



Type Certificate Data Sheet

Number: G-136
Issue No.: 3
Approval Date: Refer Below
Issue Date: November 23, 2017

This Type Certificate Data Sheet (TCDS), which is part of Type Certificate (TC), No. G-136 prescribes the conditions and limitations under which the product(s) for which the Type Certificate was granted meet(s) the standards of airworthiness required by the Canadian Aviation Regulations.

Type Certificate Holder:

Allstar PZL Glider Sp. z o.o.
ul. Cieszyńska 325
43-300 Bielsko-Biała
Poland

Models

SZD-54-2 "Perkoz"

1. MODEL SZD-54-2 "Perkoz" (Glider - Utility, Aerobatic Category) Approved May 26, 2014

Except as otherwise noted below, the conditions and limitations prescribed by this TCDS are those specified in the European Aviation Safety Agency (EASA) TCDS A.574 Issue 3 dated July 31, 2017. Subsequent revisions to the EASA TCDS A.574 are not applicable to Canadian Registered aircraft.

Certification Basis Airworthiness Manual (AWM) 522 at Change 522-8 dated June 1, 2012.

Import Requirements The import documentation must include:

- a) A Certificate of Airworthiness for Export signed by a representative of the European Aviation Safety Agency (EASA).
- or
- b) A Certificate of Airworthiness for Export signed by the Airworthiness Authority of a country with whom Canada has a Bilateral Airworthiness agreement.

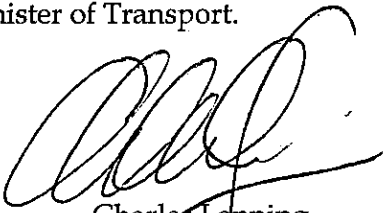
In case a) or b), the C of A must contain the following statement:

"The aircraft identified by this Certificate has been examined and found to conform to the Canadian Department of Transport Type Certificate G-136."

or

- c) Other procedures approved by the Minister of Transport.

- END -



Charles Lanning
Chief, Project Management
National Aircraft Certification
for Minister of Transport



EASA

**TYPE-CERTIFICATE
DATA SHEET**

EASA.A.574

SZD-54 "Perkoz"

Allstar PZL Glider Sp. z o.o.

**ul. Cieszyńska 325
43-300 Bielsko-Biała
POLAND**

For models: SZD-54-2 "Perkoz"

Issue 03: 31 July 2017

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SECTION A: SZD-54-2 "Perkoz"

A.I. General

1. Data Sheet No.: EASA.A.574
2. a) Type: SZD-54 "Perkoz"
b) Model: SZD-54-2 "Perkoz"
c) Variant:
3. Airworthiness Category: Sailplane - Utility (U) and Aerobatic (A) Category
4. Manufacturer:
 1. Allstar PZL Glider Sp. z o.o.
 2. Wytwórnia Konstrukcji Kompozytowych "PAPIOREK" Sp. z o.o.
ul. Strumieńska 829a
43-385 Jasienica, POLAND
5. Certification Application Date: 06 July 2010
6. EASA Certification Date: 20 November 2013

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements: 06 July 2010
2. Airworthiness Requirements: Certification Specifications for Sailplanes and Powered Sailplanes CS-22, Amendment 2, 5 March 2009
3. Special Conditions: None
4. Exemptions: None
5. Deviations: None
6. Equivalent Safety Findings: None
7. Requirements elected to comply: None
8. Environmental Standards: None

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition:
 - List of Drawings, Document No. 542.3.02, issue 2, 10.02.2014, or later approved revision.
 - Equipment List, Document No. 542.1.05, issue 2, 12.04.2014, or later approved revision.
2. Description: Two-seat trainer sailplane of utility and aerobatic category. Cantilever mid-wing monoplane with classic tail unit. Wings are equipped with three kinds of replaceable wingtips: 1. short and flat wingtips, 2. winglets, 3. long wingtips with winglets and additional aileron segments. All composite structure, mainly GFRP (CFRP in minor units). Fixed tandem-type landing gear with nose wheel and auxiliary tail wheel.

3. Equipment: Refer to the Technical Service Manual, Section 8.

4. Dimensions:

Wingtips:	short and flat or winglets	long with winglets
Span:	17,50 m	20,00 m
Length:	8,44 m	8,44 m
Wing area:	16,36 m ²	17,30 m ²

5. Launching Hooks: Nose tow hook: TOST E
Winch hook: TOST G
6. Weak links: Ultimate strength for aero-towing: 677+10% daN
Nominal strength for winch launching: 677±10% daN

7. Load factors:

- 7.1 Utility category +5,3 / -2,65 (up to V_A)
+4,0 / -1,5 (up to V_{NE})
- 7.2 Aerobatic category +7,0 / -5,0 (up to V_{NE})
- 7.3 Airbrakes extended +3,5 / -1,5 (up to V_{NE})

8. Air Speeds:

IAS [km/h]	Category	U	A
Never Exceed Speed	V _{NE}	244	269
Rough Air Speed	V _{RA}	166	194
Manoeuvring Speed	V _A	166	194
Max. Aero-tow Speed	V _T	164	164
Max. Winch-launch Speed	V _W	144	144

9. Operational Capability: Approved for VFR-day conditions.
Cloud flying permitted in accordance with binding regulations.

- | | |
|---|---|
| 10. Maximum Masses: | Utility category: 615 kg
Aerobatic category: 590 kg |
| 11. Centre of Gravity Range: | Forward limit: 258 mm aft of datum
(22,0% MAC for span 17,5 m or 21,6% MAC for span 20,0 m)
Rearward limit: 495 mm aft of datum
(46,0% MAC for span 17,5 m or 46,4% MAC for span 20,0 m) |
| 12. Datum: | Vertical plane going through leading points of wing root aerofoil section |
| 13. Levelling Means: | Wing root aerofoil section chords or wedge 27/1000 on the slope of top rear fuselage to be horizontal |
| 14. Control surface deflections: | Refer to Technical Service Manual, Section 6. |
| 15. Minimum Flight Crew: | 1 pilot |
| 16. Maximum Passenger Seating Capacity: | 2 seats
(1 pilot + 1 passenger) or (2 pilots) |
| 17. Baggage/Cargo Compartments: | Baggage compartment aft of rear seat;
max. allowable load: 20 kg |
| 18. Wheels and Tyres: | |
| 18.1 Main wheel | TOST 5" disc brake wheel 122-25
tire: Michelin 5.00-5/10/120 (or analogue) |
| 18.2 Nose wheel | Allstar PZL Glider CT.I5.00.00
tire: Stomil 255×110 (or analogue) |
| 18.3 Tail wheel | Allstar PZL Glider CT.I9.01.00
tire: Agromech 200×50 (or analogue) |

A.IV. Operating and Service Instructions

1. Flight Manual:
 - *INSTRUKCJA UŻYTKOWANIA W LOCIE* szybowca SZD-54-2 „Perkoz”, Dokument nr 542.4.01, wydanie II, Kwiecień 2014, zmiana nr 2, Maj 2017, or later approved revision.
 - FLIGHT MANUAL for a sailplane SZD-54-2 "Perkoz", Doc. No. 542.4.01, issue II, April 2014, revision no. 2, May 2017, or later approved revision.
2. Technical Manual:
 - *INSTRUKCJA OBSŁUGI TECHNICZNEJ* szybowca SZD-54-2 „Perkoz”, Dokument nr 542.4.02, wydanie II, Kwiecień 2014, zmiana nr 2, Maj 2017, or later approved revision.
 - TECHNICAL SERVICE MANUAL for a sailplane SZD-54-2 "Perkoz", Doc. No. 542.4.02, issue II, April 2014, revision no. 2, May 2017, or later approved revision.
3. Instruments and aggregates:
 - Operating Manual for the TOST Release (for release types installed), latest approved revision.
 - Installation and Operating Manual for TOST Aircraft Wheels, latest approved revision.
 - *Sygnalizator przeciągnięcia ANTI-STALL SP3. Instrukcja Obsługi Technicznej, Wyd. I, 23.03.1995 r.*
 - Stall Monitor Anti-Stall SP3. Installation and Service Manual, 1-st Edition, 23.03.1995.
 - *Sygnalizator przeciągnięcia ANTI-STALL SP3. Instrukcja Użytkowania w Locie, Wyd. I, 23.03.1995 r.*
 - Stall Monitor Anti-Stall SP3. Flight Manual, 1-st Edition, 23.03.1995.

A.V. Notes:

1. This TCDS, Section A applies to S/N 542.A.yy.nnn, starting from 542.A.11.002 where:
yy - the year of an aircraft manufacture,
nnn - the successive aircraft number.
Aircraft manufactured by Wytwórnia Konstrukcji Kompozytowych "PAPIOREK" Sp. z o.o. have an additional letter „W" at the end of S/N.
2. All glider outside surfaces must be white painted. No registration number or any colour marks on the wings and stabilizer upper surfaces are allowed.

ADMINISTRATIVE SECTION

I. Acronyms

CFRP Carbon Fibre Reinforced Plastic
GFRP Glass Fibre Reinforced Plastic
MAC Mean Aerodynamic Chord
S/N Aircraft Serial Number
VFR Visual Flight Rules

II. Type Certificate Holder Record

Allstar PZL Glider Sp. z o.o.
ul. Cieszyńska 325
43-300 Bielsko-Biała
POLAND

III. Change Record

Issue	Date	Changes
Issue 01	20 November 2013	Initial issue
Issue 02	31 October 2014	New long wingtip extensions - and several minor changes as detailed in the EASA CRI A-01, release 3.
Issue 03	31 July 2017	Major Change – MTOM increased