

U.S. Department of Transportation

Federal Aviation Administration Aircraft Certification Service Compliance & Airworthiness Division Boston ACO Branch, AIR-7B0 1200 District Avenue Burlington, MA 01803 (781) 238-7151

October 1, 2019

In reply, refer to: 19-DOC-17044

Avidyne Corporation Attn: Mr. Fred Barber 4 Middlesex Green, Suite 221 561 Virginia Road Concord, MA 01742

Dear Mr. Fred Barber:

Subject: Avidyne AXP340 and Bendix/King KT74 Mode S Transponders: Alternate Method of Compliance for FAA Airworthiness Directive 2018-NE-39-AD

The Federal Aviation Administration (FAA) received your proposal dated September 16, 2019, requesting an alternate method of compliance (AMOC) to paragraph (g)(1) and g(2) of Airworthiness Directive (AD) 2018-NE-39-AD.

The Boston Aircraft Certification Office Branch (ACOB) approves your AMOC proposal to paragraph (g)(1) and g(2) of FAA AD 2018-NE-39-AD to:

Allow the transponder installation check to be performed by the owner/operator (pilot) holding at least a private pilot certificate, in accordance with the Step 3.2 and Step 3.3 of the Avidyne Service Bulletin 601-00000-005 Rev 00, dated September 16, 2019.

The actions must be entered into the aircraft records showing compliance with this AD in accordance with Title 14 Code of Federal Regulations (14 CFR) §§ 43.9 (a)(1) -(4) and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR §§ 91.417, 121.380, or 135.439.

For the purpose of the inspection check, the installation is described as "conventional" if it is in an aft-facing avionics rack such that the transponder faceplate and controls are facing the rear of the airplane. The definition is consistent with the definition provided in AD 2018-NE-39-AD paragraph (j).

This AMOC is applicable to the following part numbers:

 Avidyne Corporation AXP340 Mode S transponders, P/N 200-00247-000, also marked with Trig Avionics P/N 01155-00-01, with a S/N from 00801 to S/N 01377 inclusive, and Mod Level 0, installed. BendixKing/Honeywell International KT74 Mode S transponders, P/N 89000007-002001 (kit, including transponder and mounting tray) or P/N 89000007-000001 (transponder alone), also marked with Trig Avionics P/N 01157-00-01, with a S/N from 01143 to S/N 02955 inclusive, and Mod Level 0, installed.

All provisions of AD 2018-NE-39-AD that are not specifically referenced above remain fully applicable and must be complied with accordingly.

This FAA AMOC is transferable with the aircraft to an operator who operates the aircraft under U.S. registry.

Before using this AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local Flight Standards District Office/Certificate Holding District Office.

This AMOC only applies to the FAA AD listed above. The FAA does not have the authority to approve this as an AMOC to any AD issued by another civil aviation authority (CAA). Approval of an AMOC to another CAA's AD must come from that CAA. A copy of this response will be forwarded to the CAA where [this/these] aircraft [is/are] registered for their consideration.

If you have any questions or need additional information, please contact Min Zhang by telephone at 781-238-7161 or electronic mail at min.zhang@faa.gov.

Sincerely,

Nicholas Faust Acting Manager, Boston ACO Branch

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| AVIDYNE | | SERVICE BULLETIN |
|------------------|---|------------------|
| | | |
| Document Number: | 601-00000-005 | |
| Title: | Avidyne & BendixKing transponders: Compliance with FAA Airworthiness Directive 2018-NE-39-AD | |
| | | |

Revision: 00

Date: September 16, 2019

1. Planning Information

1.1 Distribution/Eligibility

Distribution of this Service Bulletin is unrestricted.

The Accomplishment Instructions contained in Section 3 may be performed on US-registered aircraft by any pilot holding at least an FAA Private Pilot certificate.

1.2 Effectivity/Compatibility

This Service Bulletin applies to installations of the following:

- 1. Avidyne Corporation AXP340 Mode S transponders, P/N 200-00247-000 and 200-00247-001, also marked with Trig Avionics P/N 01155-00-01 and 01155-00-02, with a S/N from 00801 to S/N 01377 inclusive, and Mod Level 0, installed.
- 2. BendixKing/Honeywell International KT74 Mode S transponders, P/N 89000007-002001 (kit, including transponder and mounting tray) or P/N 89000007-000001 (transponder alone), also marked with Trig Avionics P/N 01157-00-01, with a S/N from 01143 to S/N 02955 inclusive, and Mod Level 0, installed.

1.3 Concurrent Requirements

None.

1.4 Reason

The FAA has issued AD 2018-NE-39-AD in order to address an unsafe condition that can arise in cases where the transponders identified above are mounted in aircraft unconventionally, as further described below.

1.5 Description

This Service Bulletin was developed as a proposed Alternative Means of Compliance (AMOC) with the AD. Upon FAA approval, the installation check described in Section 3 may be performed and recorded in the aircraft records by a pilot holding at least an FAA Private Pilot certificate in lieu of those described in paragraphs (g)(1) and (g)(2) of the subject AD. Satisfactory completion of these actions may constitute compliance with the requirements of the AD.

All actions required under the AD must be accomplished within the timeframe indicated therein. If actions other than the installation check described above are required, their accomplishment by the holder of a maintenance certificate may be required.

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1.6 Compliance

This Service Bulletin has been proposed as an optional Alternative Means of Compliance with the subject AD. Use of this SB as an AMOC is conditioned on your possession of a letter showing its approval by the FAA. If you do not have such a letter, contact Avidyne for further information. Direct compliance with the AD or any other FAA-approved AMOC may be used as an alternative to this procedure.

1.7 Approval

This procedure is not FAA-approved except as separately indicated.

1.8 Time Required

Complying with this Service Bulletin should take one person approximately 0.25 hours.

1.9 Weight and Balance

No change.

1.10 Electrical Load Data

No change.

1.11 Software Accomplishment

None.

1.12 Reference

FAA Airworthiness Directive 2018-NE-39-AD

1.13 Publications affected

None.

2. Material – Cost and Availability

None.

3. Accomplishment Instructions

3.1 Required Materials

1. This Service Bulletin

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3.2 Checking the Orientation of the Transponder as Installed

The installation of the transponder is described as "conventional" if it is in an aft-facing avionics rack such that the transponder faceplate and controls are facing the rear of the airplane. Any other installation is described as "not conventional".

- 1. Examine the transponder as installed in the aircraft.
- 2. If the installation is "not conventional" as described above, compliance with the AD cannot be established under this SB and must be established following the procedures of the AD itself.
- 3. If the installation is "conventional" as described above, compliance with the AD has been established and may be documented as described as follows.

3.3 Documenting the Results of the Check if the Installation is Conventional

If the installation of the transponder is found to be "conventional" as described above, compliance with this SB may be recorded in the aircraft records as evidence of compliance with the AD. This record should comply with the requirements of 14 CFR 43.9(a)(1) through (4) and 14 CFR 91.417(a)(2)(v) and must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

We recommend the use of the following verbiage in the aircraft maintenance log book.

<date> On this date, I have examined the installation of <transponder manufacturer, model and part number> as installed in this aircraft following the procedures of Avidyne Corporation Service Bulletin 601-00000-005 Rev 00, which has been FAA-approved as an AMOC under Airworthiness Directive 2018-NE-39-AD. My examination determined that the transponder is installed "conventionally" and that compliance with the AD is satisfied. <signature>

<printed name> <certificate type and number>