



Report of the CIVA Safety Working Group (SWG) Zoom meeting

Held on
25th of February 2026

Participants

Hanspeter Rohner HPR
Tamas Abranyi TA
Pierre Varloteaux PV
Keith Doyne KD
Geoffrey Brice Denis BD
Maurizio Costa MC
Poul Nielsen PN
Tom Cassels TC (Chairman British Aerobatics)
Patrick Paris PP
Hanna Rähkä HR (CIVA Secretary)

Agenda:

1. Welcome and introduction to new members and visitors
2. Towing safety at WGAC / WGAAC
3. Safety report by the French accident investigation bureau BEA
 - Description of damage and cause to rudder on Extra 330SC
 - Concerns about exceeding VA
4. Safety issues with certain figures
5. Canopy safety
6. Discussion
7. Action plan
8. Scheduling next meeting

1. Welcome and start of the meeting

Report SWG Zoom Meeting of 25 February 2026

Introduction of one new member to the CIVA Safety Working Group and welcome to two observers:

- Geoffrey Brice Denis (France) new member replacing Victor Lalloué of France
- Tom Cassels (Chairman of British Aerobatics)
- Hanna Rähä (CIVA Secretary)

2. Towing Safety at WGAC / WGAAC

The SWG has marked safety when towing gliders for competition flights at CIVA championships as a risk area, based on towing incidents during the previous 2 years. During the last CIVA Plenary in November 2025 the SWG asked for specific attention to towing safety during the next WGAC / WGAAC 2026 in Fayence, France.

HPR was in contact with Manuel Manu Foulon who is the CD for this championship.

Manu has a first meeting with the local organizing team in March 2026 and he will inform the SWG of their towing safety plans.

HPR will contact Manu Foulon later in March.

To assist the championship team to come up with good towing safety plan:

- KD will assist
- HPR will call Eugen Schaal for advice

3. Report of the French State Flight Safety Investigation Board BEA-E

Report No. A-2024-02-I concerns damage to the rudder of an Extra 330SC observed after a training flight on 12 February 2024, executed by the French Air and Space Force Aerobatic Team (EVAAE).

The report also discusses concerns over exceeding VA in certain configurations.

All participants received the report prior to the Zoom meeting. It is also be downloaded from CIVA News. See Appendix B.

Damage to the rudder:

- 60 cm crack on the left side of the rudder, continuing on the bottom flat of the rudder, visible delamination of the rudder skin.
- According to the investigation (see report), the damage to the rudder is the result of excessive asymmetric mechanical stress of the bending type (bending of the rudder « from left to right ») putting the inner skin of the left panel of the rudder under compression, during tail slides.

SWG discussion:

- Since the introduction of flick rolls (any type) on the vertical up leg before the tail slide, training of tail slides has increased dramatically because of the difficulty of this figure when it includes a flick roll.

SWG recommended actions:

○ **Consider rule change in SP Section 6 Part 1:**

1. Immediately suppress flicks on the up line before tail slides until clear action plan from the manufacturer
2. Once the position of the manufacturer is clear, a rule change proposal will be issued by the SWG

○ **Training and coaching:**

1. Pilots should read this report and discuss with their coaches.
2. Pay particular attention to rudder movements during reverse flight of the tail slide. Hitting the rudder stops (left or right) with high force during the reverse flight path will cause (possibly invisible) damage to the rudder itself (see report), to the stops, the hinges, the vertical stabilizer or to the tail section of the fuselage.
3. Review judging criteria of this figure, excessive reverse flight length is not required for good marks.

- **Inspection of the rudder before and after flight (not exhaustive):**
 1. Check rudder stops.
 2. Check integrity of full rudder movements, hinges, stops, solidness of rudder panel.
 3. Inspect for cracks in paint, right and left side of the panel, flat lower part, edges rear and top.
 4. Tap the complete rudder panel to detect potential delamination.
- **To manufacturer:**
 1. Review rudder integrity in view of hugely increased training frequency of complex tail slides (with or without flick rolls on the vertical up section). If necessary, issue SB.
 2. Publish:
 - Pre and post flight inspection procedures
 - Maintenance procedures, 25, 50, 100 or yearly, 1000 hours
- **Judging criteria and judges training:**
 1. Discuss this report with judges
 2. Re-iterate judging criteria and marks for tail slides
 3. PV will send letter to judges accordingly

VA: Full deflection of the ailerons beyond manoeuvring speed:

- The BEA-E report also discusses repeated full deflection of **ailerons** above VA.
- No reported excess of VA with **rudder nor elevator**.
- **SWG recommended actions:**
 - Extra has been informed via the BEA report and is in contact with EVAAE.
 - Wait for answer of Extra.
 - In the meantime, remind pilots to stay within the limits indicated in the POH of their aerobatic aircraft.

4. Safety Issues with certain figures

Patrick Paris has highlighted that certain figures are a potential safety hazard.

In addition to the intense training of Tail slides with snaps in the up line, the introduction of two snaps per figure and $\frac{3}{4}$ positive and negative snaps on 45° up and down lines, P-loops and other figures have created situations, where following safety issues could arise:

- Snaps with over speed
- Too low exit in diagonal humpty bumps
- Accidental secondary snap after a $\frac{3}{4}$ snap followed by aileron roll on 45° down line
- Tail slide induced rudder damage
- Pilot inner ear damage in negative push-up figures with 2 snaps or snaps in the up line

Patrick and Pierre have worked on a table with the figures in question. The table is added to this report as Appendix A.

The table also lists recommended or urgent actions by:

- Pilots (training, pre and post flight plane inspection)
- Manufacturer (technical or inspection/maintenance solution)
- CIVA (Section 6, Part 1 urgent or changes or Plenary proposals)

The table will be sent to Delegates for comments.

The SWG will then finalize the table and formulate a proposal to Delegates. Urgent actions will be implemented immediately with Delegate's approval. The full SWG proposal will go to Plenary.

5. Canopy Safety

Already last year, the SWG has informed pilots and Delegates of repeated issues with unintentional canopy openings. Research showed that canopy accidents were ranging from catastrophic (fatality), major airplane damage to light airplane damage.

During the German Open in Dinslaken in June 2025, Walter Extra showed to HPR the project of a device which will indicate if the canopy is securely locked or not. This installation will be retrofittable. We are expecting a Service Bulletin from EXTRA.

HPR will ask EXTRA of the status of this modification.

An Excel file with a list of canopy accidents can be found on CIVA News Safety tab:

<https://www.civanews.com/civa-safety-working-group/> under Safety reports.

6. Discussion - Other Topics

Two additional points were discussed:

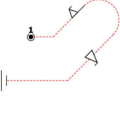
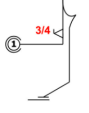
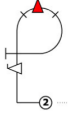
- Airspace safety at aerobatic competitions or championships:
 - o TC explained that in the UK, RA(T)'s, Restricted Area (Temporary), are systematically published for aerobatic contests and championships.
 - o EASA has the same facility for Temporary Restricted Areas
 - 1. Switzerland has also used RA(T) during their 2025 Nationals
 - 2. It is published together with a NOTAM
 - 3. Has proven to be more effective than just a NOTAM
 - o The SWG recommends using Temporary Restricted Areas for all aerobatic competitions and championship
- Safety and Emergency Response Plans during CIVA championships:
 - o KD confirmed that the WAC 2026 Organizer has worked out a detailed Emergency Response Plan
 - 1. KD please publish the plan in the CIVA News Safety tab via Nick Buckenham

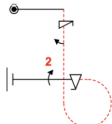
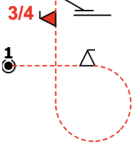
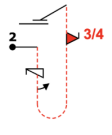
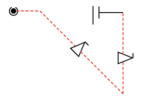
7. Summary of actions

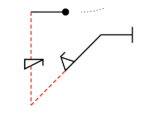
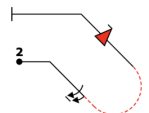
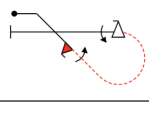
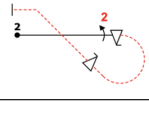
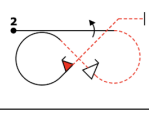
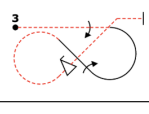
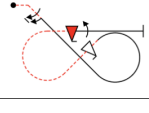
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|---|----------------------|
| - Follow-up on towing safety with Manuel Foulon | HPR |
| - Ask Eugen Schaal for advice in towing safety | HPR |
| - BEA report follow-up | |
| o Training and coaching tail slides with flicks up | All pilots+coaches |
| o Rudder inspection pre-flight post-flight | All pilots |
| o Technical solution, maintenance and inspection procedures | Manufacturer |
| o Tail slide judges criteria | PV |
| o Exceeding VA | All pilots |
| o Note to Manufacturer wrt VA excess on ailerons | HPR |
| - Safety issues with certain figures: | |
| o Table to Delegates | HPR |
| o Final review | SWG |
| o Approval by Delegates for immediate actions | HPR |
| o Full proposal for Plenary | HPR/SWG |
| - Canopy safety: E-mail to EXTRA | HPR |
| - Airspace safety at competitions and championships | Organizers/Delegates |
| - Publish Emergency response plan of WAC 2026 USA | KD |

8. Appendices

Appendix A

FIGURES WITH SAFETY ISSUES									
1 - FIGURES THAT CAN CAUSE DAMAGE TO THE PLANE								SWG conclusions	
	Description	Ref. Aresti (Line)	Example	Comments SWG / Issues	Action by pilots	Technical solution	Action by CIVA	REC.	URG
1.1	Diagonal humpty bump starting upward with flicks downward	8.4.15.1. 8.4.15.2. 8.4.16.1. 8.4.16.2. 8.4.17.1. 8.4.17.2 8.4.18.1. 8.4.18.2.		The line may flatten out after the upward rotation. - Excessive speed when exiting the loop to flick - Exit altitude from the maneuver (too low)	Training + coaching	NIL	Limit to one flick per figure in this configuration		X
1.2	Tailslide after a flick	All 6.2		With a long reverse line downward (speed ++), the rudder can be seriously damaged (See BEA report, etc)	Inspection after a flight with tailslides + report BEA to read	Specific inspection procedure by the manufacturer	Recommendation to pilots for training and inspection + information to judges for tailslide criteria. Consider suppression of snaps on the up line before tail slide (temporary or permanent)	X	
1.3	VA	-	-	-	Respect VA limitations as per POH	Waiting for Extra decision / report	...	-	-
1.5	P-Loop starting upward with one flick on the vertical line and one flick at the top	8.6.1.1. 8.6.1.2. 8.6.2.1. 8.6.2.2. 8.6.3.1. 8.6.3.2. 8.6.4.1. 8.6.4.2.		Necessity to have high speed to perform the first flick and to have enough energy to perform the second one, with a risk of overspeed for the first flick	NIL	NIL	One flick only for the listed P-loops from 8.6.1.1. to 8.6.4.2.		X

2 - FIGURES THAT CAN DAMAGE THE PILOT'S INNER EAR								SWG conclusions	
	Description	Ref. Aresti (Line)	Example	Comments SWG / Issues	Action by the pilots	Technical solution	Action by CIVA	REC.	URG
2.1	Negative P-Loops starting with vertical down line	8.6.1.3. 8.6.2.3. 8.6.3.4. 8.6.4.4.		Such figure can deeply damage the pilot's inner ear	NIL	NIL	No snap (only aileron roll) in roll elements after negative loop		X
2.2	Negative P-Loops starting with downward negative loop	8.6.5.3. 8.6.6.3. 8.6.7.4. 8.6.8.4.		Such figure can deeply damage the pilot's inner ear	NIL	NIL	Limitation on the upward line: 270° aileron roll		X
2.3	Downward negative Humpty-bumps	8.4.1.3. 8.4.2.3. 8.4.3.4. 8.4.4.4.		Such figure can deeply damage the pilot's inner ear	NIL	NIL	Limitation on the upward line: 270° aileron roll		X
2.4	Two lines with push at the bottom to vertical up or 45° up	1.2.1.4. 1.2.2.4. 1.2.3.3. 1.2.4.3.		Such figure can deeply damage the pilot's inner ear	NIL	NIL	Limitation on the upward line: 270° aileron roll		X

2.5	Two lines with push at the bottom to 45° up	1.2.5.3. 1.2.6.4. 1.2.7.3. 1.2.8.4.		Such figure can deeply damage the pilot's inner ear	NIL	NIL	Limitation: 360° aileron roll, with 2 stops max		X
2.6	Diagonal humpty-bump starting downward followed by negative loop portion	8.4.15.3. 8.4.16.3. 8.4.17.4. 8.4.18.4.		Such figure can deeply damage the pilot's inner ear	NIL	NIL	Limitation: 360° aileron roll, with 2 stops max		X
2.7	Half Cubans starting downwards followed by negative loop portion	8.5.1.4. 8.5.2.3. 8.5.3.4. 8.5.4.3.		Such figure can deeply damage the pilot's inner ear	NIL	NIL	No snap (only aileron roll) in roll elements after negative loop		X
2.8	Half Cubans starting downwards followed by negative loop portion	8.5.5.3. 8.5.6.3. 8.5.7.4. 8.5.8.4.		Such figure can deeply damage the pilot's inner ear	NIL	NIL	Limitation: 360° aileron roll, with 2 stops max		X
2.9	Horizontal "8"s starting with downward negative loop portion	7.8.1.3. 7.8.2.3. 7.8.5.1 7.8.7.2.		Such figure can deeply damage the pilot's inner ear	NIL	NIL	Limitation to the 45° up line in the first loop: 360° aileron roll, with 2 stops max		X
2.10	Horizontal "8"s with second loop negative	7.8.1.4. 7.8.2.4. 7.8.5.3.		Such figure can deeply damage the pilot's inner ear	NIL	NIL	Limitation to the 45° up line in the second loop: 360° aileron roll, with 2 stops max		X
2.11	Horizontal "8"s with second loop negative	7.8.7.4.		Such figure can deeply damage the pilot's inner ear	NIL	NIL	No snap (only aileron roll) in roll elements after the second negative loop		X

Appendix B



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FRENCH STATE FLIGHT SAFETY INVESTIGATION BOARD

INVESTIGATION REPORT



A-2024-02-1

Event date	February 12 th 2025
Place	Salon-de-Provence (France)
Type of aircraft	Extra 330 SC
Organization	French Air and Space Force







The full report can be found on CIVA News Safety tab: <https://www.civanews.com/civa-safety-working-group/> under Safety reports.

- End of Report -