

FEDERAL AVIATION AGENCY

7A13 Revision 4 DORNIER Do 28 A-1 Do 28 B-1 March 2, 2007
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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 Dornier-Werke G.M.b.H.
Munich
Federal Republic of Germany

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°		

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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. <u>3062 to 3066</u>	Serial No. <u>3067 and Up.</u>
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	Up 18° Down 18°	Up 20.5° ± 2° Down 20.5° ± 2°
(measured at zero flap)		
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.

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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.

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.

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.'

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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