

Supplemental Type Certificate

Number SA00024SE

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 therefore as specified hereon meets the airworthiness requirements of Part 3 of the Civil Air Regulations.

Original Product—Type Certificate Number: A7CE
Make: Textron Aviation Inc. (formerly Cessna)
Model: 401, 401A, 401B, 402, 402A, 402B, 414

Description of the Type Design Change: Installation of Vortex Generators on the wings and vertical tail and strakes on the nacelles in accordance with Installation Instructions MA2011 Revision D, dated June 19, 2020, or later Federal Aviation Administration (FAA) approved revision and Drawing List MA2010 Revision D, dated December 20, 2005, or later FAA approved revision. Maintained in accordance with the Instructions for Continued Airworthiness (ICA) listed in Installation Instructions MA2011 Revision D, dated June 19, 2020, or later FAA approved revision. Operated in accordance with the appropriate Airplane Flight Manual Supplement (AFMS) listed in the Limitations and Conditions section of this certificate.

Limitations and Conditions: Approval of this change in type design applies to the aircraft listed only. This approval should not be extended to other aircraft of these models on which other previously approved modifications are incorporated unless it is determined by the installer that the relationship between this change and other previously approved modifications will introduce no adverse effect upon the airworthiness of that 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.

(See Continuation Sheet Page 3 of 3 Pages)

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: February 6, 1991

Date reissued

Date of issuance: October 8, 1993

Date amended May 17, 1996; July 28, 2020



By direction of the Administrator

Bill Ashforth
FOR Digitally signed by
WILLARD D ASHFORTH
Date: 2020.07.28
11:12:42 -07'00'

(Signature)

For Manager, Seattle ACO Branch

(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 or made available to third persons by licensing agreements in accordance with 14 CFR 21.47. Possession of this Supplemental Type Certificate (STC) document by persons other than the STC holder does not constitute rights to the design data nor to alter an aircraft, aircraft engine, or propeller. The STC's supporting documentation (drawings, instructions, specifications, flight manual supplements, etc.) is the property of the STC holder. An STC holder who allows a person to use the STC to alter an aircraft, aircraft engine, or propeller must provide that person with written permission acceptable to the FAA. (Ref. 14 CFR 21.120). This certificate may be transferred in accordance with FAR 21.47.

INSTRUCTIONS: The transfer endorsement below may be used to notify the appropriate FAA Regional Office of the transfer of this Supplemental Type Certificate.

The FAA will reissue the certificate in the name of the transferee and forward it to them.

TRANSFER ENDORSEMENT

Transfer the ownership of Supplemental Type Certificate Number _____

to *(Name of Transferee)*

(Address of Transferee)

(Number and Street)

(City, State, and ZIP Code)

from *(Name of Grantor) (Print or Type)*

(Address of Grantor)

(Number and Street)

(City, State, and ZIP Code)

Extent of Authority (if licensing agreement): _____

Date of Transfer: _____

Signature of Grantor *(In Ink)*:

Supplemental Type Certificate

(Continuation Sheet)

Number SA00024SE

Micro AeroDynamics, Inc.

Date of issuance: October 8, 1993

Reissued:

Amended: May 17, 1996; July 28, 2020

Limitations and Conditions: (cont'd)

The installer has two options when installing this type design change, as described in Installation Manual Document MA2011:

OPTION 1: NO CHANGE IN PERFORMANCE: The vortex generators and nacelle strakes are installed on the aircraft, but the airspeed indicator is not changed and the Pilot's Operating Handbook is not changed to reflect any improvement in performance. The aircraft continues to be operated in accordance with the existing Pilot's Operating Handbook.

OPTION 2: CHANGE IN PERFORMANCE: The vortex generators and nacelle strakes are installed on the aircraft, the airspeed indicator is changed, and an Aircraft Flight Manual Supplement is added to the Pilot's Operating Handbook to reflect a reduced V_s , V_{so} , and V_{mca} .

When OPTION 2 is chosen by the installer, the aircraft shall be operated in accordance with the applicable Aircraft Flight Manual Supplement (AFMS) shown below, or later FAA-approved revision:

| <u>Aircraft</u> | <u>S/N</u> | <u>Document Number</u> | <u>Date</u> |
|--------------------------------------|------------|------------------------|-----------------|
| Cessna 414 | 0001-0450 | MA2012 | October 8, 1993 |
| | 0451-0800 | MA2013 | October 8, 1993 |
| | 0801-0965 | MA2014 | October 8, 1993 |
| Cessna 402B | 0001-0500 | MA2015 | May 17, 1996 |
| | 0501-1000 | MA2016 | October 8, 1993 |
| | 1001-1384 | MA2017 | October 8, 1993 |
| Cessna 401, 401A, 401B, 402, 402A | ALL | MA2015 | May 17, 1996 |

A copy of this certificate and Installation Instructions MA2011 Revision D, dated June 19, 2020, or later FAA approved revision, must be maintained as part of the permanent records for the modified aircraft.

When OPTION 2 is chosen by the installer, the applicable AFMS must be maintained as part of the permanent records of the modified aircraft.

-END-

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 or made available to third persons by licensing agreements in accordance with 14 CFR 21.47. Possession of this Supplemental Type Certificate (STC) document by persons other than the STC holder does not constitute rights to the design data nor to alter an aircraft, aircraft engine, or propeller. The STC's supporting documentation (drawings, instructions, specifications, flight manual supplements, etc.) is the property of the STC holder. An STC holder who allows a person to use the STC to alter an aircraft, aircraft engine, or propeller must provide that person with written permission acceptable to the FAA. (Ref. 14 CFR 21.120). This certificate may be transferred in accordance with FAR 21.47.
