FAA

U.S. 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 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: N87567	Serial No.: 129	
	Make: Sky Enterprises (Republic), Inc.	Model: RC-3	Series:
2. Owner	Name (As shown on registration certificate): Ostronik, KC	Address (As shown on registration certificate): Address P.O. Box 371101; City Key Largo; State FL; Zip 33037; Country USA	

3. For FAA Use Only

The data 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 section 43.7.

Thomas MacMurtry
BOS FSDO EA-61
07/11/2016

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☒	AIRFRAME		(As described in item 1 above)	
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address

Name: Timothy P. Howard, Stick'n Rudder Aero Maintenance
Address: 240 George Ryder Rd.
City: Chatham State: MA
Zip: 02633 Country: U.S.A.

B. Kind of Agency

- ☒ U.S. Certificated Mechanic
- ☐ Manufacturer
- ☐ Foreign Certificated Mechanic
- ☐ Certificated Repair Station
- ☐ Certificated Maintenance Organization

C. Certificate No.: 2854191

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: 6/1/16

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	☐	Person Appoved by Canadian Department of Transport
	☐	FAA Designee	☐	Repair Station	☒	Inspection Authorization	Other (Specify)	

Certificate or Designation No.: 2854191

Signature/Date of Authorized Individual: 6/1/16

FAA Form 337 (10-06)

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.)

N87567	06/01/2016
Nationality and Registration Mark	Date

Removed:
Left mechanical fuel pump removed from Franklin engine 6A8-215-B9F

Installed:
PMA Products, Inc. p/n CA65628-800E (Piper p/n 481701 or Facet model 480543) electric fuel pump installed in the left rear baggage compartment of Sky Enterprises (Republic) RC-3, S/N 129 in the existing fuel line using 2 each 1/4-28 standard aircraft bolts through the adjacent angle former.

All work was accomplished IAW AC43.13-2B & FAA form 8110-3 dated September 21, 2014 titled "Alteration to install electric boost pump on Republic RC-3 S/N 129". An electrical load analysis was done and does not exceed 80% of the total load capacity

This aircraft engine still meets the requirements of CAR 3, specifically 3.449 requiring at least one fuel pump installed on the engine and directly driven by the engine. One directly driven fuel pump is still installed on the engine.

Instructions for Continued Airworthiness:

1) Introduction: Electric fuel pump was installed to increase reliability and safety per AC 23-27 of the fuel system and assure uninterrupted fuel delivery under all conditions as well as to prime the carburetor.
2) Description: Electric fuel pump is located in the aft baggage area and assists in pumping fuel from the hull fuel tank to the engine mounted above and works in conjunction with the engine driven fuel pump.
3) Control / Operation Information: The electric pump is controlled by a switch located on the instrument panel and is marked / placarded accordingly. ACO approved Airplane Flight and Maintenance Manual Supplement for Sky Enterprises, Inc. (Republic) RC-3 Electric Fuel Pump Alteration, document number SEABEEALT-EFP-AFMS/AMMS dated 07/06/2016 is located in the airplane flight manual.
4) Servicing Information: Pump is located in the baggage compartment and is of the Facet type PMA Products, Inc. p/n CA65628-800E
5) Maintenance Instructions: 100 hour / annually per Maintenance Manual Supplement for instructions pg 9 and 10 of Doc # SEABEEALT-EFP-AFMS/AMMS and 14 CFR 43 Appendix D.
6) Troubleshooting Information: See attached Maintenance Manual Supplement for Inspection pg 10 of Doc# SEABEEALT-EFP-AFMS/AMMS
7) Remove and Replacement: Replacements can be ordered through aircraft suppliers and Piper aircraft
8) Diagrams: See attached Fuel System Modification pgs 6 and 24 of attached Doc # SEABEEALT-EFP, Rev 1R, 3/24/14.
9) Special Inspection Requirements: N/A
10) Application of Protective Treatments: N/A
11) Data: N/A
12) List of Special Tools: N/A
13) For Commuter Catagory Aircraft: N/A
14) Reccomended Overhaul Limits: No additional overhaul time limits
15) Airworthiness Limitation Section: No additional airworthiness limitations
16) ***This ICA may be revised by submitting a letter with a copy of the revised 337 form and ICA. The FAA accepts the change by signing block 3 of the revised 337 form. Once revised, a maintenance entry will be made identifing the revision, it's location, and date of the 337 form.***

----------END----------

☐ Additional Sheets Are Attached

FAA

STC/ALT No.	***SEEBEEALT-EFP***
Aircraft Model No.	Sky Enterprises, Inc. (Republic) RC-3
Registration No.	N87567
Aircraft Serial No.	129

Airplane Flight and Maintenance Manual Supplement for Sky Enterprises, Inc. (Republic) RC-3 Electric Fuel Pump Alteration

DERS Group Svc LLC

Document No.: SEEBEEALT-EFP-AFMMS/MM-1

Revision: 2

JUL 06 2016

Raymond Reinhardt, Acting Manager
FAA New England Regional ACO
1200 District Avenue
Burlington, MA 01803

Date

This supplement must be attached to the FAA- approved Airplane Flight Manual when Sky Enterprises (Republic) RC-3 Aircraft have been modified by DERS Group Svc LLC, **SEEBEEALT-EFP**, *Electric Fuel Pump Alteration. The information contained in this document supplements or supersedes the basic manual only in those areas listed. For limitations, procedures, performance, and loading information not contained in this supplement, consult the basic Airplane Flight Manual.*

AFMS and AMM Supplement for Sky Enterprises, Inc. (Republic) RC-3 Electric Fuel Pump Alteration

RECORD OF REVISIONS / SIGNATURES

REV. NO.	PAGES AFFECTED	DESCRIPTION	FAA APPROVED	DATE
IR	ALL	Initial Release		
A	ALL	Incorporate requested changes from Aulio Giron, New England FSDO and Michael Davison, Flight Test Engineer, New England ACO		05/27/16

JUL 0 6 2016

AFMS and AMM Supplement for Sky Enterprises, Inc. (Republic) RC-3 Electric Fuel Pump Alteration

3

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7.4 Hardware and Attachments Bracket – Replace any individual part that shows evidence of wear, breakage or failure. 10

JUL 06 2016

1 GENERAL

This Airplane Flight and Maintenance Manual Supplement (AFMS/AMMS) present changes associated with the Sky Enterprises, Inc. (Republic) RC-3 Fuel System. The DERS Group Svc LLC Electric Fuel Pump conversion and installation has been performed in accordance with DERS Group Svc LLC Alteration to install an Electric fuel pump replacing left Mechanical fuel pump on a Sky Enterprises, Inc. (Republic), RC-3 per SEABEEALT-EFP, Revision IR or later approved revision.

1.1 IMPORTANT NOTICE

This supplement when attached to the basic Airplane Flight Manual should be read carefully by the owner and/or operator in order to become familiar with the operation of the airplane. It contains limitations, operating procedures, performance information, and systems descriptions that are essential information for the pilot to properly and safely operate the above identified aircraft and engine that have been modified. As specified, this supplement must accompany the basic Airplane Flight Manual and be available to the pilot at any time during flight. If a section has not been provided in this document, then refer to the basic Airplane Flight Manual.

1.2 REVISING THIS SUPPLEMENT

Each time this supplement is revised it will be reissued to the legal owners of the modified aircraft. The records of revisions will note the changes that were incorporated since the documents last release. In the footer of each page the revision date and revision letter is shown.

2 LIMITATIONS

This section presents additional and/or superseding operating limitations and placards necessary for the safe operation of the airplane as modified per this Electric Fuel Pump Alteration. These limitations are approved by the Federal Aviation Administration and must be observed and followed at all times when operating this aircraft.

2.1 ELECTRIC FUEL PUMP LIMITATIONS

Electric Fuel Pump must be ON for Engine Start, Take-Off, Landing, and below 1000 ft. (AGL).

JUL 0 6 2016

3 EMERGENCY PROCEDURES

If the fuel pressure falls below the normal operating range of 2.0 to 9.0 psi, Electric Fuel Pump Switch must be ON.

JUL 0 6 2016

4 NORMAL PROCEDURES

4.1 Ground Test

Test of the electric fuel pump operations before starting engine – should pressure not indicate within normal range of 2.0 to 9.0 psi or fail to drop to zero, ascertain cause prior to flight.

4.1.1 **Master Switch ON**

4.1.2 **Electric Fuel Pump Switch ON – Observe fuel pressure normal range - 2.0 to 9.0 psi**

4.1.3 **Electric Fuel Pump Switch OFF – No fuel pressure indicated**

4.1.4 **Test Complete – proceed with normal engine start procedure**

4.2 Start up

4.2.1 **Master Switch ON**

4.2.2 **Fuel Pump switch ON– Observe fuel pressure normal range - 2.0 to 9.0 psi**

4.2.3 **Proceed with Normal start checklist/sequence.**

4.2.4 **With engine running ensure fuel pressure is within operating range (2.0 to 9.0 psi). If not shut down the engine and ascertain the cause.**

4.2.5 **Turn OFF the fuel pump and observe fuel pressure remains in Normal Operating Range (2.0 to 9.0 psi).**

4.3 Take Off

4.3.1 **Electric Fuel pump on– Observe fuel pressure normal range - 2.0 to 9.0 psi**

4.3.2 **Proceed with Normal start checklist/sequence.**

4.4 Landing or Below 1000 ft. (AGL)

4.4.1 **Fuel Pump switch ON– Observe fuel pressure normal range - 2.0 to 9.0 psi**

4.4.2 **Proceed with Normal start checklist/sequence.**

4.5 Engine shut down

4.5.1 **Throttle 1000 RPM**

4.5.2 **Mixture control OFF**

4.5.3 **Electric Fuel Pump OFF**

4.5.4 **Master Switch Off.**

JUL 0 6 2016

5 PERFORMANCE

5.1 No Change

JUL 0 6 2016

6 INSPECTION

Accomplish the following at 100-hour intervals.

6.1 Fuel Pump

6.1.1 Fuel Filter

6.1.2 Fuel Pump Attachments

6.1.3 Fuel Line Connections

6.2 Electric Components

6.2.1 Wiring

6.2.2 Switch and Circuit Breaker

6.2.3 Security of attachment and separation from structure and other aircraft components

6.3 Fuel Lines And Connections

6.3.1 Check for evidence of leakage at all connections

6.3.2 Check for cracking or chafing of all flexible fuel lines, replace necessary

6.3.3 Security of attachment and separation from structure and other aircraft components

7 MAINTENANCE

7.1 Fuel Pump – Upon malfunction or failure, replace the pump, No internal repair permissible.

7.2 Electrical Components – Upon malfunction or failure of switch, circuit breaker or evidence of damage to wiring, replace individual component. No internal repair permissible.

7.3 Fuel Line and Connections – Replace all fuel lines that are cracked, stiff, show evidence of chafing, or any other visible damage.

7.4 Hardware and Attachments Bracket – Replace any individual part that shows evidence of wear, breakage or failure.

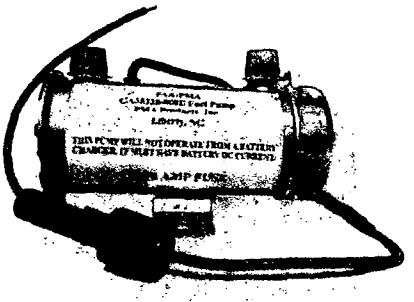
KC Ostronik Owner
SKY ENTERPRTSES, INC. (REPUBLIC)
MODEL: RC-3
SERIAL NUMBER: 129
FAA REGISTRATION: N87567

Alteration to install an Electric fuel pump replacing left Mechanical fuel pump on a Republic Sky Enterprises, Inc. (Republic), RC-3 S/N 129

DERS Group Svc LLC

DOCUMENT NO.: SEABEEALT-EFP
REVISION: B

May 26, 2016



KC Ostronik, owner of the aircraft proposes a one-time alteration to his Republic RC-3 aircraft for the installation of an Electric Fuel Pimp in lieu of left Mechanical Fuel Pump.

RECORD OF REVISIONS / SIGNATURES

REVISION	DATE	PURPOSE	APPROVAL BY
Original	03/24/2014	Initial Release	JMG
A	05/25/2016	Correct a transposed error on proper operation in flight. Pg. 16, IS: below, WAS: above. Also amended the footers to current phone number.	TRO
B	05/26/2016	Incorporate changes related to Registration number, remove AFMS and AMMS, Appendix labeling and TOC.	TRO

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1 INTRODUCTION

1.1 General:

This Compliance Summary Report document provides the description for a one-time alteration to a Republic RC-3 aircraft. This document includes alteration description, purpose, proposed certification basis, compliance finding, safety assessment and compliance demonstration.

1.2 Scope

The Republic RC-3 aircraft is an amphibious aircraft powered with a 6 cylinder horizontally opposed 215 hp. 6A8-215-B9F engines. Mr. KC Ostronik owner of the aircraft proposes this one time alteration for installation of an Electric Fuel Pump and its associated system. The Type Certified Republic RC-3 aircraft is equipped with two mechanical type fuel pumps, one on right hand side and other on left hand side of the aircraft. The alteration proposed in this document, consists of removal of left mechanical pump and subsequent installation of electric fuel pump. Installing the electric fuel pump not only primes the carburetor, but also improves the aircraft reliability and safety of the fuel system and assures uninterrupted fuel delivery under all conditions.

The proposed alteration has been previously FAA approved with FORM 337 dated 16 March 2003 for the same installation on Republic RC-3 aircraft S/N 443. Please refer to the APPENDIX A for the copy of approved FORM 337 and corresponding technical data. The applicant has chosen to follow same approved data for this alteration.
Mr. KC Ostronik has contracted DERS Group Svc LLC. (DERS Group) located at 144 Grays Creek Drive, Savannah, Georgia 31410, to act as its agent and manage this certification project and provide the FAA with all necessary documentation in support of this alteration.

This is a one time alteration is only applicable to the below specified aircraft serial number:

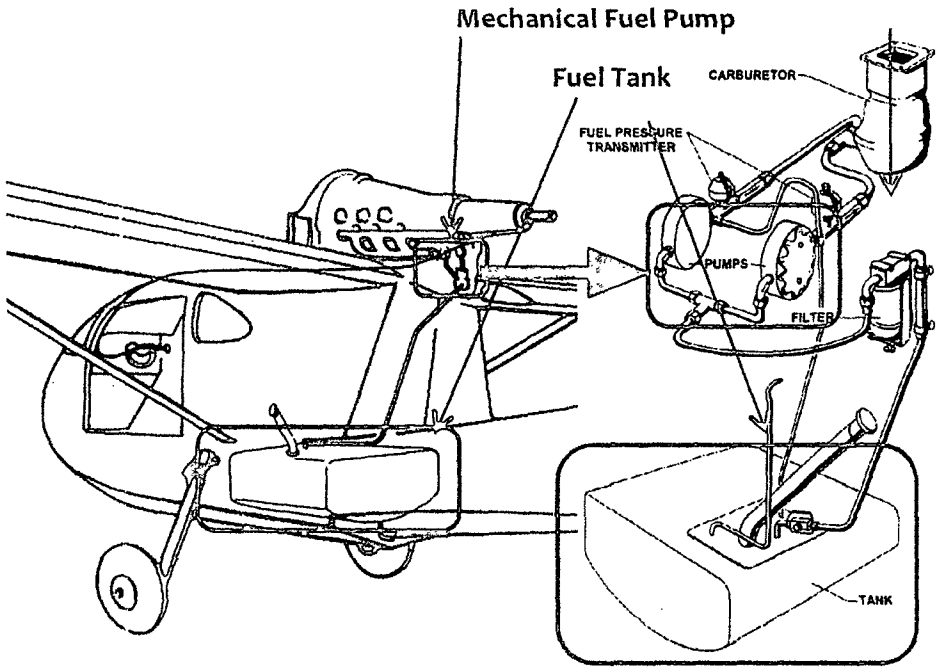
1.2.1 Table 1 – Applicability

AIRCRAFT / ENGINE MAKE	AIRCRAFT/ENGINE MODEL	TCDS	AIRCRAFT/ENGINE S/N
Sky Enterprises, Inc. (Republic)	RC -3 (Seabee)	A-769	129
Franklin Sp. z.o.o.	6AB-215-B9F	E-242	

2 DESIGN REPORT:

2.1 Original Fuel System Configuration

Fuel for an RC-3 is contained in one bladder type cell of 75 U.S. gallons capacity located in the hull under the aft baggage compartment, as shown below.



The fuel is piped to the carburetor through a strainer and pumped by two AC diaphragm type engine driven pumps, as shown above. Either pump can supply sufficient fuel to the engine.

A fuel pressure gage indicates pressure for either the left or right fuel pump (or the electric or engine driven pump) as selected by a fuel pump switch on the instrument panel.

2.2 Proposed Fuel System Configuration

The proposed alteration for Electric fuel pump installation has been previously FAA approved for the same model aircraft i.e. RC-3 but for S/N 443. The alteration for the RC-3 S/N 443 had been approved with FAA FORM 337 dated March 16, 2003.

Please Refer to **APPENDIX A** for the copies for the approved FORM 337 and corresponding technical data. The approved technical data includes, installation instructions, continued airworthiness instructions and configuration.

2.3 Design Similarity

The applicant has decided to follow the approved RC-3, S/N 443 technical data for the proposed alteration without any deviation. Therefore, both prior and post modifications have two fuel pumps meeting the requirement for having a redundant system. In addition, this same installation is identical to a previously approved installation that was authorized for installation wit a Form 337 Field Approval in accordance with Order 8300.16, Major Repair and Alteration Data Approval and 8100.17A, Field Approval Delegation Handbook.

3 INSTALLATION INSTRUCTIONS

For the installation of the Electric Fuel Pump,

- Remove Left mechanical fuel pump from the engine 6A8-215-B9F.
- Install the Piper P/N CA65628-800E Electric Fuel Pump in the baggage compartment using the existing fuel line and 2 each ¼-28 standard aircraft bolts through the angle former.
- A Fuel pump switch is installed on the instrument panel as shown above in proposed configuration diagram.

4 REGULATORY

4.1 Original Certification Basis

The Original Type Certification Basis are listed under:

- Aircraft TCDS – CAR 03 effective 13 November 1945, A-769 Rev. 15, TCH: Sky Enterprises, Inc.
- Engine TCDS – CAR 13, E-242 Rev. 6 - TCH: Franklin Sp. z.o.o.

4.2 Determination of Significance

This alteration to the engine is considered to be a 'Major Alteration' as this alteration is not listed in the engine specifications issued by the OEM. For this alteration the use of current regulations was used for compliance demonstration, hence further classification of alteration as Significant or Non-significant has not been performed.

4.3 Proposed Certification Basis

Applicable Part 23 and Part 33 regulations at current amendment levels as dated on 24 March 2014.

4.4 Compliance Checklist

Below are the rules governing the compliance applicable to this alteration.

4.4.1 Table 2 – Compliance Checklist

14 CFR	AMDT.	DESCRIPTION
23.601	Orig.	General
23.603 (b)	23-23	Materials and workmanship
23.609	Orig.	Protection of structure
23.611	23-48	Accessibility [provisions.]
23.777 (a) (b) (c) (1)	23-62	Cockpit controls
23.955 (c)	23-51	Fuel flow
23.991 (a) (1) (d)	23-43	Fuel pumps
23.993	23-43	Fuel system lines and fittings
23.994	23-29	Fuel system components
23.1301	23-62	Function and installation
23.1309 (a)(2)	23-61	Equipment, systems, and installations
23.1351	23-49	General
23.1365	23-49	Electric cables and equipment
23.1367	Orig.	Switches

4.5 Method Of Compliance

This alteration proposed in this document has been previously FAA approved for the RC-3 Seabee with aircraft serial number 443, refer APPENDIX A. The components, system and installation for this alteration are exactly similar to previously approved alteration.

Please refer to APPENDIX A for copies of the FAA approved Form 337 and Airplane Flight Manual Supplement (AFMS), for RC-3 with Serial Number 443. And as per FAA ORDER 8900.1, Volume 4, Chapter 9, Section 1, "FAA Form 337, Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance), is acceptable data that may be used for developing approved data for subsequent alterations when the specified data has been previously approved as a one-time alteration or repair."

To demonstrate compliance with the applicable regulations utilizing the Similarity (SI) approach with the previously certified aircraft and system, which is an FAA acceptable Means of Compliance per FAA AC 21-40A.

After assessing the aircraft, wiring and system installation differences that can adversely affect the system susceptibility, between the two installations (one is previously approved and other is proposed). After the assessment it has been concluded that there in no difference between the two installations as this installation has been performed according to the drawings of previously approved installation drawings.

4.6 Compliance Demonstration

This section demonstrates the compliance with the each of applicable rule.

4.6.1 Sec. 23.601 Design and Construction: General

The suitability of each questionable design detail and part having an important bearing on safety in operations, must be established by tests.
Amdt. Orig., Eff. 02/01/65

4.6.1.1 *Evidence*

The suitability of the installation of the electric fuel pump on an RC-3 aircraft has been demonstrated by a n identical previously installed system on an equivalent model aircraft i.e. RC-3 S/N 443. There has been no evidence of any operational unsafe event due to this system installation. Therefore, it is concluded that the electric fuel pump installation on RC-3 S/N 129 is in compliance with § 23.601.

4.6.2 23.603 (b) Design and Construction: Materials and workmanship

[(a) The suitability and durability of materials used for parts, the failure of which could adversely affect safety, must--
(1) Be established by experience or tests;]
(2) Meet approved specifications that ensure their having the strength and other properties assumed in the design data; [and
(3) Take into account the effects of environmental conditions, such as temperature and humidity, expected in service.]
(b) Workmanship must be of a high standard.
Amdt. 23-23, Eff. 12/01/78

4.6.2.1 *Evidence*

Installation procedures and the Instructions for Continued Airworthiness in APPENDIX C not only ensure that the system is installed correctly using the highest standard of workmanship, but it allows the operator to continue providing the safest levels of operation during the system's life. Therefore, it is concluded that the electric fuel pump installation on RC-3 S/N 129 is in compliance with § 23.603(b).

4.6.3 Sec. 23.609 Design and Construction: Protection of structure.

Each part of the structure must--

(a) Be suitably protected against deterioration or loss of strength in service due to any cause, including--

(1) Weathering;

(2) Corrosion; and

(3) Abrasion; and

(b) Have adequate provisions for ventilation and drainage.

Amdt. Orig., Eff. 02/01/65

4.6.3.1 *Evidence*

The Electric Fuel pump is installed in the baggage compartment, which is exposed to cabin environment and hence offers similar or less serve environment than that previously installed mechanical fuel pump. The wiring used is industry standard cables. Therefore, it is concluded that the electric fuel pump installation on RC-3 S/N 129 is in compliance with § 23.609.

4.6.4 Sec. 23.611 Design and Construction: Accessibility [provisions.].

[For each part that requires maintenance, inspection, or other servicing, appropriate means must be incorporated into the aircraft design to allow such servicing to be accomplished.]

Amdt. 23-48, Eff. 03/11/96

4.6.4.1 *Evidence*

Installation of the fuel pump in the baggage compartment ensures that easy access required during maintenance, inspection, or other servicing. Therefore, it is concluded that the electric fuel pump installation on RC-3 S/N 129 is in compliance with § 23.611.

4.6.5 Sec. 23.777 Design and Construction: Cockpit controls.

(a) Each cockpit control must be located and (except where its function is obvious) identified to provide convenient operation and to prevent confusion and inadvertent operation.

(b) The controls must be located and arranged so that the pilot, when seated, has full and unrestricted movement of each control without interference from either his clothing or the cockpit structure.

(c) Powerplant controls must be located--

(1) For multiengine airplanes, on the pedestal or overhead at or near the center of the cockpit;

(2) For single and tandem seated single-engine airplanes, on the left side console or instrument panel;

(3) For other single-engine airplanes at or near the center of the cockpit, on the pedestal, instrument panel, or overhead; and

(4) For airplanes with side-by-side pilot seats and with two sets of powerplant controls, on left and right consoles.

(d) When separate and distinct control levers are co-located (such as located together on the pedestal), the control location order from left to right must be power (thrust) lever, propeller (rpm control), and mixture control (condition lever and fuel cut-off for turbine- powered airplanes). Power (thrust) levers must be easily distinguishable from other controls, and provide for accurate, consistent operation. Carburetor heat or alternate air control must be to the left of the throttle or at least eight inches from the mixture control when located other than on a pedestal. Carburetor heat or alternate air control, when located on a pedestal, must be aft or below the power (thrust) lever. Supercharger controls must be located below or aft of the propeller controls. Airplanes with tandem seating or single-place airplanes may utilize control locations on the left side of the cabin compartment; however, location order from left to right must be power (thrust) lever, propeller (rpm control), and mixture control.

(e) Identical powerplant controls for each engine must be located to prevent confusion as to the engines they control.

(1) Conventional multiengine powerplant controls must be located so that the left control(s) operates the left engine(s) and the right control(s) operates the right engine(s).

(2) On twin-engine airplanes with front and rear engine locations (tandem), the left powerplant controls must operate the front engine and the right powerplant controls must operate the rear engine.

(f) Wing flap and auxiliary lift device controls must be located--
(1) Centrally, or to the right of the pedestal or powerplant throttle control centerline; and (2) Far enough away from the landing gear control to avoid confusion.
(g) The landing gear control must be located to the left of the throttle centerline or pedestal centerline.
(h) Each fuel feed selector control must comply with Sec. 23.995 and be located and arranged so that the pilot can see and reach it without moving any seat or primary flight control when his seat is at any position in which it can be placed.
(1) For a mechanical fuel selector:
(i) The indication of the selected fuel valve position must be by means of a pointer and must provide positive identification and feel (detent, etc.) of the selected position.
(ii) The position indicator pointer must be located at the part of the handle that is the maximum dimension of the handle measured from the center of rotation.
(2) For electrical or electronic fuel selector:
(i) Digital controls or electrical switches must be properly labelled.
(ii) Means must be provided to indicate to the flight crew the tank or function selected. Selector switch position is not acceptable as a means of indication. The "off" or "closed" position must be indicated in red.
(3) If the fuel valve selector handle or electrical or digital selection is also a fuel shut-off selector, the off position marking must be colored red. If a separate emergency shut-off means is provided, it also must be colored red.
Amdt. 23-62, Eff. 01/31/12

4.6.5.1 *Evidence*

The Electric Fuel pump switch is installed on the instrument panel as per the previously approved drawing, which ensures convenient, unrestricted movement preventing confusion and inadvertent operation. Therefore, it is concluded that the electric fuel pump installation on RC-3 S/N 129 is in compliance with § 23.777.

4.6.6 Sec. 23.955 Powerplant: Fuel flow.

(a) General. The ability of the fuel system to provide fuel at the rates specified in this section and at a pressure sufficient for proper engine operation must be shown in the attitude that is most critical with respect to fuel feed and quantity of unusable fuel. These conditions may be simulated in a suitable mockup. In addition--
[(1) The quantity of fuel in the tank may not exceed the amount established as the unusable fuel supply for that tank under Sec. 23.959(a) plus that quantity necessary to show compliance with this section.
(2) If there is a fuel flow meter, it must be blocked during the flow test and the fuel must flow through the meter or its bypass.
(3) If there is a flow meter without a bypass, it must not have any probable failure mode that would restrict fuel flow below the level required for this fuel demonstration.
(4) The fuel flow must include that flow necessary for vapor return flow, jet pump drive flow, and for all other purposes for which fuel is used.]
(b) Gravity systems. The fuel flow rate for gravity systems (main and reserve supply) must be 150 percent of the takeoff fuel consumption of the engine.
(c) Pump systems. The fuel flow rate for each pump system (main and reserve supply) for each reciprocating engine must be 125 percent of the fuel flow required by the engine at the maximum takeoff power approved under this part.
(1) This flow rate is required for each main pump and each emergency pump, and must be available when the pump is operating as it would during takeoff.
(2) For each hand-operated pump, this rate must occur at not more than 60 complete cycles (120 single strokes) per minute.
(3) The fuel pressure, with main and emergency pumps operating simultaneously, must not exceed the fuel inlet pressure limits of the engine unless it can be shown that no adverse effect occurs.
(d) Auxiliary fuel systems and fuel transfer systems. Paragraphs (b), (c), and (f) of this section apply to each auxiliary and transfer system, except that--

(1) The required fuel flow rate must be established upon the basis of maximum continuous power and engine rotational speed, instead of takeoff power and fuel consumption; and
(2) If there is a placard providing operating instructions, a lesser flow rate may be used for transferring fuel from any auxiliary tank into a larger main tank. This lesser flow rate must be adequate to maintain engine maximum continuous power but the flow rate must not overfill the main tank at lower engine powers.
(e) Multiple fuel tanks. For reciprocating engines that are supplied with fuel from more than one tank, if engine power loss becomes apparent due to fuel depletion from the tank selected, it must be possible after switching to any full tank, in level flight, to obtain 75 percent maximum continuous power on that engine in not more than--
(1) 10 seconds for naturally aspirated single-engine airplanes;
(2) 20 seconds for turbocharged single-engine airplanes, provided that 75 percent maximum continuous naturally aspirated power is regained within 10 seconds; or
(3) 20 seconds for multiengine airplanes.
(f) Turbine engine fuel systems. Each turbine engine fuel system must provide at least 100 percent of the fuel flow required by the engine under each intended operation condition and maneuver. The conditions may be simulated in a suitable mockup. This flow must--
(1) Be shown with the airplane in the most adverse fuel feed condition (with respect to altitudes, attitudes, and other conditions) that is expected in operation; and
(2) For multiengine airplanes, notwithstanding the lower flow rate allowed by paragraph (d) of this section, be automatically uninterrupted with respect to any engine until all fuel scheduled for use by that engine has been consumed. In addition--
(i) For the purposes of this section, "fuel scheduled for use by that engine" means all fuel in any tank intended for use by a specific engine.
(ii) The fuel system design must clearly indicate the engine for which fuel in any tank is scheduled.
(iii) Compliance with this paragraph must require no pilot action after completion of the engine-starting phase of operations.
(3) For single-engine airplanes, require no pilot action after completion of the engine starting phase of operations unless means are provided that unmistakenly alert the pilot to take any needed action at least five minutes prior to the needed action; such pilot action must not cause any change in engine operation; and such pilot action must not distract pilot attention from essential flight duties during any phase of operations for which the airplane is approved.
Amdt. 23-51, Eff. 03/11/96

4.6.6.1 *Evidence*

The installation of Electric Fuel Pump CA65628-800E, assure uninterrupted fuel delivery under all condition, which is demonstrated by experience of installation of same pump on other same model aircraft with different serial number. Therefore, it is concluded that the electric fuel pump installation on RC-3 S/N 129 is in compliance with § 23.955.

4.6.7 Sec. 23.991 (a)(1)(d) **Powerplant: Fuel pumps.**

(a) Main pumps. For main pumps, the following apply:
(1) For reciprocating engine installations having fuel pumps to supply fuel to the engine, at least one pump for each engine must be directly driven by the engine and must meet Sec. 23.955. This pump is a main pump.
(2) For turbine engine installations, each fuel pump required for proper engine operation, or required to meet the fuel system requirements of this subpart (other than those in paragraph (b) of this section), is a main pump. In addition–
(i) There must be at least one main pump for each turbine engine:
(ii) The power supply for the main pump for each engine must be independent of the power supply for each main pump for any other engine; and
(iii) For each main pump, provision must be made to allow the bypass of each positive displacement fuel pump other than a fuel injection pump approved as part of the engine.

(b) Emergency pumps. There must be an emergency pump immediately available to supply fuel to the engine if any main pump (other than a fuel injection pump approved as part of the engine) fails. The power supply for each emergency pump must be independent of the power supply for each corresponding main pump.
(c) Warning means. If both the [main] pump and emergency pump operate continuously, there must be a means to indicate to the appropriate flight crewmembers a malfunction of either pump.
(d) Operation of any fuel pump may not affect engine operation so as to create a hazard, regardless of the engine power or thrust setting or the functional status of any other fuel pump.
Amdt. 23-43, Eff. 05/10/93

4.6.7.1 *Evidence*

After this alteration, aircraft still has the right side mechanical pump, which is directly driven by engine. The electric fuel pump operates independently and does not affect engine operation so as to create a hazard, regardless of the engine power or thrust setting or the functional status of engine, which is demonstrated by experience of installation of same pump on other same model aircraft with different serial number. Therefore, it is concluded that the electric fuel pump installation on RC-3 S/N 129 is in compliance with § 23.991 (a) 1, (d).

4.6.8 Sec. 23.993 **Powerplant: Fuel system lines and fittings.**

(a) Each fuel line must be installed and supported to prevent excessive vibration and to withstand loads due to fuel pressure and accelerated flight conditions.
(b) Each fuel line connected to components of the airplane between which relative motion could exist must have provisions for flexibility.
(c) Each flexible connection in fuel lines that may be under pressure and subjected to axial loading must use flexible hose assemblies.
[(d) Each flexible hose must be shown to be suitable for the particular application.]
(e) No flexible hose that might be adversely affected by exposure to high temperatures may be used where excessive temperatures will exist during operation or after engine shutdown.
Amdt. 23-43, Eff. 05/10/93

4.6.8.1 *Evidence*

The fuel line fitting P/N AEROQUIP 303-6 & AN 821-60 are same as of installed on previously approved installation and are standard aircraft components. Therefore, it is concluded that the electric fuel pump installation on RC-3 S/N 129 is in compliance with § 23.993.

4.6.9 Sec. 23.994 **Powerplant: Fuel system components.**

[Fuel system components in an engine nacelle or in the fuselage must be protected from damage which could result in spillage of enough fuel to constitute a fire hazard as a result of a wheels-up landing on a paved runway.]
Amdt. 23-29, Eff. 03/26/84

4.6.9.1 *Evidence*

The installation of Fuel pump in the baggage compartment ensures protection and therefore, it is concluded that the electric fuel pump installation on RC-3 S/N 129 is in compliance with § 23.994.

4.6.10 Sec. 23.1301 **Equipment: Function and installation.**

Each item of installed equipment must--
(a) Be of a kind and design appropriate to its intended function;
(b) Be labeled as to its identification, function, or operating limitations, or any applicable combination of these factors; and
(c) Be installed according to limitations specified for that equipment.
Amdt. 23-62, Eff. 01/31/12

4.6.10.1 *Evidence*

The installation of Electric Fuel Pump CA65628-800E, assure perform its intended function, which is demonstrated by experience of installation of same pump on other same model aircraft with different serial number. And pump switch is labeled with proper identification. Therefore, it is concluded that the electric fuel pump installation on RC-3 S/N 129 is in compliance with § 23.1301.

4.6.11 Sec. 23.1309(a)(2) **Equipment: Equipment, systems, and installations.**

The requirements of this section, except as identified in paragraphs (a) through (d), are applicable, in addition to specific design requirements of part 23, to any equipment or system as installed in the airplane. This section is a regulation of general requirements and does not supersede any requirements contained in another section of part 23.

(a) The airplane equipment and systems must be designed and installed so that:

(1) Those required for type certification or by operating rules perform as intended under the airplane operating and environmental conditions, including the indirect effects of lightning strikes.

(2) Any equipment and system does not adversely affect the safety of the airplane or its occupants, or the proper functioning of those covered by paragraph (a)(1) of this section.

(b) Minor, major, hazardous, or catastrophic failure condition(s), which occur during Type Inspection Authorization or FAA flight- certification testing, must have root cause analysis and corrective action.

(c) The airplane systems and associated components considered separately and in relation to other systems, must be designed and installed so that:

(1) Each catastrophic failure condition is extremely improbable and does not result from a single failure;

(2) Each hazardous failure condition is extremely remote; and

(3) Each major failure condition is remote.

(d) Information concerning an unsafe system operating condition must be provided in a timely manner to the crew to enable them to take appropriate corrective action. An appropriate alert must be provided if immediate pilot awareness and immediate or subsequent corrective action is required. Systems and controls, including indications and annunciations, must be designed to minimize crew errors which could create additional hazards.Amdt. 23-62, Eff. 01/31/12

4.6.11.1 *Evidence*

The installation of Electric Fuel Pump CA65628-800E, assure perform its intended function, which is demonstrated by experience of installation of same pump on other same model aircraft with different serial number. Any minor, major, hazardous, or catastrophic failure condition(s), which occur during Type Inspection Authorization or FAA flight- certification testing, will have root cause analysis and corrective action. Therefore, it is concluded that the electric fuel pump installation on RC-3 S/N 129 is in compliance with § 23.1301(a)(2).

4.6.12 Sec. 23.1351 **Equipment: Arrangement and visibility.**

(a) Electrical system capacity. Each electrical system must be adequate for the intended use. In addition--

(1) Electric power sources, their transmission cables, and their associated control and protective devices, must be able to furnish the required power at the proper voltage to each load circuit essential for safe operation; and

(2) Compliance with paragraph (a)(1) of this section must be shown as follows–

(i) For normal, utility, and acrobatic category airplanes, by an electrical load analysis or by electrical measurements that account for the electrical loads applied to the electrical system in probable combinations and for probable durations; and

(ii) For commuter category airplanes, by an electrical load analysis that accounts for the electrical loads applied to the electrical system in probable combinations and for probable durations.

(b) Function. For each electrical system, the following apply:

(1) Each system, when installed, must be--

(i) Free from hazards in itself, in its method of operation, and in its effects on other parts of the airplane;

(ii) Protected from fuel, oil, water, other detrimental substances, and mechanical damage; and

(iii) So designed that the risk of electrical shock to crew, passengers, and ground personnel is reduced to a minimum.
[(2) Electric power sources must function properly when connected in combination or independently.
(3) No failure or malfunction of any electric power source may impair the ability of any remaining source to supply load circuits essential for safe operation.
(4) In addition, for commuter category airplanes, the following apply:]
(i) Each system must be designed so that essential load circuits can be supplied in the event of reasonably probable faults or open circuits including faults in heavy current carrying cables;
(ii) A means must be accessible in flight to the flight crewmembers for the individual and collective disconnection of the electrical power sources from the system;
(iii) The system must be designed so that voltage and frequency, if applicable, at the terminals of all essential load equipment can be maintained within the limits for which the equipment is designed during any probable operating conditions;
(iv) If two independent sources of electrical power for particular equipment or systems are required, their electrical energy supply must be ensured by means such as duplicate electrical equipment, throwover switching, or multichannel or loop circuits separately routed; and
(v) For the purpose of complying with paragraph (b)(5) of this section, the distribution system includes the distribution busses, their associated feeders, and each control and protective device.
(c) Generating system. There must be at least one generator/alternator if the electrical system supplies power to load circuits essential for safe operation. In addition--
(1) Each generator/alternator must be able to deliver its continuous rated power, or such power as is limited by its regulation system.
(2) Generator/alternator voltage control equipment must be able to dependably regulate the generator/alternator output within rated limits;
[(3) Automatic means must be provided to prevent damage to any generator/alternator and adverse effects on the airplane electrical system due to reverse current. A means must also be provided to disconnect each generator/alternator from the battery and other generators/alternators.]
(4) There must be a means to give immediate warning to the flight crew of a failure of any generator/alternator.
(5) Each generator/alternator must have an overvoltage control designed and installed to prevent damage to the electrical system, or to equipment supplied by the electrical system that could result if that generator/alternator were to develop an overvoltage condition.
(d) Instruments. A means must exist to indicate to appropriate flight crewmembers the electric power system quantities essential for safe operation.
(1) For normal, utility, and acrobatic category airplanes with direct current systems, an ammeter that can be switched into each generator feeder may be used and, if only one generator exists, the ammeter may be in the battery feeder.
(2) For commuter category airplanes, the essential electric power system quantities include the voltage and current supplied by each generator.
(e) Fire resistance. Electrical equipment must be so designed and installed that in the event of a fire in the engine compartment, during which the surface of the firewall adjacent to the fire is heated to 2,000° F for 5 minutes or to a lesser temperature substantiated by the applicant, the equipment essential to continued safe operation and located behind the firewall will function satisfactorily and will not create an additional fire hazard.
(f) External power. If provisions are made for connecting external power to the airplane, and that external power can be electrically connected to equipment other than that used for engine starting, means must be provided to ensure that no external power supply having a reverse polarity, or a reverse phase sequence, can supply power to the airplane's electrical system.
(g) It must be shown by analysis, tests, or both, that the airplane can be operated safely in VFR conditions, for a period of not less than five minutes, with the normal electrical power (electrical power sources excluding the battery and any other standby electrical sources) inoperative, with critical type fuel (from the standpoint of flameout and restart capability), and with the airplane initially at the maximum certificated altitude. Parts of the electrical system may remain on if--

(1) A single malfunction, including a wire bundle or junction box fire, cannot result in loss of the part turned off and the part turned on; and
(2) The parts turned on are electrically and mechanically isolated from the parts turned off.
Amdt. 23-49, Eff. 03/11/96

4.6.12.1 *Evidence*
A safety and criticality assessment, which includes an electrical analysis, has been provided in Section 5 of this report. Therefore, it is concluded that this alteration is in compliance with 14 CFR 23.1351, Amdt. 23-49.

4.6.13 Sec. 23.1365 Equipment: Electric cables and equipment.
(a) Each electric connecting cable must be of adequate capacity.
[(b) Any equipment that is associated with any electrical cable installation and that would overheat in the event of circuit overload or fault must be flame resistant. That equipment and the electrical cables must not emit dangerous quantities of toxic fumes.]
(c) Main power cables (including generator cables) in the fuselage must be designed to allow a reasonable degree of deformation and stretching without failure and must--
(1) Be separated from flammable fluid lines; or
(2) Be shrouded by means of electrically insulated flexible conduit, or equivalent, which is in addition to the normal cable insulation.
[(d) Means of identification must be provided for electrical cables, terminals, and connectors.
(e) Electrical cables must be installed such that the risk of mechanical damage and/or damage caused by fluids vapors, or sources of heat, is minimized.
(f) Where a cable cannot be protected by a circuit protection device or other overload protection, it must not cause a fire hazard under fault conditions.]
Amdt. 23-49, Eff. 03/11/96

4.6.13.1 *Evidence*
The cables used for the installation of the Electric fuel pump are of industry standard (MIL-W-22759/16 P/N 11-14514) and rated to handle the capacity of current, voltage, and resistance that are required to operate the system. Therefore, it is concluded that this alteration is in compliance with 14 CFR 23.1365, Amdt. 23-49.

4.6.14 Sec. 23.1367 Equipment: Switches.
Each switch must be–
(a) Able to carry its rated current;
(b) Constructed with enough distance or insulating material between current carrying parts and the housing so that vibration in flight will not cause shorting;
(c) Accessible to appropriate flight crewmembers; and
(d) Labeled as to operation and the circuit controlled.
Amdt. Orig., Eff. 02/01/65

4.6.14.1 *Evidence*
The switch used for the installation of the Electric Pump is of industry standard and rated to handle the capacity of current, voltage, and resistance that is required to operate the system. Therefore, it is concluded that this alteration is in compliance with 14 CFR 23.1367, Amdt. Orig.

4.7 Instructions for Continued Airworthiness (ICA)

Servicing Information: Pump is located in the baggage compartment.
Maintenance Instructions: 100 hour/annually per maintenance manual supplement for inspection. The Maintenance Manual Supplement is supplied with this report.
Recommended Overhaul Limits: No additional overhaul time limits.
Airworthiness Limitations Section: No additional airworthiness limitations.
List of Special Limits: N/A

Special Inspection Requirements: N/A
Application of Protective Treatment: N/A

4.8 AIRPLANE FLIGHT MANUAL SUPPLEMENT (AFMS)

The AFMS of Aircraft Serial Number 443 shows that the installed electric fuel pump was instructed to operate during engine start, takeoff and landing or below 1000 ft. AGL.

Similarly, this installation will also require that the electric fuel pump be operated during engine start, takeoff and landing or below 1000 ft. AGL. This requirement is reflected in the current Airplane Flight Manual Supplement (AFMS) supplied with this report. See DERS Group Document: SEEBEEALT-EFP-AFMS/AMMS, Revision A or Later FAA Approved "Airplane Flight and Maintenance Manual Supplement for Sky Enterprises Inc. (Republic) RC-3 Electric Fuel Pump Alteration".

5 SAFETY ASSESSMENT

5.1 Introduction

This section provides a qualitative safety assessment related to the installation of electric fuel pump and investigates in reference to failure conditions, their classification, probability and their effects, and overall system safety level.

5.2 System Description

The system considered under this safety assessment is fuel system, with newly installed electric fuel pump. The purpose of electric fuel pump installation is not only prime the carburetor, but also improves the aircraft reliability and safety of the fuel system and assures uninterrupted fuel delivery under all condition. The altered fuel system will consist of one mechanical fuel pump and one electric fuel pump. There have been no changes to the other existing aircraft system for the installation of this system.

5.3 Functional hazard assessment (FHA)

This section provides a systematic, comprehensive examination of the altered fuel system functions to identify potential minor, major, hazardous, and catastrophic failure conditions that may arise as a result of a malfunction or a failure to function.

The severity is a quantitative measure of the worst possible degree of personal injury, property damage, or system damage, which can result from a failure mode. The possible severity categories defined in FAA Advisory Circular AC 25.1309-1E are provided in Table 2.

5.3.1 Table 3 – Severity Class and Description

SEVERITY CLASS	SEVERITY DESCRIPTION
Catastrophic	Failure condition, which prevents continued safe flight and landing, and for which no effective action is realistically possible.
Hazardous	Failure condition which causes a large reduction in safety margins or functional capacity, very high increase in workload or physical stress for the crew or discomfort to occupants.
Major	Failure condition, which causes a significant reduction in safety margins or functional capabilities and a significant increase in crew workload or in, conditions impairing crew efficiency or discomfort to occupants.
Minor	Failure condition which does not significantly reduce aircraft safety and/or involve crew actions that are well within their capabilities. Minor failure conditions may include for example, a slight reduction in safety margins or functional capabilities, a slight increase in crew workload, such as a routine flight plan change or some inconvenience to occupants.
No Safety Effect	Failure conditions that would have no effect on safety (that is, failure conditions that would not affect the operational capability of the airplane or increase crew workload).

Below are the failure conditions that have been identified related to the alteration.

5.4 Safety Assessment

5.4.1 Table 4 – Failure Condition

Failure Condition Hazard Description	Failure Condition Cause	Classification Of Failure Condition	Occurrence
Loss of the electric fuel pump	• Loss of electricity • Malfunction of pump	Minor	Extremely Improbable

The occurrence of the electric fuel pump failure can be justified from previously installed same fuel pump in same model aircraft for which there no safety issues observed. Rather electric fuel pump improves the aircraft reliability and safety of the fuel system and assure uninterrupted fuel delivery under all condition.

5.4.2 Table 5 – Failure Effects

Failure Condition Hazard Description	Effect
Loss of the electric fuel pump	Pump wont be able to supply fuel but the fuel system still has mechanical fuel pump which is can supply sufficient fuel to engine.

5.5 Conclusion – Criticality Determination

Even after removal of left Mechanical Fuel pump, the aircraft configuration meets the CFR Sec. 23.991 Amdt. 23-43, which is, "For reciprocating engine installations having fuel pumps to supply fuel to the engine, at least one pump for each engine must be directly driven by the engine and must meet Sec. 23.955. This pump is a main pump." And the other Mechanical Fuel pump is alone capable of supplying sufficient fuel to the engine. The removal of left Mechanical Fuel pump and installation of Electric Fuel pump does not interface the operation of right Mechanical Fuel pump nor impose any limitations on any other aircraft system. Functioning of the fuel system is as it was before the alteration.

The safety assessment provided in this section shows that the failure condition is extremely improbable and failure condition does not have any safety concern. So, this alteration does not have any adverse effect on the previously established safety level. Hence the altered aircraft maintains the same level of safety as the original design. Therefore, it is concluded that the electric fuel pump installation on RC-3 S/N 129 is in compliance with § 23.1309.

5.6 Airworthiness Directive Search Report

SEARCH PARAMETER

Component P/N **CA65628-800E**

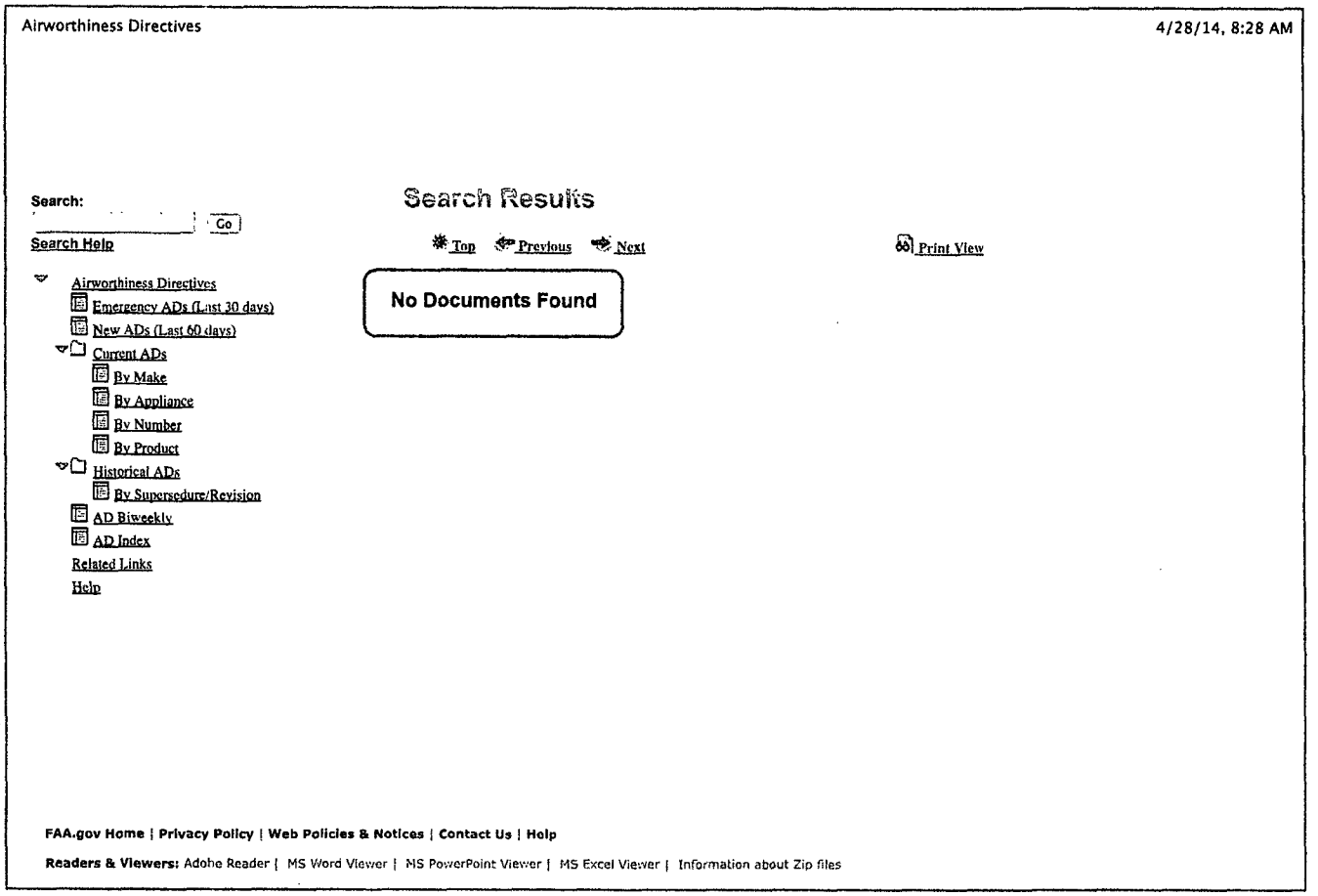
Search

http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/MainFrame?OpenFrameSet

SEARCH RESULTS A search of AOA system supplier returned 0 (zero) AD.

Search results are listed on the following pages (attached). Only important pages of each of the ADs are shown.

AD Query Completed March 24, 2013 by Jayant R Ghawalkar, Certification Engineer, DERS Group Svc LLC.


Airworthiness Directives 4/28/14, 8:28 AM

Search: Go

Search Help

Airworthiness Directives
Emergency ADs (Last 30 days)
New ADs (Last 60 days)
Current ADs
By Make
By Appliance
By Number
By Product
Historical ADs
By Supersedure/Revision
AD Biweekly
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Search Results

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No Documents Found

FAA.gov Home | Privacy Policy | Web Policies & Notices | Contact Us | Help

Readers & Viewers: Adobe Reader | MS Word Viewer | MS PowerPoint Viewer | MS Excel Viewer | Information about Zip files

5.6.1 AD Summary

The search dated on 24 March 2014 for the 'CA65628-800E' identified 0 AD as shown in the image. Therefore, no further action is required.

5.7 Service Difficulties Summary Report

The Aircraft Make for the RC-3 aircraft is Sky Enterprises, Inc., as per the TCDS A-769 shown below.

SEARCH SITE: http://av-info.faa.gov/SDRX/Query.aspx

SDR Query Completed March 24, 2013 by Jayant R Ghawalkar, Certification Engineer, DERS Group Svc LLC.

FEDERAL AVIATION AGENCY

A-769
Revision 15
STOL
(REPUBLIC)
RC-3

November 20, 1992

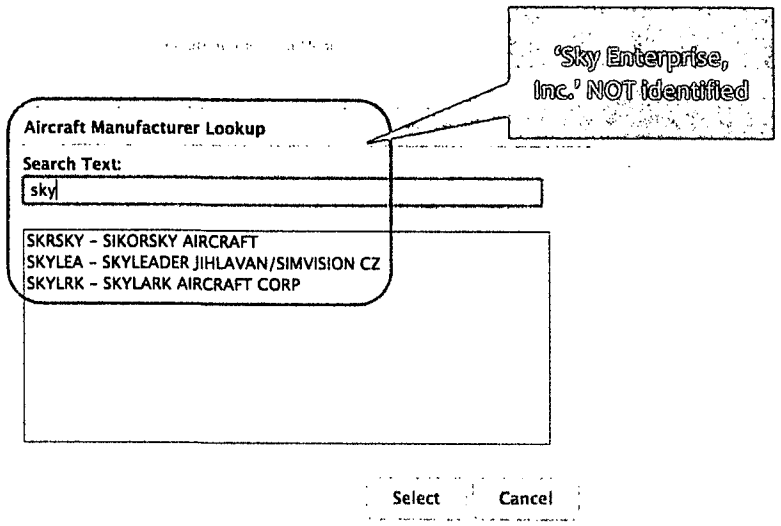
AIRCRAFT SPECIFICATION NO. A-769

Type Certificate Holder: Sky Enterprises, Inc.
Tacoma Narrows Airport
1302 26th Avenue NW
Gig Harbor, Washington

I - Model RC-3, 4 PCAmM (Normal Category), 2 PCAmM (Utility Category), Approved October 15, 1947
(See NOTES 4, 5 and 6 for flying boat versions).

Engine	Franklin 6A8-215-B8F
Fuel	80 min. octane aviation gasoline
Engine limits	For all operations, 2500 rpm (215 hp)

For the above search site, 'Sky Enterprise, Inc.' is not listed on the FAA website, as the aircraft make, shown below.



So, it was unable to identify any Service Difficulties Summary Report for RC-3.