DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A29CE Revision 9 Textron Aviation November 27, 2017

TYPE CERTIFICATE DATA SHEET NO. A29CE

This data sheet which is part of Type Certificate No. A29CE prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder Textron Aviation Inc.

> One Cessna Boulevard Wichita, KS 67215

Type Certificate Holder Record: Beech Aircraft Corporation transferred to

Raytheon Aircraft Company on April 15, 1996

Raytheon Aircraft Company transferred to

Hawker Beechcraft Corporation on March 26, 2007

Hawker Beechcraft Corporation transferred to Beechcraft Corporation on April 12, 2013

Beechcraft Corporation transferred to Textron Aviation Inc. on October 12, 2016

Model 76, Duchess, 4 PCLM (Normal Category), Approved January 24, 1978

Engine Left: Lycoming O-360-A1G6D

> Right: Lycoming LO-360-A1G6D

Fuel 100/130 minimum grade aviation fuel or 100 low lead (blue)

Oil 1st 50 hours MIL-L-6082C; thereafter MIL-L-22851

Engine Limits For all operations, 2700 rpm (180 hp.)

Propeller and

(a) Hartzell constant speed propeller: **Propeller Limits**

Left: HC-M2YR-2CEUF/FC7666A, 2 blades aluminum alloy Right: HC-M2YR-2CLEUF/FJC77666A, 2 blades aluminum alloy

Diameter: 76 in. nominal.

Minimum allowed for repair 74 in., no further reduction permitted.

Pitch setting at 30 in. station:

low $12.1^{\circ} \pm 0.1^{\circ}$, high 17° to 20° , feather 80° to 82° Woodward hydraulic governor L210652 and R210652

Hartzell spinner assembly C2285-3P and C2285-3PL

Airspeed Limits Never exceed 194 knots (223 mph)

Maximum structural cruising (IAS) 154 knots (177 mph)

132 knots (152 mph) Maneuvering Flaps extended (35°) 110 knots (127 mph) 120 knots (138 mph) (20°)

 (15°) 140 knots (161 mph)

Maximum landing gear extension 140 knots (161 mph) Maximum landing gear retraction 113 knots (130 mph)

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I. Model 76 (cont'd)

C.G. Range (Landing

Normal Category

Gear Extended)

(+110.6) to (+117.5) at 3900 lb. (+106.6) to (+117.5) at 3250 lb. and less

Straight line variation between points given Landing gear retraction moment (-1177 in.-lb.)

Empty Wt. C.G. Range

None

Leveling Means

Baggage compartment floor

Maximum Weight

Ramp 3,916 lb. Takeoff 3,900 lb. Landing 3,900 lb. Zero fuel 3,500 lb.

No. of Seats

4 maximum (2 at +105 forward or +112 aft position, 2 at +142 standard or +144

optional)

Maximum Baggage

200 lb. (+167.0)

Fuel Capacity

 Tank
 Capacity Gal.
 Usable Gal.
 Arm

 L&R main
 103
 100
 +117.0

See NOTE 1 for data on unusable fuel.

Oil Capacity

20 qt. (+75.4)

See NOTE 1 for undrainable oil

Control Surface Movements

Wing flaps Down 35° ±1° Up $20^{\circ} \pm 1^{\circ}$ Down 15° ±1° Rudder Right $30^{\circ} \pm 1^{\circ}$ Left 30° ±1° Elevator 20° +1°, -0° 15° +1°, -0° Up Down Left $20^{\circ} \pm 1^{\circ}$ Rudder tab Right $20^{\circ} \pm 1^{\circ}$ Elevator tab Up $4^{\circ} \pm 1/2^{\circ}$ Down $20^{\circ} \pm 1/2^{\circ}$ (with elevator neutral)

Serial Nos. Eligible

ME-2 and on

Datum

103 in. forward of wing leading edge (constant chord section)

Certification Basis

Part 23 of the Federal Aviation Regulations (FAR) effective February 1, 1965, as amended by 23-1 through 23-16 and FAR 36 effective June 1974, Amendment 36-1 through 36-10. Equivalent safety findings: FAR 23.621 (S/N ME-2 through ME-437 only), 23.1545, 23.1583(a).

One-engine inoperative stall characteristics tests identified in FAA letter to Beech dated May 27, 1976.

Application for Type Certificate dated October 24, 1975.

Type Certificate A29CE issued January 24, 1978, obtained by the manufacturer under

delegation option procedures.

Production Basis

Production Certificate No. 8. Delegation Option Manufacturer No. CE-2 authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations.

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I. Model 76 (cont'd)

Equipment

The basic required equipment as prescribed in applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following item of equipment is required:

1. Pilot's Operating Handbook (POH) and FAA Approved Airplane Flight Manual (AFM) (P/N 105-590000-5) dated January 1978, revised March 1979, or later.

Data Pertinent to All Models

- NOTE 1. Current weight and balance data, loading information and a list of equipment included in basic empty weight must be provided for each airplane at the time of original certification.
 - (a) Basic empty weight includes unusable fuel of 20 lb. at +123.2, with 1.6 lb. at +124.8 being undrainable.
 - (b) Basic empty weight includes engine oil of 37 lb. at +75.4, with 7.3 lb. being undrainable.
- NOTE 2. All placards required in the POH and FAA Approved AFM must be installed in the appropriate locations.
- NOTE 3. Mandatory retirement times for all structural components are contained in the AFM (P/N 105-590000-5) Limitations Section. These limitations may not be changed without FAA Approval.