

DHV TESTREPORT EN926-2:2014



MAC PARA ILLUSION 26

Type designation	MAC Para Illusion 26
Type test reference no	DHV GS-01-2272-17
Holder of certification	MAC Para Technology Ges.m.b.H.
Manufacturer	MAC Para Technology
Classification	B
Winch towing	Yes
Number of seats min / max	1 / 1
Accelerator	Yes
Trimmers	No



BEHAVIOUR AT MIN WEIGHT IN FLIGHT (78KG)

Test pilots



Beni Stocker

BEHAVIOUR AT MAX WEIGHT IN FLIGHT (100KG)



Harald Buntz

Inflation/take-off

A

A

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

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

Landing

A

A

Special landing technique required	No
---	----

No

Speeds in straight flight

A

A

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

Yes
Yes

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

Less than 25 km/h

Control movement

A

A

Symmetric control pressure	Increasing
Symmetric control travel	Greater than 55 cm

Increasing
Greater than 60 cmPitch stability exiting accelerated flight

A

A

Dive forward angle on exit	Dive forward less than 30°
Collapse occurs	No

Dive forward less than 30°
NoPitch 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 en : unmittelbare Verringerung der Drehgeschwindigkeit

Tendency to return to straight flight en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)

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

en : unmittelbare Verringerung der Drehgeschwindigkeit

en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)

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 Entering a turn of less than 90°

Keeping course

Cascade occurs No

No

en : Faltleinen wurden benutzt no

no

en : Symmetrischer Frontklapper mindestens 50% Flügeltiefe

B

A

Entry Rocking back less than 45°

Rocking back less than 45°

Recovery Spontaneous in 3 s to 5 s

Spontaneous in less than 3 s

Dive forward angle on exit Dive forward 30° to 60°

Dive forward 0° to 30°

Change of course Entering a turn of less than 90°

Keeping course

Cascade occurs No

No

en : Faltleinen wurden benutzt no

no

en : Symmetrischer Frontklapper im beschleunigten Flug

B

B

Entry Rocking back less than 45°

Rocking back less than 45°

Recovery Spontaneous in 3 s to 5 s

Spontaneous in 3 s to 5 s

Dive forward angle on exit Dive forward 30° to 60°

Dive forward 30° to 60°

Change of course Entering a turn of less than 90°

Entering a turn of less than 90°

Cascade occurs No

No

en : Faltleinen wurden benutzt no

no

Exiting deep stall (parachutal stall)

A

B

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 30° to 60°

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

B

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

Dive forward 30° to 60°

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 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

B

B

Change of course until re-inflation 90° to 180°

90° to 180°

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

B

Change of course until re-inflation	Less than 90°	90° to 180°
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

B

B

Change of course until re-inflation	90° to 180°	90° to 180°
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 30° to 60°	Dive forward 0° to 30°
Cascade occurs	No	No

Big ears

A

B

Entry procedure	Dedicated controls	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
Recovery	Spontaneous in less than 3 s	Spontaneous in 3 s to 5 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	Dedicated controls	Dedicated controls
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
Stall or spin occurs No

Yes
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