

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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Date: 18 June 2020

SECTION A: PZL M28 00

A.I. General

1.	Data Sheet No.:	A.058 Issue: 01 Date: October 24, 2005
	a) Type: b) Model: c) Variant:	PZL M28 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 Type Certificate Date:	May 15, 1995 This EASA Type Certificate replaces the Polish CAO Type Certificate No. BB-199/1
9. A.II	Reserved Certification Basis	none
A.II		none Oct 11, 1986
A.II 1.	Certification Basis Reference Date for determining	
A.II 1. 2.	Certification Basis Reference Date for determining the applicable requirements:	Oct 11, 1986
A.II1.2.3.	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. 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. 3. 4. 5. 6. 	Certification Basis Reference Date for determining the applicable requirements: Airworthiness Requirements: Special Conditions: Exemptions: Deviations: Equivalent Safety Findings: Requirements elected to	Oct 11, 1986 FAR Part 23, including Amendment 23 - 34 None None None None
 A.II 1. 2. 3. 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:	0				
Standard:		d in Sectio ′LTO-3/27/9		Airplane Flig	ht Manual ref
Optional & Operational:		d in Sectio ⁄I28/LTO-3,		Airplane Flig	ht Manual
4. Dimensions:					
Length	13.10 m	(43 ft)			
Height	4.90 m	(16 ft 1 in)			
Wing span		(72 ft 4 in)	•		
Wing area	39.72 m2	(427.5 sq.	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			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	ittainable u	p to 45.5 °C	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:		-speed, v	0876ANSK fi vith WOODV		all-metal, ed governor
-	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:	Clockwis	e			
8. I	Fluio	ds:					
8	3.1	Fuel:			••		, JET A-2 and ulletin No. 13044.
			AVTUR, CAN/C.	, AVTAG <i>,</i> G.SB.3.2	AVTAC, CAN 2-M86, CAN,	I/C.G.SB.3 /C.G.SB.3	P-4, JP-5, JP-8, 3.23-M86, .GP-24Ma, AIR GOST 16564-71.
8	3.2	Oil:	Jet Oil I	I, Castro	l 5000, BP T	urbo Oil 2	bine Oil 500, Mobil 380 - in letin No. 13001.
8	3.3	Coolant:	N/A				
9. I	Flui	d capacities:					
ç	9.1	Fuel:					
	- V	/ing with no auxiliary tank	(S	1960 l	(518 US Gal.))	
	- V	/ing with auxiliary tanks		2440 l	(645 US Gal.))	
		xtra long-ferry fuel tank ir selage	nside	2090 l	(552 US Gal.))	
9	9.2	Oil:	2 x 9.45	5 I (2.5 U	S gal)		
ç	9.3	Coolant system capacity:	N/A				
10.		Speeds: Airspeed Limitations:				IAS (km/h)	CAS (km/h)
		Max. Allowable Operating	g Speed V	мо		355	345
		Design Maneuvering Spee	ed, V _A			230	225
		Max. Allowable Flap-Exte	nded Spe	ed, V _{FE}			
					Flaps 15° Flaps 40°	215 200	210 190

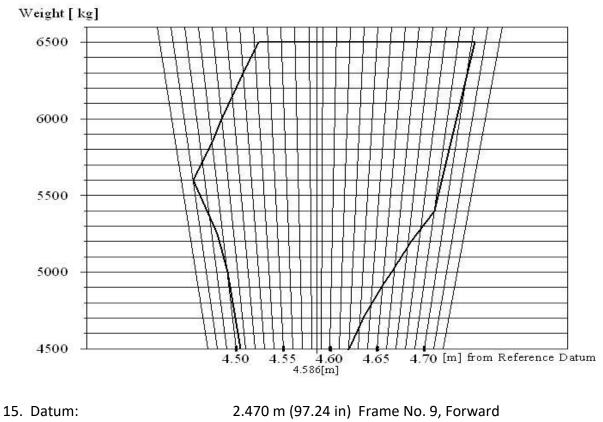


Max. Spoiler-Extended Speed, V	NS		
	 outboard spoilers 	215	210
	 inboard spoilers 	215	210
Minimum Control Speed, V _{MC}		135	130
11. Maximum Operating Altitude:			
 without oxygen supply system 			3000 m (9,842 ft)
- with crew oxygen supply system provi	ded		7620 m (25,000 ft)
12. Allweather Operations			
Capability: - VF	R flights, day and night		

	- IFR flights, day and night
13. Weights:	
Max. Takeoff	6500 kg

Max. Landing

14. Centre of Gravity Range:



(see fig. 6.1, AFM, Chapter 6)

6175 kg



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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 Down	15°±1° 25°±1°
Rudder LH:		Inboard Outboard	16°±1° 22°±1°
Rudder RH:		Inboard Outboard	16°±1° 22°±1°
Rudder Trim Tab: (Rudder Neutral)		Left Right	15°±1° 15°±1°
Wing Flaps:		Takeoff Landing	15°±1° 40°±1°
Spoilers:		Inboard Outboard	45°±1° 60°±1°
17. Levelling Means:	1LP = LH and RH (see fig. 6.1, AFI	Hevelling point on fra M, Chapter 6)	ame No. 9
18. Minimum Flight Crew:	2 (two) pilots		
19. Maximum Passenger Seating Capacity:	18		
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, tri	icycle type, with a steerable nose
		wheel	
Nose Wheel Controlling Angle		\pm 15 $^{\circ}$	
Nose Wheel Controlling Angle	with	± 50 °	
Steering OFF			
23. Max. Service Ceiling:			7620 m (25,000 ft)
24. Operating Ambient Temperature 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 Catalogue, 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,



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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).

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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Date: 18 June 2020

SECTION B: PZL M28 02

- B.I. General
- 1. Data Sheet No.: A.058 Issue: 01 Date: October 24, 2005
- 2. a) Type:
 - b) Model: 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

PZL M28

- 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.	Reserved	none
B.II	Certification Basis	
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:	None
5.	Equivalent Safety Findings:	None



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6.	Requirements elected to	none
	comply:	
7.	Environmental Standards:	FAR Part. 34 Subp. B, FAR Part. 36 App. G.
8.	(Reserved) Additional National	none
Re	quirements:	

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 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:				Airplane Fl	ight Manual
		28/LTO-3/2	-		
Optional & Operational:		d in Sectior /128/LTO-3/		Airplane Fl	ight Manual
4. Dimensions:					
Length	13.10 m	(43 ft)			
Height	4.90 m	(16 ft 1 in)			
Wing span		(72 ft 4 in)			
Wing area	39.72 m2	(427.5 ft2)			
5. Engine:					
5.1.1 Model:	PT6A-65B ratio of 0.	turboprop 0568:1	with a fre	e turbine, i	reduction
5.1.2 Type Certificate:	E4EA				
5.1.3 Limitations:	-	with PT6A-6		-	light Manual,
5.1.4. Engine Performance:	Shaft	5/27/55,			
	Horse	Torque	Prop	Turbine	Exhaust Gas
	Power	•	Speed	Speed	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	ttainable u	p to 45.5 °C	; *** att	ainable up	to 42.5 °C
5.1.5 Number of engines:	2				



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C local factors		
6. Load factors:	For model M28 02 (7000 kg MTOW) and	For model M28 02, for long-range ferry only
Flaps Up	M28 02-W (7500 kg MTOW)	(7500 kg MTOW)
Flaps Down	n=+3.0 , -1.0	n=+2.8 , -1.0
	n=+2.0, 0	n=+2.0, 0
7. Propeller:	,	,
7.1 Model:	HC-B5MP-3D/M10876ANS constant-speed, with WOC (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 approved equivalents as pe	A, JET A-1, JET A-2 and er P&WC Bulletin No. 13044.
	Equivalents: F34, F35, F40, AVTUR, AVTAG, AVTAC, CA CAN/C.G.SB.3.22-M86, CAI 3404, AIR 3405, AIR 3407,	N/C.G.SB.3.23-M86, N/C.G.SB.3.GP-24Ma, AIR
8.2 Oil:	Aero Shell Turbine Oil 500, Jet Oil II, Castrol 5000, BP accordance with Pratt & W	
8.3 Coolant:	N/A	
9. Fluid capacities:		
9.1 Fuel:	1766 kg (2278 l), (3894 lbs;	; 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 Operati	ng Speed V _{MO}	IAS (km/h) CAS (km/h) 355 345
Design Maneuvering Sp	eed, V _A	230 225
for	PZL M28 02-W variant:	244 238

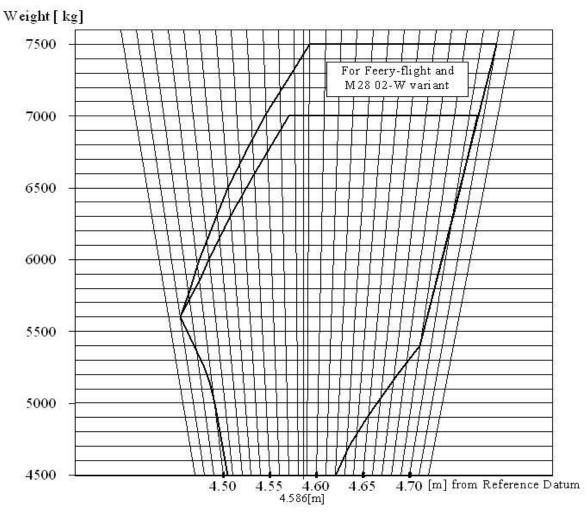


Max. Allowable Flap-Extended	d Speed, V _{FE}		
	Flaps 15°	215	210
	Flaps 40°	200	190
Max. Spoiler-Extended Speed			
	 outboard spoilers 	215	210
	 inboard spoilers 	215	210
Minimum Control Speed, V _{MC}		153	146
11. Maximum Operating Altitude:			
 without oxygen supply system 		3000 m	(9 <i>,</i> 842 ft)
- with crew oxygen supply system pro	ovided	7620 m	(25,000 ft)
12. Allweather Operations			
Capability: - VF	R flights, day and night		
- IFF	R flights, day and night		
13. Weights:			
Max. Takeoff	7000	kg	
Max. Landing	6650	kg	
Max. Takeoff for Ferry Flight	7500	kg	
Max. Takeoff and Landing for M	28 02-W variant 7500	kg	



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14. Centre of Gravity Range:



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: (elevator neutral)	Up	$15^{\circ} \pm 1^{\circ}$
		(19°± 1°)*
	Down	$25^{\circ} \pm 1^{\circ}$
		(21°±1°)*

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

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Rudder LH:		Inboard	16°±1°
Rudder En.		Outboard	$10^{\circ} \pm 1^{\circ}$ 22°±1°
Rudder RH:		Inboard	16°±1°
		Outboard	$22^{\circ} \pm 1^{\circ}$
Rudder Trim Tab: (rud	lder 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	l levelling point on fr	ame No. 9
	(see fig. 6.1 AFN	/l, Chapter 6)	
18. Minimum Flight Crew:	2 (two) pilots		
19. Maximum Passenger Seating (Capacity:		
Passenger Seating Capacity	18 + 1	attendant seat	
Passenger Seating Capacity ir "Executive" version) passenger seats (de) + 2 attendants' seat	
20. Baggage/Cargo Compartment	s:		
Max. Baggage in Under Fusel Pod:	age 300 kg		
Max. Payload:	2000 kg		
Max. Baggage on Baggage Sh	elf: 150 kg 1	1)	
Max. Hoist Capacity:	700 kg 1	1)	
1) not applicable for "Ex	ecutive" version		
21. Wheels and Tyres:	Main wheel tyre	e size 720 x 310 mm	(28.30 x 12.20 in)
	Nose wheel tyre	e size (Type 6.50x10 -	- GOOD YEAR)
	561x169 mm (2	2.10x6.65 in)	
22. Landing gear:	Fixed, t wheel	tricycle type, with a s	teerable nose
Nose Wheel Controlling	Angle \pm 15 °		
Nose Wheel Controlling Angle \pm with Steering OFF			
for M28 02-W variant:			
- Main Gear: rocker-type	e with a single-ch	amber shock absorbe	er,
- Nose Gear: rocker-type	-		
Nose Wheel Controllin	ng Angle		\pm 15 $^{\circ}$
Nose Wheel Controllin	ng Angle with Ste	ering OFF	± 45 °



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23. Max. Service Ceiling:	7620 m (25,000 ft)
24. Operating Ambient Temperature Range:	-50°C to + 50°C

25. (Reserved):

B.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
- 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)
- 9. 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).
- 5. 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)
7.	(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



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Date: 18 June 2020

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 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 EAR 23, Amendment 51: 23.929, 23.975 and 23.1093
	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,
3. Special Conditions:	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
 Special Conditions: Exemptions: 	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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TCDS No.: EASA.A.058 Issue: 09	PZL M 28 Date: 18 June 2020
5. Equivalent Safety Findings:	Equivalent Safety Level FAR 23.1361(a) - Master Switch Arrangement
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,
8. (Reserved) Additional National	none
Requirements:	
9. (Reserved)	none

- 9. (Reserved)
- **Technical Characteristics and Operational Limitations** C.III

 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 Height Wing span Wing area	13.10 m (43 ft) 4.90 m (16 ft 1 in) 22.06 m (72 ft 4 in) 39.72 m2 (427.5 ft2)
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:	For power-plants limits refer to Airplane Flight Manual, PZL M28 with PT6A-65B Engines ref No. M28/14/99 - for airplanes S/N AJE001-19 up to AJE002- 10, M28/10/2002 - for airplanes S/N AJE00301 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	SHP 1100* 1100** 1000*** 1000***	PSIG 43.34 43.34 43.34 43.34 5 to 45.5 °C;	rpm 1700 1700 1700 *** atta	% 104 104 104 ainable up to	°C 820 810 800 0 42.5 °C
5.1.5 Number of engines:	2				
 Load factors: Flaps Up Flaps Down 	n=+3.0,-1 n=+2.0,0				
 Propeller: 7.1 Model: 	HC-B5MP-3D/M10876ANSK five-blade, all-metal, constant-speed, with WOODWARD speed governor (3032082A) Hartzell Propeller Inc. (USA)				
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:		kerosene ty d equivalent	•		A-2 and in 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				
0 Fluid conscition					

9. Fluid capacities:



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9.1 Fuel:	1766 kg (2278 l), (3894 lbs; 602 US Gal.)
9.2 Oil:	2 x 9.45 l (2.5 US gal)

9.3 Coolant system capacity: N/A

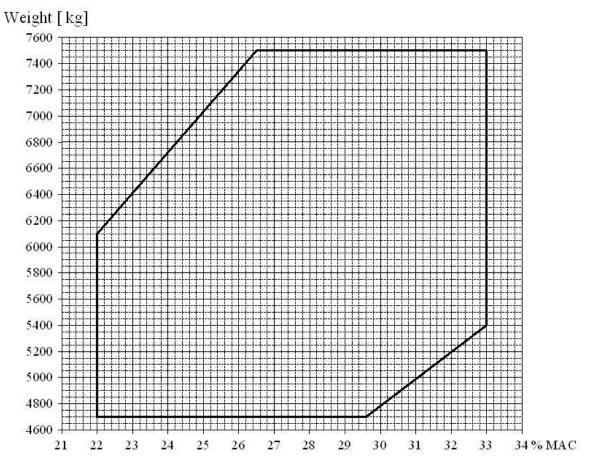
10. Air Speeds:

11.

10. Air	Airspeed Limitations: Max. Operating (Limit) Speed	d, V _{mo}	IAS [km/h] 355	CAS [km/h] 345
	Design Maneuvering Speed,	VA	244	238
	Max. Flaps-Extended Speed,	V _{FE} Flaps 15° Flaps 40°	215 200	210 190
	Max. Spoiler-Deployed Spee	d, V _{NS}	215	210
	Minimum Control Speed, V _M aximum Operating titude:	с	153	146
- with	nout oxygen supply system		3000 m (9,84	2 ft)
- with	n crew oxygen supply system p	provided	7620 m (25 <i>,</i> 0	00 ft)
	Max. Takeoff Max. Landing Max. Zero-Fuel Max. Payload		7500 kg 7500 kg 6900 kg 2300 kg	
	shelf in fuselage rear	fuselage baggage pod ght uselage Pod ge Shelf	ive of max. 40 k 4700 kg 300 kg 40 kg 700 kg	kg on baggage
			60.00	



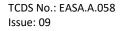
14. Centre of Gravity Range:

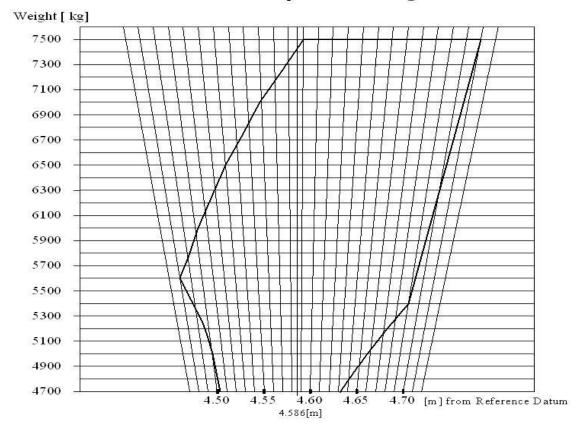




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M28 05 Airplane C.G. Range

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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15540.05			
Rudder LH:		Inboard	16°±1°
		Outboard	22°±1°
Rudder RH:		Inboard	16°±1°
Rudder Trim Tab:		Outboard	22°±1°
(Rudder Neutral)		Left	15°±1°
		Right	$15^{\circ} \pm 1^{\circ}$
Wing Flaps:		Takeoff	15°± 1°
		Landing	$40^{\circ} \pm 1^{\circ}$
Spoilers:		Inboard	45°± 1°
		Outboard	$60^{\circ} \pm 1^{\circ}$
17. Levelling Means:		levelling point on fra	me No. 9
10 Minimum Flight Crown	(see AFM, Chapt	er 6, fig. 6.1)	
18. Minimum Flight Crew:	2 (two) pilots		
19. Maximum Passenger Seating		sport, max. 19 passer	-
Capacity:		o transport mix, max	
	•	oved standard, max 2	13 passengers
20. Baggage/Cargo Compartments:	Max. payload.2300 kg (5070 lbs) i.e: - in cargo/passenger cabin max 2000 kg (4408 lbs)		
comparamentar	(on baggage she	If in fuselage rear par	
	lbs) - in underfuselag	ge baggage pod - max	. 300 kg (662 lbs)
21. Wheels and Tyres:	_	size 720 x 310 mm (- · · ·
		size (Type 6.50x10 –	GOOD YEAR)
22. Landing gear:	561x169 mm (22 Fixed tricy	2.10x6.65 in) cle type, with a steer	able nose wheel
- Main Gear: rocker-type with	=		ubic nose wheel
- Nose Gear: rocker-type, with	a double-chamb	er shock absorber,	
Nose Wheel Controlling Angle			
Nose Wheel Controlling Angle Steering OFF	\pm with \pm 45 °		
23. Max. Service Ceiling:		7620 m (25,000) ft)
24. Operating Ambient Temperatu	ure Range:	-50°C to + 50°C	
25. (Reserved):			
C.IV Operating and Service Instruct	tions		

- . .
- 1. Flight Manual:



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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 Catalogue, ref No. M28/14/97/LTO-3 For airplanes S/N AJE00301 up to AJE00309: Illustrated Parts Catalogue, ref No. M28/10/2004 For airplanes S/N AJE00310 and up: Illustrated Parts Catalogue, ref No. M28/04/2010
- 6. Table of Dimensions, Limits and Clearances: see Chapter 6. Of appropriate Maintenance Manual
- 7. Instruments and aggregates: see

for standard equipment:				
for airplanes S/N AJE001-19 up to	As defined in Section 7 of the Airplane Flight			
AJE002-10	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	As defined in Section 9 of the Airplane Flight Manual			
AJE002-10	(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			

- 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.



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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

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 December	Corrections to Vmo 335 to 355 km/hr on Pages 11 and 18	03.
	2006	Correction to propeller designation from HC-BP5MP-	21 December
		3D/M10876ANSK to HC-B5MP-3D/M10876ANSK on pages	2006
		11 and 18.	
Issue 04	14 June 2013	Transition to new TCDS layout and editorial changes.	04.
			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 to list the SB related to the approved service life extension.	08. 03 Nov 2015
Issue 09	18 June 2020	Clarification and Typo corrections to TCDS information, PJAM.	09. 18 June 2020

-END-



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