**Type designation** Muse 4 - 24

**Type test reference no** DHV GS-01-2135-15

**Holder of certification** MAC Para Technology ltd

**Manufacturer** MAC Para Technology ltd

**Classification** A

**Winch towing** Yes

**Number of seats min / max** 1 / 1

**Accelerator** Yes

**Trimmers** No

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**Test pilots**

Beni Stocker

Harald Buntz

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**Inflation/take-off**

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

**Special take off technique required** No

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**Landing**

**Special landing technique required** No

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**Speeds in straight flight**

**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

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**Control movement**

**Symmetric control pressure** Increasing

**Symmetric control travel** Greater than 55 cm

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**Pitch stability exiting accelerated flight**

Dive forward angle on exit Dive forward less than 30°

**Collapse occurs** No

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**Pitch stability operating controls during accelerated flight**

**Collapse occurs** No

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**Roll stability and damping**

**Oscillations** Reducing

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**Stability in gentle spirals**

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

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**Behaviour in a steeply banked turn**

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

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**Symmetric front collapse**

**Entry** Rocking back less than 45°

**Recovery** Spontaneous in less than 3 s

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

**Change of course** Keeping course

**Cascade occurs** No

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### Symmetric front collapse in accelerated flight

- **Entry** Rocking back less than 45°
- **Recovery** Spontaneous in less than 3 s
- **Dive forward angle on exit** Dive forward 0° to 30°
- **Change of course** Entering a turn of less than 90°
- **Cascade occurs** No

### Exiting deep stall (parachutal stall)

- **Deep stall achieved** Yes
- **Recovery** Spontaneous in less than 3 s
- **Dive forward angle on exit** Dive forward 0° to 30°
- **Change of course** Changing course less than 45°
- **Cascade occurs** No

### High angle of attack recovery

- **Recovery** Spontaneous in less than 3 s
- **Cascade occurs** No

### Recovery from a developed full stall

- **Dive forward angle on exit** Dive forward 0° to 30°
- **Collapse** No collapse
- **Cascade occurs (other than collapses)** No
- **Rocking back** Less than 45°
- **Line tension** Most lines tight

### Asymmetric collapse 45-50%

- **Change of course until re-inflation** Less than 90°
- **Maximum dive forward or roll angle** Dive or roll angle 0° to 15°
- **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

### Asymmetric collapse 70-75%

- **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

### Asymmetric collapse 45-50% in accelerated flight

- **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

### Asymmetric collapse 70-75% in accelerated flight

- **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

### Directional control with a maintained asymmetric collapse

- **Able to keep course** Yes
- **180° turn away from the collapsed side possible** Yes
<table>
<thead>
<tr>
<th>Amount of control range between turn and stall</th>
<th>More than 50% of the symmetric control travel</th>
<th>More than 50% of the symmetric control travel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trim speed spin tendency</strong></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Spin occurs</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Low speed spin tendency</strong></td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Spin occurs</td>
<td>No</td>
<td>No</td>
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<tr>
<td><strong>Recovery from a developed spin</strong></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Spin rotation angle after release</td>
<td>Stops spinning in less than 90°</td>
<td>Stops spinning in less than 90°</td>
</tr>
<tr>
<td>Cascade occurs</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>B-line stall</strong></td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Change of course before release</td>
<td>Changing course less than 45°</td>
<td>Changing course less than 45°</td>
</tr>
<tr>
<td>Behaviour before release</td>
<td>Remains stable with straight span</td>
<td>Remains stable with straight span</td>
</tr>
<tr>
<td>Recovery</td>
<td>Spontaneous in less than 3 s</td>
<td>Spontaneous in less than 3 s</td>
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<tr>
<td>Dive forward angle on exit</td>
<td>Dive forward 0° to 30°</td>
<td>Dive forward 0° to 30°</td>
</tr>
<tr>
<td>Cascade occurs</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Big ears</strong></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Entry procedure</td>
<td>Dedicated controls</td>
<td>Dedicated controls</td>
</tr>
<tr>
<td>Behaviour during big ears</td>
<td>Stable flight</td>
<td>Stable flight</td>
</tr>
<tr>
<td>Recovery</td>
<td>Spontaneous in less than 3 s</td>
<td>Spontaneous in less than 3 s</td>
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<td>Dive forward angle on exit</td>
<td>Dive forward 0° to 30°</td>
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<tr>
<td><strong>Big ears in accelerated flight</strong></td>
<td>☐</td>
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<td>Recovery</td>
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<td>Spontaneous in less than 3 s</td>
</tr>
<tr>
<td>Dive forward angle on exit</td>
<td>Dive forward 0° to 30°</td>
<td>Dive forward 0° to 30°</td>
</tr>
<tr>
<td>Behaviour immediately after releasing the</td>
<td>Stable flight</td>
<td>Stable flight</td>
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<tr>
<td>accelerator while maintaining big ears</td>
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<tr>
<td><strong>Behaviour exiting a steep spiral</strong></td>
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<td>☐</td>
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<tr>
<td>Tendency to return to straight flight</td>
<td>Spontaneous exit</td>
<td>Spontaneous exit</td>
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<tr>
<td>Turn angle to recover normal flight</td>
<td>Less than 720°, spontaneous recovery</td>
<td>Less than 720°, spontaneous recovery</td>
</tr>
<tr>
<td>Sink rate when evaluating spiral stability [m/s]</td>
<td>14</td>
<td>14</td>
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<tr>
<td><strong>Alternative means of directional control</strong></td>
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<td>☐</td>
</tr>
<tr>
<td>180° turn achievable in 20 s</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Stall or spin occurs</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**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