AIR TURQUOISE SA | PARA-TEST.COM

Route du Pré-au-Compte 8 * CH-1844 Villeneuve * +41 (0)21 965 65 65

test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



Flight test report: EN 926-2:2013+A1:2021* and NfL 2-565-20

ManufacturerAdvance Thun AGAddressUttigenstrasse 873600 Thun			Certification num Flight test	ber	PG_2535.2025 31.01.2023	
3600 Thun SwitzerlandGlider modelOMEGA XA5 ULS C. 3Serial number97106TrimmernoFolding lines usedyes		2025 23	Classification Representative Place of test		D Patrick Villeneuve	
Test pilot		Claude Thurnheer			Alexandre Jofresa	
Harness Harness to risers distance [cm] Distance between risers [cm]		Advance Thun AG Success 4 M 43 44			Dudek Zero Gravity M 43 44	
Total weight in flight [kg]		85			100	
1. Inflation/Take-off Rising behaviour		C Overshoots, shall be slowed down to avoid a front collapse			Overshoots, shall be slowed down to avoid a fron collapse	
Special take off technique required		A		A	No	A
2. Landing Special landing technique required		A No		A	No	A
3. Speed in straight flight Trim speed more than 30 km/h		B Yes		A	Yes	A
Speed range using the controls larger than 10 km/h		Yes A		A	Yes	A
Minimum speed		25 km/h to 30 km/h		В	25 km/h to 30 km/h	В
 4. Control movement Max. weight in flight up to 80 kg Symmetric control pressure / travel 		C not available		0	not available	0
Max. weight in flight 80 kg to 100 kg Symmetric control pressure / travel		Increasing / greater the	an 60 cm	A	Increasing / 45 cm to 60 cm	С
Max. weight in flight greater than 100 kg Symmetric control pressure / travel		not available		0	not available	0
5. Pitch stability exiting accelerated flight Dive forward angle on exit		A Dive forward less than 30°		A	Dive forward less than 30°	A
Collapse occurs		No		A	No	A
6. Pitch stability operating controls during accelerated flight Collapse occurs		A No		A	No	A
7. Roll stability and damping		A				
Oscillations		Reducing		A	Reducing	A
8. Stability in gentle spirals Tendency to return to straight flight		A Spontaneous exit		Α	Spontaneous exit	A

*This standard is NOT covered by accreditation D-IS-19457-01

The validation of this test report is given by the signature of the test manager on inspection certificate 91.20 Rev 07 | 04.03.2022 // ISO | 91.22 // Page 1 of 5

9. Behaviour exiting a fully developed spiral dive D Initial response of glider (first 180°) No immediate reaction B No immediate reaction B Tendency to return to straight flight Turn menine constant (glorce constant, rate) D Turn menine constant (glorce constant, rate) D Turn angle to recover normal flight With plot action D With plot action D With plot action D 10. Symmetric front collapse Approximately 30 % chord D Constraint (glorce constant, rate) D With plot action A Recovery through plot action in less than 45° A Recovery through plot action in less than 45° A Recovery through plot action in less than 45° A No income a strain 3° to 60° / Keeping course A Cascade occurs No A No formand 30° to 60° / Keeping course A Recovery frough plot action in less than 45° A Childing lines used Yes (Ohly if asked) A No formand 30° to 60° / Keeping course A Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Dive forward 30° to 60° / Keeping course B At least 50% chord Spontaneous in 3 s to 5 s B Dive forward 30° to 60
Turn constant) turn constant) turn constant) turn constant) Turn angle to recover normal flight With plot action D With plot action D 10. Symmetric front collapse Approximately 30 % chord D Entry Rocking back less than 45° A Rocking back less than 45° A Entry Rocking back less than 45° A Rocking back less than 45° A Recovery through plot action in less than a further D Dive forward angle on exit Change of course Dive forward 0° to 30° / Keeping course A Recovery through plot action in less than a further D Cascade occurs No A No A Folding lines used Yes (Ohy if asked) Dive forward 30° to 60° / Keeping course B Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Cascade occurs No A No A Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Olive forward angle on exit / Change of course No A No A Recovery Spontaneous in 3 s to 5 s B Dive forward 30° to 60°
Image: Approximately 30 % chord D Entry Rocking back less than 45° A Rocking back less than 45° A Recovery through pilot action in less than a 1 s A Recovery Spontaneous in less than 3 s A Recovery through pilot action in less than a further D Dive forward angle on exit Change of course Dive forward 0° to 30° / Keeping course A Ne couvery through pilot action in less than a further D Cascade occurs No A No A Folding lines used Yes (Only if asked) D Ves (Only if asked) D Entry Rocking back less than 45° A Rocking back less than 45° A Poive forward angle on exit / Change of course Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Cascade occurs No A No A A Cascade occurs No B Dive forward 30° to 60° / Keeping course B Cascade occurs No A No A Folding lines used Yes (Only if asked) D Yes (Only if asked) D With accelerator X Rocking back great
Approximately 30 % chord Rocking back less than 45° A Rocking back less than 45° A Entry Spontaneous in less than 3 s Recovery through pilot action in less than a further 0 B Dive forward angle on exit Change of course Dive forward 0° to 30° / Keeping course A Dive forward 30° to 60° / Keeping course B Cascade occurs No A No forward 30° to 60° / Keeping course B Folding lines used Yes (Only if asked) P Yes (Only if asked) P Entry Rocking back less than 45° A Rocking back less than 45° A Folding lines used Yes (Only if asked) P Yes (Only if asked) P Entry Rocking back less than 45° B Spontaneous in 3 to 5 s B Recovery Spontaneous in 3 to 5 s B Spontaneous in 3 to 5 s B Dive forward angle on exit / Change of course No A No A Cascade occurs No No A No A Folding lines used Yes (Only if asked) D Yes (Only if asked) D Yes (Only if asked) D Folding lin
RecoverySpontaneous in less than 3 sARecovery through plot action in less than a furtherDDive forward angle on exit Change of courseDive forward 0° to 30° / Keeping courseADive forward 30° to 60° / Keeping courseBCascade occursNoANoAFolding lines usedYes (Only if asked)DYes (Only if asked)DAt least 50% chordRocking back less than 45°ARocking back less than 45°AEntryRocking back less than 45°BSpontaneous in 3 s to 5 sBSpontaneous in 3 s to 5 sBDive forward angle on exit / Change of courseDive forward 30° to 60° / Keeping courseBDive forward 30° to 60° / Keeping courseBCascade occursNoANoAAFolding lines usedYes (Only if asked)BDive forward 30° to 60° / Keeping courseBCascade occursNoANoAFolding lines usedYes (Only if asked)DYes (Only if asked)AFolding lines usedYes (Only if asked)DYes (Only if asked)AWith acceleratorYes (Only if asked)DYes (Only if asked)CEntryRocking back greater than 45°CRocking back greater than 45°CRecoverySpontaneous in 3 s to 5 sBSpontaneous in 3 s to 5 sBDive forward angle on exit / Change of courseDive forward 30° to 60° / Keeping courseBDive forward angle on exit / Change of courseNoSootaneous in 3
Dive forward ongle on exit Change of course Dive forward 0° to 30° / Keeping course A Dive forward 30° to 60° / Keeping course B Cascade occurs No A No A Folding lines used Yes (Only if asked) Dive forward 30° to 60° / Keeping course A No A At least 50% chord Tentry Rocking back less than 45° A Rocking back less than 45° A Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Dive forward 30° to 60° / Keeping course B Cascade occurs No No A No A Folding lines used No No A Rocking back less than 45° A Cascade occurs No No A No A Folding lines used Ves (Only if asked) A No A With accelerator Ves (Only if asked) D Yes (Only if asked) A Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B
Cascade occursNoANoAFolding lines usedYes (Only if asked)DYes (Only if asked)DAt least 50% chord EntryRocking back less than 45°ARocking back less than 45°ARecoverySpontaneous in 3 s to 5 sBSpontaneous in 3 s to 5 sBDive forward angle on exit / Change of courseDive forward 30° to 60° / Keeping courseBDive forward 30° to 60° / Keeping courseAFolding lines usedNoANoAFolding lines usedYes (Only if asked)DYes (Only if asked)DWith acceleratorEntryRocking back greater than 45°CRecoverySpontaneous in 3 s to 5 sBSpontaneous in 3 s to 5 sCIn the provide on exit / Change of courseSpontaneous in 3 s to 5 sCRocking back greater than 45°CIn the provide on exit / Change of courseDive forward 30° to 60° / Keeping courseBSpontaneous in 3 s to 5 sBDive forward angle on exit / Change of courseDive forward 30° to 60° / Keeping courseBDive forward 30° to 60° / Keeping courseB
Folding lines used Yes (Only if asked) D Yes (Only if asked) D At least 50% chord Rocking back less than 45° A Rocking back less than 45° A Recovery Spontaneous in 3 to 5 s B Spontaneous in 3 to 5 s B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course B Dive forward 30° to 60° / Keeping course B Folding lines used No A No A Folding lines used Yes (Only if asked) D Yes (Only if asked) A Folding lines used Yes (Only if asked) D Yes (Only if asked) A Futth accelerator Yes (Only if asked) D Yes (Only if asked) C Entry Rocking back greater than 45° C Rocking back greater than 45° C Recovery Spontaneous in 3 to 5 s B Spontaneous in 3 to 5 s B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course B
At least 50% chord Fortry Rocking back less than 45° A Rocking back less than 45° A Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course B Dive forward 30° to 60° / Keeping course B Cascade occurs No A No A Folding lines used Yes (Only if asked) D Yes (Only if asked) D With accelerator Rocking back greater than 45° S Rocking back greater than 45° C Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course B Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course B Spontaneous in 3 s to 5 s B
EntryRocking back less than 45°ARocking back less than 45°ARecoverySpontaneous in 3 to 5 sBDive forward angle on exit / Change of courseDive forward 30° to 60° / Keeping courseBCascade occursNoANoFolding lines usedYes (Only if asked)DYes (Only if asked)DWith acceleratorESpontaneous in 3 to 5 sCRocking back greater than 45°CRecoverySpontaneous in 3 sto 5 sDSpontaneous in 3 sto 5 sBDive forward angle on exit / Change of courseDive forward 30° to 60° / Keeping courseBSpontaneous in 3 sto 5 sB
Dive forward angle on exit / Change of courseDive forward 30° to 60° / Keeping courseBDive forward 30° to 60° / Keeping courseBCascade occursNoANoAFolding lines usedYes (Only if asked)DYes (Only if asked)DWith acceleratorEntryRocking back greater than 45°CRocking back greater than 45°CRecoverySpontaneous in 3 s to 5 sBSpontaneous in 3 s to 5 sBDive forward angle on exit / Change of courseDive forward 30° to 60° / Keeping courseB
Cascade occursNoANoAFolding lines usedYes (Only if asked)DYes (Only if asked)DWith acceleratorEntryRocking back greater than 45°CRocking back greater than 45°CRocking back greater than 45°CRecoverySpontaneous in 3 s to 5 sBSpontaneous in 3 s to 5 sBDive forward angle on exit / Change of courseDive forward 30° to 60° / Keeping courseBDive forward 30° to 60° / Keeping courseB
Folding lines used Yes (Only if asked) D Yes (Only if asked) D With accelerator Entry Rocking back greater than 45° C Rocking back greater than 45° C Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Dive forward 30° to 60° / Keeping course B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course B Dive forward 30° to 60° / Keeping course B
With accelerator Rocking back greater than 45° C Rocking back greater than 45° C Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course B Dive forward 30° to 60° / Keeping course B
Entry Rocking back greater than 45° C Rocking back greater than 45° C Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course B Dive forward 30° to 60° / Keeping course B
Recovery Spontaneous in 3 s to 5 s B Spontaneous in 3 s to 5 s B Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course B Dive forward 30° to 60° / Keeping course B
Dive forward angle on exit / Change of course Dive forward 30° to 60° / Keeping course B Dive forward 30° to 60° / Keeping course B
Cascade occurs No A No A
Folding lines used Yes (Only if asked) D Yes (Only if asked) D
11. Exiting deep stall (parachutal stall) A
Deep stall achieved Yes A Yes A
Recovery Spontaneous in less than 3 s A Spontaneous in less than 3 s A
Dive forward angle on exit Dive forward 0° to 30° A Dive forward 0° to 30° A
Change of course Changing course less than 45° A Changing course less than 45° A
Cascade occurs No A No A
12. High angle of attack recovery A Recovery Spontaneous in less than 3 s A
Cascade occurs No A No A
13. Recovery from a developed full stall C Dive forward angle on exit Dive forward 30° to 60° B Dive forward 0° to 30° A
Collapse A No collapse A
Cascade occurs (other than collapses) No A No A

Rocking back	Greater than 45°	С	Less than 45°	А
Line tension	Most lines tight		Most lines tight	А
14. Asymmetric collapse	D			
Small asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45° $$	A	Less than 90° / Dive or roll angle 15° to 45° $$	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	А
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	A	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	Yes (Only if asked)	D	Yes (Only if asked)	D
Large asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45° $$	в	90° to 180° / Dive or roll angle 15° to 45°	В
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	А
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	A	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	Yes (Only if asked)	D	Yes (Only if asked)	D
Small asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45° $$	A	Less than 90° / Dive or roll angle 15° to 45° $$	A
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action		Spontaneous re-inflation	A
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	A	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	A	No	А
Cascade occurs	No	A	No	A
Folding lines used	Yes (Only if asked)	D	Yes (Only if asked)	D
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 45° to 60°	С	90° to 180° / Dive or roll angle 15° to 45°	В
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	С	Spontaneous re-inflation	А
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	A	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	A	No	A
Cascade occurs	Νο	A	No	A

Folding lines used	Yes (Only if asked)		Yes (Only if asked)	D
15. Directional control with a maintained	Α			
asymmetric collapse Able to keep course	Yes	А	Yes	А
	N.			
180° turn away from the collapsed side possible in 10 s	Yes	A	Yes	A
Amount of control range between turn and stall or spin	More than 50 % of the symmetric control travel		More than 50 % of the symmetric control travel	A
16. Trim speed spin tendency	Α			
Spin occurs	No	A	No	A
17. Low speed spin tendency	А			
Spin occurs	No	A	No	A
18. Recovery from a developed spin	В			
Spin rotation angle after release	Stops spinning in 90° to 180°	В	Stops spinning in 90° to 180°	В
Cascade occurs	No	A	No	A
19. B-line stall	0			
Change of course before release	not available	0	not available	0
Behaviour before release	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Cascade occurs	not available	0	not available	0
20. Big ears	A			
Entry procedure	Standard technique	A	Standard technique	А
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	А
21. Big ears in accelerated flight	Α			
Entry procedure	Standard technique	A	Standard technique	А
Behaviour during big ears	Stable flight	A	Stable flight	А
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	A
22. Alternative means of directional control	A			
180° turn achievable in 20 s	Yes	A	Yes	А
Stall or spin occurs	No	A	Νο	А
23. Any other flight procedure and/or configuration described in the user's manual	A			
Procedure works as described	Yes	A	Yes	А
Procedure suitable for novice pilots	Yes		Yes	A
Cascade occurs			No	А
	No	Δ		

24. Comments of test pilot