




MAC PARA ARAVIS 23

| | | |
|----------------------------------|-------------------------------------|---|
| Type designation | Mac Para Aravis 23 |  |
| Type test reference no | DHV GS-01-2666-21 | |
| Holder of certification | MAC Para Technology | |
| Manufacturer | MAC Para Technology | |
| Classification | A | |
| Winch towing | Yes | |
| Number of seats min / max | 1 / 1 | |
| Accelerator | Yes | |
| Trimmers | No | |

| | BEHAVIOUR AT MIN WEIGHT IN FLIGHT (65KG) | BEHAVIOUR AT MAX WEIGHT IN FLIGHT (93KG) |
|---|---|--|
| Test pilots |  Josef Bauer No release |  Harald Buntz No release |
| Inflation/take-off | A | A |
| Rising behaviour | Smooth, easy and constant rising | Smooth, easy and constant rising |
| Special take off technique required | No | 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 55 cm | Greater than 60 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 |
| en : Verhalten beim Verlassen einer vollständigen Steilspirale | A | A |
| en : Erstes Ansprechen des Gleitschirms (die ersten 180°) | en : unmittelbare Verringerung der Drehgeschwindigkeit | en : unmittelbare Verringerung der Drehgeschwindigkeit |
| Tendency to return to straight flight | en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend) | en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend) |

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

Less than 720°, spontaneous recovery

| | | |
|--|----------|--|
| Symmetric front collapse | A | A |
| Entry Rocking back less than 45° | | Rocking back less than 45° |
| Recovery Spontaneous in less than 3 s | | Spontaneous in less than 3 s |
| Dive forward angle on exit Dive forward 0° to 30° | | Dive forward 0° to 30° |
| Change of course Keeping course | | Keeping course |
| Cascade occurs No | | No |
| en : Faltleinen wurden benutzt no | | no |
| en : Symmetrischer Frontklapper mindestens 50% Flügeltiefe | A | A |
| Entry Rocking back less than 45° | | Rocking back less than 45° |
| Recovery Spontaneous in less than 3 s | | Spontaneous in less than 3 s |
| Dive forward angle on exit Dive forward 0° to 30° | | Dive forward 0° to 30° |
| Change of course Keeping course | | Keeping course |
| Cascade occurs No | | No |
| en : Faltleinen wurden benutzt no | | no |
| en : Symmetrischer Frontklapper im beschleunigten Flug mindestens 50% Flügeltiefe | A | A |
| Entry Rocking back less than 45° | | Rocking back less than 45° |
| Recovery Spontaneous in less than 3 s | | Spontaneous in less than 3 s |
| Dive forward angle on exit Dive forward 0° to 30° | | Dive forward 0° to 30° |
| Change of course Keeping course | | Keeping course |
| Cascade occurs No | | No |
| en : Faltleinen wurden benutzt no | | no |
| Exiting deep stall (parachutal stall) | A | A |
| Deep stall achieved Yes | | Yes |
| Recovery Spontaneous in less than 3 s | | Spontaneous in less than 3 s |
| Dive forward angle on exit Dive forward 0° to 30° | | Dive forward 0° to 30° |
| Change of course Changing course less than 45° | | Changing course less than 45° |
| Cascade occurs No | | No |
| High angle of attack recovery | A | A |
| Recovery Spontaneous in less than 3 s | | Spontaneous in less than 3 s |
| Cascade occurs No | | No |
| Recovery from a developed full stall | A | A |
| Dive forward angle on exit Dive forward 0° to 30° | | Dive forward 0° to 30° |
| Collapse No collapse | | No collapse |
| Cascade occurs (other than collapses) No | | No |
| Rocking back Less than 45° | | Less than 45° |
| Line tension Most lines tight | | Most lines tight |
| en : Kleiner einseitiger Klapper | A | A |
| Change of course until re-inflation Less than 90° | | Less than 90° |
| Maximum dive forward or roll angle Dive or roll angle 0° to 15° | | Dive or roll angle 0° to 15° |
| Re-inflation behaviour Spontaneous re-inflation | | Spontaneous re-inflation |
| Total change of course Less than 360° | | Less than 360° |
| Collapse on the opposite side occurs en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung) | | en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung) |
| Twist occurs No | | No |
| Cascade occurs No | | No |
| en : Faltleinen wurden benutzt no | | no |
| en : Großer einseitiger Klapper | A | A |
| Change of course until re-inflation Less than 90° | | Less than 90° |
| Maximum dive forward or roll angle Dive or roll angle 15° to 45° | | Dive or roll angle 15° to 45° |
| Re-inflation behaviour Spontaneous re-inflation | | Spontaneous re-inflation |
| Total change of course Less than 360° | | Less than 360° |
| Collapse on the opposite side occurs en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung) | | en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung) |
| Twist occurs No | | No |
| Cascade occurs No | | No |
| en : Faltleinen wurden benutzt no | | no |

| | | |
|---|--|--|
| en : Kleiner einseitiger Klapper im beschleunigten Flug | A | A |
| Change of course until re-inflation | Less than 90° | Less than 90° |
| Maximum dive forward or roll angle | Dive or roll angle 15° to 45° | Dive or roll angle 15° to 45° |
| Re-inflation behaviour | Spontaneous re-inflation | Spontaneous re-inflation |
| Total change of course | Less than 360° | Less than 360° |
| Collapse on the opposite side occurs | en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung) | en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung) |
| Twist occurs | No | No |
| Cascade occurs | No | No |
| en : Faltleinen wurden benutzt | no | no |
| en : Großer einseitiger Klapper im beschleunigten Flug | A | A |
| Change of course until re-inflation | Less than 90° | Less than 90° |
| Maximum dive forward or roll angle | Dive or roll angle 15° to 45° | Dive or roll angle 15° to 45° |
| Re-inflation behaviour | Spontaneous re-inflation | Spontaneous re-inflation |
| Total change of course | Less than 360° | Less than 360° |
| Collapse on the opposite side occurs | en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung) | en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung) |
| Twist occurs | No | No |
| Cascade occurs | No | No |
| en : Faltleinen wurden benutzt | no | no |
| Directional control with a maintained asymmetric collapse | A | A |
| Able to keep course | Yes | Yes |
| 180° turn away from the collapsed side possible in 10 s | Yes | Yes |
| 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 |
| Trim speed spin tendency | A | A |
| Spin occurs | No | No |
| Low speed spin tendency | A | A |
| Spin occurs | No | No |
| Recovery from a developed spin | A | A |
| Spin rotation angle after release | Stops spinning in less than 90° | Stops spinning in less than 90° |
| Cascade occurs | No | No |
| B-line stall | A | A |
| Change of course before release | Changing course less than 45° | Changing course less than 45° |
| Behaviour before release | Remains stable with straight span | Remains stable with straight span |
| Recovery | Spontaneous in less than 3 s | Spontaneous in less than 3 s |
| Dive forward angle on exit | Dive forward 0° to 30° | Dive forward 0° to 30° |
| Cascade occurs | No | No |
| Big ears | A | A |
| Entry procedure | Standard technique | Standard technique |
| Behaviour during big ears | Stable flight | Stable flight |
| Recovery | Spontaneous in less than 3 s | Spontaneous in less than 3 s |
| Dive forward angle on exit | Dive forward 0° to 30° | Dive forward 0° to 30° |
| Big ears in accelerated flight | A | A |
| Entry procedure | Standard technique | Standard technique |
| Behaviour during big ears | Stable flight | Stable flight |
| Recovery | Spontaneous in less than 3 s | Spontaneous in less than 3 s |
| Dive forward angle on exit | Dive forward 0° to 30° | Dive forward 0° to 30° |
| Behaviour immediately after releasing the accelerator while maintaining big ears | Stable flight | Stable flight |
| Alternative means of directional control | A | A |
| 180° turn achievable in 20 s | Yes | Yes |
| Stall or spin occurs | No | No |

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