DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A00012NY Revision 1 DIAMOND DA 62

June 17, 2021

TYPE CERTIFICATE DATA SHEET NO. A00012NY

This data sheet which is part of Type Certificate No. A00012NY 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: Diamond Aircraft Industries Inc.

1560 Crumlin Sideroad London, ON, Canada

N5V 1S2

I. Model DA 62 (Normal Category), approved November 4, 2019

Engine 2 Austro Engine E4P, see Note 1

FAA Type Certificate Data Sheet No. E00081EN

<u>Fuel</u> Jet A, Jet A-1 (ASTM 1655)

Engine Limits Maximum Take-Off (5 min) 2300 rpm

Maximum Continuous Operation 2200 rpm

(Propeller shaft RPM)

Max T/O Power (5 min) 100% (132 kW) Max. Continous Power 95% (126 kW)

Propeller 2 MT Propeller Co. MTV-6-R-C-F/CF194-80

FAA Type Certificate Data Sheet No. P19NE

<u>Propeller Limits</u> Diameter 76.4 in., +0.0 in., -2.0 in.; (1940 mm, +0.0 mm, -50 mm)

Low Pitch Setting11°Feather Position80°Start Lock15°

Airspeed Limits Maximum Never Exceed Speed V_{NE} 201 KEAS, 231 mph

Maximum Structural Cruising Speed V_{NO}
160 KEAS, 184 mph
Design Cruising Speed V_C
160 KEAS, 184 mph

Operating Maneuvering Speed

Vo (up to 3968 lbs / 1800 kg) 119 KEAS, 137 mph

Vo (Above 3968 lbs / 1800 kg through 4189 lbs / 1900 kg)

126 KEAS, 145 mph

V_O (Above 4189 lbs / 1900 kg through 4407 lbs / 1999 kg)

130 KEAS, 149 mph

 V_{0} (Above 4407 lbs / 1999 kg through 4630 lbs / 2100 kg) 133 KEAS, 153 mph

Vo (Above 4630 lbs / 2100 kg through 4850 lbs / 2200 kg)

136 KEAS, 156 mph

Vo (Above 4850 lbs / 2200 kg through 5071 lbs / 2300 kg) 140 KEAS, 161 mph

Maximum Flap Extending Speed V_{FE Full Flaps} 118 KEAS, 136 mph

VFE Approach Flaps 135 KEAS, 155 mph

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Maximum Landing Gear Operation Speed V_{LO}

Maximum Landing Gear Extended Speed V_{LE}

160 KEAS, 184 mph
201 KEAS, 231 mph

<u>C.G. Range</u> Forward c/g position (aft of datum):

Forward limit

Between 3527 lbs. (1600 kgs) and 3968 lbs. (1800 kgs) 92.13 in. (2.340 meters) at 5071 lbs. (2300 kgs) 96.85 in. (2.460 meters)

Varying Linearly with weight in between

Rearward c/g position (aft of datum):

at 3527 lbs. (1600 kgs) 96.85 in. (2.460 meters)
Between 4189 lbs. (1900 kgs) and 4407 lbs. (1999 kgs) 98.82 in. (2.510 meters)
at 5071 lbs. (2300 kgs) 99.61 in. (2.530 meters)

Varying Linearly with weight in between

Empty Wt. C.G. Range None

<u>Reference Datum</u> 86.46 in. (2.196 meters) in front of leading edge of stub-wing at the wing joint

<u>Leveling Means</u> Floor of front baggage compartment levelled.

<u>Maximum Weight</u> Takeoff (Normal Category) 4407 lbs. (1999 kgs)

If MÄM 62-001 is installed 5071 lbs. (2300 kgs)

Landing 5071 lbs. (2300 kgs)

Zero Fuel weight 4489 lbs. (2036 kgs)

If MÄM 62-023 is installed 4850 lbs. (2200 kgs)

Minimum Crew 1

No. of Seats 5, If OÄM 62-019 is installed 7

<u>Maximum Baggage</u> LH Front Baggage Compartment 66 lbs (30 kgs)

RH Front Baggage Compartment 66 lbs (30 kgs)
Rear Baggage Compartment 265 lbs (120 kgs)
If OÄM 62-019 is installed 101 lbs (46 kgs)

Fuel Capacity With Standard Fuel Tank 52 gallons (196.8 liters) total

50 gallons (189.2 liters) usable

With Auxiliary Tank additional 37 gallons (140 liters) total

36.4 gallons (137.8 liters) usable

Oil Capacity Each engine Maximum – 7.4 qts (7.0 liters).

Minimum – 5.3 qts (5.0 liters)

See Note 2

For specification of engine and gearbox oil see AFM, Section 2

Coolant Water / Cooler Protection

For more details see AFM, Section 2

<u>Maximum Operating Altitude</u> 20,000 feet (6096 meters)

Control Surface Movements Aileron trailing edge up 25°, ± 2°, trailing edge down 15°, +2/-0°

Elevator trailing edge up 18° , $\pm 0.5^{\circ}$, trailing edge down 15° , $\pm 1^{\circ}$

Elevator Trim Tab: $+ 17^{\circ}, \pm 5^{\circ}$ (nose up at elevator 10° up)

 -35° , $\pm 5^{\circ}$ (nose down at elevator 10° up)

Rudder: left 30°, \pm 1° / right 30°, \pm 1°

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Rudder Trim Tab: $+45^{\circ}$, $\pm 5^{\circ}$ (trim RH at rudder 20° LH)

 $+28^{\circ}$, $\pm 3^{\circ}$ (trim LH at rudder 20° LH)

Flaps:

 0° , $+2^{\circ}/-0^{\circ}$ Cruise flap setting 20° , $+4^{\circ}$ / -2° Approach flap setting 42° , $+3^{\circ}$ / -1° Landing flap setting

Manufacturer's Serial Numbers (see Note 10)

a) For aircraft produced at Diamond Aircraft Industries GmbH, N.A. Otto-Str. 5, A-2700 Wiener-Neustadt Austria, eligible serial numbers are 62.009 and subsequent.

b) For aircraft produced at Diamond Aircraft Industries Inc., 1560 Crumlin Sideroad, London Ontario N5V 1S2, Canada, eligible serial numbers are 62.C001 and subsequent.

Certification Basis

Type Certification under 14 CFR Section 21.29 including the following requirements:

- Airworthness Manual (AWM) 523, Change 523-16, dated 31 December 2016. This certification basis is equivalent to 14 CFR Part 23 Amendment 23-62.
- AWM 516, Change 516-11, dated 30 June 2015. This certification basis is equivalent to 14 CFR Part 36, effective December 1969, including Amendments 36-1 through Amendments 36-30.
- 14 CFR Part 34, Fuel Venting and Exhaust Emissions Standards, effective September 10, 1990 and including all amendments through Amendment 34-5A.

Special Conditions:

- 23-298-SC applicable to the model DA-62 for Diesel Cycle Engine Using Turbine (Jet)
- 23-297-SC applicable to the model DA-62 for Electronic Engine Control.

Equivalent Safety Items:

Equivalent Levels of Safety findings made per the provisions of 14 CFR 21.21(b)(1) for:

- TC08736NY-A-P-1A Fuel Pump Installation with Austro AE300 Diesel Engine
- TC08736NY-A-P-1B Liquid Cooling with the Austro AE300 Diesel Engine
- TC08736NY-A-P-1C Ignition Switches with the Austro AE300 Diesel Engine
- Project Specific Policy Memorandum dated July 18, 2018 for Unintended Errors in 14 CFR Part 23

Exemption:

Exemption No. 17927 dated August 3, 2018. (See Note 4)

Approved Configuration

Doc. No. D62-AW-0004, Rev A or later TCCA approved revision

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) is listed in the Airplane Flight Manual and must be installed in the airplane for certification.

In addition, the following items of equipment are required:

Airplane Flight Manual, Document No. 11.01.05-E Rev. 1, dated 24 Oct 2019, or a later approved revision, for which the C of A was issued after October 02, 2019.

Maintenance Manual (including Airworthiness Limitation), Document No. 7.02.25, Rev. 0, dated 01-Apr-2015, or later approved revision.

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Import requirements

a) For new aircraft produced in Austria, the FAA can issue a U.S. airworthiness certificate based on an NAA Export Certificate of Airworthiness (Export C of A) signed by a representative of the Austro Control Group (ACG) on behalf of the Europian Community. The Export C of A should contain the following statement "The aircraft covered by this certificate has been examined, tested, and found to comply with the Code of Federal Regulations Part 23 approved under U.S. Type Certificate No. A00012NY and to be in a condition for safe operation.

- b) For new aircraft produced in Canada, a United States airworthiness certificate may be issued on the basis of a Canadian Certificate of Airworthiness for Export signed by a representative of the Transport Canada Civil Aviation (TCCA), containing the following statement (in the English language): "The aircraft covered by this certificate has been examined, tested, and found to comply with U.S. type certificate No. A00012NY and to be in a condition for safe operation.
- c) For used aircraft a United States airworthiness certificate may be issued based on a Certificate of Airworthiness for Export from a country for which the FAA has entered into an agreement or under procedures acceptable to the FAA.
- d) The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 and exported by the country of manufacture is FAR Sections 21.183(c) or 21.185(c).
- e) The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 exported from countries other than the country of manufacture (e.g., third party country) is FAR Section 21.183(b) or 21.183(d).

Service Information

Each of the documents listed below must state that it is approved by the Canadian Department of Transport (DOT) or Diamond Aircraft DAO No. 17-O-01 – for approvals made before September 28, 2003- by Austro Control Group or for approvals made before November 15th, 2017 by European Aviation Safety Agency:

- · Service bulletins
- · Structural Repair Manuals
- · Vendor Manuals
- · Aircraft Flight Manuals, and
- · Overhaul and Maintenance Manuals

The FAA accepts such documents and considers them FAA-approved unless one of the following condition exists:

- The documents change the limitations, performance, or procedures of the FAA approved manuals; or
- $^{\bullet}$ The documents make an acoustical or emissions changes to this product's U.S. type certificate as defined in 14 CFR \S 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to TCCA to approve on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

NOTE 1: Approved engine configuration for installation in the DA 62: E4P-C

With approved engine software according to DAI MSB 62-002, always latest version.

NOTE 2: Weight and Balance:

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A current weight and balance report including list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.

The certificated empty weight and corresponding center of gravity location must include full oil, coolant and unusable fuel.

- NOTE 3: The placards specified in the TCCA approved Airplane Flight Manual must be displayed.
- NOTE 4: Compliance with requirements of 14 CFR § 23.1419(a) at Amendment 23-43 has been established by Exemption No. 17927 dated August 03, 2018 provided required ice protection systems are installed and functioning properly, and the airplane and the ice protections system are operated in accordance with Airplane Flight Manual Supplement S03, "Ice Protection System For Flight Into Known Icing Rev. 1," dated 14-Oct 2016, or later approved revision.
- NOTE 5: For approved software versions of Garmin G1000 Integrated Avionics System, see DAI MSB 62-003, always latest version.
- NOTE 6: Instructions for Continued Airworthiness and Service Life Limited components is included in the Maintenance Manual Document No. 7.02.25. Revisions to Airworthiness Limitations must be approved by the FAA.
- NOTE 7: Exterior color is limited to that specified in Diamond Document No. 7.02.25.
- NOTE 8: Major structural repair must be accomplished at a FAA certified repair stations rated for composite aircraft structure work, in accordance with Diamond repair methods approved by TCCA and accepted by FAA or by other means acceptable to the FAA.
- NOTE 9: Type Certificate Holder Record

The Model DA 62 was originally certified by EASA as a derivative of the DA 42 and was approved on TC EASA.A.005. The derivative was validated by FAA under TCDS A57CE.

The Model DA 62 was later certified on TC EASA.A.629 as a stand-alone model. Effective 15-Nov-2017, the design responsibility for the Model DA 62 certified under TC EASA.A.629 was transferred from Diamond Aircraft Industries GmbH and EASA to Diamond Aircraft Industries Inc. and Transport Canada under TC A-273.

Aircraft manufactured against TC EASA.A.005 were eligible to be transferred to TC EASA.A.629 in accordance with DAI Factory Campaign FC 62-010, which included installing a new data plate that included the new TC number.

The TC EASA.A.629 had not been validated by the FAA prior to the transfer of the state of design responsibities to TCCA and aircraft that had been manufractured under EASA.A.005 continued to be covered only by FAA TCDS A57CE until FAA TCDS A00012NY was approved.

Serial numbers originally produced under TC EASA.A.005 and still associated with that TC (identified by the data plate) remained under the responsibility of Diamond Aircraft Industries GmbH and EASA until they were transferred to TCCA type certificate A-273 under Factory Campaign FC 62-010/4. Those serial numbers originally produced under EASA.A.005 and accepted under FAA TC A57CE are eligible to be transferred to FAA TC A00012NY under that Factory Campaign which will include the addition of a supplemental data plate to show FAA TC A00012NY.

NOTE 10: Manufacturer Record

The following serial numbers were produced by Diamond Aircraft Industries GmbH (Austria) against EASA TC EASA.A.005 and were accepted under FAA TC A57CE. These serial numbers will be subject to Factory Campaign 62-010/4 (See Note 9):

62.010, 62.012 through 62.015, 62.020, 62.021, 62.023, 62.025, 62.026, 62.030, 62.031, 62.032, 62.034, 62.037, 62.038, 62.041, 62.048, 62.053, 62.056, 62.060, 62.062, 62.078, 62.079, 62.083, 62.084, 62.086 through 62.093, 62.095, 62.099.

The following serial numbers were produced by Diamond Aircraft Industires Inc. (Canada) against EASA TC EASA.A.005 nd were accepted under FAA TC A57CE. These serial numbers will be subject to Factory Campaign 62-010/4 (See Note 9):

62.C001 through 62.C005, 62.C013 through 62.C015, 62.C017, 62.C018, and 62.C020.

The following serial numbers either will be or have been produced by Diamond Aircraft GmbH (Austria) against EASA TC EASA.A.629 or EASA.IM.A.629. These serial numbers are not subject to Factory Campaign 62-010/4 (See Note 9):

62.009, 62.011, 62.016 through 62.019, 62.022, 62.024, 62.027 through 62.029, 62.033, 62.035, 62.036, 62.039, 62.040, 62.042 through 62.047, 62.049 through 62.052, 62.054, 62.055, 62.0057, 62.058, 62.059, 62.061, 62.063 through 62.077, 62.080 62.081, 62.082, 62.085, 62.094, 62.096, 62.097, 62.098, 62.0100 and subsequent.

The following serial numbers either will be or have been produced by Diamond Aircraft Industries Inc. (Canada) against TCCA TC A-273. These serial numbers are not subject to Factory Campaign 62-010/4 (See Note 9):

62.C006 through 62.C0012, 62.C016, 62.C019, 62.C021 and subsequent

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