# **Approved Model List For**

**Automatic Dependent Surveillance - Broadcast (ADS-B) Out System using the Becker Avionics BXT6553 Transponders and a Qualified Position Source** 

STC No. ST00934DE

FAA Approved: <u>See Revision Log</u>
Manager, Denver ACO Branch
Compliance and Airworthiness Division
Federal Aviation Administration

# STC NO. ST00934DE

# 1. Revision Log

Revision P	Pages	Description	FAA Approval	Date
IR A	ALL	NOTE: This revision contains a Cover Page, page ii, and pages 1-7	/s/ Todd Dixon  Todd Dixon, Manager  Denver ACO Branch  Compliance and Airworthiness Division  Federal Aviation Administration  Date: 6/6/19	June 6, 2019

#### STC NO. ST00934DE

#### 2. Introduction

This document is the Federal Aviation Administration (FAA) Approved Model List (AML) for Supplemental Type Certificate (STC) Number ST00934DE, for installing an ADS-B Out system utilizing the Becker Avionics BXT6553 transponders into eligible Part 25 aircraft. Approved models are listed in Section 4.

Revisions to the AML must be coordinated between the STC holder and the responsible Aircraft Certification Office (ACO), and require FAA approval.

This AML is only applicable to the 14 CFR, Part 25 aircraft listed in Section 4. Installations in 14 CFR Part 23, Part 27, and Part 29 aircraft are not authorized under this AML.

#### 2.1. Prerequisites

This AML assumes the following equipment is installed on the candidate aircraft via another FAA approval, and is properly linked to satisfy the intended function for the system.

- 1) Transponder system, including
  - a) XS-852(X) transponder (internal to the RCZ-8XX integrated communication unit), and,
  - b) Technical Standard Order (TSO) Approved transponder antennas which meet the requirements of TSO-C66, TSO-C74, or TSO-C112.
- 2) A digital altitude encoder/air data computer that outputs pressure altitude data via the ARINC 429 data protocol.

#### 2.2. Specific Limitations

The following limitations apply to this AML STC:

- 1. Installation of the following required equipment is outside the scope of this AML STC. This AML STC does NOT include installation approval of the following required equipment:
  - i. Primus II RM-850/RM-855 Radio Management Units
  - ii. Primus II RCZ-8XX Integrated Communication Units
  - iii. air data computers,
  - iv. new or replacement transponder antennas,
  - v. new or replacement GPS antenna,
  - vi. weight on wheels, squat switch,
  - vii. Traffic Collision Avoidance System II.
- 2. Each BXT6553 transponder must operate in the diversity mode using dual antennas (upper and lower).

Issued: June 6, 2019 Page 1

#### STC NO. ST00934DE

- 3. Only direct connections are permitted between the transponder and the GPS WAAS receiver. GPS WAAS connections utilizing a data concentrator are prohibited.
- 4. Approved software/firmware within the units is identified in E-DI-18-0014, *STC Installation Instructions*. Updates to the software/firmware must be approved by the STC holder prior to installation.
- 5. This AML STC does NOT allow or provide instructions for penetrating the pressure vessel.
- 6. The installation of the replacement BXT6553-(000) transponder systems does NOT affect the airworthiness of the Reduced Vertical Separation Minimums (RVSM) system. The installer should review the RVSM equipment list and determine if the transponder is listed by model number.

#### STC NO. ST00934DE

# 3. Certification Basis

The certification basis for each qualified model is specified in the type certificate data sheet (TCDS) and modified by the amendment levels noted in the appendix identified in the approved model list of Section 4.

# STC No. ST00934DE

# 4. Approved Model List

Item	Aircraft Make	Aircraft Model	TC Data Sheet	Certification Basis	Master Drawing List/Date	AFM Supplement Number/Date	Instructions for Continued Airworthiness	Notes	Initial Approval / Amendment Date
1.	Bombardier, Inc.	CL-600-2B16 (CL-601-3A Variant), CL-600-2B16 (CL-601-3R Variant)	A21EA	14 CFR 25 per TCDS as amended by Appendix A	Peregrine Doc. No. E-DI-18-0002, Rev B, dated 05/29/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0009, Rev IR, dated 6/5/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0008, Rev IR, dated 5/31/19, or later FAA approved revision.	(1)	Original Issue, 6/6/2019
2.	Dassault Aviation	Falcon 900 EX	A46EU	14 CFR 25 per TCDS as amended by Appendix A	Peregrine Doc. No. E-DI-18-0002, Rev B, dated 05/29/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0009, Rev IR, dated 6/5/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0008, Rev IR, dated 5/31/19, or later FAA approved revision.	(1)	Original Issue, 6/6/2019
3.	Embraer	EMB-135BJ	T00011AT	14 CFR 25 per TCDS as amended by Appendix A	Peregrine Doc. No. E-DI-18-0002, Rev B, dated 05/29/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0009, Rev IR, dated 6/5/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0008, Rev IR, dated 5/31/19, or later FAA approved revision.	(1)	Original Issue, 6/6/2019
4.	Gulfstream Aerospace Corporation	G-IV, GIV-X	A12EA	14 CFR 25 per TCDS as amended by Appendix A	Peregrine Doc. No. E-DI-18-0002, Rev B, dated 05/29/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0009, Rev IR, dated 6/5/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0008, Rev IR, dated 5/31/19, or later FAA approved revision.	(1)	Original Issue, 6/6/2019
5.	Learjet	45	T00008WI	14 CFR 25 per TCDS as amended by Appendix A	Peregrine Doc. No. E-DI-18-0002, Rev B, dated 05/29/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0009, Rev IR, dated 6/5/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0008, Rev IR, dated 5/31/19, or later FAA approved revision.	(1)	Original Issue, 6/6/2019

# STC No. ST00934DE

Item	Aircraft Make	Aircraft Model	TC Data Sheet	Certification Basis	Master Drawing List/Date	AFM Supplement Number/Date	Instructions for Continued Airworthiness	Notes	Initial Approval / Amendment Date
6.	Textron (Beechcraft Corporation)	BAe.125 Series 800A, BAe.125 Series 800B BAe.125 Series 1000A BAe.125 Series 1000B Hawker 800 Hawker 800XP Hawker 1000	A3EU	14 CFR 25 per TCDS as amended by Appendix A	Peregrine Doc. No. E-DI-18-0002, Rev B, dated 05/29/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0009, Rev IR, dated 6/5/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0008, Rev IR, dated 5/31/19, or later FAA approved revision.	(1) (3)	Original Issue, 6/6/2019
7.	Textron (Cessna)	550 (Bravo), 550 (Citation II), 560 (Citation V, Ultra, Encore), 560XL (Excel, XLS)	A22CE	14 CFR 25 per TCDS as amended by Appendix A	Peregrine Doc. No. E-DI-18-0002, Rev B, dated 05/29/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0009, Rev IR, dated 6/5/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0008, Rev IR, dated 5/31/19, or later FAA approved revision.	(1)(2)	Original Issue, 6/6/2019
8.`	Textron (Cessna)	650 (Citation VI, Citation VII)	A9NM	14 CFR 25 per TCDS as amended by Appendix A	Peregrine Doc. No. E-DI-18-0002, Rev B, dated 05/29/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0009, Rev IR, dated 6/5/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0008, Rev IR, dated 5/31/19, or later FAA approved revision.	(1)(2)	Original Issue, 6/6/2019
9.	Textron (Cessna)	680 (Sovereign)	T00012WI	14 CFR 25 per TCDS as amended by Appendix A	Peregrine Doc. No. E-DI-18-0002, Rev B, dated 05/29/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0009, Rev IR, dated 6/5/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0008, Rev IR, dated 5/31/19, or later FAA approved revision.	(2)(4)	Original Issue, 6/6/2019
10.	Textron (Cessna)	750	T00007WI	14 CFR 25 per TCDS as amended by Appendix A	Peregrine Doc. No. E-DI-18-0002, Rev B, dated 05/29/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0009, Rev IR, dated 6/5/19, or later FAA approved revision.	Peregrine Doc. No. E-DI-18-0008, Rev IR, dated 5/31/19, or later FAA approved revision.	(2)(5)	Original Issue, 6/6/2019

#### STC No. ST00934DE

#### NOTE(S):

- (1) Eligible serial numbers are those identified as eligible in the type certificate data sheet (TCDS) specified in the TC Data Sheet column of Section 4 of this document for these models.
- (2) Type Certificate Holder Record: Cessna Aircraft Company transferred TCDS to Textron Aviation Inc. on June 16, 2015.
- (3) Type Certificate Holder Record: Beechcraft Corporation transferred to Textron Aviation Inc. on October 12, 2016.

  Type Certificate Holder Record: Hawker Beechcraft Corporation transferred to Beechcraft Corporation on April 12, 2013.

  Type Certificate Holder Record: Raytheon Aircraft Company transferred to Hawker Beechcraft Corporation on March 26, 2007.
- (4) Eligible serial numbers are limited to SN 680-0001 to 680-0500 only.
- (5) Eligible serial numbers are limited to SN 750-0001 to 750-0500 only.

#### STC No. ST00934DE

# **Appendix A: All Models**

Based on 14 CFR § 21.115 and 21.101, and the FAA policy for significant changes in FAA Order 8110.48, the certification basis is as follows:

- a. As determined by the Type Certificate Data Sheet (TCDS) of the aircraft for parts **not changed or not affected** by this STC.
- b. Regulations at the amendment levels listed in Table 1 below for parts **changed or affected** by the STC since the reference date of application, November 5, 2018.

**Table 1: Certification Basis Including Amendments** 

Regulations	Amdt.
§ 25.301	25-23
§ 25.303	25-23
§ 25.305	25-86
§ 25.307	25-72
§ 25.337	25-23
§ 25.341	25-86
§ 25.473	25-91
§ 25.561 (c)	25-91
§ 25.601	25-0
§ 25.603	25-46
§ 25.605	25-46
§ 25.607	25-23
§ 25.609	25-0
§ 25.611	25-23
§ 25.613	25-72
§ 25.619	25-23
§ 25.625 (a)(b)(c)	25-72
§ 25.671 (a)	25-23

Regulations	Amdt.
§ 25.771 (a)	25-4
§ 25.773 (a)(2)	25-72
§ 25.777 (a)(b)	25-46
§ 25.853 (a)	25-83
§ 25.869 (a)(4)	25-72
§ 25.1301 (a)(b)(c)(d)	25-0
§ 25.1309 (a)(b)(c)(d)(e)(g)	25-41
§ 25.1316 (b)	25-134
§ 25.1317 (c)	25-122
§ 25.1321 (d)(e)	25-41
§ 25.1322 (d)	25-38
§ 25.1351 (a)	25-72
§ 25.1353 (a)	25-42
§ 25.1357 (a)(c)(e)	25-0
§ 25.1431 (a)(c)	25-0
§ 25.1529	25-54
§ 25.1555 (a)	25-0
§ 25.1581	25-72
§ 25.1583 (c)	25-130

Issued: June 6, 2019 Page 7