



US Department  
of Transportation  
Federal Aviation  
Administration

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

OMB No. 2120-0020  
Exp: 5/31/2018

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 <b>United States / N258RM</b>	Serial No. <b>44-8107029</b>
	Make <b>PIPER</b>	Model <b>PA-44-180</b> Series
2. Owner	Name (As shown on registration certificate) <b>FTG LEASING LLC</b>	Address (As shown on registration certificate) Address <b>285 SOUTH WATKINS ROAD</b>
		City <b>WATKINS</b> State <b>Colorado</b>
		Zip <b>80137</b> Country <b>USA</b>

**3. For FAA Use Only**

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	<u>PIPER</u>	(As described in Item 1 above)	<u>44-8107029</u>
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

**6. Conformity Statement**

A. Agency's Name and Address		B. Kind of Agency	
Name	FRONT RANGE FLIGHT SCHOOL	<input checked="" type="checkbox"/> U. S. Certificated Mechanic	Manufacturer
Address	37501 CESSNA WAY	<input type="checkbox"/> Foreign Certificated Mechanic	C. Certificate No.
City	WATKINS State CO	<input type="checkbox"/> Certified Repair Station A&P/IA 3617647	<b>A&amp;P/IA 3617647</b>
Zip	80137 Country United States	<input type="checkbox"/> Certificated Maintenance Organization	

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

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual <b>Eldon Holtz 2-20-21</b>
--	---

**7. Approval for Return to Service**

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

BY	FAA Fit. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	<input checked="" type="checkbox"/> Inspection Authorization	Other (Specify)
Certificate or Designation No. <b>A&amp;P/IA 3617647</b>		Signature/Date of Authorized Individual <b>Eldon Holtz 2-20-21</b>		



# NOTICE

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

## 8. Description of Work Accomplished

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

United States / N258RM

02/20/2021

Nationality and Registration Mark

Date

REMOVED: FACTORY ENGINE GAUGES, FUEL QUANTITY GAUGES, APOLLO MX20, VACUUM SYSTEM INCLUDING PUMP PLUMBING AND GAUGE, AND TACH GENERATOR FOR BOTH LEFT AND RIGHT ENGINES AND FUEL TANKS.

INSTALLED GARMIN G500TXI EIS SYSTEM FOR TWIN ENGINE AND FUEL PRIMARY INSTRUMENTATION IAW (IN ACCORDANCE WITH) STC SA02571SE, AND THE APPROVED IM (STC INSTALLATION MANUAL) DOC#190-01717-B3, REV 9, February 1, 2021. THE INSTALLATION IS INCLUSIVE OF TWO GEA110 ENGINE COMPUTERS (ONE LEFT, AND ONE RIGHT) ENGINE PROBES, AND SENSORS INCLUDED IN THE MANUFACTURER'S STC INSTALLATION KIT. ALL PRIMARY FUNCTIONS AS LISTED IN THE AIRCRAFT TYPE CERTIFICATE AS WELL AS EGT AND CHT FOR ALL CYLINDERS ARE DISPLAYED ON A GDU700L (GARMIN DISPLAY UNIT MODEL 700 LANDSCAPE). THE GDU IS MOUNTED IN THE AVIONICS STACK USING THE PIPER FACTORY MOUNTS PROVIDED FOR AVIONICS AND LOCATION IS PER THE APPROVED STC IM.

PROGRAMMING OF LIMITATIONS AS LISTED IN THE MANUFACTURER'S TC DATA HAS BEEN PROGRAMMED, AS WELL AS FUEL QUANTITY LEVELS CALIBRATED AND VERIFIED. THE AIRCRAFT HAS BEEN TEST RUN AND FLOWN AND ALL FUNCTIONS FOUND TO BE OPERATING NORMAL AND WITHIN THE AIRCRAFT AND ENGINE MANUFACTURER'S APPROVED LIMITATIONS.

### GENERAL NOTES:

1. The electrical system of this aircraft was evaluated and equipment current draw was found not to exceed 80 percent of aircraft's generator/alternator rated output.
2. The aircraft's weight and balance was updated and equipment list has been amended.
3. All work was accomplished IAW AC 20-1380 change 1 and 2 paragraph 15; AC 43.13-1 B chapter 11 and chapter 12 and AC 43.13-2B chapter 2, chapter 3, and paragraph 36.
4. Aircraft equipment list amended, weight and balance was calculated. Compass compensation checked. A copy of the operation instructions, contained in Pilot's Guide placed in the aircraft records.

Documentation provided and required with this installation: AFMS G500/G600 TXi Part 23 AML STC DOC#190-01717-B2, REV 4, October 1, 2020, Pilot's Guide, G500(H)/G600/G700 TXi - SSW 3.12+, DOC# 190-01717-10, REV J, October 1, 2020, Main

☒ Additional Sheets Are Attached





US Department  
of Transportation  
Federal Aviation  
Administration

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

OMB No. 2120-0020  
Exp: 5/31/2018

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 <b>United States / N258RM</b>	Serial No. <b>44-8107029</b>
	Make <b>PIPER</b>	Model <b>PA-44-180</b> Series
2. Owner	Name (As shown on registration certificate) <b>FTG LEASING LLC</b>	Address (As shown on registration certificate)
		Address <b>285 SOUTH WATKINS ROAD</b>
		City <b>WATKINS</b> State <b>Colorado</b>
		Zip <b>80137</b> Country <b>United States</b>

**3. For FAA Use Only**

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	<u>PIPER</u>	(As described in Item 1 above)	<u>44-8107029</u>
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type Manufacturer		

**6. Conformity Statement**

A. Agency's Name and Address		B. Kind of Agency	
Name <b>James D Lewis</b>		<input type="checkbox"/> U. S. Certificated Mechanic	<input type="checkbox"/> Manufacturer
Address <b>12380 Airport Road</b>		<input type="checkbox"/> Foreign Certificated Mechanic	C. Certificate No.
City <b>JACKSON</b> State <b>CA</b>		<input checked="" type="checkbox"/> Certificated Repair Station TH3R867L	<b>TH3R867L</b>
Zip <b>95642</b> Country <b>United States</b>		<input type="checkbox"/> Certificated Maintenance Organization	

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

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual <b>1-15-21</b> 
--	---

**7. Approval for Return to Service**

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

BY	FAA Flt. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee <b>X</b>	Repair Station	Inspection Authorization	Other (Specify)

Certificate or Designation No. <b>TH3R867L</b>	Signature/Date of Authorized Individual <b>1-15-21</b> 
--	---



# MAJOR REPAIR AND ALTERATION

## Application for Inspection

Project Name: **PA-44-180**

Project Number: **44-8107023**

Project Location: **PA-44-180**

Project Description: **PA-44-180**

Project Owner: **PIPER**

Project Engineer: **PIPER**

Project Inspector: **PIPER**

Project Date: **PIPER**

Item	Description	Inspected	Approved
1	Foundation	<input type="checkbox"/>	<input type="checkbox"/>
2	Structure	<input type="checkbox"/>	<input type="checkbox"/>
3	Roofing	<input type="checkbox"/>	<input type="checkbox"/>
4	Interior	<input type="checkbox"/>	<input type="checkbox"/>
5	Exterior	<input type="checkbox"/>	<input type="checkbox"/>
6	Other	<input type="checkbox"/>	<input type="checkbox"/>

Inspector: **THORNTON**

Inspector License: **THORNTON**

Inspector Signature: **THORNTON**

Inspector Date: **THORNTON**

Inspector Title: **THORNTON**

Inspector Address: **THORNTON**

Inspector Signature: **THORNTON**

Inspector Title: **THORNTON**

Inspector Address: **THORNTON**

Inspector Date: **THORNTON**

Inspector Title: **THORNTON**

Inspector Address: **THORNTON**



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.)

United States / N258RM

01/15/2021

Nationality and Registration Mark

Date

REMOVED: VACUUM ADI, AND NSD360 HSI .

INSTALLED: 1) A GI275 ADHRS+AP P/N 010-02327-20, and GI275 BASE P/N 010-02325-00 IAW (IN ACCORDANCE WITH) STC SA02658SE, and approved IM (INSTALLATION MANUAL) DOC# 190-02246-10, REV 5, AUGUST 31, 2020. The units are configured as AI/HSI (AI/PFD at removed AI location, and HSI removed HSI location) IAW the IM, and interfaced to existing navigation and autopilot equipment for NAV (GPS,VOR, ILS) guidance IAW the IM's.

GENERAL NOTES:

1. The electrical system of this aircraft was evaluated and equipment current draw was found not to exceed 80 percent of aircraft's generator/alternator rated output.
2. The aircraft's weight and balance was updated and equipment list has been amended.
3. All work was accomplished IAW AC 20-1380 change 1 and 2 paragraph 15; AC 43.13-1 B chapter 11 and chapter 12 and AC 43.13-2B chapter 2, chapter 3, and paragraph 36.
4. Aircraft equipment list amended, weight and balance was calculated. Compass compensation checked. A copy of the operation instructions, contained in Pilot's Guide placed in the aircraft records.

Documentation provided and required with this installation: GI275 installation; GI275 pilot's guide doc#190-02246-01, rev B, July 31, 2020; AFMS Doc# 190-02246-12, Rev 2, August 31, 2020, MM with ICA, Doc# 190-02246-11, Rev 2, August 31, 2020.

\*\*\*\*\* NOTHING FOLLOWS \*\*\*\*\*

☐ Additional Sheets Are Attached







U.S. 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 SO-FSD-15	
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 PA44-180		
	SERIAL NO. 44-8107029		NATIONALITY AND REGISTRATION MARK N258RM		
2. OWNER	NAME (As shown on registration certificate) Bazeco, Inc.		ADDRESS (As shown on registration certificate) 8531 Weeping Willow Way Orlando, FL 32817		
	3. FOR FAA USE ONLY				
4. UNIT IDENTIFICATION					
UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
AIRFRAME	As described in item 1 above			REPAIR	ALTERATION
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				
6. CONFORMITY STATEMENT					
A. AGENCY'S NAME AND ADDRESS		B. KIND OF AGENCY		C. CERTIFICATE NO.	
Bruce Futch 7978 Hillcrest Ter. Orlando, FL 32810		<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC <input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC <input type="checkbox"/> CERTIFICATED REPAIR STATION <input type="checkbox"/> MANUFACTURER		264111567	
D. I certify that the repair and or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.					
DATE 1-13-93		SIGNATURE OF AUTHORIZED INDIVIDUAL <i>B. Futch</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: <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> 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 1-13-93		CERTIFICATE OR DESIGNATION NO. 264111567		SIGNATURE OF AUTHORIZED INDIVIDUAL <i>B. Futch</i>	



THOSE DOCUMENTS PRECEDING THIS NOTICE WERE FILMED WITH  
NO ANNOTATION DATE IN THE ANNOTATION WINDOW. THE DATE OF  
OF 12-23-92 SHOULD HAVE APPEARED IN THE ANNOTATION  
WINDOW.

*Imaline Bennett*



FAA AIRCRAFT REGISTRY  
CAMERA NO. 3 DATE: 11-6-91



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
N258RM	PIPER PA-44-180T	44-8107029	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 21, 43, and 91 of the Federal Aviation Regulations, as applicable, and the aircraft is registered in the United States.			
DATE OF ISSUANCE 12-02-91	FAA REPRESENTATIVE HARRY L. PRATT	DESIGNATION NUMBER 440 8800-15	
Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.			
FAA Form 8100-2 (8-82)		* U.S. GPO: 1989-562-877	



U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				Form Approved Budget Bureau No. 03-R060.1	
MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)				FOR FAA USE ONLY	
				OFFICE IDENTIFICATION A50 F500-15	
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	TURBO SEMINOLE
	SERIAL NO.	44-8107029		NATIONALITY AND REGISTRATION MARK	N258RM
2. OWNER	NAME (As shown on registration certificate)			ADDRESS (As shown on registration certificate)	
	ROBERT B. FLOREN			497 BLACKWOOD AVENUE LONGWOOD, FLORIDA 32750	
3. FOR FAA USE ONLY					
4. UNIT IDENTIFICATION					
UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
AIRFRAME	***** (As described in item 1 above) *****			REPAIR	ALTERATION
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				
6. CONFORMITY STATEMENT					
A. AGENCY'S NAME AND ADDRESS			B. KIND OF AGENCY		C. CERTIFICATE NO.
FLORIDA AVIONICS, INC. 237 N. CRYSTAL LAKE DRIVE ORLANDO, FL 32803			<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC <input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC <input type="checkbox"/> CERTIFICATED REPAIR STATION <input type="checkbox"/> MANUFACTURER		764-117
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 03/18/88			SIGNATURE OF AUTHORIZED INDIVIDUAL John P. Harlier ch. clasp		
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 <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED					
BY	FAA FLT STANDARDS INSPECTOR	MANUFACTURER	INSPECTION AUTHORIZATION		OTHER (Specify)
	FAA DESIGNEE	<input checked="" type="checkbox"/> REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT		
DATE OF APPROVAL OR REJECTION 03/18/88		CERTIFICATE OR DESIGNATION NO. 764-117	SIGNATURE OF AUTHORIZED INDIVIDUAL John P. Harlier ch. clasp		



### 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.)

N258RM

INSTALLED NORTHSTAR M-1 LORAN IN RIGHT HAND RADIO PANEL. FOLLOW THE KI-76A TRANSPONDER UTILIZING EXISTING MOUNTING RAILS INSTALLED BY PIPER AIRCRAFT FOR RADIO PANEL MOUNTING. THE M-1 IS COUPLED TO THE HSI THRU A N.A.T. RS-08 LORAN COUPLING BOX. PRESENTATION IS SWITCHED BY A TOGGLE SWITCH WITH A BLUE INDICATOR LIGHT AS REQUIRED TO INDICATE WHEN LORAN PRESENTATION IS ON THE HSI.

THE ABOVE INSTALLATION WAS PERFORMED IN ACCORDANCE WITH AC43.13 2A, CHAPTER 2, PARAGRAPHS 21, 22, AND 23; AND CHAPTER 3, PARAGRAPHS 36 AND 37 AND MEETS REQUIREMENTS OF 90.145.

WIRING FOR THE ABOVE INSTALLATION WAS PERFORMED IN ACCORDANCE WITH AC43.13 1A, CHAPTER 11, SECTIONS 2, 3, 5, AND 7.

INTERFERENCE CHECK WAS PERFORMED AND NONE FOUND. ELECTRICAL LOAD WAS CHECKED IN ACCORDANCE WITH AC43.13 1A, CHAPTER 11, PARAGRAPHS 426-428.

THIS INSTALLATION MEETS THE REQUIREMENTS OF AC20.121 PARAGRAPH 6.A ITEMS 1, 2, 3, 4, AND 5.

WEIGHT AND BALANCE WAS REVISED AND LOG BOOK ENTRIES WERE MADE.

LAST ITEM.

☐ ADDITIONAL SHEETS ARE ATTACHED.



U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		Form Approved Design Series No. 04-R060.1	
MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)		FOR FAA USE ONLY OFFICE IDENTIFICATION As: F506-15	
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 TURBO SEMINOLE	
	SERIAL NO. 44-8107029	NATIONALITY AND REGISTRATION MARK N268RM	
2. OWNER	NAME (As shown on registration certificate) ROBERT B. FLOREN	ADDRESS (As shown on registration certificate) 497 BLACKWOOD AVENUE LONGWOOD, FLORIDA 32750	
3. FOR FAA USE ONLY			
4. IDENTIFICATION			
UNIT	MAKE	MODEL	SERIAL NO.
AIRFRAME	described in item 1 above		
POWERPLANT			
PROPELLER			
APPLIANCE			
5. TYPE			
			REPAIR ALTERATION
			X
6. CO			
A. AGENCY'S NAME AND ADDRESS		B. KIND OF AGENCY	
FLORIDA AVIONICS, INC. 237 N. CRYSTAL LAKE DRIVE ORLANDO, FL 32803		U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	
		C. CERTIFICATE NO. 764-117	
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.			
DATE 03/18/89	SIGNATURE OF AUTHORIZED INDIVIDUAL John P. Harbison		
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: <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED			
BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	INSPECTION AUTHORIZATION
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT
DATE OF APPROVAL OR REJECTION 03/18/88	CERTIFICATE OR DESIGNATION NO. 764-117	SIGNATURE OF AUTHORIZED INDIVIDUAL John P. Harbison	



**NOTICE**

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

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

N2 3161  
INSTALLED NORTHSTAR M-1 LORAN IN RIGHT HAND RADIO PANEL BELOW THE KT-78A TRANSPONDER UTILIZING EXISTING MOUNTING RAILS INSTALLED BY PIPER AIRCRAFT FOR RADIO PANEL MOUNTING. THE M-1 IS COUPLED TO THE HSI THROUGH A TRANSFORMER ON LORAN COUPLING BOX. PRESENTATION IS OBTAINED BY A TUGGLE SWITCH WITH A BLUE INDICATOR LIGHT AS REQUIRED. QUOTES WHEN LORAN PRESENTATION IS ON THE HSI.

THE ABOVE INSTALLATION WAS PERFORMED IN ACCORDANCE WITH AC43.13-2, CHAPTER 2, PARAGRAPHS 21, 22, AND 23; AND CHAPTER 3, PARAGRAPHS 1 AND 37 AND MEETS REQUIREMENTS OF 90.145.

WIRING FOR THE ABOVE INSTALLATION WAS PERFORMED IN ACCORDANCE WITH AC43.13-1A, CHAPTER 11, SECTIONS 2, 3, 5, AND 7.

INTERFERENCE CHECK WAS PERFORMED AND NONE FOUND. ELECTRICAL LOAD WAS CHECKED IN ACCORDANCE WITH AC43.13-1A, CHAPTER 11, PARAGRAPHS 426-429.

THIS INSTALLATION MEETS THE REQUIREMENTS OF AC20.121 PARAGRAPH 6.A ITEMS 1, 2, 3, 4, AND 5.

WEIGHT AND BALANCE WAS RECALCULATED AND LOG BOOK ENTRIES WERE MADE.  
LAST ITEM.

FORWARDED BY AIRMAIL

11-8101050

11-8101050

FOURTH OF NOV  
1981

11-8101050

11-8101050

☐ ADDITIONAL SHEETS ARE ATTACHED



DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION			
STANDARD AIRWORTHINESS CERTIFICATE			
1. NATIONALITY AND REGISTRATION MARKS <b>N258RM</b>	2. MANUFACTURER <b>Piper</b>	3. AIRCRAFT SERIAL NUMBER <b>PA-44-180T</b>	4. CATED <b>Normal</b>
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, is shown to conform to the type certificate comprehensive and detailed airworthiness code or provided by Annex 2 to the Convention on International Civil Aviation, except as noted herein. Exceptions: <b>None</b>			
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 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.			
DATE OF ISSUANCE <b>DEC 02 1980</b>	FAA REPRESENTATIVE <b>C. W. CRESSWELL</b>	DESIGNATION NUMBER <b>DOA SO-1</b>	
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. 4N DATE: 8-1-83





US Department  
of Transportation  
Federal Aviation  
Administration

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

Form Approved  
OMB No. 2120-0020

For FAA Use Only

Office Identification

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 civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make Piper Aircraft Corp.	Model PA44-180T
	Serial No. 8107029	Nationality and Registration Mark N258RM
2. Owner	Name (As shown on registration certificate) Secker Phillip A Jr Secker Ronna M Hall Adrian G	Address (As shown on registration certificate) 835 E Placenta Del Mirador Tucson AZ 85718-1956

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 Hugh Wayne Roberts 6346 East Eli Drive Tucson, AZ 85710	B. Kind of Agency <input checked="" type="checkbox"/> U.S. Certified Mechanic <input type="checkbox"/> Foreign Certified Mechanic <input type="checkbox"/> Certified Repair Station <input type="checkbox"/> Manufacturer	C. Certificate No. IA 2680121
---	---	----------------------------------

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 March 21, 2002	Signature of Authorized Individual 
------------------------	--

7. Approval for Return To Service

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

BY	FAA Fit. Standards Inspector	Manufacturer	X	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection March 21, 2002		Certificate or Designation No. IA 2680121	Signature of Authorized Individual 		









US Department  
of Transportation  
Federal Aviation  
Administration

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

Form Approved

OMB No. 2120-0020

For FAA Use Only

Office Identification

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 of Federal Aviation Act of 1958).

1. Aircraft	Make  Piper	Model  PA-44-180T
	Serial No.  44-8107029	Nationality and Registration Mark U.S.A. N258RM
2. Owner	Name (As shown on registration certificate) B.S., LLC	Address (As shown on registration certificate) 1 Curry Drive Box 217 North Vernon, IN 47265

**3. For FAA Use Only**

The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR Part 43, Section 43.7.  
Date: 6-25-03 FAA Inspector AGL-IND-FSDO Michael J. Smith

**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 Muncie Aviation Company 5201 North Walnut Street Muncie, IN 47303-9778	B. Kind of Agency	C. Certificate No.
	U.S. Certificated Mechanic	AJVR135C
	Foreign Certificated Mechanic	
	X Certified Repair Station	
	Manufacturer	

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

Date 6-26-03	Signature of Authorized Individual Scott D. Picha <u>Scott D. Picha</u>
-----------------	--

**7. Approval for Return To Service**

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

BY	FAA Flt. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	X Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 6-26-03		Certificate or Designation No. AJVR135C	Signature of Authorized Individual Scott D. Picha <u>Scott D. Picha</u>	



# INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

A/C Make: Piper Turbo Seminole Model: PA-44-180T S/N: 44-8107029 Reg. #: N258RM

Revision: Original Date: 6-26-03

This sixteen-item checklist shows the Instructions for Continued Airworthiness (ICA), to comply with FAA Handbook Bulletin for Airworthiness (HBAW 98-18 Dated October 7, 1998), and is applicable to the aircraft listed above when a GARMIN International GDL49 Data Link Receiver with a RA Miller AV14 Data Link Antenna is installed.

ITEM	CHECKLIST INFORMATION
1.	<p><b>Introduction:</b> This document identifies the Instructions for Continued Airworthiness for the modification of the above aircraft by installation of a GDL49 with an AV14.</p> <p><b>Applicability:</b> Applies to aircraft altered by installation of GDL49 with an AV14.</p> <p><b>Definitions And Abbreviations:</b> None, N/A</p> <p><b>Precautions:</b> None, N/A</p> <p><b>Units Of Measurement:</b> None, N/A</p> <p><b>Referenced Publications:</b> Installation Manual 190-00231-00 Revision D dated May 19, 2003, Maintenance Manual 190-00231-01, Supplemental Type Certificate # SA01073WI Type Certificate # 3A16, 400 / 500 Series Weather Data Link Pilot's Guide, and P/N 190-00231-05 Revision A dated May 2002.</p> <p><b>Distribution:</b> This document is a permanent aircraft record.</p>
2.	<b>Description:</b> Installation of the GDL49 with interfaces to the AV14 and the aircraft's GNS430 Comm / Nav / GPS.
3.	<b>Control:</b> Refer to the Pilot's Guide.
4.	<b>Servicing Information:</b> N/A
5.	<b>Maintenance Instructions:</b> Maintenance of the GDL49 is 'on condition' only. Periodic maintenance is not required. Refer to the Maintenance Manual. Inspection guidelines are to be done in accordance with FAR 43, Appendix D, Paragraph (b)(2), (c)(1) & (7), and (i).
6.	<b>Troubleshooting Information:</b> Refer to the Maintenance Manual.
7.	<b>Removal And Replacement Information:</b> Refer to Sections 2 and 3 of the Installation Manual. If a component of the GDL49 System is removed and reinstalled a functional check should be conducted in accordance with Section 5 of the Installation Manual.
8.	<b>Diagrams:</b> Refer to Sections 3 and 4 of the Installation Manual.
9.	<b>Special Inspection Requirements:</b> N/A
10.	<b>Application Of Protective Treatments:</b> N/A
11.	<b>Data Relative To Structural Fasteners:</b> Antenna installation, removal, and replacement should be in accordance with applicable provisions of Advisory Circular 43.13-1B and 43.13-2A.
12.	<b>List Of Special Tools:</b> N/A
13.	<b>For Commuter Category Aircraft:</b> N/A
14.	<b>Recommended Overhaul Periods:</b> No additional overhaul time limitations.
15.	<b>Airworthiness Limitation Section:</b> No additional airworthiness limitations.
16.	<p><b>Revision:</b> A letter will be submitted to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement: "The attached revised / new Instructions for Continued Airworthiness (date _____) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (date _____)."</p> <p>Once the revision has been accepted a maintenance record entry will be made identifying the revision, its location, and date of the Form 337.</p>





US Department  
of Transportation  
Federal Aviation  
Administration

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

Form Approved  
OMB No. 2120-0020

**For FAA Use Only**

Office Identification

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 civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make Piper Aircraft Corp.	Model PA44-180T
	Serial No. 8107029	Nationality and Registration Mark N258RM
2. Owner	Name (As shown on registration certificate) Secker Phillip A Jr Secker Ronna M Hall Adrian G	Address (As shown on registration certificate) 835 E Placenta Del Mirador Tucson AZ 85718-1956

**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 Hugh Wayne Roberts 6346 East Eli Drive Tucson, AZ 85710	B. Kind of Agency <input checked="" type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input type="checkbox"/> Certificated Repair Station <input type="checkbox"/> Manufacturer	C. Certificate No. IA 2680121
---	--	----------------------------------

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 March 21, 2002	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	<input checked="" type="checkbox"/>	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection March 21, 2002		Certificate or Designation No. IA 2680121		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.)

March 21, 2002    N258RM    S/N 8107029    Hobbs 630.6    TT 2129.3

Installed RH and LH Bracket air filters P/N BA-3510 per STC # SA71GL dated April 17, 1995.

Instructions for servicing are one year or 200 hours. Replace when 50% of element is covered with forine material.

Negligible change in weight and balance.

-----END-----

☐ Additional Sheets Are Attached





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

Form Approved  
OMB No. 2120-0020

For FAA Use Only

Office Identification  
CE-01

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and 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 <b>PIPER</b>	Model <b>PA-44-180</b>
	Serial No. <b>44-8107029</b>	Nationality and Registration Mark <b>N258RM</b>
2. Owner	Name (As shown on registration certificate) <b>B S LLC</b>	Address (As shown on registration certificate) <b>PO Box 217 North Vernon, Indiana 47265-0217</b>

### 3. For FAA Use Only

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

MAY 19 2004

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

(date)

4. Unit Identification

### 5. Type

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

### 6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
TIM McCANDLESS, INC. 1274 B Olive Ave Hampton, IA 50441 R02D142L	<input type="checkbox"/> U. S. Certified Mechanic	RS # R02D142L
	<input type="checkbox"/> Foreign Certified Mechanic	Radio
	<input checked="" type="checkbox"/> Certified Repair Station	Limited instrument
	<input type="checkbox"/> Manufacturer	Limited Airframe

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 <b>10-May-2004</b>	Signature of Authorized Individual <i>Charles T. Geary</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	<input type="checkbox"/> FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	<input checked="" type="checkbox"/> FAA Designee	Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection <b>5/23/2004</b>		Certificate or Designation No. <b>R02D142L</b>	Signature of Authorized Individual <i>Charles T. Geary</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.)

MAY 19 2004

May-10-2004 N258RM PIPER PA-44-180 44-8107029

Installed Garmin AT, Inc. MX20 MFD TSO C110a and C113 In Accordance With STC# SA02154AK. Installed WSI InFlight Weather Briefing System (AV200) FAA/PMA and a Garmin GTX-330 Mode S TIS (traffic information system) transponder TSO C112. The installation references STC # SA01588NY-D and STC # ST01125WI as a basis for approval.

The Garmin AT MX20 is mounted in the pilot's normal field of view in the center instrument panel. The installation used manufacturer's mounting tray P/N 310-0429-00 and radio mounting rails at station 62.0. The AV-200 was mounted behind the aft baggage area using the manufacturers mounting tray P/N 305453-00 at station 183.0. The WSI antenna CI 1530-1 FAA/PMA was mounted on the top of the fuselage at station 102.0. The GTX-330 transponder was installed in the radio stack replacing the existing transponder. The installation uses the manufacturers mounting tray P/N 115-00294-00 at station 56.6. The GTX-330 Transponder is connected to a existing transponder antenna.

The MX20 is coupled serially to the existing GNS430 GPS/NAV/COM for position information, serially to the existing altitude digitizer for altitude information, and serially to the AV200 to display the weather information. The GTX-330 is interfaced serially to the existing GNS430 GPS/NAV/COM and MX-20 MFD to provide TIS (Traffic Information Service) information and the existing KMA-24 audio panel. The GTX 330 is connected to the existing altitude digitizer for altitude information.

The MX20 is protected by one individual circuit breaker on the avionics bus labeled MFD (3 Amp).

The WSI AV200 is protected by a individual circuit breaker labeled WSI (1Amp) on the avionics buss.

The GTX-330 is protected by a individual circuit breaker labeled XPDR (5Amp) on the avionics buss.

FAA approved Apollo MX20 Flight Manual Supplement dated Oct. 14, 2003 was added to the aircraft flight manual.

All equipment was installed in accordance with the Garmin AT MX20 STC Master Drawing List P/N 560-5050-05, Garmin AT MX20 Installation Manual P/N 560-1025-07 Rev. B., WSI AV200 installation manual P/N 305427-00, Garmin GTX 330 installation manual P/N 190-00207-02 Rev F, and applicable aircraft maintenance manual, and criteria contained within AC43.13-2A, chapter 2, paragraph 21 through 27. ELECTRICAL LOAD ANALYSIS was performed and meets the requirements of AC43.13-1B, Chapter 11, Section 3, paragraph 11-37 and AC43.13-2A, paragraph 27D. All affected systems were tested in accordance with AC43.13-1B, Chapter 11, Section 8, paragraph 11-107 and AC43.13-2A, paragraphs 10 and 21a, (6), and it was determined that there is no ADVERSE INTERFERENCE to or from the newly installed equipment. MATERIALS AND OTHER ELECTRICAL HARDWARE is of the type recommended by the aircraft manufacturer or MIL SPEC approved for aircraft use and meets the requirements of AC43.13-1B, Chapter 11, Section 4 paragraph 11-48 and 11-49. Electrical/Electronic WIRE TYPE was selected and installed in accordance with AC43.13-1B, Chapter 11, Section 6 and the manufactures installation manual. WIRE ROUTING, LACING AND TYING complies with AC43.13-1B, Chapter 11, Section 9. The EQUIPMENT LIST is amended and the WEIGHT AND BALANCE is computed and entered in the aircraft records in accordance with AC43.13-1B, Chapter 10, Section 2, paragraphs 10-16 and 10-20, AC43.13-2A chapter 1, paragraphs 9 and 12.

☒ 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.)

May-10-2004 N258RM PIPER PA-44-180 44-8107029

MAY 19 2004

Instructions for Continued Airworthiness for the installation of WSI AV200, Garmin AT MX20 MFD, and Garmin GTX-330 Mode S and TIS Transponder.

1. Introduction: This alteration consists of the installation of the WSI InFlight Weather Briefing System, Garmin AT MX20 MFD, and optional Garmin GTX-330 Mode S and TIS Transponder.
2. Description: The Garmin AT MX20 is coupled serially to the existing GNS430 GPS/NAV/COM for position information, serially to the existing altitude digitizer for altitude information, and serially to the AV200 to display the weather information. The GTX-330 is interfaced serially to the existing GNS430 GPS/NAV/COM and MX-20 MFD to provide TIS (Traffic Information Service) information and the existing KMA-24 audio panel. The GTX 330 is connected to the existing altitude digitizer for altitude information. For further descriptions see aircraft flight manual supplements.
3. Control, operation information: Information is located in AV200 user guide P/N 305424-00 or later approved version. Information for the GTX-330 is located in aircraft flight manual supplements, Pilot's Guide P/N 190-00207-00 Rev. A or later approved version, and Garmin Display Interfaces Addendum P/N 190-00140-10 Rev. D or later approved version. Information for the Garmin AT MX20 MFD is located in aircraft flight manual supplement and pilot guide P/N 560-1026-05C.
4. Service information: There is no regular servicing required.
5. Maintenance Instructions: Repair of the WSI AV200 is performed at authorized service centers. For installation problems consult the WSI AV200 installation manual P/N 305427-00 or later. Repair of the Garmin GTX-330 is performed at authorized service centers. For installation problems consult the Garmin GTX-330 installation manual P/N 190-2007-02 Rev B or later. Repair of the Apollo MX20 is performed at authorized service centers. For installation problems consult the Garmin AT MX20 installation manual P/N 560-1025-07 Rev. B.
6. Troubleshooting information: Contact a authorized service center.
7. Removal and replacement information: Consult the Garmin AT MX20 installation manual P/N 560-1025-07 Rev. B. or later. Consult the WSI AV200 installation manual P/N 305427-00 or later. Consult the Garmin GTX-330 installation manual P/N 190-2007-02 Rev B or later.
8. Diagrams: Installation diagrams are available in the WSI AV200 installation manual P/N 305427-00 or later. Installation diagrams are available in the Garmin GTX-330 installation manual P/N 190-2007-02 Rev B or later. Installation diagrams are available in the Garmin AT MX20 installation manual P/N 190-2007-02 Rev B or later.
9. Special inspection requirements: N/A
10. Application of protective treatments: N/A
11. Data: No special data required.
12. Special tools: No special tools required.
13. For commuter category aircraft: N/A
14. Recommended overhaul periods: No additional overhaul time limitations.
15. Airworthiness Limitation Section: See Aircraft Flight Manual Supplements, Limitation section.
16. Revision: To Revise These Instructions for Continued Airworthiness a letter will be submitted to the local FSDO with a copy of the revised FAA form 337 and revised ICA.

END

☐ ADDITIONAL SHEETS ARE ATTACHED









US Department  
of Transportation  
Federal Aviation  
Administration

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

Form Approved  
OMB No. 2120-0020

For FAA Use Only  
Office Identification

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 civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make <b>PIPER</b>	Model <b>PA 44-180T</b>
	Serial No. <b>44-8107029</b>	Nationality and Registration Mark <b>N258RM</b>
2. Owner	Name (As shown on registration certificate) <b>J&amp;J Leasing</b>	Address (As shown on registration certificate) <b>6543 Crystal LN Prescott AZ 86301</b>

**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**

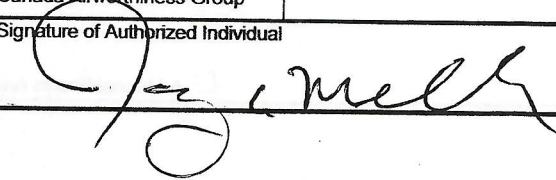
A. Agency's Name and Address <b>Granite Mountain Aviation Serv. 6543 Crystal LN, I Prescott AZ86301 Jeff Miller</b>	B. Kind of Agency <input checked="" type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input type="checkbox"/> Certificated Repair Station <input type="checkbox"/> Manufacturer	C. Certificate No. <b>526475413 IA</b>
--	--	---

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 <b>8/18/05</b>	Signature of Authorized Individual 
------------------------	--

**7. Approval for Return To Service**

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

BY	FAA Fit. Standards Inspector	Manufacturer	<input checked="" type="checkbox"/> Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection <b>8/18/05</b>		Certificate or Designation No. <b>526475413IA</b>	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.)

8/18/05 N258RM S/N-44-8107029 PA 44-180T

Installed hourmeter airspeed switch in accordance with Avalska Inc. STC, SA02168AK  
Hourmeter airspeed Switch Master Descriptive Data List, Drawing No. 99-AVAK006-01,  
dated December 17, 1999, or later FAA approved revision.

-----END-----

☐ Additional Sheets Are Attached



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

*Number* SA02168AK

*This Certificate issued to* AVALaska, Inc.  
4340 Postmark Dr.  
Anchorage, AK 99502

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

*Original Product Type Certificate Number:* See attached FAA Approved Model List (AML)  
*Make:* No. SA02168AK, dated January 11, 2001, or  
*Model:* later FAA approved revision for a list of  
approved airplane models and applicable  
airworthiness regulations.

*Description of Type Design Change:* Installation of hourmeter airspeed switch in accordance with AVALASKA, INC., Hourmeter Airspeed Switch Master Descriptive Data List, Drawing No. 99-AVAK006-01, dated December 17, 1999, or later FAA approved revision.

*Limitations and Conditions:* Compatibility of this design change with previously approved modifications must be determined by the installer. This approval is applicable to unpressurized aircraft only. Pressurized aircraft on the approved model list must have the pressurization system deactivated in accordance with FAA approved instructions.

If the holder agrees to permit another person to use this Certificate to alter the products, then the holder shall give that person written evidence of that permission.

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

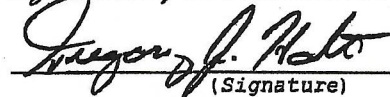
*Date of application:* December 29, 1999

*Date reissued:*

*Date of issuance:* January 26, 2001

*Date amended:*

*By direction of the Administrator*

  
(Signature)

Gregory J. Holt  
Manager  
Anchorage Aircraft Certification Office

(Title)



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





FAA APPROVED MODEL LIST (AML) SA02168AK  
FOR  
AVALASKA, INC.

STC Issue date: December 11, 2000

AIRPLANE MAKE	AIRPLANE MODEL	TYPE CERTIFI- CATE NUMBER	CERTIFICATION BASIS FOR ALTERATION
Cessna	C-145, C-165	A-701	CAR 4a
Cessna	120, 140	A-768	CAR 4a
Cessna	140A	5A2	CAR 3 (CAR 4a)
Cessna	150, 150A, 150B, 150C, 150D, 150E, 150F, 150G, 150H, 150J, 150K, 150L, 150M, 150N, 150P, 150Q, 150R, 150S, 150T, 150U, 150V, 150W, 150X, 150Y, 150Z, 151, 151A, 151B, 151C, 151D, 151E, 151F, 151G, 151H, 151J, 151K, 151L, 151M, 151N, 151P, 151Q, 151R, 151S, 151T, 151U, 151V, 151W, 151X, 151Y, 151Z, 152, 152A, 152B, 152C, 152D, 152E, 152F, 152G, 152H, 152J, 152K, 152L, 152M, 152N, 152P, 152Q, 152R, 152S	3A19	CAR 3
Cessna	170, 170A, 170B	A-799	CAR 3
Cessna	172, 172A, 172B, 172C, 172D, 172E, 172F, 172G, 172H, 172J, 172K, 172L, 172M, 172N, 172P, 172Q, 172R, 172S	3A12	CAR 3 (FAR23)
Cessna	172RG, P172D, R172E, R172F, R172G, R172H, R172J, R172K, 175, 175A, 175B, 175C	3A17	CAR 3
Cessna	177, 177A, 177B	A13CE	FAR 23
Cessna	177RG	A20CE	FAR 23
Cessna	180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, 180K	5A6	CAR 3
Cessna	182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, 182S, 182T, 182U, 182V, 182W, 182X, 182Y, 182Z, 183, 183A, 183B, 183C, 183D, 183E, 183F, 183G, 183H, 183J, 183K, 183L, 183M, 183N, 183P, 183Q, 183R, 183S, 183T, 183U, 183V, 183W, 183X, 183Y, 183Z, 184, 184A, 184B, 184C, 184D, 184E, 184F, 184G, 184H, 184J, 184K, 184L, 184M, 184N, 184P, 184Q, 184R, 184S, 184T, 184U, 184V, 184W, 184X, 184Y, 184Z, 185, 185A, 185B, 185C, 185D, 185E, 185F, 185G, 185H, 185J, 185K, 185L, 185M, 185N, 185P, 185Q, 185R, 185S, 185T, 185U, 185V, 185W, 185X, 185Y, 185Z, 186, 186A, 186B, 186C, 186D, 186E, 186F, 186G, 186H, 186J, 186K, 186L, 186M, 186N, 186P, 186Q, 186R, 186S, 186T, 186U, 186V, 186W, 186X, 186Y, 186Z, 187, 187A, 187B, 187C, 187D, 187E, 187F, 187G, 187H, 187J, 187K, 187L, 187M, 187N, 187P, 187Q, 187R, 187S, 187T, 187U, 187V, 187W, 187X, 187Y, 187Z, 188, 188A, 188B, 188C, 188D, 188E, 188F, 188G, 188H, 188J, 188K, 188L, 188M, 188N, 188P, 188Q, 188R, 188S, 188T, 188U, 188V, 188W, 188X, 188Y, 188Z, 189, 189A, 189B, 189C, 189D, 189E, 189F, 189G, 189H, 189J, 189K, 189L, 189M, 189N, 189P, 189Q, 189R, 189S, 189T, 189U, 189V, 189W, 189X, 189Y, 189Z, 190, 190A, 190B, 190C, 190D, 190E, 190F, 190G, 190H, 190J, 190K, 190L, 190M, 190N, 190P, 190Q, 190R, 190S, 190T, 190U, 190V, 190W, 190X, 190Y, 190Z, 191, 191A, 191B, 191C, 191D, 191E, 191F, 191G, 191H, 191J, 191K, 191L, 191M, 191N, 191P, 191Q, 191R, 191S, 191T, 191U, 191V, 191W, 191X, 191Y, 191Z, 192, 192A, 192B, 192C, 192D, 192E, 192F, 192G, 192H, 192J, 192K, 192L, 192M, 192N, 192P, 192Q, 192R, 192S, 192T, 192U, 192V, 192W, 192X, 192Y, 192Z, 193, 193A, 193B, 193C, 193D, 193E, 193F, 193G, 193H, 193J, 193K, 193L, 193M, 193N, 193P, 193Q, 193R, 193S, 193T, 193U, 193V, 193W, 193X, 193Y, 193Z, 194, 194A, 194B, 194C, 194D, 194E, 194F, 194G, 194H, 194J, 194K, 194L, 194M, 194N, 194P, 194Q, 194R, 194S, 194T, 194U, 194V, 194W, 194X, 194Y, 194Z, 195, 195A, 195B, 195C, 195D, 195E, 195F, 195G, 195H, 195J, 195K, 195L, 195M, 195N, 195P, 195Q, 195R, 195S, 195T, 195U, 195V, 195W, 195X, 195Y, 195Z, 196, 196A, 196B, 196C, 196D, 196E, 196F, 196G, 196H, 196J, 196K, 196L, 196M, 196N, 196P, 196Q, 196R, 196S, 196T, 196U, 196V, 196W, 196X, 196Y, 196Z, 197, 197A, 197B, 197C, 197D, 197E, 197F, 197G, 197H, 197J, 197K, 197L, 197M, 197N, 197P, 197Q, 197R, 197S, 197T, 197U, 197V, 197W, 197X, 197Y, 197Z, 198, 198A, 198B, 198C, 198D, 198E, 198F, 198G, 198H, 198J, 198K, 198L, 198M, 198N, 198P, 198Q, 198R, 198S, 198T, 198U, 198V, 198W, 198X, 198Y, 198Z, 199, 199A, 199B, 199C, 199D, 199E, 199F, 199G, 199H, 199J, 199K, 199L, 199M, 199N, 199P, 199Q, 199R, 199S, 199T, 199U, 199V, 199W, 199X, 199Y, 199Z, 200, 200A, 200B, 200C, 200D, 200E, 200F, 200G, 200H, 200J, 200K, 200L, 200M, 200N, 200P, 200Q, 200R, 200S, 200T, 200U, 200V, 200W, 200X, 200Y, 200Z, 201, 201A, 201B, 201C, 201D, 201E, 201F, 201G, 201H, 201J, 201K, 201L, 201M, 201N, 201P, 201Q, 201R, 201S, 201T, 201U, 201V, 201W, 201X, 201Y, 201Z, 202, 202A, 202B, 202C, 202D, 202E, 202F, 202G, 202H, 202J, 202K, 202L, 202M, 202N, 202P, 202Q, 202R, 202S, 202T, 202U, 202V, 202W, 202X, 202Y, 202Z, 203, 203A, 203B, 203C, 203D, 203E, 203F, 203G, 203H, 203J, 203K, 203L, 203M, 203N, 203P, 203Q, 203R, 203S, 203T, 203U, 203V, 203W, 203X, 203Y, 203Z, 204, 204A, 204B, 204C, 204D, 204E, 204F, 204G, 204H, 204J, 204K, 204L, 204M, 204N, 204P, 204Q, 204R, 204S, 204T, 204U, 204V, 204W, 204X, 204Y, 204Z, 205, 205A, 205B, 205C, 205D, 205E, 205F, 205G, 205H, 205J, 205K, 205L, 205M, 205N, 205P, 205Q, 205R, 205S, 205T, 205U, 205V, 205W, 205X, 205Y, 205Z, 206, 206A, 206B, 206C, 206D, 206E, 206F, 206G, 206H, 206J, 206K, 206L, 206M, 206N, 206P, 206Q, 206R, 206S, 206T, 206U, 206V, 206W, 206X, 206Y, 206Z, 207, 207A, 207B, 207C, 207D, 207E, 207F, 207G, 207H, 207J, 207K, 207L, 207M, 207N, 207P, 207Q, 207R, 207S, 207T, 207U, 207V, 207W, 207X, 207Y, 207Z, 208, 208A, 208B, 208C, 208D, 208E, 208F, 208G, 208H, 208J, 208K, 208L, 208M, 208N, 208P, 208Q, 208R, 208S, 208T, 208U, 208V, 208W, 208X, 208Y, 208Z, 209, 209A, 209B, 209C, 209D, 209E, 209F, 209G, 209H, 209J, 209K, 209L, 209M, 209N, 209P, 209Q, 209R, 209S, 209T, 209U, 209V, 209W, 209X, 209Y, 209Z, 210, 210A, 210B, 210C, 210D, 210E, 210F, 210G, 210H, 210J, 210K, 210L, 210M, 210N, 210P, 210Q, 210R, 210S, 210T, 210U, 210V, 210W, 210X, 210Y, 210Z, 211, 211A, 211B, 211C, 211D, 211E, 211F, 211G, 211H, 211J, 211K, 211L, 211M, 211N, 211P, 211Q, 211R, 211S, 211T, 211U, 211V, 211W, 211X, 211Y, 211Z, 212, 212A, 212B, 212C, 212D, 212E, 212F, 212G, 212H, 212J, 212K, 212L, 212M, 212N, 212P, 212Q, 212R, 212S, 212T, 212U, 212V, 212W, 212X, 212Y, 212Z, 213, 213A, 213B, 213C, 213D, 213E, 213F, 213G, 213H, 213J, 213K, 213L, 213M, 213N, 213P, 213Q, 213R, 213S, 213T, 213U, 213V, 213W, 213X, 213Y, 213Z, 214, 214A, 214B, 214C, 214D, 214E, 214F, 214G, 214H, 214J, 214K, 214L, 214M, 214N, 214P, 214Q, 214R, 214S, 214T, 214U, 214V, 214W, 214X, 214Y, 214Z, 215, 215A, 215B, 215C, 215D, 215E, 215F, 215G, 215H, 215J, 215K, 215L, 215M, 215N, 215P, 215Q, 215R, 215S, 215T, 215U, 215V, 215W, 215X, 215Y, 215Z, 216, 216A, 216B, 216C, 216D, 216E, 216F, 216G, 216H, 216J, 216K, 216L, 216M, 216N, 216P, 216Q, 216R, 216S, 216T, 216U, 216V, 216W, 216X, 216Y, 216Z, 217, 217A, 217B, 217C, 217D, 217E, 217F, 217G, 217H, 217J, 217K, 217L, 217M, 217N, 217P, 217Q, 217R, 217S, 217T, 217U, 217V, 217W, 217X, 217Y, 217Z, 218, 218A, 218B, 218C, 218D, 218E, 218F, 218G, 218H, 218J, 218K, 218L, 218M, 218N, 218P, 218Q, 218R, 218S, 218T, 218U, 218V, 218W, 218X, 218Y, 218Z, 219, 219A, 219B, 219C, 219D, 219E, 219F, 219G, 219H, 219J, 219K, 219L, 219M, 219N, 219P, 219Q, 219R, 219S, 219T, 219U, 219V, 219W, 219X, 219Y, 219Z, 220, 220A, 220B, 220C, 220D, 220E, 220F, 220G, 220H, 220J, 220K, 220L, 220M, 220N, 220P, 220Q, 220R, 220S, 220T, 220U, 220V, 220W, 220X, 220Y, 220Z, 221, 221A, 221B, 221C, 221D, 221E, 221F, 221G, 221H, 221J, 221K, 221L, 221M, 221N, 221P, 221Q, 221R, 221S, 221T, 221U, 221V, 221W, 221X, 221Y, 221Z, 222, 222A, 222B, 222C, 222D, 222E, 222F, 222G, 222H, 222J, 222K, 222L, 222M, 222N, 222P, 222Q, 222R, 222S, 222T, 222U, 222V, 222W, 222X, 222Y, 222Z, 223, 223A, 223B, 223C, 223D, 223E, 223F, 223G, 223H, 223J, 223K, 223L, 223M, 223N, 223P, 223Q, 223R, 223S, 223T, 223U, 223V, 223W, 223X, 223Y, 223Z, 224, 224A, 224B, 224C, 224D, 224E, 224F, 224G, 224H, 224J, 224K, 224L, 224M, 224N, 224P, 224Q, 224R, 224S, 224T, 224U, 224V, 224W, 224X, 224Y, 224Z, 225, 225A, 225B, 225C, 225D, 225E, 225F, 225G, 225H, 225J, 225K, 225L, 225M, 225N, 225P, 225Q, 225R, 225S, 225T, 225U, 225V, 225W, 225X, 225Y, 225Z, 226, 226A, 226B, 226C, 226D, 226E, 226F, 226G, 226H, 226J, 226K, 226L, 226M, 226N, 226P, 226Q, 226R, 226S, 226T, 226U, 226V, 226W, 226X, 226Y, 226Z, 227, 227A, 227B, 227C, 227D, 227E, 227F, 227G, 227H, 227J, 227K, 227L, 227M, 227N, 227P, 227Q, 227R, 227S, 227T, 227U, 227V, 227W, 227X, 227Y, 227Z, 228, 228A, 228B, 228C, 228D, 228E, 228F, 228G, 228H, 228J, 228K, 228L, 228M, 228N, 228P, 228Q, 228R, 228S, 228T, 228U, 228V, 228W, 228X, 228Y, 228Z, 229, 229A, 229B, 229C, 229D, 229E, 229F, 229G, 229H, 229J, 229K, 229L, 229M, 229N, 229P, 229Q, 229R, 229S, 229T, 229U, 229V, 229W, 229X, 229Y, 229Z, 230, 230A, 230B, 230C, 230D, 230E, 230F, 230G, 230H, 230J, 230K, 230L, 230M, 230N, 230P, 230Q, 230R, 230S, 230T, 230U, 230V, 230W, 230X, 230Y, 230Z, 231, 231A, 231B, 231C, 231D, 231E, 231F, 231G, 231H, 231J, 231K, 231L, 231M, 231N, 231P, 231Q, 231R, 231S, 231T, 231U, 231V, 231W, 231X, 231Y, 231Z, 232, 232A, 232B, 232C, 232D, 232E, 232F, 232G, 232H, 232J, 232K, 232L, 232M, 232N, 232P, 232Q, 232R, 232S, 232T, 232U, 232V, 232W, 232X, 232Y, 232Z, 233, 233A, 233B, 233C, 233D, 233E, 233F, 233G, 233H, 233J, 233K, 233L, 233M, 233N, 233P, 233Q, 233R, 233S, 233T, 233U, 233V, 233W, 233X, 233Y, 233Z, 234, 234A, 234B, 234C, 234D, 234E, 234F, 234G, 234H, 234J, 234K, 234L, 234M, 234N, 234P, 234Q, 234R, 234S, 234T, 234U, 234V, 234W, 234X, 234Y, 234Z, 235, 235A, 235B, 235C, 235D, 235E, 235F, 235G, 235H, 235J, 235K, 235L, 235M, 235N, 235P, 235Q, 235R, 235S, 235T, 235U, 235V, 235W, 235X, 235Y, 235Z, 236, 236A, 236B, 236C, 236D, 236E, 236F, 236G, 236H, 236J, 236K, 236L, 236M, 236N, 236P, 236Q, 236R, 236S, 236T, 236U, 236V, 236W, 236X, 236Y, 236Z, 237, 237A, 237B, 237C, 237D, 237E, 237F, 237G, 237H, 237J, 237K, 237L, 237M, 237N, 237P, 237Q, 237R, 237S, 237T, 237U, 237V, 237W, 237X, 237Y, 237Z, 238, 238A, 238B, 238C, 238D, 238E, 238F, 238G, 238H, 238J, 238K, 238L, 238M, 238N, 238P, 238Q, 238R, 238S, 238T, 238U, 238V, 238W, 238X, 238Y, 238Z, 239, 239A, 239B, 239C, 239D, 239E, 239F, 239G, 239H, 239J, 239K, 239L, 239M, 239N, 239P, 239Q, 239R, 239S, 239T, 239U, 239V, 239W, 239X, 239Y, 239Z, 240, 240A, 240B, 240C, 240D, 240E, 240F, 240G, 240H, 240J, 240K, 240L, 240M, 240N, 240P, 240Q, 240R, 240S, 240T, 240U, 240V, 240W, 240X, 240Y, 240Z, 241, 241A, 241B, 241C, 241D, 241E, 241F, 241G, 241H, 241J, 241K, 241L, 241M, 241N, 241P, 241Q, 241R, 241S, 241T, 241U, 241V, 241W, 241X, 241Y, 241Z, 242, 242A, 242B, 242C, 242D, 242E, 242F, 242G, 242H, 242J, 242K, 242L, 242M, 242N, 242P, 242Q, 242R, 242S, 242T, 242U, 242V, 242W, 242X, 242Y, 242Z, 243, 243A, 243B, 243C, 243D, 243E, 243F, 243G, 243H, 243J, 243K, 243L, 243M, 243N, 243P, 243Q, 243R, 243S, 243T, 243U, 243V, 243W, 243X, 243Y, 243Z, 244, 244A, 244B, 244C, 244D, 244E, 244F, 244G, 244H, 244J, 244K, 244L, 244M, 244N, 244P, 244Q, 244R, 244S, 244T, 244U, 244V, 244W, 244X, 244Y, 244Z, 245, 245A, 245B, 245C, 245D, 245E, 245F, 245G, 245H, 245J, 245K, 245L, 245M, 245N, 245P, 245Q, 245R, 245S, 245T, 245U, 245V, 245W, 245X, 245Y, 245Z, 246, 246A, 246B, 246C, 246D, 246E, 246F, 246G, 246H, 246J, 246K, 246L, 246M, 246N, 246P, 246Q, 246R, 246S, 246T, 246U, 246V, 246W, 246X, 246Y, 246Z, 247, 247A, 247B, 247C, 247D, 247E, 247F, 247G, 247H, 247J, 247K, 247L, 247M, 247N, 247P, 247Q, 247R, 247S, 247T, 247U, 247V, 247W, 247X, 247Y, 247Z, 248, 248A, 248B, 248C, 248D, 248E, 248F, 248G, 248H, 248J, 248K, 248L, 248M, 248N, 248P, 248Q, 248R, 248S, 248T, 248U, 248V, 248W, 248X, 248Y, 248Z, 249, 249A, 249B, 249C, 249D, 249E, 249F, 249G, 249H, 249J, 249K, 249L, 249M, 249N, 249P, 249Q, 249R, 249S, 249T, 249U, 249V, 249W, 249X, 249Y, 249Z, 250, 250A, 250B, 250C, 250D, 250E, 250F, 250G, 250H, 250J, 250K, 250L, 250M, 250N, 250P, 250Q, 250R, 250S, 250T, 250U, 250V, 250W, 250X, 250Y, 250Z, 251, 251A, 251B, 251C, 251D, 251E, 251F, 251G, 251H, 251J, 251K, 251L, 251M, 251N, 251P, 251Q, 251R, 251S, 251T, 251U, 251V, 251W, 251X, 251Y, 251Z, 252, 252A, 252B, 252C, 252D, 252E, 252F, 252G, 252H, 252J, 252K, 252L, 252M, 252N, 252P, 252Q, 252R, 252S, 252T, 252U, 252V, 252W, 252X, 252Y, 252Z, 253, 253A, 253B, 253C, 253D, 253E, 253F, 253G, 253H, 253J, 253K, 253L, 253M, 253N, 253P, 253Q, 253R, 253S, 253T, 253U, 253V, 253W, 253X, 253Y, 253Z, 254, 254A, 254B, 254C, 254D, 254E, 254F, 254G, 254H, 254J, 254K, 254L, 254M, 254N, 254P, 254Q, 254R, 254S, 254T, 254U, 254V, 254W, 254X, 254Y, 254Z, 255, 255A, 255B, 255C, 255D, 255E, 255F, 255G, 255H, 255J, 255K, 255L, 255M, 255N, 255P, 255Q, 255R, 255S, 255T, 255U, 255V, 255W, 255X, 255Y, 255Z, 256, 256A, 256B, 256C, 256D, 256E, 256F, 256G, 256H, 256J, 256K, 256L, 256M, 256N, 256		



FAA APPROVED MODEL LIST (AML) SA02168AK FOR AVALASKA, INC.			
STC Issue date: December 11, 2000			
AIRPLANE MAKE	AIRPLANE MODEL	TYPE CERTIFI- CATE NUMBER	CERTIFICATION BASIS FOR ALTERATION

Raytheon	19A, B19, M19A, 23, A23, A23A, A23-19, A23-24, B23, C23, A24, A24R, B24R, C24R	A1CE	CAR 3
Raytheon	T34(T-34C-1)(34C)	A26CE	FAR 23
Raytheon	35, A35, B35, C35, D35, E35, F35, G35, 35R	A-777	CAR 3
Raytheon	H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C, F33, F33A, F33C, G33, 36, A36, A36TC, B36TC	3A15	CAR 3 FAR 23 (A36TC, B36TC ONLY)
Raytheon	45(TY-34), A45(T-34A,B-45), D-45(T-34B)	5A3	CAR 3
Raytheon	95, B95, B95A, D95A, E95, 95-55, 95-A55, 95-B55, 95-B55A, 95-B55B(T-42A) 95-C55, 95-C55A, D55, D55A, E55, E55A, 56TC, A56TC, 58, 58A	3A16	CAR 3
Raytheon	58P, 58PA, 58TC, 58TCA	A23CE	FAR 23
Raytheon	76	A29CE	FAR 23
Raytheon	77	A30CE	FAR 23
Raytheon	D18C, D18S, E18S-9700, G18S, H18	A-765	CAR 3
Raytheon	60, A60, B60	A12CE	FAR 23
Raytheon	50(L-23A), B50(L-23B,L-23D,RL-23D) C50, D50(L-23E), D50A, D50B, D50C, D50E, D50E-5990, E50 (L-23D, RL-23D), F50, G50, H50, J50	5A4	CAR 3
American Champion Aircraft Corp.	7AC, 7ACA, S7AC(L-16A), 7BCM(L-16B), 7CCM, S7CCM, 7DC, S7DC, 7EC, S7EC, 7ECA, 7FC, 7GC, 7GCA, 7GCAA, 7GCB, 7GCB, 7GCB, 7GCB, 7HC, 7JC, 7KC, 7KCAB	A-759	CAR 4a
American Champion Aircraft Corp.	8KCAB, 8GCBC	A21CE	FAR 23
Bellanca	14-19, 14-19-2, 14-19-3, 14-19-3A, 17-30, 17-31, 17-31TC	1A3	CAR 03
Bellanca	17-30A, 17-31A, 17-31ATC	A18CE	FAR 23
Bellanca	14-13, 14-13-2, 14-13-3, 14-13-3W	A-773	CAR 4a
Bellanca	CH-300 PACEMAKER	ATC 129	CAR 4a
Bellanca	300-W PACEMAKER	ATC 328	CAR 4a

Page 5 of 11

FAA APPROVED MODEL LIST (AML) SA02168AK FOR AVALASKA, INC.			
STC Issue date: December 11, 2000			
AIRPLANE MAKE	AIRPLANE MODEL	TYPE CERTIFI- CATE NUMBER	CERTIFICATION BASIS FOR ALTERATION

Britten Norman Ltd.	BN-2A MK.III, BN-2A MK.III-2, BN-2A MK.III-3	A29EU	FAR 21.29 (FAR 21.29)
American Champion Aircraft Corp.	11AC, S11AC, 11BC, S11BC	A-761	CAR 4a
American Champion Aircraft Corp.	11CC, S11CC	A-796	CAR 3
American Champion Aircraft Corp.	402	A3CE	CAR 3
Revo Inc.	Colonial C-1, C-2, Lake LA-4, LA-4A, LA-4P, LA-4-200, LA-4-250	1A13	FAR 23
Henry E. Williams	DH82A	A5PC	FAR 21.29
Cliff Robertson	DH82A	A8EU	FAR 21.29
Civil Air Patrol Inc.	L20A	AR-33	CAR 8
Bombardier Inc.	DHC-6, DHC-6-1, DHC-6-100, DHC-6-200, DHC-6-300	A9EA	CAR 3
De Havilland Aircraft	DHC-2, DHC-2 Mk I, DHC-2 Mk II, DHC-2 Mk III	A-806	CAR 10
Bombardier Inc.	DHC-3	A-815	CAR 10 (CAR 3)
Bombardier Inc.	DHC-4, DHC-4A	1A19	CAR 10
Diamond Aircraft	DA20-A1, DA20-C1	TA4CH	FAR 23
Dornier	Do27Q6	A81N	CAR 10 (CAR 3)
Dornier	Do 28D, Do 28D-1, 228-100, 228-101, 228-200, 228-201, 228-202, 228-212	A16EU	FAR 23
Frakes Aviation	G-73	A-783	CAR 4a

Page 6 of 11

FAA APPROVED MODEL LIST (AML) SA02168AK FOR AVALASKA, INC.			
STC Issue date: December 11, 2000			
AIRPLANE MAKE	AIRPLANE MODEL	TYPE CERTIFI- CATE NUMBER	CERTIFICATION BASIS FOR ALTERATION

Grunman	G21, G21A	654	Aero Bul.7A
Twin Commander Aircraft Corp.	500, 500-A, 500-B, 500-U, 500-S, 560, 560-A, 560-E	6A1	CAR 3
Twin Commander Aircraft Corp.	560F, 680, 680-E, 680-F, 680FL, 680FL(P), 680T, 680V, 680W, 681, 685, 690, 690A, 690B, 690C, 690D, 695, 695A, 695B, 720	2A4	CAR 3
Gulfstream Aerospace	111	A11SO	FAR 23
Commander Aircraft Co.	112, 112TC, 112B, 112TCA, 114, 114A, 114B, 114TC	A12SO	FAR 23
Twin Commander Aircraft Corp.	700	A12SW	FAR 23
Tiger Aircraft LLC	AA-5, AA-5A, AA-5B, AG-5B	A16EA	FAR 23
Tiger Aircraft LLC	AA-1, AA-1A, AA-1B, AA-1C	A11EA	CAR 3
Alliance Aircraft Group LLC	H-250, H-295(USAF U-10D), HT-295, H-391(USAF YL-24), H-391B, H-395(USAF L-28A), H395B, H700, H800	1A8	CAR 3
Israel Aircraft Industries Ltd.	ARAVA 101, 101B	A32EU	FAR 23
Lockheed Aircraft	12-A	ATC 616	AERO BULLETIN 7A
The Don Luscombe Aviation History Foundation	8, 8A, 8B, 8C, 8D, 8E, 8F, T-8F	A-694	CAR 4a

Page 7 of 11

FAA APPROVED MODEL LIST (AML) SA02168AK FOR AVALASKA, INC.			
STC Issue date: December 11, 2000			
AIRPLANE MAKE	AIRPLANE MODEL	TYPE CERTIFI- CATE NUMBER	CERTIFICATION BASIS FOR ALTERATION

Maule Aerospace Technology, Inc	BEE DEE M-4, M-4, M-4C, M-4S, M-4T, M-4-180C, M-4-180S, M-4-180T, M-4-210, M-4-210C, M-4-210S, M-4-210T, M-4-220, M-4-220C, M-4-220S, M-4-220T, M-5-180C, M-5-200, M-5-210C, M-5-210TC, M-5-220C, M-5-235C, M-6-180, M-6-235, M-7-235, MX-7-180, MX-7-235, MX-7-420, MXT-7-180, MT-7-235, M-8-235, MX-7-160, MXT-7-160, MX-7-180A, MXT-7-180A, MX-7-180B, MXT-7-720, M-7-235B, M-7-235A, M-7-235C, MX-7-180C, M-7-260, M-7-260C, M-7-420AC, MX-7-160C, MX-7-180AC	3A23	CAR 3
Central Air Services	C-54A, C-54B, C-54D, C-54E, C-54G	A36CE	FAR 21.25
Gene C. Day McDonnell Douglas	R4D-8	A28SO	FAR 21
	C-54DC(Army C-54,Navy R5D) C54A-DC (Army C-54A,Navy R5D-1) C54B-DC (Army C-54B,Navy R5D-2) C54D-DC(Army C-54D,Navy R5D-3) C54E-DC(Army C-54E,Navy R5D-4) C54G-DC(Army C-54G,Navy R5D-5) DC-4	A-762	CAR 4a, CAR 4b
McDonnell Douglas	DC3-G102, DC3-G1032A(Army C-49E, C-50, C-50A, C-50B, C-50C, C-50D, C-51) DC3-G103A, DC3-G202A (Army C-49, C-49A, C-49B, C-49C, C-49D, C-49I, C-49K, Navy R4D-2)	A-618	AERO BULLETIN 7a
McDonnell Douglas	DC3A-SCG, DC3A-SC3G, DC3A-S1CG, DC3A-S1C3G (Army C-41, C-41A, C-48, C-48A, C-52, C-52A, C-52B, C-52C, C-53, C-53B, C-53C, C-53D, C-68, Navy R4D-3, R4D-4), DC3A-S4C4G, DC3C-SC3G, DC3C-S1C3G, DC3C-S4C4G(Army C-47, C-47A, Navy R4D-1, R4D-5) DC3C-R-1830-90C (Army C-47B, Navy R4D-6) DC3D-R-1830-90C (Army C-117A)	A-669	AERO BULLETIN 7a

Page 8 of 11



FAA APPROVED MODEL LIST (AML) SA02168AK  
FOR  
AVALASKA, INC.

STC Issue date: December 11, 2000

AIRPLANE MAKE	AIRPLANE MODEL	TYPE CERTIFI- CATE NUMBER	CERTIFICATION BASIS FOR ALTERATION
McDonnell Douglas	SUPER DC-3, R4D-8, R4D-8Z	6A2	CAR 4b
McDonnell Douglas	DC-6	A-781	CAR 4a, CAR 4b
McDonnell Douglas	DC-6A, Navy R6D-1, USAF C-118A	6A3	CAR 4b
McDonnell Douglas	DC-6B, Navy R6D-1Z	6A4	CAR 4b
McDonnell Douglas	DC-7, DC-7B, DC-7C	4A10	CAR 4b
Mooney Aircraft Corp.	M20, M20A, M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K, M20M, M20R, M20S	2A3	CAR 3
Mooney Aircraft Corp.	M22	A6SW	CAR 3
Noorduyn Aviation Ltd.	Army UC-64, UC-64A, UC-64B, UC-64AS	A-2-578	CAR 4a
Vulcnar S.p.A	P68, P68B, P68C, P68C-TC, P68 "Observer", P68TC "Observer", AP68TP 300 "Spartacus", AP68TP600 "Viator", P68 Observer 2	A31EU	FAR 21.29 (FAR 23)
Pilatus Aircraft Ltd.	PC-6, PC-6H1, PC-6H2, PC-6/350, PC-6/350- H1, PC-6/350-H2, PC-6A, PC-6/A-H1, PC- 6/A-H2, PC-6/B-H2, PC-6/B1-H2, PC-6/B2- H4, PC-6/C-H2, PC-6/B2-H2, PC-6/C1-H2	7A15	CAR 10 (CAR 3)
Pilatus Britten- Norman Ltd.	BN-2, BN-2A, BN-2A-2, BN-2A-3, BN-2A-6, BN-2A-8, BN-2A-9, BN-2A-20, BN-2A-21, BN-2A-26, BN-2A-27, BN-2B-20, BN-2B-21, BN-2B-27, BN-2T, BN-2B-26, BN-2T-4R	A17EU	FAR 21.29 (FAR 23)
Reims Aviation S.A.	F172D, F172E, F172F, F172G, F172H, F172K, F172L, F172M, F172N, F172P	A4EU	CAR 10 (CAR 3)
Reims Aviation S.A.	F150G, F150H, F150J, F150K, F150L, FA150L, FRA150L, F150M, FRA150M, F152, FA152	A13EU	CAR 3
Reims Aviation S.A.	FR172E, FR172F, FR172G, FR172H, FR172J, FR172K	A18EU	FAR 21.29 (CAR 3)

Page 9 of 11

FAA APPROVED MODEL LIST (AML) SA02168AK  
FOR  
AVALASKA, INC.

STC Issue date: December 11, 2000

AIRPLANE MAKE	AIRPLANE MODEL	TYPE CERTIFI- CATE NUMBER	CERTIFICATION BASIS FOR ALTERATION
Reims Aviation S.A.	F182P, F182Q, FR182	A42EU	CAR 3, FAR 23
Reims Aviation S.A.	F337E, FT337E, F337F, FT337F, F337G, FT337GP, F337H, FT337HP	A23EU	FAR 23
Reims Aviation S.A.	F177RG	A26EU	FAR 23
Reims Aviation S.A.	F406	A54EU	FAR 23
Rogers	(Aeronca) 15AC, S15AC	A-802	CAR 3
Ag Cat Corp.	G-164, G-164A, G-164B, G-164C, G-164D, G- 164D With 73" Wing Gap, G-164B With 73" Wing Gap, G164B-15T, G164B-20T, G164B- 34T	1A16	CAR 8.10(a)(1)
A.G. McKinnon	G-21C, G-21D, G-21E, G-21G	4A24	CAR 3, FAR 23
Short Brothers & Harland Ltd.	SC-7 Series 2, SC-7 Series 3	A15EU	FAR 21.29 (FAR 23)
Aermacchi S.p.A	S205-18/F, S205-18/R, S205-20/F, S205-20/R, S205-22/R, S208, S208A	A9EU	FAR 21.29 (FAR 23)
Agusta S.p.A	S210	A25EU	FAR 23
Aermacchi S.p.A	F260, F260B, F260C, F260D, F260E, F260F	A10EU	CAR 3
Sky International	A-1, A-1A, A-1B	A22NM	FAR 23
S.O.C.A.T.A.	Rallye Series MS 880B, MS 885, MS 892A- 150, MS 892E-150, MS 893A, MS 893E, MS 894A, MS 894E, Rallye 100S, Rallye 150T, Rallye 150ST, Rallye 235E, Rallye 235C	7A14	CAR 10 (CAR 3)
S.O.C.A.T.A.	GA-7	A17SO	FAR 23
S.O.C.A.T.A.	TB10, TB20, TB21, TB9, TB200	A51EA	FAR 23
Swift Museum Foundation	GC-1A, GC-1B	A-766	CAR 4a

Page 10 of 11

FAA APPROVED MODEL LIST (AML) SA02168AK  
FOR  
AVALASKA, INC.

STC Issue date: December 11, 2000

AIRPLANE MAKE	AIRPLANE MODEL	TYPE CERTIFI- CATE NUMBER	CERTIFICATION BASIS FOR ALTERATION
Taylorcraft 2000 LLC	BC, BCS, BC-65, BC12-65 ( ARMY L-2H) BCS12-65, BC12-D, BCS12-D, BC12-D1, BCS12-D1, BC12D-85, BCS12D-85, BC12D- 4-85, BCS12D-4-85	A-696	CAR 4
Taylorcraft 2000 LLC	19, F19, F21, F21A, F21B, F22, F22A, F22B, F22C	1A9	CAR 3 FAR 23
Navion Aircraft Co. Ltd.	Navion (L-17A), Navion A (L-17B), (L-17C), Navion B, Navion D, Navion E, Navion F, Navion G, Navion H	A-782	CAR 3
Univar Aircraft Corporation	(Forn) F-1, F-1A, (Erco) E, 415D, (Alon) A-2, A2-A, (Mooney) M10	A-787	CAR 3
Univar Aircraft Corporation	(Erco) 415-C, 415-CD	A-718	CAR 4a
Univar Aircraft Corporation	Stinson 108, 108-1, 108-2, 108-3, 108-5	A-767	CAR 3
Augustair Inc.	(Morrissey) 2150, 2150A, 2180	4A19	CAR 3
Weatherly Aviation Co.	201, 201A, 201B, 201C	A10WE	FAR 21.25(a) (CAM 8)
Weatherly Aviation	620, 620A, 620B, 620B-TG, 620TP	A26WE	FAR 21.25(a) (CAM 8)
Emerald Enterprises Ltd.	D-1	A9WE	CAR 3

AA APPROVED:

*Gregory J. Holt*  
Manager, Anchorage Aircraft Certification Office  
Federal Aviation Administration  
Anchorage, Alaska

Date: 1-26-01

Page 11 of 11







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

SMALL AIRPLANE DIRECTORATE  
ANCHORAGE AIRCRAFT CERTIFICATION OFFICE  
222 WEST 7TH AVENUE, #14  
ANNEX G, ROOM A18  
ANCHORAGE, ALASKA 99513-7587

October 15, 1997

Mr. Cliff Belleau, Service Manager  
AvAlaska, Inc.  
4340 Postmark Drive  
Anchorage, Alaska 99502

Dear Mr. Belleau:

We have received your application for Supplemental Type Certificate, FAA Form 8110-12, dated 10-2-97, for the installation of an additional FAA approved electric hourmeter in several models of Cessna and Piper single engine airplanes. However, per a telephone conversation with Mr. Fred Handy, ASI, of the Anchorage Flight Standards District Office (FSDO-03), both he and I agree that this type of modification is *not* a major alteration that would require the issuance of an STC. At most, it should require an FAA field approval. Furthermore, if the installation can be made with *no appreciable alteration* to the instrument panel, then a return to service by an FAA certified A&P mechanic (via aircraft logbook entry) can be made. Therefore, we are returning your STC application together with its accompanying documentation.

If you have any questions, or if we can assist you further, please contact Mr. Steven A. Mangiapane at (907) 271-2671.

Sincerely,

Michael K. Dahl, Manager  
Anchorage Aircraft Certification Office

enclosures(3)

cc: ACE-100  
Reading File

ANCHORAGE ALASKA 99511-3507  
ANNEX G, ROOM A18  
322 WEST 7TH AVENUE, #14  
ANCHORAGE AIRCRAFT CERTIFICATION OFFICE  
SMALL AIRPLANE DIRECTORATE

U.S. Department of Transportation  
Federal Aviation Administration

October 12, 1997


Mr. Cliff Bellman, Service Manager  
Aviation, Inc.  
4340 Postmark Drive  
Anchorage, Alaska 99502

Dear Mr. Bellman:

We have received your application for Supplemental Type Certification, FAA Form 8130-12, dated 10-2-97, for the installation of an additional FAA approved electric hornmaster in several models of Cessna and Piper single engine airplanes. However, per a telephone conversation with Mr. Fred Hendry, AEP of the Anchorage Flight Standards District Office (TSO-03), both he and I agree that this type of modification is not a major alteration that would require the issuance of an STC. At most, it should require an FAA field approval. Furthermore, if the installation can be made with no appreciable alteration to the instrument panel, then a return to service by an FAA certified AEP mechanic (via aircraft logbook entry) can be made. Therefore, we are returning your STC application together with its accompanying documentation.

If you have any questions, or if we can assist you further, please contact Mr. Steven A. Mangione at (907) 271-2571.

Sincerely,

  
Michael E. Dahl, Manager  
Anchorage Aircraft Certification Office

(Attachment)

cc: ACB-100  
Reading File

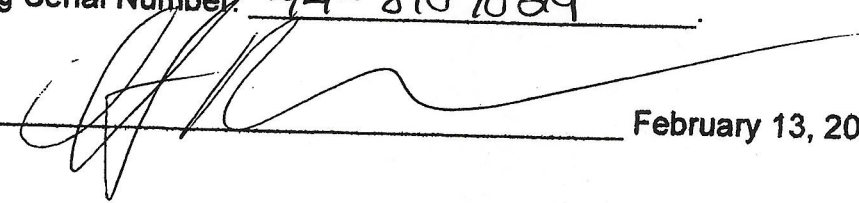


# AN ALASKA, INC.

4340 Postmark Drive  
Anchorage, AK 99502  
Phone (907) 248-7070  
Fax (907) 248-7771

## Supplemental Type Certificate (STC) Permission Statement

J & J Leasing is hereby authorized to utilize the following STC SA02168AK,  
to alter a N258RM PA44-180T model Airplane with the  
following Serial Number: 44-8107029.

Signed  February 13, 2001.

Holder (or authorized agent of holder) of the following STC SA02168AK.

The aircraft owner must maintain this Permission Statement with the applicable aircraft records to demonstrate proof of authorization as required by section 403 of the Federal Aviation Authorization Act of 1996 (Public Law 104-264).

Any person who alters this form or makes or causes to be made a false statement or entry, that falsely expresses permission from the holder of an STC to use that STC, may be in violation of 14 CFR sections 21.2 and/or 43.12. Such violation may lead to suspension or revocation of FAA certificates held by that person.

Alaska, Inc.

4310 Postmark Drive  
Anchorage, AK 99503  
Phone (907) 248-7770  
Fax (907) 248-7771

Supplemental Type Certificate (STC) Permission Statement

This is hereby authorized to utilize the following STC 8402180AK  
to alter a 1982R1A P44-180T model airplane with the  
following Serial Number 44-810309

Signed \_\_\_\_\_  
February 13, 2001

Holder (or authorized agent of holder) of the following STC 8402180AK

The aircraft owner must maintain this Permission Statement with the applicable aircraft  
records to demonstrate proof of authorization as required by section 403 of the Federal  
Aviation Authorization Act of 1996 (Public Law 104-264).

Any person who alters this STC or makes or causes to be made a false statement or entry that falsifies  
the STC or makes a false statement or entry that falsifies the STC may be in violation of 14 CFR section  
91.403-43.12. Such violation may lead to suspension or revocation of FAA certificate held by that  
person.



# **HOURLMETER AIRSPEED SWITCH INSTALLATION INSTRUCTIONS**

**FOR  
UNPRESSURIZED AIRPLANES**

**AVALASKA, INC  
4340 POSTMARK DR.  
ANCHORAGE, ALASKA**

**(907)248-7070**

**INFORMATION CONTAINED HEREIN IS PROPRIETARY  
TO AVALASKA, INC. AND MAY NOT BE REPRODUCED OR  
RELEASED WITHOUT PRIOR WRITTEN AUTHORIZATION  
BY AVALASKA, INC.**

**Report: 98-AVAK005-10M  
Rev: (A)  
Date: December 17, 1999**

## **HOURLMETER AIRSPEED SWITCH INSTALLATION INSTRUCTIONS**

### **TABLE OF CONTENTS**

<b><u>TITLE</u></b>	<b><u>PAGE</u></b>
DRAWING TITLE/ DRAWING NUMBER	1
INTENDED USE	2
SYSTEM DESCRIPTION	2
INSTALLATION REQUIREMENTS	2
SYSTEM WEIGHT	2
ELECTRICAL LOAD ANALYSIS	3
INSTALLATION INSTRUCTIONS	3
CHECKOUT PROCEDURES	4
COMPONENT LIST	5

<b><u>DRAWING TITLE</u></b>	<b><u>DRAWING NUMBER</u></b>
HOURLMETER AIRSPEED SWITCH PITOT LINE INSTALLATION	97-AVAK003-2, Sheets 1-5 98-AVAK005-2
HOURLMETER AIRSPEED SWITCH WIRING DIAGRAM	97-AVAK301-3
HOURLMETER AIRSPEED SWITCH COMPONENT LOCATIONS	98-AVAK005-4



## HOURLMETER AIRSPEED SWITCH INSTALLATION INSTRUCTIONS

**Intended Use:** The intended use of the Hourmeter airspeed switch is to change the operating characteristics of the typical unpressurized small aircraft Hourmeter. This modification will change the method of time tracking for the typical unpressurized small aircraft. Once the modification is incorporated, the Hourmeter will indicate "TIME IN SERVICE" as defined in 14 CFR part 1.1.

**System Description:** The modification adds an airspeed switch to the ground circuit of the aircraft Hourmeter. This airspeed switch utilizes the existing Pitot system to provide the needed pressures for switch actuation. The ground leg of the existing Hourmeter is connected through the airspeed switch and will supply a ground connection for the Hourmeter when the airspeed is greater than 30 Knots (35 MPH).

**Installation Requirements:** This modification can only be applied to aircraft that meet the following criteria:

- 1) An Hourmeter has been previously installed and approved.
- 2) The existing Hourmeter Circuit Protective Device (Fuse or Circuit Breaker) has a value less than or equal to 5 Amps.
- 3) The Hourmeter has an external ground that will stop clock operation when the ground lead is opened.
- 4) Aircraft stalling speed in the landing configuration ( $V_{SO}$ ) is greater than 30 Knots (35 MPH).
- 5) Aircraft is unpressurized.

### System Weight:

<u>Description</u>	<u>Weight</u>
Airspeed Switch	2 oz.
Polyethylene Tubing	1 oz.
Tee	½ oz.
20 Gauge Wire	½ oz.

## **HOURLMETER AIRSPEED SWITCH INSTALLATION INSTRUCTIONS**

**Electrical load Analysis:** There is no change in the electrical system load, no analysis is required.

### **Installation Instructions:**

#### **Required equipment:**

- 1) No special tools or equipment are required for this installation.

#### **Installation:**

- 1) Refer to AC 43.13-1A/2A, "ACCEPTABLE METHODS, TECHNIQUES, AND PRACTICES", or later approved revision, for the correct methods to be utilized for this installation.
- 2) Select a suitable mounting location forward of the instrument panel. Insure the selected location will provide adequate clearance from control cables and other hazards to flight. Using the airspeed switch bracket (item 11, P/N: 15-0008-R-83) as a template, drill two mounting holes. See drawing 98-AVAK005-4 for a typical switch mounting location.
- 3) Utilizing the hardware shown on drawing 97-AVAK003-2, Sheet: 5, install the airspeed switch and bracket. Note: the bracket may be rotated to facilitate switch placement.
- 4) Cut the existing Pitot line and install the hardware as shown on drawing 97-AVAK003-2 or 98-AVAK005-2. Insure that adequate obstruction free clearance exists for the newly installed hardware.
- 5) Connect the new section of  $\frac{1}{4}$  inch polyethylene line to airspeed switch as shown on drawing 97-AVAK003-2 or 98-AVAK005-2. The new section of polyethylene tubing connects to the port labeled "P" on the airspeed switch. The remaining port, labeled "V", is vented to the cabin. Do *not* plug the "V" port. Insure the newly added section of Pitot line forms a smooth curve when routed to the airspeed switch.
- 6) After reviewing the appropriate aircraft electrical drawing, remove the existing ground lead from the Hourmeter. Connect a ground lead to the Hourmeter, Airspeed switch, and aircraft ground as shown on drawing 97-AVAK301-3. Note: In some cases, it may be necessary to solder the ground lead to the Hourmeter ground terminal.
- 7) Utilizing the included nylon cable ties, secure the new ground lead to an existing wire bundle so as to provide adequate clearance from all control cables and other hazards to flight.
- 8) Install the supplied cockpit placard adjacent to the existing Hourmeter.



## HOURLMETER AIRSPEED SWITCH INSTALLATION INSTRUCTIONS

### Checkout Procedures:

#### Required Equipment:

- 1) Pitot test set.

#### Test:

- 1) Test the Pitot system in accordance with the aircraft manufacturer's instructions. If the manufacturer has not issued instructions for testing Pitot systems, utilize the procedures contained in AC 43.13-1A or later approved revision.
- 2) Apply power to the aircraft and observe that the circuit protective device (circuit breaker or fuse) does not "trip" or "blow". Repair wiring if necessary for proper circuit protective device operation.
- 3) After the Pitot system has been successfully leak tested, adjust Pitot test set to indicate zero knots.
- 4) Observe that the Hourmeter is "OFF". If the Hourmeter is "ON," check for the proper airspeed switch electrical connections. Incorrect switch connections will cause the Hourmeter to record time while the aircraft is on the ground.
- 5) *NOTE: Bypassing the "OIL PRESSURE SWITCH" is required for testing installations that utilize an "OIL PRESSURE SWITCH" to control Hourmeter operation.*
- 6) Adjust the airspeed to equal 33 Knots (38 MPH) or greater and observe that the Hourmeter is running. If the Hourmeter does not begin to record time, check connections on airspeed switch or repair wiring as necessary.
- 7) Reconnect "OIL PRESSURE SWITCH" if bypassed for this test.
- 8) Disconnect the Pitot test equipment from the aircraft.
- 9) Make the appropriate entries in the aircraft log book indicating a Pitot system test, and the airspeed switch installation have been completed. File FAA Form 337 "MAJOR ALTERATION or REPAIR", and revise the Aircraft Equipment list.

**Note:** This installation will have negligible effect on aircraft weight and balance.

## HOURLMETER AIRSPEED SWITCH INSTALLATION INSTRUCTIONS

### Component List

<u>Item</u>	<u>Part Number</u>	<u>Description</u>	<u>Quantity Supplied</u>	<u>Source</u>
1	AVAK AS-1	Cockpit Placard	1	Professional Colorgraphics
2	P610049	¼" polyethylene tubing	5 Ft.	Cessna
2A	WW-T-700/4 5052-0	3/16" aluminum tubing	2	Any Approved-WW-T- 700/4 5052-0 Source
3	S1137-1	¼" polyethylene tee	1	Cessna
3A	S1130-1	¼" polyethylene nut	1	Cessna
3B	S1131-1	¼" polyethylene insert	1	Cessna
4	N/A	Existing Hourmeter	None	N/A
5	AS9300-603	Airspeed Switch	1	AvAlaska
6	640903-1	Terminal Lug	3	Amp or Equiv.
7	36154	Terminal Lug	2	Amp or Equiv.
8	M22759/16-20	Wire, 20 Ga.	4 Ft.	Any MIL-W-22759 Source
9	MS35207-263	Screw	2	Any AN/MS Source
10	AVAK-R1	Flow Restrictor	1	AvAlaska
11	15-0008-R-83	Switch Bracket	1	AvAlaska
12	AN960-10	Washer	4	Any AN/MS Source
13	MS21045-3	Nut	2	Any AN/MS Source
14	PLT2M-C	Nylon Cable Tie	6	Panduit or Equiv.
15	AVAK AS-2	Airspeed switch label	1	Professional Colorgraphics
16	MS20825-3D	Tee	1	Any AN/MS Source
17	AN818-3D	Coupling nuts	2	Any AN/MS Source
18	MS20819-3D	Sleeve	2	Any AN/MS Source
19	266N-04-02	Adapter	1	EDMO Distributors
20	MS20825-4D	Tee	1	Any AN/MS Source
21	AN818-4D	Coupling nuts	2	Any AN/MS Source
22	MS20819-4D	Sleeve	2	Any AN/MS Source
23	MS27404-4D	Hose Adapter	2	Any AN/MS Source

Note: If items 16, 17, 18, 19, 20, 21, 22 and 23 are required for installation, they must be purchased separately.



CHG LTR	REVISION	BY	DATE
-	-	-	-

REPORT/DWG NO.	SHT	REV	DATE	DESCRIPTION/TITLE
99-AVAK006-1	1	(-)	12/17/99	HOURLY AIRSPEED SWITCH, MASTER DESCRIPTIVE DATA LIST
97-AVAK003-2	1	(-)	10/22/97	HOURLY AIRSPEED SWITCH, PITOT LINE INSTALLATION
97-AVAK003-2	2	(-)	10/22/97	HOURLY AIRSPEED SWITCH, PITOT LINE INSTALLATION
97-AVAK003-2	3	(-)	10/22/97	HOURLY AIRSPEED SWITCH, PITOT LINE INSTALLATION
97-AVAK003-2	4	A	12/17/99	HOURLY AIRSPEED SWITCH, PITOT LINE INSTALLATION
97-AVAK003-2	5	A	12/17/99	HOURLY AIRSPEED SWITCH, PITOT LINE INSTALLATION
98-AVAK005-2	1	(-)	12/30/97	HOURLY AIRSPEED SWITCH, PITOT LINE INSTALLATION
97-AVAK301-3	1	A	12/17/99	HOURLY AIRSPEED SWITCH, WIRING DIAGRAM
98-AVAK005-4	1	(-)	12/14/97	HOURLY AIRSPEED SWITCH, COMPONENT LOCATIONS
96-AVAK001-5	1	(-)	11/04/96	HOURLY AIRSPEED SWITCH, PLACARD AND LABEL
96-AVAK002-7	1	(-)	05/11/97	HOURLY AIRSPEED SWITCH, FLOW RESTRICTOR
98-AVAK005-10M	-	A	12/17/99	HOURLY AIRSPEED SWITCH, INSTALLATION INSTRUCTIONS
-----NOTHING FOLLOWS-----				

INFORMATION CONTAINED HEREIN IS PROPRIETARY  
TO AVALASKA, INC. AND MAY NOT BE REPRODUCED OR  
RELEASED WITHOUT PRIOR WRITTEN AUTHORIZATION  
BY AVALASKA, INC.

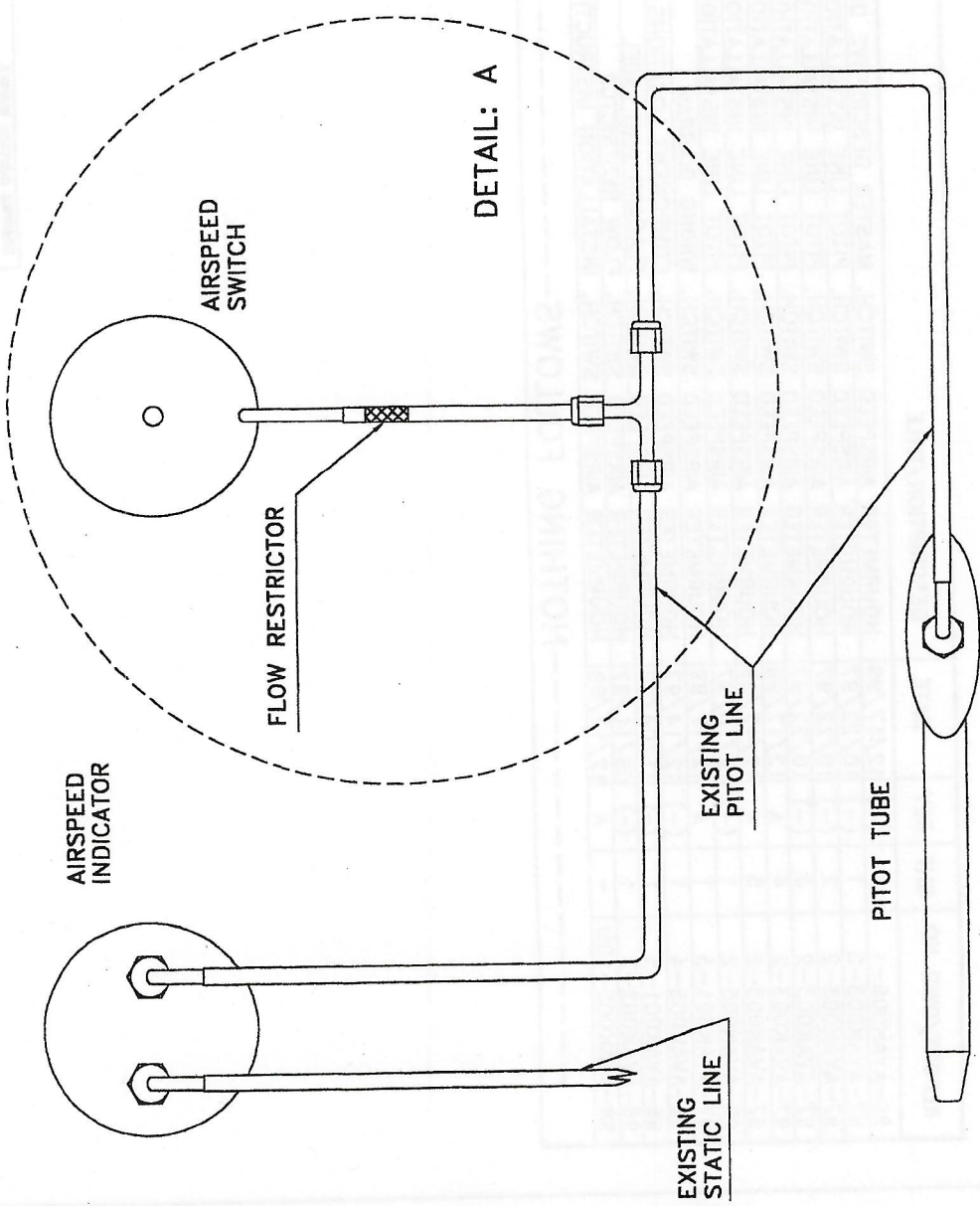
# HOURLY AIRSPEED SWITCH MASTER DESCRIPTIVE DATA LIST

DRAFTSMAN M. HEUSSER	SIZE:	DRAWING NO.: 99-AVAK006-1	REVISION: (-)
AIRCRAFT EFFECTIVITY	SCALE: NTS	DATE: 17 Dec. 1999	SHEET: 1 OF 1

DRAWING CONTROL NUMBER  
D:\AVALASKA\AVAK301D

AVALASKA, INC.  
4300 POSTMARK DR.  
ANCHORAGE, AK 99502

CHG LTR	REVISION	BY	DATE



NOTES

- 1) FLOW RESTRICTOR END OF PITOT LINE MARKED WITH COLORED BAND
- 2) FLOW RESTRICTOR END OF ADDED PITOT LINE CONNECTED TO AIRSPEED SWITCH

INFORMATION CONTAINED HEREIN IS PROPRIETARY TO AVALASKA, INC. AND MAY NOT BE REPRODUCED OR RELEASED WITHOUT PRIOR WRITTEN AUTHORIZATION BY AVALASKA, INC.

HOURLMETER AIRSPEED SWITCH  
PITOT LINE INSTALLATION

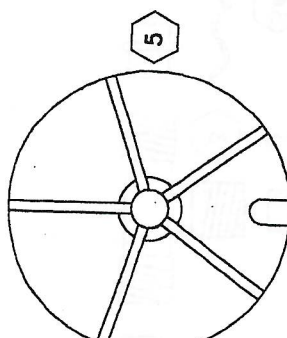
SIZE:	DRAWING NO.: 97-AVAK003-2	REVISION: (-)
SCALE: NTS	DATE: 22 October 1997	SHEET: 1 OF 5

AVALASKA, INC.  
4340 POSTMARK DR  
ANCHORAGE, AK 99502

DRAFTSMAN
M. HEUSSER
AIRCRAFT EFFECTIVITY
-

DRAWING CONTROL NUMBER  
C:\~\DER\AVALASKA\AVAK302





INFORMATION CONTAINED HEREIN IS PROPRIETARY TO AVALASKA, INC. AND MAY NOT BE REPRODUCED OR RELEASED WITHOUT PRIOR WRITTEN AUTHORIZATION BY AVALASKA, INC.

# DETAIL: A

(FOR USE WITH 1/4" ALUMINUM PITOT TUBING)

## NOTES

- 1) FLOW RESTRICTOR MARKED WITH COLORED BAND ON PITOT LINE
- 2) FLOW RESTRICTOR END OF ADDED PITOT LINE CONNECTS TO AIRSPEED SWITCH
- 3) USE CAUTION WHEN TRIMMING ADDED PITOT LINE TO FIT, SO AS TO NOT REMOVE FLOW RESTRICTOR

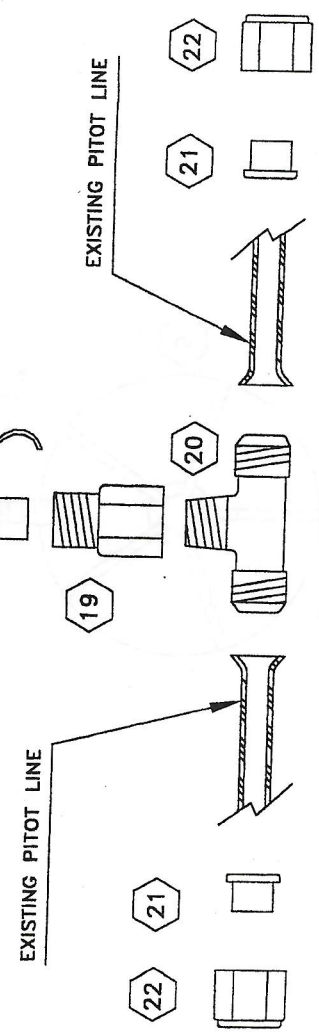
ITEM	PART NUMBER	DESCRIPTION	QUAN	SPECIFICATION
22	MS20819-4D	SLEEVE	2	AN/MS
21	AN818-4D	COUPLING NUTS	2	AN/MS
20	MS20825-4D	1/4" TEE	1	AN/MS
19	266N-04-02	ADAPTER	1	EDMO
10	AVAK-R1	FLOW RESTRICTOR	1	AVALASKA
5	AS9300-603	AIRSPEED SWITCH	1	AVALASKA
3B	S1131-1	POLYETHYLENE INSERT	3	CESSNA
3A	S1130-1	POLYETHYLENE NUT	3	CESSNA
2	P610049	1/4" TUBING	5 FT	CESSNA

## MATERIAL LIST

HOURLY AIRSPEED SWITCH  
PITOT LINE INSTALLATION

SIZE:	DRAWING NO.: 97-AVAK003-2	REVISION: (-)
SCALE:	NTS	DATE: 22 OCTOBER 1997
		SHEET: 2 OF 5

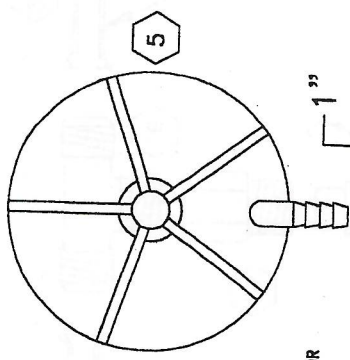
AVALASKA, INC.  
1340 POSTMARK DR.  
ANCHORAGE, AK 99502



DRAWING CONTROL NUMBER  
C:\DER\AVALASKA\AVAK314A







INFORMATION CONTAINED HEREIN IS PROPRIETARY TO AVALASKA, INC. AND MAY NOT BE REPRODUCED OR RELEASED WITHOUT PRIOR WRITTEN AUTHORIZATION BY AVALASKA, INC.

# DETAIL: A (FOR USE WITH 3/16" RUBBER PITOT LINE)

## NOTES

- 1) FLOW RESTRICTOR MARKED WITH COLORED BAND ON PITOT LINE
- 2) FLOW RESTRICTOR END OF ADDED PITOT LINE CONNECTS TO AIRSPEED SWITCH
- 3) USE CAUTION WHEN TRIMMING ADDED PITOT LINE TO FIT, SO AS TO NOT REMOVE FLOW RESTRICTOR
- 4) INSTALLING AGENCY TO FABRICATE FROM 3/16" TUBING INCLUDED IN KIT. FINISHED LENGTH 1 1/2"

ITEM	PART NUMBER	DESCRIPTION	QUAN	SPECIFICATION
19	26GN-04-02	ADAPTER	1	EDMO
18	MS20819-3D	SLEEVE	2	AN/MS
17	AN818-3D	COUPLING NUTS	2	AN/MS
16	MS20825-3D	TEE	1	AN/MS
10	AVAK-R1	FLOW RESTRICTOR	1	AVALASKA
5	AS9300-603	AIRSPEED SWITCH	1	AVALASKA
3B	S1131-1	POLYETHYLENE INSERT	1	CESSNA
3A	S1130-1	POLYETHYLENE NUT	1	CESSNA
2A	AVAK AS-3T	3/16" ALUMINUM TUBING	2	AVALASKA
2	P610049	1/4" TUBING	5 FT	CESSNA

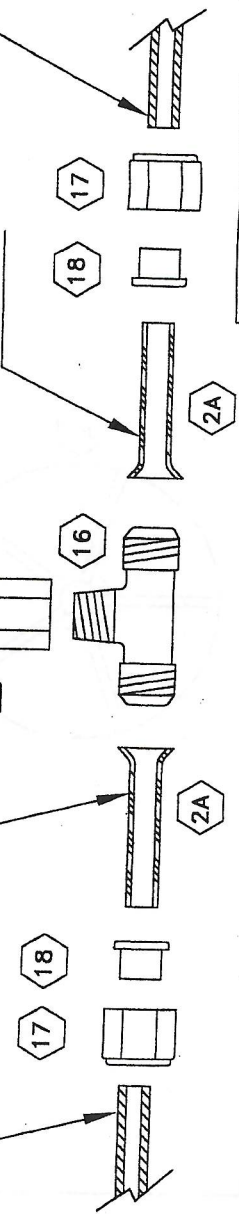
## MATERIAL LIST

EXISTING RUBBER PITOT LINE

SEE NOTE 4

SEE NOTE 4

EXISTING RUBBER PITOT LINE



SIZE:		DRAWING NO.: 97-AVAK003-2		REVISION: (-)	
SCALE:		NTS		DATE: 22 OCTOBER 1997	
DRAFTSMAN M. HEUSSER		AIRCRAFT EFFECTIVITY		SHEET: 4 OF 5	
<p>AVALASKA, INC. 4340 POSTMARK DR. ANCHORAGE, AK 99502</p>					

DRAWING CONTROL NUMBER  
C:\DER\AVALASKA\AVAK314

HOURLY AIRSPEED SWITCH  
PITOT LINE INSTALLATION







INFORMATION CONTAINED HEREIN IS PROPRIETARY  
TO AVALASKA, INC. AND MAY NOT BE REPRODUCED OR  
RELEASED WITHOUT PRIOR WRITTEN AUTHORIZATION  
BY AVALASKA, INC.

**NOTES:**

1) INSTALLING AGENCY MAY SUBSTITUTE ANY SUITABLE STRUCTURAL SCREW AND NUT.

ITEM	PART NUMBER	DESCRIPTION	QUAN	SPECIFICATION
13	MS21045-3	NUT	2	MIL SPEC
12	AN960-10	WASHER	4	MIL SPEC
11	15-0008-R-83	SWITCH BRACKET	1	AVALASKA
9	MS35207-263	SCREW	2	MIL SPEC
5	AS9300-603	AIRSPPEED SWITCH	1	AVALASKA
MATERIAL LIST				

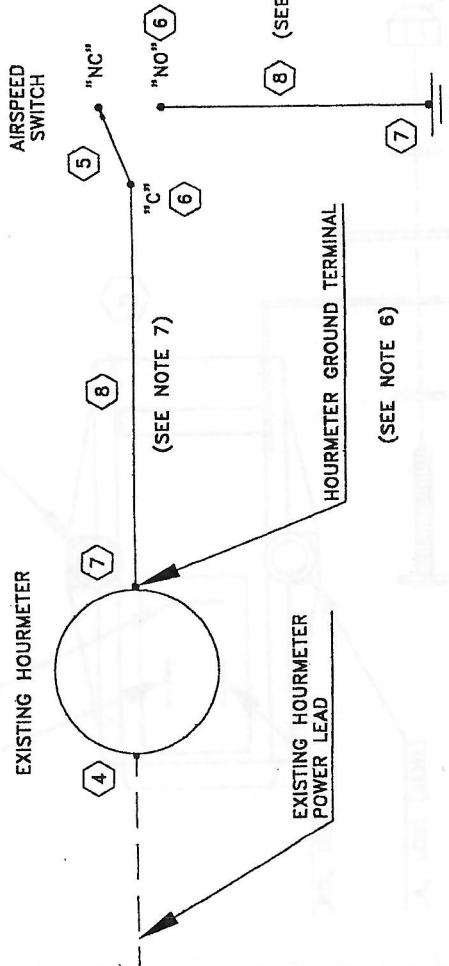
## MATERIAL LIST

## HOURMETER AIRSPEED SWITCH PITOT LINE INSTALLATION

DRAWING CONTROL NUMBER D:\ ~ \AVALASKA\AVAK308B REV.A	DRAFTSMAN M. HEUSSER	SIZE:	DRAWING NO.: 97-AVAK003-2	REVISION: (A)
	AIRCRAFT EFFECTIVITY _	SCALE:	DATE: 12/17/99	SHEET: 5 OF 5
	<b>AVALASKA, INC.</b> 4340 POSTMARK DR. ANCHORAGE, AK 99502			

DRAWING CONTROL NUMBER  
D:\~\AVALASKA\AVAK3088 REV.A

CHG LTR	REVISION	BY	DATE
A	NOTES CHANGED	MH	12/17/99



NOTES:

- 1) ALL WIRE TO CONFORM TO MIL-W-22759 OR EQUIVALENT
- 2) TERMINAL LUGS TO CONFORM TO MIL-T-7928 OR EQUIVALENT
- 3) USE NORMALLY OPEN (NO) SWITCH SEGMENT
- 4) WIRING TO BE IAW AC 43.13-1A/2A OR LATEST REV.
- 5) REFER TO DRAWING NUMBER: 97-AVAK003-2, SHEET 5 FOR SWITCH TERMINAL LOCATIONS
- 6) HOURMETER GROUND TERMINAL MAY REQUIRE THE USE OF SOLDER, ITEM #7, OR ITEM #6 FOR PROPER CONNECTIONS
- 7) TRIM WIRE TO LENGTH AS REQUIRED
- 8) REFER TO APPROPRIATE AIRCRAFT HOURMETER WIRING DIAGRAM FOR GROUND TERMINAL IDENTIFICATION

MATERIAL LIST					
ITEM	PART NUMBER	DESCRIPTION	QUAN	SPECIFICATION	
8	M22759/16-20	WIRE, 20 GA.	4 FT	MIL-W-22759	
7	36154	TERMINAL LUG	2	MIL-T-7928	
6	840903-1	TERMINAL LUG	3	MIL-T-7928	
5	AS9300-603	AIRSPEED SWITCH	1	AVALASKA	
4	-	EXISTING HOURMETER	1	-	

HOURMETER AIRSPEED SWITCH  
WIRING DIAGRAM

DRAFTSMAN M. HEUSSER	SIZE:	DRAWING NO.: 97-AVAK301-3	REVISION: (A)
AIRCRAFT EFFECTIVITY	SCALE: NTS	DATE: 12/17/99	SHEET: 1 OF 1

INFORMATION CONTAINED HEREIN IS PROPRIETARY  
TO AVALASKA, INC. AND MAY NOT BE REPRODUCED OR  
RELEASED WITHOUT PRIOR WRITTEN AUTHORIZATION  
BY AVALASKA, INC.

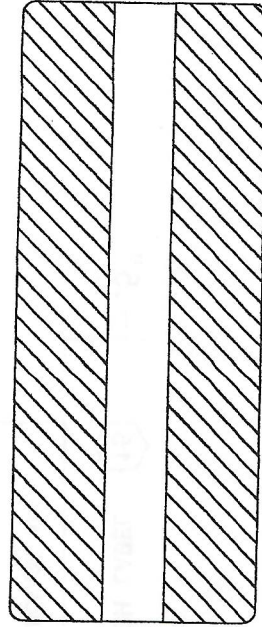
AVALASKA, INC.  
4340 POSTMARK DR  
ANCHORAGE, AK 99502

DRAWING CONTROL NUMBER  
D:\--AVALASKA\AVAK307 REV.A

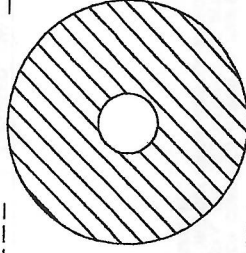


INFORMATION CONTAINED HEREIN IS PROPRIETARY TO AVALASKA, INC. AND MAY NOT BE REPRODUCED OR RELEASED WITHOUT PRIOR WRITTEN AUTHORIZATION BY AVALASKA, INC.

0.50"  $\pm 0.20$ "



0.04"  $\pm 0.005$ "



0.170"  $\pm 0.020$ "

10

# NOTES

- 1) MATERIAL: GLASS
- 2) FLOW RESTRICTOR TO BE SECURED IN POLYETHYLENE LINE WITH RTV SILICONE ADHESIVE

10	AVAK-R1	FLOW RESTRICTOR	1	AVALASKA
N/A	14059	RTV SILICONE ADHESIVE	AR	CRC OR EQUIV.
ITEM	PART NUMBER	DESCRIPTION	QUAN	SPECIFICATION

## MATERIAL LIST

HOURLMETER AIRSPEED SWITCH  
FLOW RESTRICTOR

DRAFTSMAN  
M. HEUSSER  
AIRCRAFT EFFECTIVITY

SIZE:

DRAWING NO.: 97-AVAK002-7

REVISION: (-)

SCALE: NTS

DATE: 11 May 1997

SHEET: 1 OF 1

DRAWING CONTROL NUMBER  
C:\-DER\AVALASKA\AVAK2012A

AVALASKA, INC.  
4300 ESTIMARK DR.  
ANCHORAGE, AK 99502

CHG LTR

REVISION

BY

DATE

CHG LTR		REVISION		BY	DATE

COCKPIT PLACARD

1

FOR RECORDING FLIGHT TIME IN SERVICE  
CHECK HOUR METER EACH FLIGHT. IF  
FAILED, TRACK TIME UNTIL REPAIRED

4.0"

1.0"

SCALE: 1" = 1"

AIRSPEED SWITCH LABEL

15

AVALASKA, INC. ANCHORAGE, AK.  
FAA-PMA  
AIRSPEED SWITCH P/N: AS9300-603

2.0"

.5"

SCALE: 1" = 1/2"

NOTES:

1) ALL TEXT TO BE UPPER CASE

2) BACKGROUND COLOR BLACK, TEXT COLOR WHITE

3) FONT TO BE TIMES NEW ROMAN OR OTHER CLEAR TEXT

4) COCKPIT PLACARD TEXT HEIGHT .100" MIN.

5) AIRSPEED SWITCH LABEL TEXT HEIGHT .070" MIN.

6) PLACARD MATERIAL: MYLAR, SPEC: EMTECH FM092

7) SOURCE: PROFESSIONAL COLORGRAPHICS, ANCHORAGE, AK

ITEM 15

AVAK AS-2

AIRSPEED SWITCH LABEL

1

AVALASKA

ITEM 1

AVAK AS-1

COCKPIT PLACARD

1

AVALASKA

ITEM

PART NUMBER

DESCRIPTION

QUAN

SPECIFICATION

MATERIAL LIST

HOURLY AIRSPEED SWITCH  
PLACARD AND LABEL

DRAFTSMAN

M. HEUSSER

AIRCRAFT EFFECTIVITY

SIZE:

DRAWING NO.: 96-AVAK001-5

REVISION: (-)

SCALE:

DATE: 4 NOVEMBER 1996

SHEET: 1 OF 1

DRAWING CONTROL NUMBER

C:\-DER\AVALASKA\AVAK005

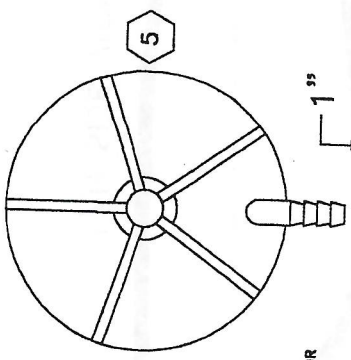
AVALASKA, INC.

1340 POSTMARK DR.

ANCHORAGE, AK 99502

INFORMATION CONTAINED HEREIN IS PROPRIETARY  
TO AVALASKA, INC. AND MAY NOT BE REPRODUCED OR  
RELEASED WITHOUT PRIOR WRITTEN AUTHORIZATION  
BY AVALASKA, INC.





**DETAIL: A**  
(FOR USE WITH 1/4" PITOT HOSE ASSEMBLY)

**NOTES**

- 1) FLOW RESTRICTOR MARKED WITH COLORED BAND ON PITOT LINE
- 2) FLOW RESTRICTOR END OF ADDED PITOT LINE CONNECTS TO AIRSPEED SWITCH
- 3) USE CAUTION WHEN TRIMMING ADDED PITOT LINE TO FIT, SO AS TO NOT REMOVE FLOW RESTRICTOR

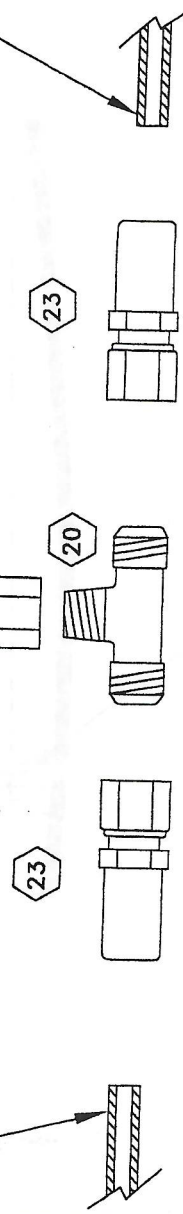
INFORMATION CONTAINED HEREIN IS PROPRIETARY TO AVALASKA, INC. AND MAY NOT BE REPRODUCED OR RELEASED WITHOUT PRIOR WRITTEN AUTHORIZATION BY AVALASKA, INC.

ITEM	PART NUMBER	DESCRIPTION	QUAN	SPECIFICATION
23	MS27404-4D	HOSE ADAPTER	2	AN/MS
20	MS20825-4D	TEE	1	AN/MS
19	266N-04-02	ADAPTER	1	EDMO
10	AVAK-R1	FLOW RESTRICTOR	1	AVALASKA
5	AS9300-603	AIRSPEED SWITCH	1	AVALASKA
3B	S1131-1	POLYETHYLENE INSERT	1	CESSNA
3A	S1130-1	POLYETHYLENE NUT	1	CESSNA
2	P610049	1/4" TUBING	5 FT	CESSNA
MATERIAL LIST				

EXISTING PITOT HOSE ASSY.

EXISTING PITOT HOSE ASSY.

**HOURLY AIRSPEED SWITCH  
PITOT LINE INSTALLATION**



DRAFTSMAN  
M. HEUSSER  
AIRCRAFT EFFECTIVITY

SIZE: 98-AVAK005-2  
SCALE: NTS  
DATE: 30 Dec. 1997  
REVISION: (-)  
SHEET: 1 OF 1

DRAWING CONTROL NUMBER  
C:\DER\AVALASKA\AVAK314C

**AVALASKA, INC.**  
4340 POSTMARK DR.  
ANCHORAGE, AK 99502

CHG LTR		REVISION		BY	DATE

**NOTES**

- 1) DRAWING SHOWS A TYPICAL SWITCH MOUNTING LOCATION
- 2) AIRSPEED SWITCH IS TO BE MOUNTED FORWARD OF THE INSTRUMENT PANEL AND AFT OF THE BULKHEAD
- 3) RECOMMENDED MOUNTING LOCATION IS THE BULKHEAD

INFORMATION CONTAINED HEREIN IS PROPRIETARY TO AVALASKA, INC. AND MAY NOT BE REPRODUCED OR RELEASED WITHOUT PRIOR WRITTEN AUTHORIZATION BY AVALASKA, INC.

<b>HOURLMETER AIRSPEED SWITCH COMPONENT LOCATIONS</b>			
DRAFTSMAN M. HEUSSER	SIZE: DRAWING NO.: 98-AVAK005-4	REVISION: (-)	
AIRCRAFT EFFECTIVITY	SCALE: NTS	DATE: 14 DEC 1997	SHEET: 1 OF 1
<b>AVALASKA, INC.</b> <small>4340 POSTMARK DR. ANCHORAGE, AK 99502</small>			

DRAWING CONTROL NUMBER C:\DER\AVALASKA\AVAK310B
--



INSTALLED ON LEFT SIDE N258RM 9-23-09 2268.

<b>U.S. Department of Transportation</b> <b>Federal Aviation Administration</b>		<b>MAJOR REPAIR AND ALTERATION</b> <b>(Airframe, Powerplant, Propeller, or Appliance)</b>		Form Approved OMB No. 2120-0020 11/30/2007		Electronic Tracking Number	
		For FAA Use Only					
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)							
1. Aircraft	Nationality and Registration Mark <b>N258RM</b>			Serial No. <b>44-8107029</b>			
	Make <b>PIPER</b>			Model <b>PA-44-180</b>		Series <b>PA-44-180</b>	
2. Owner	Name (As shown on registration certificate) <b>J &amp; J AIRCRAFT LEASING LLC</b>			Address (As shown on registration certificate) Address <b>4950 N DEL RIO CIR</b> City <b>PRESCOTT VALLEY</b> State <b>AZ</b> Zip <b>86314-7102</b> Country <b>USA</b>			
	3. For FAA Use Only						
4. Type		5. Unit Identification					
Repair	Alteration	Unit	Make	Model	Serial Number		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)		_____	
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT					
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER					
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type				
			Manufacturer				
6. Conformity Statement							
A. Agency's Name and Address				B. Kind of Agency			
Name <b>PHILIP CONNOR / KOSOLA &amp; ASSOC.</b> Address <b>12452 HWY 41 SOUTH</b> City <b>PRESTON</b> State <b>GA.</b> Zip <b>31824</b> Country <b>USA</b>				<input type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input type="checkbox"/> Certified Repair Station <input type="checkbox"/> Certificated Maintenance Organization			
				<input type="checkbox"/> Manufacturer C. Certificate No. <b>594203699</b>			
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 <input type="checkbox"/>			Signature/Date of Authorized Individual <b>9/14/09</b>				
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 <input type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED							
BY	FAA Fit Standards Inspector	Manufacturer	Maintenance Organization		Person Approved by Canadian Department of Transport		
	FAA Designee	Repair Station	X	Inspection Authorization		Other (Specify)	
Certificate or Designation No. <b>1623727</b>			Signature/Date of Authorized Individual <b>9/14/09</b>				

## NOTICE

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

### 8. Description of Work Accomplished

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

N258RM

Nationality and Registration Mark

9/14/09

Date

REPAIRS ON THE FOLLOWING WERE PREFORMED BY KOSOLA & ASSOC. INC.

1. SEE ATTACHED WORK ORDER NUMBER: 08810
2. ENGINE MOUNT PART NUMBER: 86212-02
3. ENGINE MOUNT SERIAL NUMBER: K8810

☒ Additional Sheets Are Attached