para-test.com

paragliding by air turquoise

# *LTF flight test report*

| | | | |
|---|---|---|---|
| **Manufacturer** | **Niviuk Gliders** | | |
| **Address** | Air Games S.L, C/Doctore Cordina, 29 Bajos<br>17165 La Cellera de Ter Girona<br>Spain | **Date of flight test:**<br>**Place of test:** | 30/07/2008<br>Villeneuve |
| **Representive** | Nef Olivier | **LTF 1** | |
| **Type of glider** | **Koyot S** | | |
| **Trimmer** | **not available** | | |

| | | |
|---|---|---|
| **Test Pilot** | Philippe Dupont | Claude Thurnheer |
| **Harness** | Advance - Progress Light | Advance - Progress Light |
| **Total weight in flight** | 60 kg | 80 kg |

| | | Min weight | | Max weight | |
|---|---|---|---|---|---|
| **1. Take-off** | | | | | |
| | Inflation Behaviour | evenly, immediately | 1 | evenly, immediately | 1 |
| | Rising behaviour | immediately comes over pilot | 1 | immediately comes over pilot | 1 |
| | Take off speed | stallspeed < 30 km/h | pos | stallspeed < 30 km/h | pos |
| | Take off handling | easy | 1 | easy | 1 |
| **2. Straight Flight** | | | | | |
| | Trim speed at minimum take off weight | > 30 km/h | pos | > 30 km/h | pos |
| | Speed range | > 10 km/h | pos | > 10 km/h | pos |
| | Roll Damping | high | 1 | high | 1 |
| | Pitching | not available | 0 | not available | 0 |
| | Yaw stability | not available | 0 | not available | 0 |
| **3. Turn handling** | | | | | |
| | Control travel | high | pos | high | pos |
| | Agility | not available | 0 | not available | 0 |
| | Control pressure increase | high increase | 1 | high increase | 1 |
| | Spin tendency | not available | 1 | not available | 1 |
| | Control without brakes | yes | pos | yes | pos |
| **4. Symmetrical Stall using Brakes** | | | | | |
| | Deep stall limit | > 70 cm | 1 | > 70 cm | 1 |
| | Exit of deep Stall | spontaneous, quickly | 1 | spontaneous, quickly | 1 |
| | Standard exit | yes | pos | yes | pos |
| | Full stall limit | > 75 cm | 1 | > 75 cm | 1 |
| | Full stall with full steering way | soft stall | pos | soft stall | pos |
| | Increase in steering power | high | 1 | high | 1 |
| **5. Front collapse** | | | | | |
| | A-Riser Travel until collapse | high > 10 cm | pos | high > 10 cm | pos |
| | Pre-Acceleration | not available | 0 | not available | 0 |
| | Opening behaviour | spontaneous, quickly = <1,5 s | 1 | spontaneous, quickly = <1,5 s | 1 |
| | *Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| | ***With accelerator*** | | | | |
| | A-Riser Travel until collapse | high > 10 cm | pos | high > 10 cm | pos |
| | Pre-Acceleration | not available | 0 | not available | 0 |
| | Opening behaviour | spontaneous, quickly = <1,5 s | 1 | spontaneous, quickly = <1,5 s | 1 |
| | *Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| **6. Asymmetric Collapse** | | | | | |
| | ***With 50% collapse*** | | | | |
| | Maximum recovery behaviour | <90°- <360°- average - <45°- average - spontaneous - spontaneous | 1 | <90°- <360°- average - <45°- average - spontaneous - spontaneous | 1 |
| | *Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| | ***With 75% collapse*** | | | | |
| | Maximum recovery behaviour | <90°- <360°- average - <45°- average - spontaneous - spontaneous | 1 | <90°- <360°- average - <45°- average - spontaneous - spontaneous | 1 |
| | *Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| | ***With 50% collapse and accelerator*** | | | | |
| | Maximum recovery behaviour | <90°- <360°- average - <45°- average - spontaneous - spontaneous | 1 | <90°- <360°- average - <45°- average - spontaneous - spontaneous | 1 |
| | *Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| | ***With 75% collapse and accelerator*** | | | | |
| | Maximum recovery behaviour | <180°- <360° - slight - <45°- average - spontaneous - spontaneous | 1 | <180°- <360° - slight - <45°- average - spontaneous - spontaneous | 1 |
| | *Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| **7. Countersteering an asymmetric collapse** | | | | | |
| | Stabilisation | spontaneous, countersteering easy | 1 | spontaneous, countersteering easy | 1 |
| | Turn in opposite direction | easy, no tendency to stall | 1 | easy, no tendency to stall | 1 |
| | Control pressure increase | high increase | 1 | high increase | 1 |
| | Control travel | high | pos | high | pos |
| **8.Full Stall Symmetrical Exit** | | | | | |
| | Behaviour after entry | stable | pos | stable | pos |
| | Reaction | slight shoot forward <30° | pos | slight shoot forward <30° | pos |
| | Reaction if asymmetric collapse | not available | 0 | not available | 0 |
| | *Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |

para-test.com

paragliding by air turquoise

| | | | | | |
|---|---|---|---|---|---|
| | Reaction if symmetric collapse | not available | 0 | not available | 0 |
| | *Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| **9. Big ears** | | | | | |
| | Entry | easy | pos | easy | pos |
| | Exit | spontaneous, quickly | 1 | spontaneous, quickly | 1 |
| | If not spontaneously exit; asymm. collapse | not available | 0 | not available | 0 |
| | *Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| | If not spontaneously exit; symm. collapse | not available | 0 | not available | 0 |
| | *Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| | ***With accelerator*** | | | | |
| | Entry | easy | pos | easy | pos |
| | Exit | spontaneous, quickly | 1 | spontaneous, quickly | 1 |
| | If not spontaneously exit; asymm. collapse | not available | 0 | not available | 0 |
| | *Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| | If not spontaneously exit; symm. collapse | not available | 0 | not available | 0 |
| | *Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| **10. Spin from straight flight** | | | | | |
| | Exit | spontaneous | 1 | spontaneous | 1 |
| | Reaction | not available | 0 | not available | 0 |
| | Reaction, if asymmetric collapse | not available | 0 | not available | 0 |
| | *Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| | Reaction, if symmetric collapse | not available | 0 | not available | 0 |
| | *Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| **11. Spin from Turn** | | | | | |
| | Reaction | slight shoot forward <30° | pos | slight shoot forward <30° | pos |
| | Reaction if asymmetric collapse | not available | 0 | not available | 0 |
| | *Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| | Reaction if symmetric collapse | not available | 0 | not available | 0 |
| | *Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| **12. Spiral dive** | | | | | |
| | Spin tendency | not available | 1 | not available | 1 |
| | Entry | easy | 1 | easy | 1 |
| | Exit | spontaneous, turn continues < 180° | 1 | spontaneous, turn continues < 180° | 1 |
| | Exit if stable steep spiral > 14 m/s | no acceleration, easy controllable sink rate and | 1 | no acceleration, easy controllable sink rate and | 1 |
| | Sink rate after 720° [m/s] | 11 m/s | | 18 m/s | |
| **13. B Line stall** | | | | | |
| | Entry | easy | 1 | easy | 1 |
| | Exit | spontaneous | 1 | spontaneous | 1 |
| | If not spontaneously with asym. collapse | not available | 0 | not available | 0 |
| | *Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| | If not spontaneously with symm. collapse | not available | 0 | not available | 0 |
| | *Asymmetrical, Turn tendency- Change of course- Rate of turn- Pitch and Roll angle- Loss of altitude- Stabilisation- Opening behaviuor* | | | | |
| **14. Landing** | | | | | |
| | Entry | average | 1 | average | 1 |
| | Landing speed | not available | 0 | not available | 0 |
| | Landing behaviour | easy | 1 | easy | 1 |
| **Comments of test pilot** | | | | | |
| | Comments | no | | no | |


**Air Turquoise SA**
Route du Pré-au-Comte 8
Case postale 10
CH- 1844 Villeneuve
Switzerland
mobile: +41 79 202 52 30
Tel. no : +41 21 965 65 65
fax : +41 219 65 65 68
email: info@para-test.com
homepage: www.para-test.com


ISO 9001 BUREAU VERITAS Certification

ISO 9001:2000

*pos = positive*
*neg = negative*
*x = relevant if extreme*
*na = not available*