DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7A13
Revision 7
General Atomics AeroTec Systems
Do 28 A-1
Do 28 B-1
September 28, 2021

TYPE CERTIFICATE DATA SHEET NO. 7A13

This data sheet which is a part of type certificate No.7A13 prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

Type Certificate Holder:	General Atomics AeroTec Systems GmbH Claude-Dornier-Strasse 1 D-82234 Wessling Germany
Type Certificate Holder Record:	Dornier-Werke G.M.b.H. Munich Federal Republic of Germany (Original type certificate holder; date(s) of transfer(s) to subsequent holder(s) not known. Intervening ownership until Dornier Luftfahrt GmbH not known.) DORNIER LUFTFAHRT GmbH D-8031 Wessling Federal Republic of Germany, transferred TC A16EU to Fairchild Dornier GmbH on June 1, 2000. Fairchild Dornier GmbH D-82230 Wessling, Germany, transferred TC A16EU to RUAG Aerospace Services GmbH on July 27, 2003. RUAG Aerospace Services GmbH transferred TC 7A13 to General Atomics AeroTec Systems GmbH on September 28, 2021.

I - Model Do 28 A-1, 8 PCLM (Normal Category), Approved July 20, 1961

Engines	2 Lycoming O-540-A1D	
Fuel	91/96 Minimum grade aviation gasoline	
Engine limits	For all operations, 2575 r.p.m. (250 hp.)	
Propeller and propeller limits	2 Hartzell HC-A2XK-2/8433-2 Diameter: 82 in. (No cutoff permitted) Pitch settings at 30 in. sta: Low 13°, High 52.7°	
Airspeed limits	Vne (Never exceed)	204 m.p.h. (177 knots)
	Vno (Max. structural cruising)	160 m.p.h. (139 knots)
	Vp (Maneuvering)	117 m.p.h. (102 knots)
	Vfe (Flaps extended)	100 m.p.h. (87 knots)
C.G. range	(+128.5) to (+137.5)	
Empty weight C.G. range	None	
Maximum weight	5400 lb.	
No. of seats	8. (2 at +120.8), (2 or 3* at +148.1), (2 or 3* at +189.7) *3 when seats 28.1.24/25 installed.	
Maximum baggage	132 lb. (+210.6)	
Fuel capacity	122 gal. (Two twin tanks 29 gal. and 13 gal. ea., two auxiliary tanks 19 gal. ea.) (+153.1)	
Oil capacity	6 gal. (Two engines with 3 gal. ea.) (+79.5)	

Control surface movements	Wing flaps			Down	45°
	Outer aileron	Up	21°	Down	20°
	Inner aileron	Up	18°	Down	18°
	Elevator	Up	28°	Down	23°
	Rudder	Right	25°	Left	25°
	Stabilizer	Up	9°	Down	4°

Serial Nos. eligible: The Federal Republic of Germany Certificate of Airworthiness for Export endorsed as noted below under "Certification basis" must be submitted for each individual aircraft for which application for certification is made.

II - Model Do 28 B-1, 7 PCLM (Normal Category), Approved June 1, 1964

Engines	2 Lycoming IO-540-A1A5
Fuel	100/130 Minimum grade aviation gasoline
Engine limits	For all operations, 2575 r.p.m. (290 hp.)
Propeller and propeller limits	2 Hartzell HC-A3VK-2 Diameter: 80 in. (No cutoff permitted) Pitch settings at 30 in. sta: Low 12.5°

Airspeed limits	Vne (Never exceed)	207 m.p.h. (180 knots)
	Vno (Max. structural cruising)	167 m.p.h. (145 knots)
	Vp (Maneuvering)	121 m.p.h. (105 knots)
	Vfe (Flaps extended)	109 m.p.h. (95 knots)

C.G. range	(+129.2) to (+137.5)
Empty weight C.G. range	None
Maximum weight	6000 lb.
No. of seats	7. (2 at +120.8), (2 or 3 at +148.1), (2 at +189.7)
Maximum baggage	132 lb. (+210.6)
Fuel capacity	122 U.S. gal. (Two tank groups 29 gal. + 13 gal. + 19 gal. ea.) (+153.1) 40 US gal. (Two auxiliary tip tanks, optional equipment, 20 gal. ea.) (+142.9)
Oil capacity	6 U.S. gal. (Two engines, 3 gal. ea.) (+79.5)

Control surface movements

	Serial No. 3062 to 3066				Serial No. 3067 and Up.			
Wing flaps			Down	55°			Down	55° ± 1°
Outer aileron	Up	20°	Down	20°	Up	20.5° ± 1.5°	Down	20.5° ± 1.5°
Inner aileron (measured at zero flap)	Up	18°	Down	18°	Up	20.5° ± 2°	Down	20.5° ± 2°
Elevator	Up	32°	Down	29°	Up	32° ± 1°	Down	29° ± 1°
Rudder	Right	30°	Left	30°	Right	30° ± 1°	Left	30° ± 1°

For further details see Rigging Diagram in Maintenance Manual Do 28 B-1 Page 3.31.

Serial Nos. eligible: The Federal Republic of Germany Certificate of Airworthiness for Export endorsed as noted below under "Certification basis" must be submitted for each individual aircraft for which application for certification is made.

Specifications Pertinent to All Models

Datum: 118.11 in. forward of wing leading edge slat

Leveling means: Longeron in cabin horizontal

Certification basis: CAR 10. Type Certificate No. 7A13 issued July 20, 1961
Date of Application for Type Certificate March 8, 1960

U.S. Civil Air Regulation Part 3, dated May 15, 1956, including Amendments 3-1, 3-2, 3-3, 3-4 and 3-5, (Do 28 B-1: including Amendments 3-1 through 3-7).

Each aircraft and any replacement part manufactured in Germany must be clearly identified as imported.

Certification basis, contd.

The Luftfahrt Bundesamt originally type certificated this aircraft under its type certificate Number 613. The FAA validated this product under U.S. Type Certificate Number 7A13.

Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of Germany.

The EASA type certificate is EASA.A.360.

Equipment

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

following items of equipment are required:
(a) Luftfahrt-Bundesamt approved Airplane Flight Manual
(b) Stall warning indicator

Import Requirements

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 Luftfahrt Bundesamt on behalf of the European 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 U.S. Civil Air Regulation Part 3 approved under U.S. Type Certificate No. 7A13 and to be in a condition for safe operation.'

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, *Airworthiness Certification of Aircraft*, for requirements for issuance of an *airworthiness certificate* for imported aircraft.

Service Information

Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before September 28, 2003 – by the Luftfahrt Bundesamt.

- 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 conditions exists:

- The documents change the limitations, performance, or procedures of the FAA approved manuals; or

- The documents make an acoustical or emissions changes to this product's U.S. type certificate as defined in 14 CFR § 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to EASA 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. Current weight and balance report, including list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.

NOTE 2. The following placard must be displayed on the instrument panel in full view of the pilot:

"THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATING LIMITATIONS OF THE AIRPLANE FLIGHT MANUAL. NO ACROBATIC MANOEUVERS, INCLUDING SPINS APPROVED."

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