



U.S. Department of
Transportation
Federal Aviation
Administration

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

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

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Nationality and Registration Mark <u>N1782J</u>	Serial No. <u>28-24205</u>		
	Make <u>Piper</u>	Model <u>PA28-140</u>	Series <u>28</u>	
2. Owner	Name (As shown on registration certificate) <u>Jonathan Whalley</u>		Address (As shown on registration certificate) [Redacted]	
			Address [Redacted]	
			City <u>Mansfield</u>	State <u>MA</u>
			Zip <u>02048</u>	Country <u>USA</u>

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial Number
☐	☐	AIRFRAME	_____	(As described in Item 1 above)	_____
☐	☒	POWERPLANT	<u>Lycoming</u>	<u>O-320-E3D</u>	<u>L-42423-27A</u>
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type _____ Manufacturer _____		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency	
Name <u>James P. Casey</u>		☒ U.S. Certificated Mechanic ☐ Manufacturer	
Address [Redacted]		☐ Foreign Certificated Mechanic C. Certificate No.	
City <u>Braintree</u> State <u>MA</u>		☐ Certificated Repair Station [Redacted]	
Zip <u>02184</u> Country <u>USA</u>		☐ Certificated Maintenance Organization [Redacted]	

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

Extended range fuel per 14 CFR Part 43 App. B ☐	Signature/Date of Authorized Individual [Redacted] <u>6-13-14</u>
--	--

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

Certificate or Designation No. [Redacted]	Signature/Date of Authorized Individual [Redacted] <u>6-13-14</u>
--	--

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.)

N1782J

Nationality and Registration Mark

6-13-14

Date

Modified Lycoming O-320-E3D SN L-42423-27A
in accordance with RAM Aircraft Drawing No 1724 Rev D
to increase power rating from 150 HP to 160 HP in
accordance with instructions contained within STC #
SE89875W-D

No change in Weight and Balance

END

☐ Additional Sheets Are Attached



December 20, 2013

Casey Aviation
Attn: Jim

[REDACTED]
Mansfield, MA 02048

RE: STC USAGE AGREEMENT

Dear Sir:

This letter serves as a one time authorization per our installation center agreement to modify Lycoming Engine Model 0-320-E3D, Serial No. L-42423-27A, to increase take-off power rating from 150HP to 160HP. This Engine is to be installed on Aircraft Model PA-28-140, Serial No. 28-24205, Registration No. N1782J.

Installation is to be done in accordance with **RAM AIRCRAFT LIMITED PARTNERSHIP STC No. SE8987SW-D.**

Sincerely,

[REDACTED]
Tommy Derr
QC Inspector

United States Of America
Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SE8987SW-D

This Certificate issued to RAM Aircraft, Limited Partnership
Waco, TX 76708

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 13 of the Civil Air Regulations.

Original Product Type Certificate Number:

B-274

Make:

AVCO Lycoming Division of Textron, Inc.

Model:

O-320-E3D, O-320-E2A

Description of Type Design Change: Modify engine O-320-E3D in accordance with RAM Aircraft Drawing No. 1724, Rev. C, dated April 17, 2006, or later FAA approved revision to increase take off power rating from 150HP to 160HP. Modify O-320-E2A engine in accordance with RAM Aircraft Drawing No. 1724, Rev. C, dated April 17, 2006, or later FAA approved revision to increase take off and maximum continuous power rating from 150HP to 160HP.

Limitations and Conditions: Minimum fuel grade is 100/100LL. Lycoming model O-320-E2A not certified with gravity flow fuel system. The installer must determine whether this design change is compatible with previously approved modifications. If the holder agrees to permit another person to use this certificate to alter a product, the holder must give the other person written evidence of that permission.

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

Date of application: March 25, 1994

Date of issuance: October 27, 1994

Date reissued: October 08, 2001; February 20, 2008

Date amended: June 26, 2006; October 11, 2006
Revision 2



By direction of the Administrator

(Signature)

S. Frances Cox, Manager
Special Certification Office,
Rotorcraft Directorate

(Title)

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



U.S. Department of
Transportation
Federal Aviation
Administration

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

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

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Nationality and Registration Mark <u>N1782J</u>	Serial No. <u>28-24205</u>	
	Make <u>Piper</u>	Model <u>PA28-140</u>	Series <u>28</u>
2. Owner	Name (As shown on registration certificate) <u>Jonathan Whalley</u>	Address (As shown on registration certificate) Address <u>[REDACTED]</u>	
		City <u>Mansfield</u> State <u>MA</u> Zip <u>02048</u> Country <u>USA</u>	

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial Number
☐	☐	AIRFRAME	_____	(As described in Item 1 above)	_____
☐	☒	POWERPLANT	<u>Lycoming</u>	<u>O-320-E2D</u>	<u>L-42423-27A</u>
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type _____ Manufacturer _____		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency	
Name <u>James P. Casey</u>		☒ U.S. Certified Mechanic	☐ Manufacturer
Address <u>[REDACTED]</u>		☐ Foreign Certified Mechanic	C. Certificate No.
City <u>Braintree</u> State <u>MA</u>		☐ Certified Repair Station	<u>[REDACTED]</u>
Zip <u>02184</u> Country <u>USA</u>		☐ Certified Maintenance Organization	

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

Extended range fuel per 14 CFR Part 43 App. B ☐	Signature/Date of Authorized Individual <u>[REDACTED]</u> <u>6-13-14</u>
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7. Approval for Return to Service

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

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

Certificate or Designation No. <u>[REDACTED]</u>	Signature/Date of Authorized Individual <u>[REDACTED]</u> <u>6-13-14</u>
--	---

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.)

N1782J

Nationality and Registration Mark

6-13-14

Date

Engine converted from an O-320-E2D to an O-320-E3D by replacement of parts in accordance with Textron Lycoming Service Instruction No. 1304J. Data Plate stamped 'C' added as a suffix on engine serial number per SI 1304J.

Parts required to change O-320-E2D to O-320-E3D

Qty	P.N. installed	Nomenclature	P.N. removed
1ea	72066	Prop Flange bushing	72065
5ea	72067	Prop Flange bushings	72063

Weight Change Negligible

Engine Test Run

This conversion is noted in the permanent engine maintenance records.

END

☐ Additional Sheets Are Attached



U.S. Department of
Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020
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 <i>N1782T</i>	Serial No. <i>28-24205</i>		
	Make <i>Piper</i>	Model <i>PA28-140</i>	Series <i>28</i>	
2. Owner	Name (As shown on registration certificate) <i>Jonathan Whalley</i>		Address (As shown on registration certificate) [Redacted]	
			Address [Redacted]	
			City <i>Mansfield</i>	State <i>MA</i>
			Zip <i>02048</i>	Country <i>USA</i>

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial Number
☐	☒	AIRFRAME	_____	(As described in Item 1 above)	_____
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type		
			Manufacturer		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency	
Name <i>James P. Casey</i>		☒ U.S. Certificated Mechanic	☐ Manufacturer
Address [Redacted]		☐ Foreign Certificated Mechanic	C. Certificate No.
City <i>Barnstable</i>	State <i>MA</i>	☐ Certificated Repair Station	[Redacted]
Zip <i>02184</i>	Country <i>USA</i>	☐ Certificated Maintenance Organization	

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

Extended range fuel per 14 CFR Part 43 App. B ☐	Signature/Date of Authorized Individual [Redacted] <i>6-13-14</i>
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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	Person Approved by Canadian Department of Transport
	FAA Designee	Repair Station	☒ Inspection Authorization	Other (Specify)

Certificate or Designation No. [Redacted]	Signature/Date of Authorized Individual [Redacted] <i>6-13-14</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.)

N1782J

Nationality and Registration Mark

6-13-14

Date

Installed Lycoming O-320-E3D SN L-42423-27A
in accordance with RAM Aircraft Drawing No R140012
Rev J and instructions contained within STC SA2706SW-D
No change in weight and balance

END

☐ Additional Sheets Are Attached

United States Of America
Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SA2706SW-D

This Certificate issued to RAM Aircraft, Limited Partnership
[REDACTED]
Waco, TX 76708

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

Original Product Type Certificate Number: 2A-13

Make: Piper

Model: PA-28-140

Description of Type Design Change: Installation of 160 H. P. Lycoming O-320-D2A, -D2B, -D2C, -D3G, -E2A, or -E3D engines on a Piper Model PA-28-140 in accordance with RAM Aircraft Drawing No. R14001D, Revision H, dated September 26, 2005, or later FAA approved revision. FAA approved Airplane Flight Manual Supplement No. 1084, Revision B, dated November 14, 2006, or later FAA approved revision is required.

Limitations and Conditions: To be eligible for installation, Lycoming O-320-E2A and O-320-E3D engine must be modified per STC SE8987SW. Instructions for Continued Airworthiness are contained in RAM Drawing number 2662 dated December 12, 2005. The installer must determine whether this design change is compatible with previously approved modifications. If the holder agrees to permit another person to use this certificate to alter a product, the holder must give the other person written evidence of that permission.

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

Date of application: January 03, 1978

Date of issuance: January 20, 1978

Date reissued: October 8, 2001; February 12, 2008

Date amended: 09/28/81; 10/21/81; 01/17/97; 11/14/06
Rev. 4



By direction of the Administrator

[REDACTED]
(Signature)
S. Frances Cox, Manager
Special Certification Office,
Southwest Region

(Title)

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



December 20, 2013

Casey Aviation

Attn: Jim

Mansfield, MA. 02048

RE: STC USAGE AGREEMENT

Dear Sir:

This letter serves as a one-time authorization per our installation center agreement to install a Lycoming Engine, Model (check one) 0-320-D2A, 0-320-D2B, 0-320-D2C, 0-320-D3G, X 0-320-E3D, (modified in accordance with STC#SE 8987SW), on Piper model PA-28-140, Serial No. 28-24205, Registration No. N1782J.

Modification is to be done in accordance with RAM AIRCRAFT LIMITED PARTNERSHIP STC SA2706SW-D.

Sincerely,

Tommy Derfick
QC Inspector

3454

200030065

 US Department of Transportation Federal Aviation Administration	MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance) RECEIVED OCT 8 1999				Form Approved OMB No. 2120-0020 WKD	
					For FAA Use Only	
					Office Identification NR-P500-03 WIC	
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. 1424). 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			Model 28-140		
	Serial No. 28-24205			Nationality and Registration Mark N1782J		
2. Owner	Name (As shown on registration certificate) BRADY, JOHN			Address (As shown on registration certificate) WAYLAND, MA 01778		
	3. For FAA Use Only					
4. Unit Identification						
Unit	Make	Model	Serial No.	Repair	Alteration	
AIRFRAME	(As described in Item 1 above)			X		
POWERPLANT						
PROPELLER						
APPLIANCE	Type					
	Manufacturer					
6. Conformity Statement						
A. Agency's Name and Address		B. Kind of Agency		C. Certificate No.		
CHARLES MELLO RUTLAND, MA 01543		☒ U.S. Certified Mechanic ☐ Foreign Certified Mechanic ☐ Certified Repair Station ☐ Manufacturer		[REDACTED]		
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.						
Date 10-1-99		Signature of Authorized Individual CHARLES MELLO [REDACTED]				
7. Approval for Return To Service						
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED						
BY	FAA Fit. Standards Inspector	Manufacturer	☒	Inspection Authorization	Other (Specify)	
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group		
Date of Approval or Rejection 10-1-99		Certificate or Designation No. [REDACTED]	Signature of Authorized Individual CHARLES MELLO [REDACTED]			

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.)
FOUND RIGHT WING REAR SPAR WITH INTERGRANULAR CORROSION AT ATTACH
FITTING.

REPLACED RIGHT REAR SPAR INBOARD SECTION WITH P/N 62054-001.

SPAR WAS INSTALLED USING THE ORIGINAL RIVET SIZE, TYPE AND SPACING.

THE WORK WAS ACCOMPLISHED I/A/W AC.43.13-1A PAR 100..

NO CHANGE WEIGHT AND BALANCE. END

☐ Additional Sheets Are Attached

RECEIVED MAR 29 1993 WINDSOR		U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		Form Approved Budget Bureau No. 2430-1	
		MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)		FOR FAA USE ONLY OFFICE IDENTIFICATION NB-FSDO-03	
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 SERIAL NO. 28-24205		MODEL 28-140 NATIONALITY AND REGISTRATION MARK N1782J	
2. OWNER		NAME (As shown on registration certificate) BRADY, JOHN		ADDRESS (As shown on registration certificate) WAYLAND, MA 01778	
3. FOR FAA USE ONLY					
4. UNIT IDENTIFICATION				5. TYPE	
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	[As described in item 1 above]				XXX
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				
6. CONFORMITY STATEMENT					
A. AGENCY'S NAME AND ADDRESS		B. KIND OF AGENCY		C. CERTIFICATE NO.	
ANDREW LIEBFRIED [REDACTED] FITCHBURG MA 01420		☒ U.S. CERTIFICATED MECHANIC ☐ FOREIGN CERTIFICATED MECHANIC ☐ CERTIFICATED REPAIR STATION ☐ MANUFACTURER		[REDACTED]	
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 3-23-93		SIGNATURE OF AUTHORIZED INDIVIDUAL ANDREW LIEBFRIED [REDACTED]			
7. APPROVAL FOR RETURN TO SERVICE					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED					
BY	FAA P.T. STANDARDS INSPECTOR	MANUFACTURER	☒	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION 3-23-93		CERTIFICATE OR DESIGNATION NO. [REDACTED]		SIGNATURE OF AUTHORIZED INDIVIDUAL ANDREW LIEBFRIED [REDACTED]	

NOTICE

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

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

INSTALLED ROSS LCA-200 USING STANDARD RND ANTENNA AND PRE-AMP. UNIT WAS MOUNTED IN AVIONICS STACK UTILIZING EXISTING BRACKETRY PROVIDED BY THE AIRCRAFT MANUFACTURER. ALL WORK DONE IN ACCORDANCE WITH AC 43,13-1A CHAPTERS 11, 13, AND 15, AC 43,13-2A CHAPTERS 1, 2, and 3, AC 20-121A APPENDIX 1, PARAGRAPH 3, AND MANUFACTURERS INSTALLATION INSTRUCTIONS. A GROUND AND FLIGHT TEST WERE PERFORMED TO DETERMINE PROPER OPERATION. THE LORAN IS NOT CONNECTED TO ANY OTHER EQUIPMENT AND IS PLACARDED "LORAN C IS NOT APPROVED FOR IFR." NEW WEIGHT AND BALANCE COMPUTED AND EQUIPMENT LIST REVISED. ADDITIONAL ELECTRICAL LOAD IS 1 AMP.

END

U.S. GOVERNMENT PRINTING OFFICE: 1988-559-121/40146

U.S. GOVERNMENT PRINTING OFFICE: 1988-559-121/40146

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 2A	
				NE-FSDO-03	
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 28-140		
	SERIAL NO. 28-24205		NATIONALITY AND REGISTRATION MARK N1782J		
2. OWNER	NAME (As shown on registration certificate) Brady, John		ADDRESS (As shown on registration certificate) Wayland, MA 01778		
3. FOR FAA USE ONLY					
4. UNIT IDENTIFICATION					5. TYPE
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	As described in item 1 above				X
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				
6. CONFORMITY STATEMENT					
A. AGENCY'S NAME AND ADDRESS			B. KIND OF AGENCY		C. CERTIFICATE NO.
ANDREW LIEBFRIED [REDACTED] PITCHBURG MA 01420			☒ U.S. CERTIFICATED MECHANIC		[REDACTED]
			☐ FOREIGN CERTIFICATED MECHANIC		
			☐ CERTIFICATED REPAIR STATION		
			☐ MANUFACTURER		
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.					
DATE 3-19-93			SIGNATURE OF AUTHORIZED INDIVIDUAL ANDREW LIEBFRIED [REDACTED]		
7. APPROVAL FOR RETURN TO SERVICE					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED					
BY	FAA P.T. STANDARDS INSPECTOR	MANUFACTURER	☒ INSPECTION AUTHORIZATION		OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION	☐ CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT		
DATE OF APPROVAL OR REJECTION 3-19-93		CERTIFICATE OR DESIGNATION NO. [REDACTED]		SIGNATURE OF AUTHORIZED INDIVIDUAL ANDREW LIEBFRIED [REDACTED]	

NOTICE

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

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

Modified Battery Box I/A/W STC SA 4008NM.

No change to weight and Balance.

END

REPAIRS BY
JAMES W. WILSON
CAMERA 1111111111
T. WILSON

NAME	WILSON, JAMES W.	REG	WILSON, JAMES W.
ADDRESS	18-34562	DOB	18-34562
PHONE	1-602	SSN	18-34562
DATE	18-34562	AGE	18-34562

ADDITIONAL SHEETS ARE ATTACHED

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)				Form Approved Budget Bureau No. 04-R060.1 FOR FAA USE ONLY OFFICE IDENTIFICATION NE-FSDU-23	
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 <u>Piper</u>		MODEL <u>28-140</u>		
	SERIAL NO. <u>28-24205</u>		NATIONALITY AND REGISTRATION MARK <u>N 1782J</u>		
2. OWNER	NAME (As shown on registration certificate) <u>Brady, John</u>		ADDRESS (As shown on registration certificate) <u>Wayland, MA 01778</u>		
	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.
ANDREW LIEBFRIED [REDACTED] FITCHBURG MA 01420			☒ U.S. CERTIFICATED MECHANIC		[REDACTED]
			☐ FOREIGN CERTIFICATED MECHANIC		
			☐ CERTIFICATED REPAIR STATION		
			☐ MANUFACTURER		
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or 1 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 <u>3-4-93</u>			SIGNATURE OF AUTHORIZED INDIVIDUAL ANDREW LIEBFRIED [REDACTED]		
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 PT. STANDARDS INSPECTOR	MANUFACTURER	☒ INSPECTION AUTHORIZATION	OTHER (Specify)	
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT		
DATE OF APPROVAL OR REJECTION <u>3-4-93</u>		CERTIFICATE OR DESIGNATION NO. [REDACTED]	SIGNATURE OF AUTHORIZED INDIVIDUAL ANDREW LIEBFRIED [REDACTED]		

NOTICE

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

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

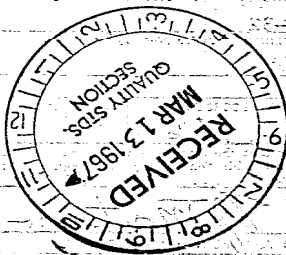
- ① Removed original Air Filter.
- ② Installed Bracket air Filter Assy BA104
Per STC SA693CE
- ③ OPS CK OK
- ④ NO change to weight & Balance
END

359-0328 21 MAR 1981

Form Approved
Budget Bureau No. 04-R058.2

FEDERAL AVIATION AGENCY APPLICATION FOR AIRWORTHINESS CERTIFICATE (FAR 21)				INSTRUCTIONS: Print or type. Do not write in shaded areas; these are for FAA use only. Submit original only to an authorized FAA Representative. If additional space is required, use reverse side.	
I. AIRCRAFT DESCRIPTION	1. REGISTRATION MARK	2. AIRCRAFT MAKE	3. AIRCRAFT MODEL DESIGNATION	FAA CODING	
	4. AIRCRAFT SERIAL NO.	5. ENGINE MAKE	6. ENGINE MODEL DESIGNATION	7102802	
	7. NO. OF ENGINES	8. PROPELLER MAKE	9. PROPELLER MODEL DESIGNATION	141508	
	One	Sensenich	M74DM58	1968	
II. CERTIFICATION REQUESTED	A. APPLICATION IS HEREBY MADE FOR:				
	3 ☒ ORIGINAL CERTIFICATE—AIRCRAFT IS ☒ NEW ☐ USED ☐ IMPORT				
	4 ☐ AMENDMENT OR MODIFICATION OF CURRENT CERTIFICATE				
	5 ☐ OTHER (Specify)				
	B. AIRWORTHINESS CLASSIFICATION (For multiple certification, check appropriate items)				
	1 ☒ STANDARD (Indicate category) ☒ NORMAL ☒ UTILITY ☐ ACROBATIC ☐ TRANSPORT				
	2 ☐ LIMITED				
	3 ☐ RESTRICTED (Indicate operation(s) to be conducted)				
	4 ☐ EXPERIMENTAL (Indicate operation(s) to be conducted)				
	5 ☐ PROVISIONAL (Indicate class)				
III. OWNER'S CERTIFICATION	A. REGISTERED OWNER (As shown on Certificate of Aircraft Registration)				
	NAME		ADDRESS (Number, street, city, State and ZIP code)		
	Piper Aircraft Corporation		Vero Beach, Florida 32960		
	B. AIRCRAFT CERTIFICATION BASIS				
	AIRCRAFT SPECIFICATION OR TYPE CERTIFICATION DATA SHEET (Give No. and Rev. No.)		AIRWORTHINESS DIRECTIVE SUMMARY (Give year and last card No.)		
	2A13 REV 15		1966 67-32		
	AIRCRAFT LISTING (Give page No(s.))		SUPPLEMENTAL TYPE CERTIFICATE (Give No(s.))		
	C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS				
	☒ AIRCRAFT NEW—NO PREVIOUS HISTORY		TOTAL AIRFRAME HOURS RECORDED		FAA CODING
	RECORDS MAINTAINED IN COMPLIANCE WITH FAR 91.173		66		1
IV. INSPECTION AGENCY VERIFICATION	I hereby certify that I am the registered owner (or his agent) of the aircraft described above; that the aircraft is registered with the Federal Aviation Agency in accordance with section 501 of the Federal Aviation Act of 1958, and applicable Federal Aviation Regulations; and that the aircraft has been inspected and is airworthy and eligible for the classification(s) requested.				
	DATE OF APPLICATION		NAME AND TITLE (Print or type)		SIGNATURE
	1-30-68		V. J. Montuoro Agent		
	IN ACCORDANCE WITH FAR 21.183, THE AIRCRAFT DESCRIBED ABOVE HAS BEEN INSPECTED AND FOUND AIRWORTHY BY:				
	2 ☒ CERTIFICATED AIR CARRIER (Give Certificate No.)		3 ☒ CERTIFICATED MECHANIC (IA) (Give Certificate No.)		6 ☒ CERTIFICATED DOMESTIC REPAIR STATION (Give Certificate No.)
	5 ☐ AIRCRAFT MANUFACTURER (Give name of firm)		VERIFIED BY		
	DATE		TITLE		SIGNATURE
					No. 16
	V. AIRWORTHINESS DOCUMENTATION				
	A. CURRENT OPERATING LIMITATIONS AVAILABLE IN AIRCRAFT		☒ G. THIS INSPECTION RECORDED IN AIRCRAFT RECORDS		
B. CURRENT OPERATING LIMITATIONS ATTACHED		H. STATEMENT OF CONFORMITY—FAA FORM 317 (Attach when required)			
☒ C. CURRENT APPROVED FLIGHT MANUAL AVAILABLE IN AIRCRAFT		I. PREVIOUS AIRWORTHINESS CERTIFICATE ISSUED IN ACCORDANCE WITH FAR _____ CAR _____ (Orig. attached)			
D. DATA, DRAWINGS, PHOTOGRAPHS, ETC. (Attach when required)		J. AIRWORTHINESS CERTIFICATE ISSUED IN ACCORDANCE WITH FAR 21.183 (a) (Copy attached)			
☒ E. CURRENT WEIGHT & BALANCE INFORMATION AVAILABLE IN AIRCRAFT					
☒ F. MAJOR REPAIR AND ALTERATION, FAA FORM 337 (Attach when req.)					
VI. FAA REPRESENTATIVE CERTIFICATION	A. I have inspected the aircraft described above, find it conforms to its type certificate, and is in condition for safe operation.				
	B. I have inspected the aircraft described above, find it is in condition for safe experimental operation.				
	C. Current Airworthiness Certificate amended.				
	DATE	DESIGNATION NO.	OFFICE NO.	SIGNATURE	
01-68 JAN 30 1968			JAMES E. WOOD		

DATE: 9-14-81



CONVEYANCE FILED WITH E. MOORE
FAA AIRCRAFT REGISTRY

MAR 14 11 51 AM '88

OKLAHOMA CITY

No. 10

VERIFIED BY

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

1. NATIONALITY AND REGISTRATION MARKS HL782J	2. MANUFACTURER AND MODEL Piper PA 28-140	3. AIRCRAFT SERIAL NUMBER 28-24205	4. CATEGORY Normal or Utility
5. AUTHORITY AND BASIS FOR ISSUANCE This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation, except as noted herein. None			
6. TERMS AND CONDITIONS Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is valid as long as the maintenance, preservation, and alterations are performed in accordance with Parts 43, and 71 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.			
DATE OF ISSUANCE JAN 30 1969	FAA REPRESENTATIVE JAMES E. WOOD	DESIGNATION NUMBER [REDACTED]	

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. 5N

DATE:

9-14-81