

Summary:

uAvionix tailBeacon and skyBeacon ADS-B system may be installed on an aircraft not listed on the applicable AML STC as per FAA Policy Memorandum dated March 2, 2016 and FAA Technical Paper AFS-360-2017-1. The policy refers to these installations as *follow-on* installations.

uAvionix Approved Documentation:

This document is not intended to replace official approved uAvionix Manuals. You can find the latest STC, Approved Model List (AML), STC permission letter, TSO, and STC Installation manuals at uAvionix.com/support

FAA Documentation:

This document is not intended to replace official FAA guidance or policy. An understanding of the following documents is necessary to complete any ADS-B OUT installations.

[FAA Policy Memorandum dated March 2, 2016](#)

[FAA Technical Paper AFS-360-2017-1](#)

[AC 43.9-1](#)

[FAA FORM 337](#)

The attached Form 337 is intended to provide sample content for correct completion under the current ADS-B OUT installation policy. Each installation is unique and will require aircraft and installation specific details.

Submission:

Retain a copy to be included with the aircraft records and mail the original FAA Form 337 to:

Aircraft Registration Branch
AFS-750
P.O. Box 25504,
Oklahoma City, Oklahoma 73125

For additional information and assistance visit uAvionix.com/support



US Department
of Transportation
Federal Aviation
Administration

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

OMB No. 2120-0020
Exp: 01/31/2023

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))

1. Aircraft	Nationality and Registration Mark	Serial No.		
	Make	Model	Series	
2. Owner	Name <i>(As shown on registration certificate)</i>		Address <i>(As shown on registration certificate)</i>	
			Address _____	
			City _____	State _____
			Zip _____	Country _____

3. For FAA Use Only

Note to Installer: FAA Technical Paper AFS-360-2017-1 states: "In cases where an ADS-B OUT system is installed without need for further data approval, Form 337 may be executed without FAA signature in Block 3." If no further data approval is necessary submit the 337 with the following statement in Block 3:

This ADS-B OUT system installation was completed using approved data from STC SA04427CH as per FAA Policy Memorandum Installation Approval ADS-B OUT Systems, March 2 2016 (or later).

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input type="checkbox"/>	AIRFRAME	_____	<i>(As described in Item 1 above)</i>	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

6. Conformity Statement

A. Agency's Name and Address Name _____ Address _____ City _____ State _____ Zip _____ Country _____		B. Kind of Agency <input type="checkbox"/> U. S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input type="checkbox"/> Certificated Repair Station <input type="checkbox"/> Certificated Maintenance Organization	
		C. Certificate No. _____	

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 _____
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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	Persons Approved by Canadian Department of Transport Other <i>(Specify)</i>
		FAA Designee	Repair Station	Inspection Authorization	

Certificate or Designation No.	Signature/Date of Authorized Individual _____
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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.)

_____	_____
Nationality and Registration Mark	Date

Replaced existing rear white position light with uAvionix tailBeacon assembly, Part # UAV-1002183-001 in accordance with tailBeacon STC Installation Guide, Document # UAV-1002514-001.

The tailBeacon ADS-B transmitter is compliant to TSO-C154c or later and the tailBeacon integrated position sensor is compliant to TSO-C145d or later.

Electrical interface was accomplished using the existing position light circuit and confirmed appropriate per AC43.13-1B Chapter 11, Section 5&6

Note to Installer: If the tailBeacon is mounted to a static location on the airframe:

tailBeacon was installed using the existing rear position light mounting location. No modification the aircraft structure was necessary. The existing location provides a clear view of the sky and ground and does not interfere with existing control surfaces.

Note to Installer: If installed on a moving control surface, specific attention must be paid to proper balance. Refer to the aircraft Manufacturer's Service Manual to determine if balancing is required and for balancing instructions. Include a statement addressing that the balancing was reviewed and adjusted as necessary. Specific guidance on performing rudder balance for an aircraft is beyond the scope of this document.

tailBeacon was installed using the existing rear position light mounting location. The existing location provides a clear view of the sky and ground The tailBeacon is installed on a moving control surface (rudder). Review of rudder balance was performed according to [Manufacturer Service Manual]. Complete the above statement with a description of work the necessary for the aircraft rudder balance or a statement that the balance was found to be acceptable.

Note to Installer: State that a ground test or operational flight evaluation (OFE) was performed with approval to return to service. Please note the OFE is often referred to as a test flight.

Note to Installer: If a satisfactory ground test was conducted using ground/ramp test equipment, the following statement may be used:

A satisfactory ground test of the ADS-B system was completed using a transponder ramp test set. The ground test checked for proper configuration of the equipment and the equipment performance requirements. The installed ADS-B system has been shown to meet the equipment requirements of CFR 14-91.227.

Note to Installer: If the system has been installed, yet requires an operational flight evaluation (OFE), to make a determination of proper configuration and performance, than the following statement may be used:

The ADS-B system has been installed and is limited to use for OFE purposes only. The system has not yet been shown to meet the requirement of CFR 14-91.227. A determination of proper configuration and performance has yet to be established via an operational flight evaluation in accordance with CFR 14-91.407(b).

Note to Installer: A second Form 337 is required to be submitted to document the completion of the operational flight evaluation. Following completion of a flight that demonstrates compliance with 91.227 submit the second Form 337 and include the following statement:

"The installed ADS-B OUT system has been shown to meet the equipment requirements of CFR 14-91.227."

Note to Installer: After successful ground test or OFE (flight test), document in the aircraft maintenance records that the ADS-B system installation has been completed and include the following statement:

"The installed ADS-B OUT system has been shown to meet the equipment requirements of CFR 14-91.227."

(additional sheet attached)

Additional Sheets Are Attached

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 (Continued). Description of Work Accomplished

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

_____	_____
_____	_____
Nationality and Registration Mark	Date

Note to Installer: Insert the appropriate airplane/rotorcraft flight manual supplement into the flight manual/pilot manual.

Aircraft flight manual was updated with tailBeacon Flight Manual Supplement P/N: UAV-1002512-001. In accordance with Flight Manual Supplement a placard was placed near the position light switch with the following statement: "Position Lights Must Remain on for ADS-B Out"

Note to Installer: If any installation/configuration deviates from the current Flight Manual Supplement guidance, the Flight Manual Supplement must be updated to address those deviations. Approval from an FAA representative may be necessary. For further information please review FAA Technical Paper AFS-360-2017-1 Attachments 2 and 3.

Note to Installer: Address any new Airworthiness Limitations as a result of the installation. Document and placard as necessary. If no additional limitations are found use the following statement:

No additional Airworthiness Limitations as a result of the installation

Note to Installer: tailBeacon is limited to operation below FL180. If the aircraft service ceiling exceeds FL180, a limitation must be noted.

Note to installer: The ICA must be provided to the aircraft operator/owner for incorporation into the aircraft maintenance program. tailBeacon

Instructions for Continued Airworthiness uAvionix Document # UAV-1002513-001 was provided to the aircraft owner/operator.

Note to installer: If replacing an incandescent position light the electrical load of the tailBeacon is lower than that of the equipment being removed.

The above modification was found not to interfere with other installed systems and/or modifications and does not exceed 80% of generator/alternator output. No adverse interference to radios and navigation systems from RFI was found while operating the tailBeacon during the configuration process.

Change to Weight and Balance is negligible. Equipment list was revised and a copy has been placed with the aircraft records.

Additional Sheets Are Attached