U.S Department of Transportation
Federal Aviation Administration

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

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

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 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. 1421). 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	Serial No.	
N13KS	21060202	
Make	**Model**	**Series**
Cessna	T210	L

2. Owner

Name *(As shown on registration certificate)*	Address *(As shown on registration certificate)*
Robinson Stephen C	Address 3644A 5th ST NW City Coleharbor State ND Zip 58531 Country USA

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial Number
☐	☒	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 Bismarck Aero Center	☐	U.S. Certificated Mechanic	☐	Manufacturer
Address 2301 UNIVERSITY DRIVE BLDG #53	☐	Foreign Certificated Mechanic	C. Certificate No.	
City BISMARCK State ND	☒	Certificated Repair Station	D1NR542Y	
Zip 58504 Country USA	☐	Certificated 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
	08/12/22

7. Approval for Return to Service

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

BY								
	☐	FAA Flt Standards Inspector	☐	Manufacturer	☐	Maintenance Organization	☐	Person Approved by Canadian Department of Transport
	☐	FAA Designee	☒	Repair Station	☐	Inspection Authorization	Other *(Specify)*	

Certificate or Designation No.	Signature/Date of Authorized Individual
D1NR542Y	08/12/22

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.)

N13KS	08/12/22
Nationality and Registration Mark	Date

Removed Aspen EFD 1000 (P/N 910-00001-001) and Aspen EFD 1000 (P/N 910-00001-001). Installed a new Aspen EFD 1000 (P/N 910-00001-021) in the PFD position. Installed a new Aspen EFD 1000 (P/N 910-00001-021) in the MFD position. Enabled synthetic vision on both displays in accordance with Aspen tech note 2011-10. Enabled third party ADS-B unlock on the Aspen MFD in accordance with Aspen tech note 2014-02. All work and testing done in accordance with Aspen Avionics EFD 1000 installation manual (P/N 900-00003-001) and Aspen Avionics STC SA10822SC. Functional test ok.

Installed current STC approved AFMS into Aircraft Flight Manual. Supplied operator with the current Pilot's Guide.

Weight and balance negligible.

Confirmed installed equipment operates IAW the manufactures recommendations and is not a source of objectionable interference.

STC Permission Letters, STC and ICA's are attached to this document

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

☐ Additional Sheets Are Attached

United States of America
Department of Transportation
Federal Aviation Administration

Supplemental Type Certificate

Number: SA10822SC

This certificate issued to: Aspen Avionics, Inc.
5001 Indian School Rd. NE
Albuquerque, NM 87110

Certifies that the change in the type design for the following product with the limitations and conditions therefore as specified hereon meets the airworthiness requirements of * *of Part 23 Regulations.*

Original Product
Type Certificate Number:

Make: [*See attached FAA Approved Model List (AML)]

Model: [*See attached FAA Approved Model List (AML)]

Description of Type Design Change:

1. Installation of EFD1000 Primary Flight Display in accordance with Aspen Avionics Installation Manual document #A-01-126-00, Revision C, dated 3/28/2008, or later approved FAA revision. Airplane Flight Manual Supplement document #A-01-175-00, Revision B, dated 3/17/2008 or document #A-01-179-00, Revision A, dated 3/17/2008, or later FAA approved revision is required.

(Continued on Page 3 of 7)

Limitations and Conditions:

1) The installer must determine whether this design change is compatible with previously approved modification.
2) If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.
3) Activation of the Angle of Attack (AOA) indication is only permitted for airplanes with flaps.
4) Installation of EFD1000 E5 system is approved for Class I and II airplanes only.

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: June 22, 2007
Date of Issuance: March 28, 2008

Date Reissued: April 18, 2008
Date Amended: February 13, 2009; September 29, 2009 Rev. 2; July 17, 2015; December 7, 2018; June 28, 2019; July 15, 2021

By Direction of the Administrator

Signature: JAMES A GRIGG
Digitally signed by JAMES A GRIGG
Date: 2021.07.20 10:08:57 -05'00'

Title: Jim Grigg
Manager, Fort Worth ACO Branch
Compliance and Airworthiness Division
Aircraft Certification Service

1. STC SA10822SC

1.1 Overview

STC SA10822SC authorizes installation of the various EFD1000 / EFD500 Electronic Flight Instrument System equipment including the EFD1000 E5 into the make and model aircraft listed on the Approved Model List attached to the STC.

The FAA AML should be consulted for applicability prior to installation. The FAA AML is replicated in this document for convenience.

The installer must record the airplane make, model, registration number, and serial number where indicated on the EFD1000/500 AFMS or EFD1000 E5 AFMS corresponding to the unit installed and Instructions for Continued Airworthiness document, and include these documents in the Aircraft Fight Manual and permanent maintenance records respectively.

For the EFD1000/500 system, STC SA10822SC includes the FAA approved Installation Manuals, the FAA approved Airplane Flight Manual Supplement (AFMS), the ICA and the FAA Approved Model List (AML).

For the EFD1000 E5 system, STC SA10822SC includes the FAA approved EFD1000 E5 Installation Manual, the FAA approved Master Drawing List, the FAA approved EFD1000 E5 Airplane Flight Manual Supplement (AFMS) the ICA and the FAA Approved Model List (AML).

It is important to note that the EFD1000 / EFD500 Installation Manual 900-00003-001, 900-00041-001 EFD1000 E5 Installation Manual and EWR50 Installation Manual 900-00007-001 can be used by those seeking installation approval for aircraft not included in the EFD1000 AML, where permitted by National Aviation Authority policy and guidance.

NOTE: The asterisk (*) in the TCDS column indicates that that some models of the TCDS are not included in the AML.

1.2 Permission Statement

In accordance with FAA Order 8110.4c, or later release, Aspen Avionics Inc. hereby grants permission to all National Aviation Authority (NAA) installers who are Authorized Aspen Avionics Inc. Dealers in good standing to use STC SA10822SC data to modify aircraft with either factory new, factory rebuilt, or factory altered EFD1000 / EFD500 Electronic Flight Instrument Systems equipment including the EFD1000 E5.

Permission is not granted for installation of used equipment.

Any and all other parties require separate written authorization to use STC SA10822SC and associated data, which is the proprietary data of Aspen Avionics Inc.

EFD1000 and EFD500
Instructions
for
Continued Airworthiness

AIRCRAFT MAKE: Cessna

AIRCRAFT MODEL: T210L

AIRCRAFT SERIAL NUMBER: 21060207

Modification of an aircraft under the EFD1000 AML Supplemental Type Certificate obligates the aircraft operator to include the maintenance information provided by this document in the operator's ICA, Aircraft Maintenance Manual and operator's Aircraft Scheduled Maintenance Program.

Aspen Document # 900-00012-001 Revision AE

ICA - RECORD OF REVISION

Revision	Description of Change	ECO
ICA Revision IR through Revision AC	See ECO record	See ECO record
AD	Extend internal battery and external battery (EBB-58) replacement interval to 2200 hours or 4 years (Section 11)	6169
AE	Removed redundant information in the Introductory Information section. Added instructions for 910-00001-009, -010, -021, -023 and -027 EFD systems.	6194

Table of Contents

1 Introductory Information

These Instructions for Continued Airworthiness (ICA) provides instructions necessary for authorized personnel to inspect and maintain the EFD500 and EFD1000 system installed by the EFD1000 AML-STC.

This document must be printed and included with the aircraft Instructions for Continued Airworthiness, and arranged for easy and practical use.

Description of the Appliances and its Systems and Installations:
The Aspen Avionics EFD1000 and EFD500 systems are multi-purpose displays. The EFD1000 contains an internal Air Data and Heading Reference System (ADAHRS) that is used to provide attitude, heading and air data for the display. The EFD500 is a variant of the EFD1000 and does not contain the internal ADAHRS.

For additional information, refer to Section 3 of the EFD1000 and EFD500 SW v2.X Installation Manual, 900-00003-001 Rev CF or later. For additional information on the EFD1000 E5 see Section 3 of the EFD1000 E5 Flight Display Installation Manual, 900-00041-001 Rev ( ) or later.

The following data may be necessary for maintenance or preventive maintenance:

Replacement Parts:	See Section 1 of the EFD1000 and EFD500 SW v2.X Installation Manual, document 900-00003-001 Rev CF or later (or for the EFD1000 E5, 900-00041-001 Rev ( ) or later) for Aspen replacement parts. *For the APS4A Altitude Preselect System, contact:* Avionik Straubing Entwicklungs GmbH Flugplatzstr. 5 Atting D-94348 Germany www.**avionik**.de
Software Version Compatibility	Class III aircraft (typ. >6000 lbs. Maximum Gross Takeoff Weight (MGTOW), see AC 23.1309-1X) require a PFD containing RTCA DO-178B Level B software. Verify the software level on the EFD Data tag before installation. See Section 5.2, "ICA Software Compatibility" of the EFD1000 and EFD500 SW v2.X Installation Manual, document 900-00003-001 Rev CF or later.
Operating Instructions:	See the EFD1000 Aircraft Flight Manual Supplement (AFMS), document 900-00008-001 or the EFD1000 E5 Aircraft Flight Manual Supplement (AFMS), document 900-00038-001.
Wire Routing Locations:	See attachment to this document (part of the permanent aircraft records).
Wiring Diagrams:	See attachment to this document (part of the permanent aircraft records).
Special Tools	For bonding checks, use a milliohm meter such as an Extech 380460 Portable Precision Milliohm Meter or equivalent.
	It may be required to align the EA100 Adapter to the autopilot computer using a KTS-150 Test Set, a KTS-158 Test Set, a KTS-154 Test Set or equivalent and following the autopilot manufacturer's procedure for aligning the gyro (KI-256) to the autopilot computer (these Test Sets are normally available at autopilot-qualified Bendix-King dealers). The EA100 Alignment Tool (acquired through the dealer ramp Section of the Aspen.com web site, see Tech Note 2010-10) will be used to manipulate the gyro pitch and roll signals and the autopilot Test Set will be used to measure the autopilot demodulated gyro voltages. In the case of the KFC225 the Remote Terminal Interface

	(normally available at autopilot-qualified Bendix-King dealers) will be required in place of the test sets. See Appendix E of the EFD1000 and EFD500 SW v2.X Installation Manual, document 900-00003-001 Rev CF or later or Appendix E of the EFD1000 E5 Dual Electronic Flight Instrument (EFI) Install Manual, 900-00041-001 Rev ( ) or later for detailed information.
	It may be required to receive a WiFi signal from the CG100. A wireless-enabled device such as a laptop computer, iPad, iPhone or Android device will be suitable for this purpose.
Consumables	Loctite® 242® Threadlocker or equiv Dow Corning 738, MIL-A-46146 or equiv Pro-Seal PS 870B-1/2, MIL-PRF-81733D or equiv

2 System Description and Information about the Interface of the EFD1000/500 System with the Aircraft

The EFD1000 PFD, EFD1000 EBD, and EFD1000 E5 system is comprised of the Electronic Flight Display (EFD), Remote Sensor Module (RSM), Configuration Module (CM) and optional Analog Converter Unit (ACU or ACU2). Optionally one or two MFD displays of either the EFD500 or EFD1000 may be installed with an accompanied PFD system. An optional EA100 Adapter (autopilot attitude adapter) may be installed.

The EFD1000 PFD, EBD and E5 system provides display of attitude, airspeed, altitude, direction of flight, vertical speed, turn rate, and turn quality. The system may optionally provide display of navigation information through interfaces to GPS Receivers and/or VHF Navigation Receivers.

When interfaced with a compatible autopilot, the EFD1000 system provides heading and course datum information to the autopilot, which enables the autopilot to follow the Course and Heading values set by the pilot on the EFD1000.

If optional MFD displays are installed they can present terrain, traffic, weather, and WX-500 Stormscope data to the flight crew. The EFD1000 MFD can be used as backup instruments to the PFD supporting reversionary capabilities. The EFD500 presents MFD data, but cannot be used for backup or reversion.

The optional EA100 supplies pitch and roll stabilization signals to the autopilot. The article has no direct pilot controls.

The Avionik Straubing TSO'd APS4A is integrated with the EFD1000 and provides Altitude Preselect capability. The APS4A is not applicable to the EFD1000 E5.

The CG100 Gateway allows mobile devices to interface to other avionics through an EFD1000 MFD or EFD500 MFD.

NOTE: Other modifications to the aircraft could affect the EFD1000 PFD and MFD magnetic sensors. *The EFD1000 PFD and MFD heading performance should be checked after other* modifications. See Section 10.5.4, heading accuracy test in the EFD1000 and 500 SW 2.X Installation Manual, document 900-00003-001 revision CF or later.

3 Description of How the EFD1000 System Operates and is Controlled, Including Special Procedures and Limitations

The EFD1000 system is controlled by a switch marked "EFD1000 PFD" or "PFD", "ASPEN" (for EBD system), "EFD" (for E5 system) and, (if installed) "EFD1000 MFD". The system is ready to be operated when the initialization screen disappears, and the EFD1000 attitude and heading display is shown. See the EFD1000 Aircraft Flight Manual Supplement (AFMS), document 900-00008-001 or EFD1000 E5 Aircraft Flight Manual Supplement (AFMS), document 900-00038-001 regarding which appliances are installed, how the EFD1000 system operates, and is controlled, and special procedures and limitations.

A 30-minute Emergency Battery is required for EBD installations and may be required in some EFD1000 MFD installation configurations if it is being used as any required secondary instruments.

See the attachment to this document (part of permanent aircraft records) for detailed interface information.

3.1 Maintaining Security Safeguards with the Aspen Connected Panel

The Aspen Connected Gateway is an appliance not required by 14 CFR Part 23 that permits bi-directional communication of data between wireless devices and the EFD1000 MFD. Security of the communication link to the EFD1000 MFD is important and appropriate for these instructions. Generally, the system automatically controls the security aspects of the communication link, however the operator has responsibility to assure adequate security when it comes to the human interaction.

3.1.1 Physical Security

The Connected Gateway System can be linked to several wireless devices at the same time. Only devices that are within range of the Wi-Fi signal can be linked. Therefore the devices that can be linked while in flight are limited to the devices in the aircraft. Physical security does not require maintenance or assurance for continued airworthiness. This is an operator consideration.

3.1.2 Operational Security

When the aircraft is in operation, only those systems used for Connected Gateway should be linked. Keep the password confidential. The operator should assure that only authorized devices have access to the Connected Gateway. Operational security does not require maintenance or assurance for continued airworthiness. This is an operator consideration. The password for the Connected Gateway Wi-Fi for a particular aircraft should be safeguarded and only supplied to those who are trusted. If an unexpected device is connected and a flight plan is sent, the choice is simply to reject the flight plan.

3.1.3 Security Safeguards Monitoring

If there are attempts to violate security rules while in flight, as shown by an unexpected candidate flight plan, reject the flight plan and turn off Aspen GTWY by the switch. Do not

operate it until the security breach is addressed. Security safeguards monitoring does not require maintenance or assurance for continued airworthiness. This is an operator consideration.

3.1.4 Management Procedures

Measures should be established to prevent malicious introduction of unauthorized modifications to the wireless device, including the operating system, the hosted applications and the databases or data links. This might include maintaining a separate wireless device that is exclusively for aircraft use and limiting the number of applications loaded to those that are known to be non-malicious. Management procedures do not require maintenance or assurance for continued airworthiness. This is an operator consideration.

3.1.5 Maintenance Procedures for Maintaining Security Safeguards

With the EFD1000 or EFD500 MFD and the CG100 operating, display the CG100 status by going to the MFD Gateway page. Verify that Device: LINK STATUS CG100: is reported as LINKED. Use a wireless enabled device to search for the SSID of the installed Gateway. By default, the SSID is ASPENCG100. Verify that access requires a password. This also checks the functionality of the CG100 Gateway software and hardware.

4 System Operation and Procedures for System Testing During Ground Running

Refer to the EFD1000 AFMS, document 900-00008-001 or EFD1000 E5 AFMS, document 900-00038-001 for instructions on system operation. For System Testing refer to Section 10, Appendix E (EA100), Appendix F (A/P Source Select), Appendix G (APS4A) and Appendix H (CG100) of the EFD1000 and EFD500 SW v2.X Installation Manual, 900-00003-001 Rev BY or later. For the EFD1000 E5 refer to Section 10 and Appendix E (EA100) of the EFD1000 E5 Dual Electronic Flight Instrument (EFI) Install Manual, 900-00041-001 Rev ( ) or later.

NOTE: Appendix H of document 900-00008-001 directs the user to another supporting document (900-000023-001, see "System Checkout") information for the CG100. This is because the primary document for the STC is document 900-00003-001, and information regarding support documentation will be in this document.

To check the functionality of the CG100 Gateway software and hardware, see Section 3.1.5.

5 Servicing and Scheduling Information

The EFD, RSM, ACU, ACU2, CM, EA100, APS4A, CG100, and EBB58 have no field serviceable components. Return defective units to Aspen Avionics or an authorized dealer. No equipment is required for servicing.

Recommended times for cleaning, inspecting, testing lubricating and adjusting each component of the EFD1000 System. See the Periodic Maintenance and Calibration Section.	
EA100	Verify the operation of the internal autopilot disconnect relay annually (See Section 11)
Internal battery	Inspection every twelve months (See Section 11)
EBB58 Emergency Backup Battery	Inspection every twelve months (See Section 11)
A/P Source Select switch	Verify operation annually (See Section 11)
All other components	Refer to Section 12 for inspection requirements.

6 Overhaul Period

None required.

7 Commercial Parts

There are no commercial parts in the installed EFD1000/500 system.

8 Special Tools

For bonding checks, use a milliohm meter such as an Extech 380460 Portable Precision Milliohm Meter or equivalent.

It may be required to align the EA100 Adapter to the autopilot computer using a KTS-150 Test Set, a KTS-158 Test Set, a KTS-154 Test Set or equivalent and following the autopilot manufacturer's procedure for aligning the gyro (KI-256) to the autopilot computer. The EA100 Alignment Tool will be used to manipulate the gyro pitch and roll signals and the autopilot Test Set will be used to measure the autopilot demodulated gyro voltages. In the case of the KFC225 the Remote Terminal Interface will be required in place of the test sets.

9 Airworthiness Limitations

There are no Airworthiness limitations associated with the installation of this appliance. The Airworthiness Limitations Section is FAA approved and specifies maintenance required under 14 CFR § 43.16 and § 91.403 unless an alternate program has been FAA approved.

10 Distribution of Revisions

Notification of changes to this ICA will be sent to all owners on record. The changed document will then be available in the Dealer Ramp section at www.aspenavionics.com. Paper copies are available on request, contact Aspen Avionics at www.aspenavionics.com.

11 Periodic Maintenance and Calibration and Storage Limitations

All maintenance is considered "ON CONDITION" unless otherwise noted in this ICA. The EFD Internal battery and the Emergency Backup Battery must be replaced in the interval identified below. There are no other storage limitations.

EBB58 Emergency Backup Battery (use with EFD P/N 910-00001-002, -012, -007, and -017)

The EBB58 Emergency Backup Battery when installed must be visually inspected and tested as described below once every 12 months and biannually (every 6 months) after 3 years (from date of installation) to ensure it meets the minimum 30-minute requirement for powering the EFD1000 MFD and EBD under all foreseeable conditions. The EBB58 must be replaced every 4 years (from the date of installation) or 2200 flight hours (from the time of installation) (whichever occurs first), or if it fails the following visual or operational tests.

Remove the EBB from the tray and visually inspect for the following:

- Leakage from the battery especially around the metal seams
- Evidence of water contamination
- Evidence of corrosion

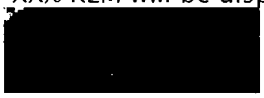
If any of the above issues are noted return the EBB58 to Aspen Avionics for repair.

Re-install the battery and check the battery capacity as follows: (this test must be run at room temperature approximately 25° C)

- Turn on the EFD1000 MFD or EBD
- Press MENU Key
- Select POWER SETTINGS, Main Menu page
- Press the BATTERY line select key

BAT LEVEL IN --.-- will be displayed for a short period of time as battery capacity is being measured. This could take up to 10 minutes if the ambient temperature is below 0° C.

Once the capacity is measured ON BAT XX% REM will be displayed.



The "ON BAT" indication must read a minimum of 80% to continue. If the battery capacity is below 80% then the battery should be charged by returning the MFD or EBD to aircraft power. The EBB will charge as long as the display is turned on and aircraft power is supplied.

With the battery displaying greater than 80% charge set a timer for one (1) hour. After the one hour time has elapsed the MFD or EBD must still be operating on battery. If the EBB will not supply the minimum 1 hour operating time or fails to charge above 80% return the battery to Aspen Avionics for repair.

Instructions for battery replacement are contained in Section 12.

Following the battery endurance test and while operating on battery power, switch the "EBB EMER DISC" switch to "DISC"; verify the display powers OFF. Return the "EBB EMER DISC" switch to "NORM"; verify the display powers ON and is on battery power.

Switch the MFD or EBD back to aircraft power and recharge the EBB to 80% or greater prior to release to service.

EFD Internal Battery (EFD P/N 910-00001-001, -003, -004, -009, -010, -011, -013 -021, -023, -027 and 900-00101-001)

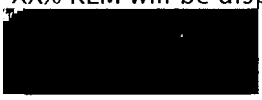
The internal back-up battery in the EFD must be tested once every 12 months and biannually (every 6 months) after 3 years (from date of installation) to ensure it operates properly. Each EFD with an internal battery must have the battery replaced every 4 years or 2200 hours, or if it fails the following operational test.

This test must be run at room temperature approximately 25° C.

- Turn on the EFD1000 or EFD500
- Press MENU Key
- Select POWER SETTINGS page from the Main Menu
- Press the BATTERY line select key

BAT LEVEL IN --.-- will be displayed for a short period of time as battery capacity is being measured. This could take up to 10 minutes if the ambient temperature is below 0° C.

Once the capacity is measured ON BAT XX% REM will be displayed.



The "ON BAT" indication must read a minimum of 80% to continue. If the battery capacity is below 80% then the battery should be charged by returning the EFD to aircraft power. The battery will charge as long as the MFD is turned on and aircraft power is supplied.

With the battery displaying greater than 80% charge set a timer for 30 minutes (40 minutes for the E5, -009, -010, -021 and -027 EFD). After the 30 minute (40 min for E5, -009, -010, -021 and -027 EFD) time has elapsed the EFD must still be operating on battery. If the internal battery will not supply the minimum 30 minutes (40 min for E5, -009, -010, -021 and -027 EFD) operating time or fails to charge above 80%, replace the battery and return the failed battery to Aspen Avionics.

Instructions for battery replacement are contained in Section 14. Contact customer service at Aspen Avionics or an authorized Aspen Avionics Dealer for a replacement battery.

Switch the EFD back to aircraft power and recharge the internal battery to 80% or greater prior to release to service.

EA100 Autopilot Disconnect (if the EA100 is installed)

The ability of an EA100 to disconnect the autopilot must be tested annually. The test is accomplished in the following manner:

Turn on the PFD, or EBD, or E5 and all MFD systems. Verify the "A/P AHRS FAIL" light extinguishes. Engage the autopilot and then pull the "A/P AHRS" circuit breaker. If the autopilot disengages immediately and the A/P AHRS light simultaneously illuminates, then the test was successful. Restore the circuit breaker. If the autopilot fails to disengage then arrange for repair of the EA100 or associated wiring.

A/P Source Select (if installed)

The switch must be tested annually. The test is accomplished in the following manner:

Turn on the PFD and all MFD systems. Engage the autopilot and verify the PFD heading bug will steer the HDG mode of the autopilot. Disconnect the autopilot. Press the MFD "REV" button and then momentarily push the A/P Source Select switch to the MFD REV position. Engage the autopilot and verify the reverted MFD heading bug will steer the HDG mode of the autopilot.

EFD Display Backlight

The EFD display backlight has a median expected life of 50,000 operating hours. Replacement of the lamp is on-condition as it may last longer or shorter than 50,000 hours. It is up to the operator to determine whether the backlighting has become too dim for its intended use.

ACU, ACU2, RSM, APS4A, CM, CG100

The ACU, ACU2, RSM, APS4A, CG100 and the Configuration Module require no periodic maintenance or calibration.

11.1 Inspection Checklist

FAR 43.15, Additional performance rules for inspections, Para. (c)(1) Annual and 100-hour inspections, requires "Each person performing an annual or 100-hour inspection shall use a checklist while performing the inspection. "Depending on the options and thus the associated complexity, it may be advantageous to prepare a checklist to be used when performing an Annual or 100-hour inspection. For all installations, the information will be found in Sections 11 and 12 of this document. Those items marked "If Installed" means that the inspection should only be conducted if the equipment is installed in the aircraft. Refer to the EFD1000 Aircraft Flight Manual Supplement, document 900-00008-001 or EFD1000 E5 Aircraft Flight manual Supplement, document 900-00038-001 for this aircraft to determine the equipment installed.

Section 11 Checklist

1. Check the EBB58 battery (if installed) in accordance with Section 11 of this document.
2. Check the EFD internal battery in accordance with Section 11 of this document.
   Note that each EFD has a battery.
3. Check the EA100 Autopilot disconnect switch (if installed) in accordance with Section 11 of this document.
4. Check the A/P Source Select switch (if installed) in accordance with Section 11 of this document.
5. Verify Security Safeguards in accordance with Section 3.1.5 of this document.

12 Unit and Wiring Inspection

All units, brackets, installation hardware and wiring of the EFD1000 system should be checked as defined below during annual inspection. Items found to be defective should be repaired or replaced prior to returning the aircraft to service. The performance of this inspection should not create the need for additional protective treatment (Alodine, paint, etc) of surfaces within the aircraft.

EFD Inspection

The EFD(s) should be inspected for damage and their operation should be verified using documents identified in Section 1 of these ICA's. The EFD wiring, pneumatic tubing, and quick disconnects should be checked for integrity, damage, chafing, or excessive wear. The EFD braided bonding strap should be checked for proper termination at the EFD and aircraft grounding point to maintain HIRF and Lightning compliance.

Verify ≤ 3 milliohms from EFD ground stud to airframe ground. The installation of the EFD should be inspected for corrosion on the EFD and the structure it is mounted on. The fasteners should be inspected for tightness and general condition.

ACU/ACU2 Inspection - if installed

The ACU should be inspected for damage and its operation should be verified using documents identified in Section 1 of these ICA's. ACU wiring should be checked for damage, chafing, or excessive wear. Verify ACU chassis bonding from the face of the unit (connector side) to airframe ground is ≤ 3 milliohms to maintain HIRF and Lightning compliance. The installation of the ACU should be inspected for corrosion on the ACU and the structure it is mounted on. The fasteners should be inspected for tightness and general condition.

RSM Inspection

The RSM(s) should be visually inspected for damage and wear on the lightning strip. RSM wiring should be checked for damage, chafing, or excessive wear. Verify RSM doubler plate bonding from the ground stud to airframe ground is ≤ 3 milliohms to maintain HIRF and Lightning compliance. The RSM installation and doubler should be inspected for corrosion on the RSM, the RSM shim (optional), the fuselage skin, and the doubler. The installation should be inspected for cracks in the fuselage, and loose or damaged fasteners.

Configuration Module Inspection

The Configuration Module(s) should be checked for damage. The Configuration Module wiring should be checked for damage, chafing, or excessive wear.

EA100 Inspection - if installed

The EA100 should be inspected for damage and its operation should be verified using documents identified in Section 1 of this document. The EA100 wiring should be checked for damage, chafing, or excessive wear. Verify EA100 chassis bonding from the face of the unit (connector side) to airframe ground is ≤ 3 milliohms to maintain HIRF and Lightning compliance. The installation should be inspected for corrosion on the EA100 and the structure it is mounted on. The fasteners should be inspected for tightness and general condition.

EBB58 Inspection -if installed

The EBB58 Emergency Backup Battery should be inspected for damage to the battery and mounting tray. Battery operation should be verified using Section 9 of this ICA. Verify ≤ 3 milliohms from mounting tray to airframe ground. The wiring should be checked for damage, chafing, or excessive wear.

APS4A Inspection- if installed

The APS4A should be inspected for damage and its operation should be verified using documents identified in Section 4 of this document. The APS4A wiring should be checked for damage, chafing, or excessive wear. Verify APS4A chassis bonding from one of the cover retaining cap screws to airframe ground is ≤ 3 milliohms to maintain HIRF and Lightning compliance. The installation should be inspected for corrosion on the APS4A and the structure it is mounted on. The fasteners should be inspected for tightness and general condition.

CG100 Inspection- if installed

The CG100 should be inspected for damage and its operation should be verified using documents identified in Section 4 of this document. The CG100 wiring should be checked for damage, chafing, or excessive wear. Verify CG100 chassis bonding from face of the unit (connector side) to airframe ground is ≤ 3 milliohms to maintain HIRF and Lightning compliance. The installation should be inspected for corrosion on the CG100 and the structure it is mounted on. The fasteners should be inspected for tightness and general condition.

12.1 Inspection Checklist

FAR 43.15, additional performance rules for inspections, Para. (c)(1) Annual and 100-hour inspections, requires "Each person performing an annual or 100-hour inspection shall use a checklist while performing the inspection." Depending on the options and thus the associated complexity, it may be advantageous to prepare a checklist to be used when performing an Annual or 100-hour inspection. For all installations, the information will be found in Sections 11 and 12 of this document. Those items marked "If Installed" means that the inspection should only be conducted if the equipment is installed in the aircraft. Refer to the EFD1000 Aircraft Flight Manual Supplement, document 900-00008-001 for this aircraft to determine the equipment installed.

Section 12 Checklist

1. Inspect the EFD(s) for damage and their operation in accordance with Section 12 of this document.
2. Inspect the ACU or ACU2 (if installed) for damage and its operation in accordance with Section 12 of this document.
3. Inspect the RSMs for damage and wear in accordance with Section 12 of this document.
4. Inspect the Configuration Module(s) for damage in accordance with Section 12 of this document.
5. Inspect the EA100 (if installed) for damage and its operation in accordance with Section 12 of this document.
6. Inspect the EBB58 (if installed) for damage in accordance with Section 12 of this document.
7. Inspect the APS4A (if installed) for damage and its operation in accordance with Section 12 of this document.
8. Inspect the CG100 (if installed) for damage and its operation in accordance with Section 12 of this document.

13 Troubleshooting

NOTE:

For more information about recognizing malfunctions, see the checkout procedure Sections 10 and 11 in the EFD1000 and EFD500 SW v2.X Installation Manual, 900-00003-001 Rev CF or later or EFD1000 E5 Dual Electronic Flight Instrument (EFI) Install Manual, 900-00041-001 Rev ( ) or later.

EFD1000 Startup Page Faults (SW v2.0 and above)

Malfunction & How to Recognize the Malfunction	**Cause**	**Remedy**
IOP initialization failure	a) Fail b) System reboots after IOP test	a) Replace EFD b) Replace EFD
ARINC initialization failure	a) Fail	a) Replace EFD
RS232 initialization failure	a) Fail	a) Replace EFD
Config Module initialization failure	a) Fail b) Wrong CM version c) System reboots after Config Module Test d) displays "Initializing" for more than 20 seconds	a) Check Config Module wiring. Replace Config Module. b) Install correct SW version CM. c) v2.0 or v2.1 display installed with a v2.2 CM. Install correct CM or EFD. d) Config Module unplugged or mis-wired.
RSM initialization failure	a) Fail (x)	a) Check RSM to PFD wiring for shorts or opens. Repair or replace RSM. Repair or replace PFD.
IMU initialization failure	a) Fail	a) Replace EFD
ADC initialization failure	a) Fail	a) Replace EFD
ADAHRS initialization failure	a) Fail b) "Initializing" for more than 3 minutes c) "Initializing" for more than 3 minutes with a RSM Fail above.	a) Replace EFD b) Remove Pitot and Static line from back of EFD and reboot. If problem still exists then replace the EFD. If problem clears then repair Pitot or Static obstruction/kink. c) Repair RSM wiring or replace RSM.

EFD1000 General Faults (SW v2.0 and above)

Malfunction & How to Recognize the Malfunction	Cause	Remedy
Display does not power on (Note: there can be up to a 20 second delay from the application of power to a visible display)	a) EFD missing A/C power	a) Check EFD circuit breaker, EFD on/off switch on panel, wiring, and A/C battery voltage > 11.5 volts.
	b) EFD may have been improperly shut down	b) Switch unit off using "REV" button or "SHUT DOWN" command from Main Menu page 6.
	c) EFD missing A/C ground	c) Check wiring to EFD
	d) EFD is defective	d) Repair or replace EFD
Display does not power off (Note: EFD will switch to battery if airspeed is greater than 30kts.)	a) Airspeed is above 30kts	a) Normal operation
	b) EFD may have been switched to internal battery	b) Switch unit off using "REV" button or "SHUT DOWN" command from Main Menu page 6.
	c) EFD may have been improperly shut down	c) Hold "REV" button for 20 seconds or unplug EFD internal battery for 3 seconds
	d) EFD is defective	d) Repair or replace EFD
Display flashes on/off, black/white or blue/white repetitively	a) Configuration Module unplugged or miswired	a) Check CM plug and wiring from EFD to CM
	b) RSM or CM wiring short	b) Verify RSM pin 6 or CM pin 1 is not shorted to aircraft ground or another pin.
	c) Configuration module defective	c) Repair or replace CM
	d) EFD defective	d) Repair or replace EFD
"CONFIG MODULE LINK FAIL" message (SW v1.X)	a) Configuration Module unplugged or mis-wired	a) Check CM plug and wiring from PFD to CM
	b) Configuration module defective	b) Repair or replace CM
	c) PFD defective	c) Repair or replace PFD
"INITIALIZING" message for more than 60 seconds (SW v1.X)	a) RSM to PFD communication lost	a) Check RSM to PFD wiring for shorts or opens.
	b) RSM failed	b) Repair or replace RSM
	c) PFD failed	c) Repair or replace PFD
"RSM LINK FAIL" message (SW v1.X)	a) RSM to PFD communication lost	a) Check RSM to PFD wiring for shorts or opens.
	b) RSM failed	b) Repair or replace RSM
	c) PFD failed	c) Repair or replace PFD
"WRONG CONFIG MODULE" message (SW v1.X)	a) PFD is at one software level and config module is at a different software level	a) Convert config module per appropriate service bulletin.

Malfunction & How to Recognize the Malfunction	Cause	Remedy
ALTIMETER, AIRSPEED, VSI FAIL (RED-X)	a) Air data sensor has not had sufficient warm-up time. b) Pitot/static lines reversed c) Air data sensor failed	a) Allow up to 20 minutes at temps below -20°C for flags to clear b) Connect pitot line to "P" port and static line to "S" port on EFD c) Repair or replace EFD
ATTITUDE FAIL or DIRECTION FAIL (RED-X) (Note: Attitude flags could take up to 3 minutes to clear at temps below -20 °C)	a) AHRS sensor has not completed initialization. b) RSM failed/data missing. c) Pitot and/or Static lines crossed, unplugged, or blocked. d) EFD is defective	a) Allow up to 3 minutes for AHRS to initialize. b) Check RSM to EFD wiring. Repair or replace RSM. c) Correct pitot/static plumbing issue. d) Repair or replace EFD.
ATTITUDE FAIL and DIRECTION FAIL associated with "CHECK PITOT HEAT" message	a) In Flight, Normal if pitot blockage due to ice or other. b) On Ground, Normal if GPS reception is marginal and GPS GS ramps above 50Kts intermittently.	a) Use pitot heat or check pitot system for blockage. b) No further action required unless message is due to faulty GPS system, then repair GPS system.
DEGRADED MODE (sw 2.10 and later) - GPS groundspeed is above 50kts and airspeed is below 30kts	a) In Flight, Normal if pitot blockage due to ice or other. b) On Ground, Normal if GPS reception is marginal and GPS GS ramps above 50Kts intermittently.	a) Use pitot heat or check pitot system for blockage. b) No further action required unless message is due to faulty GPS system, then repair GPS system.
CROSS CHECK ATTITUDE message (yellow) (also see sluggish AHRS performance troubleshooting)	a) If it occurred on system start. b) Normal after abrupt maneuvers on ground or in air	a) RESET AHRS b) RESET AHRS

Malfunction & How to Recognize the Malfunction	Cause	Remedy
Red Slash through Navigation Sensor (i.e., GPS1, NAV2)	a) GPS or VLOC receiver turned off. b) GPS does not have a valid "TO" waypoint and position c) GPS or VLOC receiver failed d) ACU not powered e) Wiring fault between sensor and ACU or EFD f) ACU to EFD wiring fault. g) ACU is defective. h) EFD is defective.	a) Turn on GPS or VLOC receiver b) Allow GPS to acquire a position and enter a flight plan or Direct To c) See GPS/VLOC manufacturer's instructions for troubleshooting d) Check ACU circuit breaker e) Check wiring between GPS/VLOC and ACU or EFD f) Check ACU circuit breaker, check ACU to EFD A429 wiring and ACU to sensor wiring g) Repair or replace ACU h) Repair or replace EFD
GPS1 or GPS2 selection not available on Display (GNS430/GNS530/GNS480 only)	a) GPS receiver turned off b) GPS does not have a valid "TO" waypoint and position c) GNS CDI is selected to VLOC. d) GPS to EFD A429 wiring issue. e) GPS defective. f) EFD defective.	a) Turn on GPS and initialize b) Allow GPS to acquire a position and enter a flight plan or Direct To c) Verify the GNS CDI is selected to GPS. d) Check A429 wiring for shorts, opens or crossed A and B lines. e) Repair or replace GPS f) Repair or replace EFD
Autopilot or analog NAV/GPS inoperative	a) ACU chassis not grounded b) ACU not powered c) ACU to sensor wiring d) ACU to EFD wiring e) ACU fault f) EFD fault	a) Ground ACU chassis to airframe ground b) Check ACU circuit breaker and power/grounds c) Check ACU to sensor wiring d) Check ACU to EFD A429 wiring e) Repair or replace ACU f) Repair or replace EFD

Malfunction & How to Recognize the Malfunction	**Cause**	**Remedy**
"ERRONEOUS CALIBRATION VALUES" message during RSM Cal (SW v2.0 and later) or Excessive Heading errors in one quadrant, or errors that are higher than actual in some quadrants and lower than actual in other quadrants.	a) RSM is tilted more than allowed per Section 6 of this manual b) Poor RSM calibration c) RSM calibrated too close to buildings or ferrous objects d) Ferrous hardware used to mount RSM e) Airframe or external magnetic interference	a) Shim RSM to within limits defined in Section 6 of this manual b) Re-run RSM calibration at constant rate turns on flat ground. c) Re-run RSM calibration away from buildings and other ferrous objects d) Only non-ferrous screws, nuts, washers may be used on RSM e) Check for magnetized areas on airframe close to RSM. Verify no ferrous hardware is near RSM. Degauss magnetized area(s)
Sluggish or Poor AHRS (ADI) performance Poor AHRS performance in steep bank turns Sluggish compass card (Note: may or may not be associated with "Cross Check Attitude" message)	a) RSM magnetic interference b) RSM has become magnetized. c) "Pitch Attitude Trim" or "Panel Tilt Pitch Compensation" adjustment made without performing a subsequent RSM Calibration. d) Pitot and/or Static line connections at EFD blocked, kinked, or unplugged. e) Normal after abrupt maneuvers.	a) Survey RSM location using handheld compass per Section 6.9.1. Verify there are no cabin speakers within 3ft of RSM. Degauss any areas found to be magnetized or remove magnetism by other methods. b) With power removed from EFD1000 system degauss RSM and general area using degausser. c) Perform an RSM Calibration per Section 10.5.2 d) Check pitot/static connections and plumbing for blockage. Check IAS and ALT sensor per Section 10. e) Perform AHRS Reset
Excessive Heading Lead / Lag during or after turns (>7°)	Magnetic Interference	Verify that all steps have been accomplished to remove magnetic interference (see section 6.9.4), then contact an Aspen Field Service Engineer

Malfunction & How to Recognize the Malfunction	Cause	Remedy
Autopilot has lateral offset in GPSS or APPR mode (HDG Bug may also be out of center)	a) Autopilot roll "null" centering out of adjustment	a) Follow the autopilot manufacturer's guidelines for adjusting roll "null" centering
Century II/III autopilot performance poor in all modes	a) Value of R1 set incorrectly	a) Follow the autopilot manufacturer's instructions for checking NAV intercept angle. Larger value for R1 will raise angle and smaller value of R1 will lower intercept angle. See Tech Note 2009-06.
OAT Display dashed	a) Wiring fault between EFD and RSM b) RSM is defective	a) Check wiring b) Repair or replace RSM
WIND vector, velocity, and direction display dashed (Note: wind readout will dash when velocity is < 10 kts)	a) Groundspeed < 20kts b) No GPS ground track c) Airspeed failed	a) Normal operation b) GPS not computing GTK c) See AIRSPEED FAIL troubleshooting procedure
OBS mode inoperative on GPS	a) GPS A429 IN bus configured wrong b) ARINC 429 "A" and "B" lines reversed	a) See Figure 9.27 for GPS configuration notes b) Correct wiring error to GPS A429 IN bus
"CROSS LINK FAILURE" message	a) PFD or MFD not powered up b) PFD or MFD inter-system bus wiring fault c) PFD or MFD is defective	a) Power up all EFD displays b) Check wiring per diagrams in Section 9 c) Repair or Replace defective EFD
"DATABASE FAILURE" message	a) Data Card (microSD) is not inserted in MFD display. b) Wrong Data Card inserted. c) Data Card is bad d) MFD card slot is defective	a) Insert Data Card in display b) Insert correct Data Card See Section 1 for authorized database part numbers c) Replace data card with new d) Repair or replace MFD display
"Database Init" message	a) Database is missing or files are missing from card	a) Insert functional database card

Malfunction & How to Recognize the Malfunction	Cause	Remedy
"TERRAIN FAIL" message	a) Data Card not inserted b) Data Card failed c) Heading fail d) GPS position fail e) Altitude fail	a) Insert valid MFD Database b) Insert valid MFD Database c) Verify EFD1000 MFD Direction Indicator is valid and repair if needed. EFD500 MFD inter-communication bus to PFD may have failed or is not configured. d) Verify GPS has good position data e) Verify EFD1000 Altitude is valid. EFD500 MFD intercommunication bus to PFD may have failed or is not configured.
"TFC FAIL" message	a) Traffic sensor is configured but not valid.	a) Verify traffic processor is turned on and is operational.
Dedicated Traffic Display page messages	See AFMS or pilots guide	
Dedicated WX500 Display page messages	See AFMS or pilots guide	
Dedicated Weather Display page messages	See AFMS or pilots guide	
"RSM GPS" message	a) Message is on MFD and a -002 or -003 RSM is installed. b) New RSM installation. c) Wiring issue between EFD and RSM. d) RSM GPS engine has failed.	a) Set RSM GPS Enable to DISABLE in installation menu. b) New RSM installations may need to acquire an almanac and could require up to 15 minutes to clear. c) Check RSM pins 1 and 2 for continuity to EFD. d) Replace RSM.

System Troubleshooting -continued

Fault	Cause	Corrective Action
EA100		
A/P AHRS FAIL lamp is never illuminated when the EA100 circuit breaker is engaged and the circuit is closed and energized (press to test fails)	a) Probable lamp failure. The A/P AHRS FAIL lamp power source is the autopilot circuit.	a) Verify the autopilot circuit breaker is not tripped. b) Check wiring for the lamp and autopilot circuit breaker. If OK, replace the A/P AHRS FAIL lamp.
A/P AHRS FAIL lamp is illuminated whenever the EA100 circuit breaker is engaged and the circuit is closed and energized.	a) EA100 is not functioning.	a) Verify the EFD1000 IP ADDR/SUBNET MASK/PORT is set correctly (see "Configuration" in Appendix E of this manual). b) Verify the EFD1000 has software version 2.2.2 or later. c) Verify the A/P AHRS circuit breaker is not tripped. Check the wiring to the EA100. If OK, replace the EA100. d) Normal operation if EA100 Alignment Tool is in use. Use "Engage Relay" to close relay contact and turn off light.
Autopilot has lateral offset in GPSS or APPR mode (HDG Bug may also be out of center)	a) Autopilot roll "null" centering out of adjustment.	a) Follow the autopilot manufacturer's guidelines for adjusting roll "null" centering.
APS4A		
Altitude Preselect function is inoperative when the autopilot altitude hold function is correct.	a) Failure of the APS4A, or b) Failure of the EFD1000 ground assert to the APS4A when the altitude alerter reaches the selected altitude.	a) Verify the APS4A circuit breaker is not tripped. b) Check wiring and the presence of the ground assert when the altitude alerter reaches the selected altitude. Use ground elevation for the altitude alerter selection.
Altitude Preselect function is inoperative when the autopilot altitude hold function is not correct.	a) Failure of the autopilot.	a) Refer to autopilot troubleshooting procedures.

Fault	Cause	Corrective Action
	CG100	
The SSID "AspenCG100" not broadcast	a) CG100 not powered on b) CG100 antenna disconnected c) CG100 is defective	a) Repair wiring/switch/circuit breaker. b) Verify antenna is connected or coax is ok if using remote antenna. c) Before replacing the CG100 check to see if the LEDs are lit under the SD card cover. If the LEDs are not lit then the CG100 has malfunctioned. Replace CG100.
The wireless device does not link to the CG100.	Wrong password	If the correct password cannot be located, the CG100 must be returned to Aspen for repair.
MFD will not communicate with CG100 • "Not Linked" message on MFD Gateway Page • GTWY Version Number reports UNKNOWN	a) CG100 IP Address wrong b) MFD IP Address wrong c) Ethernet wiring bad	a) Use the "Aspen Flight Connect App" to set IP Address b) Set MFD IP Address to 192.168.28.12 for MFD1000 or 192.168.28.10 for MFD500 c) Check Ethernet wiring
GPS will not communicate with CG100 • GPS1 or GPS2 "Not Available" message on MFD Gateway Page	a) GPS turned off or not beyond Test Page b) Wrong MFD RS232 Ports configured for GPS Type 4/5 c) RS232 wiring issue between MFD and GPS	a) Turn on GPS and press "OK" twice b) Verify the MFD has GPS TYPE 4 or 5 set on the proper RS232 ports. c) Check GPS to MFD wiring.

14 Removal and Replacement

This section provides instructions for removal and replacement of LRUs that have been previously installed in the aircraft. No special tools are required for the removal and replacement of any system LRUs. If an LRU is found to be defective it should be removed and returned to Aspen Avionics for repair or replacement.

Fastener Identification and Discard Recommendations:

The fasteners for the components identified below are identified in the EFD1000 and EFD500 SW v2.X Installation Manual, 900-00003-001 Rev BY or later and EFD1000 E5 Dual Electronic Flight Instrument (EFI) Install Manual 900-00041-001 Rev ( ) or later. If the fasteners are deformed in any way they should be replaced.

EFD Removal

Verify power is off. Carefully insert a flat blade screwdriver into the locking mechanism on the top center of the EFD. While gently prying pull back the top of the EFD and extract from bracket. Remove nut securing braided ground strap to EFD. Remove pitot and static quick connectors (EFD1000 only) by pulling back outer spring loaded locking sleeve while unplugging connectors. To remove 44 pin D-sub connector unscrew both jackscrews fully and pull connector straight back.

EFD Replacement

Verify power is off. Install 44 pin D-sub connector and tighten jackscrews until connector is fully seated. Install pitot and static lines (EFD1000 only) to back of EFD by firmly pressing the fitting until fully seated (pitot and static quick connectors are keyed and cannot be crossed). Gently pull on connector to ensure proper connection. Connect braided bonding strap to EFD with nut. Insert bottom of EFD into bracket and pivot top forward until it locks into place on bracket.

Using section 10.6 of 900-00003-001 Rev BY or later (or 900-00041-001 Rev ( ) or later, E5 only), verify all system interfaces are functional. Verify proper bonding per Section 10.1.2 (10.2 for E5). Perform a System Leak Test (Section10.6.3, EFD1000 systems only) and Sonalert or Audio Test (Section 10.6.11, PFD and EBD only).

EFD Battery Replacement

EFD battery replacement must only be performed by a properly certified individual or facility.

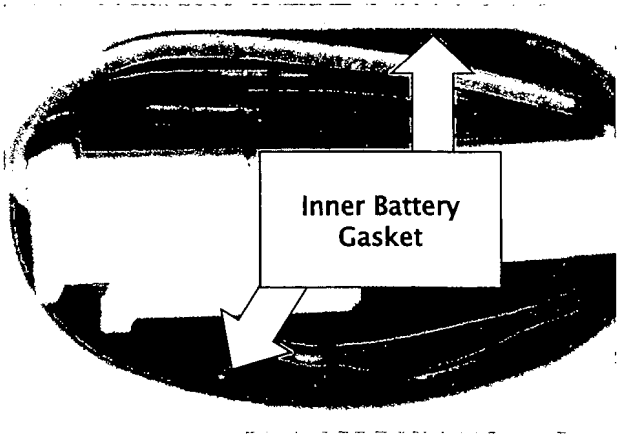
There are three types of replacement batteries:

- Battery Assy 413-00001-001 is specifically for the EFD1000 A-05-110-00 Rev A and the 910-00001-001 Rev ( ).
- Internal Battery Pack 409-00003-001 is for internal battery EFDs P/N 910-00001-001 Rev A and later and P/N 910-00001-002, -003, -004, -007, -011, -012, and -013.
- Internal Battery Pack 409-00003-002 is for all EFD1000 E5 PMA'd EFDs and P/N 910-00001-009, -010, -021, -023, and -027.

Remove the EFD from the aircraft panel as described above. Remove the two screws (one on each end) securing the oval-shaped battery cover plate to the rear of the EFD.

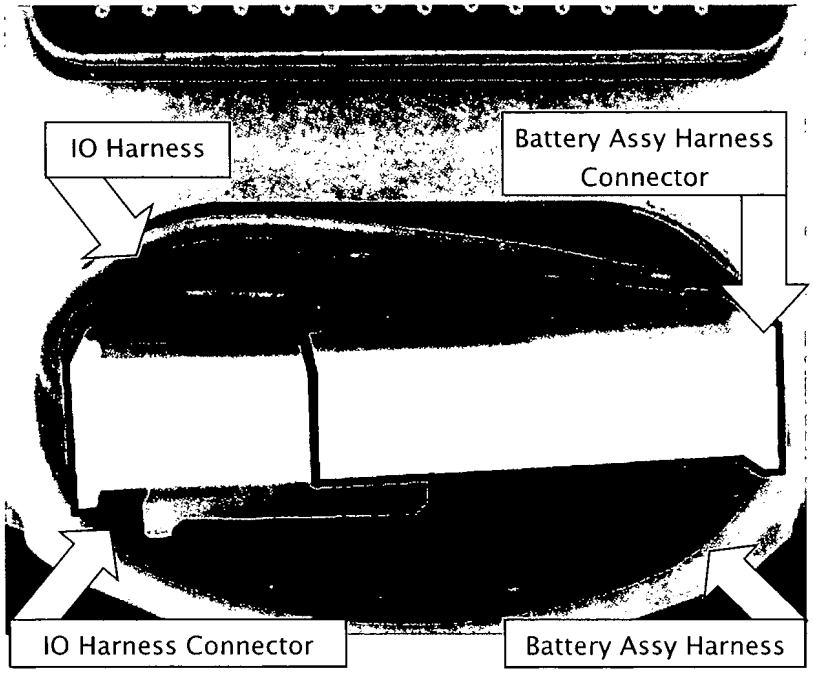
Use caution when removing the battery:

The Inner Battery Gasket (if installed) may extend partially into the battery cavity as shown in the image below. Carefully remove the battery to not disturb the gasket. *If damaged, the Inner Battery Gasket cannot be replaced in the field and the unit must be returned to the factory.*

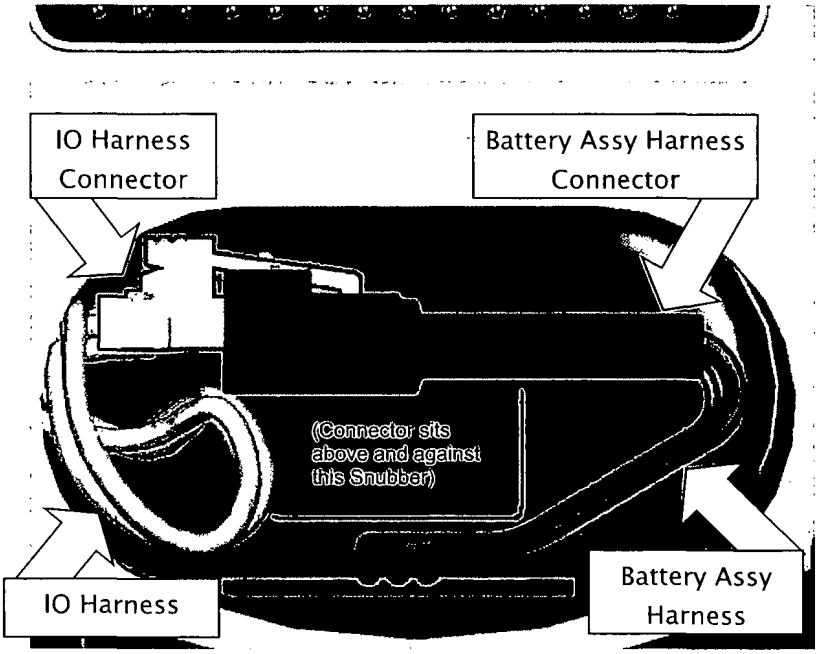


Unplug the battery connector from the IO Harness connector. Remove the old battery and install the new battery in the EFD. Then plug in the battery connector to the IO Battery Harness connector.

See the images below for connector placement and wire routing for each Battery type. To prevent pinching/shorting of wires, the wires must be routed as shown.



409-00003-00x Internal Battery Pack Connector & Wire Positioning



413-00001-001 Battery Assy Connector & Wire Positioning

Clean the threads of the two screws used to secure the battery cover. Place a small amount of Loctite® 242 on the threads of the cover screws, then position the cover plate, install the cover screws and torque to 12 in-lbs. Reinstall into panel as instructed in the EFD Replacement section above and then test the EFD.

ACU/ACU2 Removal

Verify power is off. Remove ACU by unscrewing the jackscrews of all D-sub connectors. Gently remove the connectors by pulling straight out. Remove the six (6) 6-32 mounting screws securing the ACU to the aircraft and remove unit from aircraft.

ACU/ACU2 Replacement

Verify power is off. Install ACU in mounting location and install six (6) 6-32 mounting screws through holes in ACU mounting tabs. Tighten to 12 in-lbs. Install all D-sub connectors securing each with the two jackscrews per connector.

Verify proper bonding per Section 10.1.2, then perform post installation tests in Sections 10.6.6, 10.6.7, 10.6.9, 10.6.10 of the EFD1000 and EFD500 SW v2.X Installation Manual 900-00003-001 Rev CF or later. For the E5, verify bonding per Section 10.2 and perform post install tests in Sections 10.6.5 thru 10.6.10 of the EFD1000 E5 Dual Electronic Flight Instrument (EFI) Install Manual 900-00041-001 Rev ( ) or later.

CAUTION: The RSM is very sensitive to local magnetic fields. Do not use a magnetic tipped screw driver when removing and replacing the RSM.

RSM Removal

Verify power is off. It will be necessary to gain access to the underside of the RSM mounting location in order to unplug the RSM connector. Unscrew RSM electrical connector from inside and undo shield ground wire from ground stud. Remove sealant from around base of RSM and on mounting screws. Remove four (4) 8-32 non-ferrous mounting screws from RSM and remove RSM from aircraft taking care to guide 24 inch "pigtail" connector out through ½ inch hole in aircraft skin.

RSM Replacement

Verify power is off. Replace the O-ring on the RSM. Contact Aspen Avionics for replacement O-ring (256-00001-001). Verify RSM shim is installed between aircraft skin and RSM if required. Feed circular connector down through ½ inch hole in aircraft skin and mount RSM (vent hole faces aft) with four (4) 8-32 non-ferrous screws. Tighten to 12-15 in-lbs. It is critical that the screws be non-ferrous to prevent the introduction of compass errors. Connect the circular electrical connector and cable tie harness to prevent chaffing and interference. Connect shield ground wire to ground stud. For RSM locations that are external or in a wet environment seal around base and on top of four mounting screws of the RSM using one of the following non-corrosive sealants:

Non-pressure vessel mounting	Dow Corning 738, MIL-A-46146 or equiv.
Pressure vessel mounting	Pro-Seal PS 870B-1/2, MIL-PRF-81733D, or equiv.

Verify proper bonding per Section 10.1.2, and perform RSM Calibration per Section 10.5 of the EFD1000 and EFD500 SW v2.X Installation Manual, 900-00003-001 Rev CF or later. Also check OAT operation per Section 10.6.4 and check RSM GPS operation per Section 10.6.6. For the E5 verify bonding per Section 10.2 and perform RSM Calibration per Section 10.5 of the EFD1000 E5 Dual Electronic Flight Instrument (EFI) Install Manual 900-00041-001 Rev ( ) or later.

CM Removal

Verify power is off. Cut the two (2) cable ties affixing the CM to the PFD wiring harness. Unplug the Molex connector by pressing down on the locking tab and gently pulling the connector from the module.

CM Replacement

Verify power is off. Plug the Molex connector into the module until it clicks. Cable tie the module to the PFD wiring harness.

Perform the Installation Menu Unit Configuration per section 10.4.5 of the EFD1000 Installation Manual, 900-00003-001 Rev CF or later (or 900-00041-001 Rev ( ) or later, for E5).

Perform RSM Calibration per Section 10.5 of the EFD1000 and EFD500 SW v2.X Installation Manual, 900-00003-001 Rev CF or later (or 900-00041-001 Rev ( ) or later, for E5).

To display the angle of attack (AOA) indicator (if enabled), perform the AOA Calibration Instructions in the EFD1000 and EFD500 SW v2.X Installation Manual, 900-00003-001 Rev CF or later.

EA100 Removal

Verify power is off. Remove the EA100 by unscrewing the jackscrews of both D-sub connectors. Gently remove the connectors by pulling straight out. Remove the six (6) 6-32 mounting screws securing the EA100 to the aircraft and remove unit from aircraft.

EA100 Replacement

Verify power is off. Install EA100 in mounting location and install six (6) 8-32 mounting screws through holes in EA100 mounting tabs. Tighten to 12 in-lbs. Install both D-sub connectors, securing each with the two jackscrews per connector.

Verify EA100 bonding per the Mechanical Installation section and perform post installation tests in the EFD1000 and EFD500 SW v2.X Installation Manual 900-00003-001 Rev CF or later (or 900-00041-001 Rev ( ) or later, for E5), Appendix E.

If the EA100 being installed is a replacement then configure it using the EA100 Alignment Tool and set the values to those recorded on the configuration table in the permanent aircraft records.

EBB58 Removal

Verify power is off. Unscrew two jackscrews that secure the D-sub connector to the battery and then unplug the connector. Spread battery tray hold down clips outward to release battery and slide battery out of tray.

EBB58 Replacement

Verify power is off. Slide battery into tray until hold down clips lock into place. Install D-sub connector and secure with both jackscrews.

NOTE: If the spring clip(s) are sprung so the pins do not fully seat, the mounting bracket must be replaced.

Turn on the EFD1000 MFD or EBD and switch unit to battery. Verify charge of 80% or greater. If battery is below 80% then charge battery to above 80% by switching EFD back to aircraft power. EBB58 battery will recharge as long as EFD is powered up on aircraft power.

EBB58 Tray Removal

Verify power is off. Remove the battery. Remove the four screws securing the tray to the airframe.

EBB58 Tray Replacement

Replace the four screws securing the tray to the airframe. Tighten to 12 in-lbs. Verify proper bonding per Section 10.1.2 of the EFD1000 Installation Manual, 900-00003-001 Rev CE or earlier.

APS4A Removal

Verify power is off. Remove the APS4A by unscrewing the jackscrews of the D-sub connector. Gently remove the connector by pulling straight out. Remove the four mounting screws securing the APS4A to the aircraft and remove unit from aircraft.

APS4A Replacement

Verify power is off. Install APS4A in its mounting location and install four 6-32 mounting screws through holes in APS4A mounting tabs. Tighten to 12 in-lbs. Install the D-sub connector, securing with two jackscrews per connector.

Verify APS4A bonding per the Mechanical Installation section and perform post installation tests in accordance with Appendix G - EFD1000 Installation Manual, 900-00003-001 Rev CF or later.

CG100 Removal

Verify power is off. Remove the CG100 by unscrewing the jackscrews of the D-sub connectors. Gently remove the connectors by pulling straight out. Remove the six mounting screws securing the CG100 to the aircraft and remove unit from aircraft.

CG100 Replacement

Verify power is off. Install CG100 in its mounting location and install six 6-32 mounting screws through holes in CG100 mounting tabs. Tighten to 12 in-lbs. Install the D-sub connectors, securing with two jackscrews per connector. Note - it may be necessary to remove the antenna from the old CG100 and install it on to the SMA connector of the replacement CG100.

Verify CG100 bonding per the Mechanical Installation section and perform post installation tests in accordance with Appendix H - EFD1000 Installation Manual, 900-00003-001 Rev CF or later.

NOTE: Appendix H of document 900-00008-001 directs the user to another supporting document (900-000023-001, see "CG100 Installation, and "System Checkout") information for the CG100. This is because the primary document for the STC is document 900-00003-001, and information regarding support documentation will be in this document.

15 Wiring and Component Location Data

INSTRUCTIONS:

NOTE: The wire routing information placed here by the installer must be detailed enough to enable maintenance personnel to troubleshoot, repair, and service the electrical system. These diagrams must also include a method of determining connector type (if other than the connectors supplied by Aspen Avionics in the Installation Kits), wire type, and wire size. The system wiring diagrams are descriptive data of the systems used on the aircraft, and are part of the ICA.

a) Draw in the locations of the EFD1000 system, including the EFD(s) (PFD, EBD, E5, MFD), RSM, optional ACU/ACU2, EBB58, EA100, CG100 and autopilot locations (Figures 1 and 2).

b) Draw in the circuit breaker and switch locations on instrument panel (Figure 3).

c) Draw in the EFD to RSM cable routing, including wire type and wire size.

d) Draw in the ACU to EFD and ACU to autopilot cable routing, including wire type and wire size.

e) Draw in the optional EA100 to EFD and EA100 to autopilot cable routing, including wire type and wire size.

f) Draw in the optional CG100 to MFD cable routing.

g) Draw in the optional CG100 USB port locations.

h) Show the location of access panels for inspection and servicing the EFD1000 system, including diagrams of the access plates and any information necessary to gain access when access plates are not provided.

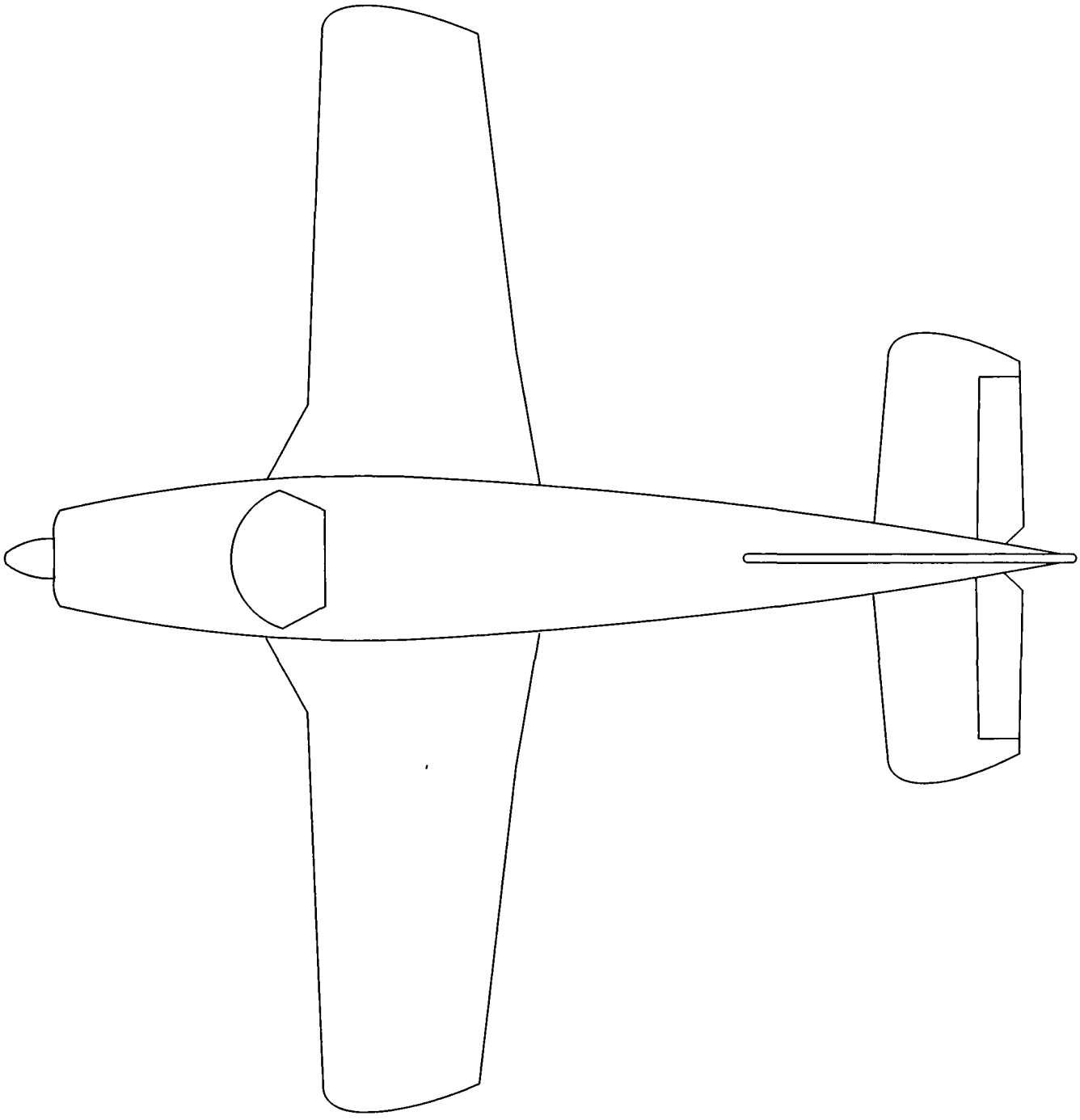


Figure 1 - EFD1000 Components and cable routing (top view)

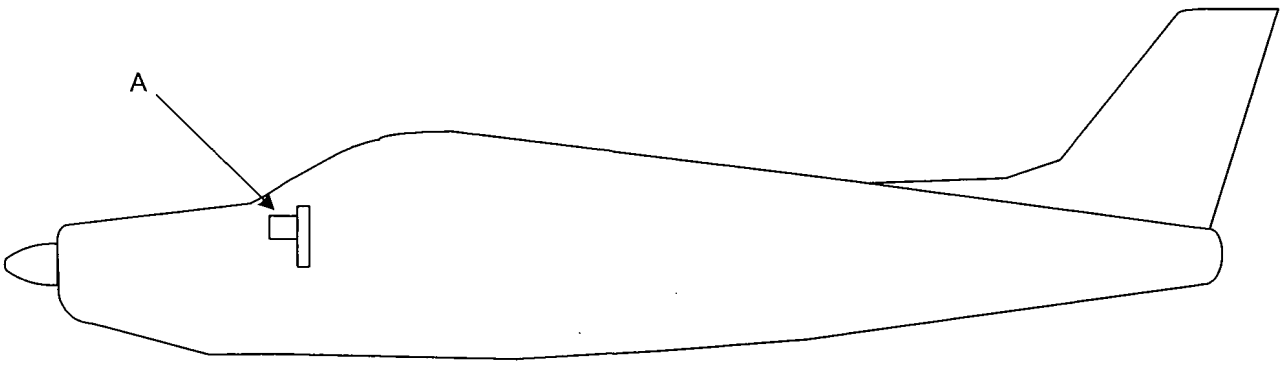


Figure 2 - EFD1000 Components and cable routing (side view)

LRU Definitions

A. EFD (CM is wired within 6" of EFD)
B. RSM (PFD, EBD, or E5)
C. ACU/2 #1 - optional equipment
D. ACU/2 #2 - optional equipment
E. MFD#1 and MFD#2 -optional
F. RSM (MFD) - optional
G. EBB58 - optional equipment
H. Autopilot computer location -optional equipment
J. EWR50 location - optional equipment
K. EA100 location - optional equipment
L. APS4A location - optional equipment
M. CG100 - optional equipment

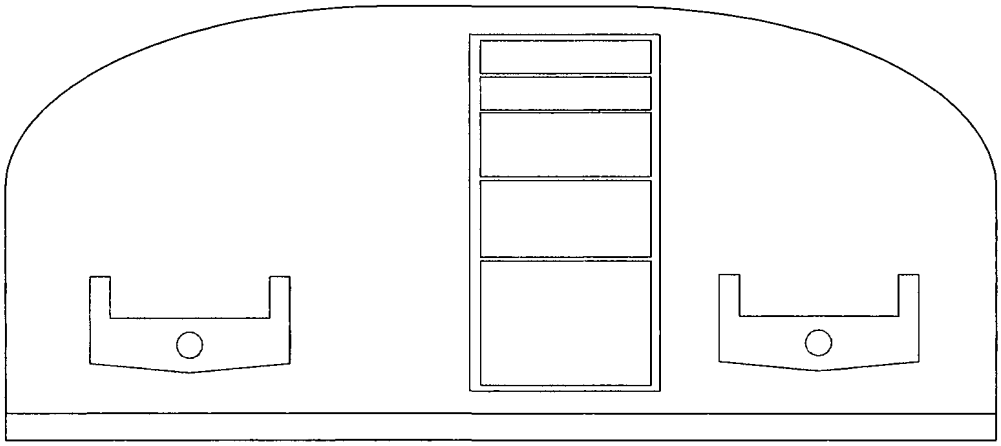


Figure 3 - Circuit Breaker and Switch Locations

Circuit Breaker and Switch Definitions

a) PFD/MFD/EBD/E5 circuit breakers
b) PFD/MFD/EBD/E5 switch(s)
c) ACU circuit breaker(s) - optional
d) A/P AHRS circuit breaker -w/opt. EA100
e) EBB58 Emergency Disconnect Switch
f) A/P AHRS FAIL light - w/ opt. EA100
g) PRESEL/(ARMED) switch - optional
h) A/P Source switch - optional
i) GTWY circuit breaker - optional
j) ASPEN GTWY switch - optional

INSERT WIRING DIAGRAMS AFTER THIS PAGE

(The drawings must include detailed information on the interface of the EFD1000 system suitable for system troubleshooting)

INSERT THE FOLLOWING AFTER THIS PAGE

All inserts are from EFD1000 and EFD500 SW v2.X Installation Manual, 900-00003-001 Rev CF or later. For the EFD1000 E5 Dual EFI, the inserts are from the EFD1000 E5 Flight Display Installation Manual, 900-00041-001 Rev ( ) or later. The sections and paragraph numbers in brackets [ ] are the locations in the 900-00041-001 document.

COMPLETED - CONFIGURATION PAGES - Section 10.4.6 & 10.4.7 [10.4.6]

COMPLETED - PRE-MODIFICATION CHECKLIST - TABLE 5-1 & 5-2 & 5-3 [Table 5-1]

COMPLETED - OPERATOR CONFIGURATION CHECKLIST FROM APPENDIX C [Installed Equipment Configuration Matrix from Appendix C]

COMPLETED - EFD1000/500 INSTALLATION FINAL CHECKSHEET FROM APPENDIX B [Appendix B]

COMPLETED - EA100 FLIGHT TEST and CONFIGURATION TABLE FROM APPENDIX E [Appendix E]

U.S. Department of Transportation
Federal Aviation Administration

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

Form Approved OMB No.2120-0020 2/28/2011 | Electronic Tracking Number

For FAA Use Only

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

1. Aircraft

Nationality and Registration Mark	Serial No.
USA N13KS	21060202

Make	Model	Series
Cessna	T210L	

2. Owner

Name (As shown on registration certificate): C&C Flying Service

Address (As shown on registration certificate)
Address PO Box 594
City Pocahontas State AR
Zip 72455 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
Name Dyersburg Avionics, Incorporated of Caruthersville
Address 2204 Airport Drive
City Caruthersville State MO
Zip 63830 Country USA

B. Kind of Agency
☐ U.S. Certificated Mechanic
☐ Foreign Certificated Mechanic
☒ Certificated Repair Station
☐ Certificated Maintenance Organization
☐ Manufacturer

C. Certificate No.
Limited Airframe SF4R516M

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
Jerrie W. Davis 2/8/18

7. Approval for Return To Service

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

BY								
	☐	FAA Flt. Standards Inspector	☐	Manufacturer	☐	Maintenance Organization	☐	Person Appoved by Canadian Department of Transport
	☐	FAA Designee	☒	Repair Station	☐	Inspection Authorization	Other *(Specify)*	

Certificate or Designation No.: SF4R516M

Signature/Date of Authorized Individual
Jerrie W. Davis 2/8/18

FAA Form 337 (10-06)

NOTICE

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

8. Description of Work Accomplished

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

USA N13KS	2/8/18
Nationality and Registration Mark	Date

Removed Garmin GTX-330 Transponder.

Installed:

1. Garmin GTX-345 ADS-B in and out Transponder and GAE-12 encoder with reference to the Installation Manual, P/N 190-00734-10 Rev. 9 dated 12/2017.

The GTX-345 is approved for installation under STC SA01714WI with an Approved Model List.

The GTX-345 was interfaced to the existing audio panel, existing GNS-530W, existing GTN-650 and existing Ryan 9900B TCAD.

Installed Pilot's Guide P/N 190-01499-00 Rev. C dated Sep 2016 in the aircraft.

Installed GTX-345 with ADS-B in and out FAA Approved Flight Manual Supplement P/N 190-00734-15 Rev. 3 dated 12/2017 in the Airplane Flight Manual.

Instructions for Continued Airworthiness P/N 190-00734-11 Rev. 6 Section 4 dated 12/2017 were installed in aircraft records.

Ground test of the GTX-345 was performed with reference to the applicable Installation Manuals. Systems performed within required specifications. No interference was noted from other installed equipment.

The described installation was accomplished with reference to the acceptable methods, techniques, and practices in Advisory Circular (AC) 43.13-1B, Chapter 10 Paragraph 20, Chapter 11 Paragraphs 30-32, 35a, 47-52, 76, 77, 96, 104, 105, 115, 116, 135-139, 155, 167, 174, 185, and 186; Chapter 12 Paragraphs 1, 8, and 9; AC 43.13-2B 2B Chapter 1 Paragraph 100, 106, 108, 109, 110, 111. and 112; Chapter 2 Paragraphs 200-202, 203f, 205, 206a, 207, 208, 209 and 210; Chapter 3 Paragraph 300-310.

Total continuous electrical load does not exceed 80% of the electrical charging system.

Updated the aircraft records with the revised weight and balance and aircraft equipment list, reflecting the above airframe alteration. Aircraft center of gravity limits are not exceeded.
Entered the description of work performed in the Aircraft Maintenance Logbook.
All pertinent details regarding this installation are on file at this repair station under Work Order Numbers 5005

☐ 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	Serial No.	
N13KS	21060202	
Make	**Model**	**Series**
Cessna	T210L	

2. Owner

Name *(As shown on registration certificate)*	Address *(As shown on registration certificate)*
C and C Flying Service	Address PO Box 594
	City Pocahontas State AR
	Zip 72455 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	Continental Motors	TSIO-520-R	236418-R
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		
Name RAM Aircraft. Limited Partnership	☐ U. S. Certificated Mechanic	☐ Manufacturer	
Address 7505 Karl May Drive	☐ Foreign Certificated Mechanic	C. Certificate No.	
City Waco State Texas	☑ Certificated Repair Station	Airframe Class III, Powerplant Class I VA1R551K	
Zip 76708 Country United States	☐ Certificated 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
	Anthony S. Czajkowski 3/9/16

7. Approval for Return to Service

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

BY								
	☐	FAA Flt. Standards Inspector	☐	Manufacturer	☐	Maintenance Organization	☐	Persons Approved by Canadian Department of Transport
	☐	FAA Designee	✓	Repair Station	☐	Inspection Authorization		Other *(Specify)*

Certificate or Designation No.	Signature/Date of Authorized Individual
VA1R551K	Anthony S. Czajkowski 3/9/16

FAA Form 337 (10-06)

NOTICE

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

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

N13KS	3/9/16
Nationality and Registration Mark	Date

Engine modified per Dwg. 1157, Rev. AP, dated 09/09/09 I/A/W STC SE3630SW-D.

Installed Slick pressurized magnetos p/n 6320 per Dwg. 1068, Rev. N, dated 1/02/07 I/A/W STC SE4651SW-D.

Installation mechanic must complete Block 1 and 2 on reverse side and mail one copy to the Federal Aviation Administration, Aircraft Registration Branch AFS-750, P.O. Box 25504, Oklahoma City, Oklahoma 73125.

Negligible weight and balance change.

Customer furnished with FAA approved Overhaul and Parts Manual Supplements with Instructions for Continued Airworthiness for all alterations.

Pertinent details of the above installations are on file under Project No. 7983.

--End--

☐ Additional Sheets Are Attached

United States Of America

Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SE3630SW-D

This Certificate issued to RAM Aircraft, Limited Partnership
7505 Karl May Drive
Waco, TX 76708

certifies that the change in the type design for the following product with the limitations and conditions thereof as specified hereon meets the airworthiness requirements of Part 18 of the Civil Air Regulations.

Original Product Type Certificate Number: E8CE

Make: Teledyne Continental

Model: TSIO-520-AF; TSIO-520-B; TSIO-520-BB; TSIO-520-C; TSIO-520-D; TSIO-520-E; TSIO-520-EB; TSIO-520-G; TSIO-520-H; TSIO-520-J; TSIO-520-JB; TSIO-520-K; TSIO-520-KB; TSIO-520-L; TSIO-520-LB; TSIO-520-M; TSIO-520-N; TSIO-520-NB; TSIO-520-P; TSIO-520-R; TSIO-520-T; TSIO-520-UB; TSIO-520-VB; TSIO-520-WB

Description of Type Design Change:
Engine modifications in accordance with RAM Aircraft, Limited Partnership Drawing No. 1157, Rev. AG, dated April 21, 2005, or later FAA approved revision.

Limitations and Conditions:
The following supplements or later FAA approved revisions are required:

1. Overhaul Manual Supplement Drawing No. 1273, Rev. E, dated April 22, 2005.

(See continuation sheet 3 of 3)

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: June 05, 1985 *Date issued:* October 08, 2001, February 19, 2008

Date of issuance: July 10, 1986 *Date amended:* February 28, 2006

By direction of the Administrator

(Signature)

S. Frances Cox
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.

This certificate may be transferred in accordance with FAR 21.47.

United States Of America
Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SE3630SW-D

Date of Issuance: July 10, 1986
Date Amended: February 28, 2006

Limitations and Conditions (Continued):

2. Parts Manual Supplement Drawing No. 1274, Rev. D, dated April 22, 2005.
3. This STC does not change the engine ratings or operational limitations.

The installer must determine whether this design change is compatible with previously approved modifications. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

T21060NL

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: N13KS	Serial No.: 21060202	
	Make: Cessna	Model: T210L	Series:
2. Owner	Name *(As shown on registration certificate)*: C&C Flying Service	Address *(As shown on registration certificate)*: Address P.O. Box 594; City Pocahontas State AR; Zip 72455 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 Kevin Late	☑ U. S. Certificated Mechanic	☐ Manufacturer	
Address 297 Clubview Rd	☐ Foreign Certificated Mechanic	C. Certificate No.	
City Pocahontas State AR	☐ Certificated Repair Station	AP3112349IA	
Zip 72455 Country USA	☐ Certificated 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
	Kevin Late 5/16/2016

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	X	Inspection Authorization		Other *(Specify)*

Certificate or Designation No.	Signature/Date of Authorized Individual
AP3112349IA	Kevin Late KEVIN LATE 5/16/2016

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 appicable airworthiness requirements.

8. Description of Work Accomplished	N13KS Nationality and Registration Mark	 Date

5/16/2016 TACH 4176.82 N13KS SN21060202

Install CMI TSIO-520-R SN 236418-R on Cessna T210L N13KS SN21060202 in accordance with RAM Aircraft , Limited Partnership STC SA2689SW-D according to drawings R21001B and R21002.
Engine installed received from RAM Aircraft 0 Time since major overhaul.
Suppliment placed in flight manual.
ICA placed in logbook folder.

———— END ————

[ ] Additional Sheets Are Attached

United States Of America

Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SA2689SW-D

This Certificate issued to RAM Aircraft, Limited Partnership
7505 Karl May Drive
Waco, TX 76708

certifies that the change in the type design for the following product with the limitations and conditions thereof as specified hereon meets the airworthiness requirements of Part 3 *of the* Civil Air *Regulations.*

Original Product Type Certificate Number: 3A21

Make: Cessna

Model: T210F, T210G, T210H, T210J, T210K, T210L

Description of Type Design Change:
Installation of TSIO-520-M engine in Models T210F, T210G, and T210H; or
TSIO-520-R engine in Models T210J, T210K, and T210L according to Drawings R21001B dated 5/12/78 and R21002 dated 10/24/77, or later FAA approved revision.

Limitations and Conditions

(See continuation sheet 3 of 3)

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: August 22, 1977

Date reissued: 10/8/01; 12/21/01; 9/20/02; 5/29/08

Date of issuance: December 09, 1977

Date amended: 5/17/78; 9/28/81
Revision 2

By direction of the Administrator

(Signature)

S. Frances Cox, 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.

This certificate may be transferred in accordance with FAR 21.47.

Supplemental Type Certificate

(Continuation Sheet)

Number SA2689SW-D

Date of Issuance: December 09, 1977
Amended Date: September 28, 1981
Reissuance Date: May 29, 2008

Limitations and Conditions (Continued):

1. The following FAA Approved Airplane Supplemental Flight Manuals are required:

   a. Dated December 9, 1977, for Cessna Models T210G and T210H.

   b. Dated May 17, 1978, or April 30, 1981, for Cessna Models T210F, T210G, T210H.

   c. Dated December 9, 1977, for Cessna Model T210J.

   d. Dated May 9, 1978, or May 1, 1981, for Cessna Models T210J, T210K, T210L.

2. Compatibility of this design change with previously approved modifications must be determined by the installer. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

-END-

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: N13KS	Serial No.: 21060202	
	Make: Cessna	Model: T210L	Series:
2. Owner	Name *(As shown on registration certificate)*: C&C Flying Service	Address *(As shown on registration certificate)*: Address P.O. Box 594; City Pocahontas State AR; Zip 72455 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 Kevin Late	☑ U. S. Certificated Mechanic	☐ Manufacturer	
Address 297 Clubview Rd	☐ Foreign Certificated Mechanic	C. Certificate No.	
City Pocahontas State AR	☐ Certificated Repair Station	AP3112349IA	
Zip 72455 Country USA	☐ Certificated 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
	Kevin Late 5/16/2016

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	X	Inspection Authorization		Other *(Specify)*

Certificate or Designation No.	Signature/Date of Authorized Individual
AP3112349IA	Kevin Late KEVIN LATE 5/16/2016

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 appicable airworthiness requirements.

N13KS	
Nationality and Registration Mark	Date

8. Description of Work Accomplished

5/16/2016 TACH 4176.82 N13KS SN21060202
Remove existing cabin air vents.
Install Wilco, Inc. "Wemac" style directional fresh air control valves in accordance with STC SA2359CE and drawing W210-100.

Negligible wieght change.

END

[ ] Additional Sheets Are Attached

United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA2395CE

This certificate, issued to Wilco, Inc.
3502 West Harry
Wichita, KS 67213

certifies that the change in the type design for the following product with the limitations and conditions thereof as specified hereon meets the airworthiness requirements of Part 03 of the Civil Air Regulations.

Original Product—Type Certificate Number: 3A21

Make: Cessna

Model: 210 and T210

Description of Type Design Change: Replacement of pilot/copilot overhead fresh air valves with "WEMAC" type directional control valves in accordance with Wilco, Inc., Drawing W210-100, no revision, dated July 13, 1988, or later FAA approved revisions.

Limitations and Conditions:

None.

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: July 1, 1988

Date issued: August 10, 1988

Date reissued:

(illegible)

By direction of the Administrator

Lawrence A. Herron
(Signature)

Lawrence A. Herron, Manager
Wichita 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.

FAA Form 8110-2 (10-68)

U.S 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 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

Nationality and Registration Mark	Serial No.		
N13KS	21060202		
Make	**Model**	**Series**	
Cessna	T210L	Centurion	

2. Owner

Name *(As shown on registration certificate)*	Address *(As shown on registration certificate)*
C and C Flying Service	Address P.O. Box 594 City Pocahontas State Arkansas Zip 724550594 Country USA

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial Number
☐	☒	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 Michael D. Hunter	☒	U.S. Certificated Mechanic	☐	Manufacturer
Address P.O. Box 1510	☐	Foreign Certificated Mechanic	C. Certificate No.	
City Mountain View State Arkansas	☐	Certificated Repair Station	3337200	
Zip 72560 Country USA	☐	Certificated 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 24, 2013

7. Approval for Return to Service

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

BY							
☐	FAA Flt Standards Inspector	☐	Manufacturer	☐	Maintenance Organization	☐	Person Approved by Canadian Department of Transport
☐	FAA Designee	☐	Repair Station	☒	Inspection Authorization		Other *(Specify)*

Certificate or Designation No. 3337200 IA

Signature/Date of Authorized Individual: April 24, 2013

FAA Form 337 (10-06)

NOTICE

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

8. Description of Work Accomplished

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

N13KS	April 24, 2013
Nationality and Registration Mark	Date

1. Installed Mountain View Aviation Door Steward Kit, PN 200C10M&O on Left Hand and Right Hand cabin doors in accordance with STC SA01120SE and manufacturers' installation instructions, PN MVA-200C10M&O, dated February 1, 2008, Rev. C.
2. Instructions for Continued Airworthiness added to aircraft records.
3. Weight and Balance change negligible. Equipment List updated.

********** E N D **********

☐ Additional Sheets Are Attached

United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA01120SE

This certificate, issued to **AP Enterprises, LLC**
DBA Mountain View Aviation
PO Box 31
Hubbard, OR 97032

*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: No. SA01120SE for list of approved airplane
Model: models and applicable airworthiness regulations.

Description of the Type Design Change: Installation of Door Steward in accordance with drawings listed on Approved Model List SA01120SE, dated September 9, 2002, or later FAA approved revision.

Limitations and Conditions: Approval of this change in type design applies to the airplane models listed on the AML only. This approval should not be extended to other aircraft of these models on which other previously approved modifications are incorporated unless it is determined that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this certificate and FAA Approved Model List (AML) No. SA01120SE must be maintained as part of the permanent records for the modified aircraft.

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

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: June 17, 2002 *Date reissued:*

Date of issuance: September 9, 2002 *Date amended:*

By direction of the Administrator

(Signature)

Acting Manager, Seattle 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.

FAA Form 8110-2(10-68)

FAA APPROVED MODEL LIST (AML) NO. SA01120SE
DBA MOUNTAIN VIEW AVIATION
FOR
INSTALLATION OF DOOR STEWARD

ORIGINAL ISSUE DATE: September 09, 2002

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	FAA SEALED DRAWING OR MASTER DRAWING LIST (1)	FAA APPROVED INSTALLATION AND MAINTENANCE INSTRUCTIONS	AML AMEMDMENT DATE
1.	Cessna	170, 170A, 170B	A-799	CAR 3 and TCDS A-799	Master Drawing List: MVA471-90, Revision IR, dated April 29, 2008	Installation Instructions: MVA200C10M & O, Revision C, dated February 01, 2008	07-11-2008
2.	Cessna	172, 172A, 172B, 172C, 172D, 172E, 172F, 172G, 172H, 172I, 172K, 172L, 172M, 172N, 172P, 172Q, 172R, 172S	3A12	CAR 3 and TCDS 3A12	Master Drawing List: MVA471-90, Revision IR, dated April 29, 2008	Installation Instructions: MVA200C10M & O, Revision C, dated February 01, 2008	07-11-2008
3.	Cessna	175, 175A, 175B, 175C, P172D, R172E, R172F, R172G, R172H, R172J, R172K, 172RG	3A17	CAR 3 and TCDS 3A17	Master Drawing List: MVA471-90, Revision IR, dated April 29, 2008	Installation Instructions: MVA200C10M & O, Revision C, dated February 01, 2008	07-11-2008
4.	Cessna	180, 180A, 180B, 180C, 180D,180E, 180F, 180G, 180H, 180J, 180K	5A6	CAR 3 and TCDS 5A6	Master Drawing List: MVA471-90, Revision IR, dated April 29, 2008	Installation Instructions: MVA200C10M & O, Revision C, dated February 01, 2008	07-11-2008
5	Cessna	182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, 182S, 182T, R182, T182, TR182, T182T	3A13	CAR 3 and TCDS 3A13	Master Drawing List: MVA471-90, Revision IR, dated April 29, 2008	Installation Instructions: MVA200C10M & O, Revision C, dated February 01, 2008	07-11-2008
6	Cessna	185, 185A, 185B, 185C, 185D, 185E, A185E, A185F	3A24	CAR 3 and TCDS 3A24	Master Drawing List: MVA471-90, Revision IR, dated April 29, 2008	Installation Instructions: MVA200C10M & O, Revision C, dated February 01, 2008	07-11-2008
7.	Cessna	206, P206, P206A, P206B, P206C, P206D, P206E, U206, U206A, 206H, U206B, U206C, U206D, U206E, U206F, U206G, TP206A, TP206B, TP206C, T206H, TP206D, TP206E, TU206A, TU206B, TU206C, TU206D, TU206E, TU206F, TU206G	A4CE	CAR 3 and TCDS A4CE	Master Drawing List: MVA471-90, Revision IR, dated April 29, 2008	Installation Instructions: MVA200C10M & O, Revision C, dated February 01, 2008	07-11-2008
8.	Cessna	210, 210A, 210B, 210C, 210D, 210E, 210F, T210F, 210G, T210G, 210H, T210H, 210J, T210J, 210K, T210K, 210L, T210L, 210M, T210M, 210N, T210N, 210R, T210R, 210-5 (205), 210-5A (205A)	3A21	CAR 3 and TCDS 3A21	Master Drawing List: MVA471-90, Revision IR, dated April 29, 2008	Installation Instructions: MVA200C10M & O, Revision C, dated February 01, 2008	07-11-2008

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 of 1958).

1. Aircraft	Make: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name (As shown on registration certificate): J & B Aircraft Sales and Leasing, Inc.	Address (As shown on registration certificate): 2711 Centerville Rd Wilmington, DE 19808-1660

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.
Dyersburg Avionics, Incorporated of Caruthersville 2204 Airport Drive Caruthersville, MO 63830	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	Limited Airframe SF4R516M

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: 8/25/10 | Signature of Authorized Individual: Jerrie W. Davis | Jerrie W. Davis

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	[X]	Repair Station		[ ] Person Appoved by Transport Canada Airworthiness Group		

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
8/25/10	SF4R516M	Jerrie W. Davis

FAA Form 337 (12-88)

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.)

Removed existing DG and VSI.

Installed Aspen EFD1000 MFD System.

The EFD1000 MFD is approved for installation with a FAA Approved model List (AML) under STC SA10822SC.

The EFD1000 MFD was installed with reference to the applicable STC and EFD1000 Installation Manual, Doc # 900-00003-001 Dated July 2010 and AC43-13-2B applicable sections.

The EFD1000 MFD system was interfaced to the EFD1000 PFD.

System performed within required specifications during ground and flight evaluation.

Installed Aspen EFD1000 Instructions for Continued Airworthiness (ICA), Doc. No. 900-00012-001 Rev. D in aircraft records.

Installed Aspen EFD1000 Pilot's Guide, Doc. 091-00005-001 Rev. B and 091-00006-001 Rev. ( ) in the aircraft.

Installed Aspen EFD1000 PFD and MFD AFM Supplement, 900-00008-001 Rev. F in aircraft.

The described installation was accomplished with reference to the acceptable methods, techniques, and practices in Advisory Circular (AC) 43.13-1B, Chapter 10 Paragraph 20, Chapter 11 Paragraphs 30-32, 35a, 47-52, 76, 77, 96, 104, 105, 115, 116, 135-139, 155, 167, 174, 185, and 186; Chapter 12 Paragraphs 1, 8, and 9; AC 43.13-2B Chapter 1 paragraph 100, 106, 108, 109, 110, 111, and 112; Chapter 2 paragraph 200-202, 203f, 205, 206a, 207, 208, 209, and 210; and Chapter 3 paragraph 300-310.

Total continuous electrical load does not exceed 80% of the electrical charging system.

Updated the aircraft records with the revised weight and balance and aircraft equipment list, reflecting the above airframe alteration. Aircraft center of gravity limits are not exceeded.

All pertinent details regarding this installation is on file at this repair station under Work Order Number 2343.

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

☐ Additional Sheets Are Attatched

*U.S.GPO:1994-568-012/00019

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 of 1958).

1. Aircraft	Make: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name (As shown on registration certificate): J & B Aircraft Sales & Leasing Inc.	Address (As shown on registration certificate): 30 Old Rudnick Ln Dover, DE 19901-4912

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
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	C. Certificate No.
Dyersburg Avionics, Incorporated of Caruthersville 2204 Airport Drive Caruthersville, MO 63830	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	Limited Airframe SF4R516M

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	Signature of Authorized Individual
1/18/08 JW	Jerrie W. Davis

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	[X]	Repair Station		[ ] Person Appoved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
1/18/08 JW	SF4R516M	Jerrie W. Davis

FAA Form 337 (12-88)

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.)

The following is a correction to WAAS upgrade FAA Form 337 dated 5/11/07
Paragraph 1:

The existing GA56 antenna was removed and replaced with a GA35 antenna
Using the approved mounting provisions of the previous installation.

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

☐ Additional Sheets Are Attatched

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 of 1958).

1. Aircraft	Make: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name (As shown on registration certificate): J & B Aircraft Sales & Leasing Inc.	Address (As shown on registration certificate): 30 Old Rudnick Ln Dover, DE 19901-4912

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
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	C. Certificate No.
Dyersburg Avionics, Incorporated of Caruthersville 2204 Airport Drive Caruthersville, MO 63830	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	Limited Airframe SF4R516M

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: 1/14/08 JW — Signature of Authorized Individual: Jerrie W Davis — Jerrie W. Davis

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							Other *(Specify)*
	[ ] FAA Flt. Standards Inspector		[ ] Manufacturer		[ ] Inspection Authorization		
	[ ] FAA Designee	[X]	Repair Station		[ ] Person Appoved by Transport Canada Airworthiness Group		

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
1/14/08 JW	SF4R516M	Jerrie W Davis — Jerrie W. Davis

FAA Form 337 (12-88)

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.)

The following is a correction to WAAS upgrade FAA Form 337 dated 5/11/07
Paragraph 1:

The existing GA56 antenna was removed and replaced with a GA35 antenna
Using the approved mounting provisions of the previous installation.

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

☐ Additional Sheets Are Attatched

*U.S.GPO:1994-568-012/00019

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 of 1958).

1. Aircraft	Make: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name (As shown on registration certificate): J & B Aircraft Sales and Leasing, Inc.	Address (As shown on registration certificate): 30 Old Rudnick Lane, Dover, DE 19901-4912

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
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	C. Certificate No.
Dyersburg Avionics, Incorporated of Caruthersville 2204 Airport Drive Caruthersville, MO 63830	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	Limited Airframe SF4R516M

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	Signature of Authorized Individual	
5/11/07	Jerrie W Davis	Jerrie W. Davis

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							Other *(Specify)*
	[ ] FAA Flt. Standards Inspector		[ ] Manufacturer		[ ] Inspection Authorization		
	[ ] FAA Designee	[X]	Repair Station		[ ] Person Appoved by Transport Canada Airworthiness Group		

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual	
5/11/07	SF4R516M	Jerrie W Davis	Jerrie W. Davis

FAA Form 337 (12-88)

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.)

Validated that the previous installation of the GNS-430 was installed with reference to the Garmin instructions and approved via an FAA-stamped field approval document on FAA-form 337 dated 11-14-03. Verified this aircraft and all interfaced equipment are covered under the STC AML. Unit was removed and upgraded to a GNS-430W. The existing location of the unit was determined to meet the field-of-view requirements without the need for external annunciation. The existing wiring and shielding was inspected and determined to be with reference to the STC AML installation data. The existing GA-56 antenna was removed and replaced with a GA-56W antenna using the approved mounting previsions of the previous installation.

A summary of the modification done to the aircraft is as follows:

1. Removed Garmin GA-56 Antenna, P/N 011-00134-00 and installed a new GA-56W GPS/WAAS Antenna, P/N 011-01111-00 using provisions left behind from the standard antenna and with reference to the Garmin upgrade manual P/N 190-00357-06 Rev. A and STC no. SA01933LS.
2. Removed Garmin GNS-430 P/N 011-00280-00 unit and installed Garmin GNS-430W, P/N 011-01060-45, using the provision left behind from the standard 430 unit. Installation done with reference to the Garmin upgrade installation Manual P/N 190-00357-06 Rev. A and STC no. SA01933LA.
3. The GNS-430W was configured identical to the original 430 unit. Each interface was checked out with reference to the 430W Installation Manual P/N 190-00356-02 Section 5. A copy of the checkout log was completed and included with the aircrafts maintenance records.
4. Removed the Aircraft Flight Manual Supplement for the GNS-430 and installed a GNS-430 Approved Flight Manual Supplement, P/N 190-00356-63, FAA approved date 12/21/2006 into the Aircraft Flight Manual.
5. Updated the aircraft Equipment List and Weight and Balance to refelct the new WAAS unit. The current electrical load analysis remains valid since the new units draw the same or less current than the original units.

All pertinent details regarding this installation is on file at this repair station under Work Order Number _____.

Instructions for Continued Airworthiness (ICA)

1. GNS-430W - Included Garmin document P/N 190-00356-65, GNS-430W Instructions for Continued Airworthiness in the aircraft maintenance records.

Note: This supersedes ICAW data for the previously installed GNS-430.

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

☐ Additional Sheets Are Attatched

*U.S.GPO:1994-568-012/00019

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 of 1958).

1. Aircraft	Make: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name (As shown on registration certificate): J & B Aircraft Sales and Leasing, Inc.	Address (As shown on registration certificate): 30 Old Rudnick Lane, Dover, DE 19901-4912

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
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	C. Certificate No.
Dyersburg Avionics, Incorporated of Caruthersville 2204 Airport Drive Caruthersville, MO 63830	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	Limited Airframe SF4R516M

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	Signature of Authorized Individual	
5/11/07	Jerrie W Davis	Jerrie W. Davis

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	[X]	Repair Station	[ ]	Person Appoved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual	
5/11/07	SF4R516M	Jerrie W Davis	Jerrie W. Davis

FAA Form 337 (12-88)

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.)

Validated that the previous installation of the GNS-530 was installed with reference to the Garmin instructions and approved via an FAA-stamped field approval document on FAA-form 337 dated 6-2-2000. Verified this aircraft and all interfaced equipment are covered under the STC AML. Unit was removed and upgraded to a GNS-530W. The existing location of the unit was determined to meet the field-of-view requirements without the need for external annunciation. The existing wiring and shielding was inspected and determined to be with reference to the STC AML installation data. The existing GA-56 antenna was removed and replaced with a GA-56W antenna using the approved mounting previsions of the previous installation.

A summary of the modification done to the aircraft is as follows:

1. Removed Garmin GA-56 Antenna, P/N 011-00134-00 and installed a new GA-56W GPS/WAAS Antenna, P/N 011-01111-00 using provisions left behind from the standard antenna and with reference to the Garmin upgrade manual P/N 190-00357-06 Rev. A and STC no. SA01933LS.
2. Removed Garmin GNS-530 P/N 011-00550-00 unit and installed Garmin GNS-530W, P/N 011-01064-45, using the provision left behind from the standard 5.30 unit. Installation done with reference to the Garmin upgrade installation Manual P/N 190-00357-06 Rev. A and STC no. SA01933LA.
3. The GNS-530W was configured identical to the original 530 unit. Each interface was checked out with reference to the 530W Installation Manual P/N 190-00357-02 Section 5. A copy of the checkout log was completed and included with the aircrafts maintenance records.
4. Removed the Aircraft Flight Manual Supplement for the GNS-530 and installed a GNS-530 Approved Flight Manual Supplement, P/N 190-00357-63, FAA approved date 12/21/2006 into the Aircraft Flight Manual.
5. Updated the aircraft Equipment List and Weight and Balance to refelct the new WAAS unit. The current electrical load analysis remains valid since the new units draw the same or less current than the original units.

All pertinent details regarding this installation is on file at this repair station under Work Order Number 1026

Instructions for Continued Airworthiness (ICA)

1. GNS-530W - Included Garmin document P/N 190-00357-65, GNS-530W Instructions for Continued Airworthiness in the aircraft maintenance records.

Note: This supersedes ICAW data for the previously installed GNS-530.

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

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 of 1958).

1. Aircraft	Make: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name (As shown on registration certificate): J & B Aircraft Sales and Leasing, Inc.	Address (As shown on registration certificate): 30 Old Rudnick Lane, Dover, DE 19901-4912

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
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	C. Certificate No.
Dyersburg Avionics, Incorporated of Caruthersville 2204 Airport Drive Caruthersville, MO 63830	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	Limited Airframe SF4R516M

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	Signature of Authorized Individual	
5/11/07	Jerrie W Davis	Jerrie W. Davis

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							Other *(Specify)*
	[ ] FAA Flt. Standards Inspector		[ ] Manufacturer		[ ] Inspection Authorization		
	[ ] FAA Designee	[X]	Repair Station		[ ] Person Appoved by Transport Canada Airworthiness Group		

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual	
5/11/07	SF4R516M	Jerrie W Davis	Jerrie W. Davis

FAA Form 337 (12-88)

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.)

Removed WSI weather system.

Installed Garmin GDL69A XM Satellite Radio Datalink Receiver with GA-55 Antenna.

The GDL69A system is approved for installation under STC SA01487SE with an Approved Model List.

The GDL69A was interfaced to the existing Garmin GNS-530.

The described installation was accomplished with reference to the Garmin GDL69/69A Installation Manual, P/N 190-00355-02, Rev. D Dated Sep 05 and the acceptable methods, techniques, and practices in Advisory Circular (AC) 43.13-1B, Chapter 10 Paragraph 20, Chapter 11 Paragraphs 30-32, 35a, 47-52, 76, 77, 96, 104, 105, 115, 116, 135-139, 155, 167, 174, 185, and 186; Chapter 12 Paragraphs 1, 8, and 9; AC 43.13-2A Paragraphs 21, 22, 23a, 23b, 27, and 36.

Installed unit is on-condition and no additional maintenance is required other than checking for security and operation at normal inspection intervals.

Installed Garmin GNS400/500 series Pilot's Guide Addendum, P/N 190-00140-13, Rev. E Dated Aug 2005 in the aircraft.

Ground test and flight evaluation of the GDL69A was performed i/a/w the applicable Installation Manuals. Systems performed within required specifications. No interference was noted from other installed equipment.

Updated the aircraft records with the revised weight and balance and aircraft equipment list, reflecting the above airframe alteration. Aircraft center of gravity limits are not exceeded.

Entered the description of work performed in the Aircraft Maintenance Logbook.

Checked magnetic compass for correct headings.

All pertinent details regarding this installation is on file at this repair station under Work Order Number 1026.

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

☐ Additional Sheets Are Attatched

*U.S.GPO:1994-568-012/00019

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 ASO-FSDO-25

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: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name (As shown on registration certificate): J & B Aircraft Sales & Leasing, Inc.	Address (As shown on registration certificate): 30 Old Rudnick Lane, Dover, DE 19901-4912

3. For FAA Use Only

The technical data identified herein has been found to comply with applicable airworthiness requirements and is hereby approved for use only on the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, Section 43.7.

District Office: ASO-FSDO-25 Date: NOV 12 2003 Signature of FAA Inspector: [signature]

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.
Dyersburg Avionics, Inc. 315 Airport Road Dyersburg, TN 38024	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	Limited Airframe SF4R516M

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 11/14/03 | Signature of Authorized Individual [signature] Jerrie W. Davis

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	[X]	Repair Station		[ ] Person Appoved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
11/14/03	SF4R516M	[signature] Jerrie W. Davis

FAA Form 337 (12-88)

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.)

Removed King KNS-80 RNAV, Northstar M-3 GPS system with C-1 Smart Com and King KI-206 Nav/ILS/GS Indicator.

Installed the following:

1. Garmin GNS-430 Airborne GPS/VOR/ILS/Com system, P/N 010-00139-11, TSO C129a Class A (1), C37d Class 4 and 6, C38d Class C and E, C40c, C36e, and C34e.

2. Garmin GA-56 GPS Aviation Antenna, P/N 011-00134-00, TSO C129a Class A(1).

3. Garmin GI-106A Course Deviation Indicator, P/N 013-00049-01, TSO C36e and C40c. Installation was accomplished with reference to the Garmin GI-102A/106A Installation Manual, P/N 190-00180-00, Revision C, dated April 2001.

Installed Instructions for Continued Airworthiness in aircraft records.

The GNS-430 was connected to the (newly installed) GI-106A CDI and (Previously installed) PS Engineering PMA7000 Audio Panel, Century I Autopilot and GTX-330 Mode S Transponder. All connected equipment is approved under the applicable TSO or STC. No other interfaces were accomplished.

The GNS-430 is approved for installation under STC SA 00705WI in a similar type aircraft. The above installations were accomplished, with no major deviations, in accordance with (i/a/w) the GNS-430 Installation Manual, P/N 190-00140-02, Revision L, dated December 2002, which is referenced in the STC Master Drawing List:

Installed "GNS-430 Approved for IFR Enroute, Terminal and Non-Precision Approaches" placard on the pilot's instrument panel.

Installed Garmin GNS-430 "Pilot's Guide and Reference", P/N 190-00140-00, Revision G, in the aircraft and FAA Approved Flight Manual Supplement, dated NOV 1 2 2003, in the Airplane flight Manual.

Ground Test and Flight evaluation of the GNS-430 were performed i/a/w the GNS-430 Installation Manual, and AC20-138, paragraph 8c(2). Systems performed within required specifications. No interference was noted from other installed equipment. Adequate isolation from harmonic interference of the VHF communication transceiver, as required by AC20-138 paragraphs 8c(1)(IV)(F), was verified.

The described installation was accomplished with reference to the acceptable methods, techniques, and

☒ Additional Sheets Are Attatched

*U.S.GPO:1994-568-012/00019

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.)

USA **Reg# N13KS** **Date:** NOV 1 2 2003

practices in Advisory Circular (AC) 43.13-1B, chapter 10 Paragraph 20, Chapter 11 paragraphs 30-32, 35a, 47-52, 76, 77, 96, 104, 105, 115, 116, 135-139, 155, 167, 174, 185, and 186; Chapter 12 paragraphs 1, 8, and 9; AC 43.13-2A paragraphs 21, 22, 23a, 23b, 23e, 27 and 36.

Performed Altimeter System Test and Inspection i/a/w FAR 43 Appendix E; no discrepancies were noted.

Total continuous electrical load does not exceed 80% of the electrical charging system.

Up-dated the aircraft records with the revised weight and balance and aircraft equipment list, reflecting the above airframe alteration. Aircraft center of gravity limits are not exceeded.

Entered the description of work performed in the Aircraft Maintenance Logbook.

Checked Magnetic Compass for Correct Headings.

All pertinent details regarding these installations are on file at this repair station under Work Order Numbers 18520.

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

☐ Additional Sheets Are Attatched

Instruction for Continued Airworthiness
Aircraft Make: Cessna Model: T210L
S/N 21060202 Reg# N13KS
Revision: 0 Date: NOV 1 2 2003
System: Garmin GNS-430 GPS/VOR/ILS/Com with
GI-106A CDI

1. **Introduction:** See Block 1 of the FAA Form 337, dated NOV 1 2 2003.
2. **Description:** See Block 8 of the FAA Form 337, dated NOV 1 2 2003.
3. **Control, operation information:** Operation information for this system are contained in the Garmin GNS-430 "Pilot's Guide and Reference" P/N 190-00140-00 (as revised) and the appropriate Airplane Flight Manual Supplement.
4. **Servicing information:** Not applicable.
5. **Maintenance instructions:** The equipment should be inspected for security of installation during aircraft annual inspection. Reference the Garmin GNS-430 Maintenance Manual, P/N 190-00140-05 (as revised) for the system/components installed. Forward GI-106A to manufacturer for service/repair.
6. **Troubleshooting information:** Reference the Garmin GNS-430 Installation Manual, P/N 190-00140-02 (as revised) and GI-106A Installation Manual P/N 190-00180-00 (as revised) for the system/components installed..
7. **Removal and replacement information:** Reference the Garmin GNS-430 Installation Manual, P/N 190-00140-02 (as revised) and GI-106A Installation Manual P/N 190-00180-00 (as revised) for the system/components installed.
8. **Diagrams:** Not applicable
9. **Special inspection requirements:** Not applicable
10. **Application of protective treatments:** Not applicable
11. **Data:** Not applicable
12. **List of special tools:** No special tools are required for removal of installation of any components in this system.
13. **For commuter category aircraft:** Not applicable
14. **Recommended overhaul periods:** No additional overhaul time limitations.
15. **Airworthiness limitations section:** No additional airworthiness limitations.
16. **Revisions:** The revised FAA Form 337 and ICA must be submitted to the local FAA Flight Standards District Office with a letter, requesting acceptance of the changes to those documents. Once the revision has been accepted, a maintenance record entry will be made identifying the revision, its location, and date of the Form 337.

Jerrie W. Davis
SF4R516M

SO-FSDO-25
NOV 1 2 2003

Dyersburg Avionics, Inc.
315 Airport Road
Dyersburg, TN 38024
Repair Station # SF4R516M

GARMIN GNS 430 VHF Communications
Transceiver / VOR / ILS Receiver / GPS Receiver

FAA APPROVED FLIGHT MANUAL SUPPLEMENT
GARMIN GNS 430 VHF COMMUNICATIONS TRANSCEIVER / VOR/ILS RECEIVER / GPS RECEIVER

AIRCRAFT MAKE: Cessna

AIRCRAFT MODEL: T210L

AIRCRAFT SERIAL NO.: 21060202

This document must be carried in the aircraft at all times. It describes the operating procedures for the GARMIN GNS 430 navigation system when it has been installed in accordance with GARMIN Installation Manual 190-00140-02 Rev. L and FAA Form 337 dated NOV 1 2 2003.

For aircraft with an FAA Approved Airplane Flight Manual, this document serves as the FAA Approved Flight Manual Supplement for the GARMIN GNS 430. For aircraft that do not have an approved flight manual, this document serves as the FAA Approved Supplemental Flight Manual for the GARMIN GNS 430.

The Information contained herein supplements or supersedes the basic Airplane Flight Manual only in those areas listed herein. For limitations, procedures, and performance information not contained in this document, consult the basic Airplane Flight Manual.

FAA Approved: Gene C. Williams Date: NOV 1 2 2003

Gene C. Williams
Principal Avionics Inspector
ASO-FSDO-25
Memphis, TN

Aircraft Make: Cessna
Aircraft Model: T210L
Aircraft Serial Number: 21060202

GARMIN GNS 430 VHF Communications
Transceiver / VOR / ILS Receiver / GPS Receiver

Table of Contents

SECTION I
GENERAL

1. The GNS 430 System is a fully integrated, panel mounted instrument, which contains a VHF Communications Transceiver, a VOR/ILS receiver, and a Global Positioning System (GPS) Navigation computer. The system consists of a GPS antenna, GPS Receiver, VHF VOR/LOC/GS antenna, VOR/ILS receiver, VHF COMM antenna and a VHF Communications Transceiver. The primary function of the VHF Communication portion of the equipment is to facilitate communication with Air Traffic Control. The primary function of the VOR/ILS Receiver portion of the equipment is to receive and demodulate VOR, Localizer, and Glide Slope signals. The primary function of the GPS portion of the system is to acquire signals from the GPS system satellites, recover orbital data, make range and Doppler measurements, and process this information in real-time to obtain the user's position, velocity, and time.

2. Provided the GARMIN GNS 430's GPS receiver is receiving adequate usable signals, it has been demonstrated capable of and has been shown to meet the accuracy specifications for:

   - VFR/IFR enroute, terminal, and non-precision instrument approach (GPS, Loran-C, VOR, VOR-DME, TACAN, NDB, NDB-DME, RNAV) operation within the U.S. National Airspace System in accordance with AC 20-138.

   - One of the approved sensors, for a single or dual GNS 430 installation, for North Atlantic Minimum Navigation Performance Specification (MNPS) Airspace in accordance with AC 91-49 and AC 120-33.

   - The systems meets RNP5 airspace (BRNAV) requirements of AC 90-96 and in accordance with AC 20-138, and JAA AMJ 20X2 Leaflet 2 Revision 1, provided it is receiving usable navigation information from the GPS receiver.

   - The equipment as installed has been found to comply with the requirements for GPS primary means of navigation in oceanic and remote airspace, when used in conjunction with the 400 Series Trainer Program incorporating the FDE Prediction Program. This does not constitute an operational approval.

   Navigation is accomplished using the WGS-84 (NAD-83) coordinate reference datum. Navigation data is based upon use of only the Global Positioning System (GPS) operated by the United States of America.

SECTION II
LIMITATIONS

1. The GARMIN GNS 430 Pilot's Guide, P/N 190-00140-00, Rev. G, dated April 2003 or later appropriate revision, must be immediately available to the flight crew whenever navigation is predicated on the use of the system. In addition to the Pilot's Guide, the appropriate Pilot's Guide Addendum also must be immediately available to the flight crew if lightning detection or traffic advisory equipment is interfaced to the system or if primary means oceanic/remote navigation is conducted.

2. The GNS 430 must utilize the following or later FAA approved software versions:

Function	Sub-System Version				
	Main	GPS	COM	VOR/LOC	G/S
Initial Approval	2.00	2.00	2.00	1.25	2.00
Traffic / Weather Interface	2.08	2.00	2.00	1.25	2.00
Primary Oceanic/Remote	3.00	3.00	2.00	1.25	2.00
TIS Interface	4.00	2.00	2.00	1.25	2.00

   The Main software version is displayed on the GNS 430 self test page immediately after turn-on for 5 seconds. The remaining system software versions can be verified on the AUX group sub-page 2, "SOFTWARE/DATABASE VER".

3. IFR enroute and terminal navigation predicated upon the GNS 430's GPS Receiver is prohibited unless the pilot verifies the currency of the data base or verifies each selected waypoint for accuracy by reference to current approved data.

4. Instrument approach navigation predicated upon the GNS 430's GPS Receiver must be accomplished in accordance with approved instrument approach procedures that are retrieved from the GPS equipment data base. The GPS equipment database must incorporate the current update cycle.

   (a) Instrument approaches utilizing the GPS receiver must be conducted in the approach mode and Receiver Autonomous Integrity Monitoring (RAIM) must be available at the Final Approach Fix.

   (b) Accomplishment of ILS, LOC, LOC-BC, LDA, SDF, MLS or any other type of approach not approved for GPS overlay with the GNS 430's GPS receiver is not authorized.

(c) Use of the GNS 430 VOR/ILS receiver to fly approaches not approved for GPS require VOR/ILS navigation data to be present on the external indicator.

(d) When an alternate airport is required by the applicable operating rules, it must be served by an approach based on other than GPS or Loran-C navigation, the aircraft must have the operational equipment capable of using that navigation aid, and the required navigation aid must be operational.

(e) VNAV information may be utilized for advisory information only. Use of VNAV information for Instrument Approach Procedures does not guarantee Step-Down Fix altitude protection, or arrival at approach minimums in normal position to land.

5. If not previously defined, the following default settings must be made in the "SETUP 1" menu of the GNS 430 prior to operation (refer to Pilot's Guide for procedure if necessary):

(a) **dis, spd** ..... n m k t (sets navigation units to "nautical miles" and "knots")
(b) **alt, vs** ..... f t fpm (sets altitude units to "feet" and "feet per minute")
(c) **map datum** ..WGS 84 (sets map datum to WGS-84, see note below)
(d) **posn** .....deg-min (sets navigation grid units to decimal minutes)

NOTE: In some areas outside the United States, datums other than WGS-84 or NAD-83 may be used. If the GNS 430 is authorized for use by the appropriate Airworthiness authority, the required geodetic datum must be set in the GNS 430 prior to its use for navigation.

SECTION III
EMERGENCY PROCEDURES

ABNORMAL PROCEDURES

1. If GARMIN GNS 430 navigation information is not available or invalid, utilize remaining operational navigation equipment as required.

2. If "RAIM POSITION WARNING" message is displayed the system will flag and no longer provide GPS based navigational guidance. The crew should revert to the GNS 430 VOR/ILS receiver or an alternate means of navigation other than the GNS 430's GPS Receiver.

3. If "RAIM IS NOT AVAILABLE" message is displayed in the enroute, terminal, or initial approach phase of flight, continue to navigate using the GPS equipment or revert to an alternate means of navigation other than the GNS 430's GPS receiver appropriate to the route and phase of flight. When continuing to use GPS navigation, position must be verified every

15 minutes using the GNS 430's VOR/ILS receiver or another IFR-approved navigation system.

4. If "RAIM IS NOT AVAILABLE" message is displayed while on the final approach segment, GPS based navigation will continue for up to 5 minutes with approach CDI sensitivity (0.3 nautical mile). After 5 minutes the system will flag and no longer provide course guidance with approach sensitivity. Missed approach course guidance may still be available with 1 nautical mile CDI sensitivity by executing the missed approach.

5. In an in-flight emergency, depressing and holding the Comm transfer button for 2 seconds will select the emergency frequency of 121.500 Mhz into the "Active" frequency window.

SECTION IV
NORMAL PROCEDURES

1. DETAILED OPERATING PROCEDURES

Normal operating procedures are described in the GARMIN GNS 430 Pilot's Guide, P/N 190-00140-00, Rev. G, dated April 2003, or later appropriate revision.

2. PILOT'S DISPLAY

The GNS 430 System data will appear on the Pilot's CDI. The source of data is either GPS or VLOC as annunciated on the display above the CDI key.

NOTE: It is the pilot's responsibility to assure that published or assigned procedures are correctly complied with. Course guidance is not provided for all possible ARINC 424 leg types. See the GNS 430 Pilot's Guide for detailed operating procedures regarding navigation capabilities for specific ARINC 424 leg types.

3. AUTOPILOT

Coupling of the GNS 430 System steering information to the autopilot can be accomplished by engaging the Century I autopilot in the Track mode.

When the autopilot system is using course information supplied by the GNS 430 System and the course pointer is not automatically driven to the desired track, the course pointer on the CDI must be manually set to the desired track (DTK) indicated by the GNS 430. For detailed autopilot operational instructions, refer to the FAA Approved flight Manual Supplement for the autopilot.

4. AUTOMATIC LOCALIZER COURSE CAPTURE

By default, the GNS 430 automatic localizer course capture feature is enabled. This feature provides a method for system navigation data present on the external indicators to be switched automatically from GPS guidance to localizer / glide slope guidance as the aircraft approaches the localizer course inbound to the final approach fix. If an offset from the final approach course is being flown, it is possible that the automatic switch from GPS course guidance to localizer / glide slope course guidance will not occur. It is the pilot's responsibility to ensure correct system navigation data is present on the external indicator before continuing a localizer based approach beyond the final approach fix. Refer to the GNS 430 Pilot's Guide for detailed operating instructions.

5. DISPLAY OF TRAFFIC INFORMATION SERVICE DATA

TIS surveillance data uplinked by Air Traffic Control (ATC) radar through the GTX-330 Mode S Transponder will appear on the moving map and traffic display pages of the GNS-430. For detailed operating instructions regarding the interface of the GNS-430 with the GTX-330, refer to the GNS-430 Pilot's Guide Addendum for the TIS System interface.

SECTION V
PERFORMANCE

No change.

SECTION VI
WEIGHT AND BALANCE

See current weight and balance data.

SECTION VII
AIRPLANE & SYSTEM DESCRIPTIONS

See GNS 430 Pilot's Guide for a complete description of the GNS 430 system.

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
S025 JBF

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: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name (As shown on registration certificate): J & B Aircraft Sales and Leasing	Address (As shown on registration certificate): 30 Old Rudnick Lane, Dover, DE 19901-4912

3. For FAA Use Only

The data herein complies with the applicable airworthiness requirements and is approved for the above stated aircraft, subject to conformity inspection by a person authorized in FAR 43.7.
Date: 9/12/02 FAA Inspector: Jerry Dersch PAI

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.
Dyersburg Avionics, Inc. 315 Airport Road Dyersburg, TN 38024	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	Limited Airframe SF4R516M

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	Signature of Authorized Individual
9-12-02	Jerrie W. Davis — Jerrie W. Davis

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							Other *(Specify)*
	[ ]	FAA Flt. Standards Inspector	[ ]	Manufacturer	[ ]	Inspection Authorization	
	[ ]	FAA Designee	[X]	Repair Station	[ ]	Person Appoved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
9-12-02	SF4R516M	Jerrie W. Davis — Jerrie W. Davis

FAA Form 337 (12-88)

Instructions for Continued Airworthiness
for GDL-49 as installed in
Cessna T210L S/N 21060202 Reg# N13KS

1. **Introduction**
   Reg# N13KS, Cessna T210L, S/N 21060202
   -Content, Scope, purpose and Arrangement: This document identified the Instruction for Continued Airworthiness for the modification of the above aircraft by installation of a Garmin GDL-49.
   -Applicability: Applies to aircraft altered by installation of the Garmin GDL-49.
   -Definitions and Abbreviations: None, N/A
   -Precautions: None, N/A
   -Units of Measure: None, N/A
   -Referenced Publications: Garmin GDL-49 Installation Manual, P/N 190-00231-00
   Garmin GDL-49 Maintenance Manual, P/N 190-00231-01
   Garmin STC # SA01073
   -Distribution: this document should be a permanent aircraft record.
2. **Description of the Alteration**
   Garmin GDL-49 Installation Manual, P/N 190-00231-00.
3. **Control, operation Information**
   N/A
4. **Servicing Information**
   N/A
5. **Maintenance Instructions**
   Maintenance of the GDL-49 is "on condition" only. Periodic maintenance is not required. Refer to the GDL-49 Maintenance Manual, Garmin P/N 190-00231-01.
6. **Troubleshooting Information**
   Refer to the GDL-49 Maintenance Manual.
7. **Removal and Replacement Information**
   Refer to sections 2 and 3 of the GDL-49 Installation Manual. If the unit is removed and reinstalled, a functional check of the equipment should be conducted in accordance with section 5 of the GDL-49 Installation Manual.
8. **Diagrams**
   Refer to sections 3 and 4 of the GDL-49 Installation Manual.
9. **Special Inspection Requirements**
   N/A
10. **Application of Protective Treatments**
    N/A
11. **Data: Relative to Structural Fasteners**
    Unit installation, removal and replacement should be in accordance with applicable Provisions of AC43.13-1A and 43.13-2A.
12. **Special Tools**
    N/A

13. **This Section is for Commuter Category Aircraft Only.**

A. Electrical loads: Refer to section 1.3.2 of the GDL-49 Installation Manual.

B. Methods of balancing flight controls: N/A.

C. Identification of primary and secondary structures: N/A

D. Special repair methods applicable to the airplane: N/A.

14. **Overhaul Period**

No additional overhaul time limitations.

15. **Airworthiness Limitation Section**

N/A

16. **Revision**

To revise this ICA, a letter must be submitted to the local FSDO with a copy of the revised FAA Form 337, and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement:

"The attached revised/new Instructions for Continued Airworthiness (Date_____) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (Date_____)."

17. **Assistance**

Flight Standards Inspectors have the resources to respond to questions regarding the ICA.

18. **Implementation and Record Keeping**

For major alterations performed in accordance with FAA field approval policy, the owner/operator operating under Part 91 is responsible for ensuring that the ICA is made part of the applicable section 91.409 inspection program for their aircraft. This is accomplished when a maintenance entry is made in the aircraft's maintenance record in accordance with section 43.9. This entry records the major alteration and identifies the original ICA location (e.g. Block 8 of FAA Form 337, date 9-12-02) along with a statement that the ICA is now part of the aircraft's inspection/maintenance requirement.

9-12-02

Date

Jerrie W. Davis
SF4R516M

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
S025JBF

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: Cessna	Model: 210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name (As shown on registration certificate): J & B Aircraft Sales and Leasing, Inc.	Address (As shown on registration certificate): 30 Old Rudnick Lane, Dover, DE 19901-4912

3. For FAA Use Only

The data herein complies with the applicable airworthiness requirements and is approved for the above stated aircraft, subject to conformity inspection by a person authorized in FAR 43.7.
Date: 8-9-02 FAA Inspector: Walter Bu ASO-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	B. Kind of Agency	C. Certificate No.
Chris Droke 236 Drake Street #23 Ripley, TN 38063	X U.S. Certificated Mechanic	A&P409139173
	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: 8/21/02 Signature of Authorized Individual: Chris Droke A&P409139173 Chris Droke

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 [X] APPROVED [ ] REJECTED

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
8/21/02	141423682IA	Joseph Samoge Jr. Joe Samoge, Jr.

FAA Form 337 (12-88)

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 Wilco, Inc. wing mounted convex mirror for inspection of nose and main landing gear position on lower left wing instead of on right lower wing as noted in Wilco drawing W210107. STC SA2749CE is applicable to the right wing installation.
2. Aircraft weight and balance data was revised.
3. Equipment list was updated.
4. ICA attached.
5. Reference work order 3421 Dyersburg Aviation, Inc.

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

☒ Additional Sheets Are Attatched

*U.S.GPO:1994-568-012/00019

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
WING MIRROR AS INSTALLED IN
CESSNA T210L S/N 21060202 REG# N13KS

1. SEE BLOCK 1 OF THE FAA FORM 337.
2. SEE BLOCK 8 ITEM 2 OF THIS FAA FORM 337.
3. NOT APPLICABLE
4. SERVICING REQUIREMENTS FOR THE EQUIPMENT INSTALLED IN THIS INSTALLATION, IF APPLICABLE, ARE NOTED IN THE INSTALLATION AND MAINTENANCE MANUALS.
5. THE EQUIPMENT AS INSTALLED FOR THIS ALTERATION SHOULD BE INSPECTED FOR SECURITY OF INSTALLATION DURING AIRCRAFT ANNUAL INSPECTION AND DURING PRE-FLIGHT INSPECTION.
6. MAINTAINING THE EQUIPMENT IN THIS INSTALLATION CAN BE FOUND IN THE APPROPRIATE MAINTENANCE MANUALS.
7-11. NOT APPLICABLE.
12. NO SPECIAL TOOLS ARE REQUIRED FOR REMOVAL OR INSTALLATION OF ANY COMPONENTS IN THIS SYSTEM.
13. NOT APPLICABLE.
14. NO ADDITIONAL OVERHAUL TIME LIMITATIONS.
15. NOT APPLICABLE.
16. TO REVISE THE INSTRUCTIONS FOR CONTINUED AIRWORTHINESS, A LETTER MUST BE SUBMITTED TO THE LOCAL FSDO WITH A COPY OF THE REVISED FAA FORM 337 AND REVISED ICA.

8/21/02
DATE

Joseph Samoge Jr
JOE SAMOGE JR
41423682IA

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
S025JBF

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: Cessna	Model: 210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name (As shown on registration certificate): J & B Aircraft Sales and Leasing, Inc.	Address (As shown on registration certificate): 30 Old Rudnick Lane, Dover, DE 19901-4912

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
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	C. Certificate No.
William O. Alexander Drawer F Finley, TN 38080	X U.S. Certificated Mechanic	A&P1452735
	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: 4-18-02

Signature of Authorized Individual: William O. Alexander — William O. Alexander

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	X	Inspection Authorization	Other *(Specify)*
	FAA Designee		Repair Station		Person Appoved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
4-18-02	141423682IA	Joseph Samoge Jr — Joe Samoge, Jr.

FAA Form 337 (12-88)

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. Removed exisiting Cessna exhaust system.
2. Installed Knisley Welding, Inc. exhaust system with reference to Cessna Service Manual Chapter 12. STC SA5012NM is applicable to the Knisley Welding, Inc. exhaust system.

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

☐ Additional Sheets Are Attatched

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

US Department of Transportation
Federal Aviation Administration

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
ASO FSDO 50-25

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 form 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: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: N13KS
2. Owner	Name *(As shown on registration certificate)*: J & B Aircraft Sales & Leasin	Address *(As shown on registration certificate)*: 30 Old Rudnick Lane Dover, DE 19901-4912

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.
William O. Alexander P. O. Box 133 Finley, TN 38080	X U.S. Certificated Mechanic	1452735 A&P
	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	Signature of Authorized Individual
February 22, 2001	William O. Alexander William O. Alexander

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						Other (Specify)
	☐	FAA Flt. Standards Inspector	☐	Manufacturer	☐ Inspection Authorization	
	☐	FAA Designee	☐	Repair Station	☐ Person Approved by Transport Canadian Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
2/22/01	IA587541366	Fred G. Taylor Fred G. Taylor

FAA Form 337 (12-88)

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 M20 Oil Separators, LLC. Air/Oil separator Model 300 on the rear right side of engine baffle. The model 300 Air/Oil separator was installed with reference to the manufacturers installation instructions.
2. STC SA02033AT is applicable to the Model 300 and this installation.
3. Aircraft weight and balance data and equipment list have been revised to include this system. An airframe logbook entry was made which references this FAA Form 337 and complies with FAR Section 43.9.
4. Post installation evaluation was performed with normal results.
5. ICA inserted in aircraft records.
6. Reference Dyersburg Aviation work order 2978.

---------- E N D ----------

☐ Additional Sheets Are Attached

U.S. GOVERNMENT PRINTING OFFICE: 1992-769-012/60157

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
S025JBF

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 form 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: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: N13KS
2. Owner	Name *(As shown on registration certificate)*: J & B Aircraft Sales & Leasin	Address *(As shown on registration certificate)*: 30 Old Rudnick Lane Dover, DE 19901-4912

3. For FAA Use Only

The data herein complies with the applicable requirements and is approved for the above stated aircraft, subject to conformity inspection by a person authorized in FAR 43.7.
DATE: 03/01/01 FAA INSPECTOR: Jerry Davis, PAI

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.
Dyersburg Avionics, Inc. 315 Airport Road Dyersburg, TN 38024		U.S. Certificated Mechanic	LIMITED AIRFRAME SF4R516M
		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	Signature of Authorized Individual
3/3/01	Jerrie W. Davis Jerrie W. Davis

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 [X] APPROVED [ ] REJECTED

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
3/3/01	SF4R516M	Jerrie W. Davis Jerrie W Davis

FAA Form 337 (12-88)

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. Removed existing Bendix/King KT-76A Transponder.
2. The following equipment and components were installed:
   a. GArmin GTX327 Transponder TSO C74c S/N 83700410
   b. TCAD Model 9900B Processor P/N 70-2400 S/N 001242 with mounting tray.
   c. Transponder coupler P/N 70-2040 S/N 000992
   d. Two L-Band antennas P/N S72-1750-31L and S72-1750-32L.
3. The GTX-327 was mounted in the center avionics stack. The 9900B Processor was installed in the mounting tray assembly located on the rear avionics shelf, the transponder coupler was installed on the right side wall behind the instrument panel. These units were installed with reference to instructions in the RYAN TCAD 990 Series Installation Manual P/N 32-2301 dated 17 Dec 1998, The Garmin GTX-327 installation manual, and guidance in FAA Advisory Circulars 43.13-1B;Chapter 10 paragraph 20; Chapter 11 paragraphs 30-32, 37, 47-52, 76, 77, 96, 97, 100, 104, 105, 115, 116, 135-139, 155, 167, 174, 185 and 186; Chapter 12 paragraphs 1, 8, and 9.
4. Performed requirements of FAR 43 Appendix E and F and FAR 23.1325 for the GTX-327 installation.
5. The 9900B TCAD was interfaced to the KNS-80 DME Suppression, the GTX-327 suppression, the existing encoder, the existing Argus 5000, and the existing Garmin GNS-530.
6. An L-Band antenna P/N S72-1750-31L S/N 1044 was installed on the top of the aircraft fuselage with reference to instructions and guidance contained in FAA Advisory Circular 43.13-2A Chapter 3 paragraph 42 and the installation manual.
7. An L-Band antenna P/N S72-1750-32L S/N 1044 was installed on the bottom of the aircraft fuselage with refeence to instructions and guidance contained in FAA Advisory Circular 43.13-2A Chapter 3 paragraph 42 and the installation manual.
8. A complete operation test was performed with reference to Ryan TCAD 9900 Series installation manual P/N 32-2301 dated 17 Dec 1998. The eqiupment performed satisfactorily and did not adversely affect existing components or systems in the aircraft as required by FAR 23.1309B.
9. The aircraft equipment list was revised to reflect these changes. Weight and Balance data have been revised and placed in the aircraft records. A Ryan TCAD Model 9900 Pilot's Hnadbook P/N 32.2302 dated 9 Nov 1998 was placed in the aircraft.
10. Total electrical load does not exceed 80% to total alternator capacity.
11. STC SA1763GL is applicable to the 9900B TCAD as well as STC 00900NY.
12. ICA inserted in aircraft records.
13. An approved FAA FMS was installed in the aircraft.
14. The 9900B TCAD is a Traffic Alert Advisory System not intended to meet or be a substitute for a TCAS.
15. Reference work order 16237 this repair station.

----------E N D----------

☐ Additional Sheets Are Attached

U.S. GOVERNMENT PRINTING OFFICE: 1992-769-012/60157

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
5025 JBF

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: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name *(As shown on registration certificate)*: J & B Aircraft Sales & Leasing, Inc.	Address *(As shown on registration certificate)*: 30 Old Rudnick Lane Dover, DE 19901-4912

3. For FAA Use Only

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

DATE: 06/01/00 FAA INSPECTOR: [signature]

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.
Dyersburg Avionics, Inc. 315 Airport Road Dyersburg, TN 38024		U.S. Certificated Mechanic	Limited Airframe SF4R516M
		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	Signature of Authorized Individual
6/2/00	Jerrie W. Davis [signature]

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
6/2/00	Sf4R516M	Jerrie W. Davis [signature]

FAA Form 337 (12-88)

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. Removed interface between M-3 GPS/KNS-80 RNAV and HSI/AP. Installed KI-206 TSO C34c, C36c, and C40a in top right hole of pilot's instrument panel. Interfaced M-3 GPS/KNS-80 RNAV to the KI-206. Removed Edo-Aire 1D714 Gyro Slaving Amp. Installed Century Flight System 1D755 Gyro Slaving Amp with bootstrap TSO C6c, C9c, C52a. Also installed Mid-Continent MD28-26 DC/AC inverter PMA PQ3738CE. The ID755 was interfaced to the MD28-26. Also removed IImorrow SL60 Com/GPS system with MAP360, Insight SF2000 Strike Finder System, Terra Tri-Nav C Indicator and KR-86 ADF System.
2. Installed GNS-530 GPS/Nav/Com TSO C129a, C37d, C38d, C40c, C36e and C34e. Installed GA-56 GPS Antenna TSO C129a.. The GNS-530 was mounted in the center avionics stack. The GA-56 was mounted on the forward top section of the aircraft. STC 2166WI-A is applicable to the GNS-530. The GNS-530 was interfaced to the existing HSI/AP and encoder.
3. Installed Argus 5000 TSO C113a in the center right hole of the pilot's instrument panel. Installed behind the instrument panel a Comant CI-1125 VOR/GS Diplexer TSO C34c, C36c, and C40a. Also installed a WX-500 Stormscope system TSO C110a. The processor was mounted in the rear section of the aircraft on available shelving. The antenna was mounted on the lower rear fuselage. The Argus 5000 was interfaced to the M-3 GPS, 1D755, and MD28-26. The WX-500 was interfaced to the GNS-530.
4. The following is applicable:

GNS-530 S/N 73300283 WX-500 Processor S/N JCP0400126
GA-56 S/N 59045099 WX-500 Antenna S/N JCA04004145
KI-206 S/N 10145 Argus 5000 S/N 001140
1D755 S/N 5820A

5. These systems were installed with reference to the manufacturers' instructions and the acceptable methods, techniques and practices in Advisory Circular (AC) 43.13-1B, Chapter 10 paragraphs 14; Chapter 11 paragraphs 30-32, 37, 47-52,76, 77, 96, 99,104, 105, 115, 116, 135-139, 155, 167, 174, 185 and 186; Chapter 12 paragraphs 1, 8, and 9; AC 43.13-2A paragraphs 21, 22, 23a, 23b, 23e, and 27 and AC 20-138 paragraphs 8c(2). Requirements of FAR 43 Appendix E and F and FAR 23.1325 were verified.
6. The GNS-430 FAA approved Flight Manual Supplement has been installed in the airplane flight manual for this aircraft.
7. Post installation ground accuracy and function tests were performed in accordance with manufacturer instructions, including the VHF transmitter harmonic interference tests required by AC20-138, paragraphs 8c(1)(1V)(F). All systems operated normally. Adequate isolation from harmonic interference of the VHF communications transceiver was verified.
8. Placard "**GNS-530 GPS approved for IFR, Enroute, Terminal and Non-Precision Approaches".**
9. Aircraft weight and balance data and equipment list have been revised to include this system. An Airframe logbook entry was made which references this FAA Form 337 and complies with FAR Section 43.9.
10. Total electrical load does not exceed 80% of total alternator capacity.
11. Following approval for return to service by completion of Section 7 of this FAA Form 337, a flight test is required to confirm that all GPS related systems operate normally, safely, in accordance with manufacturers specification, and the functional flight evaluation requirements of AC 20-138. Results of evaluation will be recorded in Airframe logbook of aircraft.
12. ICA inserted in aircraft records.
13. Reference work orders 15907 and 15908 this repair station.

**********THE END**********

☐ Additional Sheets Are Attached

*U.S.GPO:1994-568-012/00019

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: SO25JBF

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: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name (As shown on registration certificate): J & B Aircraft Sales & Leasing, Inc.	Address (As shown on registration certificate): 30 Old Rudnick Lane, Dover, DE 19901-4912

3. For FAA Use Only

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

DATE: 06/01/00 FAA INSPECTOR: Jerry Joseph, IA

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.
Dyersburg Avionics, Inc. 315 Airport Road Dyersburg, TN 38024	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	Limited Airframe SF4R516M

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	Signature of Authorized Individual
6/2/00	Jerrie W. Davis Jerrie W. Davis

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 [X] APPROVED [ ] REJECTED

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
6/2/00	SF4R516M	Jerrie W. Davis Jerrie W. Davis

FAA Form 337 (12-88)

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. Removed interface between M-3 GPS/KNS-80 RNAV and HSI/AP. Installed KI-206 TSO C34c, C36c, and C40a in top right hole of pilot's instrument panel. Interfaced M-3 GPS/KNS-80 RNAV to the KI-206. Removed Edo-Aire 1D714 Gyro Slaving Amp. Installed Century Flight System 1D755 Gyro Slaving Amp with bootstrap TSO C6c, C9c, C52a. Also installed Mid-Continent MD28-26 DC/AC inverter PMA PQ3738CE. The ID755 was interfaced to the MD28-26. Also removed Ilmorrow SL60 Com/GPS system with MAP360, Insight SF2000 Strike Finder System, Terra Tri-Nav C Indicator and KR-86 ADF System.
2. Installed GNS-530 GPS/Nav/Com TSO C129a, C37d, C38d, C40c, C36c and C34e. Installed GA-56 GPS Antenna TSO C129a.. The GNS-530 was mounted in the center avionics stack. The GA-56 was mounted on the forward top section of the aircraft. STC 2166WI-A is applicable to the GNS-530. The GNS-530 was interfaced to the existing HSI/AP and cricoder.
3. Installed Argus 5000 TSO C113a in the center right hole of the pilot's instrument panel. Installed behind the instrument panel a Comant CI-1125 VOR/GS Diplexer TSO C34c, C36c, and C40a. Also installed a WX-500 Stormscope system TSO C110a. The processor was mounted in the rear section of the aircraft on available shelving. The antenna was mounted on the lower rear fuselage. The Argus 5000 was interfaced to the M-3 GPS, 1D755, and MD28-26. The WX-500 was interfaced to the GNS-530.
4. The following is applicable:

GNS-530 S/N 73300283 WX-500 Processor S/N JCP0400126
GA-56 S/N 59045099 WX-500 Antenna S/N JCA04004145
KI-206 S/N 10145 Argus 5000 S/N 001140
1D755 S/N 5820A

5. These systems were installed with reference to the manufacturers' instructions and the acceptable methods, techniques and practices in Advisory Circular (AC) 43.13-1B, Chapter 10 paragraphs 14; Chapter 11 paragraphs 30-32, 37, 47-52,76, 77, 96, 99,104, 105, 115, 116, 135-139, 155, 167, 174, 185 and 186; Chapter 12 paragraphs 1, 8, and 9; AC 43.13-2A paragraphs 21, 22, 23a, 23b, 23e, and 27 and AC 20-138 paragraphs 8c(2). Requirements of FAR 43 Appendix E and F and FAR 23.1325 were verified.
6. The GNS-430 FAA approved Flight Manual Supplement has been installed in the airplane flight manual for this aircraft.
7. Post installation ground accuracy and function tests were performed in accordance with manufacturer instructions, including the VHF transmitter harmonic interference tests required by AC20-138, paragraphs 8c(1)(IV)(F). All systems operated normally. Adequate isolation from harmonic interference of the VHF communications transceiver was verified.
8. Placard "GNS-530 GPS approved for IFR, Enroute, Terminal and Non-Precision Approaches".
9. Aircraft weight and balance data and equipment list have been revised to include this system. An Airframe logbook entry was made which references this FAA Form 337 and complies with FAR Section 43.9.
10. Total electrical load does not exceed 80% of total alternator capacity.
11. Following approval for return to service by completion of Section 7 of this FAA Form 337, a flight test is required to confirm that all GPS related systems operate normally, safely, in accordance with manufacturers specification, and the functional flight evaluation requirements of AC 20-138. Results of evaluation will be recorded in Airframe logbook of aircraft.
12. ICA inserted in aircraft records.
13. Reference work orders 15907 and 15908 this repair station.

**********THE END**********

☐ Additional Sheets Are Attached

*U.S.GPO:1994-568-012/00019

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
So 25 JBF

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: Cessna	Model: P210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N6ZZ
2. Owner	Name *(As shown on registration certificate)*: Joseph Henry Schaeffer III	Address *(As shown on registration certificate)*: 211 Belle Meade Lane Memphis, TN 38117

3. For FAA Use Only

The data herein complies with the applicable airworthiness requirements and is approved for the above stated aircraft, subject to a conformity inspection by a person authorized in FAR 43.7. The attached instructions for continued airworthiness dated 1/14/99, for the above aircraft major alteration have been accepted by the FAA. DATE: 02/09/99 FAA INSPECTOR: Jerry Davis, PAI

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.
Dyersburg Avionics, Inc. 315 Airport Road Dyersburg, TN 38024	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	Limited Airframe SF4R516M

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	Signature of Authorized Individual
February 9, 1999	Jerrie W. Davis Jerrie W. Davis

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 [X] APPROVED [ ] REJECTED

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
February 9, 1999	SF4R516M	Jerrie W. Davis Jerrie W. Davis

FAA Form 337

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. CHECKED INSTALLATION OF BENDIX/KING MODEL KLN-90B GPS S/N 81261 IN AVIONICS STACK AND INSTALLATION OF BENDIX/KING KA-92 GPS ANTENNA ON TOP OF FUSELAGE. STC SA00241WI-D DATED 1 FEBRUARY 1995 IS APPLICABLE TO KLN-90B.
2. CHECKED INTERFACE OF KLN-90B TO HSI AND AUTOPILOT WHICH UTILIZED A MID-CONTINENT INSTRUMENT CORP. MD41-328 GPS ANNUCIATOR CONTROL UNIT S/N 3921 TSO C129. THE KLN-90B IS INTERFACED TO EXISTING ENCODER.
3. THIS SYSTEM WAS INSTALLED WITH REFERENCE TO THE BENDIX/KING MODEL KLN-90B INSTALLATION MANUAL P/N 006-10521-0002, DATED FEBRUARY 1995, AND THE ACCEPTABLE METHODS, TECHNIQUES, AND PRACTICES IN ADVISORY CIRCULAR (AC) 43.13-1A, PARAGRAPHS 424, 429, 443, 445, 447, 450, 514, AND 750; AND AC 43.13-2AA PARAGRAPHS 21, 22, 23a, 23b, 23e, 27 AND 36; THE REQUIREMENTS OF AC 20-138 PARAGRAPHS 8C(2); FAR 43 APPENDIX E AND F; AND FAR 23.1325.
4. THE BENDIX/KING MODEL KLN-90B FAA APPROVED AIRPLANE FLIGHT MANUAL SUPPLEMENT HAS BEEN INSTALLED IN THE AIRPLANE FLIGHT MANUAL FOR THE AIRCRAFT.
5. POST INSTALLATION GROUND ACCURACY AND FUNCTION TESTS WERE PERFORMED IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS, INCLUDING THE VHF TRANSMITTER HARMONIC INTERFERENCE TESTS REQUIRED BY ADEQUATE ISOLATION FROM HARMONIC INTERFERENCE OF THE VHF COMMUNICATION TRANSCEIVERS WAS VERIFIED.
6. AIRCRAFT WEIGHT AND BALANCE DATA AND EQUIPMENT LIST HAVE BEEN REVISED TO INCLUDE THIS SYSTEM. AN AIRFRAME LOGBBOK ENTRY WAS MADE WHICH REFERENCES THIS FAA FORM 337 AND COMPLIES WITH FAR SECTION 43.9.
7. ALSO INSTALLED IN AIRCRAFT THE KLN-90B PILOT'S GUIDE, ABBREVIATED OPERATION MANUAL AND THE MEMORY JOGGER.
8. PLACARD <u>"KLN-90B - APPROVED FOR IFR ENROUTE, TERMINAL AND NON-PRECISION APPROACHES."</u>
9. FOLLOWING APPROVAL FOR RETURN TO SERVICE BY COMPLETION OF SECTION 7 OF THIS FAA FORM 337, A FLIGHT TEST IS REQUIRED TO CONFIRM THAT ALL GPS RELATED SYSTEMS OPERATE NORMALLY, SAFELY, IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AND THE FUNCTIONAL FLIGHT EVALUATION WILL BE RECORDED IN AIRFRAME LOGBOOK OF AIRCRAFT.
10. REFERENCE WORK ORDER 14601 THIS REPAIR STATION.

**********THE END**********

☐ Additional Sheets Are Attached

ICA FOR KLN-90B AND MD41-328 AS INSTALLED IN
CESSNA P210N, REG# N6ZZ, S/N P21000558

1. SEE BLOCK 1 OF THIS FAA FORM 337.
2. SEE BLOCK 8, ITEM 1 AND 2 OF THIS FAA FORM 337.
3. SEE PILOT'S GUIDE P/N 006-08773-0000 OR LATER, ABBRVIATED PILOT'S GUIDE P/N 006-08785-0000 OR LATER, AND MEMORY JOGGER P/N 006-08785-0000 AND FMS FOR KLN-90B FOR OPERATION OF THE KLN-90B. SEE MD41-328 OPERATION/INSTALLATION GUIDE P/N 7016074 REV. 4 OR LATER FOR OPERTION OF THE MD41-328.
4. THERE ARE NO SERVICING INSTRUCTIONS FOR THE KLN-90B OR MD41-328.
5. THE EQUIPMENT AS INSTALLED SHOULD BE INSPECTED FOR SECURITY INSTALLATION AND VISIBLE DAMAGE AT REGULAR AIRCRAFT INSPECTION INTERVALS.
6. TROUBLESHOOTING AND MAINTENANCE OF THE KLN-90B ARE LOCATED IN THE INSTALLATION MANUAL P/N 006-10521-0002 OR LATER AND MAINTENANCE MANUAL P/N 006-15521-0000 OR LATER. NOT APPLICABLE FOR THE MD41-328.
7. REMOVED INSTRUCTIONS FOR THE KLN-90B ARE LOCATED IN THE INSTALLATION MANUAL P/N 006-10521-0002 OR LATER. NOT APPLICABLE FOR THE MD41-328.
8-13. NOT APPLICABLE.
14. NO ADDITIONAL OVERHAUL TIME LIMITATIONS.
15. NOT APPLICABLE.
16. TO REVISE THE INSTRUCTIONS FOR CONTINUED AIRWORTHINESS, A LETTER MUST BE SUBMITTED TO THE LOCAL FSDO WITH A COPY OF THE REVISED FAA FORM 337 AND REVISED ICA.

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
FSDO-25

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: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name *(As shown on registration certificate)*: J & B Aircraft Sales and Leasing Inc.	Address *(As shown on registration certificate)*: 30 Old Rudnick Ln Dover, DE 19901-4912

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.
Kenneth Foltz 1291 Friendship Eaton Road Friendship TN 38034	X	U.S. Certificated Mechanic	A&P 432861016
		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	Signature of Authorized Individual
12/09/98	Kenneth Foltz A&P 432861016

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	X	Inspection Authorization	Other *(Specify)*
	FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	William E Braese

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
12/09/98	1503833IA	William E. Braese William E Braese

FAA Form 337 (12-88)

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. REMOVED EXISTING EGT SYSTEM AND TACHOMETER. EXISTING TACH TIME TRANSFERRED TO P1000 TACH.

2. INSTALLED J. P. INSTRUMENTS EDM-700 ENGINE DATA MANAGEMENT SYSTEM WITH FUEL FLOW OPTION. STC SA2586NM AND SA00432SE TO THE EDM-700 WITH FUEL FLOW OPTION. THE TEMPERATURE INDICATOR EGT-701 TSO C43b WAS INSTALLED IN THE RIGHT INSTRUMENT PANEL. THE EGT PROBES, CHT PROBES, TIT PROBE, OIL TEMP PROBE, AND FUEL FLOW TRANSDUCER WERE INSTALLED WITH REFERENCE TO THE STC.

3. INSTALLED HORIZON INSTRUMENTS, INC. ELECTRONIC DIGITAL ENGINE TACHOMETER MODEL P-1000 AS PER STC SA5821M. STC SA5821M IS APPLICABLE TO THE P1000.

4. THE EDM-700 AND P1000 WERE INSTALLED WITH REFERENCE TO THE STC AND MANUFACTRERS INSTALLATION INSTRUCTIONS AND THE ACCEPTABLE METHODS, TECHNIQUES, AND PRACTICES IN ADVISORY CIRCULAR (AC)43.13-1A PARAGRAPHS 424, 442, 443, 445, 447, 450, 514, AND 750.

5. INSTALLED FAA APPROVED FLIGHT MANUAL SUPPLEMENTS FOR P-1000 AND EDM-700 IN THE AIRCRAFT.

6. AIRCRAFT WEIGHT AND BALANCE DATA EQUIPMENT LIST HAVE BEEN REVISED TO INCLUDE THIS SYSTEM. AN AIRFRAME LOGBOOK ENTRY WAS MADE WHICH REFERENCES THIS FAA FORM 337 AND COMPLIES WITH FAR SECTION 43.9.

7. POST INSTALLATION FUNCTIONAL TESTS WERE PERFORMED WITH REFERENCE TO THE MANUFACTURER'S INSTRUCTIONS. THE P1000 AND EDM-700 FUNCTIONED PROPERLY.

8. REFERENCE DYERSBURG AVIATION WORK ORDER 2352 FOR THIS INSTALLATION.

**********THE END**********

☐ Additional Sheets Are Attached

*U.S.GPO:1994-568-012/00019

RECEIVED
FEB 03 1997
FSDO-25

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
50-25 JB

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: CESSNA	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name *(As shown on registration certificate)*: J & B Aircraft Sales AND Leasing, Inc.	Address *(As shown on registration certificate)*: 1050 S. State St. Dover, DE 19901

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 FAR 43.7.

DATE: 12/30/96 FAA INSPECTOR: [signature] PAI 50-25

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	B. Kind of Agency	C. Certificate No.
DYersburg Avionics, Inc. 315 Airport Road Dyersburg, TN 38024	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	LIMITED AIRFRAME SF4R516M

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	Signature of Authorized Individual
December 23, 1996	Jerrie Davis [signature]

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 [X] APPROVED [ ] REJECTED

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
1/29/97	SF4R516M	Jerrie Davis [signature]

FAA Form 337 (12-88)

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. Removed Northstar M-3 GPS IFR Enroute Model Panel unit.
2. Installed Northstar Avionics M3 GPS Approach Model Panel unit in existing mounting tray. STC SA00464NY is applicable.
3. The M3 was interfaced to the existing HSI and Auto Pilot by utilizing an Eaton PB switch and a Northern Airborne Technology RS08-001 Remote Switch. The M3 was also interfaced to an Eaton Annunciator, which annunciates MSG, WPT, PTK, and APCH.
4. This system was installed in accordance with the Manufacturer Installation Manual, and the acceptable methods, techniques, and practices in Advisory Circular (AC) 43.13-1A, Paragraphs 424, 429, 443, 445, 447, 450, 514, and 750; and AC 43.13-2A, Paragraphs 21, 22, 23a, 23b, 23e, 27, and 36; and the requirements of AC 20-138, Paragraphs 8c(2).
5. The Northstar M3 FAA Approved Airplane Flight Manual Supplement has been installed in the Airplane Flight Manual for this aircraft.
6. Post-installation ground accuracy and function tests were performed in accordance with manufacturer instructions including the VHF transmitter harmonic interference tests required by AC 20-138, Paragraph 8c(1)(iv)(F). All systems operated normally. Adequate isolation from harmonic interference of VHF communication transceivers was verified.
7. Aircraft weight and balance data, and equipment list, have been revised to include this system. An Airframe Logbook entry was made which references this FAA Form 337, and complies with FAR Section 43.9.
8. Following approval for return to service by completion of Section 7 of this FAA Form 337, a flight evaluation will be performed to confirm that all GPS related systems operate normally, safely, in accordance with manufacturer specifications, and the functional flight evaluation requirements of AC 20-138. Results of Flight Evaluation will be recorded in the Airframe Logbook.
9. Reference work orders 12744 and 12475 this repair station.

* * * * * * * * * * * * * THE END * * * * * * * * * * * * *

☐ Additional Sheets Are Attached

☆U.S. GOVERNMENT PRINTING OFFICE: 1992-768-017/60157

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
50-25 JB

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: CESSNA	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name *(As shown on registration certificate)*: J & B Aircraft Sales and Leasing, Inc.	Address *(As shown on registration certificate)*: 1050 S. State St. Dover, DE 19901

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: KX-175 TSO / Manufacturer: KING				X

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Dyersburg Avionics, Inc. 315 Airport Road Dyersbrug, TN 38024	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	LIMITED AIRFRAME SF4R516M

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	Signature of Authorized Individual
November 8, 1996	Jerrie Davis Jerrie Davis

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 [X] APPROVED [ ] REJECTED

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
November 8, 1996	SF4R516M	Jerrie Davis Jerrie Davis

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 McCoy Avionics Corporation Model 1700 Series Control Display Unit S/N 005169 to King Radio Corporation KX-175 TSO, S/N 3373 TSO C36c, C37b, C38b and C40c. VHF transceivers per previously approved data and in accordance with the MAC Installation manual, P/N 46-01445-000 REV 3 dated 10/95. STC SA1343GL is applicable.

2. Removed KING KX175B.

3. Installed MAC1700/KX-175 TSO S/N 005169/3373.

4. Installation accomplished IAW manufacturers installation instructions and; AC 43.13-1A chapter 11 section 2 paragraphs 424, 429, 443, 445, 447, 450, 514, and 750; AC 43.13-2A chapter 2 paragraph 21(A), 22, 23(a)(b)(e), and 27(a)(b)(c).

5. The McCoy Avionics Corporation Pilot's Operating Handbook and Flight Manual Supplement has been installed in the aircraft.

6. Post installation functional tests were performed IAW manufacturers instructions. System operated normally.

7. Aircraft weight and balance data, and equipment list have been revised to include this system. An Airframe Logbook entry was made which references this FAA Form 337, and complies with FAR Section 43.9.

8. Reference work order 12583 this repair station.

* * * * * * * * * * * * * THE END * * * * * * * * * * * * *

☐ Additional Sheets Are Attached

*U.S.GPO:1994-568-012/00019

RECEIVED FAA MAR 19 1996 MEMPHIS, TENN.

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
SO-25 JB

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: CESSNA	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13SK
2. Owner	Name *(As shown on registration certificate)*: J & B Aircraft Sales and Leasing, Inc.	Address *(As shown on registration certificate)*: 1050 S. State St. Dover, DE 19901

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 FAR 43.7.

DATE: 3/19/96 FAA INSPECTOR: [signature] BAI 5025

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.
Dyersburg Avionics, Inc. 315 Airport Road Dyersburg, TN 38024	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	LIMITED AIRFRAME SF4R516M

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	Signature of Authorized Individual
March 16, 1996	Jerrie Davis [signature]

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							Other *(Specify)*
	[ ]	FAA Flt. Standards Inspector	[ ]	Manufacturer	[ ]	Inspection Authorization	
	[ ]	FAA Designee	[X]	Repair Station	[ ]	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
3/20/96	SF4R516M	JERRIE DAVIS [signature]

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 Northstar M3 GPS Navigator P/N 1200-01-01 in No. 3 position of avionics stack. Installed Northstar AN135 GPS antenna on right forward top section of aircraft. This equipment is manufactured under TSO C129 and was originally approved for IFR under STC SA0020NY, dated 15 September 1994.
2. M3 GPS Navigator was interfaced to Century IV and Century I Autopilot as well as HSI by utilizing a NAT RS08-001 remote switch and a NAV/GPS Illuminated Push Button Switch. The M3 was interfaced to Warn, Parallel Track and Alert Annunciator. The M3 was also interfaced to the existing Aerosonic Altimeter.
3. This system is installed in accordance with the Northstar Installation Manual Revision D of March 7, 1995; and the acceptable methods, techniques, and practices in Advisory Circular (AC) 43.13-1A, Paragraphs 424, 429, 443, 445, 447, 450, 514, and 750; and AC43.13-2A, Paragraphs 21, 22, 23a, 23b, 23e, 27 and 36; and the requirements of AC 20-138, Paragraphs 8c(2).
4. Post-installation ground accuracy and function tests were performed in accordance with manufacture instructions, including the VHF transmitter harmonic interference tests required by AC 20-138. Paragraph 8c(1)(iv)(F). All systems operated normally. Adequate isolation from harmonic interference of VHF communication transceivers was verified.
5. Aircraft Weight and Balance data, and equipment list, have been revised to include this system. An Airframe Logbook entry was made which references this FAA Form 337, and complies with FAR Section 43.9.
6. The Northstar M3 FAA Approved Airplane Flight Manual Supplement has been installed in the Airplane Flight Manual for this aircraft.
7. Placard - "M3 GPS - LIMITED TO VFR and IFR ENROUTE and TERMINAL AREA NAVIGATION".
8. Following approval for return to service by completion of Section 7 of this FAA Form 337, a flight evaluation will be performed to confirm that all GPS related systems operate normally, safely, in accordance with manufacturer specifications, and the functional flight evaluation requirements of AC 20-138. The results of the Flight Evaluation will be recorded in the aircraft Airframe Logbook.
9. Reference work order 11614 and 11690 this repair station.

* * * * * * * * * * * * * THE END * * * * * * * * * * * * *

☐ Additional Sheets Are Attached

★U.S.GPO.1990-0-568-012/40004

RECEIVED FAA MAR 25 1996

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 SO-25-JB

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: CESSNA	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13SK
2. Owner	Name *(As shown on registration certificate)*: J & B Aircraft Sales and Leasing, Inc.	Address *(As shown on registration certificate)*: 1050 S. State St. Dover, DE 19901

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 FAR 43.7.

DATE: 3/19/96 FAA INSPECTOR: [signature] PAI SO-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	B. Kind of Agency	C. Certificate No.
Dyersburg Avionics, Inc. 315 Airport Road Dyersburg, TN 38024	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	LIMITED AIRFRAME SF4R516M

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	Signature of Authorized Individual
March 16, 1996	Jerrie Davis [signature]

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	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
3/20/96	SF4R516M	JERRIE DAVIS [signature]

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. Removed KING KX-175B NAV/COM, KN-74 RNAV, KA-39 28-14 Voltage Converter, KN-65 DME, KT-76 Transponder, KI265 DME Indicator, and KN-73 Glideslope Receiver.

2. Installed TERRA TRA 3000/TRI40 Radar Altimeter System. TRA3000 was mounted on lower fuselage below center seat area. TRI40 mounted in pilot's instrument panel. Interfaced TRI 40 to unswitch audio in existing KMA-20 Audio Panel, an external Decision Height Annunciator, and Landing Gear "Down Annunciator".

3. Installed Insight SF2000 Strike Finder TSO C110a. Display was mounted in lower right hole of pilot's instrument panel. Sensor was mounted on lower rear tail section.

4. Installed KING KY-196 COM TSO C37b and C38b in No. 2 Position of Avionics stack.

5. Installed KT-76A Transponder TSO C74b in No. 6 Position of Avionics Stack. KT-76A was interfaced to existing Aerosonic Encoding Altimeter.

6. Installed KING KNS-80 RNAV System in No. 4 position of Avionics Stack. STC SA1401CE dated 2/16/78 is applicable. The KNS-80 utilizes the existing 52D137-1220 HSI as manufactured by Edo Aire and approved for use with the KNS-80 in King Service Memo 274.

7. These systems as installed conforms to the manufacturers installation instructions; and the acceptable methods, techniques, and practices in Advisory Circular (AC) 43.13-1A, Paragraphs 424, 429, 443, 445, 447, 450, 514, and 750; and AC 43.13-2A,Paragraphs 21, 22, 23a, 23b, 23e, 27.

8. The Strike Finder owner's operation manual and TRA 3000/TRI40 Radar Altimeter operation manual have been installed in the aircraft.

9. Placard: "KNS-80 LIMITED TO VFR USE"
"STRIKE FINDER - NOT APPROVED FOR THUNDERSTORM PENETRATION".

10. Performed Altimeter and Encoder certification as per FAR 43 Appendix E. Transponder was certified as per FAR 43 Appendix F. Static was checked as per FAR 23.1325.

Additional Sheets Are Attached

★U.S.GPO:1990-0-568-012/40004

11. The maximum continuous electrical load does not exceed 80% of the capacity of the charging system.

12. Utilized MIL-C-22759 wire, MIL-C-27500 shielded cable, and RG-58 A/U coaxial cable in the installation.

13. Post-installation ground accuracy and function tests were performed, in accordance with manufacturers instructions. All systems operated normally.

14. Aircraft Weight and Balance Data, and Equipment List, were revised to include these systems. An Airframe Logbook entry was made which reference the FAA Form 337, and complies with FAR Section 43.9.

15. Following approval for return to service by completion of Section 7 of this FAA Form 337, a Flight Evaluation will be performed to verify that the KNS-80 performs to manufacturers RNAV requirements. After this evaluation and proper verification of KNS-80 Area Navigation accuracy.

(1) The Placard "KNS-80 LIMITED TO VFR USE" will be removed.

(2) A new Placard <u>"AREA NAVIGATION USE APPROVED FOR IFR ENROUTE and APPROACH CATEGORIES"</u> will be installed in upper left side of pilot's instruments panel.

(3) An FAA Approved Airplane Flight Manual Supplement will be installed in the aircraft.

(4) The results of the Area Nav evaluation will be recorded in the aircraft Airframe Logbook.

16. Reference work orders 11614, 11690, and 11691 this repair station.

* * * * * * * * * * * * THE END * * * * * * * * * * * *

RECEIVED
FAA
AUG 28 1996
TN FSDO
MEMPHIS, TENN.

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
SO-25 JB

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: Cessna	Model: T210L
	Serial No.: 60202	Nationality and Registration Mark: USA N13KS
2. Owner	Name *(As shown on registration certificate)*: J & B Aircraft Sales and Leasing, Inc.	Address *(As shown on registration certificate)*: 1050 S. State St. Dover, DE 19901

3. For FAA Use Only

4. Unit Identification / **5. Type**

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
William O. ALexander P.O. BOX 133 Finley TN 38030	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	A&P1452735

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	Signature of Authorized Individual
8/08/96	William O. Alexander

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 XX APPROVED ☐ REJECTED

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
8/08/96	AP413136597IA	David M. Laws

FAA Form 337 (12-88)

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. Removed existing fuel caps.

2. Installed Monarch Air & Development, Inc. fuel caps as per Drawing NO. CFC 100-WW and STC SA2456CE dated 4/26/89.

3. Installed Aero Technologies SAF-T-STOP as per manufacturers installation instruction and STC SA1230GL dated 8/20/87.

THE END

☐ Additional Sheets Are Attached

*U.S.GPO:1994-568-012/00019

RECEIVED FAA APR 23 1996 ATL FSDO

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
SO-25-JB

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: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: USA N13KS
2. Owner	Name *(As shown on registration certificate)*: J & B Aircraft Sales and Leasing, Inc.	Address *(As shown on registration certificate)*: 1050 S. State St. Dover, DE 19901

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.
David M. Laws 1727 E. Court Street Dyersburg, TN 38024	[ ] U.S. Certificated Mechanic [X] Foreign Certificated Mechanic [ ] Certificated Repair Station [ ] Manufacturer	AP413136597IA

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	Signature of Authorized Individual
April 18, 1996	David M. Laws David M. Laws

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 [X] APPROVED [ ] REJECTED

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
April 18, 1996	AP413136597IA	David M. Laws David M. Laws

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 wing mounted landing gear inspection mirror as per manufacturers installation instructions and STC SA2749CE.

2. This installation conforms to the applicable STC and manufacturers installation instructions; and the acceptable methods; techniques; and practices in Advisory Circular (AC) AC43.13-1A Chapter 2, SEC 1, PAR. 55; AC43.13-2A Chapter 1: Par. 6, 7, 8, and 10.

3. Aircraft weight and balance data, and Airframe Logbook entry was made which references this FAA Form 337, and complies with FAR Section 43.9.

* * * * * * * * * * * * * THE END * * * * * * * * * * * * *

☐ Additional Sheets Are Attached

*U.S.GPO:1994-568-012/00019

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-28-94

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
SW-FSDO-OKC

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: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: N13KS
2. Owner	Name *(As shown on registration certificate)*: Venture Drilling	Address *(As shown on registration certificate)*: P.O. Box 790 Tahlequah, OK 74464

3. For FAA Use Only

4. Unit Identification / **5. Type**

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

OS MGR AS MW
APS RECEIVED MAR 7 1994 FAA SW-FSDO-OKC
A1 A2 A3 A4 A5 A6 A7 A8
02 AUTO
A-W

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Virgle H. Wilhelm 2010 Golf Course Rd. Tahlequah, OK 74464	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	AP 555609113

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	Signature of Authorized Individual
#3-4-94	V H Wilhelm

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	X	Inspection Authorization	Other *(Specify)*
	FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
3-4-94	IA555609113	V H Wilhelm

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-28-94

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.)

Guardian I standby vacuum system,manufactured by Aero Safe Corp installed per STC SA4626SW. Installation completed per Drawing List 820200, Revision B,dated 4-28-82 or,later FAA approved revision. Electrical load checked per AC 43.13-1A page 176 paragraph426 f. Maximume expected continious Combinations will not exceed 80% of rated capacity for the alternator. ********** ********** **********END **********

XX

☐ Additional Sheets Are Attached

★U.S.G.P.O. 1990-761-753

FAA AIRCRAFT REGISTRY
CAMERA NO. 2V DATE: 4-28-94

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 ASW FSDO 015

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: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: N13KS
2. Owner	Name *(As shown on registration certificate)*: Venture Drilling Inc.	Address *(As shown on registration certificate)*: P.O. Box 790, Tahleguah, OK 74464

3. For FAA Use Only

4. Unit Identification / **5. Type**

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

OS 01 02 03 04 05 06 07 08 — MGR — AFS — C1 C2 C3 — AS A1 A2 A3 A4 A5 A6 A7 AUTO

RECEIVED
NOV 2 1993
FAA
SW-FSDO-OKC

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Virgle H. Wilhelm 2010 Golf Course Rd. Tahlequah, OK 74464	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	A & P AP 555609113

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	Signature of Authorized Individual
11-1-93	V H Wilhelm

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
11-1-93	IA555609113	V H Wilhelm

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-28-94

NOTICE

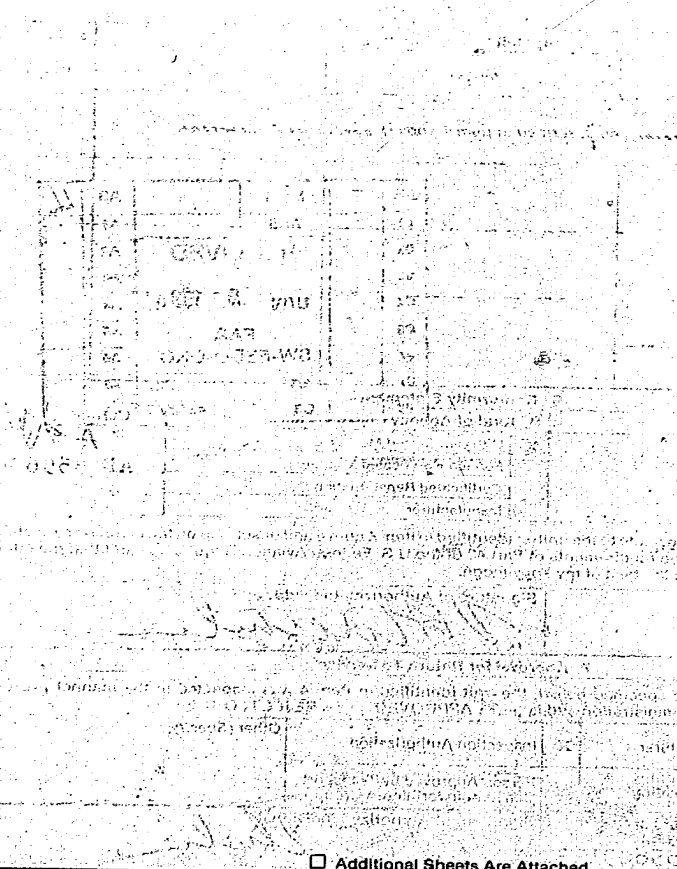
Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

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

McCauley propeller installed per STC SA2582NM. Weight and balance were modified to reflect installation of Model D3A34C402-C constant speed propeller in accordance with American Propeller installation instruction no. AP402, dated April 27,1985. FAA Approved American propeller Supplemental Airplane Flight Manual dated July 2, 1985 was included as part of this installation.

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



☐ Additional Sheets Are Attached

☆U.S.G.P.O. 1990-761-753

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 3-26-92

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 OKC FSDO 015

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: Cessna	Model: T210L
	Serial No.: 21060202	Nationality and Registration Mark: N13KS
2. Owner	Name *(As shown on registration certificate)*: Venture Drilling Inc.	Address *(As shown on registration certificate)*: PO Box 790- Tahlequah OK 74464

3. For FAA Use Only

4. Unit Identification / **5. Type**

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

RECEIVED
FEB 18 1992
FAA
SW-FSDO-OKC

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Kurt K. Hrdlicka 12237 N 172nd East Ave Collinsville, OK 74021	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	302582446

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: 2/13/92 — Signature of Authorized Individual: Kurt K. Hrdlicka

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	X	Inspection Authorization	Other *(Specify)*
	FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
2/13/92	302582446	Kurt K. Hrdlicka

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 3-26-92

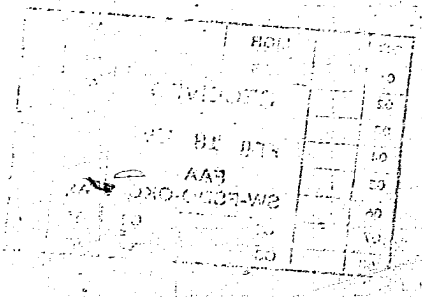
NOTICE

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.)

N13KS, Serial 21060202; Nose landing gear modified per Sierra Industries, Inc. S.T.C. SA 5934SW. Main landing gear doors removed and replaced with fairings per Uvalde Flight Center, Inc. S.T.C. SA5737SW. Weight and balance revised.

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



☐ Additional Sheets Are Attached

★U.S.GPO:1989-0-663-171

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 12-7-90

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY
OFFICE IDENTIFICATION

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

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.

1. AIRCRAFT	MAKE: CESSNA	MODEL: T210L
	SERIAL NO.: 21060202	NATIONALITY AND REGISTRATION MARK: N13KS
2. OWNER	NAME (As shown on registration certificate): VENTURE Drilling INC.	ADDRESS (As shown on registration certificate): P.O Box 790 TAHLEQUAH, OK 74464

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE: REPAIR	5. TYPE: ALTERATION
AIRFRAME	••••••••••••••••••••• (As described in item 1 above) •••••••••••••••••••••				
POWERPLANT	CONTINENTAL	TS10-520-H-4A	506125	X	
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Alan J Trudgen 7108 E Tecumseh Tulsa OK. 74115	X U.S. CERTIFICATED MECHANIC	A&P 375489347
	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	SIGNATURE OF AUTHORIZED INDIVIDUAL
12-10-89	Alan J Trudgen

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 [X] APPROVED [ ] REJECTED

BY						OTHER (Specify)
	[ ] FAA FLT. STANDARDS INSPECTOR	[ ] MANUFACTURER	[X]	INSPECTION AUTHORIZATION		
	[ ] FAA DESIGNEE	[ ] REPAIR STATION	[ ]	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT		

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
10 DEC 89	44056293	Don Cuenca

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 12-7-90

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.)*

10DEC89 INSTALLED TSIO-520-H H/A S.N. 506125 ON CESSNA T210L - N13KS.

POWERPLANT rebuilt by BROWN WRATHER INC. 1902 N. NORWOOD TULSA, OK. 74115

Crankcase repaired and inspected by DIVCO, INC CRS# 212-51 2806 N. Sheridan Rd. Tulsa, Ok 74115. work order # 76911

Crankshaft repaired and inspected by Rick Romans INC. CRS# 209-62 2828 N. Sheridan Rd. Tulsa, OK. 74115 work order # 3665

Fuel Metering device overhauled by Miles A/C Fuel Metering Service CRS# 265-2 9406 E. 46ST N. Tulsa, Ok. 74117 work order # 4702.

New parts installed are:

1ea	626734M000	Collar	8ea	350998	Bushing
1ea	535661	Camshaft	4ea	639193	Bushing
12ea	624188	Lifter	12ea	539740	Shaft
1ea	SA5201A2	Ring Set	10ea	639629	Bushing
1ea	646588A1M010	Bearing set	1ea	641361	Plate
12ea	630526M010	Rod Bearing	24ea	401893P3	Stud
1ea	638161	Seal	6ea	631496	Guide
4ea	638172	Cushion	6ea	636242	Guide
16ea	629104	Ring	5ea	630591	Seal
1ea	537721	Bearing	3ea	35967	Seal
12ea	AN381-25-10	Key			
1ea	633570A7	Gasket set			

Powerplant reassembled in accordance with Teledyne Continental Overhaul Manual # X30024A. Test Run for 4 min. checked OK. ——— END.

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/290

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/18

UNITED STATES OF AMERICA — FEDERAL AVIATION AGENCY SW EMDO 2-0-42

STANDARD AIRWORTHINESS CERTIFICATE

1. NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4. CATEGORY
N13KS	Cessna T210L	21060202	Normal

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 to have 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

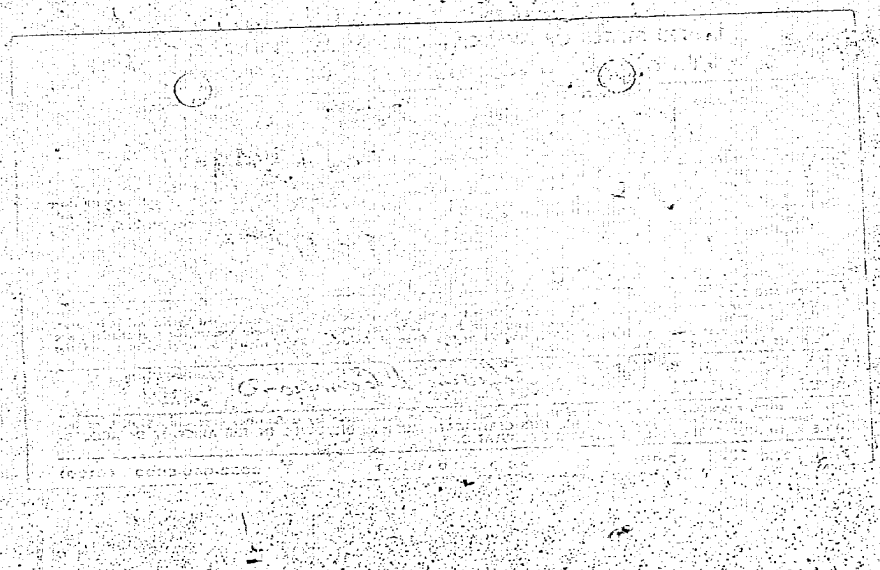
6. TERMS AND CONDITIONS
Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 43, and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

DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER
Amended: April 26, 1974	Edwin D. Cameron	DAS2SW

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.

FAA Form 1362 (7-65) * GPO : 1966 O - 795-355 0052-040-8000 (8100)

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/81



FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4/16/81

SW EMDO

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Form Approved 2-0-42
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY
OFFICE IDENTIFICATION

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

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.

1. AIRCRAFT	MAKE: CESSNA	MODEL: T210L
	SERIAL NO.: 21060202	NATIONALITY AND REGISTRATION MARK: N13KS
2. OWNER	NAME (As shown on registration certificate): Stevens Equipment Company, Inc.	ADDRESS (As shown on registration certificate): 6006 Market Street, Youngstown, Ohio 44512

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. REPAIR	5. 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.
Walter F. Davis Mitchell Industries, Inc. P.O. Box 611 Mineral Wells, Texas	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A & P 1984252

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	SIGNATURE OF AUTHORIZED INDIVIDUAL
4-26-74	Walter F. Davis — Walter F. Davis

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR		MANUFACTURER		INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	X	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
4-26-74	242-2	Edwin D. Cameron — Edwin D. Cameron

FAA Form 337 (7-67) (8320)

GPO : 1971 O - 410-878

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/81

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 EDO-AIRE MITCHELL Century IV Flight Director Autopilot (AK468FD), including Edo-Aire Mitchell Slaved NSD-360 Compass System, in accordance with information provided in installation Bulletin No. 589 dated 4-9-74 and per STC SA3001SW-D, dated 4-26-74.

Installed Edo-Aire Mitchell Century I Autopilot (AK386) in accordance with data provided in Edo-Aire Mitchell installation Bulletin No. 508, Rev. 2, dated 8-30-72. A relay box (Mitchell Industries P/N 1B405-24) was installed to connect the Century I System electrically to the roll servo when Century IV System is off.

The addition of these systems does not adversely affect the magnetic compass and the total continuous current drain and does not exceed 80% of the 60 amp alternator output.

A new Weight and Balance was computed and the equipment list modified.

---------- **END** ----------

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/81

SW EMDO
2-0-42

Form Approved
Budget Bureau No. 04-R0058

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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	2. AIRCRAFT BUILDER'S NAME (make)	3. AIRCRAFT MODEL DESIGNATION	4. YR. MFG.	FAA CODING
N13KS	Cessna	T210L	1974	2073449
5. AIRCRAFT SERIAL NO.	**6. ENGINE BUILDER'S NAME (make)**	**7. ENGINE MODEL DESIGNATION**		17040
21060202	Continental	TSIO-520-H-4A		
8. NUMBER OF ENGINES	**9. PROPELLER BUILDER'S NAME (make)**	**10. PROPELLER MODEL DESIGNATION**	**11. AIRCRAFT IS:**	
1	McCauley	D3A32C88	[X] NEW [ ] USED	[ ] IMPORT

II. CERTIFICATION REQUESTED

APPLICATION IS HEREBY MADE FOR: (Check applicable items)

A [1] [X] STANDARD AIRWORTHINESS CERT. (Indicate category) — [X] 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 & PEST CONTROL; [2] AERIAL SURVEYING; [3] AERIAL ADVERTISING; [4] FOREST (Wild life conservation); [5] PATROLLING; [6] WEATHER CONTROL; [0] OTHER (Specify)
- [4] EXPERIMENTAL (Indicate operation(s) to be conducted) — [1] RESEARCH AND DEVELOPMENT; [2] AMATEUR BUILT; [3] EXHIBITION; [4] RACING; [5] CREW TRAINING; [6] 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 MAX. CERTIFICATED TAKE-OFF WEIGHT; [4] DELIVERING OR EXPORT; [5] PRODUCTION FLIGHT TESTING

C [6] MULTIPLE AIRWORTHINESS CERTIFICATE (Check appropriate Restricted Operation and Standard or Limited as applicable above)

III. OWNER'S CERTIFICATION

A. REGISTERED OWNER (As shown on Certificate of Aircraft Registration) — IF DEALER, CHECK HERE →

NAME	ADDRESS
Stevens Equipment Co., Inc.	6006 Market St. Youngstown, Ohio 44512

B. AIRCRAFT CERTIFICATION BASIS (Check applicable blocks and complete items as indicated)

[X]	AIRCRAFT SPECIFICATION OR TYPE CERTIFICATION DATA SHEET (Give No. and Revision No.): 3A21, Rev. 23	[X]	AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.): 74-8-12
	AIRCRAFT LISTING (Give page No(s).): N/A	[X]	SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated): SA3001SW-D

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173	TOTAL AIRFRAME HOURS—Enter for used aircraft only	EXPERIMENTAL ONLY—Enter hours flown since last certificate issued or renewed
[X]	31.1	[3]

D. CERTIFICATION—I hereby certify that I am the 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	NAME AND TITLE (Print or type)	SIGNATURE
4-26-74	Benny L. Barrett (Agent)	Benny L Barrett

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] [X]	CERTIFICATED MECHANIC (Give Certificate No.): 1984252	[6]	CERTIFICATED REPAIR STATION (Give Certificate No.)
[5]	AIRCRAFT MANUFACTURER (Give Name of Firm)				

DATE	TITLE	SIGNATURE
4-26-74	Walter F. Davis, A & P Mechanic	Walter F Davis

V. FAA REPRESENTATIVE CERTIFICATION

(Check ALL applicable blocks) I find that the aircraft described in Section I or VII meets the requirements for: [ ] The certification requested, or [4] [X] Amendment or modification of its current airworthiness certificate. Inspection for a special flight permit under Section VII was conducted by: [ ] FAA Inspector; certificate holder under [ ] FAR 65, [ ] FAR 121 or 127, or [ ] FAR 145.

DATE	DISTRICT OFFICE	DESIGNEE'S SIGNATURE AND NO.	FAA INSPECTOR'S SIGNATURE
4-26-74 Amended	SW-EMDO-2-0-42	[4] Edwin D. Cameron, DAS2SWO Edwin D. Cameron	[1]

FAA Form 8130-6 (7-70)

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/81

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

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)

- [X] A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable
- [ ] B. Current Operating Limitations Attached
- [ ] C. Data, Drawings, Photographs, etc. *(Attach when required)*
- [X] D. Current Weight and Balance Information Available in Aircraft
- [X] E. Major Repair and Alteration, FAA 337 *(Attach when required)*
- [X] F. This Inspection Recorded in Aircraft Records
- [X] G. Statement of Conformity, FAA Form 317 *(Attach when required)*
- [ ] H. Foreign Airworthiness Certification for Import Aircraft *(Attach when required)*
- [X] I. Previous Airworthiness Certificate Issued in Accordance with FAR 21.191 CAR _____ *(Original attached)*
- [X] J. Current Airworthiness Certificate Issued in Accordance with FAR 21.183 *(Copy attached)*

FAA AIRCRAFT REGISTRY
CAMERA NO. SW DATE: 4/16/81

SW EMDO
2-0-42

Form Approved Budget Bureau No. 04-R0146

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF CONFORMITY

SECTION I – AIRCRAFT

1. MAKE: CESSNA	2. MODEL: T210L
3. SERIAL NO.: 21060202	4. REGISTRATION NO.: N13KS

SECTION II – ENGINE

1. MAKE	2. MODEL
3. SERIAL NO.	

SECTION III – PROPELLER

1. MAKE	2. HUB MODEL
2. BLADE MODEL	4. HUB SERIAL NO.
5. BLADE SERIAL NOS.	

SECTION IV – CERTIFICATION

I hereby certify that:

[X] A. I have complied with Section 21.33(a).

[ ] B. The aircraft described above, produced under type certificate only (FAR 21 Subpart F), conforms to its type certificate, is in a condition for safe operation, and was flight checked on _____ (Date).

[ ] C. The engine or propeller described above, presented herewith for type certification, conforms to the type design therefor.

[ ] D. The engine or propeller described above produced under type certificate only (FAR 21 Subpart F), conforms to its type certificate and is in a condition for safe operation. The engine or, if applicable, the variable pitch propeller was subjected by the manufacturer to a final operational check on _____ (Date).

Deviations:

None as applicable to AK468, Century IV Autopilot or AK468FD, Century IV Flight Director per Bulletin No. 589 dated 4-9-74.

SIGNATURE OF CERTIFIER: Edwin D. Cameron	TITLE: ~~CW-DAS-500~~ Quality Control Section Staff Coordinator	
ORGANIZATION: EDO-AIRE MITCHELL		DATE: 4-24-74

FAA Form 317 (11-67)

C FAA AC 71-2185

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/81

INSTRUCTIONS

This form should be submitted to a representative of the Administrator under the following circumstances:

1. By the applicant for a type certificate or a supplemental type certificate at the time he presents an aircraft or parts thereof to the FAA for tests.

2. By the applicant for a type certificate or a supplemental type certificate for each engine or propeller submitted for type certification.

3. By the type certificate holder or licensee manufacturing products under a type certificate only, upon the initial transfer by him of the ownership of each product or upon application for the original issue of an aircraft airworthiness certificate, or an Airworthiness Approval Tag (FAA Form 186).

This form should be completed as follows:

Section I. Aircraft. Complete the pertinent part of only this section when certification covers an aircraft or part thereof.

Section II. Engine. Complete this section when certification covers an engine.

Section III. Propeller. Complete this section when certification covers a propeller.

Section IV. Certification.

Item A. Check this block when an aircraft or part thereof is presented for flight or ground tests during type certification or supplemental type certification.

Item B. Check this block when the holder or licensee of a type certificate only, initially transfers the ownership of an aircraft manufactured under that type certificate, or applies for the original issuance of an airworthiness certificate.

Item C. Check this block when an engine or propeller is presented for type certification.

Item D. Check this block when an engine or propeller is presented for airworthiness approval and insert the date the product completed a final operational check.

The certification must be signed by an authorized person who holds a responsible position in the manufacturing organization.

Typed by FAA

RECEIVED
APR 24 1981
ENGINEERING AND MANUFACTURING BRANCH

GPO 933-621

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/81

SW EMDO
2-0-42

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION — FEDERAL AVIATION ADMINISTRATION

SPECIAL AIRWORTHINESS CERTIFICATE

A	CLASSIFICATION: Experimental		
	PURPOSE: Show Compliance with FAR		
B	MANUFACTURER NAME: N/A		
	ADDRESS: N/A		
C	FLIGHT FROM: N/A		
	TO: N/A		
D	N— 59302	SERIAL NO. 21060202	
	BUILDER Cessna	MODEL T210L	
E	DATE OF ISSUANCE March 21, 1974	EXPIRY March 20, 1975	
	OPERATING LIMITATIONS DATED 3-21-74	ARE A PART OF THIS CERTIFICATE	
	SIGNATURE OF FAA REPRESENTATIVE: Clarence E. Knight	DESIGNATION OR OFFICE NO. SW-EMDO-2-0-42	

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.

FAA FORM 8130-7 (3-69) SUPERSEDES FAA FORMS 1362-8; 8100-3; 8130-6 SEE REVERSE SIDE

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/81

A	This airworthiness certificate is issued under the authority of the Federal Aviation Act of 1958 and the Federal Aviation Regulations (FAR).
B	This airworthiness certificate authorizes the manufacturer named on the reverse side to conduct production flight tests, and only production flight tests, of aircraft registered in his name. No person may conduct production flight tests under this certificate: (1) Carrying persons or property for compensation or hire; and/or (2) Carrying persons not essential to the purpose of the flight.
C	This airworthiness certificate authorizes the flight specified on the reverse side for the purpose shown in Block A.
D	This airworthiness certificate certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to meet the requirements of the applicable FAR. The aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention On International Civil Aviation. No person may operate the aircraft described on the reverse side: (1) except in accordance with the applicable FAR and in accordance with conditions and limitations which may be prescribed by the Administrator as part of this certificate; (2) over any foreign country without the special permission of that country.
E	Unless sooner surrendered, suspended, or revoked, this airworthiness certificate is effective for the duration and under the conditions prescribed in FAR Part 21, Section 21.181 or 21.217.

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4/16/81

SW EMDO

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION — FEDERAL AVIATION ADMINISTRATION

SPECIAL AIRWORTHINESS CERTIFICATE

A	CLASSIFICATION: Experimental		
	PURPOSE: Show Compliance with FAR		
B	MANUFACTURER NAME: N/A		
	ADDRESS: N/A		
C	FLIGHT FROM: N/A		
	TO: N/A		
D	N— 59302	SERIAL NO. 21060202	
	BUILDER Cessna	MODEL T210L	
E	DATE OF ISSUANCE March 21, 1974	EXPIRY March 20, 1975	
	OPERATING LIMITATIONS DATED 3-21-74 ARE A PART OF THIS CERTIFICATE		
	SIGNATURE OF FAA REPRESENTATIVE	DESIGNATION OR OFFICE NO.	
	Clarence E. Knight	SW-EMDO-2-0-42	

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.

FAA FORM 8130-7 (3-69) SUPERSEDES FAA FORMS 1362-B; 8100-3; 8130-5 *SEE REVERSE SIDE*

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4/16/81

A	This airworthiness certificate is issued under the authority of the Federal Aviation Act of 1958 and the Federal Aviation Regulations (FAR).
B	This airworthiness certificate authorizes the manufacturer named on the reverse side to conduct production flight tests, and only production flight tests, of aircraft registered in his name. No person may conduct production flight tests under this certificate: (1) Carrying persons or property for compensation or hire; and/or (2) Carrying persons not essential to the purpose of the flight.
C	This airworthiness certificate authorizes the flight specified on the reverse side for the purpose shown in Block A.
D	This airworthiness certificate certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to meet the requirements of the applicable FAR. The aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention On International Civil Aviation. No person may operate the aircraft described on the reverse side: (1) except in accordance with the applicable FAR and in accordance with conditions and limitations which may be prescribed by the Administrator as part of this certificate; (2) over any foreign country without the special permission of that country.
E	Unless sooner surrendered, suspended, or revoked, this airworthiness certificate is effective for the duration and under the conditions prescribed in FAR Part 21, Section 21.181 or 21.217.

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/81

SW EMDO
2-0-42

Form Approved
Budget Bureau No. 04-R0058

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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	2. AIRCRAFT BUILDER'S NAME (make)	3. AIRCRAFT MODEL DESIGNATION	4. YR. MFG.	FAA CODING
N13KS	Cessna	T210L	1974	2073449
5. AIRCRAFT SERIAL NO	**6. ENGINE BUILDER'S NAME (make)**	**7. ENGINE MODEL DESIGNATION**		17040
21060202	Continental	TSIO-520-H-4A		
8. NUMBER OF ENGINES	**9. PROPELLER BUILDER'S NAME (make)**	**10. PROPELLER MODEL DESIGNATION**	**11. AIRCRAFT IS**	
1	McCauley	D3A32C88	X NEW X USED	IMPORT

II. CERTIFICATION REQUESTED

APPLICATION IS HEREBY MADE FOR: (Check applicable items)

A [1] — STANDARD AIRWORTHINESS CERT. (Indicate category) — NORMAL | UTILITY | ACROBATIC | TRANSPORT | GLIDER | BALLOON

B [X] — 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 & PEST CONTROL; [2] AERIAL SURVEYING; [3] AERIAL ADVERTISING; [4] FOREST (Wild life conservation); [5] PATROLLING; [6] WEATHER CONTROL; [0] OTHER (Specify)
- [4] X EXPERIMENTAL (Indicate operation(s) to be conducted): [1] RESEARCH AND DEVELOPMENT; [2] AMATEUR BUILT; [3] EXHIBITION; [4] RACING; [5] CREW TRAINING; [6] MKT. SURVEY; [0] X 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 MAX. CERTIFICATED TAKE-OFF WEIGHT; [4] DELIVERING OR EXPORT; [5] PRODUCTION FLIGHT TESTING

C [6] — MULTIPLE AIRWORTHINESS CERTIFICATE (Check appropriate Restricted Operation and Standard or Limited as applicable above)

III. OWNER'S CERTIFICATION

A. REGISTERED OWNER (As shown on Certificate of Aircraft Registration) — IF DEALER, CHECK HERE →

NAME	ADDRESS
Stevens Equipment Co., Inc.	606 Market St. Youngstown, Ohio 44512

B. AIRCRAFT CERTIFICATION BASIS (Check applicable blocks and complete items as indicated)

AIRCRAFT SPECIFICATION OR TYPE CERTIFICATION DATA SHEET (Give No. and Revision No.)	AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.)
N/A	N/A
AIRCRAFT LISTING (Give page No(s).)	**SUPPLEMENTAL TYPE CERTIFICATE** (List number of each STC incorporated)
N/A	N/A

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173	TOTAL AIRFRAME HOURS—Enter for used aircraft only	EXPERIMENTAL ONLY—Enter hours flown since last certificate issued or renewed
X	23.0	

D. CERTIFICATION—I hereby certify that I am the 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	NAME AND TITLE (Print or type)	SIGNATURE
3-21-74	Benny L. Barrett (Agent)	Benny L Barrett

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) I find that the aircraft described in Section I or VII meets the requirements for: [X] The certification requested, or [4] Amendment or modification of its current airworthiness certificate. Inspection for a special flight permit under Section VII was conducted by: [ ] FAA Inspector; certificate holder under [ ] FAR 65, [ ] FAR 121 or 127, or [ ] FAR 145.

DATE	DISTRICT OFFICE	[4] DESIGNEE'S SIGNATURE AND NO.	[1] FAA INSPECTOR'S SIGNATURE
3-21-74	SW-EMDO-2-0-42		Clarence E. Vaughn

FAA Form 8130-6 (7-70)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4/16/81

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

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)

- [X] A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable
- [X] B. Current Operating Limitations Attached
- [ ] C. Data, Drawings, Photographs, etc. *(Attach when required)*
- [X] D. Current Weight and Balance Information Available in Aircraft
- [ ] E. Major Repair and Alteration, FAA 337 *(Attach when required)*
- [X] F. This Inspection Recorded in Aircraft Records
- [ ] G. Statement of Conformity, FAA Form 317 *(Attach when required)*
- [ ] H. Foreign Airworthiness Certification for Import Aircraft *(Attach when required)*
- [X] I. Previous Airworthiness Certificate Issued in Accordance with FAR 21.183 CAR _____ *(Original attached)*
- [X] J. Current Airworthiness Certificate Issued in Accordance with FAR 21.191 *(Copy attached)*

C FAA AC 72-8976

SW EMDO
2-0-42

Date March 21, 1974

Federal Aviation Administration
Engineering & Manufacturing District
Office, SW-EMDO-42
P. O. Box 2531, Greater Southwest Airport
Fort Worth, Texas 76125

Gentlemen:

Request Experimental Certificate of Airworthiness be issued to aircraft described below:

Make Cessna Model T210L

S/N 21060202 Reg. No. N59302

The purpose of the experiment is to show compliance with FAR and certification of Mitchell Automatic Flight System Model AK468FD consisting of Century IV Autopilot Flight Director per Bul. No. 589.

The estimated time required is March 21, 1974 to March 20, 1975.

The areas over which the experiment will be conducted will be as approved on the Experimental Operating Restrictions.

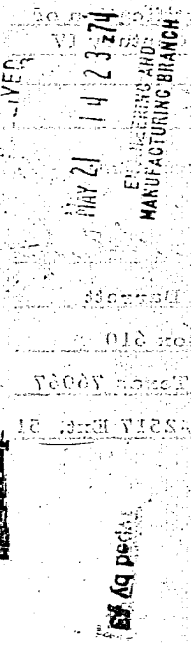
Signature Benny L. Barrett

Name Benny L. Barrett

Address P. O. Box 610
Mineral Wells, Texas 76067

Telephone No. 325-2517 Ext. 51

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/81



FAA AIRCRAFT REGISTRY
CAMERA NO. SW DATE: 4/16/81

SW EMDO
2-0-42

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

SOUTHWEST REGION, FORT WORTH, TEXAS

EXPERIMENTAL OPERATING LIMITATIONS

MAKE: **Cessna** MODEL: **T210L** SERIAL NO: **21060202** REG. NO: **N59302**
DATE OF ISSUANCE: **March 21, 1974** DATE OF EXPIRATION: **March 20, 1975**

1. No person may operate this aircraft for other than the purpose for which the special purpose airworthiness certificate was issued and the aircraft shall be operated in accordance with the applicable FAA Air Traffic and General Operating Rules.

2. No operations shall be conducted over densely populated areas or in congested airways except for take-offs and landings.

3. Operator of this aircraft shall notify the control tower of the experimental nature of this aircraft when operating it into or out of airports with operating control towers.

4. Unless appropriately equipped for night and/or instrument flight in accordance with FAR 91.33, this aircraft must be operated Day VFR only.

5. This aircraft shall contain the placards, listings, and instrument markings required by FAR 91.31.

6. No person may operate this aircraft for carrying persons or property for compensation or hire.

7. The person operating this aircraft shall advise each person of the experimental nature of this aircraft.

8. Any major change to this aircraft, as defined by FAR 21.93, invalidates the special airworthiness certificate issued for this aircraft.

9. This aircraft does not comply with the Airworthiness Standards of ICAO Annex, Part II; therefore, flights are not authorized over foreign countries. Special permission must be obtained from foreign countries to conduct flights over their territories.

10. All flights shall be conducted within the following boundaries and/or corridors: Within a 40 mile radius of Mineral Wells, Texas Airport and including Meacham Field, Fort Worth, Texas.

Clarence E. Knight
FAA Representative

SW-EMDO-2-0-42
Designation

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/81

FAA AIRCRAFT REGISTRY
CAMERA NO. SW DATE: 4/16/81

SW EMDO
2-0-42

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

SOUTHWEST REGION, FORT WORTH, TEXAS

EXPERIMENTAL OPERATING LIMITATIONS

MAKE: Cessna MODEL: T210L SERIAL NO: 21060202 REG. NO: N59302
DATE OF ISSUANCE: March 21, 1974 DATE OF EXPIRATION: March 20, 1975

1. No person may operate this aircraft for other than the purpose for which the special purpose airworthiness certificate was issued and the aircraft shall be operated in accordance with the applicable FAA Air Traffic and General Operating Rules.

2. No operations shall be conducted over densely populated areas or in congested airways except for take-offs and landings.

3. Operator of this aircraft shall notify the control tower of the experimental nature of this aircraft when operating it into or out of airports with operating control towers.

4. Unless appropriately equipped for night and/or instrument flight in accordance with FAR 91.33, this aircraft must be operated Day VFR only.

5. This aircraft shall contain the placards, listings, and instrument markings required by FAR 91.31.

6. No person may operate this aircraft for carrying persons or property for compensation or hire.

7. The person operating this aircraft shall advise each person of the experimental nature of this aircraft.

8. Any major change to this aircraft, as defined by FAR 21.93, invalidates the special airworthiness certificate issued for this aircraft.

9. This aircraft does not comply with the Airworthiness Standards of ICAO Annex, Part II; therefore, flights are not authorized over foreign countries. Special permission must be obtained from foreign countries to conduct flights over their territories.

10. All flights shall be conducted within the following boundaries and/or corridors: Within a 40 mile radius of Mineral Wells, Texas Airport and including Meacham Field, Fort Worth, Texas.

Clarence E. Knight
FAA Representative

SW-EMDO-2-0-42
Designation

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4/16/81

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4/16/81

Van 13 K5 L ②

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION
AGL-FSDO #65

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.

1. AIRCRAFT	MAKE: Cessna	MODEL: T210L
	SERIAL NO.: 21060202	NATIONALITY AND REGISTRATION MARK: N59302
2. OWNER	NAME (As shown on registration certificate): Stevens Equipment Co., Inc.	ADDRESS (As shown on registration certificate): 6006 Market St. Youngstown, Ohio 44512

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE: REPAIR	5. TYPE: ALTERATION
AIRFRAME	(As described in item 1 above)				XX
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Midtown Aviation Corp. 2350 Lansdowne Blvd. Youngstown, Ohio 44505	U.S. CERTIFICATED MECHANIC	
	FOREIGN CERTIFICATED MECHANIC	
	X CERTIFICATED REPAIR STATION	106-15
	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	SIGNATURE OF AUTHORIZED INDIVIDUAL
March 10, 1974	Howard L. Mans

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	X	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
3-10-74	106-15	Howard L. Mans

MAR 14 1974

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/81

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: 2-KX175B Nav/Com
KR 85 ADF
KI 225 Indicator
KA 47 Loop
KN 75 Area Nav
KN 73 Glideslope Receiver
KT 76 Transponder
KN 65 DME
KI 265 Indicator
KMA Isolation Amplifier

This installation made using applibable King installation manuals. Units mounted in center of panel using AN 526-832 screws into rivnuts, and sets supported in rear by two extruded angles screwed to covers.
ADF mounted right side of panel in space provided. Antennas mounted in accordance with Cessna Electronics manual.
DME mounted left wing root. KN 73 Glideslope receiver and KA 39 Voltage Converters mounted right wing root. AC 43:13-1 Sec 2 and 43:13-2 Chapter 2 & 3 used in the installation of wiring and circuit protection.
Electfical load taken from Spec's and does not exceed 80% of 60 AMP alternator installed. Aircraft tested and transponder does not interfere with the operation of the other equipment.
Cessna Kit AK 210-118 Vacumm systen installed at this time.
Equipment list reflects this change.

New Aircraft Empty Weight	2372.0
New Aircraft Empty Weight CG	39.5
New Aircraft Moment	93795.2
New Useful Load	1428.0

-END-

[ ] ADDITIONAL SHEETS ARE ATTACHED

U.S. G.P.O. 1972/720-694/545/1303

FAA AIRCRAFT REGISTRY
CAMERA NO. SN DATE: 4/16/81

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

SW EMD

1. NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4. CATEGORY ~~2-0-48~~
N59302	Cessna T210L	21060202	Normal

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 so long as the required preventative maintenance, and alterations are performed in accordance with Parts 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States. Cessna Aircraft Co., Pawnee Div.

DATE OF ISSUANCE	FAA REPRESENTATIVE (Office, Manufacturer, or ACE)	DESIGNATION NUMBER
2-19-74	by	PC4

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.

FAA Form 8100-2 (7-67) FORMERLY FAA FORM 1362

GPO : 1967—O-270-931

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4/16/81