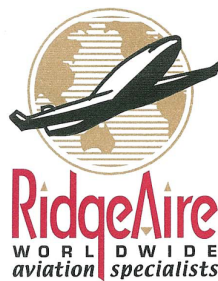


N22JL

1972 Piper Seneca
PA-34-200

Airworthiness



MSN: 34-7250198

Prepared by the worldwide aviation specialists at RidgeAir, Inc.

FAA OAK city



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 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 USA N22JLO	Serial No. 34-7250198	
	Make PIPER	Model PA-34-200	Series
2. Owner	Name (As shown on registration certificate) JACKSONVILLE AVIATION INC	Address (As shown on registration certificate) 3511 SILVERSIDE RD STE 105 WILMINGTON, DELAWARE 19810-4902	

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 HARTSELL AVIONICS INC. 1872 CR 1143 TYLER, TEXAS 75704	B. Kind of Agency <table><tr><td>☐ U. S. Certified Mechanic</td><td>Manufacturer</td></tr><tr><td>☐ Foreign Certified Mechanic</td><td>C. Certificate No.</td></tr><tr><td>☒ Certified Repair Station</td><td>H9TR858J</td></tr><tr><td>☐ Certified Maintenance Organization</td><td></td></tr></table>	☐ U. S. Certified Mechanic	Manufacturer	☐ Foreign Certified Mechanic	C. Certificate No.	☒ Certified Repair Station	H9TR858J	☐ Certified Maintenance Organization	
☐ U. S. Certified Mechanic	Manufacturer								
☐ Foreign Certified Mechanic	C. Certificate No.								
☒ Certified Repair Station	H9TR858J								
☐ Certified Maintenance Organization									

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

Extended range fuel per 14 CFR Part 43 App. B ☐ Signature/Date of Authorized Individual **DAVID HARTSELL**
14-October-2008

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

FAA Fit. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
BY	FAA Designee ☒ Repair Station	Inspection Authorization	Other (Specify)
Certificate or Designation No. H9TR858J	Signature/Date of Authorized Individual DAVID HARTSELL 14-October-2008		

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 N22JLO

Oct-14-2008

Nationality and Registration Mark

Date

A. UPDATED GNS 430 TO GNS 430W CONFIGURATION PER STC#SA01933LA. REMOVED GARMIN GA 56 GPS ANT AND INSTALLED GARMIN GA 35 ANT'S IN SAME LOCATION UTILIZING THE SAME MOUNTING CONFIGURATION.

B. THE APPROVED FMS FOR THE GPS 400W P# 190-00356-03, Rev. A, 11-20-2007 MUST BE ON BOARD AND IMMEDIATELY AVAILABLE TO THE

FLIGHT CREW WHEN USING THE GNS 430W .

C. ELECTRICAL LOAD DOES NOT EXCEED 80% OF SYSTEM CAP.

D. WEIGHT AND BALLANCE CHANGE NEG SEE HARTSELL AVIONICS WO#5546 FOR FURTHER INFO.

E. STC APPROVED ICA FOR GNS 430W PUT IN AIRCRAFT RECORDS.

-----END-----

☐ ADDITIONAL SHEETS ARE ATTACHED



U.S. Department
of Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

ASW05 R011

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$ 1000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make PIPER	Model PA-34-200
	Serial No. 34-7250198	Nationality and Registration Mark USA N22JL
2. Owner	Name (As shown on registration certificate) JACKSONVILLE AVIATION INC	Address (As shown on registration certificate) 3511 SILVERSIDE RD STE 105 WILMINGTON, DELAWARE 19810-4902

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 HARTSELL AVIONICS INC. 1872 CR 1143 TYLER, TEXAS 75704 H9TR858J	B. Kind of Agency ☐ U. S. Certified Mechanic ☐ Foreign Certified Mechanic ☒ Certified Repair Station ☐ Manufacturer	C. Certificate No. H9TR858J
--	--	---------------------------------------

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U. S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date 10-September-2003	Signature of Authorized Individual DAVID HARTSELL
----------------------------------	---

7. Approval for Return to Service

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

BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee X	Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 10-September-2003		Certificate or Designation No. H9TR858J	Signature of Authorized Individual DAVID HARTSELL	

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.)

Sep-10-2003

A. THIS ALTERATION IS FOR VFR/IFR OPERATIONAL APPROVAL OF A GARMIN GNS 430 PREVIOUSLY APPROVED VFR ONLY ON FAA 337 DATED 06-27-03. THE INSTALLED CONFIGURATION HAS NOT CHANGED.

B. THE PREVIOUSLY INSTALLED (GPS FOR VFR ONLY) PLACARD HAS BEEN REMOVED FROM INST PANEL.

C. THE EQUIPMENT MANUFACTURER HAS CERTIFIED THE GNC 430 TO TSO C129A1 AND THE GNC 430 HAS PREVIOUSLY DEMONSTRATED TO BE COMPLIANT WITH AC 20-138 FOR VFR/IFR ENROUTE, TERMINAL AND NON PRECISION APPROACH UNDER STC#SA00705WI.

D. GROUND AND FLIGHT TEST WERE PERFORMED AND FLIGHT TEST RESULTS DOCUMENTED ON (FLIGHT TEST FOR APPROACH CERTIFICATION) FORM DATED 08-28-03, (ATTACHED).

E. THE FLIGHT MANUAL SUPPLEMENT FOR THE KING GNS 430 APPROVED ON 06-27-03 MUST BE ATTACHED TO THE AIRCRAFT FLIGHT MANUAL.

F. THE GNS 530 IS APPROVED AS A SUPPLEMENTAL MEANS FOR VFR/IFR NAVIGATION PER ITEM (C) WHEN OPERATED I.A.W. THE FAA APPROVED FLIGHT MANUAL SUPPLEMENT.

G. I CERTIFY THAT THE FLIGHT TEST REQUIRED BY 14 CFR PART 91.407 IAW AC 20-138 HAVE BEEN PERFORMED SUCCESSFULLY WITH NO DISCREPANCIES NOTED.

NAME JAMES LOUIS WASSON DATE OF FLIGHT 08/03/03

SIGNATURE James Louis Wasson IDENTIFICATION NUMBER 2739379

END

☐ ADDITIONAL SHEETS ARE ATTACHED

FLIGHT TEST FOR APPROACH CERTIFICATION
PER AC 20-138 PARA 8C(1)(IV)(J)

KTYR TYLER POUNDS VOR/DME/GPS PWY 4
N32 20 45.415 W95 24 38.452

RESULTS: N32 20 45 410 W95 24 38 460 ACCEPTABLE UNACCEPTABLE

KTYR TYLER POUNDS VOR/DME/GPS RWY 22
N32 21 35.692 W95 23 38.989

RESULTS: N32 21 34 690 W95 23 38 980 ACCEPTABLE UNACCEPTABLE

KTYR TYLER POUNDS VOR/GPS RWY 31
N32 21 03.920 W95 23 36.705

RESULTS: N32 21 03 920 W95 23 36 710 ACCEPTABLE UNACCEPTABLE

AIRCRAFT N225L

I CERTIFY THE FLIGHT WAS ACCOMPLISHED SUCCESSFULLY

NAME James John Warrick LIC# 2739379

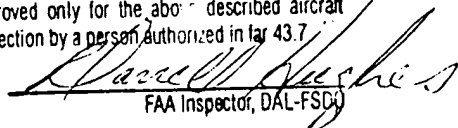
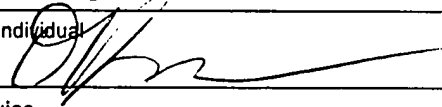
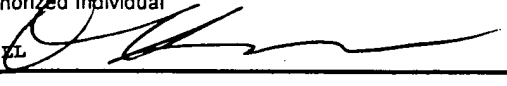
DATE 8/03/03

INSTRUCTIONS FOR TEST

1. WITH GPS LOCKED ON AND A WAYPOINT SELECTED FLY THE AIRCRAFT IN A 30 DEG. BANK IN BOTH DIRECTIONS FOR 1 MIN EACH AND VERIFY THAT THE GPS DOES NOT LOSE LOCK.
2. VERIFY THAT FTE (FLIGHT TECHNICAL ERROR) IS WITHIN .25 NM. FOR APPROACH OPERATING MODES. THIS CAN BE ACCOMPLISHED BY COMPAIRING THE DISPLAYED COORDINATES WITH THE PUBLISHED RUNWAY THRESHOLD COORDINATES UPON CROSSING RUNWAY THRESHOLD.

FOA

5405200309139

 U.S. Department of Transportation Federal Aviation Administration		MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)		Form Approved OMB No. 2120-0020 ASW105 For FAA Use Only. Office Identification RDH	
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$ 1000 for each such violation (Section 901 Federal Aviation Act of 1958).					
1. Aircraft	Make PIPER		Model PA-34-200		
	Serial No. 34-7250198		Nationality and Registration Mark USA N22JL		
2. Owner	Name (As shown on registration certificate) K & S ENTERPRISES LLC		Address (As shown on registration certificate) 1320 CR 1143 TYLER TX 75704-9232		
3. For FAA Use Only					
The alteration identified herein complied with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by a person authorized in far 43.7 JUN 27 2003  Date JUN 27 2003 FAA Inspector, DAL-FSDO					
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.	
HARTSELL AVIONICS INC 1872 CR 1143 TYLER, TX 75704, H9TR858J		☐ U. S. Certified Mechanic ☐ Foreign Certified Mechanic ☒ Certified Repair Station ☐ Manufacturer		H9TR858J	
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 6-27-03		Signature of Authorized Individual DAVID HARTSELL 			
7. Approval for Return to Service					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED					
BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)	
	FAA Designee	☒ Repair Station	Person Approved by Transport Canada Airworthiness Group		
Date of Approval or Rejection 6-27-03		Certificate or Designation No. H9TR858J	Signature of Authorized Individual DAVID HARTSELL 		

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.)

Jun-13-2003 34-7250198

- A. REMOVED TKM MX 11 COM, KLN89 GPS AND ANT, NARCO NAV 824 AND ID 824 IND AND EDO AIR A 770 AUDIO PANEL.
- B. THE FOLLOWING EQUIPMENT WAS INSTALLED USING MIL 22759 AND MIL 27500 WIRE. ALL COAX IS ECS 3C058A UNLESS OTHERWISE NOTED.
- C. EQUIPMENT INSTALLED I.A.W.:
- a. GARMIN INSTALL MANUAL P#190-00140-02 REV E.
 - b. A.C. 43.13-1B CHAP. 4(SEC 4),6,7(SEC1-5,7,11),10,11[ALL EXCP SEC 2(18-20) AND 12(SEC 1,2)].
 - c. A.C. 43-13-2A CHAP. 1,2,3,13
 - d. A.C. 20-138 PARA 7.
 - e. BFG WX 500 INSTALL MANUAL P#009-11500-001 REV.D.
 - f. HARTSELL AVIONICS DWG#N22JLGPS DATED 06/26/03.
 - g. PS ENG PMA7000MS-CD INSTALL MANUAL P#200-790-0005 DATED JULY 2002.
 - h. STC SA00161B0.
 - i. KING KNS 80 INSTALL MANUAL P#006-00154-0000 REV.3.
 - j. GARMIN GTX 330 INSTALL MANUAL P# 190-00207-02 REV A.
- D. EQUIPMENT INSTALLED AS FOLLOWS.
- a. GARMIN GNC 430 GPS,COM,NAV,ILS SYSTEM P#010-00171-00 INSTALLED IN THE AVIONICS STACK AND INTERFACED TO A MD200-306 CDI MOUNTED IN THE PILOTS PANEL AND TO EXISTING AUTOPILOT AND ENCODER. ANT GA56 IS INSTALLED ON TOP OF FUSELAGE ABOVE COCKPIT IN A .040 ALUMINUM DOUBLER PLATE RIVETED TO THE SKIN. POWER IS SUPPLIED THRU 2 7277-2-5 5AMP C\B MOUNTED IN THE EXISTING C\B PANEL LABELED "NAV1\gps" AND "COM1" SUPPLIED FROM THE AVIONICS BUSS.THE APPROVED FMS FOR THE GNS 430 DATED JUN 27 2003 MUST BE ON BOARD AND IMMEDIATELY AVAILABLE TO THE FLIGHT CREW WHEN USING THE GNS 430 FOR NAVIGATION.
 - b. BFG WX 500 STORMSCOPE P#805-11500-001 PROCESSOR INSTALLED IN TAILCONE ON A EXISTING SHELF, STORMSCOPE ANT NY 153 P# 805-10930-001 INSTALLED ON BOTTOM OF TAILCONE USING A .040 ALUMINUM DOUBLER PLATE RIVETED TO THE SKIN AND EXISTING STRINGERS. POWER IS SUPPLIED THRU A 7277-2-3 3 AMP C\B MOUNTED IN EXISTING C\B PANEL CONNECTED TO THE AVIONICS BUSS LABELED "WX 500". WX 500 IS INTERFACED TO GNS 430 FOR CONTROL AND DISPLAY.
 - c. INSTALLED PS ENG PMA 7000CD P#7000MS-OPTCD IN SAME LOCATION THAT OLD AUDIO PANEL WAS REMOVED AND PCO 7100R CD PLAYER P# 11955 IN RH AVIONICS STACK POWER IS SUPPLIED FROM A 7277-2-3 3 AMP C\B LABELED "AUDIO PANEL" AND A 7277-2-2 2 AMP C\B LABELED "CD PLAYER" MOUNTED IN THE R\H C\B PANEL. PMA 7000 IS INTERFACED TO SPEAKER AND MIC\PHONE JACKS AND TO EXISTING MARKER ANT.
 - d. INSTALLED AVIDYNE EX 500 P#700-0007-001 IAW STC SA00161B0 USING APPD G IN EX 500 INSTALL MANUAL P#600-00079-000 REV 3 INTERFACED TO GARMIN GNS 430 AND BFG WX 500 STORMSCOPE PER APPD H. INSTALLED RAMI AVB 529 HIBAND VHF ANT ON THE TOP OF THE FUSELAGE ABOVE CABIN USING A .040 ALUMINUM DOUBLER PLATE ATTACHED TO THE SKIN AND EXISTING STRINGERS PER ITEM C ABOVE. ICA DOC#AVMFD083 REV 2 DATED 02-06-03 SUPPLIED TO A\C OWNER.
 - e. INSTALLED KING KNS 80 P#066-4008-00 IN THE L\H RADIO STACK AND INTERFACED WITH A KING KNI 520 CDI P# 066-3066-01 MOUNTED IN THE PILOTS PANEL USED EXISTING NAV AND GLIDESLOPE ANT'S, INSTALLED COMANT CI 101 DME ANT ON BOTTOM OF FUSELAGE UNDER THE CENTER SEATS. POWER IS SUPPLIED FROM A 7277-2-2 2 AMP C\B LABELED "NAV 2" MOUNTED IN THE R\H C\B PANEL.
 - f. INSTALLED GARMIN GTX 330 P#010-00230-00 IN THE R\H INSTRUMENT PANEL ABOVE EXISTING NARCO AT 150 TRANSPONDER, INTERFACED TO EXISTING ENCODER AND TO GNS 430 FOR TIS DISPLAY. INSTALLED COMANT CI 101 TXP ANT ON BOTTOM OF FUSELAGE UNDER FRONT FLOOR BOARDS. POWER IS SUPPLIED FROM A 7277-2-2 C\B LABELED "TXP 2" MOUNTED IN THE R\H C\B PANEL.
- E. THE FOLLOWING PLACARD'S IS INSTALLED ON THE CENTER PANEL (GPS FOR VFR ONLY), (RNAV VFR ONLY).
- F. ELECTRICAL LOAD DOES NOT EXCEED 80% OF SYSTEM CAP.
- G. EQUIPMENT LIST AND W&B UPDATED, SEE HARTSELL AVIONICS W.O.#3702 FOR FURTHER INFO.
- H. INSTRUCTIONS FOR CONT AIRWORTHINESS
- 1. INTRO-PER THIS 337.
 - 2. DESCRIPTION-PER THIS 337.
 - 3. OPERATION-PER GARMIN GNC 430 FMS DATED JUN 27 2003, BFG WX500 PILOTS GUIDE P# 009-11501-001 REV A, PS ENG PMA 7000 CD OPS MANUAL P#200-790-0005 DATED 7\01, KING KNS 80 PILOTS GUIDE P# 006-08307-0004 DATED 03\90 AND GARMIN GTX 330 PILOTS GUIDE P#190-00207-00 REV A. OR LATER APPROVED REV'S.
 - 4. SERVICING INFO - NO ROUTINE SERVICE REQUIRED.
 - 5. MAINT INSTRUCTIONS - PER SEC (C) ABOVE.
 - 6. TROUBLESHOOTING-SAME AS ITEM 5.
 - 7. R&R INFORMATION-SAME AS ITEM 5.
 - 8. DIAGRAMS-HARTSELL AVIONICS DWG N22JGPS DATED 06-26-03.

☒ ADDITIONAL SHEETS ARE ATTACHED

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.)

Jun-13-2003 34-7250198

- 9. SPECIAL INSP REQ.-INSPECT ANTENNA INSTALLATIONS IAW FAR 43-13-1B CHAP 12, SEC 2 PARA 12-9(B) AT EACH 12 MONTH INSPECTION OR IAW OPERATORS APPROVED MAINTANCE SCHEDULE.
- 11. DATA-NOT APPLICABLE.
- 12. TOOLS-NOT APPLICABLE.
- 13. FOR COMMUTER CAT.-NOT APPLICABLE.
- 14. OVHL PERIOD-NO ADDITIONAL OVERHAUL TIME LIMITATIONS.
- 15. AIRWORTHINESS LIMITATIONS-PER GNS 430 FMS DATED JUN 27 2003
- 16. REVISION-BY LETTER TO FSDO, REVISED 337, AND REVISED I.C.A.

I. THIS ALTERATION COMPILES WITH THE FOLLOWING FAR'S, 23.301:LOADS, 23.303:FACTOR OF SAFETY, 23.305:PROOF OF STRUCTURE, 23.601:GENERAL, 23.603:MATERIALS AND WORKMANSHIP, 23.605:FABRICATION METHODS, 23.607:FASTENERS, 23.609:PROTECTION OF STRUCTURE, 23.611:ACCESSIBLY PROVISIONS, 23.613:MATERIAL STRENGTH PROPERTIES AND DESIGN VALUES, 23.867:ELECTRICAL BONDING AND LIGHTING PROTECTION, 23.1301:FUNCTION AND INSTALLATION, 23.1303:FLIGHT AND NAVIGATION INSTRUMENTS, 23.1305:POWERPLANT INSTRUMENTS, 23.1307:MISCELLANEOUS EQUIPMENT, 23.1309:EQUIPMENT SYSTEMS AND INSTALLATIONS, 23.1321:ARRANGMENT AND VISIBILITY, 23.1327:MAGNETIC DIRECTION INDICATOR, 23.1329:AUTOMATIC PILOT SYSTEM, 23.1331:INSTRUMENTS USING A POWER SOURCE, 23.1357:CIRCUIT PROTECTIVE DEVICES, 23.1359:ELECTRICAL EQUIPMENT FIRE PROTECTION, 23.1365:ELECTRIC CABLES AND EQUIPMENT, 23.1381:INSTRUMENT LIGHTS, 23.1529:INSTRUCTIONS FOR CONTINUED AIRWORTHINESS, 23.1541:GENERAL MARKINGS AND PLACARDS, 23.1557:MISC. MARKINGS AND PLACARDS, 23.1559:OPERATING LIMITATIONS PLACARD, 23.1581-23.1589:AIRCRAFT FLIGHT MANUAL AND APPROVED MANUAL MATERIAL.

-----END-----

☐ ADDITIONAL SHEETS ARE ATTACHED

HARTSELL AVIONICS
1872 CR 1143
TYLER, TX 75704

AFM SUPPLEMENT TO
PIPER PA34-200 S#34-7250198
GARMIN GNS 430

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

AIRCRAFT MAKE: PIPER

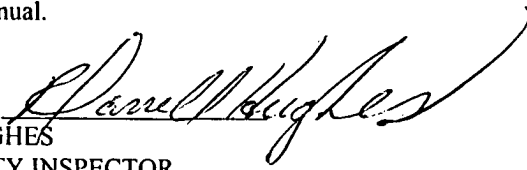
AIRCRAFT MODEL PA34-200

AIRCRAFT SERIAL NO.: 34-7250198

This document must be carried in the aircraft at all times. It describes the operating procedures for the GARMIN GNC 430 navigation system when it has been installed in accordance with GARMIN Installation Manual 190-00140-02 (Rev. E or later) and FAA Form 337 dated JUN 27 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 GNC 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: 
R. DARRELL HUGHES
AVIATION SAFETY INSPECTOR
DALLAS FSDO
FEDERAL AVIATION ADMINISTRATION
3300 LOVE FIELD DR. DALLAS, TX 75235

DATE: JUNE 27, 2003

HARTSELL AVIONICS
1872 CR 1143
TYLER, TX 75704

AFM SUPPLEMENT TO
PIPER PA34-200 S#34-7250198
GARMIN GNS 430

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WEIGHT AND BALANCE	7
AIRPLANE & SYSTEM DESCRIPTIONS	7

LOG OF REVISIONS

REV	REV. DATE	DESC.	APPROVED
ORIGINAL	JUN 27 2003	COMPLETE SUPPL	<u>RDH</u>

FAA APPROVED RDH DATE: JUN 27 2003 PAGE 2 OF 7



HARTSELL AVIONICS
1872 CR 1143
TYLER, TX 75704

FMS SUPPLEMENT TO
PIPER PA34-200 S#34-7250198
GARMIN GNS 430

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.

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. A, dated October, 1998, or later appropriate revision, must be immediately available to the flight crew whenever navigation is predicated on the use of the system.

HARTSELL AVIONICS
1872 CR 1143
TYLER, TX 75704

FMS SUPPLEMENT TO
PIPER PA34-200 S#34-7250198
GARMIN GNS 430

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

Sub-System	Software Version
Main	4.00
GPS	3.00
COMM	6.00
VOR/LOC	3.01
G/S	2.03

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.

HARTSELL AVIONICS
1872 CR 1143
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FMS SUPPLEMENT TO
PIPER PA34-200 S#34-7250198
GARMIN GNS 430

- (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 $\frac{n}{m}$ $\frac{k}{t}$ (sets navigation units to "nautical miles" and "knots")
 - (b) alt, vs $\frac{f}{t}$ 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.

- 6. Display of TIS traffic information is advisory only and does not relieve the pilot responsibility to "see and avoid" other aircraft. Aircraft maneuvers shall not be predicated on the TIS displayed information.
- 7. Display of TIS traffic information does not constitute a TCAS I or TCAS II collision avoidance system as required 14 CFR Part 121 or part 135.
- 8. Title 14 of the Code of Federal Regulations (14 CFR) state that "When an Air Traffic Control (ATC) clearance has been obtained, no pilot-in-command (PIC) may deviate from that clearance, except in an emergency, unless he obtains an amended clearance." Traffic information provided by the TIS up-link does not relieve the PIC of this responsibility.
- 9. The 400/500 Series Garmin Display Interfaces (Pilot's Guide Addendum) P/N 190-00140-13 Rev. A or later revision must be accessible to the flight crew during flight.
- 10. 400/500 Series Main software 4.00 or later FAA approved software is required to operate the TIS interface and provide TIS functionality.

SECTION III
EMERGENCY PROCEDURES

ABNORMAL PROCEDURES

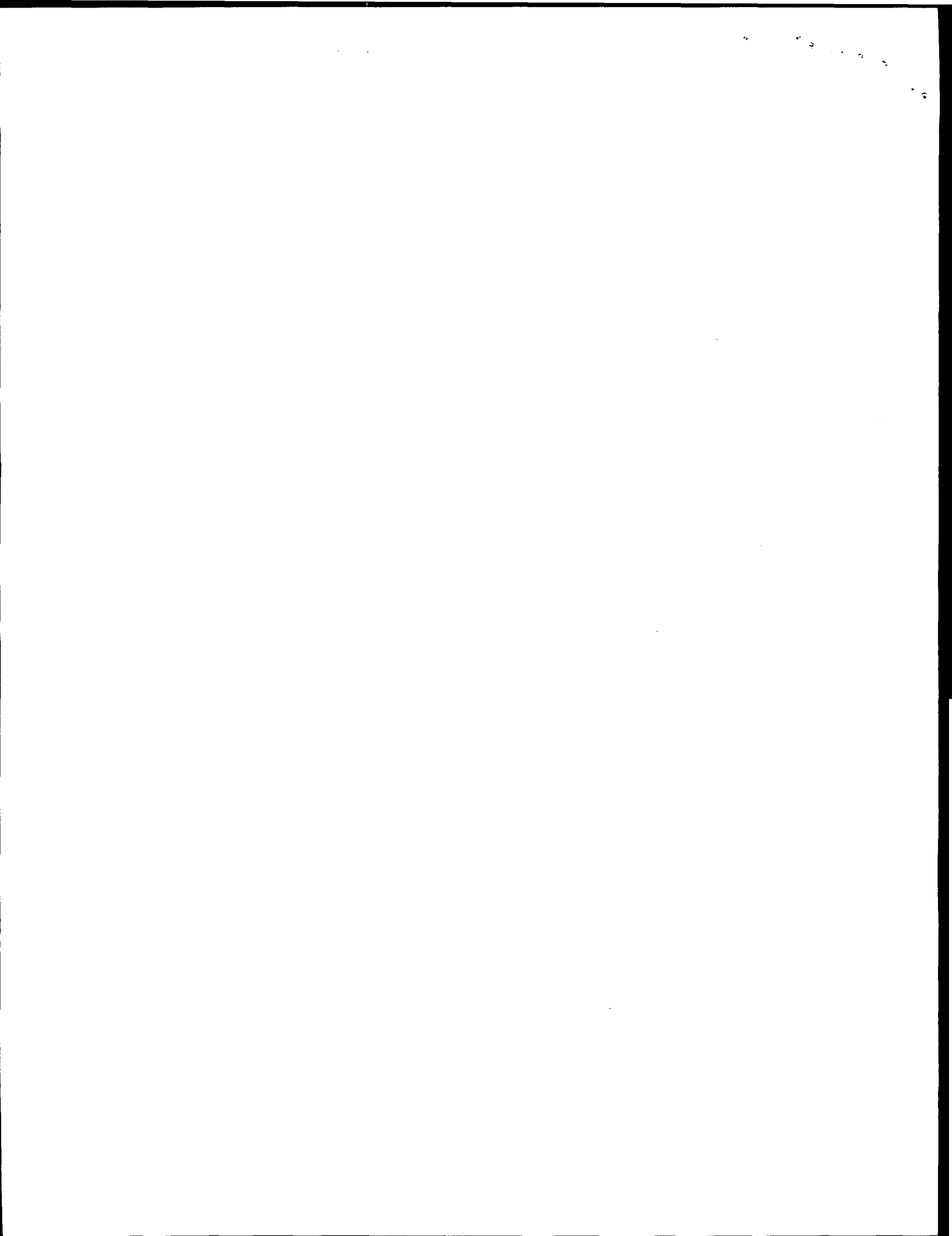
1. If GARMIN GNS 430 navigation information is not available or invalid, utilize remaining operational navigation equipment as required.

FAA APPROVED

R.D.H.

DATE: JUN 27 2003

PAGE 5 OF 7



HARTSELL AVIONICS
1872 CR 1143
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PIPER PA34-200 S#34-7250198
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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. A, dated October, 1998, or later appropriate revision.

2. NAVIGATION DISPLAY

The GNS 430 System data will appear on the Pilot's #1 CDI. The source of data is either GPS or VLOC as annunciated on the display above the CDI key and on the CDI.

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HARTSELL AVIONICS
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FMS SUPPLEMENT TO
PIPER PA34-200 S#34-7250198
GARMIN GNS 430

3. AUTOPILOT / FLIGHT DIRECTOR OPERATION

Coupling of the GNS 430 System steering information to the autopilot can be accomplished by engaging the autopilot Nav coupler in the NAV or LOC mode.

When the autopilot system is using course information supplied by the GNS 430 System the HDG bug on the DG 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.. DISPLAY OF LIGHTNING STRIKE DATA(optional)

For installations that interface the BFGoodrich WX-500 Stormscope and the GNS 430, lightning strike data detected by the WX-500 will appear on the GNS 430. For detailed operating instructions regarding the interface of the GNS 430 with the WX-500, refer to the WX-500 Pilot's Guide and the GNS 430 Pilot's Guide Addendum for the WX-500 Stormscope interface.

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. Power is supplied thru a 5amp c\b labeled 430 COM 1 and a 5 amp C\b labeled 430 NAV 1\GPS mounted in the c\b panel.

FAA APPROVED

R.D.H.

DATE: JUN 27 2003

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2



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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

04231

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 PIPER	Model PA34-200
	Serial No. 34-7250198	Nationality and Registration Mark N22JL
2. Owner	Name (As shown on registration certificate) K&S ENTERPRISES LLC	Address (As shown on registration certificate) 1320 CR 1143 TYLER TX 75704

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.
RICHARD BLUNDELL 1320 CR 1143 TYLER TX 75704	☒ U.S. Certified Mechanic	A&P 460982668
	☐ Foreign Certified Mechanic	
	☐ Certificated Repair Station	
	☐ Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date 12/18/2001	Signature of Authorized Individual <i>[Signature]</i>
--------------------	--

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED					
BY	FAA Fit. Standards Inspector	Manufacturer	☒	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 12/18/2001		Certificate or Designation No. A&P 2165443 IA		Signature of Authorized Individual <i>Billy D. Wood</i>	

NOTICE

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

8. Description of Work Accomplished

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

INSTALLED TWO NEW TACHOMETERS MN: R-1-4 FROM ELECTRONICS INTERNATIONAL INC. THIS INSTALLATION WAS PERFORMED IN ACCORDANCE WITH RPM (R-1) OPERATING AND INSTALLATION INSTRUCTIONS 'OI 0517811 REV. C DATED 9/24/97. THIS INSTALLATION APPROVED BY STC SA5924NM.
WEIGHT AND BALANCE CHANGE NEGLIGIBLE.

***** NOTHING FOLLOWS *****:

☐ Additional Sheets Are Attached

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION-FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

1 NATIONALITY AND REGISTRATION MARKS N22JL	2 MANUFACTURER AND MODEL PIPER PA 34-200	3 AIRCRAFT SERIAL NUMBER 34-7250198	4 CATEGORY NORMAL
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5 AUTHORITY AND BASIS FOR ISSUANCE

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

Exceptions:

NONE

6 TERMS AND CONDITIONS

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

DATE OF ISSUANCE R February 18 1975	FAA REPRESENTATIVE  William C. Nelson	DESIGNATION NUMBER SW05
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Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

100

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

1 NATIONALITY AND REGISTRATION MARKS	2 MANUFACTURER AND MODEL	3 AIRCRAFT SERIAL NUMBER	4 CATEGORY
N22JL	PIPER PA 34-200	34-7250198	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 as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations as appropriate, and the aircraft is registered in the United States

DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER
R02-18-75	MARIO M. VILLARRUBIA	AZ-FSDO SDL

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

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

WP-R520-57

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 Piper	MODEL PA34-200
	SERIAL NO. 347250116	NATIONALITY AND REGISTRATION MARK N22JL
2. OWNER	NAME (As shown on registration certificate) Hensler Ray	ADDRESS (As shown on registration certificate) 301 W. Hartford Apt. 611 Ponca City OK 74601

3. FOR FAA USE ONLY

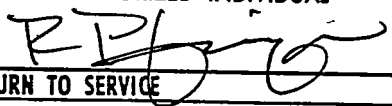
4. UNIT IDENTIFICATION

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

6. CONFORMITY STATEMENT

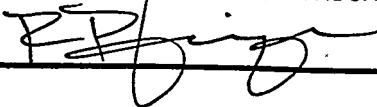
A. AGENCY'S NAME AND ADDRESS WESTWIND AVIATION, INC. 732 W. DEER VALLEY RD. PHOENIX AZ 85027	B. KIND OF AGENCY		C. CERTIFICATE NO. WIWR604K
	U.S. CERTIFICATED MECHANIC		
	FOREIGN CERTIFICATED MECHANIC		
	☒ CERTIFICATED REPAIR STATION		
	MANUFACTURER		

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 6 August 1997	SIGNATURE OF AUTHORIZED INDIVIDUAL 
-----------------------	--

7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	☒ REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION 7 August 1997		CERTIFICATE OR DESIGNATION NO. WIWR604K	SIGNATURE OF AUTHORIZED INDIVIDUAL 	

NOTICE

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

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

AIRCRAFT MAKE - Piper
AIRCRAFT MODEL - PA34-200
AIRCRAFT SERIAL NO. -347250116
AIRCRAFT REGISTRATION NO. -N22JL
DATE - 7 August 1997

REMOVED THE FOLLOWING EQUIPMENT:

LAST

INSTALLED THE FOLLOWING EQUIPMENT:

Flightcom 403M intercom system
LAST

INSTALLATION WAS ACCOMPLISHED I.A.W. MANUFACTURERS' RECOMMENDATIONS;
AC43.13-1A CHAPTERS 11,15,& 16; AND AC43.13-2A CHAPTERS 2,3,& 13.

ALL APPLICABLE GROUND AND FLIGHT CHECKS WERE ACCOMPLISHED.

AIRCRAFT WEIGHT AND BALANCE UPDATED AND LOGBOOKS ANNOTATED.

INSTALLATION WAS INSPECTED AIRWORTHY AND AIRCRAFT RETURNED TO SERVICE.

☐ ADDITIONAL SHEETS ARE ATTACHED

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

1 NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3 AIRCRAFT SERIAL NUMBER	4 CATEGORY
N22TT	PIPER PA 34-200	34-7250198	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 sale, operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation, except as noted herein.

Exceptions:

NONE

6. TERMS AND CONDITIONS

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

DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER
02-12-75	MERTO M. VILLARREAL	34-7250198

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

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

1. NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER
N22JL	PIPER PA-31-200	31-7250198

5. AUTHORITY AND BASIS FOR ISSUANCE

This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of 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:

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 Part 21, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.

DATE OF ISSUANCE
REPLACEMENT

FEB. 18, 1975

FAA REPRESENTATIVE

Donald Ogden

DESIGNATION NUMBER

AWP FSDO 64

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.



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

FAT FSDO *LAB*

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 PIPER	Model PA34-200
	Serial No. 34-7250198	Nationality and Registration Mark U.S.A. N22JL
2. Owner	Name (As shown on registration certificate) LUIS FARMS	Address (As shown on registration certificate) 25152 ULLREY AVE ESCALON, CA. 95320
	The data contained herein complies with	

airworthiness requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43.7
Date **2-9-96**
FAA Inspector **WP FSDO-17**

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 MODESTO AVIONICS 801 AIRPORT WAY SUITE 3 MODESTO, CA 95354	B. Kind of Agency ☒ U.S. Certificated Mechanic ☒ Foreign Certificated Mechanic ☒ Certified Repair Station ☐ Manufacturer	C. Certificate No. CX3R439L
---	---	---------------------------------------

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 2-9-96	Signature of Authorized Individual <i>[Signature]</i>
-----------------------	--

7. Approval for Return To Service

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

BY	FAA Fit Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee ☒	Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 2-9-96		Certificate or Designation No. CX3R439L	Signature of Authorized Individual <i>[Signature]</i>	

NOTICE

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

00-53871-1A3

8. Description of Work Accomplished

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

NATIONALITY: U.S.A.

REGISTRATION N#: 22JL

DATE: 2-9-96

INSTALLED BENDIX/KING KLN-89 GPS TSO C129 CLASS A-1 IN EXISTING RADIO SPACE PROVIDED BY THE AIRFRAME MANUFACTURER. INSTALLED BENDIX/KING KA-92 GPS ANTENNA ON AIRCRAFT CABIN ROOF. THE GPS RECEIVER AND ANTENNA WERE INSTALLED REFERRING TO BENDIX/KING INSTALLATION MANUAL PART # 006-10522-0001 REV. F, DATED JUNE 1995, AC 43.13 2A CHAPTER 2 SECTIONS 22 AND 23, AND AC 43.13 2A CHAPTER 3 SECTION 38.

THE GPS WAS INSTALLED I.A.W. AC 20-138 APPENDIX 1 SECTION 1a, b, c, d.

A GROUND AND FLIGHT EVALUATION OF THE INSTALLED UNITS WAS

CONDUCTED AND THE GPS SYSTEM WAS FOUND TO PERFORM I.A.W. THE

BENDIX/KING KLN-89 INSTALLATION MANUAL.

A PLACARD WAS INSTALLED IN CLEAR VIEW OF THE PILOT INDICATING

THAT THE GPS IS NOT APPROVED FOR NAVIGATION UNDER I.F.R.

CONDITIONS. AN ELECTRICAL LOAD ANALYSIS WAS MADE AND IT WAS

DETERMINED THAT THE TOTAL ELECTRICAL LOAD DOES NOT EXCEED 80 % OF

AIRCRAFT SINGLE ENGINE ALTERNATOR RATED OUTPUT.

AIRCRAFT WEIGHT AND BALANCE/EQUIPMENT LIST WAS UPDATED AND

ENTERED INTO THE AIRCRAFT RECORDS.

AIRCRAFT AIRFRAME LOGBOOK ENTRY MADE.

***** END *****

14 1996

BY:

Additional Sheets Are Attached

THOSE DOCUMENTS PRECEDING THIS NOTICE WHICH INDICATE
A FILMING DATE OF 7-18 IN THE ANNOTATION WINDOW ARE
SHOWING AN INCORRECT DATE. THE CORRECT FILMING DATE
SHOULD BE 7-18-88

Imeline Bennett

Form Approved
Budget Bureau No. 04-R0058

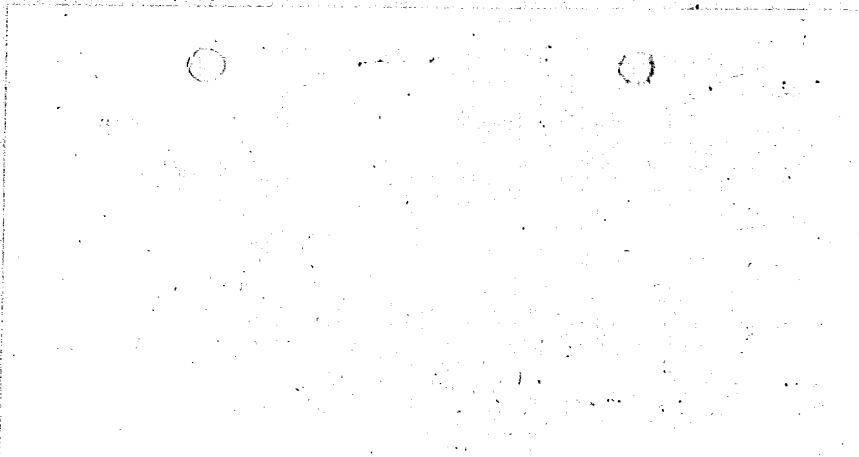
FAA Form 8130-6 (7-70)

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	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 301 of the Federal Aviation Act of 1958, and applicable Federal Aviation Regulations; and that the aircraft has been inspected and is airworthy for the flight described.		
DATE	NAME AND TITLE (Print or type)	SIGNATURE
VIII. AIRWORTHINESS DOCUMENTATION (FAA use only)	☒ A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable	☐ G. Statement of Conformity, FAA Form 317 (Attach when required)
	☐ B. Current Operating Limitations Attached	☐ H. Foreign Airworthiness Certification for Import Aircraft (Attach when required)
	☐ C. Data, Drawings, Photographs, etc. (Attach when required)	☒ I. Previous Airworthiness Certificate Issued in Accordance with FAR 21.191(a) CAR (Original attached)
	☒ D. Current Weight and Balance Information Available in Aircraft	☒ J. Current Airworthiness Certificate Issued in Accordance with FAR 21.183(a)(1) (Copy attached)
	☒ E. Major Repair and Alteration, FAA 337 (Attach when required)	
	☒ F. This Inspection Recorded in Aircraft Records	

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION STANDARD AIRWORTHINESS CERTIFICATE			
1. NATIONALITY AND REGISTRATION MARKS N2BL	2. MANUFACTURER AND MODEL Piper PA34-200	3. AIRCRAFT SERIAL NUMBER 89-7250198	4. CATEGORY 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, which is issued, has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex B to the Convention on International Civil Aviation, except as noted herein. Exceptions: None			
6. TERMS AND CONDITIONS Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventive maintenance, and alterations are performed in accordance with Parts 91, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.			
DATE OF ISSUANCE Feb. 18, 1975	FAA REPRESENTATIVE G. L. Davis	DESIGNATION NUMBER NW-EMDO-S-O-41	
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			

FAA AIRCRAFT REGISTRY
CAMERA NO. 2

DATE: 4-26-83



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATIONEXPERIMENTAL
OPERATING LIMITATIONS

These operating limitations form a part of the special airworthiness certificate issued for the aircraft described below, and must be displayed in the aircraft in accordance with Federal Aviation Regulations (FAR) 91.27(b).

MAKE: Piper

MODEL: PA34-200

SERIAL NO.: 34-7250198

N-51957

1. This aircraft may be operated for the following purpose(s):

- a. Research and Development (FAR 21.191(a))
 b. Showing Compliance with Regulations (FAR 21.191(b))
 c. ~~XX~~
 d. ~~XX~~

2. No person may operate this aircraft except in compliance with these operating limitations, the operating limitations prescribed in FAR 91.42, and in accordance with all applicable traffic, operating, and maintenance rules.
3. No person may operate this aircraft over a densely populated area or in a congested airway, including takeoffs and landings, unless such operations are conducted in a manner that will not create a hazard to other aircraft in flight or to persons and property on the ground.
4. Instrument Flight Rules (IFR), and Visual Flight Rules (VFR) Night operations ~~are~~ are not authorized.
5. During takeoff and landing each person on board the aircraft must occupy a seat or berth with a safety belt properly secured about him in accordance with FAR 91.14 unless the performance of his duties would make it impractical to be secured by a safety belt. However, a seat or berth with safety belt must be available for each person aboard.
6. No person may be carried in the aircraft during flight unless that person is essential to the purpose of the flight or has a proper interest in the operations allowed under the purpose(s) for which the special airworthiness certificate is issued.
7. Any major changes to the aircraft or change in its ownership invalidates the special airworthiness certificate.
8. These operating limitations expire concurrently with the special airworthiness certificate on March 26, 1975

E. J. Huthenauer
 G. L. Davis
 Signature

NW-EMDO-S-O-41
 Designation or
 office.

JANUARY 21, 1975
September 28, 1974
 Date of Issue

FAA AIRCRAFT REGISTRY

CAMERA NO. 2

DATE: 4-26-83

Typed by AS

DEPARTMENT OF TRANSPORTATION		UNITED STATES OF AMERICA		FEDERAL AVIATION ADMINISTRATION	
SPECIAL AIRWORTHINESS CERTIFICATE					
A	CLASSIFICATION: <u>Experimental</u>				
PURPOSE: R & D and to show compliance with FAR's					
B	MANUFACTURER	NAME	N/A		
		ADDRESS	N/A		
C	FLIGHT	FROM	N/A		
		TO	N/A		
D	N-2 BL	★	SERIAL NO.	34-7250198	
	BUILDER	Piper	MODEL	PA34-200	
	DATE OF ISSUANCE	January 21, 1975	EXPIRY	March 26, 1975	
	OPERATING LIMITATIONS DATED	1-21-75	ARE A PART OF THIS CERTIFICATE		
E	SIGNATURE OF FAA REPRESENTATIVE			DESIGNATION OR OFFICE NO.	
	E. J. Huttenmaier			NW-EMDO S-0-41	

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.

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.

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 N2BL	2. AIRCRAFT BUILDER'S NAME (make) Piper	3. AIRCRAFT MODEL DESIGNATION PA34-200	4. YR. MFG. 1972	FAA CODING 7103445		
	5. AIRCRAFT SERIAL NO. 34-7250198	6. ENGINE BUILDER'S NAME (make) Lycoming	7. ENGINE MODEL DESIGNATION IO 360-C1E6/LIO-360-C1E6		41515		
	8. NUMBER OF ENGINES 2	9. PROPELLER BUILDER'S NAME (make) Hartzell	10. PROPELLER MODEL DESIGNATION HC-C24K-2CLFF		11. AIRCRAFT IS: ☐ EXPORT ☐ 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						
	3 ☐ PROVISIONAL (Indicate class)						
	4 ☐ RESTRICTED (Indicate operation(s) to be conducted)						
	5 ☒ EXPERIMENTAL (Indicate operation(s) to be conducted)						
	6 ☐ SPECIAL FLIGHT PERMIT (Indicate operation to be conducted then complete Section VI or VII as applicable on reverse side)						
	C ☐ 6 MULTIPLE AIRWORTHINESS CERTIFICATE (Check appropriate Restricted Operation and Standard or Limited as applicable above)						
	D. CERTIFICATION—1 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 request.						
III. OWNER'S CERTIFICATION	A. REGISTERED OWNER (As shown on Certificate of Aircraft Registration) IF DEALER, CHECK HERE ☐						
	NAME: Bob Landers ADDRESS: 7240 Estrella de Mar						
	CITY: Carlsbad, California ZIP: 92008						
	B. AIRCRAFT CERTIFICATION BASIS (Check applicable blocks and complete items as indicated)						
IV. INSPECTION AGENCY VERIFICATION	X ☒ AIRCRAFT CERTIFICATION OR TYPE CERTIFICATION DATA SHEET (Give No. and Revision No.) A750 Rev. 3						
	X ☒ AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.) 75.01						
	AIRCRAFT LISTING (Give page No(s)) N/A						
	SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated) N/A						
	C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS						
	X ☒ CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173 TOTAL AIRFRAME HOURS: 910						
	3 ☐ EXPERIMENTAL ONLY—Enter hours flown since last certificate issued or renewed 35						
	D. CERTIFICATION—1 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 request.						
	E. DATE OF APPLICATION: 21 January, 1975 NAME AND TITLE (Print or type): Henry I. McKay, Vice President SIGNATURE: [Signature]						
	A. THE AIRCRAFT DESCRIBED ABOVE HAS BEEN INSPECTED AND FOUND AIRWORTHY BY: (Complete this section only if FAR 21.183 (d) applies)						
V. FAA REPRESENTATIVE CERTIFICATION	2 ☐ FAR PART 121 OR 127 CERTIFICATE HOLDER (Give Certificate No.) 3 ☐ CERTIFICATED MECHANIC (Give Certificate No.) 4 ☐ CERTIFICATED REPAIR STATION (Give Certificate No.)						
	5 ☐ AIRCRAFT MANUFACTURER (Give Name of Firm)						
	DATE: 1/21/75 TITLE: NW-EMDO S-0-41 SIGNATURE: E. J. Huttenmaier						
	(Check ALL applicable blocks) I find that the aircraft described in Section I or VII meets the requirements for: ☐ The certification requested, or ☒ 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.						

FAA AIRCRAFT REGISTRY

CAMERA NO. 2ND DATE: 4-26-83

VI. PRODUCTION FLIGHT TESTING	A. MANUFACTURER	
	NAME	ADDRESS
	B. PRODUCTION BASIS (Check applicable item)	
	PRODUCTION CERTIFICATE (Give production certificate number)	
VII. SPECIAL FLIGHT PERMIT PURPOSES OTHER THAN PRODUCTION FLIGHT TEST	TYPE CERTIFICATE ONLY	
	APPROVED PRODUCTION INSPECTION SYSTEM	
	C. GIVE QUANTITY OF CERTIFICATES REQUIRED FOR OPERATING NEEDS:	
	DATE OF APPLICATION	SIGNATURE
	NAME AND TITLE (Print or type)	
	A. DESCRIPTION OF AIRCRAFT	
	REGISTERED OWNER	ADDRESS
	BUILDER (Make)	MODEL
	ENGINE/ENGINE TYPE	REGISTRATION MARK
	SERIAL NUMBER	
	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 1938, and applicable Federal Aviation Regulations; and that the aircraft has been inspected and is airworthy for the flight described.		
DATE	SIGNATURE	
NAME AND TITLE (Print or type)		
VIII. AIRWORTHINESS DOCUMENTATION (FAA use only)	☒ A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable	G. Statement of Conformity, FAA Form 317 (Attach when required)
	☒ B. Current Operating Limitations Attached	H. Foreign Airworthiness Certification for Import Aircraft (Attach when required)
	☒ C. Data, Drawings, Photographs, etc. (Attach when required)	I. Previous Airworthiness Certificate Issued in Accordance with FAR 21.191(a) (Original attached)
	☒ D. Current Weight and Balance Information Available in Aircraft	J. Current Airworthiness Certificate Issued in Accordance with FAR 21.191(a) & (b) (Copy attached)
	☒ E. Major Repair and Alteration, FAA 337 (Attach when required)	
	☒ F. This Inspection Recorded in Aircraft Records	

C FAA AC 78-0771

CAMERA NO. 2 DATE: 7-18
 FAA AIRCRAFT REGISTRY
 CAMERA NO. 2 DATE: 4-26-83

DEPARTMENT OF TRANSPORTATION
 UNITED STATES OF AMERICA
 FEDERAL AVIATION ADMINISTRATION
 SPECIAL AIRWORTHINESS CERTIFICATION

CLASSIFICATION: **Experimental**
 PURPOSE: **B & D and no other compliance with FAR's**

MANUFACTURER: **PA34-200**
 NAME: **PA34-200**
 ADDRESS: **PA34-200**
 FROM AIR: **PA34-200**
 TO: **PA34-200**

FLIGHT: **PA34-200**
 SERIAL NO.: **PA34-200**

DATE OF ISSUANCE: **January 21, 1975**
 BUILDING: **Piper**
 OWNER: **PA34-200**
 OPERATING LIMITATIONS: **PA34-200**
 SIGNATURE: **PA34-200**

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 1882-8; 8100-3; 8150-8

Form Approved
 Budget Bureau No. 04-R060.1
 FOR FAA USE ONLY
 OFFICE IDENTIFICATION
AWF-520 64

MODEL: **PA34-200**
 NATIONALITY AND REGISTRATION MARK: **N28L 223L**
 ADDRESS (As shown on registration certificate): **10522 S. Wagner Ave Stockton, Ca. 95205**

RECEIVED
 FEB 17 1991
 FSDO

UNIT	MAKE	MODEL	SERIAL NO.	S. TYPE
AIRFRAME				REPAIR ALTERATION
POWERPLANT				X
PROPELLER				
APPLIANCE	TYPE			
	MANUFACTURER			

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS: **Big Valley Aviation, Inc. 1794 Lindbergh St. Stockton, Ca. 95206**

B. KIND OF AGENCY: ☒ U.S. CERTIFICATED MECHANIC ☐ FOREIGN CERTIFICATED MECHANIC ☒ CERTIFICATED REPAIR STATION ☐ MANUFACTURER

C. CERTIFICATE NO: **464-34**

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: **2-10-81** SIGNATURE OF AUTHORIZED INDIVIDUAL: **Robert E. Fisher**

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)

DATE OF APPROVAL OR REJECTION: **2-10-81** CERTIFICATE OR DESIGNATION NO: **464-34** SIGNATURE OF AUTHORIZED INDIVIDUAL: **Robert E. Fisher**

NOTICE

- A This airworthiness certificate is issued under the authority of the Federal Aviation Regulations (FAR) 1958 and the Federal Aviation Regulations (FAR) 21.151 and 21.157. It is valid only for the aircraft to which it is issued and for the purpose of flight.
- B This airworthiness certificate authorizes the aircraft to be used for the purpose of flight. No person may conduct production flight tests of aircraft registered in his name. No person may conduct production flight tests of aircraft registered in his name. No person may conduct production flight tests of aircraft registered in his name.
- C This airworthiness certificate authorizes the aircraft to be used for the purpose of flight. No person may conduct production flight tests of aircraft registered in his name. No person may conduct production flight tests of aircraft registered in his name. No person may conduct production flight tests of aircraft registered in his name.
- 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 FAR. The aircraft does not meet the requirements of the applicable FAR. The aircraft does not meet the requirements of the applicable FAR.
- 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 21.151 or 21.217.

be entered in the appropriate aircraft record. to assure continued conformity with the

attach additional sheets. Identify with air-

to IT and RE engines

☒ ADDITIONAL SHEETS ARE ATTACHED

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

EXPERIMENTAL

OPERATING LIMITATIONS



These operating limitations form a part of the special airworthiness certificate issued for the aircraft described below, and must be displayed in the aircraft in accordance with Federal Aviation Regulations (FAR) 91.27(b).

MAKE: Piper MODEL: PA34-200 SERIAL NO.: 34-7250198 ^{28L} N-5105P

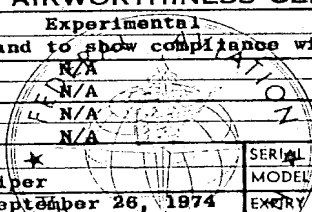
1. This aircraft may be operated for the following purpose(s):
 - a. Research and Development (FAR 21.191(a))
 - b. Showing Compliance with Regulations (FAR 21.191(b))
 - c. XXXXXXXXXXXXXXXXXXXXXXXXXXXX
 - d. XXXXXXXXXXXXXXXXXXXXXXXXXXXX
2. No person may operate this aircraft except in compliance with these operating limitations, the operating limitations prescribed in FAR 91.42, and in accordance with all applicable traffic, operating, and maintenance rules.
3. No person may operate this aircraft over a densely populated area or in a congested airway, including takeoffs and landings, unless such operations are conducted in a manner that will not create a hazard to other aircraft in flight or to persons and property on the ground.
4. Instrument Flight Rules (IFR), and Visual Flight Rules (VFR) Night operations ~~are~~ are not authorized.
5. During takeoff and landing each person on board the aircraft must occupy a seat or berth with a safety belt properly secured about him in accordance with FAR 91.14 unless the performance of his duties would make it impractical to be secured by a safety belt. However, a seat or berth with safety belt must be available for each person aboard.
6. No person may be carried in the aircraft during flight unless that person is essential to the purpose of the flight or has a proper interest in the operations allowed under the purpose(s) for which the special airworthiness certificate is issued.
7. Any major changes to the aircraft or change in its ownership invalidates the special airworthiness certificate.
8. These operating limitations expire concurrently with the special airworthiness certificate on March 26, 1975

E. J. Hutton
G. L. Davis
Signature
JANUARY 21, 1975
September 26, 1974
Date of Issue

NW-EMDO-S-O-41
Designation or
office.

FAA AIRCRAFT-REGISTRY
CAMERA NO. 2

DATE: 4-26-83

DEPARTMENT OF TRANSPORTATION UNITED STATES OF AMERICA FEDERAL AVIATION ADMINISTRATION SPECIAL AIRWORTHINESS CERTIFICATE			
A	CLASSIFICATION: Experimental		
	PURPOSE: R&D and to show compliance with FARs		
B	MANUFACTURER	NAME N/A	
	ADDRESS	N/A	
C	FLIGHT	FROM N/A	
	TO N/A	N/A	
D	N- 8106T BUILDER	Piper	SERIAL NO. 34-7250198
			MODEL PA34-200
	DATE OF ISSUANCE September 26, 1974		EXPIRY March 26, 1975
E	OPERATING LIMITATIONS DATED 9/26/74		ARE A PART OF THIS CERTIFICATE
	SIGNATURE OF FAA REPRESENTATIVE G. L. Davis		DESIGNATION OR OFFICE NO. NW-EMDO-8-0-41

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; 8130-3

SEE REVERSE SIDE

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.

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATIONNORTHWEST REGION
FAA BUILDING, BOEING FIELD
SEATTLE, WASHINGTON 98108

DATE: February 19, 1975

IN REPLY
REFER TO: NW-EMDO-41

SUBJECT: Special Airworthiness Certificate, Piper, PA34-200,
N-2BL.

FROM: Chief, Engineering and Manufacturing District Office-41

TO: Memo for File

This experimental certificate was issued to extend the expiration date, and to reflect the change in registration from N5015T to N2BL.

Because of the applicant's urgent test commitments, the statement required by FAR 21.193 was submitted orally. All factors were the same as for original issuance of the certificate.

George J. Pour
GEORGE J. POUR

W. A. [illegible]

W. A. [illegible]

W. A. [illegible]

W. A. [illegible]

W. A. [illegible]

W. A. [illegible]

This document is a copy of the original document and is not to be used for any other purpose. The original document is the only one that should be used for any purpose. The original document is the only one that should be used for any purpose.

W. A. [illegible]

Form Approved
Budget Bureau No. 04-R0058

20-0204 281		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				
	5. AIRCRAFT SERIAL NO.	6. ENGINE BUILDER'S NAME (make)	7. ENGINE MODEL DESIGNATION						
	8. NUMBER OF ENGINES	9. PROPELLER BUILDER'S NAME (make)	10. PROPELLER MODEL DESIGNATION						
					11. AIRCRAFT IS				
APPLICATION IS HEREBY MADE FOR: (Check applicable items)									
II. CERTIFICATION REQUESTED	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				
		3	RESTRICTED (Indicate operation(s) to be conducted)	2	CLASS II				
		4	EXPERIMENTAL (Indicate operation(s) to be conducted)	1	AGRICULTURE & FST CONTROL	2	AERIAL SURVEYING	3	AERIAL ADVERTISING
				4	FOREST (Wild life conservation)	5	PATROLLING	6	WEATHER CONTROL
				0	OTHER (Specify)				
				1	RESEARCH AND DEVELOPMENT	2	AMATEUR BUILT	3	EXHIBITION
				4	RACING	5	CREW TRAINING	6	MKT. SURVEY
	8	SPECIAL FLIGHT PERMIT (Indicate operation to be conducted then complete Section VI or VII as applicable on reverse side)	0	TO SHOW COMPLIANCE WITH FAR					
			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						
	BOB LANDERS		7240 ESTRELLA DE MAR CARLEAD, CALIF 92008						
	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.)		X AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.)						
A750 REV 3		73-14-2							
X AIRCRAFT LISTING (Give page No.)		SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated)							
A750 REV 4 PG. 1		NONE							
C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS									
X CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173		TOTAL AIRFRAME HOURS—		EXPERIMENTAL ONLY—Enter hours flown since last certificate issued or renewal					
		866.							
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 301 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					
19 SEPT 74		G.A. KELLOGG—Chief Engineer		George A. Kellogg Jr.					
A. THE AIRCRAFT DESCRIBED ABOVE HAS BEEN INSPECTED AND FOUND AIRWORTHY BY: (Complete this Section only if FAR 21.63(d) applies)									
IV. INSPECTION AGENCY VERIFICATION	2	FAR PART 121 OR 127 CERTIFICATE HOLDER (Give Certificate No.)	3	CERTIFICATED MECHANIC (Give Certificate No.)	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: ☒ The certification requested, or ☐ 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	DESIGNER'S SIGNATURE AND NO.		FAA INSPECTOR'S SIGNATURE				
	9-26-74	NW-ENDD- 5-0-41			G. L. Awa				

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:					
VII. SPECIAL FLIGHT PERMIT PURPOSES OTHER THAN PRODUCTION FLIGHT TEST	DATE OF APPLICATION		NAME AND TITLE (Print or type)			SIGNATURE
	A. DESCRIPTION OF AIRCRAFT					
	REGISTERED OWNER			ADDRESS		
	BUILDER (Mark)			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 301 of the Federal Aviation Act of 1938, and applicable Federal Aviation Regulations; and that the aircraft has been inspected and is airworthy for the flight described.						
DATE		NAME AND TITLE (Print or type)			SIGNATURE	
VIII. AIRWORTHINESS DOCUMENTATION (FAA use only)	☒	A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable				G. Statement of Conformity, FAA Form 317 (Attach when required)
	☒	B. Current Operating Limitations Attached				H. Foreign Airworthiness Certification for Import Aircraft (Attach when required)
	☒	C. Data, Drawings, Photographs, etc. (Attach when required)				I. Previous Airworthiness Certificate Issued in Accordance with FAR 21.183 (b) (Original attached)
	☒	D. Current Weight and Balance Information Available in Aircraft				J. Current Airworthiness Certificate Issued in Accordance with FAR 21.19 (a) (b) (Copy attached)
	☒	E. Major Repair and Alteration, FAA 337 (Attach when required)				
	☒	F. This Inspection Recorded in Aircraft Records				

DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION	
SPECIAL AIRWORTHINESS CERTIFICATE	
A	CLASSIFICATION: Experimental
	PURPOSE: R&D and to show compliance with FARs
B	MANUFACTURER: N/A
	NAME: N/A
	ADDRESS: N/A
C	FLIGHT: N/A
	FROM: N/A
	TO: N/A
D	N-5105T
	BUILDER: Pipor
	SERIAL NO. 34-7250198
	MODEL: PA34-200
	DATE OF ISSUANCE: September 26, 1974
	EXPIRY: March 26, 1975
E	OPERATING LIMITATIONS: 9/26/74
	SIGNATURE OF FAA REPRESENTATIVE: G. L. Davis
	DESIGNATION OR OFFICE NO.: NW-EMO-8-O-41

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; 8130-8 SEE REVERSE SIDE

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 **DATE: 4-26-83**

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.

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

EXPERIMENTAL

OPERATING LIMITATIONS



These operating limitations form a part of the special airworthiness certificate issued for the aircraft described below, and must be displayed in the aircraft in accordance with Federal Aviation Regulations (FAR) 91.27(b).

MAKE: Piper MODEL: PAJ4-200 SERIAL NO.: 34-7250198 N-5105T

1. This aircraft may be operated for the following purpose(s):
 - a. Research and Development (FAR 21.191(a))
 - b. Showing Compliance with Regulations (FAR 21.191(b))
 - c. XXXXXXXXXXXXXXXXXXXXXXXXXXXX
 - d. XXXXXXXXXXXXXXXXXXXXXXXXXXXX
2. No person may operate this aircraft except in compliance with these operating limitations, the operating limitations prescribed in FAR 91.42, and in accordance with all applicable traffic, operating, and maintenance rules.
3. No person may operate this aircraft over a densely populated area or in a congested airway, including takeoffs and landings, unless such operations are conducted in a manner that will not create a hazard to other aircraft in flight or to persons and property on the ground.
4. Instrument Flight Rules (IFR), and Visual Flight Rules (VFR) Night operations ~~are~~ are not authorized.
5. During takeoff and landing each person on board the aircraft must occupy a seat or berth with a safety belt properly secured about him in accordance with FAR 91.14 unless the performance of his duties would make it impractical to be secured by a safety belt. However, a seat or berth with safety belt must be available for each person aboard.
6. No person may be carried in the aircraft during flight unless that person is essential to the purpose of the flight or has a proper interest in the operations allowed under the purpose(s) for which the special airworthiness certificate is issued.
7. Any major changes to the aircraft or change in its ownership invalidates the special airworthiness certificate.
8. These operating limitations expire concurrently with the special airworthiness certificate on March 26, 1975

G. L. Davis
Signature
September 26, 1974
Date of Issue

NW-EMDO-S-0-41
Designation or
office.

FAA AIRCRAFT REGISTRY

CAMERA NO. 2N DATE: 4-26-83

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION STANDARD AIRWORTHINESS CERTIFICATE			
1. NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4. CATEGORY
N5015T	Piper PA-34-200	34-7250198	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 B to the Convention on International Civil Aviation, except as noted herein. Exceptions:			
None			
6. TERMS AND CONDITIONS Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventive maintenance, and alterations are performed in accordance with Parts 23, 25, and 35 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.			
DATE OF ISSUANCE	FAA REPRESENTATIVE		DESIGNATION NUMBER
MAY 2 1972	JIMMIE R. LANFAIR		DOA SO-1
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 AIRCRAFT REGISTRY

CAMERA NO. 2N DATE: 4-26-83

4-26-83

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				Form Approved Budget Bureau No. 04-R060.1	
MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)				FOR FAA USE ONLY	
				OFFICE IDENTIFICATION NW-FS00-81	
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	Piper	MODEL	PA34-200	
	SERIAL NO.	34-7250198	NATIONALITY AND REGISTRATION MARK	N28L	
2. OWNER	NAME (As shown on registration certificate)		ADDRESS (As shown on registration certificate)		
	Bob Landers		7240 Estrella Damar Carlsbad, California 92008		
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				
6. CONFORMITY STATEMENT					
A. AGENCY'S NAME AND ADDRESS		B. KIND OF AGENCY		C. CERTIFICATE NO.	
Robertson Aircraft Corporation		U.S. CERTIFICATED MECHANIC		415-23	
839 West Perimeter Road		FOREIGN CERTIFICATED MECHANIC			
Renton, Washington 98055		XX 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 11, 1975		David M. Davis - Inspector			
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	XX REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT		
DATE OF APPROVAL OR REJECTION		CERTIFICATE OR DESIGNATION NO.		SIGNATURE OF AUTHORIZED INDIVIDUAL	
2-11-75		ARS 145-23		Henry I. McKay - Inspector - Chief	

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.)

Robertson Safety and Performance System including full span flaps & spoiler system installed in accordance with Robertson Aircraft Corporation approved Drawing List 27 and STC SA1548W, dated 1-28-75.

Weight added 30.0 lbs. at 129 inches.

END

RECEIVED

FEB 14 1975

NW-FSDO-61

☐ ADDITIONAL SHEETS ARE ATTACHED

The information normally furnished in Section VIII is on file as part of the historical inspection record at Piper Aircraft Corporation.

Form Approved
Budget Bureau No. 04-R0058

Current Airworthiness Certificate issued I/A/W FAR 21.183(a) PER 21.273

Typed by 474

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 N5015T	2. AIRCRAFT BUILDER'S NAME (make) Piper	3. AIRCRAFT MODEL DESIGNATION PA34-200	4. YR. AVG. 1972	FAA COLORING 710 3405		
	5. AIRCRAFT SERIAL NO. 34-7250198	6. ENGINE BUILDER'S NAME (make) Lycoming	7. ENGINE MODEL DESIGNATION IO-360-C1E6/LIO-360-C1E6	41515			
	8. NUMBER OF ENGINES 2	9. PROPELLER BUILDER'S NAME (make) Hartzell	10. PROPELLER MODEL DESIGNATION HC-C2YK-2CEF HC-C2YK-2CLEF	11. AIRCRAFT IS ☒ NEW ☐ USED ☐ IMPORT			
II. CERTIFICATION REQUESTED	APPLICATION IS HEREBY MADE FOR: (Check applicable items)						
	A. ☒ STANDARD AIRWORTHINESS CERT. (Indicate category) ☒ NORMAL ☐ UTILITY ☐ ACROBATIC ☐ TRANSPORT ☐ GLIDER ☐ BALLOON						
	B. ☐ SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate items)						
	2. LIMITED						
	5. PROVISIONAL (Indicate class)						
	3. RESTRICTED (Indicate operation(s) to be conducted)						
	4. EXPERIMENTAL (Indicate operation(s) to be conducted)						
	8. SPECIAL FLIGHT PERMIT (Indicate operation to be conducted then complete Section VI or VII as applicable on reverse side)						
	1. CLASS I						
	2. CLASS II						
III. OWNER'S CERTIFICATION	C. ☒ MULTIPLE AIRWORTHINESS CERTIFICATE (Check appropriate Restricted Operation and Standard or Limited as applicable above)						
	A. REGISTERED OWNER (As shown on Certificate of Aircraft Registration)						
	NAME Piper Aircraft Corporation			ADDRESS P.O. Box 1328 Vero Beach, Florida 32960			
	B. AIRCRAFT CERTIFICATION BASIS (Check applicable blocks and complete items as indicated)						
	☒ AIRCRAFT SPECIFICATION OR TYPE CERTIFICATION DATA SHEET (Give No. and Revision No.) A7SO REV 2			☒ AIRWORTHINESS DIRECTIVES; (Check if all applicable AD's complied with and give latest AD No.) 72-7-12			
	☐ AIRCRAFT LISTING (Give Page No.)			☐ SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated)			
	C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS						
	☒ CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173			TOTAL AIRFRAME HOURS—Enter for and aircraft only		3. EXPERIMENTAL ONLY—Enter hours flown since last certificate issued or renewed	
	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 4-18-72		NAME AND TITLE (Print or type) V. J. Montuoro Agent			SIGNATURE V. J. Montuoro	
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	I have inspected the aircraft described in Item I or VII and find it meets the requirements for:						
	☒ A. STANDARD AIRWORTHINESS CERTIFICATE						
	☐ B. SPECIAL AIRWORTHINESS CERTIFICATE						
	☐ C. AMENDMENT OR MODIFICATION OF ITS CURRENT AIRWORTHINESS CERTIFICATE						
DATE MAY 2 1972		DISTRICT OFFICE MIA-EMDO 7-0-43		DESIGNER'S SIGNATURE AND NO. Jimmie A. Lanfair DOA:SO-1		FAA INSPECTOR'S SIGNATURE	

FAA AIRCRAFT REGISTRY

CAMERA NO. 2N DATE: 4-26-83

MICRO

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21 FEB 10 1972

WASHINGTON FIELD

WASHINGTON FIELD

OKLAHOMA CITY, OKLA.

MAY 16 9 51 AM '72

CONVEYANCE FILED WITH
FAA AIRCRAFT REGISTRY

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

1. NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4. CATEGORY
N501ST	Piper PA34-200	84-7250198	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 ★

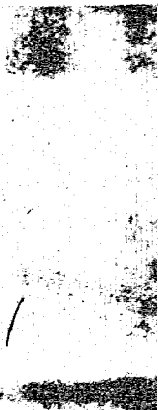
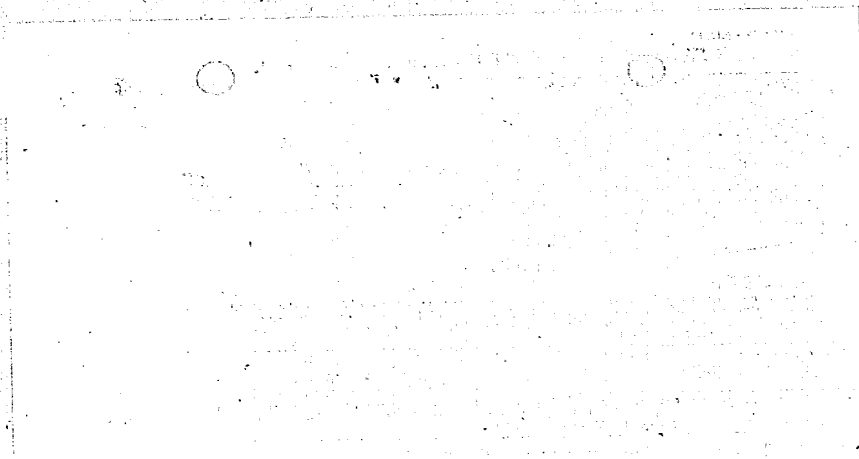
6. TERMS AND CONDITIONS
Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventive maintenance, and alterations are performed in accordance with Parts 43, and 91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

DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER
MAY 2 1972	JIMMIE W. LANFAIR	DOA SO-1

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 AIRCRAFT REGISTRY
CAMERA NO. 2

DATE: 4-26-83



28 NOV 1972

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				Form Approved Budget Bureau No. 04-R060.1	
MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)				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.					
1. AIRCRAFT	MAKE	Piper	MODEL	PA34-200	
	SERIAL NO.	34-7250198	NATIONALITY AND REGISTRATION MARK	N5015T	
2. OWNER	NAME (As shown on registration certificate)		ADDRESS (As shown on registration certificate)		
	Banner Flight Ltd.		Stewart Airport Newburgh, N.Y. 12550		
3. FOR FAA USE ONLY					
4. UNIT IDENTIFICATION					
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.	
Abraham C. Corson c/o Banner Flight Ltd. Stewart Airport Newburgh, N.Y. 12550		☒ U.S. CERTIFICATED MECHANIC ☐ FOREIGN CERTIFICATED MECHANIC ☐ CERTIFICATED REPAIR STATION ☐ MANUFACTURER		A&P1837707	
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 25, 1972		Abraham C. Corson A&P1837707			
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 P.T. STANDARDS INSPECTOR	MANUFACTURER	☒	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION		CERTIFICATE OR DESIGNATION NO.		SIGNATURE OF AUTHORIZED INDIVIDUAL	
11-25-72		IA1621713		Stephen J. [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.)

Modified left and right wing false spar assys. by installing Piper Kit #760-696 as directed by Piper Service Bulletin #369.

All work accomplished in accordance with Piper drawing 76161 and AC43.13-1, Chapter 2, Section 3, Paras 64, 65 and Figure 2.17.

Negligible change in weight and balance.

END 4

☐ ADDITIONAL SHEETS ARE ATTACHED

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				Form Approved Budget Bureau No. 04-R060.1	
MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)				FOR FAA USE ONLY	
				OFFICE IDENTIFICATION 7-3-08	
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	Piper		MODEL	PA34-200
	SERIAL NO.	34-7250198		NATIONALITY AND REGISTRATION MARK	N501ST
2. OWNER	NAME (As shown on registration certificate)			ADDRESS (As shown on registration certificate)	
	Piper Aircraft Corporation			PO Box 1328 Vero Beach Florida 32960	
3. FOR FAA USE ONLY					
4. UNIT IDENTIFICATION					
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	(As described in item 1 above)				X
POWERPLANT	SO - GADO - 8				
PROPELLER	MAY 10 1972				
APPLIANCE	ST. PETERSBURG				
	FLORIDA				
6. CONFORMITY STATEMENT					
A. AGENCY'S NAME AND ADDRESS		B. KIND OF AGENCY		C. CERTIFICATE NO.	
Piper Aircraft Corporation		U.S. CERTIFICATED MECHANIC		FAA DOA SO-1	
PO Box 1328		FOREIGN CERTIFICATED MECHANIC			
Vero Beach Florida 32960		CERTIFICATED REPAIR STATION			
		X MANUFACTURER			
b. 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			
MAY 2 1972		ANTHONY J. DIVOLA <i>Anthony J. Divola</i>			
7. APPROVAL FOR RETURN TO SERVICE					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED					
BY	FAA FLT. STANDARDS INSPECTOR	X	MANUFACTURER	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE		REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION		CERTIFICATE OR DESIGNATION NO.		SIGNATURE OF AUTHORIZED INDIVIDUAL	
MAY 2 1972		DOA SO-1		<i>W. Montuono</i>	

NOTICE

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

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

Installed: PAC All Weather Antenna, Anti-Static Kit PAC #756-784, reference initial approval on PA34-200, 34-7250033, M286T, by Piper Engineering on Dec. 1, 1971.

1. Installed #1 Broad Band Antenna at Station 190.6 and #2 Broad Band Antenna at Station 225.2. Both antennas are bolted to existing factory installed doubler plates with AN3-4A bolts, reference ACA3.13-2, Chapter 3.

2. The ADF Sense Antenna is installed with reference to the instructions contained in the kit and located as per PAC ADF Drawing #95257.

3. Static Wicks installed on outboard side of both ailerons, both flaps and at the bottom on the rudder trim tab. Established balancing limits are: Unpainted Ailerons: +2 to -10 inch pounds; Unpainted Rudder: -19 to -29 inch pounds. No balance required on Flaps. New balance figures for surfaces with Wicks installed are: Left Aileron: $-9.4 + (-.21) = -9.61$ inch pounds; Right Aileron: $-8.5 + (-.21) = -8.71$ inch pounds. The Rudder was balanced with the Wick installed, balance figure for it is -24.9 inch pounds. Since modified surfaces are still within limits, rebalancing is not required.

4. No change in compass headings, and no electrical power required for this installation.

5. Aircraft Equipment List and weight and balance is revised.

6. Aircraft flown for function check.

***** END *****

☐ ADDITIONAL SHEETS ARE ATTACHED