TECHNICAL DATA DHV TESTREPORT LTF DHV TESTREPORT EN DATASHEET PARTS LIST OPERATING INSTRUCTION PRINT





DHV TESTREPORT EN926-2:2005

NOVA TON3 XS

Inflation/take-off

Type designation NOVA Ion3 XS

Type test reference no DHV GS-01-2101-13

Holder of certification NOVA Vertriebsgesellschaft m.b.H.

Manufacturer NOVA Vertriebsgesellschaft m.b.H.

Classification B

Winch towing Yes

Number of seats min / max 1/1

Accelerator Yes Trimmers No





Rising behaviour Smooth, easy and constant rising

Special take off technique required No

<u>Landing</u> A Special landing technique required No

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

Control movement A

Symmetric control pressure Increasing Symmetric control travel Greater than 55 cm

Pitch stability exiting accelerated flight A Dive forward angle on exit Dive forward less than 30°

Collapse occurs No

Oscillations Reducing

Pitch stability operating controls during

accelerated flight Collapse occurs No

Roll stability and damping

Stability in gentle spirals A

Tendency to return to straight flight Spontaneous exit

Behaviour in a steeply banked turn 🎩

Sink rate after two turns 12 m/s to 14 m/s

Symmetric front collapse

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



BEHAVIOUR AT MAX WEIGHT IN FLIGHT (90KG)



Smooth, easy and constant rising

Yes

Yes

Less than 25 km/h

Increasing Greater than 60 cm

Dive forward less than 30°

Reducing

More than 14 m/s

Rocking back less than 45° Spontaneous in less than 3 s Dive forward 0° to 30° Entering a turn of less than 90°

1 von 3 05.02.2014 16:04

Entry Rocking back less than 45°

Entry Rocking back less than 45° Dive forward angle on exit Dro Forward of 10 30° Charge of course (intering a tim of less than 90° Carcaré occurs No Dive forward angle on exit Dro Forward of 10 30° Charge of course (intering a tim of less than 90° Carcaré occurs No Dive forward angle on exit Dro Forward of 10 30° Charge of course Changing course less than 3 5° Dive forward angle on exit Dro Forward of 10 30° Change of course Changing course less than 45° Caccade occurs No Dive forward angle on exit Dro Forward of 10 30° Change of course Changing course less than 45° Caccade occurs No Dive forward angle on exit Dro Forward of 10 30° Changing course less than 3 5° Caccade occurs No Dive forward angle on exit Dro Forward of 10 30° Changing course less than 3 5° Caccade occurs No Dive forward angle on exit Dro Forward of 10 30° Changing course less than 3 5° Caccade occurs (other than collapse) No No Caccade occurs	Symmetric front collapse in accelerated flight	Δ.	В
Recovery Spontaneous in less than 3 s Dive forward angle on exit byte forward or 0 sold of the control of the c	<u>ii</u>	. 4	4
Dive forward angle on exit Dive forward of % to 10° Cascade occurs No Cascade occurs No Cascade occurs No No Cascade occurs No Deep stall actived Yes Receivery Spontaneous in less than 3 s Dive forward on exit Dive forward of % to 10° Change of course Changing course less than 3 s Dive forward on exit Dive forward of % to 10° Change of course Changing course less than 45° Cascade occurs No No Recovery Spontaneous in less than 3 s Dive forward of % to 10° Change of course Changing course less than 45° Cascade occurs No No Recovery Spontaneous in less than 3 s Cascade occurs No No Recovery Spontaneous in less than 3 s Cascade occurs No No Recovery Spontaneous in less than 3 s Cascade occurs No No Recovery Spontaneous in less than 3 s Cascade occurs No No Recovery Spontaneous in less than 3 s Cascade occurs No No Recovery Spontaneous in less than 3 s Cascade occurs No No Recovery Spontaneous in less than 3 s No Recovery Spontaneous re-inflation Total change of course Less than 360° No Recovery Spontaneous re-inflation Total change of course Less than 360° No Recovery Spontaneous re-inflation Total change of course Less than 360° No Recovery Spontaneous re-inflation Total change of course Less than 360° No Recovery Spontaneous re-inflation Total change of course Less than 360° No Recovery Spontaneous re-inflation Less than 90° No Recovery Spontaneous re-inflation Less than 90° No No Recovery Spontaneous re-inflation Less than 360° No No Recovery Spontaneous re-inflation Less than 90° No Recovery Spontaneous re-inflation Less than 90° No No Recovery Spontaneous re-inflation Less than 90° No No Recovery Spontaneous	•		•
Change of course entering a turn of less than 90° No Recovery Spontamenus in less than 3 s Dive forward angle on exit Dive Coverand 0° to 20° Change of course of Changing course less than 3 s Dive forward angle on exit Dive Coverand 0° to 20° Change of course of Changing course less than 45° Changing course less than 3 s Recovery Spontamenus in less than 3 s Recovery Spontamenus in less than 3 s Recovery Spontamenus in less than 3 s Chacade occurs No Recovery Spontamenus in less than 3 s Recovery from a developed full stall A Pure forward angle on exit Dive forward 0° to 30° Collapse (Less than 45°) Collapse (Less than 45°) Line tension Mott lines tipt) Asymmetric collapse 45-50% 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 Spontamenus re-inflation Total change of course less than 300° Collapse on the opposite side occurs No No Cascade occurs No Cascade occurs No Collapse of ourse until re-inflation 09° to 180° Maximum dive forward or roll angle Dive or roll angle 15° to 45° Re-inflation behaviour spontamenus re-inflation Total change of course less than 300° Collapse on the opposite side occurs No No Cascade occurs No Collapse on the opposite side occurs No No Cascade occurs No Collapse on the opposite side occurs No No Cascade occurs No Asymmetric collapse 45-50% in accelerated A Itlight Change of course until re-inflation less than 30° Maximum dive forward or roll angle 10° to 45° Re-inflation behaviour spontamenus re-inflation Total change of course until re-inflation 10° to 45° Re-inflation behaviour spontamenus re-inflation Total change of course until re-inflation 10° to 45° Re-inflation behaviour spontamenus re-inflation Total change of course until re-inflation 10° to 45° Re-inflation behaviour spontamenus re-inflation Less than 30° No No Cascade occurs No No Cascade occurs No No Cascade	_		•
Exiting deep stell (parachutal stell) A	_		
Exiting deep stall (parachutal stall) A A	_		•
Deep stall achieved Yes Recovery Spontaneous in less than 3 s Dive forward anale on exit three forward 0° to 30° Change of course Changing course less than 45° Cascade occurs No No Recovery Spontaneous in less than 3 s Cascade occurs No No Recovery Spontaneous in less than 3 s Cascade occurs No No Recovery Spontaneous in less than 3 s Cascade occurs No No Recovery from a developed full stall Dive forward angle on exit Dive forward 0° to 30° Collapse No collapse Cascade occurs (ether than collapses) No Recovery from a developed full stall A Dive forward angle on exit Dive forward 0° to 30° Collapse No collapse Cascade occurs (ether than collapses) No Recovery from a developed full stall A Dive forward angle on exit Dive forward 0° to 30° Collapse No collapse Cascade occurs (ether than collapses) No Recovery from a developed full stall A A A A A A A A A A A A A A A A A A	Cascade occurs	s No	No
Recovery Spontaneous in less than 3 s Dive forward angle on exit Dive forward for 10 alof Change of course Changing course less than 45° No High angle of attack recovery A A A Recovery Spontaneous in less than 3 s Spontaneous in less than 3 s No Recovery from a developed full stall Dive forward angle on exit Dive forward or 10 alof Collapse No collapse Cascade occurs No No Recking back less than 45° Recking back less than 45° Line tension Most lines tight Asymmetric collapse 45-50% A Change of course until re-inflation less than 30° Collapse on the opposite side occurs No No Asymmetric collapse 70-75% B A Change of course until re-inflation 00° to 180° Maximum dive forward or evil angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Total change of course less than 30° Asymmetric collapse a for course less than 30° Collapse on the opposite side occurs No No Asymmetric collapse 70-75% B A Change of course until re-inflation 00° to 180° Re-inflation behaviour Spontaneous re-inflation Total change of course less than 30° Collapse on the opposite side occurs No No Asymmetric collapse 45-50% A Change of course until re-inflation 00° to 180° Re-inflation behaviour Spontaneous re-inflation Total change of course less than 30° Collapse on the opposite side occurs No No Asymmetric collapse 45-50% in accelerated Re-inflation behaviour Spontaneous re-inflation Total change of course less than 30° Collapse on the opposite side occurs No No Asymmetric collapse 45-50% in accelerated Re-inflation behaviour Spontaneous re-inflation Total change of course less than 30° Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No	Exiting deep stall (parachutal stall)	Α	А
Recovery Spontaneous in less than 3 s Dive forward angle on exit Dive forward for 10 alof Change of course Changing course less than 45° No High angle of attack recovery A A A Recovery Spontaneous in less than 3 s Spontaneous in less than 3 s No Recovery from a developed full stall Dive forward angle on exit Dive forward or 10 alof Collapse No collapse Cascade occurs No No Recking back less than 45° Recking back less than 45° Line tension Most lines tight Asymmetric collapse 45-50% A Change of course until re-inflation less than 30° Collapse on the opposite side occurs No No Asymmetric collapse 70-75% B A Change of course until re-inflation 00° to 180° Maximum dive forward or evil angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Total change of course less than 30° Asymmetric collapse a for course less than 30° Collapse on the opposite side occurs No No Asymmetric collapse 70-75% B A Change of course until re-inflation 00° to 180° Re-inflation behaviour Spontaneous re-inflation Total change of course less than 30° Collapse on the opposite side occurs No No Asymmetric collapse 45-50% A Change of course until re-inflation 00° to 180° Re-inflation behaviour Spontaneous re-inflation Total change of course less than 30° Collapse on the opposite side occurs No No Asymmetric collapse 45-50% in accelerated Re-inflation behaviour Spontaneous re-inflation Total change of course less than 30° Collapse on the opposite side occurs No No Asymmetric collapse 45-50% in accelerated Re-inflation behaviour Spontaneous re-inflation Total change of course less than 30° Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No	Deep stall achieved	l Yes	Yes
Dive forward angle on exit Dive forward or to 30° Change of course Chenging course less than 45° Cascade occurs No No Recovery Spontaneous in less than 3 s Recovery Irom a developed full stall A Dive forward angle on exit Dive forward 0° to 30° Collapse (No collapse) Asymmetric collapse (No collapse) Re-inflation behaviour Spontaneous re-inflation Total Canage of course (Less than 90° Re-inflation behaviour Spontaneous re-inflation Total Canage of course (Less than 360° Collapse on the opposite side occurs No No Cascade occurs (No No No No No Cascade	•		Spontaneous in less than 3 s
Change of course Changing course less than 45° No Cascade occurs No Recovery Spontaneous in less than 3 s Recovery Spontaneous in less than 3 s Recovery Spontaneous in less than 3 s Recovery from a developed full stall A Recovery from a developed full stall A Dive forward angle on exit Dive forward 0° to 30° Collapse No collapse Cascade occurs (other than collapses) No Rocking back Less than 45° Lie tension Most lines tight Asymmetric collapse 45-50% A 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° Cascade occurs No Change of course until re-inflation 0°0 to 180° 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° Less than 360° Asymmetric collapse 70-755% B Change of course until re-inflation 0°0 to 180° 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 No Asymmetric collapse 45-50% in accelerated A Change of course until re-inflation 10°0 to 180° 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° 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° No Coacade occurs No No No Asymmetric collapse 45-50% in accelerated B Change of course until re-inflation 10°0 to 180° 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° No Coacade occurs No No Caccade oc			•
High angle of attack recovery A A	_		Changing course less than 45°
Recovery Spontaneous in less than 3 s Cascade occurs No Calcade occurs No No No No No Calcade occurs (other than collapses) No Calcade occurs (other than collapses) No Rocking back Less than 45° Line tension Most lines tight A Change of course until re-inflation Less than 30° Callapse no collapse (or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Total change of course until re-inflation and poly to roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Less than 360° No Cascade occurs No Cascade occurs No Cascade occurs No Cascade occurs No No No No No Cascade occurs No N	_		
Recovery Spontaneous in less than 3 s Cacade occurs No Cacade occurs No Calcade occurs No Calcage No Collapse No Collapse Cascade occurs (other than collapses) No Rocking back Less than 45° Cascade occurs (other than collapses) No Rocking back Less than 45° Calcage 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° Less than 360° 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° Less than 360° No Cascade occurs No Twist occurs No Cascade occurs No No No No No Cascade occurs No No No Cascade occurs No No Cascade occurs No No No Casc	High angle of attack recovery	ia	Α.
Recovery from a developed full stall A	<u> </u>	-	<u> </u>
Dive forward angle on exit Dive forward 0° to 30°			'
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% A Change of course until re-inflation Less than 90° Maximum dive forward or roll angle 10° to 180° Collapse on the opposite side occurs No Twist occurs No Cascade occurs No Total change of course Less than 360° Collapse on the opposite side occurs No Total change of course Less than 360° Collapse on the opposite side occurs No Total change of course Less than 360° Asymmetric collapse 70-75% B Change of course until re-inflation 90° to 180° Maximum dive forward 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 No Cascade occurs No No Cascade occurs No No Asymmetric collapse 70-75% Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs No No Cascade occurs No No			
Collapse No collapse Cascade occurs (other than collapses) No Rocking back Less than 45° Line tension Most lines tight Asymmetric collapse 45-50% A 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 Asymmetric collapse 70-75% B Change of course until re-inflation 100° to 180° Maximum dive forward or roll angle Dive or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Cascade occurs No No Asymmetric collapse 70-75% B A Change of course until re-inflation 90° to 180° 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 No Cascade occurs No No Asymmetric collapse 45-50% in accelerated Ilight 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° 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 No Cascade occurs No No Ocacade occurs No No No Ocacade occurs No No Ocacade occurs No No No Ocacade occurs No No No Ocacade occurs No No Ocacade occurs No No No No Ocacade occurs No No No No Ocacade occurs No	Recovery from a developed full stall	А	Α
Cascade occurs (other than collapses) No Rocking back Less than 45° Line tension Most lines tight Asymmetric collapse 45-50% A 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 Tvist occurs No Cascade occurs No No Cascade occurs No Collapse Or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Less than 360° No No Cascade occurs No No Collapse on the opposite side occurs No No Collapse on the opposite side occurs No No Cascade occurs No No No No No Cascade occurs No No No No No Cascade occurs No No	Dive forward angle on exit	t Dive forward 0° to 30°	Dive forward 0° to 30°
Rocking back Less than 45° Less than 45° Line tension Most lines tight Most lines tight Asymmetric collapse 45-50% A Change of course until re-inflation Less than 90° Less than 90° Dive or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Spontaneous re-inflation Less than 360° Less than 360° Less than 360° No	Collapse	No collapse	No collapse
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 15° to 45° Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs No No Cascade occurs No Change of course until re-inflation 90° to 180° 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 No Twist occurs No Collapse on the opposite side occurs No Collapse on the opposite side occurs No No Total change of course Less than 360° Collapse on the opposite side occurs No No Asymmetric collapse 45-50% in accelerated flight Change of course until re-inflation Less than 90° Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs No No Asymmetric collapse 45-50% in accelerated flight Change of course until re-inflation Less than 90° Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs No No Cascade occurs No No Asymmetric collapse 70-75% In accelerated B Change of course Less than 360° Collapse on the opposite side occurs No No Cascade occurs No No Cascade occurs No No Cascade occurs No No Occurs of the opposite side occurs No No Cascade occurs No No Occurs of the opposite side occurs No No Cascade occurs No No Cascade occurs No No Occurs of the opposite side occurs No No Occurs of the o	Cascade occurs (other than collapses)	No No	No
Asymmetric collapse 45-50% 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 No Tavist occurs No No Cascade occurs No No Asymmetric collapse 45-50% in accelerated A A Change of course Less than 360° Asymmetric collapse on the opposite side occurs No No Cascade occurs No No Cascade occurs No No Cascade occurs No No Cascade occurs No No Collapse on the opposite side occurs No No Cascade occurs No No Cascade occurs No No Collapse on the opposite side occurs No No Cascade occurs No No No No Cascade occurs No No No No Cascade occurs No No No No No Directional control with a maintained asymmetric collapse A A A A A A A A A A A A A A A A A A	Rocking back	Less than 45°	Less than 45°
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 No Cascade occurs No No Cascade occurs No No Cascade occurs No Cascade occurs No No No Cascade occurs No Cascade occurs No No No No No Cascade occurs No No No No Cascade occurs No No No No Dive or roll angle 15° to 45° Dive or roll angle	Line tension	Most lines tight	Most lines tight
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 No Cascade occurs No No Cascade occurs No No Cascade occurs No Cascade occurs No Cascade occurs No No Cascade occurs No No Cascade occurs No Cascade occurs No No No No Cascade occurs No No No Dive or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° No No Cascade occurs No No No Cascade occurs No No No Dive or roll angle 15° to 45° No No Cascade occurs No No No No Dive or roll angle 15° to 45° No No No Cascade occurs No No No No No Cascade occurs No No No No Dive or roll angle 15° to 45° No No No Cascade occurs No No No No No Dive or roll angle 15° to 45° No	Asymmetric collapse 45-50%	A	A
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 No Twist occurs No Cascade occurs No No Asymmetric collapse 70-75% B Change of course until re-inflation 90° to 180° Collapse on the opposite side occurs No No Asymmetric collapse 70-75% B Change of course until re-inflation 90° to 180° Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs No No Cascade occurs No No Asymmetric collapse 45-50% in accelerated flight Change of course Less than 360° Collapse on the opposite side occurs No No Cascade occurs No No Cascade occurs No No Asymmetric collapse 70-75% in accelerated Collapse on the opposite side occurs No No Cascade occurs No No No No Cascade occurs No No No Cascade occurs No No No No Cascade occurs No No No Cascade occurs No No No No No Cascade occurs No N	<u></u>	Less than 90°	<u></u>
Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs No No Cascade occurs No Cascade occurs No Cascade occurs No No Cascade occurs No Cascade occurs No No Cascade occurs No No Cascade occurs No No Collapse on the opposite side occurs No No No No Cascade occurs No No No Cascade occurs No No Cascade occurs No No Collapse on the opposite side occurs No No Cascade occurs No No Collapse on the opposite side occurs No No Cascade occurs No No No Collapse on the opposite side occurs No No No Cascade occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs No No No Collapse on the opposite side occurs	_		
Total change of course Less than 360° Collapse on the opposite side occurs No No Twist occurs No No Cascade occurs No No No Asymmetric collapse 70-75% B Change of course until re-inflation 90° to 180° Maximum dive forward or roll angle Dive or roll angle 15° to 45° Collapse on the opposite side occurs No No Cascade occurs No No No Cascade occurs No No Cascade occurs No No No Ca	_		
Collapse on the opposite side occurs No No Twist occurs No No Cascade occurs No No Asymmetric collapse 70-75% B A Change of course until re-inflation 90° to 180° Less than 90° Maximum dive forward or roll angle Dive or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs No No Cascade occurs No No Cascade occurs No No Asymmetric collapse 45-50% in accelerated A 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 Spontaneous re-inflation Less than 90° Maximum dive forward or roll angle Dive or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Less than 360° Collapse on the opposite side occurs No No No Twist occurs No No No Cascade occurs No No No Asymmetric collapse 70-75% in accelerated B flight Change of course until re-inflation 90° to 180° Maximum dive forward or roll angle Dive or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Spontaneous re-inflation Total change of course Less than 360° Cascade occurs No No No Cascade occurs No No No Cascade occurs No No No Dive or roll angle 15° to 45° Spontaneous re-inflation Spontaneous re-inflation Spontaneous re-inflation Spontaneous re-inflation Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs No No No Cascade occurs No No No Directional control with a maintained symmetric collapse			·
Twist occurs No Cascade occurs No	_		
Cascade occurs No Asymmetric collapse 70-75% B Change of course until re-inflation 90° to 180° 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 Maximum dive forward or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Total change of course until re-inflation Less than 360° Asymmetric collapse 45-50% in accelerated A 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 Cascade occurs No No Cascade occurs No No Asymmetric collapse 70-75% in accelerated B flight Change of course until re-inflation 90° to 180° Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs No No Asymmetric collapse 70-75% in accelerated B flight Change of course until re-inflation 90° to 180° Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs No No Cascade occurs No No Collapse on the opposite side occurs No No Collapse on the opposite side occurs No No Collapse on the opposite side occurs No No Cascade occurs No No No Cascade occ			
Change of course until re-inflation 90° to 180° 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 No Twist occurs No Cascade occurs No No Cascade occurs No Maximum dive forward or roll angle Dive or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Cascade occurs No No Asymmetric collapse 45-50% in accelerated A 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° Asymmetric collapse 70-75% in accelerated B Change of course until re-inflation 90° to 180° 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° No No Asymmetric collapse 70-75% in accelerated B B Change of course until re-inflation 90° to 180° Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Less than 360° Less than 360° No No Ordination that the description of the proposite side occurs No No No Twist occurs No No No Ordination that the description of the proposite side occurs No No No Twist occurs No No No Ordination that a maintained asymmetric collapse			
Change of course until re-inflation 90° to 180° 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 No Twist occurs No Cascade occurs No No Cascade occurs No Maximum dive forward or roll angle Dive or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Cascade occurs No No Asymmetric collapse 45-50% in accelerated A 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° Asymmetric collapse 70-75% in accelerated B Change of course until re-inflation 90° to 180° 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° No No Asymmetric collapse 70-75% in accelerated B B Change of course until re-inflation 90° to 180° Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Less than 360° Less than 360° No No Ordination that the description of the proposite side occurs No No No Twist occurs No No No Ordination that the description of the proposite side occurs No No No Twist occurs No No No Ordination that a maintained asymmetric collapse	Accommodation colleges 70, 75%	in.	: <u>*</u>
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° Less than 360° Collapse on the opposite side occurs No No Twist occurs No Cascade occurs No No Asymmetric collapse 45-50% in accelerated A 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 No Twist occurs No Cascade occurs No No Asymmetric collapse 70-75% in accelerated B Change of course until re-inflation 90° to 180° Maximum dive forward or roll angle Dive or roll angle 15° to 45° Spontaneous re-inflation No Cascade occurs No No Cascade occurs No No Collapse on the opposite side occurs No No Cascade occurs No No Collapse of course until re-inflation 90° to 180° 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° Less than 360° Less than 360° Less than 360° No Total change of course Less than 360° Less than 360° Less than 360° Less than 360° No Total change of course Less than 360° Less than 360° Less than 360° No Total change of course Less than 360° Less than 360° No Total change of course Less than 360° Less than 360° No Total change of course Less than 360° No Total change of the opposite side occurs No No No Total change of the opposite side occurs No No No Total c	İ	.1	J
Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Less than 360° No Collapse on the opposite side occurs No No Cascade occurs No No Cascade occurs No No Cascade occurs No No Cascade occurs No No 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° Less tha	_		
Total change of course Less than 360° Collapse on the opposite side occurs No Twist occurs No Cascade occurs No No Asymmetric collapse 45-50% in accelerated A 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 No Cascade occurs No No No Collapse on the opposite side occurs No No Cascade occurs No No Cascade occurs No No Cascade occurs No No No Cascade occurs No No No Change of course until re-inflation 90° to 180° No 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 No Twist occurs No No Cascade occurs No No Directional control with a maintained asymmetric collapse	_	_	
Collapse on the opposite side occurs No No Twist occurs No No Cascade occurs No 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 No Twist occurs No No Cascade occurs No No Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° 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 No Cascade occurs No No Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° 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 No Twist occurs No No Cascade occurs No No Directional control with a maintained asymmetric collapse			
Twist occurs No Cascade occurs No No No No Resymmetric 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 No Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° Maximum dive forward or roll angle Dive or roll angle 15° to 45° Dive or roll angle 15° to 45° Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° 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 No Twist occurs No No Cascade occurs No No Directional control with a maintained asymmetric collapse Directional control with a maintained asymmetric collapse			
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 90° to 180° 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 No Cascade occurs No No Dive or roll angle 15° to 45° Dive or roll angle 15° to 45° Spontaneous re-inflation Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs No No Cascade occurs No No Directional control with a maintained asymmetric collapse A			
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 No Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° 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 No Twist occurs No Collapse on the opposite side occurs No No Twist occurs No No Cascade occurs No No Dive or roll angle 15° to 45° Dive or roll angle 15° to 45° Dive or roll angle 15° to 45° No No Collapse on the opposite side occurs No No Cascade occurs No No Dive or roll angle 15° to 45° No Dive or roll angle 15° to 45° No No Cascade occurs No No Dive or roll angle 15° to 45° No No Cascade occurs No No Dive or roll angle 15° to 45° A			
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 Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° Maximum dive forward or roll angle Dive or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation No Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° 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 No Directional control with a maintained asymmetric collapse	Cascade occurs	5 NO	NO
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 No Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° 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° B Collapse on the opposite side occurs No No Cascade occurs No No Directional control with a maintained asymmetric collapse A	The state of the s	A	A
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 No Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° 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 No Twist occurs No Cascade occurs No No Directional control with a maintained asymmetric collapse A Directional control with a maintained asymmetric collapse		Less than 90°	Less than 90°
Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs No No Twist occurs No Cascade occurs No No Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° 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 No Twist occurs No Cascade occurs No No Directional control with a maintained asymmetric collapse A A A A			
Total change of course Less than 360° Collapse on the opposite side occurs No Twist occurs No Cascade occurs No No Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° 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 No Directional control with a maintained asymmetric collapse A Less than 360° No No No A A	_		•
Collapse on the opposite side occurs No Twist occurs No Cascade occurs No No Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° 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 No Directional control with a maintained asymmetric collapse A No No No A A		•	•
Twist occurs No Cascade occurs No No Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 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 Total change of course Less than 360° Collapse on the opposite side occurs No Twist occurs No Cascade occurs No No Directional control with a maintained asymmetric collapse A A	_		
Cascade occurs No Asymmetric collapse 70-75% in accelerated flight Change of course until re-inflation 90° to 180° 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 A B B B Change of course until re-inflation 90° to 180° Pive or roll angle 15° to 45° Spontaneous re-inflation Spontaneous re-inflation No No No A A			
Change of course until re-inflation 90° to 180° 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 No Directional control with a maintained asymmetric collapse			
Change of course until re-inflation 90° to 180° 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 No Directional control with a maintained asymmetric collapse	1	1	:
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 No Directional control with a maintained asymmetric collapse		В	В
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 No Directional control with a maintained asymmetric collapse A Spontaneous re-inflation Less than 360° No No A	Change of course until re-inflation	90° to 180°	90° to 180°
Total change of course Less than 360° Collapse on the opposite side occurs No Twist occurs No Cascade occurs No No Directional control with a maintained asymmetric collapse A Less than 360° No No A	Maximum dive forward or roll angle	Dive or roll angle 15° to 45°	Dive or roll angle 15° to 45°
Collapse on the opposite side occurs No Twist occurs No Cascade occurs No No Directional control with a maintained asymmetric collapse A	Re-inflation behaviour	Spontaneous re-inflation	Spontaneous re-inflation
Collapse on the opposite side occurs No Twist occurs No Cascade occurs No No Directional control with a maintained asymmetric collapse A	Total change of course	Less than 360°	
Twist occurs No No Cascade occurs No No Directional control with a maintained asymmetric collapse A A	Collapse on the opposite side occurs	s No	No
Directional control with a maintained asymmetric collapse			No
asymmetric collapse A	Cascade occurs	s No	No
asymmetric collapse A	Directional control with a maintained	1	
Able to keep course Yes Yes		Α	Α
		V.	V

2 von 3 05.02.2014 16:04

180° turn away from the collapsed side possible in 10 s		Yes
Amount of control range between turn and stall or		More than 50 % of the symmetric control travel
Trim speed spin tendency	A	A
Spin occurs	No	No
Low speed spin tendency	A	Α
Spin occurs	No	No
Recovery from a developed spin	A	Α
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	Α
	Remains stable with straight span	Changing course less than 45° Remains stable with straight span
Recovery Dive forward angle on exit Cascade occurs		Spontaneous in less than 3 s Dive forward 0° to 30° No
Big ears	В	В
Entry procedure	Dedicated controls	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
-	Spontaneous in 3 s to 5 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
-	Spontaneous in 3 s to 5 s	Spontaneous in less than 3 s
Dive forward angle on exit Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	Dive forward 0° to 30° Stable flight
Behaviour exiting a steep spiral	A	A
Tendency to return to straight flight	Spontaneous exit	Spontaneous exit
Turn angle to recover normal flight	·	Less than 720°, spontaneous recovery
Sink rate when evaluating spiral stability [m/s]	14	14
Alternative means of directional control	Α	A
180° turn achievable in 20 s	Yes	Yes
Stall or spin occurs	NI -	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 $% \left(1\right) =\left(1\right) \left(1\right)$

by jursaconsulting

3 von 3 05.02.2014 16:04