

TYPE-CERTIFICATE

DATA SHEET

NO. EASA.A.058

for PZL M28

Type Certificate Holder Polskie Zakłady Lotnicze Sp. z o. o.

> Wojska Polskiego 3 39-300 Mielec POLAND

For models: PZL M28 00, PZL M28 02, PZL M28 05

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SECTION A: PZL M28 00

A.I. General

1.	Data Sheet No.:	A.058 Issue: 01 Date: October 24, 2005		
	a) Type:			
۷.	b) Model:	PZL M28		
	c) Variant:	PZL M28 00 - passenger (18 pax) transport		
	-,	- cargo transport		
		 passenger/cargo transport 		
		- paradrop		
3.	Airworthiness Category:	Commuter		
4.	Type Certificate Holder:	Polskie Zakłady Lotnicze Sp. z o. o.		
5.	Manufacturer:	Polskie Zakłady Lotnicze Sp. z o. o.		
6.	Certification Application Date:	Sep 14, 2004 (to EASA)		
7.	(Reserved) National Certifying Authority	Civil Aviation Office, Poland		
8.	(Reserved) National Authority	May 15, 1995 This EASA Type Certificate replaces the Polish CAO		
	Type Certificate Date:	Type Certificate No. BB-199/1		
9.	Reserved	none		
9. A.II	Reserved Certification Basis	none		
A.II	Certification Basis Reference Date for determining	none Oct 11, 1986		
A.II 1.	Certification Basis Reference Date for determining the applicable requirements:	Oct 11, 1986		
A.II 1. 2.	Certification Basis Reference Date for determining the applicable requirements: Airworthiness Requirements:	Oct 11, 1986 FAR Part 23, including Amendment 23 - 34		
A.II 1. 2.	Certification Basis Reference Date for determining the applicable requirements:	Oct 11, 1986 FAR Part 23, including Amendment 23 - 34 None		
A.II 1. 2.	Certification Basis Reference Date for determining the applicable requirements: Airworthiness Requirements:	Oct 11, 1986 FAR Part 23, including Amendment 23 - 34 None None		
 A.II 1. 2. 3. 3. 	Certification Basis Reference Date for determining the applicable requirements: Airworthiness Requirements: Special Conditions:	Oct 11, 1986 FAR Part 23, including Amendment 23 - 34 None		
 A.II 1. 2. 3. 3. 	Certification Basis Reference Date for determining the applicable requirements: Airworthiness Requirements: Special Conditions: Exemptions:	Oct 11, 1986 FAR Part 23, including Amendment 23 - 34 None None		
 A.II 1. 2. 3. 3. 4. 	Certification Basis Reference Date for determining the applicable requirements: Airworthiness Requirements: Special Conditions: Exemptions: Deviations:	Oct 11, 1986 FAR Part 23, including Amendment 23 - 34 None None None		
 A.II 1. 2. 3. 4. 5. 	Certification Basis Reference Date for determining the applicable requirements: Airworthiness Requirements: Special Conditions: Exemptions: Deviations: Equivalent Safety Findings: Requirements elected to comply:	Oct 11, 1986 FAR Part 23, including Amendment 23 - 34 None None None None		
 A.II 1. 2. 3. 4. 5. 6. 7. 8. 	Certification Basis Reference Date for determining the applicable requirements: Airworthiness Requirements: Special Conditions: Exemptions: Deviations: Equivalent Safety Findings: Requirements elected to comply:	Oct 11, 1986 FAR Part 23, including Amendment 23 - 34 None None None None none		



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A.III Technical Characteristics and Operational Limitations

 Type Design Definition: Description: 	specification sheet No. 28.15.0000.000.000 The PZL M28 Model 00 is an all metal strut-braced high wing twin engine turboprop STOL airplane, with twin vertical tails and a tricycle non-retractable landing gear featuring a steerable nose wheel					
3. Equipment:	reaturing					
Standard:	As defined in Section 7 of the Airplane Flight Manual Ref. No. M28/LTO-3/27/95					
Optional & Operational:		As defined in Section 9 of the Airplane Flight Manual Ref. No. M28/LTO-3/27/95				
4. Dimensions:						
Length	13.10 m	(43 ft)				
Height		(16 ft 1 in)				
Wing span		(72 ft 4 in)				
Wing area	39.72 m²	(427.5 sq. f	ft.)			
5. Engine:						
5.1.1 Model:	PT6A-65B of 0.0568		with a free	e turbine, re	duction ratio	
5.1.2 Type Certificate:	E4EA					
5.1.3 Limitations:	•	with PT6A-6	its refer to 55B Engines	•	ght Manual,	
5.1.4. Engine Performance:	Shaft Horse Power	Torque	Prop Speed	Turbine Speed	Exhaust Gas Temp.	
	SHP	PSIG	rpm	%	°C	
Takeoff	1100*	43.34	1700	104	820	
Max. Continuous	1100**	43.34	1700	104	810	
Max. Cruise	1000***	43.34	1700	104	800	
* attainable up to 50.5 °C; $$ ** a	attainable u	p to 45.5 ° (C; *** att	ainable up t	o 42.5 °C	
5.1.5 Number of engines:	2					
6. Load factors:						
Flaps Up	n=+3.0 , -:	1.0				
Flaps Down	n=+2.0, (



7. Propeller:

7.1 Model:	HC-B5MP-3D/M10876ANSK five-blade, all-metal,
	constant-speed, with WOODWARD speed governor
	(3032082A)

- 7.2 Type Certificate: P44GL
- 7.3 Number of blades: 5 (five)
- 7.4 Diameter: 2.820 m (9 ft 3in)
- 7.5 Sense of Rotation: Clockwise
- 8. Fluids:
 - 8.1 Fuel: Aviation kerosene type JET A, JET A-1, JET A-2 and approved equivalents as per P&WC Bulletin No. 13044.
 Equivalents: F34, F35, F40, F43, F44, JP-4, JP-5, JP-8, AVTUR, AVTAG, AVTAC, CAN/C.G.SB.3.23-M86, CAN/C.G.SB.3.22-M86, CAN/C.G.SB.3.GP-24Ma, AIR 3404, AIR 3405, AIR 3407, RT acc. to GOST 16564-71.
 8.2 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.
 - 8.3 Coolant: N/A
- 9. Fluid capacities:
 - 9.1 Fuel:
 - Wing with no auxiliary tanks
 Wing with auxiliary tanks
 2440 I (645 US Gal.)
 - Extra long-ferry fuel tank inside 2090 I (552 US Gal.)
 - fuselage 9.2 Oil: 2 x 9.45 l (2.5 US gal)
 - 9.3 Coolant system capacity: N/A
- 10. Air Speeds: Airspeed Limitations: IAS (km/h) CAS (km/h) Max. Allowable Operating Speed V_{MO} 355 345 Design Maneuvering Speed, VA 230 225 Max. Allowable Flap-Extended Speed, V_{FE} Flaps 15° 210 215 Flaps 40° 200 190



Max. Spoiler-Extended Sp	peed, V _{NS}		
	 outboard spoilers 	215	210
	- inboard spoilers	215	210
Minimum Control Speed,	, V _{MC}	135	130
11. Maximum Operating Altitud	e:		
 without oxygen supply system 		3000	m (9,842 ft.)
- with crew oxygen supply syster	n provided	7620	m (25,000 ft.)
	F	7020	111 (25,000 11.)
12. Allweather Operations	 VFR flights, day and night 		
Capability:	- IFR flights, day and night		
13. Weights:			

Max. Takeoff	6500 kg
Max. Landing	6175 kg

14. Centre of Gravity Range:



(see fig. 6.1, AFM, Chapter 6)



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16. Control Surface Deflections:

Ailerons:		Up Down	22°±1° 16°20′±1°
		DOWIT	10 20 1 1
Aileron Trim Tab:		Up	$14^{\circ} \pm 1^{\circ}$
		Down	$14^{\circ} \pm 1^{\circ}$
Elevator:		Up	27°± 1°
		Down	$19^{\circ} \pm 1^{\circ}$
Elevator Trim Tab:			
(Elevator Neutral)		Up	15°± 1°
		Down	25°±1°
Rudder LH:		Inboard	16°±1°
		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°±1°
Wing Flaps:		Takeoff	15°±1°
		Landing	$40^{\circ} \pm 1^{\circ}$
Spoilers:		Inboard	45°± 1°
		Outboard	$60^{\circ} \pm 1^{\circ}$
	11 D – I H and BH	l levelling point on fra	me No 9
17. Levelling Means:			
	(see fig. 6.1, AFI	M, Chapter 6)	
18. Minimum Flight Crew:	2 (two) pilots		
19. Maximum Passenger Seating	18		
Capacity:			
20. Baggage/Cargo			
Compartments:			
Max. Baggage Compartment	Load: 150 kg		
Max. Payload:	1750 kg		



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21. Wheels and Tyres:	Main w	heel tyre size 720 x 310 mm (28.30 x 12.20 in)
	Nose w	heel tyre size (Type 6.50x10 –	GOOD YEAR)
	561x16	9 mm (22.10x6.65 in)	
22. Landing gear:		Fixed, tricycle type, with a st	eerable nose
		wheel	
Nose Wheel Controlling Angle		± 15 °	
Nose Wheel Controlling Angle	with	± 50 °	
Steering OFF			
23. Max. Service Ceiling:		7620 m (25,000 ft.)	
24. Operating Ambient Temperatu	re Range	:	-50°C to + 50°C
25. (Reserved):			

A.IV Operating and Service Instructions

- 1 Flight Manual: Airplane Flight Manual, PZL M28 with PT6A-65B Engines ref No. M28/LTO-3/27/95,
- 2. Technical Manual: PZL M28 Maintenance Manual Ref No. M28/4/95/LTO-33
- 3. Repair Manual: Repair Manual PZL M28 Airplane ref No. M28/1/2001
- 4. Manual for Operation: see related Flight Manual section 9.
- 5. Spare Parts Catalogue: Illustrated Parts Catalog, ref No. M28/14/97/LTO-3
- 6. Table of Dimensions, Limits and Clearances: see Chapter 6 of appropriate Maintenance Manual
- Instruments and aggregates: see for standard equipment: As defined in Section 7 of the

As defined in Section 7 of the Airplane Flight Manual, PZL M28 with PT6A-65B Engines ref No. M28/LTO-3/27/95,

for optional & operational equipment:

As defined in Section 9 of the Airplane Flight Manual, PZL M28 with PT6A-65B Engines ref No. M28/LTO-3/27/95,

 Airplane Service Life, and Component TBOs : Airplane Service Life, Component TBOs as defined in Sec. 4 of M28 Maintenance Manual (M28/4/95/LTO-33).



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A.V Notes

- 1. Flight in known or forecast icing conditions is prohibited
- 2. This Type Certificate applies to aircraft S/N: AJEP1-01 and to AJE001-02 and up
- 3. When the ice protection system is installed, flight with this system operative is allowed but with consideration for note 1 (above).



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SECTION B: PZL M28 02

B.I. General

b) Model:

- 1. Data Sheet No.: A.058 Issue: 01 Date: October 24, 2005
- 2. a) Type: PZL M28
 - PZL M28 02
 - c) Variant: - passenger transport (18 passengers + 1 attendant
 - seat)
 - passenger "Executive" (designation M28 02-E), 8 or 10 passenger seats (depending on seat model) + 2 attendants' seats
 - cargo transport
 - mixed passenger/cargo transport
 - paradrop
 - liquid-cargo transportation
 - long-range ferry

For above listed versions the reinforced PZL M28 02-W variant with 7500 kg MTOW is approved.

3.	Airworthiness Category:	Commuter
4.	Type Certificate Holder:	Polskie Zakłady Lotnicze Sp. z o. o.
5.	Manufacturer:	Polskie Zakłady Lotnicze Sp. z o. o.
6.	Certification Application Date:	Sep 14, 2004 (to EASA)
7.	National Certifying Authority	Civil Aviation Office, Poland
8.	National Authority Type Certificate Date:	Feb 23, 1996 This EASA Type Certificate replaces the Polish CAO Type Certificate No. BB-199/1
9. B.II	Reserved Certification Basis	none
1.	Reference Date for determining the applicable requirements:	Oct 11, 1986
2.	Airworthiness Requirements:	FAR Part 23, including Amendment 23 – 34. For flight in known and forecast icing (FIKI) see certification basis for PZL M2805 model for FIKI.
3.	Special Conditions:	None
3.	Exemptions:	None

4. Deviations:



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- Equivalent Safety Findings: None
 Requirements elected to comply:
 Environmental Standards: FAR Part. 34 Subp. B, FAR Part. 36 App. G.
 (Reserved) Additional National none Requirements:
- 9. (Reserved) none

B.III Technical Characteristics and Operational Limitations

 Type Design Definition: Description: 	specification sheet No. 28.15.0000.000.000 The PZL M28 Model 02 is an all metal strut-braced high win twin engine turboprop STOL airplane, with twin vertical tail and a tricycle non-retractable landing gear featuring a steerable nose wheel				
3. Equipment:					
Standard:	As defined i M28/LTO-3,		on 7 of the Airp	olane Flight	Manual ref No.
Optional & Operational:	As defined i No. M28/LT		on 9 of the Airı '95	olane Flight	Manual Ref.
4. Dimensions:	-				
Length	13.10 m (4	3 ft)			
Height	4.90 m (1				
Wing span	22.06 m (7				
Wing area	39.72 m² (4	27.5 sq.1	ft.)		
5. Engine:					
5.1.1 Model:	PT6A-65B tu 0.0568:1	ırboprop	with a free tu	irbine, redu	ction ratio of
5.1.2 Type Certificate:	E4EA				
5.1.3 Limitations:	• •		nits refer to Ai Engines ref No		
5.1.4. Engine Performance:	Shaft Horse Power	Torque	Prop Speed	Turbine Speed	Exhaust Gas Temp.
	SHP	PSIG	rpm	%	°C
Takeoff	1100*	43.34	1700	104	820
Max. Continuous	1100**	43.34	1700	104	810
Max. Cruise		43.34	1700	104	800
* attainable up to 50.5 °C; ** attain	able up to 45	5.5 °C;	*** attainable	up to 42.5	°C



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5.1.5 Number of engines:	2		
6. Load factors:	For model M28 02 (7000 kg MTOW) and	For model M28 (range ferry only	
	M28 02-W (7500 kg MTOW)	MTOW)	
Flaps Up	n=+3.0 , -1.0	n=+2.8 , -1.0	
Flaps Down	n=+2.0, 0	n=+2.0, 0	
7 Bropollor:	11-12.0, 0	n=12.0, 0	
7. Propeller:7.1 Model:	HC-B5MP-3D/M10876ANSK speed, with WOODWARD sp		
7.2 Type Certificate:	P44GL		
7.3 Number of blades:	5 (five)		
7.4 Diameter:	2.820 m (9 ft 3in)		
7.5 Sense of Rotation:	Clockwise		
8. Fluids:			
8.1 Fuel:	Aviation kerosene type JET A equivalents as per P&WC Bu		and approved
	Equivalents: F34, F35, F40, F AVTAG, AVTAC, CAN/C.G.SB. CAN/C.G.SB.3.GP-24Ma, AIR to GOST 16564-71.	3.23-M86, CAN/C	C.G.SB.3.22-M86,
8.2 Oil:	Aero Shell Turbine Oil 500, R Oil II, Castrol 5000, BP Turbo Pratt & Whitney Bulletin No.	o Oil 2380 - in acc	
8.3 Coolant:	N/A		
9. Fluid capacities:			
9.1 Fuel:	1766 kg (2278 l), (3894 lbs; 6	602 US Gal.)	
9.2 Oil:	2 x 9.45 l (2.5 US gal)		
9.3 Coolant system capacity:	N/A		
10. Air Speeds:			
Airspeed Limitations: Max. Allowable Operating S	Speed V _{MO}	IAS (km/h) 355	CAS (km/h) 345
Design Maneuvering Speed	, V _A	230	225
for PZL	M28 02-W variant:	244	238



Max. Allowable Flap-Exter	nded Speed, V _{FE}			
	Fla	aps 15°	215	210
	Fla	aps 40°	200	190
Max. Spoiler-Extended Sp				
	- outboard	•	215	210
	- inboard	spoilers	215	210
Minimum Control Speed,	V _{MC}		153	146
11. Maximum Operating Altitude:				
 without oxygen supply system 			3000 m (9	9,842 ft)
 with crew oxygen supply system 	provided		7620 m (2	25,000 ft)
12. Allweather Operations	- VFR flights, day and r	night		
Capability:	- IFR flights, day and n	ight		
13. Weights:				
13. Weights.				
Max. Takeoff	70	000 kg		
Max. Landing	66	650 kg		
Max. Takeoff for Ferry Flight	75	500 kg		
Max. Takeoff and Landing for	r M28 02-W variant 75	500 kg		
14 Centre of Gravity Bange				

14. Centre of Gravity Range:



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15. Datum:

2.470 m (97.24 in) Frame No. 9, Forward (see fig. 6.1, AFM, Chapter 6)

16. Control Surface Deflections:

Ailerons:	Up	$22^{o}\pm1^{o}$
	Down	16 ° 20' \pm 1 °
Aileron Trim Tab:	Up	$14^{\circ} \pm 1^{\circ}$
	Down	$14^{\circ} \pm 1^{\circ}$
Elevator:	Up	27°±1°
	Down	$19^{\circ} \pm 1^{\circ}$
Elevator Trim Tab: (<i>elevator neutral</i>)	Up	$15^{\circ} \pm 1^{\circ}$
		(19°± 1°)*
	Down	25°±1°
		(21°±1°)*

(*) On airplane S/N AJE001-01 only.

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	Rudder LH:			Inboard	$16^{\circ} \pm 1^{\circ}$
				Outboard	22°±1°
	Rudder RH:			Inboard	$16^{\circ} \pm 1^{\circ}$
				Outboard	22°±1°
	Rudder Trim Tab: (rud	der neut	ral)	Left	$15^{\circ} \pm 1^{\circ}$
				Right	15°±1°
	Wing Flaps:			Takeoff	15°±1°
				Landing	40°±1°
	Spoilers:			Inboard	45°± 1°
				Outboard	60°±1°
17.	Levelling Means:	1LP = LH	and RH	levelling point on fra	me No. 9
		(see fig.	6.1 AFM	, Chapter 6)	
18.	Minimum Flight Crew:	2 (two)	pilots		
19.	Maximum Passenger Seating C	Capacity:			
	Passenger Seating Capacity		18 + 1 a	attendant seat	
	Passenger Seating Capacity in "Executive" version			passenger seats (dep + 2 attendants' seats	-
20.	Baggage/Cargo Compartments	5:			
	Max. Baggage in Under Fusela Pod:	age	300 kg		
	Max. Payload:		2000 kg		
	Max. Baggage on Baggage She	elf:	150 kg 1))	
	Max. Hoist Capacity:		700 kg 1))	
	1) not applicable for "Exe	ecutive"	version		
21.	Wheels and Tyres:	Main w	heel tyre	size 720 x 310 mm (28.30 x 12.20 in)
	Landing gear:		9 mm (22	size (Type 6.50x10 – .10x6.65 in) icycle type, with a st	
	Nose Wheel Controlling A	ngle	± 15 °		
	Nose Wheel Controlling A	-	± 50 °		
	with Steering OFF		± 30		
	for M28 02-W variant:				
	- Main Gear: rocker-type	with a s	ingle-cha	mber shock absorbe	r,
	- Nose Gear: rocker-type	, with a	double-cł	namber shock absorb	er,
	Nose Wheel Controllin	g Angle			± 15 °

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Date: 11 August 2022

Nose Wheel Controlling Angle with Steering OFF \pm 45 °

23. Max. Service Ceiling: 7620 m (25,000 ft)

-50°C to + 50°C

25. (Reserved):

B.IV Operating and Service Instructions

24. Operating Ambient Temperature Range:

1 Flight Manual: Airplane Flight Manual, PZL M28 with PT6A-65B Engines ref No. M28/LTO-3/27/95.

- 2 Technical Manual: PZL M28 Maintenance Manual Ref No. M28/4/95/LTO-33.
- 3. Repair Manual: Repair Manual PZL M28 Airplane ref No. M28/1/2001
- 4. Manual for Operation: see related Flight Manual section 9.
- 5. Spare Parts Catalogue: Illustrated Parts Catalog, ref No. M28/14/97/LTO-3
- 6. Table of Dimensions, Limits and Clearances: see Chapter 6. Of appropriate Maintenance Manual
- 7. Instruments and aggregates: see for standard equipment:

As defined in Section 7 of the Airplane Flight Manual, PZL M28 with PT6A-65B Engines ref No. M28/LTO-3/27/95,

for optional & operational equipment:

As defined in Section 9 of the Airplane Flight Manual, PZL M28 with PT6A-65B Engines ref No. M28/LTO-3/27/95,

- Airplane Service Life, and Component TBOs : Airplane Service Life, Component TBOs as defined in Sec. 4 of M28 Maintenance Manual (M28/4/95/LTO-33)
- OSD (M28 02-W only): OSD FC M28 02-W DTD/108/2015, Initial Issue from 29 Oct 2015, or later approved Revision
- 10. MMEL (M28 02-W only):

MMEL PZL M28 02-W M28 05, Original Issue from 20 May 2015, or later approved Revision



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B.V Notes

- 1. [Reserved.]
- 2. PZL M28 02-W variant: is approved for operation on condition of execution of provisions included in Bulletin No. E/12.048/2001 only.
- 3. This Type Certificate applies to aircraft S/N: AJE001-01 and up. For flight in known and forecast icing (FIKI) this certificate applies for AJE001-01 airplane only.
- 4. When the ice protection system is installed, flight with this system operative is allowed but with consideration for note 3 (above).
- Chapter 4. Of the Maintenance Manual Ref No. M28/4/95/LTO-33 related to the FIKI have been approved on the Chapter 4. Of the Maintenance Manual Ref. No.: M28/11/2002,approved for PZL M28 05 model for FIKI basis.



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SECTION C : PZL M28 05

C.I. General

1. Data Sheet No.:	A.058
	Issue: 01 Date: October 24, 2005
PZL M28 05-SG variant :	Issue: 02 Date: April 21, 2006
2. a) Type:b) Model:c) Variant:	 PZL M28 PZL M28 05 passenger transport, max. 19 passengers; cargo transport; passenger/cargo transport mix, max. 18 passengers; paradrop; liquid-cargo transportation; long-range ferry; version of improved standard, max. 13 passengers with the special equipment transportation/release system (designation PZL M28 05-S) maritime patrol (designation PZL M28 05-MPW) for Border Guard missions (designation PZL M28 05-SG)
3. Airworthiness Category:	Commuter
4. Type Certificate Holder:	Polskie Zakłady Lotnicze Sp. z o. o.
5. Manufacturer:	Polskie Zakłady Lotnicze Sp. z o. o.
6. Certification Application Date:	Sep 14, 2004 (to EASA)
 (Reserved) National Certifying Authority 	Civil Aviation Office, Poland
8. (Reserved) National Authority Type Certificate Date:	Nov. 17, 1999 (acc. to BB-199/1) Apr. 18, 2002 (acc. to BB-216) This EASA Type Certificate replaces the Polish CAO Type Certificates No. BB-199/1 and BB-216
9. Reserved	none



C.II Certification Basis

1. Reference Date for determining the applicable requirements:	Oct 11, 1986 (acc to the BB-199/1) Feb 2, 1991 (acc to the BB-216)
2. Airworthiness Requirements: for airplanes S/N AJE001-19 up to AJE002-10 (Polish CAO TC No. BB199/1):	FAR Pt. 23, Amendment 34, FAR Pt. 23, Amendment 42: Flight Data Recorder (23.1459), Voice Recorder (23.1457) FAR Pt. 23, Amendment 49: Installations, systems and airplane reliability analysis (23.1309) FAR Pt. 23, Amendment 50: Stall warning (23.207) FAR Pt. 34, Subpart B, FAR Pt. 36, Appendix G.
for airplanes S/N AJE00301 and up : (Polish CAO TC No. BB216)	FAR 23, Amendment 42, FAR 23, Amendment 49 : 23.1309, FAR 23, Amendment 50 : 23.49, 23.201, 23.203, 23.205, 23.207 and 23.1545
for airplanes S/N AJE00301 and up for service life extension	FAR 23, Amendment 48: 23.572, 23.574, 23.575, 23.629
for airplanes with ice protection system installed, certified for FIKI, S/N AJE00301 and up	 FAR 23, Amendment 42, FAR 23, Amendment 43: 23.1419, FAR 23, Amendment 45: 23.1525, FAR 23, Amendment 49: 23.775, 23.1307, 23.1309, 23.1323, 23.1326, 23.1351, 23.1353, and
system installed, certified for	FAR 23, Amendment 43: 23.1419, FAR 23, Amendment 45: 23.1525, FAR 23, Amendment 49 : 23.775, 23.1307, 23.1309,
system installed, certified for	 FAR 23, Amendment 43: 23.1419, FAR 23, Amendment 45: 23.1525, FAR 23, Amendment 49: 23.775, 23.1307, 23.1309, 23.1323, 23.1326, 23.1351, 23.1353, and 23.1431 FAR 23, Amendment 50: 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 FAR 23, Amendment 51: 23.929, 23.975 and 23.1093 FAR 23, Amendment 54: 23.901 FAR 23, Amendment 54: 23.903
system installed, certified for FIKI, S/N AJE00301 and up	 FAR 23, Amendment 43: 23.1419, FAR 23, Amendment 45: 23.1525, FAR 23, Amendment 49: 23.775, 23.1307, 23.1309, 23.1323, 23.1326, 23.1351, 23.1353, and 23.1431 FAR 23, Amendment 50: 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 FAR 23, Amendment 51: 23.929, 23.975 and 23.1093 FAR 23, Amendment 53: 23.901 FAR 23, Amendment 54: 23.903 FAR 23, Amendment 62: 23.73

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5.	Equivalent Safety Findings:	Equivalent Safety Level FAR 23.1361(a) - Master Switch Arrangement
6.	Requirements elected to comply:	none
7.	Environmental Standards:	FAR Part. 34 Subp. B, FAR Part. 36 App. G., and: Annex 16 ICAO, Part II, Chapter 10: Aircraft Noise Certification,
	(Reserved) Additional National quirements:	none
9.	(Reserved)	none

C.III Technical Characteristics and Operational Limitations

 Type Design Definition: Description: 	specification sheet No. 28.15.0000.000.000 The PZL M28 Model 05 is an all metal strut-braced high wing twin engine turboprop STOL airplane, with twin vertical tails and a tricycle non-retractable landing gear featuring a steerable nose wheel
3. Equipment:	
Standard:	For airplanes S/N AJE001-19 up to AJE002-10: as defined in Section 7 of the Airplane Flight Manual (M28/14/99).
	For airplanes S/N AJE00301 and up: as defined in Section 7 of the PZL M28 Airplane Flight Manual, Ref. No. M28/10/2002
Optional & Operational:	For airplanes S/N AJE001-19 up to AJE002-10: as defined in Section 9 of the Airplane Flight Manual (M28/14/99 Issue).
	For airplanes S/N AJE00301 and up: as defined in Section 9 of the PZL M28 Airplane Flight Manual, Ref. No. M28/10/2002
4. Dimensions:	
Length	13.10 m (43 ft)
Height	4.90 m (16 ft 1 in)
Wing span	22.06 m (72 ft 4 in)
Wing area	39.72 m² (427.5 sq.ft.)
5. Engine:	
5.1.1 Model:	PT6A-65B turboprop with a free turbine, reduction ratio of 0.0568:1
5.1.2 Type Certificate:	E4EA



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5.1.3 Limitations:	PZL M28 M28/14/9 10,	with PT6A-6	5B Engines anes S/N A	s ref No. JE001-19 u	ght Manual, p to AJE002- and up
5.1.4. Engine Performance:	Shaft Horse Power	Torque	Prop Speed	Turbine Speed	Exhaust Gas Temp.
Takeoff Max. Continuous Max. Cruise * attainable up to 50.5 °C; ** a		PSIG 43.34 43.34 43.34 p to 45.5 °C	rpm 1700 1700 1700 ; *** atta	% 104 104 104 ainable up t	°C 820 810 800 o 42.5 °C
5.1.5 Number of engines:	2				
 Load factors: Flaps Up Flaps Down 	n=+3.0,- n=+2.0,(
 Propeller: 7.1 Model: 	constant-	-3D/M1087 speed, with A) Hartzell F	WOODWA	ARD speed g	
7.2 Type Certificate:	P44GL		·		
7.3 Number of blades:	5 (five)				
7.4 Diameter:	2.820 m (9 ft 3in)			
7.5 Sense of Rotation:	Clockwise	2			
8. Fluids:					
8.1 Fuel:		n kerosene t ed equivalen			A-2 and in No. 13044.
	AVTUR, CAN/C.(ents: F34, F3 AVTAG, AV G.SB.3.22-M IR 3405, AIR	TAC, CAN/0 86, CAN/C	C.G.SB.3.23- .G.SB.3.GP-	-M86, 24Ma, AIR
8.2 Oil	Jet Oil II	ell Turbine (, Castrol 50(nce with Pra	00, BP Tur	bo Oil 2380	
8.3 Coolant:	N/A				



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9. Fluid capacities:				
9.1 Fuel:	1766 kg (227	78 l), (3894 lbs;	602 US Gal.)	
9.2 Oil:	2 x 9.45 l (2.5	5 US gal)		
9.3 Coolant system capacity:	N/A			
10. Air Speeds: Airspeed Limitations: Max. Operating (Limit) Speed, V _{mc}	9		IAS [km/h] 355	CAS [km/h] 345
Design Maneuvering Speed, V _A			244	238
•	os 15º os 40º		215 200	210 190
Max. Spoiler-Deployed Speed, V_{NS}			215	210
Minimum Control Speed, V _{MC} 11. Maximum Operating Altitude:			153	146
- without oxygen supply system		3000 m (9,842	2 ft)	
- with crew oxygen supply syster	n provided	7620 m (25,00	00 ft)	
12. Allweather Operations Capab	ility:		- VFR flights, da - IFR flights, da	
 Weights: Max. Zero-Fuel Max. Payload Note: 			6900 kg 2300 kg	, c
max. 2000 kg in Cargo/Pas fuselage rear part) max. 300 kg in under fusela	_		ax. 40 kg on ba	ggage shelf in
Minimum Weight for Flight Max. Baggage in Underfuselag Max. Baggage on Baggage She Hoist Lifting Capacity Max:	ge Pod		4700 kg 300 kg 40 kg 700 kg	

14. Centre of Gravity Range:





**** * * ***

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M28 05 Airplane C.G. Range

15. Datum:

2.470 m (97.24 in) Frame No. 9, Forward (see AFM, Chapter 6, fig. 6.1)

16. Control Surface Deflections:

Ailerons:	Up Down	22°±1° 16°20′±1°
Aileron Trim Tab:	Up Down	14°± 1° 14°± 1°
Elevator:	Up Down	27°± 1° 19°± 1°
Elevator Trim Tab:		
(Elevator Neutral)	Up	15°±1° (19°±1°)*
	Down	25°±1° (21°±1°)*

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



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Rudder LH:			Inboard	$16^{\circ} \pm 1^{\circ}$
			Outboard	22°±1°
Rudder RH:			Inboard	16°±1°
			Outboard	22°±1°
Rudder Trim Tab:				
(Rudder Neutral)			Left	15°±1°
			Right	15°±1°
Wing Flaps:			Takeoff	15°± 1°
			Landing	$40^{\circ} \pm 1^{\circ}$
Spoilers:			Inboard	45°± 1°
			Outboard	60°± 1°
17. Levelling Means:	1LP = LH	and RH	levelling point on fra	me No. 9
			er 6, fig. 6.1)	
	•	•		
18. Minimum Flight Crew:	2 (two) p	ollots		
19. Maximum Passenger Seating	- nassan	ger trans	sport, max. 19 passer	igers.
Capacity:		-		-
capacity.			o transport mix, max	
	- version	n of impr	oved standard, max 1	.3 passengers
20. Baggage/Cargo		-	300 kg (5070 lbs) i.e:	
Compartments:	-	•	nger cabin max 2000 l	• •
		gage she	lf in fuselage rear par	t max 40 kg (88
	lbs)			
	- in unde	erfuselag	e baggage pod - max	. 300 kg (662 lbs)
21. Wheels and Tyres:	Main wh	neel tyre	size 720 x 310 mm (2	28.30 x 12.20 in)
	Nose wh	neel tyre	size (Type 6.50x10 –	GOOD YEAR)
	561x169) mm (22	.10x6.65 in)	
22. Landing gear:	Fix	ed, tricy	cle type, with a steer	able nose wheel
 Main Gear: rocker-type with a 	-			
 Nose Gear: rocker-type, with 	a double-	-chambe	r shock absorber,	
Nose Wheel Controlling Angle		\pm 15 $^{\circ}$		
Nose Wheel Controlling Angle	with	± 45 °		
Steering OFF		± 45		
23. Max. Service Ceiling:		7	620 m (25,000 ft)	
24. Operating Ambient Temperatu	re Range	:		-50°C to + 50°C
25. (Reserved):				
23. (neserveu).				



C.IV Operating and Service Instructions

1. Flight Manual:

For airplanes S/N AJE001-19* up to AJE002-10* :PZL M28 with PT6A-65B Engines: Airplane Flight Manual (P/N M28/14/99), Issue Dec. 1999.

For airplanes S/N AJE00301* and up : PZL M28 Airplane Flight Manual, Ref. No.: M28/10/2002, Issue April 2002.

*The serial number system of the M28 05 airplane is as follows: AJE001-XZ, AJE002-XZ, AJE003XZ and up. The XZ is the number of airplane in series.

2. Technical Manual:

For airplanes S/N AJE001-19 up to AJE002-10 PZL M28 Maintenance Manual (P/N M28/4/95/PBD), Issue Dec. 1999, including Sec. 4: "AIRWORTHINESS LIMITATIONS" and Sec. 5: "MAINTENANCE SCHEDULE", For airplanes S/N AJE00301 and up : PZL M28 Maintenance Manual, Ref. No.: M28/11/2002, Issue April 2002, including Sec. 4: "Airworthiness Limitations" and Sec. 5: "Maintenance Schedule".

- 3. Repair Manual: Repair Manual PZL M28 Airplane ref No. M28/1/2001
- 4. Manual for Operation: see related Flight Manual section 9.
- Spare Parts Catalogue: For airplanes S/N AJE001-19 up to AJE002-10: Illustrated Parts Catalog, ref No. M28/14/97/LTO-3 For airplanes S/N AJE00301 up to AJE00309: Illustrated Parts Catalog, ref No. M28/10/2004 For airplanes S/N AJE00310 and up: Illustrated Parts Catalog, ref No. M28/04/2010
- 6. Table of Dimensions, Limits and Clearances: see Chapter 6. Of appropriate Maintenance Manual

Instruments and aggregates: see for standard equipment:	
for airplanes S/N AJE001-19 up to AJE002-10	As defined in Section 7 of the Airplane Flight Manual (M28/14/99)
for airplanes S/N AJE00301 and up	As defined in Section 7 of the PZL M28 Airplane Flight Manual, Ref. No. M28/10/2002
for optional & operational equipment	
for airplanes S/N AJE001-19 up to AJE002-10	As defined in Section 9 of the Airplane Flight Manual (M28/14/99 Issue)
for airplanes S/N AJE00301 and up	As defined in Section 9 of the PZL M28 Airplane Flight Manual, Ref. No. M28/10/2002



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- 8. Airplane Service Life, and Component TBOs :
 - a) For airplanes S/N AJE001-19 up to AJE002-10 as defined in Sec. 4 of M28 Maintenance Manual Ref. No. M28/4/95/PBD, Issue Dec. 1999.
 - b) For airplanes S/N AJE00301 and up as defined in Sec. 4 of M28 Maintenance Manual Ref. No. M28/11/2002, Issue April 2002.
- 9. OSD:

OSD FC M28 02-W DTD/108/2015, Initial Issue from 29 Oct 2015, or later approved Revision

10. MMEL:

MMEL PZL M28 02-W M28 05, Original Issue from 20 May 2015, or later approved Revision



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C.V Notes

- 1. 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.
- 2. Flight in known icing condition is permitted, when certified IPS (ice protection system) is installed and is operational.. This applies 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
- 3. Flight in known or forecast icing conditions is prohibited when certified IPS (ice protection system) is not installed. This applies to S/N from AJE001-19 up to AJE002-10 airplanes.
- 4. This Type Certificate applies to aircraft S/N: AJE001-19 up to AJE002-10, and to aircraft S/N AJE00301 and up.
- 5. 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).



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SECTION ADMINISTRATIVE

I. Acronyms & Abbreviations

AMM - Aircraft Maintenance Manual

- CRI Certification Review Item
- FAR Federal Aviation Regulations
- EASA European Aviation Safety Agency
- IAS Indicated Airspeed
- KIAS Indicated Airspeed [knots]
- MAC Mean Aerodynamic Chord
- POH Pilot's Operating Handbook
- RPM Rotations per Minute
- FIKI Flight Into Known Icing
- SLD Supercooled Large Droplets
- TCDS Type Certificate Data Sheet

II. Type Certificate Holder Record

Zakład Lotniczy "PZL Mielec" Sp. z o.o. Ul. Wojska Polskiego 3, 39-300 Mielec, POLAND

Polskie Zakłady Lotnicze Sp. z o.o. Ul. Wojska Polskiego 3, 39-300 Mielec, POLAND

III. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	24 October	Initial Issue	Initial Issue,
	2005		24 October
			2005
Issue 02	21 April,	Introduction of maritime patrol (designation PZL	02.
	2006	M2805-MPW) and Border Guard missions (designation	21 April 2006
		PZL M28 05-SG) in Section3. Installation of ice protection	
		system, approved on a non-hazard basis only. Flight in	
		known or forecast	
		icing conditions is prohibited	
Issue 03	21	Corrections to Vmo 335 to 355 km/hr on Pages 11 and 18	03.
	December	Correction to propeller designation from HC-BP5MP-	21 December
	2006	3D/M10876ANSK to HC-B5MP-3D/M10876ANSK on pages 11	2006
		and 18.	
Issue 04	14 June	Transition to new TCDS layout and editorial changes.	04.
	2013		14 June 2013



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		Introduction of airplane operation in icing conditions for model PZL M28 05 and PZL M28 02-W	
Issue 05	03 July 2013	Information on entry of earlier approved Major Change with respect to the service life extension of earlier approved Major Change with respect to the Approval No 10036658. Editorial changes and misprint corrections.	05. 03 July 2013
Issue 06	07 April 2014	Introduction of elevator trim tabs new angular movements and editorial changes.	06. 07 April 2014
Issue 07	04 Dec 2014	Editorial changes and misprint corrections related to approved Major Change Approval No 1004755 with respect to the service life extension	07. 04 Dec 2014
Issue 08	03 Nov 2015	OSD FC and MMEL to include, editorial changes	08. 03 Nov 2015
lssue 09	18 June 2020	Clarification and Typo corrections to TCDS information.	09. 18 June 2020
Issue 10	26 January 2022	Clarification to TCDS information.	10. 26 January 2022
lssue 11	11 August 2022	Typo corrections to TCDS information.	11. 11 August 2022

-END-

