



TYPE CERTIFICATE DATA SHEET Nº EA-2015T10

Type Certificate Holder:

POLSKIE ZAKŁADY LOTNICZE SP. Z O. O.
 Wojska Polskiego 3
 39-300 Mielec
POLAND

EA-2015T10
 Sheet 01

PZL MIELEC
 PZL M28 05

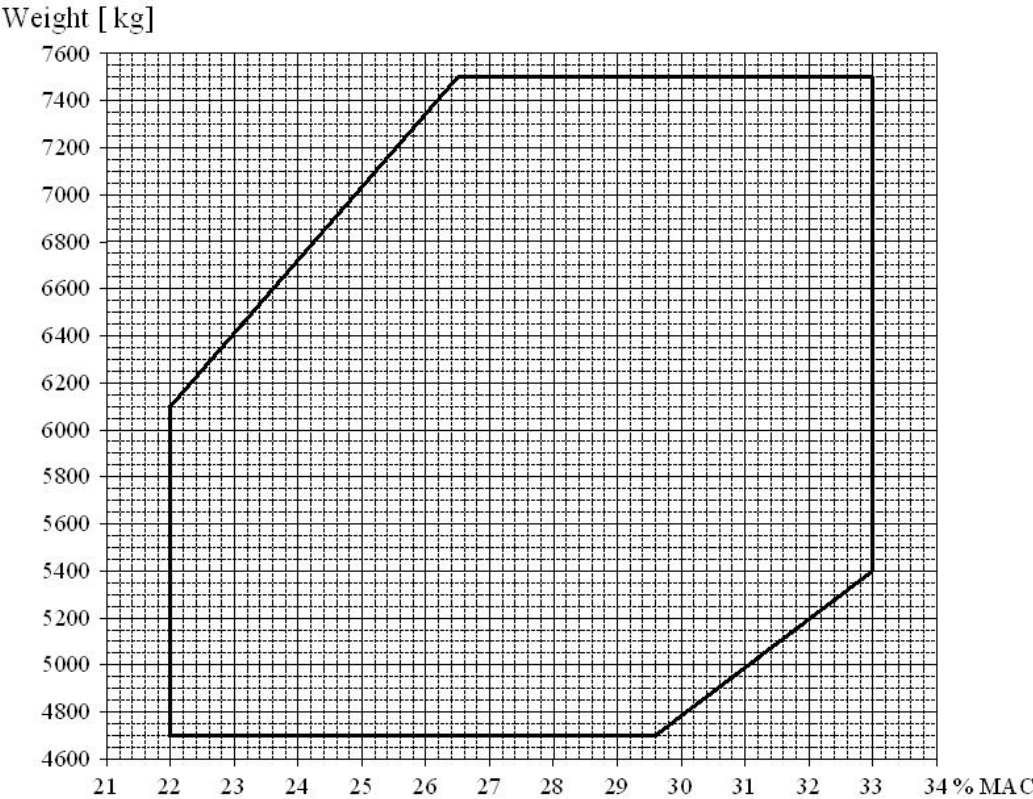
21 October 2015

This data sheet, which is part of Type Certificate No. 2015T10, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Brazilian Aeronautical Regulations.

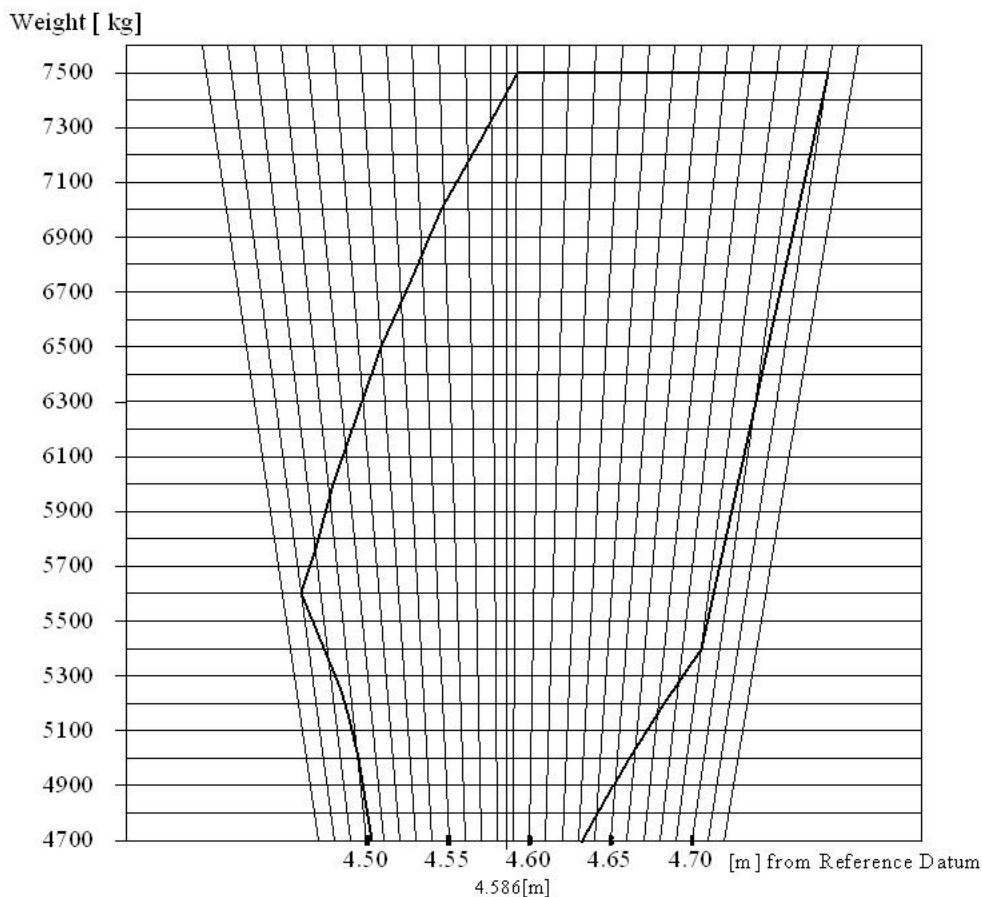
I – Model PZL M28 05 (COMMUTER CATEGORY) - APPROVED 21 October 2015.

ENGINE	2 (two) Pratt & Whitney Canada, Inc. PT6A-65B (ANAC Type Certificate 8005).				
FUEL	Aviation kerosene type JET A, JET A-1, JET A-2 and approved equivalents as per P&WC Bulletin No. 13044.				
ENGINE PERFORMANCE					
	Shaft Horse Power [SHP]	Torque [PSIG]	Prop Speed [RPM]	Turbine Speed [%]	Exhaust Gas Temp. [°C]
Takeoff	1100(1)	43.34	1700	104	820
Max. Continuous	1100(2)	43.34	1700	104	810
Max. Cruise	1000(3)	43.34	1700	104	800
	(1) Attainable up to 50.5°C. (2) Attainable up to 45.5°C. (3) Attainable up to 42.5°C.				
OIL	Aero Shell Turbine Oil 500, Royco Turbine Oil 500, Mobil Jet Oil II, Castrol 5000, BP Turbo Oil 2380 – in accordance with Pratt & Whitney Bulletin No. 13001.				
PROPELLER	2 (two) HC-B5MP-3D/M10876ANSK five-blade, all-metal, constant-speed, with WOODWARD speed governor (3032082A) Hartzell Propeller Inc. (USA) – ANAC Type Certificate 2000T03.				
	Diameter:			2.820 m	
AIRSPEED LIMITS (IAS)	Max. Operating (Limit) Speed, V_{mo}		355 Km/h		
	Design Maneuvering Speed, V_A		244 Km/h		
	Max. Flaps-Extended Speed, V_{FE}				
	Flaps 15°		215 Km/h		
	Flaps 40°		200 Km/h		
	Max. Spoiler-Deployed Speed, V_{NS}		215 Km/h		
	Minimum Control Speed, V_{MC}		153 Km/h		

CG RANGE



M28 05 Airplane C.G. Range



DATUM	2.470 m (97.24 in) Frame No. 9, Forward.	
LEVELING MEANS	1LP = LH and RH levelling point on frame No. 9 (see AFM Ch. 6).	
WEIGHTS	Max. Takeoff:	7500 kg
	Max. Landing:	7500 kg
	Max. Zero-Fuel:	6900 kg
	Minimum for flight:	4700 kg
MINIMUM CREW	Two pilots.	
PASSENGER SEATS	Passenger transport:	Max. 19
	Passenger/Cargo transport mix:	Max. 18
	Version of improved standard:	Max. 13
BAGGAGE/CARGO COMPARTMENTS	Max. Payload:	2300 kg
	Max. In Cargo/Passenger Cabin (inclusive of max. 40 kg on baggage shelf in fuselage rear part):	2000 kg
	Max. in underfuselage baggage pod:	300 kg
	Max hoist lifting capacity:	700 kg

FUEL CAPACITY	1766 kg; 2278 liters (3894 lbs; 602 U.S. gallons) Unusable fuel = 28 kg; 36 liters (62 lbs; 9.5 U.S. gallons)		
OIL CAPACITY	2 x 9.45 liters (2.5 US gal)		
MAXIMUM OPERATING ALTITUDE	7620 m (25000 ft)		
CONTROL SURFACE MOVEMENTS	Ailerons:	Up $22^{\circ} \pm 1^{\circ}$	Down $16^{\circ} 20' \pm 1^{\circ}$
	Aileron Trim Tab:	Up $14^{\circ} \pm 1^{\circ}$	Down $14^{\circ} \pm 1^{\circ}$
	Elevator:	Up $27^{\circ} \pm 1^{\circ}$	Down $19^{\circ} \pm 1^{\circ}$
	Elevator Trim Tab: (Elevator Neutral)	Up $15^{\circ} \pm 1^{\circ}$ ($19^{\circ} \pm 1^{\circ}$)*	Down $25^{\circ} \pm 1^{\circ}$ ($21^{\circ} \pm 1^{\circ}$)*
	Rudder LH:	Inboard $16^{\circ} \pm 1^{\circ}$	Outboard $22^{\circ} \pm 1^{\circ}$
	Rudder RH:	Inboard $16^{\circ} \pm 1^{\circ}$	Outboard $22^{\circ} \pm 1^{\circ}$
	Rudder Trim Tab: (Rudder Neutral)	Left $15^{\circ} \pm 1^{\circ}$	Right $15^{\circ} \pm 1^{\circ}$
	Wing Flaps:	Takeoff $15^{\circ} \pm 1^{\circ}$	Landing $40^{\circ} \pm 1^{\circ}$
	Spoilers:	Inboard $45^{\circ} \pm 1^{\circ}$	Outboard $60^{\circ} \pm 1^{\circ}$

(*) On airplanes S/N AJE00339 and subsequent and S/N AJE00338 and prior post Bulletin E/12.117/2013.

SERIAL NUMBER ELIGIBLE

AJE00302 and on.

A Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for a Brazilian Certificate of Airworthiness is made.

Only the model PZL M28 05 aircraft, without any other letter associated on the model designation, is eligible for a Brazilian Airworthiness Certificate (for example, the model PZL M28 05 Y is not eligible).

IMPORT REQUIREMENTS

A Brazilian Certificate of Airworthiness may be issued on the basis of the Airworthiness Certificate for Exportation issued by the EASA, including the following statement:

"The aircraft covered by this certificate has been inspected, tested and found to be in conformity with the Brazilian approved type design as defined by the Brazilian Type Certificate no. 2015T10 and in condition of safe operation".

CERTIFICATION BASIS

RBAC 23 equivalent to the US FAR 23, Amendment 42, with exception of 23.1309 which is at amendment 49 and 23.49, 23.201, 23.203, 23.205, 23.207 and 23.1545 which are at amendment 50 and 23.1308(d) which is at amendment 57.

**CERTIFICATION BASIS
CONT.**

For airplanes with life extension modification the certification basis is the same original above, with exception of 23.572, 23.574, 23.575 and 23.629, which are at amendment 48.

For airplanes with ice protection system installed, certified for FIKI, the certification basis is the same original above, with exception of 23.1419 at amdt. 43, 23.1525 at amdt.45, 23.775, 23.1307, 23.1309, 23.1323, 23.1326, 23.1351, 23.1353 and 23.1431 at amdt.49, 23.49, 23.63, 23.67, 23.69, 23.75, 23.201, 23.203, 23.207, 23.1325, 23.1559, 23.1581, 23.1583 and 23.1585 at amdt. 50, 23.929, 23.975 and 23.1093 at amdt. 51, 23.901 at amdt. 53, 23.903 at amdt. 54 and 23.73 at amdt. 62.

FAR Part. 34 Subpart B, FAR Part. 36 App. G., and Annex 16 ICAO, Part II, Chapter 10: Aircraft Noise Certification.

Equivalent level of safety findings in respect to 23.1361(a) – Master Switch Arrangement, listed on doc ELOS ACE-03-02 memo dated 12/Jan/04, issued by FAA and accepted by the ANAC.

REQUIRED EQUIPMENT

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

In addition, the ANAC/EASA approved PZL M28 Brazilian Airplane Flight Manual, Ref. No. M28/10/2002 must be on board of the aircraft at all times.

NOTES:**NOTE 1** Weight and balance:

Current weight and balance report, including list of equipment included in certified empty weight must be provided for each aircraft at the time of original airworthiness certification and at all times thereafter. Loading instructions are included in the applicable ANAC/EASA approved Flight Manual.

NOTE 2 Markings and placards.

All placards required in the approved flight manual must be installed in the appropriate locations. For the approved markings and placards translations contact the TC holder and/or ANAC at the following address: ggcp-gr@anac.gov.br.

Each aircraft must have a placard in clear view of the pilot that specifies the kind of operations such as VFR or IFR, DAY or NIGHT, to which the equipment installed limits the operation of the aircraft, and also that flight in known icing conditions is prohibited.

NOTE 3 Continuing Airworthiness.

Maintenance of this aircraft shall be performed in accordance with the Instructions for continuing airworthiness following documentation:

Maintenance Manual M28/11/2002 – PZL M28 05 with PT6A - 65B engines.

NOTE 4 Flight in Known Icing Condition

Flight in known icing condition is permitted, when certified IPS (ice protection system) is installed and is operational. This applies to S/N AJE00339 and up and to prior airplanes with Bulletin no. E/12.115/2013 “Installation of ice protection system certified for flight in known and forecast icing conditions” incorporated. From S/N AJE00339 and up the IPS is an option.

NOTE 5 Airframe Service Life Extension

For airplanes in service, if operators are going to extend the airframe service life, they must incorporate SB E/12.101R3/2014 and use chap 4 of rev 52 of MM M28/11/2002 dated May 11, 2015 or later EASA approved revisions. Any repairs/modifications done to airplanes with this modification must comply with the certification basis listed above on this TCDS. This modification must be accomplished after the airplane reaches 7800-8000 flight hours or 11300-11500 landings (whichever is first).

NOTE 6 The differences of the Brazilian airplanes in relation to the basic EASA type design are summarized below:

- 1 - The Brazilian Airplane Flight Manual (ANAC POH/AFM);
- 2 - Markings and placards.

**MÁRIO IGAWA**

**Gerente-Geral de Certificação de Produto Aeronáutico
(Manager, Aeronautical Product Certification)**