

 US Department of Transportation <b>Federal Aviation Administration</b>		<b>MAJOR REPAIR AND ALTERATION</b> <b>(Airframe, Powerplant, Propeller, or Appliance)</b>		OMB No. 2120-0020 Exp. 02/28/2023		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))							
<b>1. Aircraft</b>	Nationality and Registration Mark <u>N7431N</u>			Serial No. <u>18263209</u>			
	Make <u>Cessna</u>			Model <u>182</u>		Series <u>P</u>	
<b>2. Owner</b>	Name (As shown on registration certificate) <u>ASBERRY, GREGG</u>			Address (As shown on registration certificate) <u>PO BOX 612</u>			
				City <u>CAVE CITY</u>		State <u>ARKANSAS</u>	
				Zip <u>72521-0612</u>		Country <u>UNITED STATES</u>	
3. For FAA Use Only							
<b>4. Type</b>		<b>5. Unit Identification</b>					
Repair	Alteration	Unit	Make	Model		Serial No.	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	<u>Cessna</u>	(As described in Item 1 above)		<u>18263209</u>	
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT					
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER					
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type				
			Manufacturer				
<b>6. Conformity Statement</b>							
<b>A. Agency's Name and Address</b>				<b>B. Kind of Agency</b>			
Name <u>Logan Cole Graham</u>				<input type="checkbox"/> U. S. Certificated Mechanic			
Address <u>102 Cherry Rose Trail</u>				<input type="checkbox"/> Foreign Certificated Mechanic			
City <u>Canton</u> State <u>MS</u>				<input type="checkbox"/> Certified Repair Station			
Zip <u>39046</u> Country <u>UNITED STATES</u>				<input type="checkbox"/> Certified Maintenance Organization			
				C. Certificate No. <u>A3P4644553</u>			
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 <u>Logan Cole Graham</u> <u>7 JUL 2025</u>				
<b>7. Approval for Return to Service</b>							
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 checked="" type="checkbox"/> Approved <input type="checkbox"/> 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. <u>4644553</u>			Signature/Date of Authorized Individual <u>Logan Cole Graham</u> <u>7 JUL 2025</u> <u>Logan Cole Graham</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.)

TACHOMETER TIME - 2448.7  
N7431N 7-7-2025

Nationality and Registration Mark

Date

Installation of vortex generators on the wings and tail surfaces in accordance with the provisions of AML SA00834SE and STC#SA00834SE.

Instructions for Continued Airworthiness of Micro Vortex Generator Installations are stated on VG Operating Placard #MA8001 which must be installed in an easily seen location in the cockpit. This placard states: "if more than 5 VGs are damaged or missing, the aircraft is not airworthy." To make it airworthy, the missing VGs in excess of five need to be replaced. The VGs should be examined prior to each flight, during the pre-flight inspection, to determine if any are missing or damaged. Missing or damaged VGs in excess of five need to be replaced by the installation of a new (replacement) part. Installation is accomplished with Loctite AA 330 Adhesive. No other maintenance or inspections are necessary.

Negligible weight change

END

☐ Additional Sheets Are Attached



## Authorization for the use of Supplemental Type Certificate

Micro AeroDynamics, Inc is the owner of the following STC and hereby authorizes the use of this STC on the following aircraft:

STC Number:	SA00834SE
Make:	Cessna
Model:	182P
Registration Number:	N7431N
Serial Number:	18263209

Signed: *K. Lutscher*

Date of Authorization: May 9, 2025

Authorization Reference: 44137

Micro AeroDynamics, Inc.

Micro AeroDynamics, Inc. 4000 Airport Rd. Suite D Anacortes, WA 98221  
360-293-8082 800-677-2370 360-293-5499 Fax



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

*Number* SA00834SE

*This certificate, issued to* Micro AeroDynamics, Inc.  
4000 Airport Road, Suite D  
Anacortes, WA 98221

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

*Original Product—Type Certificate Number:* \*See attached FAA Approved Model List (AML)  
*Make:* No. SA00834SE for a list of approved airplane  
*Model:* models and applicable airworthiness regulations.

*Description of the Type Design Change:* Installation of vortex generators on the wings and tail surfaces in accordance with the provisions of AML SA00834SE.

NOTE: If more than five vortex generators are damaged or missing, the aircraft is not airworthy.

*Limitations and Conditions:* Approval of this change in type design applies to the aircraft listed on AML SA00834SE only. This approval should not be extended to other aircraft on which other previously approved modifications are incorporated unless it is determined that the relationship between this change and any other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft. NOTE: Compatibility of this modification with R/STOL Systems Supplemental Type Certificate SA1382WE has been demonstrated by flight testing. A copy of this Certificate and AML must be maintained as part of the permanent records for the modified aircraft.

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

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

*Date of application:* June 8, 2000

*Date reissued:*

*Date of issuance:* August 11, 2000

*Date amended:*



*By direction of the Administrator*

*Adrian P. ...*  
(Signature)

Acting Manager, Seattle Aircraft  
Certification Office

(Title)

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

This certificate may be transferred in accordance with FAR 21.47.

**FAA APPROVED MODEL LIST NO. SA00834SE  
FOR  
INSTALLATION OF VORTEX GENERATORS**

**ISSUED AUGUST 11, 2000**

ITEM	AIRCRAFT MODEL	AIRCRAFT MAKE	TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	FAA SEALED DRAWING LIST NUMBER REV	INSTALLATION INSTRUCTIONS, REVISION AND DATE	AML REVISION DATE
1.	R172E (USAF T-41B, C, & D)	CESSNA	3A17	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
2.	R172F (USAF T-41D)	CESSNA	3A17	CAR 3	MA2138 REV B 2/7/2003	3/10/03 MA2148, REV D 2/7/2003	3/10/03
3.	R172G (USAF T-41C or D)	CESSNA	3A17	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
4.	R172H (USAF T41D)	CESSNA	3A17	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
5.	R172J	CESSNA	3A17	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
6.	R172K	CESSNA	3A17	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
7.	FR172E	CESSNA	A18EU	FAR 21.29	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
8.	FR172F	CESSNA	A18EU	FAR 21.29	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
9.	FR172G	CESSNA	A18EU	FAR 21.29	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
10.	FR172H	CESSNA	A18EU	FAR 21.29	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
11.	FR172J	CESSNA	A18EU	FAR 21.29	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
12.	FR172K	CESSNA	A18EU	FAR 21.29	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
13.	182C	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03

**FAA APPROVED MODEL LIST NO. SA00834SE**  
**FOR**  
**INSTALLATION OF VORTEX GENERATORS**

**ISSUED AUGUST 11, 2000**

ITEM	AIRCRAFT MODEL	AIRCRAFT MAKE	TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	FAA SEALED DRAWING LIST NUMBER REV	INSTALLATION INSTRUCTIONS, REVISION AND DATE	AML REVISION DATE
14.	182D	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
15.	182E	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
16.	182F	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
17.	182G	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
18.	182H	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
19.	182J	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
20.	182K	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
21.	182L	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
22.	182M	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
23.	182N	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
24.	182P	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
25.	182Q	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
26.	R182	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
27.	TR182	CESSNA	3A13	CAR 3	MA2138 REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03




**FAA APPROVED MODEL LIST NO. SA00834SE  
FOR  
INSTALLATION OF VORTEX GENERATORS**

**ISSUED AUGUST 11, 2000**

ITEM	AIRCRAFT MODEL	AIRCRAFT MAKE	TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	FAA SEALED DRAWING LIST NUMBER	REV	INSTALLATION INSTRUCTIONS, REVISION AND DATE	AML REVISION DATE
28.	182R	CESSNA	3A13	CAR 3	MA2138	REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
29.	T182	CESSNA	3A13	CAR 3	MA2138	REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
30.	182S	CESSNA	3A13	FAR 23	MA2138	REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
31.	F182P	CESSNA	A42EU	CAR 3	MA2138	REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
32.	F182Q	CESSNA	A42EU	CAR 3	MA2138	REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
33.	FR182	CESSNA	A42EU	CAR 3	MA2138	REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
34.	182T	CESSNA	3A13	FAR 23	MA2138	REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03
35.	T182T	CESSNA	3A13	FAR 23	MA2138	REV B 2/7/2003	MA2148, REV D 2/7/2003	3/10/03

Approved

  
Acting Manager, Seattle Aircraft  
Certification Office