

MAC PARA ARAVIS 17

Symmetric front collapse

Type designation Mac Para Aravis 17 **Type test reference no** DHV GS-01-2663-21

Holder of certification MAC Para Technology

Manufacturer MAC Para Technology

Classification C

Winch towing Yes

Number of seats min / max $\ 1\ /\ 1$

Accelerator Yes

Trimmers No



BEHAVIOUR AT MIN WEIGHT IN FLIGHT (55KG)

Test pilots



Juliette Schönsee

BEHAVIOUR AT MAX WEIGHT IN FLIGHT (70KG)



Josef Bauer

Α

Rocking back less than 45°

Evnert Beni Stocker

Expert	Beni Stocker	
	No release	No release
<u>Inflation/take-off</u>	A	A
Rising behaviour	Smooth, easy and constant rising	Smooth, easy and constant rising
Special take off technique required	No	No
<u>Landing</u>	A	A
Special landing technique required	No	No
<u>Speeds in straight flight</u>	A	В
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	25 km/h to 30 km/h
Control movement	С	c
Symmetric control pressure	Increasing	Increasing
Symmetric control travel	40 cm to 55 cm	40 cm to 55 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	A	A
accelerated flight	<u> </u>	<u> </u>
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 exiting a fully developed spiral dive	A	Α
Initial response of glider (first 180°)	Immediate reduction of rate of turn	Immediate reduction of rate of turn
	: Spontaneous exit (g force decreasing, rate of	Spontaneous exit (g force decreasing,
	turn decreasing)	rate of turn decreasing)
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	Less than 720°, spontaneous recovery

Entry Rocking back less than 45°

	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit		Dive forward 0° to 30°
Change or course Cascade occurs	Entering a turn of less than 90°	Keeping course No
Folding lines used		no
Totaling lines used		110
Unaccelerated collapse (at least 50 % chord)	A	Α
Entra	r Rocking back less than 45°	Rocking back less than 45°
-	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	•	Dive forward 0° to 30°
	Entering a turn of less than 90°	Keeping course
Cascade occurs	-	No
Folding lines used	l no	no
Accelerated collapse (at least 50 % chord)	В	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 30° to 60°	Dive forward 0° to 30°
Change of course	Entering a turn of less than 90°	Keeping course
Cascade occurs		No
Folding lines used	l no	no
Eviting doop stall (named with letall)	A	A
Exiting deep stall (parachutal stall)	±	i
Deep stall achieved		Yes
	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit		Dive forward 0° to 30°
Change or course Cascade occurs	Changing course less than 45°	Changing course less than 45°
Cascade occurs	S INO	No
High angle of attack recovery	A	A
	4	±
Recovery Cascade occurs	r Spontaneous in less than 3 s	Spontaneous in less than 3 s
Cascade occurs	3 NO	No
Recovery from a developed full stall	В	A
Dive fewered and a suit	D' - C 1 200 L - C00	±
		Dive forward 00 to 300
	: Dive forward 30° to 60°	Dive forward 0° to 30° No collapse
Collapse	No collapse	No collapse
Collapse Cascade occurs (other than collapses)	No collapse	
Collapse Cascade occurs (other than collapses) Rocking back	No collapse No	No collapse No
Collapse Cascade occurs (other than collapses) Rocking back	No collapse No Less than 45°	No collapse No Less than 45°
Collapse Cascade occurs (other than collapses) Rocking back	No collapse No Less than 45°	No collapse No Less than 45°
Collapse Cascade occurs (other than collapses) Rocking back Line tension	No collapse No Less than 45° Most lines tight	No collapse No Less than 45° Most lines tight
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Cascade occurs	s No	No
Folding lines used	I no	no
Large asymmetric collapse accelerated	A	B
	<u>i</u>	
Change of course until re-inflation		90° to 180° Dive or roll angle 15° to 45°
Maximum dive forward or roll angle	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course	·	Less than 360°
	No (or only a small number of collapsed cells	No (or only a small number of collapse
conapse on the opposite side occurs	with a spontaneous re inflation)	cells with a spontaneous re inflation)
Twist occurs	s No	No
Cascade occurs	s No	No
Folding lines used	l no	no
Directional control with a maintained asymmetric collapse	A	А
Able to keep course	Yes	Yes
180° turn away from the collapsed side possible in 10 s		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	s No	No
Spin occurs	, 140	110
<u>Low speed spin tendency</u>	A	A
Spin occurs	s No	No
Recovery from a developed spin	Α	В
Spin rotation angle after release	Stops spinning in less than 90°	Stops spinning in 90° to 180°
Cascade occurs	s No	No
B-line stall	A	A
Change of course before release	Changing course less than 45°	Changing course less than 45°
	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	s No	No
<u>Big ears</u>	A	A
Entry procedure	Dedicated controls	Standard technique
Behaviour during big ears		Stable flight
	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	Α
Entry procedure	Dedicated controls	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
Alternative means of directional control	¦A	A
	<u> </u>	
180° turn achievable in 20 s		Yes
Stall or spin occurs	s No	No
Any other flight procedure and/or configuratio	n described in the user's manual	

No other flight procedure or configuration described in the user's manual $% \left(1\right) =\left(1\right) \left(1\right)$