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# Instructions for Continued Airworthiness

# MICRO VORTEX GENERATORS (VGs)

## Introduction

- A. PURPOSE: This document is intended to satisfy the requirements of FAA Order 8110.54 Instructions for Continued Airworthiness for Micro Vortex Generator Installations.
- B. UPDATES: Distribution of document updates will be sent to authorized STC holders. Requests for document revisions can also be made available by contacting Micro AeroDynamics, Inc.
- C. FUNCTION: Micro Vortex Generators (VGs) control airflow over the wings and tail by creating vortices that energize the boundary layer and postpone airflow separation. This results in improved performance and control authority at low airspeeds and higher angles of attack.

The Micro Vortex Generators should be examined prior to each flight, during the pre-flight inspection to determine if any are missing or damaged. Contact Micro AeroDynamics for guidance (if needed) to discern the difference between a cosmetically or functionally damaged VG. Damaged VG may be removed by tapping a blade positioned under the base of the part being careful not to damage the aircraft skin.

As stated on the face of the STC and on the VG Operating Placard #MA8001 which must be installed in an easily seen location in the cockpit "If more than 5 VGs are damaged or missing, the aircraft is not airworthy." The 5 VGs missing requirement is regardless of their position on the aircraft. To make it airworthy, the missing VGs in excess of five need to be replaced by the installation of a new (replacement) part with Loctite Depend 330 Adhesive.

### **Airworthiness Limitations**

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Parts 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

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### **Scheduled Maintenance**

- A. INSPECTION INTERVAL: The Micro Vortex Generator modification does not change the due dates, or times of scheduled inspection for the aircraft.
- B. INSPECTION: During each scheduled inspection, check for missing or damaged VGs. Contact Micro AeroDynamics for guidance (if needed) to discern the difference between a cosmetically or functionally damaged VG.
- C. REPLACEMENT INTERVAL: None. 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 Depend 330 Adhesive. Instructions for replacing missing vortex generators, including positioning, are provided with the new (replacement) parts, see Installation Manual and Drawing Package referenced on the STC cover page.

### MICRO AERODYNAMICS DOCUMENT MA0666