

## TESTREPORT EN926-2:2005

## UP ASCENT 3 L

**Type designation** UP Ascent 3 L  
**Type test reference no** DHV GS-01-2063-13  
**Holder of certification** [UP International GmbH](#)  
**Manufacturer** [UP International GmbH](#)  
**Classification** A  
**Winch towing** Yes  
**Number of seats min / max** 1 / 1  
**Accelerator** Yes  
**Trimmers** No



## BEHAVIOUR AT MIN WEIGHT IN FLIGHT (95KG)

## BEHAVIOUR AT MAX WEIGHT IN FLIGHT (135KG)

## Test pilots



Harald Buntz

No release



Sebastian Mackrodt

No release

## Inflation/take-off

A

A

**Rising behaviour** Smooth, easy and constant rising

**Special take off technique required** No

Smooth, easy and constant rising

No

## Landing

A

A

**Special landing technique required** No

No

## Speeds in straight flight

A

A

**Trim speed more than 30 km/h** Yes

Yes

**Speed range using the controls larger than 10 km/h** Yes

Yes

**Minimum speed** Less than 25 km/h

Less than 25 km/h

## Control movement

A

A

**Symmetric control pressure** Increasing

Increasing

**Symmetric control travel** Greater than 60 cm

Greater than 65 cm

## Pitch stability exiting accelerated flight

A

A

**Dive forward angle on exit** Dive forward less than 30°

Dive forward less than 30°

**Collapse occurs** No

No

## Pitch stability operating controls during accelerated flight

A

A

**Collapse occurs** No

No

## Roll stability and damping

A

A

**Oscillations** Reducing

Reducing

## Stability in gentle spirals

A

A

**Tendency to return to straight flight** Spontaneous exit

Spontaneous exit

## Behaviour in a steeply banked turn



A

A

**Sink rate after two turns** Up to 12 m/s

12 m/s to 14 m/s

## Symmetric front collapse

A

A

**Entry** Rocking back less than 45°

Rocking back less than 45°

|  |   |                               |
|--|---|-------------------------------|
|  | <b>Recovery</b> Spontaneous in less than 3 s                            | Spontaneous in less than 3 s  |
|  | <b>Dive forward angle on exit</b> Dive forward 0° to 30°                | Dive forward 0° to 30°        |
|  | <b>Change of course</b> Keeping course                                  | Keeping course                |
|  | <b>Cascade occurs</b> No  | No                            |
| <b>Symmetric front collapse in accelerated flight</b> <b>A</b>   |   |                               |
|  | <b>Entry</b> Rocking back less than 45°                                 | Rocking back less than 45°    |
|  | <b>Recovery</b> Spontaneous in less than 3 s                            | Spontaneous in less than 3 s  |
|  | <b>Dive forward angle on exit</b> Dive forward 0° to 30°                | Dive forward 0° to 30°        |
|  | <b>Change of course</b> Keeping course                                  | Keeping course                |
|  | <b>Cascade occurs</b> No  | No                            |
| <b>Exiting deep stall (parachutal stall)</b> <b>A</b>            |   |                               |
|  | <b>Deep stall achieved</b> Yes  | Yes                           |
|  | <b>Recovery</b> Spontaneous in less than 3 s                            | Spontaneous in less than 3 s  |
|  | <b>Dive forward angle on exit</b> Dive forward 0° to 30°                | Dive forward 0° to 30°        |
|  | <b>Change of course</b> Changing course less than 45°                   | Changing course less than 45° |
|  | <b>Cascade occurs</b> No  | No                            |
| <b>High angle of attack recovery</b> <b>A</b>                    |   |                               |
|  | <b>Recovery</b> Spontaneous in less than 3 s                            | Spontaneous in less than 3 s  |
|  | <b>Cascade occurs</b> No  | No                            |
| <b>Recovery from a developed full stall</b> <b>A</b>             |   |                               |
|  | <b>Dive forward angle on exit</b> Dive forward 0° to 30°                | Dive forward 0° to 30°        |
|  | <b>Collapse</b> No collapse   | No collapse                   |
|  | <b>Cascade occurs (other than collapses)</b> No                         | No                            |
|  | <b>Rocking back</b> Less than 45°                                       | Less than 45°                 |
|  | <b>Line tension</b> Most lines tight                                    | Most lines tight              |
| <b>Asymmetric collapse 45-50%</b> <b>A</b>                       |   |                               |
|  | <b>Change of course until re-inflation</b> Less than 90°                | Less than 90°                 |
|  | <b>Maximum dive forward or roll angle</b> Dive or roll angle 0° to 15°  | Dive or roll angle 0° to 15°  |
|  | <b>Re-inflation behaviour</b> Spontaneous re-inflation                  | Spontaneous re-inflation      |
|  | <b>Total change of course</b> Less than 360°                            | Less than 360°                |
|  | <b>Collapse on the opposite side occurs</b> No                          | No                            |
|  | <b>Twist occurs</b> No  | No                            |
|  | <b>Cascade occurs</b> No  | No                            |
| <b>Asymmetric collapse 70-75%</b> <b>A</b>                       |   |                               |
|  | <b>Change of course until re-inflation</b> Less than 90°                | Less than 90°                 |
|  | <b>Maximum dive forward or roll angle</b> Dive or roll angle 15° to 45° | Dive or roll angle 15° to 45° |
|  | <b>Re-inflation behaviour</b> Spontaneous re-inflation                  | Spontaneous re-inflation      |
|  | <b>Total change of course</b> Less than 360°                            | Less than 360°                |
|  | <b>Collapse on the opposite side occurs</b> No                          | No                            |
|  | <b>Twist occurs</b> No  | No                            |
|  | <b>Cascade occurs</b> No  | No                            |
| <b>Asymmetric collapse 45-50% in accelerated flight</b> <b>A</b> |   |                               |
|  | <b>Change of course until re-inflation</b> Less than 90°                | Less than 90°                 |
|  | <b>Maximum dive forward or roll angle</b> Dive or roll angle 15° to 45° | Dive or roll angle 15° to 45° |
|  | <b>Re-inflation behaviour</b> Spontaneous re-inflation                  | Spontaneous re-inflation      |
|  | <b>Total change of course</b> Less than 360°                            | Less than 360°                |
|  | <b>Collapse on the opposite side occurs</b> No                          | No                            |
|  | <b>Twist occurs</b> No  | No                            |
|  | <b>Cascade occurs</b> No  | No                            |
| <b>Asymmetric collapse 70-75% in accelerated flight</b> <b>A</b> |   |                               |
|  | <b>Change of course until re-inflation</b> Less than 90°                | Less than 90°                 |
|  | <b>Maximum dive forward or roll angle</b> Dive or roll angle 15° to 45° | Dive or roll angle 15° to 45° |

|   |  |  |
|---|--|--|
| <b>Re-inflation behaviour</b>   | Spontaneous re-inflation                       | Spontaneous re-inflation                       |
| <b>Total change of course</b>   | Less than 360°                                 | Less than 360°                                 |
| <b>Collapse on the opposite side occurs</b>   | No   | No   |
| <b>Twist occurs</b>   | No   | No   |
| <b>Cascade occurs</b>   | No   | No   |
| <b>Directional control with a maintained asymmetric collapse</b>                        | <b>A</b>                                       | <b>A</b>                                       |
| <b>Able to keep course</b>  | Yes  | Yes  |
| <b>180° turn away from the collapsed side possible in 10 s</b>                          | Yes  | Yes  |
| <b>Amount of control range between turn and stall or spin</b>                           | More than 50 % of the symmetric control travel | More than 50 % of the symmetric control travel |
| <b>Trim speed spin tendency</b>   | <b>A</b>                                       | <b>A</b>                                       |
| <b>Spin occurs</b>  | No   | No   |
| <b>Low speed spin tendency</b>  | <b>A</b>                                       | <b>A</b>                                       |
| <b>Spin occurs</b>  | No   | No   |
| <b>Recovery from a developed spin</b>   | <b>A</b>                                       | <b>A</b>                                       |
| <b>Spin rotation angle after release</b>  | Stops spinning in less than 90°                | Stops spinning in less than 90°                |
| <b>Cascade occurs</b>   | No   | No   |
| <b>B-line stall</b>   | <b>A</b>                                       | <b>A</b>                                       |
| <b>Change of course before release</b>  | Changing course less than 45°                  | Changing course less than 45°                  |
| <b>Behaviour before release</b>   | Remains stable with straight span              | Remains stable with straight span              |
| <b>Recovery</b>   | Spontaneous in less than 3 s                   | Spontaneous in less than 3 s                   |
| <b>Dive forward angle on exit</b>   | Dive forward 0° to 30°                         | Dive forward 0° to 30°                         |
| <b>Cascade occurs</b>   | No   | No   |
| <b>Big ears</b>   | <b>A</b>                                       | <b>A</b>                                       |
| <b>Entry procedure</b>  | Standard technique                             | Dedicated controls                             |
| <b>Behaviour during big ears</b>  | Stable flight                                  | Stable flight                                  |
| <b>Recovery</b>   | Spontaneous in less than 3 s                   | Spontaneous in less than 3 s                   |
| <b>Dive forward angle on exit</b>   | Dive forward 0° to 30°                         | Dive forward 0° to 30°                         |
| <b>Big ears in accelerated flight</b>   | <b>A</b>                                       | <b>A</b>                                       |
| <b>Entry procedure</b>  | Standard technique                             | Dedicated controls                             |
| <b>Behaviour during big ears</b>  | Stable flight                                  | Stable flight                                  |
| <b>Recovery</b>   | Spontaneous in 3 s to 5 s                      | Spontaneous in less than 3 s                   |
| <b>Dive forward angle on exit</b>   | Dive forward 0° to 30°                         | Dive forward 0° to 30°                         |
| <b>Behaviour immediately after releasing the accelerator while maintaining big ears</b> | Stable flight                                  | Stable flight                                  |
| <b>Behaviour exiting a steep spiral</b>   | <b>A</b>                                       | <b>A</b>                                       |
| <b>Tendency to return to straight flight</b>  | Spontaneous exit                               | Spontaneous exit                               |
| <b>Turn angle to recover normal flight</b>  | Less than 720°, spontaneous recovery           | Less than 720°, spontaneous recovery           |
| <b>Sink rate when evaluating spiral stability</b>                                       | 14 [m/s]                                       | 14   |
| <b>Alternative means of directional control</b>   | <b>A</b>                                       | <b>A</b>                                       |
| <b>180° turn achievable in 20 s</b>   | Yes  | Yes  |
| <b>Stall or spin occurs</b>   | No   | No   |
| <b>Any other flight procedure and/or configuration described in the user's manual</b>   |  |  |
| No other flight procedure or configuration described in the user's manual               |  |  |