



Deutscher Hängegleiterverband e.V. im DAeC
Akkreditierte Musterprüfstelle für Hängegleiter und
Gleitsegel nach DIN EN ISO/IEC 17020:2012-07

GS TESTFLUG LTF 2009 GIN GTO 2 S

Test No 026636-GSTF09-659-Beni
Test date 19.10.2014
Location Gardasee / Mt Baldo
Type GIN GTO 2 S
Test type GS Testflug LTF 2009
Test order Auftrag GS Musterprüfung GIN GTO 2 S (GIN Gliders Inc.)
Customer GIN Gliders Inc.
Test standard LTF NFL II-91/09
Test standard 2 EN 926-2:2005
Expert Stocker
Result positive
Billing to: 100%

Technical peculiarities

Datum / Unterschrift (Beni Stocker)

RESULTS

PG test flight (general)

Take off weight [kg] 80
Weight limit for certification [kg] 80
Number of pilots 1
test pilot Beni Stocker
Harness type SUP' AIR 02
Harness category GH
Minimum speed [km/h] 23
Trim speed [km/h] 35
Accelerated speed [km/h] 0
Accelerator used? Yes
Trimmings -

en : Klassifizierung

en : Klassifizierung D

EN : ERGEBNISDETAILS NACH LTF 2009

1 Inflation/take-off

A

Rising behaviour Smooth, easy and constant rising
Special take off technique required No

2 Landing

A

Special landing technique required No

3 Speeds in straight flight

A

Trim speed more than 30 km/h Yes
Speed range using the controls larger than 10 km/h Yes
Minimum speed Less than 25 km/h

4 Control movement	C
<p>Symmetric control pressure Increasing</p> <p>Symmetric control travel 45 cm to 60 cm</p>	
5 Pitch stability exiting accelerated flight	A
<p>Dive forward angle on exit Dive forward 30° to 60°</p> <p>Collapse occurs No</p>	
6 Pitch stability operating controls during accelerated flight	A
<p>Collapse occurs No</p>	
7 Roll stability and damping	A
<p>Oscillations Reducing</p>	
8 Stability in gentle spirals	A
<p>Tendency to return to straight flight Spontaneous exit</p>	
9 Behaviour in a steeply banked turn	A
<p>Sink rate after two turns 12 m/s to 14 m/s</p>	
10.1 Symmetric front collapse	B
<p>Entry Rocking back less than 45°</p> <p>Recovery Spontaneous in 3 s to 5 s</p> <p>Dive forward angle on exit Dive forward 30° to 60°</p> <p>Change of course Entering a turn of less than 90°</p> <p>Cascade occurs No</p>	
10.2 Symmetric front collapse in accelerated flight	D
<p>Entry Rocking back less than 45°</p> <p>Recovery Recovery through pilot action in less than a further 3 s</p> <p>Dive forward angle on exit Dive forward 30° to 60°</p> <p>Change of course Entering a turn of 90° to 180°</p> <p>Cascade occurs No</p>	
11 Exiting deep stall (parachutal stall)	A
<p>Deep stall achieved No</p>	
12 High angle of attack recovery	A
<p>Recovery Spontaneous in less than 3 s</p> <p>Cascade occurs No</p>	
13 Recovery from a developed full stall	C
<p>Dive forward angle on exit Dive forward 60° to 90°</p> <p>Collapse No collapse</p> <p>Cascade occurs (other than collapses) No</p> <p>Rocking back Less than 45°</p> <p>Line tension Most lines tight</p>	
14.1 Asymmetric collapse 45-50%	B
<p>Change of course until re-inflation 90° to 180°</p> <p>Maximum dive forward or roll angle Dive or roll angle 15° to 45°</p> <p>Re-inflation behaviour Spontaneous re-inflation</p> <p>Total change of course Less than 360°</p> <p>Collapse on the opposite side occurs No</p> <p>Twist occurs No</p> <p>Cascade occurs No</p>	

14.2 Asymmetric collapse 70-75% **B****Change of course until re-inflation** 90° to 180°**Maximum dive forward or roll angle** Dive or roll angle 15° to 45°**Re-inflation behaviour** Spontaneous re-inflation**Total change of course** Less than 360°**Collapse on the opposite side occurs** No**Twist occurs** No**Cascade occurs** No**14.3 Asymmetric collapse 45-50% in accelerated flight** **B****Change of course until re-inflation** 90° to 180°**Maximum dive forward or roll angle** Dive or roll angle 15° to 45°**Re-inflation behaviour** Spontaneous re-inflation**Total change of course** Less than 360°**Collapse on the opposite side occurs** No**Twist occurs** No**Cascade occurs** No**14.4 Asymmetric collapse 70-75% in accelerated flight** **C****Change of course until re-inflation** 180° to 360°**Maximum dive forward or roll angle** Dive or roll angle 45° to 60°**Re-inflation behaviour** Spontaneous re-inflation**Total change of course** Less than 360°**Collapse on the opposite side occurs** No**Twist occurs** No**Cascade occurs** No**15 Directional control with a maintained asymmetric collapse** **C****Able to keep course** Yes**180° turn away from the collapsed side possible in 10 s** Yes**Amount of control range between turn and stall or spin** 25 % to 50 % of the symmetric control travel**16 Trim speed spin tendency** **A****Spin occurs** No**17 Low speed spin tendency** **A****Spin occurs** No**18 Recovery from a developed spin** **A****Spin rotation angle after release** Stops spinning in less than 90°**Cascade occurs** No**19 B-line stall** **D****Change of course before release** Changing course more than 45°**Behaviour before release** Unstable**Recovery** Recovery through pilot action in less than a further 3 s**Dive forward angle on exit** Dive forward 0° to 30°**Cascade occurs** No**20 Big ears** **B****Entry procedure** Standard technique**Behaviour during big ears** Stable flight**Recovery** Spontaneous in 3 s to 5 s**Dive forward angle on exit** Dive forward 0° to 30°

21 Big ears in accelerated flight

A

Entry procedure Standard technique

Behaviour during big ears Stable flight

Recovery Spontaneous in 3 s to 5 s

Dive forward angle on exit Dive forward 0° to 30°

Behaviour immediately after releasing the accelerator while maintaining big ears Stable flight

22 Behaviour exiting a steep spiral

A

Tendency to return to straight flight Spontaneous exit

Turn angle to recover normal flight Less than 720°, spontaneous recovery

Sink rate when evaluating spiral stability 14 [m/s]

23 Alternative means of directional control

A

180° turn achievable in 20 s Yes

Stall or spin occurs No

24 Any other flight procedure and/or configuration described in the user's manual

No other flight procedure or configuration described in the user's manual

Sprachmodul [default](#)
Sprachmodul [default_constants](#)
Sprachmodul [default_dhv](#)
Sprachmodul [default_tmo](#)
Sprachmodul [erg_flusi](#)
Sprachmodul [tmo_pruefungen](#)
Sprachmodul [tmo_pruefungentestflug](#)
Sprachmodul [tmo_pruefungentestfluggs](#)
Sprachmodul [tmo_pruefungentestfluggsltf09](#)
Sprachmodul [tmo_pruefauftraege](#)
Sprachmodul [dhv_adressen](#)
Sprachmodul [tmo_muster](#)
Sprachmodul [tmo_musterfremd](#)
Sprachmodul [tmo_pruefungsarten](#)
Sprachmodul [dhv_adressenperson](#)
Sprachmodul [dhv_adressenumsetzung](#)
Sprachmodul [dhv_adressen_constants](#)



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GS TESTFLUG LTF 2009 GIN GTO 2 S

Test No 026615-GSTF09-649-Harry
Test date 27.10.2014
Location Pyeongtaek/Korea
Type GIN GTO 2 S
Test type GS Testflug LTF 2009
Test order Auftrag GS Musterprüfung GIN GTO 2 S (GIN Gliders Inc.)
Customer GIN Gliders Inc.
Test standard LTF NFL II-91/09
Test standard 2 EN 926-2:2005
Expert Buntz
Result positive
Billing to: 100%
Technical peculiarities

Datum / Unterschrift (Harald Buntz)

RESULTS

PG test flight (general)

Take off weight [kg] 95
Weight limit for certification [kg] 95
Number of pilots 1
test pilot Harald Buntz
Harness type GIN Gingo 2
Harness category GH
Minimum speed [km/h] 23
Trim speed [km/h] 35
Accelerated speed [km/h] 55
Accelerator used? Yes
Trimms -

en : Klassifizierung

en : Klassifizierung C

EN : ERGEBNISDETAILS NACH LTF 2009

1 Inflation/take-off

A

Rising behaviour Smooth, easy and constant rising
Special take off technique required No

2 Landing

A

Special landing technique required No

3 Speeds in straight flight

A

Trim speed more than 30 km/h Yes
Speed range using the controls larger than 10 km/h Yes

Minimum speed Less than 25 km/h

4 Control movement	A
Symmetric control pressure Increasing	
Symmetric control travel Greater than 60 cm	
5 Pitch stability exiting accelerated flight	A
Dive forward angle on exit Dive forward less than 30°	
Collapse occurs No	
6 Pitch stability operating controls during accelerated flight	A
Collapse occurs No	
7 Roll stability and damping	A
Oscillations Reducing	
8 Stability in gentle spirals	A
Tendency to return to straight flight Spontaneous exit	
9 Behaviour in a steeply banked turn	B
Sink rate after two turns More than 14 m/s	
10.1 Symmetric front collapse	C
Entry Rocking back greater than 45°	
Recovery Spontaneous in 3 s to 5 s	
Dive forward angle on exit Dive forward 30° to 60°	
Change of course Entering a turn of less than 90°	
Cascade occurs No	
10.2 Symmetric front collapse in accelerated flight	C
Entry Rocking back greater than 45°	
Recovery Spontaneous in 3 s to 5 s	
Dive forward angle on exit Dive forward 30° to 60°	
Change of course Entering a turn of less than 90°	
Cascade occurs No	
11 Exiting deep stall (parachutal stall)	B
Deep stall achieved Yes	
Recovery Spontaneous in less than 3 s	
Dive forward angle on exit Dive forward 30° to 60°	
Change of course Changing course less than 45°	
Cascade occurs No	
12 High angle of attack recovery	A
Recovery Spontaneous in less than 3 s	
Cascade occurs No	
13 Recovery from a developed full stall	B
Dive forward angle on exit Dive forward 30° to 60°	
Collapse No collapse	
Cascade occurs (other than collapses) No	
Rocking back Greater than 45°	
Line tension Most lines tight	
14.1 Asymmetric collapse 45-50%	A
Change of course until re-inflation Less than 90°	
Maximum dive forward or roll angle Dive or roll angle 15° to 45°	

Re-inflation behaviour Spontaneous re-inflation**Total change of course** Less than 360°**Collapse on the opposite side occurs** No**Twist occurs** No**Cascade occurs** No**14.2 Asymmetric collapse 70-75%****C****Change of course until re-inflation** 90° to 180°**Maximum dive forward or roll angle** Dive or roll angle 45° to 60°**Re-inflation behaviour** Spontaneous re-inflation**Total change of course** Less than 360°**Collapse on the opposite side occurs** No**Twist occurs** No**Cascade occurs** No**14.3 Asymmetric collapse 45-50% in accelerated flight****C****Change of course until re-inflation** Less than 90°**Maximum dive forward or roll angle** Dive or roll angle 45° to 60°**Re-inflation behaviour** Spontaneous re-inflation**Total change of course** Less than 360°**Collapse on the opposite side occurs** No**Twist occurs** No**Cascade occurs** No**14.4 Asymmetric collapse 70-75% in accelerated flight****C****Change of course until re-inflation** 90° to 180°**Maximum dive forward or roll angle** Dive or roll angle 60° to 90°**Re-inflation behaviour** Inflates in less than 3 s from start of pilot action**Total change of course** Less than 360°**Collapse on the opposite side occurs** Yes, no turn reversal**Twist occurs** No**Cascade occurs** No**15 Directional control with a maintained asymmetric collapse****C****Able to keep course** Yes**180° turn away from the collapsed side possible in 10 s** Yes**Amount of control range between turn and stall or spin** 25 % to 50 % of the symmetric control travel**16 Trim speed spin tendency****A****Spin occurs** No**17 Low speed spin tendency****A****Spin occurs** No**18 Recovery from a developed spin****C****Spin rotation angle after release** Stops spinning in 90° to 180°**Cascade occurs** No**19 B-line stall****C****Change of course before release** Changing course more than 45°**Behaviour before release** Remains stable without straight span**Recovery** Spontaneous in less than 3 s**Dive forward angle on exit** Dive forward 0° to 30°**Cascade occurs** No

20 Big ears **B**

Entry procedure Dedicated controls
Behaviour during big ears Stable flight
Recovery Spontaneous in 3 s to 5 s
Dive forward angle on exit Dive forward 0° to 30°

21 Big ears in accelerated flight **A**

Entry procedure Standard technique
Behaviour during big ears Stable flight
Recovery Spontaneous in 3 s to 5 s
Dive forward angle on exit Dive forward 0° to 30°
Behaviour immediately after releasing the accelerator while maintaining big ears Stable flight

22 Behaviour exiting a steep spiral **A**

Tendency to return to straight flight Spontaneous exit
Turn angle to recover normal flight Less than 720°, spontaneous recovery
Sink rate when evaluating spiral stability 14 [m/s]

23 Alternative means of directional control **A**

180° turn achievable in 20 s Yes
Stall or spin occurs No

24 Any other flight procedure and/or configuration described in the user's manual

No other flight procedure or configuration described in the user's manual

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- Sprachmodul [erg_flusi](#)
- Sprachmodul [tmo_pruefungen](#)
- Sprachmodul [tmo_pruefungentestflug](#)
- Sprachmodul [tmo_pruefungentestfluggs](#)
- Sprachmodul [tmo_pruefungentestfluggsltf09](#)
- Sprachmodul [tmo_pruefauftraege](#)
- Sprachmodul [dhv_adressen](#)
- Sprachmodul [tmo_muster](#)
- Sprachmodul [tmo_musterfremd](#)
- Sprachmodul [tmo_pruefungsarten](#)
- Sprachmodul [dhv_adressenperson](#)
- Sprachmodul [dhv_adressenumsetzung](#)
- Sprachmodul [dhv_adressen_constants](#)