

N7EV

1998 A36 Bonanza Turbine

Airworthiness



MSN: E-3162

Prepared by the worldwide aviation specialists at RidgeAir, Inc.



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 N7EV	Serial No. E-3162	
	Make RAYTHEON AIRCRAFT	Model A36	Series
2. Owner	Name (As shown on registration certificate) AMG SALES AND SERVICES LLC	Address (As shown on registration certificate) Address 3310 S BIRMINGHAM AVE	
		City TULSA	State OK
		Zip 74105-2328	Country USA

3. For FAA Use Only

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		B. Kind of Agency	
Name Tulsair Beechcraft, Inc.		☐ U. S. Certified Mechanic	☐ Manufacturer
Address 3207 N. Sheridan Road		☐ Foreign Certified Mechanic	C. Certificate No.
City Tulsa	State OK	☒ Certified Repair Station	
Zip 74115	Country USA	☐ Certified Maintenance Organization	HMGR732E

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 James Maddux <i>James Maddux</i> 10/MAR/2020
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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	Inspection Authorization	

Certificate or Designation No. HMGR732E	Signature/Date of Authorized Individual Mark Taylor <i>Mark Taylor</i> 10/MAR/2020
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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.)

N7EV

10/MAR/2020

Nationality and Registration Mark

Date

REMOVED THE FOLLOWING EQUIPMENT: B/K KT76C transponder in the radio panel at STA 51, Becker transponder model 4401-1-250 from instrument panel at STA 52 and Garmin GA56 GPS Antenna from top of fuselage at STA 85.5.

INSTALLED GARMIN GTX345 TRANSPONDER P/N 011-01216-01 S/N 3EG025287 IN RADIO PANEL AT STA 51. APPROVAL REFERENCE STC 01741WI. INTERFACE REFERENCE GARMIN DOCUMENT 190-00734-10 REV 14. AFMS 190-00734-15 REV 4 AND ICA DOCUMENT 190-00734-11 REV 7. PILOT'S GUIDE P/N 190-01499-00 REV F PROVIDED. Installation of this transponder meets current FAA ADS-B compliance.

Removed Garmin GNS530 P/N 011-00550-010, S/N 78401224 and had unit upgraded to GNS530W P/N 011-01064-40 S/N 78401224. Installation done I/A/W STC Upgrade Manual P/N 190-00357-06 REV E, STC SA01933LA-D. Installation checkout per manual 190-00357-02 Section 5. Removed the AFMS for the GNS530 and installed a GNS530W AFMS P/N 190-00357-03 Rev F. Provided Garmin P/N 190-00357-65 REV D ICA. Garmin pilots guide P/N 190-00357-00 REV K provided.

Removed Garmin GA56 antenna S/N 59061102 at STA 85.5. Installed Garmin GA35 antenna S/N 185355 in same location using existing mount I/A/W this Garmin manual P/N 190-00569-00 Rev. F reference STC SA01695SE approval. ICA 190-00673-01 REV F provided.

INSTALLATION COMPLIES WITH GUIDANCE OF AC43.13-1B CHAPTERS 6,7,10,11,12; AC43.13-2B CHAPTERS 1,2,11. LOG ENTRY MADE, WEIGHT AND BALANCE REVISED, EQUIPMENT LIST UPDATED AND INSERTED IN POH. WEIGHT AND BALANCE AND EQUIPMENT LIST DATED 10/MAR/2020.

NEW A/C EMPTY WEIGHT	2682.20 LBS
NEW A/C C.G.	79.18
NEW A/C MOMENT	212698.95

☐ Additional Sheets Are Attached



US Department
of Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020
11/30/2007

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 N7EV	Serial No. E-3162	
	Make RAYTHEON AIRCRAFT COMPANY	Model A36	Series N/A
2. Owner	Name (As shown on registration certificate) KRUSE AIR LLC	Address (As shown on registration certificate) Address 2504 S. CYPRESS ST. City SIoux CITY State IOWA Zip 51106-3745 Country UNITED STATES	

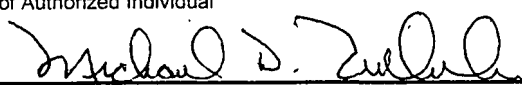
3. For FAA Use Only

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

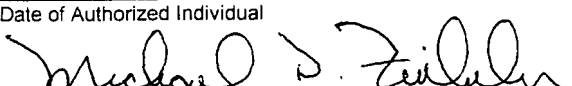
6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency	
Name Duncan Aviation		☐ U. S. Certified Mechanic	☐ Manufacturer
Address 3701 Aviation Road		☐ Foreign Certified Mechanic	C. Certificate No.
City Lincoln State NE		☒ Certified Repair Station	JGVR194F
Zip 68524 Country United States		☐ 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  DUNCAN R11 50 February 18, 2011
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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 Transportation
	FAA Designee	☒	Repair Station	Inspection Authorization	Other (Specify)
Certificate or Designation No. JGVR194F			Signature/Date of Authorized Individual  DUNCAN R11 50 February 18, 2011		

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.)

N7EV

Nationality and Registration Mark

February 18, 2011

Date

1. Dynamically balanced propeller to .09 IPS per ACES manuals 1000-OM-01 rev 2 dated 6-1996 and 2020-OM-01 rev 4 dated 7-2007. Installed 7.8 grams of weight at 115 degrees.

2. Weight and Balance change negligible.

3. Alteration performed on work order LWAWA

The manufacturer's continued airworthiness inspection requirements do not change with this Alteration.

-----END-----

☐ Additional Sheets Are Attached



US Department
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Federal Aviation
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MAJOR REPAIR AND ALTERATION
(Airframe, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0020
11/30/2007

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 US N7EV	Serial No. E3162	
	Make RAYTHEON	Model BEECH A36	Series 36
2. Owner	Name (As shown on registration certificate) Kruse Air LLC.	Address (As shown on registration certificate) Address 2504 South Cypress Street	
		City Sioux City	State IA
		Zip 51106	Country US

3. For FAA Use Only

The data identified herein complies with the applicable
airworthiness requirements and is approved only for the above
described aircraft, subject to conformity inspection by a person
authorized in F.A.R. 43.7 (a)

05-15-2008
(date)

Vincent C. Chicoine
F.A.A. Inspector, ACE-FSDO-01

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		B. Kind of Agency	
Name JetSun Aviation Centre	Address Sioux City Municipal Airport	☐ U. S. Certificated Mechanic	☐ Manufacturer
City Sioux City	State IA	☒ Foreign Certificated Mechanic	C. Certificate No. SG7R549J
Zip 51111	Country US	☐ Certified Repair Station	Airframe Limited
		☐ 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 April 25, 2008 Vincent C Chicoine <u><i>Vincent C. Chicoine</i></u>
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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 Fit. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	☒ Repair Station	Inspection Authorization	

Certificate or Designation No. SG7R549J	Signature/Date of Authorized Individual <u><i>Vincent C. Chicoine</i></u> 7/18/08
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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.)

US N7EV

11

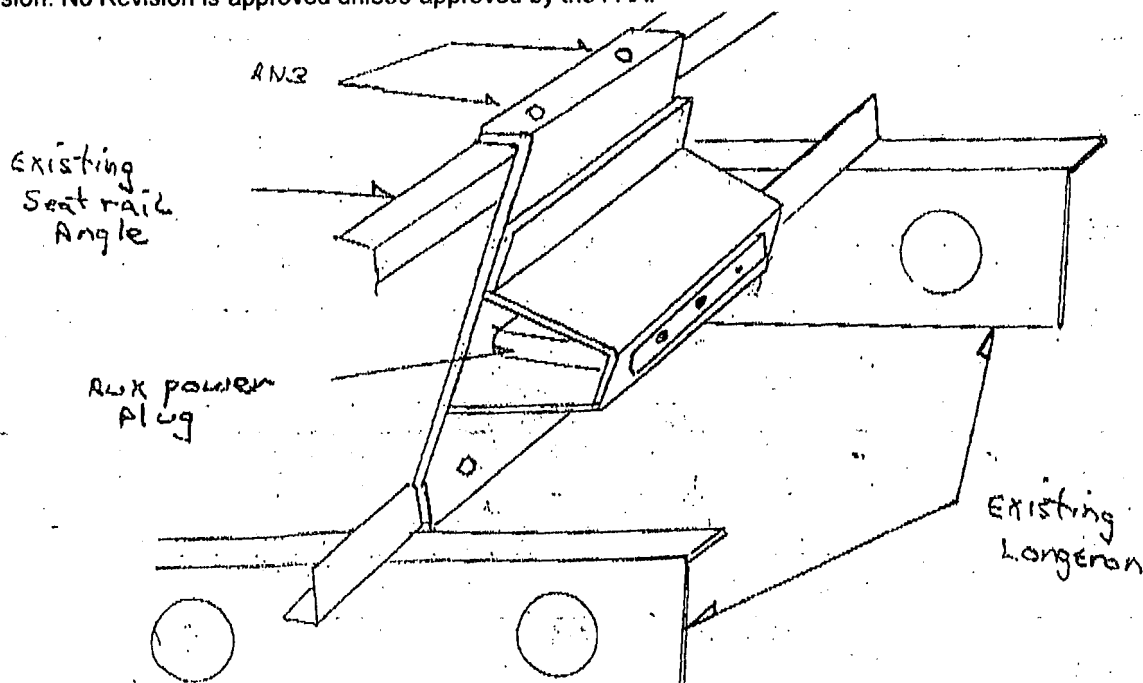
Nationality and Registration Mark

Date

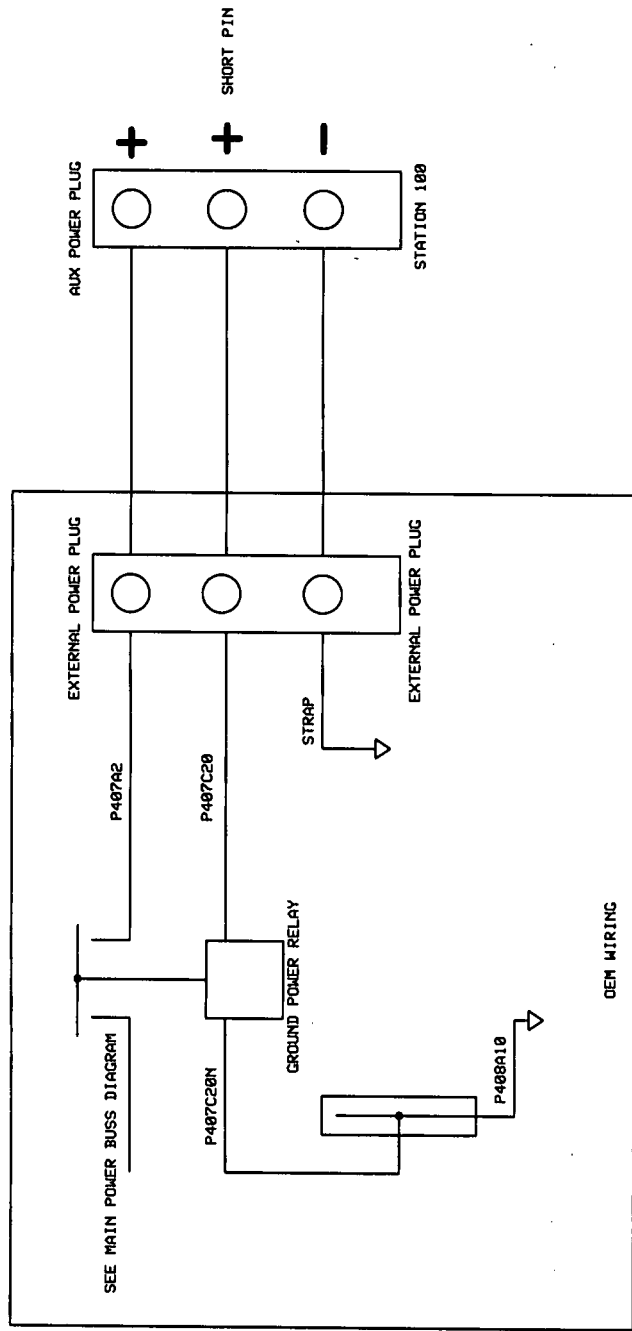
Installed an auxillary power plug on the interior of the fuselage at station 100.00. It is installed on the forward side of the center seat base. The auxillary plug is mounted on a bracket made of .040 aluminum and bolted to the existing cross members with AN3 bolts. The auxillary power plug used is part number MS3506-1. The main power wire (+) is routed along the right side of the fuselage and attached to the (+) terminal of the existing external power plug. The ground wire (-) is attached to the fuselage longeron near the auxillary power plug. The relay wire (+) is routed along with the main wire and is attached to the external power plug relay wire terminal. The wiring used is M22759/16-01 and M22759/16-18 wire. The wiring was done in accordance with 43.13-1B chapter 11. (See Wiring Diagram)

Instructions For Continued Airworthiness:

- 1)Introduction: This Aircraft has been modified to have an external plug on the inside of the aircraft under the front of the center seat.
- 2)Description: MS3506-1 Plug M22759/16-1 wire and M22759/16/18 wire.
- 3)Control: See P.O.H for operation of the external power plug.
- 4)Servicing Information: Maintenance is on condition only. Periodic maintenance is not required.
- 5)Maintenance Instructions: Inspection in accordance with FAR 43 Appendix D and 43.13-1B chapter 11.
- 6)Trouble Shooting Information: Current A36 Shop Manual p/n AF35-0001-3 Section 13 and 14.
- 7)Removal and Replacement Information: Replacement parts are listed in item 2. Removal refer to drawing.
- 8)Diagrams: Wiring Diagram
- 9)Special Inspection Requirement: N/A
- 10)Application of Protective Treatments: N/A
- 11)Data relative to structural Fasteners: AN3 Bolts
- 12)Special Tools: N/A
- 13)For Commuter Category: N/A
- 14)Recommended Overhaul Period: N/A
- 15)Airworthiness Limitations Section: "Not Approved For use In Flight"
- 16)Revision: No Revision is approved unless approved by the FAA.



☒ Additional Sheets Are Attached



JETSUN AVIATION

N7EY SN: E3162

DAN CUMMINS

4/25/2008

Page 1 OF 1

100



U.S. Department
of Transportation
**Federal Aviation
Administration**

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
CE-01

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000.00 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make RAYTHEON	Model A36
	Serial No. E-3162	Nationality and Registration Mark UNITED STATES N7EV
2. Owner	Name (As shown on registration certificate) Kruse Air LLC.	Address (As shown on registration certificate) 2504 S Cypress St Sioux City, IA 51106

3. For FAA Use Only

The data identified herein complies with the applicable
airworthiness requirements and is approved only for the above
described aircraft, subject to conformity inspection by a person
authorized in F.A.R. 43.7 (a)

OCT 22 2004

(date)

Stephen A. Smith
F.A.A. Inspector, ACE-FSDO-01

4. Unit Identification

5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~ (As described in Item 1 above) ~~~~~				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
JetSun Aviation Centre Sioux City Municipal Airport 5815 Mitchell Street Sioux City, IA 51111	☐ U.S. Certificated Mechanic	SG7R549J CLASS I,II RADIO LMTD AIRFRAME
	☐ Foreign Certificated Mechanic	
	☒ Certificated Repair Station	
	☐ Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date 10/ 7/2004	Signature of Authorized Individual MARK PETERSEN <i>Mark Petersen</i>
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7. Approval For Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED

BY	FAA Fit Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee ☒	Repair Station	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection 10-29-04	Certificate or Designation No. SG7R549J	Signature of Authorized Individual MARK PETERSEN <i>Mark Petersen</i>
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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

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

1. INSTALLED THE FOLLOWING EQUIPMENT:

- INSTALLED THE FOLLOWING EQUIPMENT:
- A. WSI INFLIGHT AV-200 PN: 305391-000 FAA-PMA ON RADIO SHELF BEHIND REAR INTERIOR PANEL
 - B. WEATHER ANTENNA CI 1530-1 PN: 305394 FAA-PMA ON CENTERLINE ABOVE LUGGAGE AREA
PER WSI INSTALLATION MANUAL PN: 305427-00 REV. A
 - C. WSI INTERFACE AVX-5 PN: 01-P00896DM01 FAA-PMA ON RADIO SHELF BEHIND REAR INTERIOR

PANEL

PER WSI INSTALLATION MANUAL PN: AE-QS0023 REV. B

2. THIS INSTALLATION IS A FOLLOW ON APPROVAL WITH REFERENCE TO STC SA02029CH HELD BY PROJECTS UNLIMITED, INC FOR AVX-5 AND STC SA01588NY-D HELD BY KEYSTONE HELICOPTER CORP FOR AV-200.

3. ALL WORK WAS DONE IN ACCORDANCE WITH APPROPRIATE SECTIONS OF AC 43.13-1B CHAPTER 11, AC 43.13-1B CHAPTER 12, AC 43.13-2A CHAPTER 2 AND AC 43.13-2A CHAPTER 3.

4. NEW WEIGHT AND BALANCE WAS PERFORMED AND ENTERED IN A/C LOGS.

5. THE AV-200 AND AVX-5 WERE CHECKED FOR INTERFERENCE WITH AIRCRAFT EQUIPMENT

6. A. THE AV-200 WAS INTERFACED AND TESTED WITH AVX-5
B. THE AVX-5 WAS INTERFACED AND TESTED WITH #1 GNS-530

7. A. INSTALLED 1 AMP CIRCUIT BREAKER, MOUNTED ON THE LOWER RIGHT CIRCUIT BREAKER PANEL, AND LABELED WEATHER DATALINK

8. INSTRUCTIONS FOR CONTINUED AIRWORTHINESS; SEE ATTACHED SHEETS.

[illegible]

☒ Additional Sheets are Attached

Raytheon A36
N7EV
SN: E-3162
DATE: OCT 22 2004

ICA CHECK LIST

1. **INTRODUCTION:** The AV-200 is a remote mount unit that provides weather data via a satellite up-link antenna.
2. **DESCRIPTION:** This AV-200 is interfaced with the GNS-530 via the AVX-5 interface unit. Information is transferred via RS-232 and displayed on the GNS-530.
3. **CONTROL, OPERATION INFORMATION:** See Pilot's Guide Addendum PN: 190-00140-13 Rev. A for GNS 400/500 series.
4. **SERVICING INFORMATION:** N/A
5. **MAINTENANCE INSTRUCTIONS:** See Installation Manual PN: 305427-00 Rev. A for AV-200 and PN: AE-QS0023 Rev. B for AVX-5.
6. **TROUBLESHOOTING INFORMATION:** See Installation Manual PN: 305427-00 Rev. A for AV-200 and PN: AE-QS0023 Rev. B for AVX-5.
7. **REMOVAL & REPLACEMENT INFORMATION:** See Installation Manual PN: 305427-00 Rev. A for AV-200 and PN: AE-QS0023 Rev. B for AVX-5.
8. **DIAGRAMS:** See Installation Manual PN: 305427-00 Rev. A for AV-200 and PN: AE-QS0023 Rev. B for AVX-5.
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 CATEGORY AIRCRAFT:** N/A
14. **RECOMMENDED OVERHAUL PERIODS:** N/A
15. **AIRWORTHINESS LIMITATION SECTION:** The GNS-400/500 Series Pilot's Guide Addendum, PN: 190-00140-13 Rev. A, or later appropriate revision, must be immediately available to the flight crew whenever flight is predicated on the use of the system.
16. **REVISION:** "The attached revised/new Instructions for Continued Airworthiness (date 10-29-04) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (date N/A)." Once the revision has been accepted, a maintenance record entry will be made identifying the revision, its location, and date of the Form 337.

11. 93 400



U.S. Department
of Transportation
Federal Aviation
Administration

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

LBB FSDO

MAY 17 2002 LBB FSDO SW-13

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make Beech	Model A36
	Serial No. E-3162	Nationality and Registration Mark N7EV
2. Owner	Name (As shown on registration certificate) Sundance Aviation, Inc	Address (As shown on registration certificate) 12210 N Sara Rd Yukon, OK 73099

3. For FAA Use Only

4. Unit Identification

5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Tradewind Turbines Corporation 10001 American Drive Amarillo, TX 79111	U.S. Certificated Mechanic	TUDR675K
	Foreign Certificated Mechanic	
	☒ Certificated Repair Station	
	Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date 05-15-2002	Signature of Authorized Individual <i>Willard L. Chapman</i> Willard L. Chapman
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7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED					
BY	FAA Fit. Standards Inspector		Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	☒	Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 05-15-2002		Certificate or Designation No. TUDR675K		Signature of Authorized Individual <i>Willard L. Chapman</i> Willard L. Chapman	

NOTICE

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8. Description of Work Accomplished

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

Installed a Bob Fields Aerocessories door seal pump upgrade kit in accordance with STC SA4180WE and Bob Fields Aerocessories Service Bulletin BFA-001. Incorporation of this service bulletin is an acceptable Alternate Method of Compliance for AD 98-21-21 in accordance with a Memorandum dated January 11, 1998 from the FAA Los Angeles Aircraft Certification Office. Door seal with a manual pump was previously installed under the same STC on 01-07-02. Updated aircraft weight and balance data to reflect this change.

***** NOTHING FOLLOWS *****

☐ Additional Sheets Are Attached



U.S. Department
of Transportation
Federal Aviation
Administration

Memorandum

Subject: **INFORMATION: Alternative Methods of Compliance**
(AMOC) for AD 98-21-21

Date: January 11, 1998

From: Manager, Los Angeles Aircraft Certification Office,
ANM-100L

Reply to Paul Wells
Attn. of: 562-627-5354

To: Docket 98-CE-88-AD

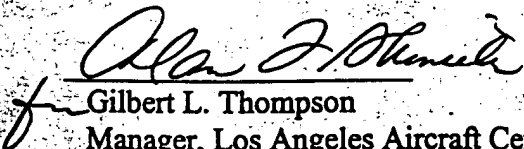
The Small Airplane Directorate, in conjunction with the Los Angeles Aircraft Certification Office, issued Airworthiness Directive (AD) 98-21-21, by Priority Letter on October 2, 1998. This AD applied to all Bob Fields Aerocessories electric door seal inflation Supplemental Type Certificates, (STCs) installed on various general aviation airplanes, including Cessna, Mooney, Piper, Raytheon, Bellanca and Wing. Since manufacturer's service information was unavailable, the Federal Aviation Administration made the determination that these systems needed to be immediately deactivated and developed instructions based on information available at that time.

Subsequently, service information had been provided by the manufacturer which has been determined to be an acceptable Alternative Method of Compliance (AMOC) for AD 98-21-21.

Incorporation of the provisions of Bob Fields Service Bulletin No. BFA-001 (original), dated November 3, 1998, is hereby approved as an alternate method of compliance for AD 98-21-21.

A copy of this letter must be kept in the maintenance and flight manuals of the airplanes utilizing the Bob Fields Service Bulletin No. BFA-001, dated November 3, 1998, as an alternate method of compliance.

If you have any further questions, please contact Mr. Paul Wells of my staff at 562-627-5354.


Gilbert L. Thompson

Manager, Los Angeles Aircraft Certification Office

United States of America
Department of Transportation — Federal Aviation Administration
Supplemental Type Certificate

Number SA4180WE

This certificate is issued to Bob Fields Aerocessories

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 3* of the Civil Air Regulations. *See Aircraft Specification 3A15 for complete certification basis.

Original Product — Type Certificate Number 3A15

Make: Beech

Model: H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C, F33, F33A, F33C, G33, 36, A36, A36TC

Description of Type Design Change: Installation of inflatable door seal in accordance with FAA sealed Aerocessories Drawing No. 3950 dated April 7, 1980, or later FAA approved revision.

Limitations and Conditions: The approval of this change in type design applies to the basic aircraft of the specified model only that is otherwise unmodified. This approval should not be extended to other aircraft of this model on which other previously approved modifications are incorporated unless it is determined by the installer that the interrelationship between this change and any of those other previously approved modifications will introduce no adverse effect upon the airworthiness of that aircraft.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: October 16, 1979

Date received:

Date of issuance: June 30, 1980

Date recorded:



By direction of the Administrator

[Signature]
(Signature)
Chief, Aircraft Modification Branch
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both. This certificate may be transferred in accordance with FAR 21.47

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

NATIONALITY AND REGISTRATION MARKS	2 MANUFACTURER AND MODEL	3 AIRCRAFT SERIAL NUMBER	4 CATEGORY
N7EV	Raytheon Aircraft Company BE-36-A36	E-3162	Utility

AUTHORITY AND BASIS FOR ISSUANCE

This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation, except as noted herein.

Exceptions:

None.

TERMS AND CONDITIONS

Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.

DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER
03-24-1998	Paul W. Reynolds/AST	ASW-FSDO-15

Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION
STANDARD AIRWORTHINESS CERTIFICATE

NATIONALITY AND REGISTRATION MARKS	2 MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4 CATEGORY
N2302L	RAYTHEON AIRCRAFT COMPANY A36	E-3162	UTILITY

5 AUTHORITY AND BASIS FOR ISSUANCE

This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation, except as noted herein.

Exceptions:

NONE

6 TERMS AND CONDITIONS

Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States

DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER
3-24-98	 R.M. Workman	DOA, PC#8

Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years or both THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION
STANDARD AIRWORTHINESS CERTIFICATE

NATIONALITY AND REGISTRATION MARKS	2 MANUFACTURER AND MODEL	3 AIRCRAFT SERIAL NUMBER	4 CATEGORY
N99LE	Raytheon Aircraft Company BE-36-A36	E-3162	Utility

5 AUTHORITY AND BASIS FOR ISSUANCE

This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation, except as noted herein.

Exceptions:

None.

6 TERMS AND CONDITIONS

Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.

DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER
03-24-1998	Paul W. Reynolds/AST	ASW-FSDO-15

Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

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UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION
STANDARD AIRWORTHINESS CERTIFICATE

1. NATIONALITY AND REGISTRATION MARKS N2302L	2. MANUFACTURER AND MODEL RAYTHRON AIRCRAFT COMPANY A36	3. AIRCRAFT SERIAL NUMBER E-31162	4. CATEGORY UTILITY
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5. AUTHORITY AND BASIS FOR ISSUANCE
This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex B to the Convention on International Civil Aviation, except as noted herein.
Exceptions:

NONE

6. TERMS AND CONDITIONS

Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.

DATE OF ISSUANCE 3-24-98	FAA REPRESENTATIVE <i>R.M. Workman</i> R.M. Workman	DESIGNATION NUMBER DOA, PC#8
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Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

GPO 773-933

FAA Form 8100-2 (8-82)

ATTN: Paul Reynolds FSDO
From: Gary VARNELL
SUNDANCE AVIATION
Thank you

PAGE 1 OF 3





U.S. Department of
Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

50-F500-35

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Make Raytheon Aircraft Company	Model A36
	Serial No. E-3162	Nationality and Registration Mark N99LE
2. Owner	Name (As shown on registration certificate) A414 CORP	Address (As shown on registration certificate) 9021 Town Center Pkwy Bradenton, FL 43202-4175

3. For FAA Use Only

4. Unit Identification

5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address Mark V. Keefer 107 8 th Ave S. St. Petersburg, FL. 33701	B. Kind of Agency ☒ U.S. Certified Mechanic ☐ Foreign Certified Mechanic ☐ Certified Repair Station ☐ Manufacturer	C. Certificate No. IA 230786539
---	---	------------------------------------

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date 01-07-02	Signature of Authorized Individual Mark V. Keefer
------------------	--

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED

BY	FAA Fit Standards Inspector	Manufacturer	X	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 01-07-02		Certificate or Designation No. IA 230786539		Signature of Authorized Individual Mark V. Keefer	

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.)

1. Installed a Bob Fields Aeroccessories economy door seal P/N 3950-36EC iaw STC# SA4180WE and Bob Fields Aeroccessories drawing #3950 dated April 7, 1980.
2. Weight and Balance change is negligible.

☐ Additional Sheets Are Attached



U.S. Department
of Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020
For FAA Use Only

Office Identification:
SW-FSDO-13

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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.1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Make RAYTHEON	Model A36
	Serial No. E3162	Nationality and Registration Mark N-2302L
2. Owner	Name (As shown on registration certificate) TRADEWIND TURBINES CORP	Address (As shown on registration certificate) 10001 AMERICAN DR AMARILLO, TX 79111-1213

3. For FAA Use Only

"The Alteration/Date identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized by FAR Part 43, Section 43.7"

SW-FSDO-13 NOV 07 2001 *Steven E. Miller*
District Office Date Signature of FAA Inspector

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

6. Conformity Statement

A. Agency's Name and Address TRADEWIND TURBINES P.O. BOX 31930 AMARILLO, TX 79120-1930	B. Kind of Agency	C. Certificate No. TUDR675K
	U.S. Certificated Mechanic	
	Foreign Certificated Mechanic	
	X Certificated Repair Station	
	Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date 10-31-01	Signature of Authorized Individual <i>Chester E. Hupley</i>
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7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is

☒ APPROVED ☐ REJECTED

BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	X Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 11-8-01		Certificate or Designation No. TUDR675K	Signature of Authorized Individual <i>Chester E. Hupley</i>	

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.)

- I. REFERENCE: TRADEWIND TURBINES FAA 337, DATED 10-24-01.
- II. GARMIN PILOT'S GUIDE, PN 190-00181-60, REV. A, DATED MAY 2000, INSTALLED IN AND MUST BE MAINTAINED AS PART OF THE PERMANENT RECORDS OF THE AIRCRAFT.
- III. FLIGHT EVALUATION FOR IFR ENROUTE, TERMINAL AND NON PRECISION GPS APPROACHES WERE MADE AND MET THE ACCURACY REQUIREMENTS OF AC 20-138, PAR. 8c(2)(iv). ~~NON PRECISION GPS APPROACHES WERE MADE TO AMARILLO, TX RWY 4 & 22.~~
- IV. FAA APPROVED AIRPLANE FLIGHT MANUAL SUPPLEMENT FOR GARMIN GNS530 GPS NAVIGATION SYSTEM, DATED NOV 07 2001, HAS BEEN INCORPORATED IN THE RAYTHEON MODEL A36 PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL.
- V. THE PLACARD INSTALLED UNDER TRADEWIND TURBINES FAA FORM 337, DATED 10-24-01, HAS BEEN REMOVED.
- VI. THE GARMIN GNS530 GPS SYSTEM IS APPROVED FOR IFR ENROUTE, TERMINAL AND NON PRECISION APPROACHES.

-----END-----



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

LBB FSDO

NOV 09 2001

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
SW-FSDO-13

[Signature]

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Make RAYTHEON	Model A36
	Serial No. E3162	Nationality and Registration Mark N-2302L
2. Owner	Name (As shown on registration certificate) TRADEWIND TURBINES CORP	Address (As shown on registration certificate) 10001 AMERICAN DR AMARILLO, TX 79111-1213

3. For FAA Use Only

"The Alteration/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 by FAR Part 43, Section 43.7"

SW-FSDO-13 NOV 07 2001

[Signature: Sharon E. Miller]
Signature of FAA Inspector

District Office

Date

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

6. Conformity Statement

A. Agency's Name and Address TRADEWIND TURBINES P.O. BOX 31930 AMARILLO, TX 79120-1930	B. Kind of Agency	C. Certificate No.
	U.S. Certified Mechanic	TUDR675K
	Foreign Certified Mechanic	
	X Certified Repair Station	
	Manufacturer	

I, _____, certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date 10-31-01	Signature of Authorized Individual <i>[Signature: Chester E. Huxley]</i>
------------------	---

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is

☒ APPROVED

☐ REJECTED

BY	FAA FTL Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	X Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 10-8-01		Certificate or Designation No. TUDR675K	Signature of Authorized Individual <i>[Signature: Chester E. Huxley]</i>	

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.)

- I. REFERENCE: TRADEWIND TURBINES FAA 337, DATED 10-24-01.
- II. GARMIN PILOT'S GUIDE, PN 190-00140-00, REV. F, DATED JUL 2000, INSTALLED IN AND MUST BE MAINTAINED AS PART OF THE PERMANENT RECORDS OF THE AIRCRAFT.
- III. FLIGHT EVALUATION FOR IFR ENROUTE, TERMINAL AND NON PRECISION GPS APPROACHES WERE MADE AND MET THE ACCURACY REQUIREMENTS OF AC 20-138, PAR. 8c(2)(iv). NON PRECISION GPS APPROACHES WERE MADE TO AMARILLO, TX RWY 4 & 22.
- IV. FAA APPROVED AIRPLANE FLIGHT MANUAL SUPPLEMENT FOR GARMIN GNS430 GPS NAVIGATION SYSTEM, DATED NOV 07 2001, HAS BEEN INCORPORATED IN THE RAYTHEON MODEL A36 PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL.
- V. THE PLACARD INSTALLED UNDER TRADEWIND TURBINES FAA FORM 337, DATED 10-24-01, HAS BEEN REMOVED.
- VI. THE GARMIN GNS430 GPS SYSTEM IS APPROVED FOR IFR ENROUTE, TERMINAL AND NON PRECISION APPROACHES.

-----END-----



U.S. Department
of Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
SW-FSDO-13

SWK

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Make RAYTHEON	Model A36
	Serial No. E3162	Nationality and Registration Mark N-2302L
2. Owner	Name (As shown on registration certificate) TRADEWIND TURBINES CORP	Address (As shown on registration certificate) 10001 AMERICAN DR AMARILLO, TX 79111-1213

3. For FAA Use Only

4. Unit Identification

5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~ (As described in item 1 above) ~~~~~				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address TRADEWIND TURBINES P.O. BOX 31930 AMARILLO, TX 79120-1930	B. Kind of Agency	C. Certificate No.
	U.S. Certificated Mechanic	TUDR675K
	Foreign Certificated Mechanic	
	X Certificated Repair Station	
	Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date 11-9-01	Signature of Authorized Individual Will East
-----------------	---

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED

BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	X Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 11-9-01		Certificate or Designation No. TUDR675K	Signature of Authorized Individual	

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.)

Modified aircraft by installation of an Allison 250-B17F/2 turbine engine and related airframe changes in accordance with Soloy Conversion Ltd. master drawing list 771-300, dated October 30, 1987 and STC SA3523NM Rev. 2, dated February 13, 1992.

Installed Knots 2 You, Inc. aileron and flap gap seal kit as part of above work. Installed in accordance with Knots 2 You, Inc. installation manual Bonanza gap Seals and STC SA421GL.

Weighed aircraft and entered new weight & balance data in the aircraft records.

Continuous airworthiness as per Beech/Allison/Soloy inspection form.

-----END-----



U.S. Department
of Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
SW-FSDO-13

SWH

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Make RAYTHEON	Model A36
	Serial No. E3162	Nationality and Registration Mark N-2302L
2. Owner	Name (As shown on registration certificate) TRADEWIND TURBINES CORP	Address (As shown on registration certificate) 10001 AMERICAN DR AMARILLO, TX 79111-1213

3. For FAA Use Only

4. Unit Identification

5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	----- (As described in item 1 above) -----				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address TRADEWIND TURBINES P.O. BOX 31930 AMARILLO, TX 79120-1930	B. Kind of Agency	C. Certificate No.
	☐ U.S. Certificated Mechanic	TUDR675K
	☐ Foreign Certificated Mechanic	
	☒ Certificated Repair Station	
	Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date 11-9-01	Signature of Authorized Individual <i>[Signature]</i>
-----------------	--

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED

BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	X Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 11-9-01		Certificate or Designation No. TUDR675K	Signature of Authorized Individual <i>[Signature]</i>	

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.)

Installed oxygen system on Beechcraft A36.

Installation done in accordance with Tradewind Turbines, Inc. oxygen system installation for Beechcraft A36. Drawings and parts list dated 10/12/95 and 10/13/98 and instructions on original Multiple Field Approval, FAA Form 337 dated 11/20/98.

Refer to aircraft flight manual section 4, pages 4-18 through 4-21, section 7, page 7-43 and section 8, pages 8-25 & 8-26 for pertinent details. Bottle hydrostatic test due at three year intervals & replacement at 15 years. Regulator due overhaul or replacement every 48 months. Continuous airworthiness as per Beech/Allison/Soloy inspection form.

Updated aircraft weight and balance report and equipment list.

This alteration complies with the applicable airworthiness requirements and is approved for duplication on identical make and model aircraft when accomplished by the original modifier. Approved for multiple duplication by FAA Form 337 dated 11/20/98. issued by SW-FSDO-13.

Continuous airworthiness as per Beech/Allison/Soloy inspection form.

-----END-----



U.S. Department
of Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
SW-FSDO-13

[Signature]

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Make RAYTHEON	Model A36
	Serial No. E3162	Nationality and Registration Mark N-2302L
2. Owner	Name (As shown on registration certificate) TRADEWIND TURBINES CORP	Address (As shown on registration certificate) 10001 AMERICAN DR AMARILLO, TX 79111-1213

3. For FAA Use Only

4. Unit Identification

5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~ (As described in item 1 above) ~~~~~				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address TRADEWIND TURBINES P.O. BOX 31930 AMARILLO, TX 79120-1930	B. Kind of Agency ☐ U.S. Certified Mechanic ☐ Foreign Certified Mechanic ☒ Certified Repair Station ☐ Manufacturer	C. Certificate No. TUDR675K
---	---	--------------------------------

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date 11-9-01	Signature of Authorized Individual <i>[Signature]</i>
-----------------	--

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is

☒ APPROVED ☐ REJECTED

BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	X Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 11-9-01		Certificate or Designation No. TUDR675K	Signature of Authorized Individual <i>[Signature]</i>	

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.)

- I. INSTALLED AERO-TRIM INC., ELECTRIC RUDDER TRIM TAB AS PER STC NO. SA1836S0 & AERO-TRIM INSTALLATION INSTRUCTIONS.
- II. LOG BOOK ENTRIES MADE.
- III. WEIGHT & BALANCE UPDATED.
- IV. CONTINUOUS AIRWORTHINESS AS PER BEECH/ALLISON/SOLOY INSPECTION FORM.

-----END-----



U.S. Department
of Transportation
Federal Aviation
Administration

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

LBB FSDO

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
SW-FSDO-13

SWK

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Make RAYTHEON	Model A36
	Serial No. E3162	Nationality and Registration Mark N-2302L
2. Owner	Name (As shown on registration certificate) TRADEWIND TURBINES CORP	Address (As shown on registration certificate) 10001 AMERICAN DR AMARILLO, TX 79111-1213

3. For FAA Use Only

4. Unit Identification

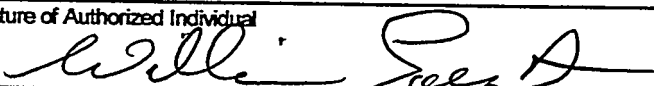
5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~ (As described in item 1 above) ~~~~~				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address TRADEWIND TURBINES P.O. BOX 31930 AMARILLO, TX 79120-1930	B. Kind of Agency	C. Certificate No.
	U.S. Certificated Mechanic	TUDR675K
	Foreign Certificated Mechanic	
	X Certificated Repair Station	
	Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date 11-9-01	Signature of Authorized Individual 
-----------------	--

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is

☒ APPROVED

☐ REJECTED

BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	X Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 11-9-01		Certificate or Designation No. TUDR675K	Signature of Authorized Individual 	

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.)

I. INSTALLED KEITH PRODUCTS MOTOR DRIVEN FREON COMPRESSOR PER STC NO. SA3523NM & SOLOY CONVERSION DRAWINGS 771-4500/4525/1045. CONNECTED TO ORIGINAL BEECH INSTALLED AIRCONDITIONING EQUIPMENT.

II. LOG BOOK ENTRIES MADE.

III. WEIGHT & BALANCE UPDATED.

IV. CONTINUOUS AIRWORTHINESS AS PER BEECH/ALLISON/SOLOY INSPECTION FORM.

-----END-----



U.S. Department
of Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Make RAYTHEON	Model A36
	Serial No. E3162	Nationality and Registration Mark N-2302L
2. Owner	Name (As shown on registration certificate) TRADEWIND TURBINES CORP	Address (As shown on registration certificate) 10001 AMERICAN DR AMARILLO, TX 79111-1213

3. For FAA Use Only

"The information/data identified herein complies with the applicable aircraft safety requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized by FAR Part 43, Section 43.7"

SW-FSDO-13

OCT 29 2001

District Office

Date

Signature of FAA Inspector

4. Unit Identification

5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address TRADEWIND TURBINES P.O. BOX 31930 AMARILLO, TX 79120-1930	B. Kind of Agency	C. Certificate No.
	U.S. Certified Mechanic	TUDR675K
	Foreign Certified Mechanic	
	☒ Certified Repair Station	
	Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date 10-19-01	Signature of Authorized Individual <i>Charles E. Hupley</i>
------------------	--

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is

☒ APPROVED

☐ REJECTED

BY	FAA Fit Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	☒ Repair Station	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection 10-31-01	Certificate or Designation No. TUDR675K	Signature of Authorized Individual <i>Charles E. Hupley</i>
---	--	--

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.)

- I. REMOVED THE FOLLOWING:
 - 1. ENSIGHT ENGINE MONITOR.
- II. INSTALLED THE FOLLOWING:
 - 1. WIRING FOR FUTURE INSTALLATION OF THE BECKER TSO'D MODEL ATC4401-(X) TRANSPONDER IN THE 2.25 IN. ROUND INSTRUMENT HOLE WHERE THE ENGINE MONITOR WAS INSTALLED.
 - 2. COMANT CI-505 TRANSPONDER ANTENNA ON THE BOTTOM OF THE AIRCRAFT AT STA. LOCATION 52.0.
 - 3. ACK TECHNOLOGIES A-30 ENCODER ON THE AVIONICS SHELF BEHIND THE CO-PILOT'S SIDE INSTRUMENT PANEL.
- III. INSTALLATION PERFORMED, TESTED AND APPROVED I-A-W :
 - 1. BECKER AVIONICS SYSTEMS ATC4401-(X) INSTALLATION WIRING DIAGRAM.
 - 2. ACK TECHNOLOGIES A-30 ALT. ENCODER INSTALLATION MANUAL.
 - 3. ATTACHMENT #1, TRADEWIND TURBINES DRAWING 59092-2
 - 4. ATTACHMENT #2, INSTRUCTIONS FOR CONTINUED AIRWORTHINESS.
 - 5. FAA A/C 43.13-1B PARA. 11-37, 11-47, 11-53, 11-96, 11-146 & 11-158.
 - 6. FAA A/C 43.13-2A PARA. 21, 22, 23.
 - 7. F.A.R. 23.1301 AND 23.1309(a) (1&2).
- IV. WEIGHT & BALANCE UPDATED & LOGBOOK ENTRIES MADE.

-----END-----



U.S. Department
of Transportation
Federal Aviation
Administration

OCT 10 2001

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

SW-FSDO-13

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

OCT 23 2001

1. Aircraft	Make RAYTHEON	Model A36
	Serial No. E3162	Nationality and Registration Mark N-2302L
2. Owner	Name (As shown on registration certificate) TRADEWIND TURBINES CORP	Address (As shown on registration certificate) 10001 AMERICAN DR AMARILLO, TX 79111-1213

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 by FAR Part 43, Section 43.7

STEVEN E. MILLER

SW-FSDO-13 OCT 11 2001

District Office

Date

Signature of FAA Inspector

4. Unit Identification

5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address TRADEWIND TURBINES P.O. BOX 31930 AMARILLO, TX 79120-1930	B. Kind of Agency ☐ U.S. Certificated Mechanic ☐ Foreign Certificated Mechanic ☒ Certificated Repair Station ☐ Manufacturer	C. Certificate No. TUDR675K
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D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date 10-8-01	Signature of Authorized Individual <i>Rennier J. Stelma</i>
-----------------	--

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED

BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	X Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 10-24-01		Certificate or Designation No. TUDR675K	Signature of Authorized Individual <i>Chester E. Hupley</i>	

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.)

- I. REMOVED THE FOLLOWING:
 - 1. #2 BENDIX/KING KX-165 COM/NAV & KI-202 VOR/LOC INDICATOR.
- II. INSTALLED THE FOLLOWING:
 - 1. GARMIN GNS430 GPS/COM/VOR/LOC/GS SYSTEM, PN 011-00280-10, SN 97104433, MAIN SW VERSION 2.22, IN CENTER AVIONICS STACK BELOW THE GARMIN GNS530 & THE GARMIN GI-106A INDICATOR IN THE #2 NAV INDICATOR LOCATION AS THE #2 COM/NAV SYSTEM & INTERFACED TO THE BF GOODRICH SKYWATCH 497 & WX-500 STORMSCOPE.
 - 2. GARMIN GA56 ANTENNA, PN 011-00134-00, SN 59055798, ON TOP OF AIRCRAFT ABOVE COCKPIT, STA LOCATION 85.0, BESIDE THE #1 GARMIN GA56 GPS ANTENNA.
- III. INSTALLATION PERFORMED, TESTED AND APPROVED I.A.W.:
 - 1. GARMIN INSTALLATION MANUAL, PN 190-00140-02, REV. J, FEBRUARY 2001.
 - 2. ATTACHMENT #1, STC #SA00705WI, SUPPORTING DATA.
 - 3. ATTACHMENT #2, TRADEWIND TURBINES DRAWING 59092-1.
 - 4. ATTACHMENT #3, MANUFACTURES INSTRUCTIONS FOR CONTINUED AIRWORTHINESS, GARMIN (400 SERIES UNIT),
 - 5. FAA A/C 43.13-1B PARA. 11-37, 11-47, 11-53, 11-96, 11-146, & 11-158.
 - 6. FAA A/C 43.13-2A PARA. 21, 22, 23.
 - 7. F.A.R. 23.1301 AND 23.1309(a) (1&2).
- IV. AIRCRAFT PLACARDED "GPS NOT APPROVED FOR IFR".
- V. WEIGHT & BALANCE UPDATED & LOGBOOK ENTRIES MADE.

-----END-----

LBB FSDO



U.S. Department
of Transportation
Federal Aviation
Administration

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

OCT 09 2001

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

SW-FSDO-13

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

LBB FSDO

1. Aircraft	Make RAYTHEON	Model A36
	Serial No. E3162	Nationality and Registration Mark N-2302L
2. Owner	Name (As shown on registration certificate) TRADEWIND TURBINES CORP	Address (As shown on registration certificate) 10001 AMERICAN DR. AMARILLO, TX 79111-1213

OCT 26 2001

3. For FAA Use Only

This Aircraft 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 by FAR Part 43, Section 43.7.

SW-FSDO-13 OCT 11 2001

District Office

Date

Signature of FAA Inspector

STEVEN E. MILLER

4. Unit Identification

5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address TRADEWIND TURBINES P.O. BOX 31930 AMARILLO, TX 79120-1930	B. Kind of Agency	C. Certificate No.
	☐ U.S. Certified Mechanic	TUDR675K
	☐ Foreign Certified Mechanic	
	☒ Certified Repair Station	
	Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date

10-5-01

Signature of Authorized Individual

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is

☒ APPROVED☐ REJECTED

BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	X Repair Station	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection

10-24-01

Certificate or
Designation No.
TUDR675K

Signature of Authorized Individual

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.)

- I. REMOVED THE FOLLOWING:
 1. #1 BENDIX/KING KX-165 COM/NAV/GS.
 2. BENDIX/KING KLN-90B GPS, KA-92 GPS ANTENNA & MID CONTINENT MD41 ANNUNCIATOR SWITCH.
 3. BACK UP AIR DRIVEN DG FROM CO-PILOT'S SIDE.
 4. KI-227 ADF INDICATOR FROM LOWER LEFT CORNER OF THE PILOT'S INSTRUMENT PANEL.
- II. RELOCATED THE FOLLOWING:
 1. BENDIX/KING KR-87 ADF FROM THE CENTER AVIONICS STACK TO THE RIGHT STACK.
- III. INSTALLED THE FOLLOWING:
 1. GARMIN GNS530 GPS/COM/VOR/LOC/GS SYSTEM, PN 011-00550-10, SN 78401224, MAIN SW VERSION 2.07, IN CENTER AVIONICS STACK UNDER THE BENDIX/KING KMA-24 AUDIO PANEL AS THE #1 COM/NAV SYSTEM & INTERFACED TO THE HSI, KFC-150 A/P, BF GOODRICH SKYWATCH 497, WX-500 STORMSCOPE & ARGUS 7000CE MAP.
 2. GARMIN GA56 ANTENNA, PN 011-00134-00, SN 59061102, ON TOP OF AIRCRAFT ABOVE COCKPIT, STA LOCATION 85.0, BESIDE THE #2 GARMIN GA56 GPS ANTENNA.
- IV. INSTALLATION PERFORMED, TESTED AND APPROVED I.A.W.:
 1. GARMIN INSTALLATION MANUAL, PN 190-00181-02, REV. D, APRIL 2001.
 2. ATTACHMENT #1, STC #SA00864WI, SUPPORTING DATA.
 3. ATTACHMENT #2, TRADEWIND TURBINES DRAWING 59092.
 4. ATTACHMENT #3, MANUFACTURES INSTRUCTIONS FOR CONTINUED AIRWORTHINESS, GARMIN (500 SERIES UNIT),
 5. FAA A/C 43.13-1B PARA. 11-37, 11-47, 11-53, 11-96, 11-146, & 11-158.
 6. FAA A/C 43.13-2A PARA. 21, 22, 23.
 7. F.A.R. 23.1301 AND 23.1309(a) (1&2).
- V. AIRCRAFT PLACARDED "GPS NOT APPROVED FOR IFR".
- VI. WEIGHT & BALANCE UPDATED & LOGBOOK ENTRIES MADE.

-----END-----



APPLICATION FOR AIRWORTHINESS CERTIFICATE

INSTRUCTIONS — Print or type. Do not write in shaded areas; these are for FAA use only. Submit original only to an authorized FAA Representative. If additional space is required, use an attachment. For special flight permits complete Sections II and VI or VII as applicable.

I. AIRCRAFT DESCRIPTION	1. REGISTRATION MARK N2302L	2. AIRCRAFT BUILDER'S NAME (Make) RAYTHEON AIRCRAFT CO.	3. AIRCRAFT MODEL DESIGNATION A36	4. YR. MFR 1998	FAA CODING 7150001
	5. AIRCRAFT SERIAL NO E-3162	6. ENGINE BUILDER'S NAME (Make) Continental	7. ENGINE MODEL DESIGNATION IO-550-B		
	8. NUMBER OF ENGINES 1	9. PROPELLER BUILDER'S NAME (Make) McCauley	10. PROPELLER MODEL DESIGNATION D3A32C409C		
					11. AIRCRAFT IS (Check if applicable) IMPORT

II. CERTIFICATION REQUESTED	APPLICATION IS HEREBY MADE FOR: (Check applicable items)														
	A	1	☒	STANDARD AIRWORTHINESS CERTIFICATE (Indicate category)	NORMAL	☒	UTILITY	☐	ACROBATIC	☐	TRANSPORT	☐	GLIDER	☐	BALLOON
	B	SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate items)													
	2	☐	LIMITED												
	5	☐	PROVISIONAL (Indicate class)	1	☐	CLASS I									
		☐		2	☐	CLASS II									
	3	☐	RESTRICTED (Indicate operation(s) to be conducted)	1	☐	AGRICULTURE AND PEST CONTROL	2	☐	AERIAL SURVEYING	3	☐	AERIAL ADVERTISING			
		☐		4	☐	FOREST (Wildlife conservation)	5	☐	PATROLLING	6	☐	WEATHER CONTROL			
	4	☐	EXPERIMENTAL (Indicate operation(s) to be conducted)	7	☐	CARRIAGE OF CARGO	0	☐	OTHER (Specify)						
		☐		1	☐	RESEARCH AND DEVELOPMENT	2	☐	AMATEUR BUILT	3	☐	EXHIBITION			
	☐		4	☐	RACING	5	☐	CREW TRAINING		☐	MKT. SURVEY				
	☐		0	TO SHOW COMPLIANCE WITH FAR											
8	☐	SPECIAL FLIGHT PERMIT (Indicate operation to be conducted, then complete Section VI or VII as applicable on reverse side)	1	FERRY FLIGHT FOR REPAIRS, ALTERATIONS, MAINTENANCE OR STORAGE											
	☐		2	EVACUATE FROM AREA OF IMPENDING DANGER											
	☐		3	OPERATION IN EXCESS OF MAXIMUM CERTIFICATED TAKE-OFF WEIGHT											
	☐		4	DELIVERING OR EXPORT				5	PRODUCTION FLIGHT TESTING						
	☐		6	CUSTOMER DEMONSTRATION FLIGHTS											
C	6	☐	MULTIPLE AIRWORTHINESS CERTIFICATE (Check ABOVE "Restricted Operation" and "Standard" or "Limited," as applicable.)												

III. OWNER'S CERTIFICATION	A. REGISTERED OWNER (As shown on certificate of aircraft registration)		IF DEALER, CHECK HERE ☒	
	NAME RAYTHEON AIRCRAFT COMPANY		ADDRESS P.O. Box 85 Wichita, Kansas 67201	
	B. AIRCRAFT CERTIFICATION BASIS (Check applicable blocks and complete items as indicated)			
	☒	AIRCRAFT SPECIFICATION OR TYPE CERTIFICATE DATA SHEET (Give No and Revision No.) 3A15, Rev. 86	☒	AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.) ISSUE 98-06
	☐	AIRCRAFT LISTING (Give page number(s)) N/A	☐	SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated) N/A
C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS				
☒	CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173 91.417	TOTAL AIRFRAME HOURS 3:05	3	EXPERIMENTAL ONLY (Enter hours flown since last certificate issued or renewed) N/A

D. CERTIFICATION — I hereby certify that I am the registered owner (or his agent) of the aircraft described above, that the aircraft is registered with the Federal Aviation Administration in accordance with Section 501 of the Federal Aviation Act of 1958, and applicable Federal Aviation Regulations, and that the aircraft has been inspected and is airworthy and eligible for the airworthiness certificate requested

DATE OF APPLICATION 03-24-98	NAME AND TITLE (Print or type) R.M. Workman Section Manager-Quality Assurance	SIGNATURE
--	---	---------------

IV. INSPECTION AGENCY VERIFICATION	A. THE AIRCRAFT DESCRIBED ABOVE HAS BEEN INSPECTED AND FOUND AIRWORTHY BY: (Complete this section only if FAR 21.183(d) applies)					
	2	FAR PART 121 OR 127 CERTIFICATE HOLDER (Give Certificate No.)	3	CERTIFICATED MECHANIC (Give Certificate No.)	6	CERTIFICATED REPAIR STATION (Give Certificate No.)
	5	AIRCRAFT MANUFACTURER (Give name of firm)				
DATE		TITLE		SIGNATURE		

V. FAA REPRESENTATIVE CERTIFICATION	(Check ALL applicable blocks in items A and B)		☒	THE CERTIFICATE REQUESTED
	A. I find that the aircraft described in Section I or VII meets requirements for.		4	AMENDMENT OR MODIFICATION OF CURRENT AIRWORTHINESS CERTIFICATE
	B. Inspection for a special flight permit under Section VII was conducted by:		FAA INSPECTOR	FAA DESIGNEE
	DATE		CERTIFICATE HOLDER UNDER:	FAR 65 FAR 121, 127 or 135 FAR 145
	03-24-98	DISTRICT OFFICE WICHITA MIDO	DESIGNEE'S SIGNATURE AND NO. R.M. Workman, DOA, PC#8	FAA INSPECTOR'S SIGNATURE

VI. PRODUCTION FLIGHT TESTING	A. MANUFACTURER				
	NAME		ADDRESS		
	B. PRODUCTION BASIS (Check applicable item)				
	☐ PRODUCTION CERTIFICATE (Give production certificate number)				
	☐ TYPE CERTIFICATE ONLY				
☐ APPROVED PRODUCTION INSPECTION SYSTEM					
C. GIVE QUANTITY OF CERTIFICATES REQUIRED FOR OPERATING NEEDS →					
DATE OF APPLICATION		NAME AND TITLE (Print or type)			
		SIGNATURE			
VII. SPECIAL FLIGHT PERMIT PURPOSES OTHER THAN PRODUCTION FLIGHT TEST	A. DESCRIPTION OF AIRCRAFT				
	REGISTERED OWNER		ADDRESS		
	BUILDER (Make)		MODEL		
	SERIAL NUMBER		REGISTRATION MARK		
	B. DESCRIPTION OF FLIGHT CUSTOMER DEMONSTRATION FLIGHTS ☐ (Check if applicable)				
	FROM		TO		
	VIA		DEPARTURE DATE	DURATION	
	C. CREW REQUIRED TO OPERATE THE AIRCRAFT AND ITS EQUIPMENT				
	☐	PILOT	☐ CO-PILOT	☐ NAVIGATOR	
	☐	OTHER (Specify)			
	D. THE AIRCRAFT DOES NOT MEET THE APPLICABLE AIRWORTHINESS REQUIREMENTS AS FOLLOWS				
	E. THE FOLLOWING RESTRICTIONS ARE CONSIDERED NECESSARY FOR SAFE OPERATION (Use attachment if necessary)				
	F. CERTIFICATION — I hereby certify that I am the registered owner (or his agent) of the aircraft described above, that the aircraft is registered with the Federal Aviation Administration in accordance with Section 501 of the Federal Aviation Act of 1958, and applicable Federal Aviation Regulations, and that the aircraft has been inspected and is airworthy for the flight described				
DATE		NAME AND TITLE (Print or type)			
		SIGNATURE			
VIII. AIRWORTHINESS DOCUMENTATION (FAA use only)	☒	A. Operating Limitations and Markings in Compliance with FAR 91.91 as Applicable	91.9	☐	G. Statement of Conformity, FAA Form 8130-9 (Attach when required)
	☐	B. Current Operating Limitations Attached		☐	H. Foreign Airworthiness Certification for Import Aircraft (Attach when required)
	☐	C. Data, Drawings, Photographs, etc. (Attach when required)		☐	I. Previous Airworthiness Certificate Issued in Accordance with FAR _____ CAR _____ (Original Attached)
	☒	D. Current Weight and Balance Information Available in Aircraft		☐	J. Current Airworthiness Certificate Issued in Accordance with FAR _____ (Copy attached)
	☐	E. Major Repair and Alteration, FAA Form 337 (Attach when required)			
	☒	F. This Inspection Recorded in Aircraft Records		☒	FAR 21.183 (a) per 21.273

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION
STANDARD AIRWORTHINESS CERTIFICATE

1 NATIONALITY AND REGISTRATION MARKS N2302L	2 MANUFACTURER AND MODEL RAYTHEON AIRCRAFT COMPANY A36	3. AIRCRAFT SERIAL NUMBER E-3162	4 CATEGORY UTILITY
--	--	---	----------------------------------

5 AUTHORITY AND BASIS FOR ISSUANCE

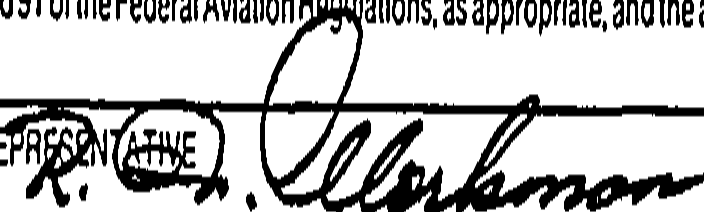
This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for sale operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation, except as noted herein.

Exceptions:

NONE

6 TERMS AND CONDITIONS

Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States

DATE OF ISSUANCE 3-24-98	FAA REPRESENTATIVE  R.M. Workman	DESIGNATION NUMBER DOA, PC#8
--	---	--

Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years or both THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS

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US Department
of Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
WP 25 *AS*

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make Raytheon Aircraft Co.	Model A36
	Serial No. E-3162	Nationality and Registration Mark N2302L
2. Owner	Name (As shown on registration certificate) Red Sea Group LLC, A California Limited Liability Group	Address (As shown on registration certificate) 226 Lowell Ave. Palo Alto, CA 94301

3. For FAA Use Only

The data/alteration identified herein complies with the applicable airworthiness requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43.7

AUG 06 1998
Date

James P. Nelson
Principal Avionics Inspector WP/ESDO-25

4. Unit Identification

Unit	Make	Model	Serial No.	5. Type	
				Repair	Alteration
AIRFRAME	(As described in Item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Woodland Aviation, Inc. 17992 County Road 94B Woodland, CA 95776	☐ U.S. Certified Mechanic	FAA CRS AWKR 298C AF-1, 3 RAD-1, 2, 3 L-PP, L-PRP, L-INS
	☐ Foreign Certified Mechanic	
	☒ Certificated Repair Station	
	☐ Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

Date Aug. 4, 1998	Signature of Authorized Individual <i>Douglas E. Barton</i> Douglas E. Barton
-----------------------------	--

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED

BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	☒ Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection AUG. 6, 1998		Certificate or Designation No. CRS AWKR 298C	Signature of Authorized Individual <i>Douglas E. Barton</i> Douglas E. Barton	

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.

B. Description of Work Accomplished

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

Installed:

Make	Model	Part No.	Description	TSO
1. BF Goodrich	NY-164	805-10890-001	Antenna	C-118
2. BF Goodrich	TRC-497	805-10800-001	Processor	FAA-PMA
3. BF Goodrich	WX-500	805-11500-001	Antenna	C-110a
4. BF Goodrich	NY-163	805-10930-001	Processor	C-110a
5. BF Goodrich	WX-1000/SKY497	78-8060-5900-8	Display	C-110a/C-113

Installed BF Goodrich Avionics Systems, Inc. Model SKY497 Traffic Advisory System.

Installation is being made as a follow-on to FAA STC SA00733CH, dated August 20, 1997, and BF Goodrich SKY497 Installation Manual P/N 009-10800-001 (A), dated April 25, 1997, or later revision.

Installed P/N 805-10800-001, FAA PMA, TRC497 Processor on AFT avionics shelf at F.S. 201.0". Installed B.F. Goodrich model NY164, P/N 805-10890-001 TCAS I Antenna on top of fuselage at F.S. 111.0".

B.F. Goodrich SKY497 Traffic Advisory System uses the B.F. Goodrich P/N 78-8060-5900-8 WX-1000/SKY497 Display which is mounted in the lower RH position of the pilots instrument panel.

Woodland Aviation Inc. Flight Manual Supplement, Revision "A" Dated ~~AUG 06 1998~~ or later revision must be carried in the aircraft.

Installation was wired in accordance with Woodland Aviation Inc. drawing No. A3089-1 Rev. IR, dated 7/22/98, or later revision, and drawing No. A3089-2 Rev. IR, dated 7/22/98 or later revision.

Aircraft was supplied with B.F. Goodrich P/N 009-10801-001 Pilot Guide, Rev. A, dated 6-23-97.

All work was accomplished in accordance with manufacturers instructions, FAA AC 43.13-1A, Chapter 11, sections 2-428, 429; 3-443, 3-448, 449, 450; 4-464, 465; 7-515, 517, 519. FAA AC 43.13-2A; Chapter 1, paragraph 12, Chapter 2, paragraph 21, 22, 23, 24; chapter 3, paragraph 36.

The installed equipment was operationally tested and performed satisfactorily and did not adversely affect existing components or systems in the aircraft as required by FAR 23.1301.

The aircraft Weight & Balance and the aircraft Equipment List were amended in accordance with AC 43.13-1A, Chapter 13, paragraph 659 through 663.

Installed B.F. Goodrich WX-500 Stormscope Weather Mapping System. Installed P/N 805-10930-001 Antenna on lower fuselage skin, with Manufacturer provided Doubler, after skin mapping.

Installed P/N 805-11500-001 Processor on AFT avionics shelf.

BF Goodrich WX-500 receives heading information from pilots HSI heading bootstrap synchro.

BF Goodrich WX-500 displays its weather information on the ARGUS7000/CE Color Moving Map Display.

Electrical load was checked in accordance with FAA AC 43.13-1A; Chap 11, section 2, para. 426, 427 and 428.

Instructions for continued airworthiness requires a visual inspection & operational test of this equipment in accordance with manufacturers recommendations annually.

~~~~~END~~~~~

☐ Additional Sheets Are Attached



US Department  
of Transportation  
Federal Aviation  
Administration

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

Form Approved  
OMB No. 2120-0020

For FAA Use Only

Office Identification  
WP 25 *[Signature]*

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

|             |                                                                                                                   |                                                                                                  |
|-------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 1. Aircraft | Make<br><b>Raytheon Aircraft Co.</b>                                                                              | Model<br><b>A36</b>                                                                              |
|             | Serial No.<br><b>E-3162</b>                                                                                       | Nationality and Registration Mark<br><b>N2302L</b>                                               |
| 2. Owner    | Name (As shown on registration certificate)<br><b>Red Sea Group LLC, A California<br/>Limited Liability Group</b> | Address (As shown on registration certificate)<br><b>226 Lowell Ave.<br/>Palo Alto, CA 94301</b> |

**3. For FAA Use Only**

The data/alteration identified herein complies with the applicable airworthiness requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43.7.

**AUG 06 1998**  
Date

*[Signature]*  
**James P. Nelson**  
Principal Avionics Inspector WP-FSDO-25

**4. Unit Identification**

| Unit       | Make                                       | Model | Serial No. | 5. Type |            |
|------------|--------------------------------------------|-------|------------|---------|------------|
|            |                                            |       |            | Repair  | Alteration |
| AIRFRAME   | ~~~~~ (As described in Item 1 above) ~~~~~ |       |            |         | X          |
| POWERPLANT |                                            |       |            |         |            |
| PROPELLER  |                                            |       |            |         |            |
| APPLIANCE  | Type                                       |       |            |         |            |
|            | Manufacturer                               |       |            |         |            |

**6. Conformity Statement**

|                                                                                 |                                                              |                                                                         |
|---------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------|
| A. Agency's Name and Address                                                    | B. Kind of Agency                                            | C. Certificate No.                                                      |
| <b>Woodland Aviation, Inc.<br/>17992 County Road 94B<br/>Woodland, CA 95776</b> | <input type="checkbox"/> U.S. Certified Mechanic             | <b>FAA CRS AWKR 298C<br/>AF-1, 3 RAD-1, 2, 3<br/>L-PP, L-PRP, L-INS</b> |
|                                                                                 | <input type="checkbox"/> Foreign Certified Mechanic          |                                                                         |
|                                                                                 | <input checked="" type="checkbox"/> Certified Repair Station |                                                                         |
|                                                                                 | <input type="checkbox"/> Manufacturer                        |                                                                         |

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

|                             |                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------|
| Date<br><b>Aug. 4, 1998</b> | Signature of Authorized Individual<br><i>Douglas E. Barton</i><br><b>Douglas E. Barton</b> |
|-----------------------------|--------------------------------------------------------------------------------------------|

**7. Approval for Return to Service**

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED

|                                                    |                              |                                                        |                                                                                            |                 |
|----------------------------------------------------|------------------------------|--------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------|
| BY                                                 | FAA Fit. Standards Inspector | Manufacturer                                           | Inspection Authorization                                                                   | Other (Specify) |
|                                                    | FAA Designee                 | <input checked="" type="checkbox"/> Repair Station     | Person Approved by Transport Canada Airworthiness Group                                    |                 |
| Date of Approval or Rejection<br><b>AUG 6/1998</b> |                              | Certificate or Designation No.<br><b>CRS AWKR 298C</b> | Signature of Authorized Individual<br><i>Douglas E. Barton</i><br><b>Douglas E. Barton</b> |                 |

## 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.*

### B. Description of Work Accomplished

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

Fabricated AFT LH Avionics Shelf from .040" 2024-T3 Aluminum.

Shelf was attached to existing Raytheon Aircraft Co. P/N 36-340310-3 shelf with existing hardware at upper attach flange.

Lower attach flange was attached to fuselage lower LH Stringer, with 130909 B14 Bolts, AN960-3 Washers, & MS21059L3 Nutplates, in three places.

Installed 2 each 2024-T3511 1/2" x 3/4" reinforcing aluminum Angles in lower side of Shelf Assy, for mounting BF Goodrich Skywatch497 Processor Tray.

Angles attached with MS20470AD3-4 Rivets and installed 4 each MS21059L08 Nutplates.

Installed BF Goodrich WX-500 Processor Rack Assy, and Skywatch497 processor Rack Assy with manufacturers provided hardware.

Rack Assy's were load tested in accordance with AC 43.13-2A, Chapter 1, paragraph 2,d.

Installation made in accordance with FAA AC 43.13-2A, Chapter 2.

Revised Aircraft Weight & Balance.

~~~~~END~~~~~

☐ Additional Sheets Are Attached



US Department
of Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

SAC. FSDO

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

| | | |
|-------------|---|---|
| 1. Aircraft | Make
Beechcraft | Model
A36 |
| | Serial No.
E-3162 | Nationality and Registration Mark
N 2302L |
| 2. Owner | Name (As shown on registration certificate)
Red Sea Group LLC, A California Limited Liability Company | Address (As shown on registration certificate)
226 Lowell Avenue
Palo Alto CA 94301 |

3. For FAA Use Only

4. Unit Identification

5. Type

| Unit | Make | Model | Serial No. | Repair | Alteration |
|------------|--|------------------|---------------|--------|------------|
| AIRFRAME | ~~~~~ (As described in Item 1 above) ~~~~~ | | | | X |
| POWERPLANT | Teledyne Continental Motors | IO550B37B | 682978 | | X |
| PROPELLER | | | | | |
| APPLIANCE | Type | | | | |
| | Manufacturer | | | | |

6. Conformity Statement

| | | |
|---|--|--|
| A. Agency's Name and Address
Woodland Aviation, Inc.
P.O. Box 1157
Woodland, CA 95776 | B. Kind of Agency
☐ U.S. Certificated Mechanic
☐ Foreign Certificated Mechanic
☒ Certificated Repair Station
☐ Manufacturer | C. Certificate No.
AWKR 298C
AF-1,3 RAD 1,2,3
L-PP, L-PRP, L-INS |
|---|--|--|

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

| | |
|------------------------------|--|
| Date
July 31, 1998 | Signature of Authorized Individual

Timothy P. Farley |
|------------------------------|--|

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED

| | | | | |
|---|------------------------------|---|--|-----------------|
| BY | FAA Flt. Standards Inspector | Manufacturer | Inspection Authorization | Other (Specify) |
| | FAA Designee | ☒ Repair Station | Person Approved by Transport Canada Airworthiness Group | |
| Date of Approval or Rejection
July 31, 1998 | | Certificate or Designation No.
CRS AWKR298C | Signature of Authorized Individual

Timothy P. Farley | |

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.)

N 2302L

Beechcraft

A36

E-3162

Removed six (6) TCM fuel nozzles P/N 627335D13-B and installed General Aviation Modifications, Inc. GAMljectors Kit No. GAD13B S/N 4101 in accordance with STC SE09217SC PMA No. PQ821SW per GAMljector Installation Procedure No. IP-96-001 (Rev 004) dated September 25, 1996. No change in weight and balance.

Installed acrylic window liners in accordance with FAA approved Gale R. Calhoon Report No. 1, no revision, dated December 7, 1987 per STC# SA3759NM Updated Weight and Balance.

-----Nothing Follows-----

☐ Additional Sheets Are Attached

United States of America
Department of Transportation—Federal Aviation Administration
Supplemental Type Certificate

Number SA3759NM

This certificate, issued to Gale R. Calhoon

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 3 of the Civil Air Regulations. *Certification basis is set forth in Type Certificate Data Sheet 3A15*

Original Product—Type Certificate Number: 3A15

Make: Beech

Model: 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C
F33, F33A, F33C, G33, H35, J35, K35, M35, N35, P35, S35, V35
V35A, V35B, 36, A36, A36TC, B36TC

Description of Type Design Change: Installation of acrylic window liners in accordance with FAA sealed Gale R. Calhoon Report No. 1, no revision, dated December 7, 1987, or later FA approved revision.

Limitations and Conditions: This installation should not be incorporated in any aircraft unless it is determined that the interrelationship between this change and any previously approved configuration will not introduce any adverse effect upon the airworthiness of the aircraft.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or its termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: December 16, 1987

Date reissued:

Date of issuance: March 21, 1988

Date amended: September 9, 1988



By direction of the Administrator

Fredrick Lee
(Signature)

Manager, Los Angeles Aircraft
Certification Office
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.



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G&D AERO PRODUCTS INC.

LONG BEACH, CA 90815

REPORT #1

REVISION "B"

MARCH 15, 1995

PART LIST

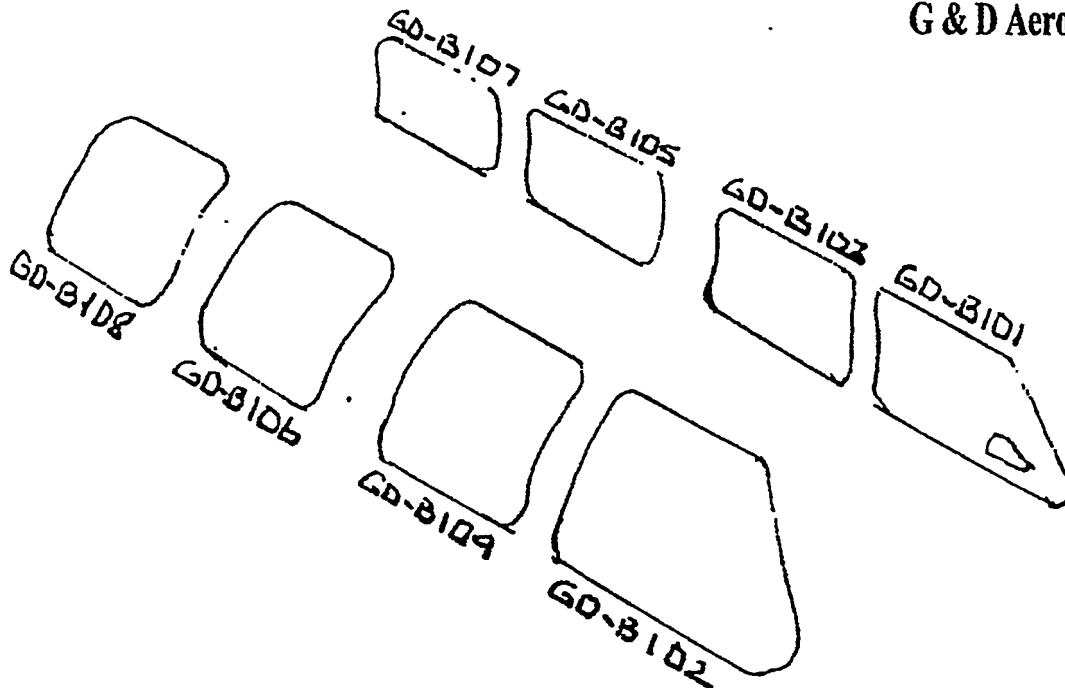
36, A36, A36TC, B36TC 58, 58TC

FAA APPROVED

MAR 27 1995

LOS ANGELES
AIRCRAFT CERTIFICATION OFFICE
INITIALS: ALC

FAA / PMA
G & D Aero Products



FRAMED WINDOWS
MOULDING "A", "A1"

GD-B101 GD-B102 GD-B105 GD-B106 GD-B107 GD-B108

MOULDING "B"
GD-B103 GD-B104

NON FRAMED WINDOWS
MOULDING "C"

GD-B101 GD-B102 GD-B103 GD-B104
GD-B105 GD-B106 GD-B107 GD-B108



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United States Of America
Department of Transportation - Federal Aviation Administration
Supplemental Type Certificate

Number SE09217SC

This Certificate issued to General Aviation Modifications, Inc.
2800 Airport Road
Hangar A
Ada, OK 74820

*certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part * of the * Regulations.*

Original Product Type Certificate Number : [see attached FAA Approved Model List (AML)]
Make : for list of Approved models and applicable airworthiness
Model : regulations]

Description of Type Design Change: Installation of modified fuel injector nozzles in accordance with General Aviation Modifications Inc., "Data List", Revision 003, dated September 24, 1996, and Installation Procedure No. IP-96-001, "GAMIJECTOR Installation Procedure for Teledyne Continental Motors (TCM) IO-550/520/470 Engines", Revision 004, dated September 25, 1996, or later FAA approved revisions.

Limitations and Conditions: Compatibility of this design change with previously approved modifications must be determined by the installer. This STC does not allow any adjustment to the fuel injection control unit. Compliance with the following Teledyne Continental Service Bulletins is required: M78-11 Fuel Injection System Inspection; M85-19 Fuel Injection System Application Guide; M87-12 Rev.1 Recommended Fuel and Oil Grades; M89-10 Fuel System Adjustment; and M89-18 EGT Recommendations.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application : December 22, 1995

Date reissued :

Date of issuance : April 30, 1996

Date amended : 9/27/1996; January 08, 1997, Rev. 2



By direction of the Administrator

A. J. Merrill
(Signature)

A. J. Merrill
Manager, Special Certification Office
Southwest Region

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

FAA APPROVED MODEL LIST (AML)

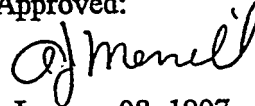
STC No. SE09217SC

General Aviation Modifications, Inc.
2800 Airport Road, Hangar A
Ada, OK 74820

Date of Issuance: April 30, 1996
Date Amended: January 08, 1997, Rev. 2

| Item | Aircraft
Make | Aircraft Model | Original Type
Certificate
Number | Regulation
/ Part |
|------|-----------------------------|--|--|----------------------|
| 1 | Teledyne Continental Motors | IO-470-A & C | E-273 | CAR 13 |
| 2 | Teledyne Continental Motors | IO-470-D, E, F, G, H, J, K, L, LO, M, N, P,
R, S, T, U, V, VO, & L/IO-470-A | 3E1 | CAR 13 |
| 3 | Teledyne Continental Motors | IO-520-A, B, BA, BB, C, CB, D, E, F, J, K,
L, M, & MB | E5CE | CAR 13 |
| 4 | Teledyne Continental Motors | IO-550-A, B, C, D, E, F, & L | E3SO | FAR 33 |

FAA Approved:

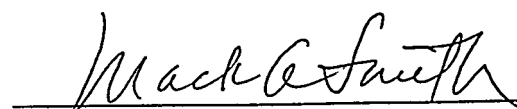


Date: January 08, 1997

Pursuant to Title 49 United States Code § 44704 (b) (3) (effective October 19, 1996) the signature below constitutes the agreement and permission of General Aviation Modifications, Inc., allowing the registered owner of N2302L, to alter that certain Teledyne Continental Motors Engine:

Model IO-550B SN 682778 and N/A, and ONLY that serial number (or numbers), by application of STC No. SE09217SC, to that specific engine(s), for the purpose of installing the fuel injector nozzles which are the subject of that STC.

General Aviation Modifications, Inc.



By Tim Roehl, President
Or George W. Braly, CEO
Or Mack Smith, V.P.-General Manager

[SEAL]

7-14-98
Date

General Aviation Modifications, Inc.

2800 Airport Rd. Hangar A
Ada, OK 74820
405 436-4833
Fax 405 436-6622

MANUFACTURER RELEASE CERTIFICATE

KIT NO. GAD13A

Product Name: **GAMIJECTORS™**
Fuel Injection Nozzles

STC No. : SE09217SC
FAA-PMA

P/N:GA173 Qty. 1 Installation Location Cylinder: 1 Replaces TCM P/N 627335D13A
P/N:GA173 Qty. 1 Installation Location Cylinder: 2 Replaces TCM P/N 627335D13A
P/N:GM156 Qty. 1 Installation Location Cylinder: 3 Replaces TCM P/N 627335D13A
P/N:GM156 Qty. 1 Installation Location Cylinder: 4 Replaces TCM P/N 627335D13A
P/N:GF147 Qty. 1 Installation Location Cylinder: 5 Replaces TCM P/N 627335D13A
P/N:GF147 Qty. 1 Installation Location Cylinder: 6 Replaces TCM P/N 627335D13A

Applicable to:

Engine Manufacturer :Teledyne Continental Motors

Engine Model(s): IO-550B

Gamijector Kit No. GAD13A

S/N 4309

THE AERONAUTICAL PRODUCT DESCRIBED HEREON CONFORMS TO APPROVED
TYPE DESIGN AND IS IN A CONDITION FOR SAFE OPERATION

LKJ 
GAMI AUTHORIZED INSPECTOR

Date: 7-14-98



General Aviation Modifications, Inc.
Installation Procedure, No. IP-96-001
(Rev. 004)
Date: September 25, 1996

GAMI Kit No. GAD13A
S/N 4309

**GAMljector™ Installation Procedure
for TCM IO-550/520/470 Engines
STC No. SE09217SC**

1. Remove existing TCM fuel injector nozzles by disconnecting fuel lines at the top with an appropriate wrench. Remove the nozzles with a ½ inch deep socket.
2. Determine which specific nozzle is installed in the engine as the factory standard nozzle. Then refer to Chart "A" for the GAMI Kit to be installed. Verify that the kit to be used matches the appropriate kit number corresponding to the factory standard nozzle size for the engine to be modified. Verify that the injectors enclosed in the kit are correctly identified and correspond to the injector numbers on the line identified by the kit number in Chart "A".
3. Using a ½ inch deep socket, install the GAMljector™ nozzles in the appropriate cylinders as described above. It is recommended that an appropriate "anti-seize" compound be applied to the threads before installing the injectors.
4. Tighten nozzles to a torque value of 55-65 lb-in.
5. Reconnect and tighten the fuel lines at the top of the GAMljector™ nozzles.
6. Check installation for crimped lines, loose fittings, etc.
7. Leak check the GAMljector™ nozzles and associated fuel lines by use of the electric fuel pump, prior to starting the engine. Perform a ground engine run-up and recheck for fuel leaks before flight.
8. Clean a flat 1.5" X 2" area on each cylinder rocker arm cover with acetone or isopropyl alcohol. Apply the correct GAMljector™ label to the cleaned area with high temperature RTV silicone, such as Permatex "Ultra Copper" P/N101B or equivalent. Allow to cure, thoroughly, prior to operation of the engine.
9. Check to insure that the GAMljectors™ and placards have been installed on the proper cylinder and that the GAMljector™ part number in each cylinder corresponds with the part number called out on the placard affixed to its respective cylinder head rocker arm cover.

G&D AERO PRODUCTS INC.

LONG BEACH, CA 90815

REPORT #1

REVISION "B"

MARCH 15, 1995

PART LIST

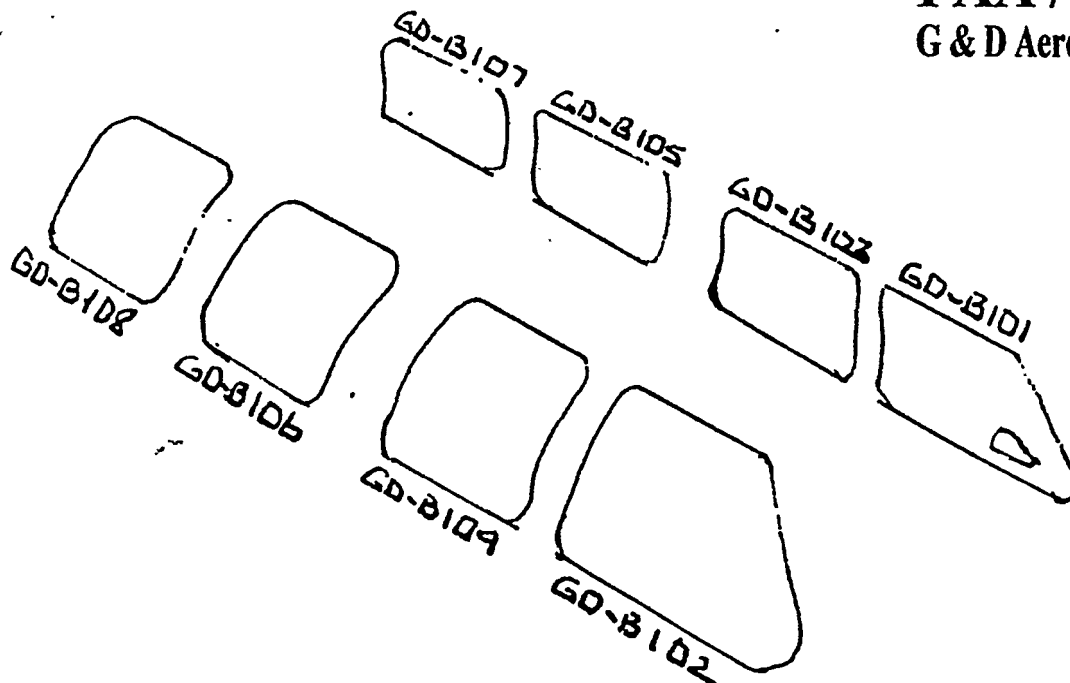
36, A36, A36TC, B36TC 58, 58TC

FAA APPROVED

MAR 27 1995

LOS ANGELES
AIRCRAFT CERTIFICATION OFFICE
INITIALS: ALC

FAA / PMA
G & D Aero Products



FRAMED WINDOWS
MOULDING "A", "A1"

GD-B101 GD-B102 GD-B105 GD-B106 GD-B107 GD-B108

MOULDING "B"
GD-B103 GD-B104

NON FRAMED WINDOWS
MOULDING "C"

GD-B101 GD-B102 GD-B103 GD-B104
GD-B105 GD-B106 GD-B107 GD-B108



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US Department
of Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
WP-25

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

| | | |
|--------------|---|---|
| 1. Aircraft: | Make
Beech | Model
A36 |
| | Serial No.
E-3162 | Nationality and Registration Mark
N2302L |
| 2. Owner | Name (As shown on registration certificate)
Woodland Aviation | Address (As shown on registration certificate)
P.O. Box 1157
Woodland, CA 95776 |

3. For FAA Use Only

The data/alteration identified herein complies with the applicable airworthiness requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43.7

JUN 02 1998

Date

James P. Nelson

Principal Avionics Inspector WP-FSDO-25

4. Unit Identification

5. Type

| Unit | Make | Model | Serial No. | Repair | Alteration |
|------------|--|-------|------------|--------|------------|
| AIRFRAME | ----- (As described in Item 1 above) ----- | | | | X |
| POWERPLANT | | | | | |
| PROPELLER | | | | | |
| APPLIANCE | Type | | | | |
| | Manufacturer | | | | |

6. Conformity Statement

| | | |
|--|---|--|
| A. Agency's Name and Address

Woodland Aviation Inc.
17992 County Road 94B
Woodland, CA 95695 | B. Kind of Agency | C. Certificate No.

FAA CRS AWKR 298C
AF-1, 3 RAD-1, 2, 3.
L-PP, L-PRP, L-INS |
| | ☐ U.S. Certified Mechanic | |
| | ☐ Foreign Certified Mechanic | |
| | ☒ Certificated Repair Station | |
| | ☐ Manufacturer | |

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

| | |
|-----------------------------|---|
| Date
June 2, 1998 | Signature of Authorized Individual
Douglas E. Barton <i>Douglas E. Barton</i> |
|-----------------------------|---|

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED

| | | | | |
|--|------------------------------|--|---|-----------------|
| BY | FAA Fit. Standards Inspector | Manufacturer | Inspection Authorization | Other (Specify) |
| | FAA Designee | ☒ Repair Station | Person Approved by Transport Canada Airworthiness Group | |
| Date of Approval or Rejection
June 2, 1998 | | Certificate or Designation No.
CRS AWKR 298C | Signature of Authorized Individual
Douglas E. Barton <i>Douglas E. Barton</i> | |

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.

B. Description of Work Accomplished

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

Avionics Equipment installed:

| Manufacturer | Description | Model Number | Partnumber | TSO |
|----------------------|-----------------------|---------------|-----------------|------------------------|
| 1. Dome and Margolin | Comm Antenna | N/A | DMC 70-4 | C37b, C38b |
| 2. Mid Continent | GPS ACU | MD41-328 | N/A | C-129 |
| 3. Commant | Marker Antenna | N/A | CI-118 | C35d |
| 4. Commant | Antenna diplexer | N/A | CI-505 | C34c, C76c, C40a |
| 5. Commant | Antenna diplexer | N/A | CI-503 | C34c, C76c, C40a |
| 6. Allied Signal | DME Indicator | KDI572 | 066-01069-0000 | C66a |
| 7. Allied Signal | DME Interrogator | KN63 | 066-01070-0001 | C66a |
| 8. Allied Signal | Nav/Comm | KX165 | 069-01025-0025 | C37b, C38b, C40c, C36c |
| 8. Allied Signal | Nav/Comm | KX165 | 069-01025-0025 | C37b, C38b, C40c, C36c |
| 10. Allied Signal | ADF Receiver | KR87 | 066-01072-0004 | C41c |
| 11. Allied Signal | ADF Indicator | KI227 | 066-03063-0001 | C41c |
| 12. Allied Signal | GPS Nav receiver | KLN90B | 066-04031-1121 | C129a1 |
| 13. Allied Signal | GPS Antenna | KA92 | 071-01553-0000 | G129 |
| 14. Allied Signal | DME Antenna | KA60 | 071-01174-0000 | C66a, C74c |
| 15. Allied Signal | Transponder Ant. | KA60 | 071-01174-0000 | C66a, C74c |
| 16. Allied Signal | ADF Antenna | KA44B | 071-01234-0000 | C41b |
| 17. Allied Signal | ATC Transponder | KT70 | 066-01141-0101 | C112 |
| 18. Allied Signal | VOR/LOC Indicator | KI202 | 066-03034-0007 | C40a, C36c |
| 19. Eventide | Moving Map | Argus-7000/CE | 7000-10-15 | C113 |
| 20. PS Engineering | Intercom | PM3000 | 11930 | |
| 21. Troll | Avionics blower | FN-300 | PZL-Koliber150A | |
| 22. Mid Continent | Inverter | MD26-28 | MD26-28VDC | |
| 23. Insight | Engine Monitor | GEM610 | 610-001 | C43b |
| 24. Allied Signal | Audio Panel / MB rec. | KMA24 | 066-01055-0003 | C35d, C50b |

Installed Allied Signal KR87 ADF Receiver in center avionics panel. Installed KA44B on lower fuselage skin at F.S.161.00", using manufacturers provided doubler assy. KR87 was interfaced to Allied Signal KI227 ADF Indicator.

Installed 2 ea Allied Signal KX165 Nav/Comm transceivers.

Installed 1 ea.P.S. Engineering PM3000 Intercom with 6 sets of mic./phone jacks and pilots/ copilot Bose Interface. The PM3000 has an automatic fail-safe interconnect to the aircraft radio.

Installed Allied Signal KLN90B GPS receiver, with Allied Signal KA92 GPS Antenna; KLN90B is coupled through a Mid Continent model MD41-328 TSO, GPS Annunciator Switching Unit, to an Allied Signal KI525A Pictorial Navigation Indicator and KFC150 FD/AP. KA92 GPS Antenna installed on roof centerline at F.S. 83.00 utilizing factory installed doubler. GPS installed in accordance with Allied Signal Installation Manual P/N 006-10521-0002 Rev. 2 dated February1995, Woodland Aviation Inc. wiring package P/N A2863 and as a follow-on to STC SA00241WI-D dated February 2, 1995. GPS installed in accordance with FAA AC 20-138. Allied Signal KLN90B system may be used for IFR enroute, terminal an non-precision approach. The KLN90B Pilots Guide P/N 066-08773-000 dated, December 1995 and FAA approved Flight Manual Supplement dated: **JUN 0 2 1998** must be available to the pilot during flight.

Installed Allied Signal KN63 DME Interrogator on AFT avionics shelf, and installed Allied Signal KA60 DME Antenna on lower fuselage skin, with doubler provided, at F.S. 108.25" LH side.

Installed Allied Signal KDI572 DME Indicator in pilots instrument panel below Allied Signal KI525A PNI.

Installed Commant Model CI-118 MKR Beacon Antenna on lower fuselage skin at F.S. 198.00" on the RH side, with .040 2024-T3 doubler.

Installed Dome Margolin DMC 70-4 VHF Comm. Antenna on lower fuselage skin at F.S. 174.25", LH side using .040 2024-T3 doubler.

Installed Eventide ARGUS7000/CE TSO-C113 Moving Map Display in RH side of pilots instrument panel, and interfaced to Allied Signal KLN90B GPS. ARGUS7000/CE installed in accordance with Eventide Reference Manual P/N 14100, dated Nov,1996. ARGUS placarded "Argus VFR only".

Continued on next sheet

☒ Additional Sheets Are Attached

Additional sheet 1 of 1 for FAA form 337 DATED: June 2, 1998

Aircraft Make: Beech
Model: A36
Serialnumber: E-3162
Registration: N2302L

Description of Work Accomplished (continued)

Installed Raytheon Aircraft Co. P/N 36-340310-3 Shelf Assy, P/N 36-340310-15 Bracket and P/N 36-340310-13 Clip at F.S. 200.00".

Installed Mid Continent model MD26-28VDC, 26VAC 400Hz Inverter, PMA No. PQ373CE, on RH AFT avionics shelf at F.S. 206.00".

Installed Allied Signal KT70 Mode-S Transponder. Mounted Allied Signal KA60 L-Band Antenna on lower fuselage skin at F.S. 95.00" with doubler provided.

Installed Allied Signal KI202 VOR/LOC Indicator in pilots instrument panel and interfaced to #2 KX165 Nav./Comm.

All work was accomplished in accordance with manufacturers instructions, FAA AC.43.13-1A, Chap. 11, sec. 2-428, 429; 3-443, 3-448, 449, 450; 4-464, 465; 7-515, 517, 519. FAA AC 43.12-2A; chap. 1, para 12, chap. 2, para 21, 22, 23, 24; chap 3, para 36.

The installed equipment was operationally tested and performed satisfactorily and did not adversely affect existing component or systems in the aircraft as required by FAR 23.1301.

Installed larger left hand instrument panel. Panel attached to existing panel sub-frame as shown on Woodland Aviation Inc. drawing No. A2262-1.

The aircraft Weight & Balance and the aircraft Equipment List were amended in accordance with AC 43.13-1A, Chapter 13, paragraph 659 through 663.

Performed ATC transponder and pitot static tests in accordance with FAR 91.411 and 91.413. Equipment installed in accordance with current Allied Signal installation manuals and Woodland Aviation Inc. wiring package P/N A2863.

Installed Insight Corp. Model 610-063 Graphic Engine Monitor, manufactured to TSO C43b, dated 8-12-93.

The modification to the aircraft was performed as a deviation to FAA STC No. SA157NE. Issued June 4, 1983, as amended through October 18, 1996 by the installation of model 610 Indicator, TSO C43b.

All components were installed, wired and secured in accordance with instructions provided within Insight Instrument Corp. Installation Manuals, DWG 8258, Version 3.0 dated May 1996, and Document No. 930320, Revision 1.02 or later, as appropriate.

The components, as installed comply with the requirements of FAR (s) 23.1121 (b) & (c), 23.1301 and 23.1309 (a) & (b) (1) & (2).

The alteration was performed in accordance with AC 43.13-1A, Chap. 11, Para. 446 through 448, 450, 451, 464 through 466, 514 through 518 and AC 43.13-2A, Chapter 13 (if applicable).

Electrical load was checked in accordance with FAA AC 43.13-1A; Chap 11, section 2, para. 426, 427 and 428.

Instructions for continued airworthiness requires a visual inspection & operational test of this equipment in accordance with manufacturers recommendations annually.

-----END-----

This GPS Installation is not to be used for navigation until a functional flight evaluation has been successfully accomplished to verify equipment accuracy.

ACCURACY TEST ACCOMPLISHED ON JUNE 19, 1998

BY FREDRICK J. ATWOOD

CERT. TYPE AND NO. BEAIRMANN #2574068

IN ACCORDANCE WITH ACCURACY DATA SHEET DATED JUNE 19, 1998

GPS FUNCTIONAL FLIGHT EVALUATION - WORK SHEET

Legend: P = Pass F = Fail N/A Not Applicable

- A P Evaluate all operating modes of the equipment.
- B P Examine Interface of other equipment.
- C P Review failure modes and associated annunciation's.
- D P Evaluate steering response with autopilot coupled.
- E P Evaluate instrument interface with HSI, CDI, etc.
- F P Assess all switching and transfer functions including high power electrical loads and electrical bus switching.
- G P Evaluate EMI & RFI on VHF frequencies; 121.150, 121.175, 121.200, 131.250, 131.275 and 131.300 MHz (modulated and unmodulated for 20 second transmissions.
- H P Evaluate accessibility of equipment controls.
- I P Evaluate visibility of displays and annunciators. No distracting glare or reflection.
- J P Monitor the displayed cross-track error and distance to waypoint during the enroute and approach transition to verify that the Flight Technical Error (FTE) is less than 1 nm. With and without the autopilot.
- K N/A Accuracy verified by conducting at least 5 (five) low-level overflights of known landmarks.
- L P Verify continuity of navigation data during normal aircraft maneuvers including 30 degree bank turns for 360 degrees left and right.
- M P Monitor the displayed cross-track error and distance to waypoint during approach operations of the flight and verify that the FTE is less than .25 nmi. With and without the autopilot.
- N P For equipment approved for approach, conduct at least 3 (three) published instrument approaches (retrieved from the database) to verify proper operation.

| | | | |
|-------------------|------------------------|----------|-------------|
| Approach #1 Name: | <u>GPS-RNWX 2 SAC</u> | Results: | <u>PASS</u> |
| Approach #2 Name: | <u>GPS-RNWX 34 203</u> | Results: | <u>PASS</u> |
| Approach #3 Name: | <u>GPS-C/LAND 041</u> | Results: | <u>PASS</u> |

Equipment MFG BENDIX/KING Model KLN90B TSO C129

Aircraft N 2302L Make RAYTHEON ACFT CO. Model A-36 S/N E-3162

has completed a flight accuracy check in accordance with the applicable requirements:
GPS: AC 20-138, paragraph 8c (2) (IV). GPS Multi Sensor: AC 20-130A 9c (2) (IV).

| | | | |
|------------|---|-----------|----------------------|
| Technician | <u>FREDRICK J. ATWOOD</u> | Cert. No. | <u>2574068</u> |
| Signature: |  | | |
| Cert. Type | <u>FAA REPAIRMAN</u> | Date | <u>JUNE 19, 1998</u> |

11-11-11

11-11-11

11-11-11



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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
WP 25

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

| | | |
|-------------|---|---|
| 1. Aircraft | Make
Beech | Model
A36 |
| | Serial No.
E-3162 | Nationality and Registration Mark
N2302L |
| 2. Owner | Name (As shown on registration certificate)
Woodland Aviation | Address (As shown on registration certificate)
P.O. Box 1157
Woodland, CA 95695 |

3. For FAA Use Only

4. Unit Identification

5. Type

| Unit | Make | Model | Serial No. | Repair | Alteration |
|------------|--|-------|------------|--------|------------|
| AIRFRAME | ~~~~~ (As described in Item 1 above) ~~~~~ | | | | X |
| POWERPLANT | | | | | |
| PROPELLER | | | | | |
| APPLIANCE | Type | | | | |
| | Manufacturer | | | | |

6. Conformity Statement

| | | |
|--|--|---|
| A. Agency's Name and Address
Woodland Aviation Inc.
17992 County Road 94B
Woodland, CA 95695 | B. Kind of Agency
☐ U.S. Certified Mechanic
☐ Foreign Certified Mechanic
☒ Certificated Repair Station
☐ Manufacturer | C. Certificate No.
FAA CRS AWKR 298C
AF-1, 3 RAD-1, 2, 3
L-PP, L-PRP, L-INS |
|--|--|---|

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 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.

| | |
|-----------------------------|---|
| Date
June 2, 1998 | Signature of Authorized Individual
Douglas E. Barton <i>Douglas E. Barton</i> |
|-----------------------------|---|

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ **APPROVED** ☐ **REJECTED**

| | | | | |
|----|------------------------------|--|---|-----------------|
| BY | FAA Fit. Standards Inspector | Manufacturer | Inspection Authorization | Other (Specify) |
| | FAA Designee | ☒ Repair Station | Person Approved by Transport Canada Airworthiness Group | |

| | | |
|--|--|---|
| Date of Approval or Rejection
June 2, 1998 | Certificate or Designation No.
CRS AWKR 298C | Signature of Authorized Individual
Douglas E. Barton <i>Douglas E. Barton</i> |
|--|--|---|

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.

B. Description of Work Accomplished

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

Installed Allied Signal KFC150 two axis Flight Control System, optional KAS297B vertical speed and altitude preselector with KEA130A Encoding Altimeter, manual and auto electric trim system, and KCS55A Compass System, in accordance with FAA STC SA1574CE-D; dated 01-12-83 and amended 04-05-85 and 02-19-91 and Allied Signal Installation Manual P/N 006-00277-0000 Rev 2 dated September 15, 1990. Installed optional 3rd axis Yaw Damper System.

Installed Shadin Company Fuel Flow Indication System in accordance with, FAA STC SA449GL, and Shadin report #4017, revised August 31, 1984, or other FAA approved revision. Installation performed in accordance to Shadin Company Inc., Drawing #4017-25 Rev A, dated 5-20-85.

Shadin Fuel Flow Indicator was interfaced to existing Allied Signal KLN90B GPS.

The installed equipment was operationally tested and performed satisfactorily and did not adversely affect existing components or systems in the aircraft as required by FAR 23.1301.

The Aircraft Weight & Balance and the aircraft Equipment List were amended in accordance with AC 43.13-1a, Chapter 13, para 659 through 663.

Instructions for continued airworthiness requires a visual inspection & operational test of this equipment in accordance with manufacturers recommendations annually.

-----END-----

☐ Additional Sheets Are Attached