Aviation Fabricators
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Document No: AF-504
Revision: (A)
Date: January 15, 2014

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

For

Tailcone Stinger Assembly

Document No.: AF-504

Revision "A"

Revision Date: 01/15/14

Applicable to:

**Cessna 310P, T310P, 310Q, T310Q,
310R, T310R Aircraft**

Modified by FAA STC SA00873WI

The information in the Instruction for Continued Airworthiness is FAA accepted material and complies with 14 CFR 23.1529, Instructions for Continued Airworthiness. It supersedes or adds to that provided in the Maintenance Manual for the Cessna 310 Series Aircraft, only where covered in the items contained herein. For limitations and procedures not contained in the Supplement, consult the Component Maintenance Manual, or other approved airplane data.

REVISION PAGE

Document Title: Instructions for Continued Airworthiness

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Reviewed By: Brian C. Adamson

Updates to the ICA will be made by Aviation Fabricators Inc. Updates will be listed in the log of revisions and the effective pages will be listed below.

Log of Revisions

REV. NO.	EFFECTED PAGE(S)	DESCRIPTION	DATE	APPROVED BY
IR	All	Initial Release	07/01/10	D. Shepard
A	All	-Updated Section 10 Limitations to latest format, pg 10 -Added section 11.0 Troubleshooting, pg 10	01/15/14	JRL

Distribution:

Per the requirement of Appendix G of 14 CFR Part 23 paragraph G23.1 (c), the changes made to the ICA by the applicant will be distributed via mail by means of paper copy.

TABLE OF CONTENTS

ABBREVIATIONS AND DEFINITIONS

Abbreviations	Definitions
AML	FAA Approved Model List (AML)
Detailed Inspection (DET)	An intensive examination of a specific item, installation or assembly to detect damage, failure or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors, magnifying lenses, etc. may be necessary. Surface cleaning and elaborate access procedures may be required.
FAA	Federal Aviation Administration
FAA MIDO	FAA Manufacturing Inspection District Office
General Visual Inspection (GVI)	A visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight or droplight and may require removal or opening of access panels or doors. Stands, ladders or platforms may be required to gain proximity to the area being checked.
ICA	Instructions for Continued Airworthiness
Special Detailed Inspection (SDI)	An intensive examination of a specific item, installation, or assembly to detect damage, failure or irregularity. The examination is likely to make extensive use of specialized Inspection Techniques and/or equipment. Intricate cleaning and substantial access or disassembly procedure may be required.
STC	Supplemental Type Certificate

1.0 INTRODUCTION

The purpose of this Maintenance Manual Supplement and Instructions for Continued Airworthiness (ICA) is to provide the maintenance technician with the information necessary to ensure the continued airworthiness of the Aviation Fabricators Tailcone Stinger Assembly installation, per installation number 42-0225, when installed in accordance with Aviation Fabricators design data included on STC Drawing List AF-297 and per Supplement Type Certificate (STC) SA00873WI.

Modifications to an aircraft obligates the operator to include the maintenance information provided by this document into the operators aircraft Maintenance Manual and operator's aircraft scheduled maintenance program. This document defines supplementary maintenance operations and frequencies recommended by Aviation Fabricators Inc., to ensure the aircraft's airworthiness.

The information contained herein addresses the requirements specified in 14 CFR 23.1529, Instructions for Continues Airworthiness and supplements the basic Airplane Maintenance Manual only in those areas listed as pertains to the installation of the tailcone stinger assembly, as installed per the Aviation Fabricator STC Drawing List AF-297. For limitations and procedures not contained in this supplement, consult the basic Airplane Maintenance Manual.

DATA

All information to support the continued airworthiness of this modification is contained in:

STC SA00873WI.
STC Drawing List: AF-297.

Installation: STC Drawing List: AF-297:
Drawing D-10205

Parts: Refer to p/n 42-0225 STC Drawing List AF-297.

The tailcone stinger assembly is a two piece assembly made from woven carbon graphite and vinylester resin. It is attached to the aircraft using screws and the taillight assembly is attached in the same manner as the OEM assembly.

Design Change Control
All data and changes to the parts and assemblies will be tracked per STC Drawing List AF-297 Rev C or later approved revision.

Applicable Aircraft
Cessna 310P, T310P, 310Q, T310Q, 310R, T310R Aircraft

Tailcone Stinger Assembly
P/N 42-0225

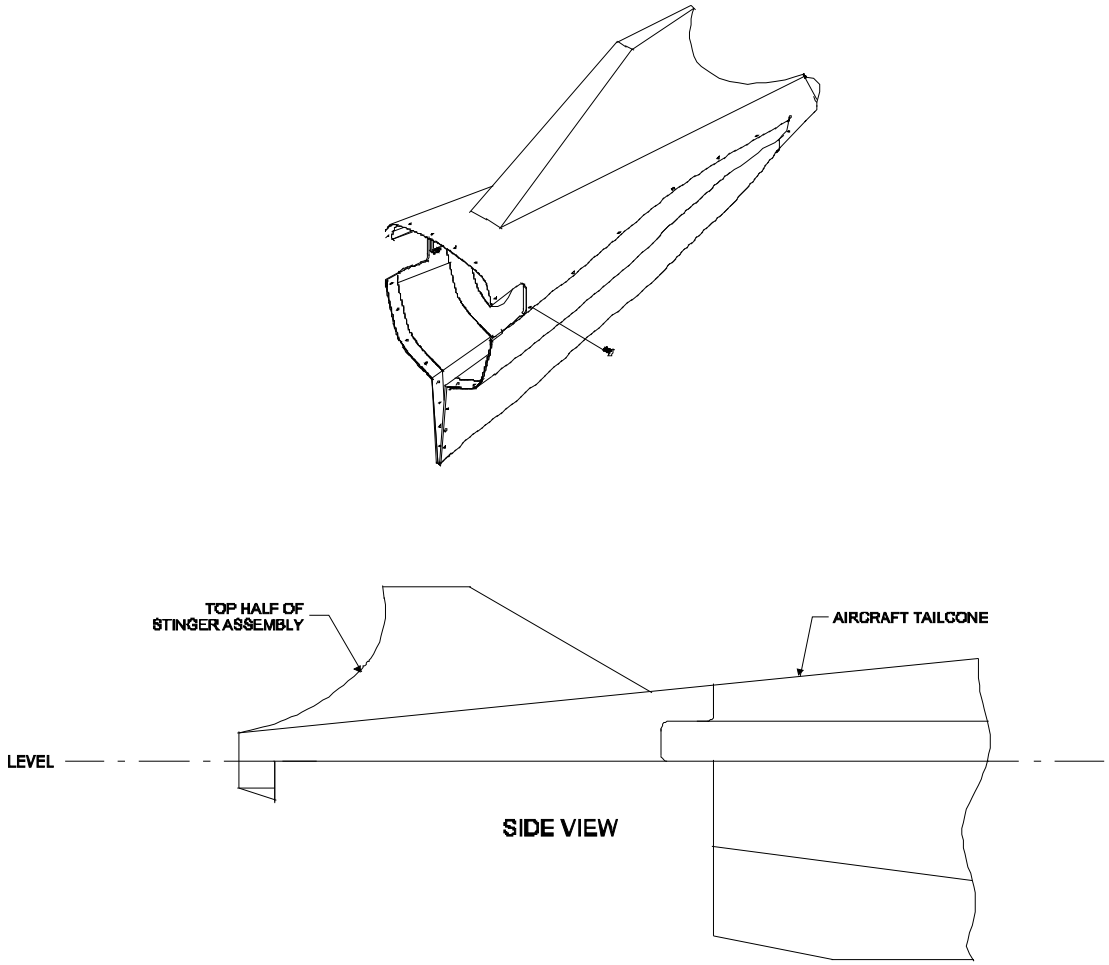

Figure 1.0A

2.0 INSPECTION REQUIREMENTS AND OVERHAUL SCHEDULE

1. To comply with14 CFR 23.1529, inspect the tailcone stinger assembly per the following table

2. Inspection Time Limit for the tailcone stinger assembly installations:
   100 hour inspection or annually

3. Recommended Overhaul Periods
   No additional overhaul time limitations.

Task Code			Schedule	Date	Mech	Insp
AFI-100	a.	Check cracks around assembly and attachment screws.				
AFI-101	b.	Check cracks, breaks, or any other damage to the body of the tailcone assembly.				

3.0 DIMENSION AND ACCESS

The installation of the tailcone stinger assembly does not change the dimensions of the aircraft or alter the access to any existing aircraft system.

4.0 LIFTING AND SHORING

No change.

5.0 LEVELING AND WEIGHING

Tailcone Stinger Assembly = 5.5 lbs +/- .5 lbs without paint.

6.0 TOWING AND TAXIIING

No change.

7.0 PARKING AND MOORING

No change.

8.0 PLACARDS AND MARKINGS

No placards are required in conjunction with this modification.

9.0 SERVICE INFORMATION

Service Instructions:

Cleaning:

1. Clean tailcone stinger assembly with mild detergent and water typical of the aircraft fuselage.

Maintenance Instructions:

If any damage is found during inspection to the tailcone stinger assembly, contact Aviation Fabricators for replacement or repair.

Removal and Installation of the Tailcone Stinger Assembly:

Removal:

1. Remove attaching screws and move stinger assembly aft slightly.
2. Disconnect all electrical wires to the navigation light, strobe, and/or reel antenna if installed.
3. Remove stinger assembly from aircraft.

Installation:

4. Attach tail navigation light and reel antenna to upper half of new tailcone stinger assembly and attach all electrical wiring.
5. Place upper half assembly up to aircraft tailcone, hold in a level position, and secure upper half to the aircraft using screws.
6. Assemble lower half assembly to the upper half assembly and aircraft using screws.

10.0 AIRWORTHINESS LIMITATIONS

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

There are no Airworthiness Limitations to the aircraft with the addition of the tailcone stinger assembly installed by this STC.

11.0 TROUBLESHOOTING

Refer to the existing Aircraft Maintenance Manual for troubleshooting the Tailcone Stinger Assembly that is required beyond the information found on the installation drawing D-10205.

For replacement parts or repair of damage parts:

Contact Aviation Fabricators at (660) 885-8317.

Troubleshooting this installation should only be accomplished by FAA approved repair stations with the appropriate ratings or appropriately rated operator/individuals, with required test equipment and service data.