

Basic requirements for CP Scoring system

or how to fix Omniscore before use at the next FCE

Lessons learnt during the WC Eloy 2023

CP judging system should:

1. Be a **stable software** that has been updated **in accordance with the latest rules** and any updates or changes have been completed and tested in time. Should software not be ready, there should be an option to impose on organiser change to working and tested solution.
2. Be a software with clear hardware requirements, full version installed on on main and on one **backup** computer.
3. Be checked by the CP Committee ample time before the FCE for implementation of changes required by rules. **All functionality needs to be compliant with current rules.**

CP judging system should:

- 4. Not be modified or updated during the competition**, unless fatal errors occur. No fancy upgrades during the competition should be allowed.
- 5. Not allow for switching between software versions during the competition.**
6. CP Scoring Technical Director responsible during competition should be confirmed the latest before publication of Bulletin 1. This person should be skilled or trained in the use of the software and have full knowledge and understanding of canopy piloting discipline.

Other important information:

7. **Scoresheets** generated by the system and used by judges to capture scores **should have required information.**
8. System should be able to generate “completed” scoresheets, as captured in the system for **double checking before publication of scores and results.**
9. All scoresheets and results pages should have the same information - competitor number, name and country.
10. **Final scores and results should be immediately available on the ISC official results page.** This page takes priority over the other pages.

Detailed notes
on problems and suggestions to
implement changes

Software needs to be stable

Judging software needs to be **tested before the competition and confirmed by the developer to be ready with yearly updates** (based on latest changes to the competition rules). Any changes required needs to be done before the start of the competition. There is ample time between the publication of the new rules and FCE.

Judging system needs to be stable and not requiring constant modifications. Obviously if there are any errors, attention is needed. Only fatal errors need to be attended to.

Suggestion:

System developer should report to CJ and Judges Committee maximum two months before the competition confirming relevant changes have been applied. If changes have not been applied, the decision of way forward should be discussed between CJ, Judges Committee and CP Committee allowing for use of backup software (other software).

Explanation:

I have been in contact with Ted Wagner regarding readiness of the system from the moment of appointment as CJ. I was ensured that required changes have been applied. It appeared that I was misled and required changes were not done far in advance.

In addition, software was constantly worked on during the competition – this led to breaking the code that was correct and working and that needing to fix again.

Software and hardware

Judging software needs to be able to be installed on any computer and can be operated by any person that is trained to capture the scores.

If there is a hardware requirement – software producer needs to specify these requirements in advance for organiser to be able to purchase or rent required hardware.
Simple manual operational manual needs to be created in case the person that has been appointed to capture the scores becomes temporarily unavailable.

Backup computer available in case of operating system error or hard disc malfunction.

Backups done after each round or each day online.

Suggestion:

Backup machine - this is how often completions are run in other disciplines. My experience as MD and CJ in other events proved it is crucial to have a backup hardware for each piece of equipment.

Explanation:

Current CP version of omniscore is relying on Ted Wagner and his computer only.
For one of another reason any of the two is unavailable, non-functioning, implications to running the FCE competition is affected.
If there is a printing error or computer-printer communication error, there is no easy alternative solution.

Accordance to the rules

It is of the most importance that software first fulfils all the requirements of current rules. That is the base of the software. Any additional “nice” functionality should not take privilege over the core of the software.

Any software with obvious deviations from the rules, should be required to implement the change before allowed to be used at the next FCE. This ideally to be monitored by the joint forces of Judges Committee and Canopy Piloting Committee.

Examples of rules not implemented:

Disqualified competitor according to rule 5.6.5 – all results achieved in the competition have to be removed and competitor needs to be marked “disqualified” and listed in the ranking list after all competitors.

Omniscore did not have that functionality. Disqualification of competitor only created a score of the zero. Additional development of the software during the competition required moving the competitor to the end of the list and removing any result. Red card (also yellow card) had to be marked by hand on printout. Changes have been made the next day. But each change to the system, caused other parts of the system not work.

Other example - Canopy Formations

I am pointing this, as it clearly shows lack of understanding rule requirements. Another example from another discipline – Canopy Formations rule 2.11 Working Time: “...If the judges cannot determine the working time from the video footage submitted, the following procedure will be followed. The Event Judge will determine the closest approximation to the working time and begin the chronometer and a penalty...”

Omniscore “nice” functionality is allowing for Event Judge to select the judge whose start of the working time is counted. However, the Event Judge cannot start the working time in accordance with the rules, as stated in 2.11.



11th FAI World Cup of Canopy Piloting, Eloy, AZ, 2023
Canopy Piloting - Speed - Current Standings

Rank	Pilot	Speed						Total
		Round 1		Round 2		Round 3		
		sec	pts	sec	pts	sec	pts	
46	Thomas Perdula (CZE)	5.313	31.354	5.048	30.691			62.045
47	Jean-Philippe Bernier (CAN)	3.281	59.614					59.614
48	Klas Ramsay (FIN)	0.000	3.000	3.247	55.264			58.264
49	Philip Webley (GBR)	3.551	53.647	4.334	3.000			56.647
50	Christian Bonaldo (ITA)	3.473	55.259	0.000	0.000			55.259
51	Darcy King (USA)	0.000	3.000	3.509	49.831			52.831
52	Giuseppe Crott (ITA)	3.651	51.699	0.000	0.000			
53	Juha-Matti Sironen (FIN)	3.676	51.234	0.000	0.000			
54	Christopher Good (GBR)	0.000	0.000	3.445	51.076			
55	Nicholas Robinson (GBR)	3.820	48.676	0.000	0.000			
56	Bhakta Nall (IND)	0.000	0.000	4.880	32.104			
57	Sebastian Dratwa (POL)	0.000	0.000	0.000	0.000			

Disqualified competitor with red card.
Omniscore did not comply with competition rules and calculated competitor as he was competing.
This error obviously affects other competitors scores.

Version control

Once all updates to the system are applied in accordance with rule changes, the version of the software should be officially confirmed and used as the only version of that system.

It should not be allowed to switch between versions of the software during the competition or even in the middle of the round.

Suggestion:

Software developers have obligation to keep the official version update history published. This should be available for everyone to view.

Developer of the system used during the FCE should have set time to implement and publish changes - for example within 3 months from publication of the rules.

Explanation:

During the World Cup, code from different events have been implemented to the actual version run during the competition.

The basic rule that one line of code, creates ripple effect has been clearly visible.

Changes to the code were made in the middle of the round - for example to older version or specially to special version like World Games version and back.

Scoresheets design

Canopy Piloting judges require scoresheets printed from the system. These need to be attached to the clipboard and easy for judges to fill out on the move.

Ideal scoresheet is the one, that gives enough of space per competitor to write a score. While most of judges will only write their own position score (for example making or not making a gate, zone number or distance), Event Judge and scorers will capture results from all judges. This is why it is important to have space to write all required information.

There needs to be space for judge's name and position (for example G1, G2... zones, etc). Ideal space for that is right top corner – so CJ after collecting all scoresheets can easily search, if needed.

Explanation:

I was informed by some judges, that in previous competitions scoresheets were hard to use, as very little space. Samples were sent to me via email and I have noticed that they all are printed on vertical page. However, judges were right – the space for writing was small. I have asked if there is an option to print out the scoresheets vertically. This was agreed and tested during the OPP. However, the unnecessary margin on the bottom was still big. Ted Wagner decided to implement “fun changes” and started on working on printing judge's name on top of the page (without my approval).

This functionality would not make judge's performance any better – we would need much more time to pick the right scoresheets that are meant for specific judges.

However, working on the system caused an error and scoresheets were no longer printed as during the OPP, but vertical.

Judge Name: LIZ - OC - PRACTICE

Speed Score Sheet - Round 1

Competitor	Entry (G1)	G2	G3	G4	G5	Time	DQ	Reason	Notes
Plane 1									
Pass 1									
1									
2									
3									
4									
Pass 2									
5									
6									
7									
8									
Pass 3									
9									
10									
11									
12									
Pass 4									
13									
14									
15									
16									
Pass 5									
17									
18									
19									
20									

Scoresheets during the OPP.

Easier to write for judges. However, empty space on the bottom of the page is not necessary. Rows should have been made higher (as requested months before competition).

Judge Name: Jani

2 rej, 7/83

Speed Score Sheet - Round 1

Competitor	Entry (G1)	G2	G3	G4	G5	Time	DQ	Reason	Notes
Plane 1									
Pass 1									
1 Darcy King									
2 Taras Zdoroviy									
3 Giuseppe Crott									
4 Cameron Puttee									
5 Bhakta Nall									
Pass 2									
6 Sergei Fedotov									
9 V Prib									
7 Jean-Philippe Bernier									
8 Thomas Perdula									
10 Philip Webley									
Pass 3									
13 Curtis Taylor									
14 Jeannie Bartholomew									
11 Jesse Weyher									
15 Miles Cottman									
12 Luke Currow									
Pass 4									
19 Roman Dubsky									
20 Nicholas Satsch									
18 Mark Rahbani									
16 Robyn Jandie									

Scoresheets during the Competition.

Less convenient to judges.

Information printed

Scoresheets need to be in jump order, **showing competitor number, name and country.**

Other systems allow for capturing the colour of the canopy and publish both colour of the canopy (different per event) and country code. That helps judges if there is malfunction or competitors in wrong order. It is what we are used to as judges, but not a requirement.

Printing only part of the information is explained further in this document.

Suggestion to the organiser:

It is wise to select fast printer, have plenty of backup cartridge and chose one that does not smudge. Specially during the distance, when judges run holding scoresheets, rubbing on clothing was making scoresheets unreadable.

Next page shows problems while selecting wrong printer.

Judge Name: Lauren Foster

Competitor	Entry (G1)	G2	G3	G4	G5	Time	DQ	Reason
Plane 1								
Pass 1								
1 Darcy King						3.509		✓
2 Taras Zdorovik						3.431		✓
3 Marjorie Court	ME					NT		
4 Cameron Puttce						3.499		✓
5 Shakti Mall						4.880		✓
Pass 2								
6 Sargei redotov						3.761		✓
9 V Prio						2.701		✓
7 Jean-Philippe Bernier	Rd2:					3.281		✓
8 Thomas Peroula						5.048		✓
10 Philig Webley						4.334	VE	
Pass 3								
13 Curtis Taylor						2.019 ^{not correct} 2.664		✓
14 Jesse Weyher						3.334		✓
21 Jesse Weyher						2.355		✓
15 Miles Cottman						2.879		✓
12 Luke Curnow						3.521		✓
Pass 4								
19 Roman Dubsky						2.865		✓
20 Nicholas Batsch						2.537		✓
18 Mark Rahbani						3.240		✓
16 Robin Jandle						2.777		✓

9 V Prio						2.701		✓
7 Jean-Philippe Bernier	Rd2:					3.281		✓
8 Thomas Peroula						5.048		✓
10 Philig Webley						4.334	VE	
Pass 3								
13 Curtis Taylor						2.019 ^{not correct} 2.664		✓
14 Jesse Weyher						3.334		✓
21 Jesse Weyher						2.355		✓
15 Miles Cottman						2.879		✓
12 Luke Curnow						3.521		✓
Pass 4								
19 Roman Dubsky						2.865		✓
20 Nicholas Batsch						2.537		✓
18 Mark Rahbani						3.240		✓
16 Robin Jandle						2.777		✓

Unreadable information

Captured scores

After scores have been captured, judges need to verify that the scores have been captured correctly. Scoresheets with full information should be generated from the system. Option to show negative (only missed gates shown) or positive (only made gates shown) should be part. For judges would be easier to use the negative scores, but to publish final information for competitors would be the positive.

After the captured scores have been verified and all capturing scores have been corrected, the final results can be printed, signed by CJ and published.

Omniscore does not allow for printing details of captured scores, as it can ONLY print the FINAL score and final result.

Receiving final scores and results without details gives judges two options – to accept without checking details or using manual calculation to determine that the score applied is correct.

That meant that for each of the classic events, judges had to manually calculate scores to compare to the printout. For freestyle, we had to use software to calculate scores.

Explanation:

Examples of how judges have to check the scores on next slide.



11th FAI World Cup of Canopy Piloting, Eloy, AZ, 2023
Canopy Piloting - Accuracy - Final Standings

Rank	Pilot	Accuracy							
		Round 1		Round 2		Round 3		Total	
		score	pts	score	pts	score	pts		
36	Tiago Muller (CAN)	74	81.318	74	75.510	35	38.461	195.289	
37	Mark Rahbani (CZE)	81	89.010	45	45.918	48	52.747	187.675	
38	Max Lesziak (CAN)	81	89.010	48	48.979	45	49.450	187.439	
39	Alan (Wez) Westley (GBR)	45	49.450	65	66.326	65	71.428	187.204	
40	Jeannie Bartholomew (USA)	53	58.241	59	60.204	58	63.736	182.181	
41	Thomas Perdula (CZE)	260	3.000	77	78.571	91	100.000	181.571	
42	Gonzalo Resende (POR)	81	89.010	24	24.489	60	65.934	179.433	
43	Luke Curnow (GBR)	24	26.373	74	75.510	65	71.428	173.311	
44	Christian Bonaldo (ITA)	51	56.043	51	52.040	59	64.835	172.918	
45	Boris Grozev (BUL)	65	71.428	30	30.612	59	64.835	166.875	
46	Christopher Good (GBR)	45	49.450	38	38.775	65	71.428	159.653	
47	Darcy King (USA)	51	56.043	2721	27.551	65	71.428	155.022	
48	Samuel Gouws (CAN)	51	56.043	30	30.612	59	64.835	151.490	
49	Philip Webley (GBR)	43	47.252	51	52.040	44	48.351	147.643	
49	Giuseppe Crott (ITA)	51	56.043	51	52.040	36	39.560	147.643	
51	Paolo Ribeiro Marques (BRA)	58	63.736	74	75.510	560	3.000	142.246	
52	Juha-Matti Sironen (FIN)	45	49.450	74	75.510	560	3.000	127.960	
53	Patrick Kessler (USA)	65	71.428	24	24.489	29	31.868	127.785	
54	Bhakta Nall (IND)	51	56.043	90	3.000		56.043	115.086	
55	Taras Zdorovyk (UKR)	22	24.175	90	3.000		47.252	74.427	
56	Klas Ramsay (FIN)	0	0.000	0	0.000		0.000	0.000	
57	Jean-Philippe Bernier (CAN)	DQ	DQ	DQ	DQ			0.000	

Examples of wrong capturing and wrong calculating formula resulting in incorrect score and result. This would have not been picked up if judges would have not calculated all scores manually for double checking.



Rank	Pilot	Accuracy							
		Round 1		Round 2		Round 3		Total	
pts	score	pts	score	pts	score	pts	score		
89.010	98	100.000	88	96.703	285.713				
89.010	86	87.755	88	96.703	273.668				
94.505	81	82.653	86	94.505	271.663				
100.000	65	66.326	91	100.000	266.326				
92.307	84	85.714	77	84.615	262.636				
71.428	88	89.795	91	100.000	261.223				
71.428	84	85.714	91	100.000	257.142				
81.318	74	75.510	91	100.000	256.828				
73.626	91	92.857	81	89.010	255.493				
89.010	91	92.857	65	71.428	253.295				
81.318	81	82.653	81	89.010	252.981				
89.010	67	68.367	84	92.307	249.684				
71.428	74	75.510	91	100.000	246.938				
89.010	74	75.510	74	81.318	245.838				
71.428	81	82.653	81	89.010	243.091				
75.824	7565	76.530	77	84.615	236.969				
71.428	74	75.510	81	89.010	235.948				
71.428	74	75.510	81	89.010	235.948				
84.615	61	62.244	81	89.010	235.869				
81.318	81	82.653	59	64.835	228.806				
71.428	67	68.367	81	89.010	228.805				
48.351	84	85.714	86	94.505	228.570				
89.010	86	87.755	45	49.450	226.215				
81.318	81	82.653	53	58.241	222.212				
58.241	77	78.571	77	84.615	221.427				
89.010	56	57.142	67	73.626	219.778				
56.043	84	85.714	69	75.824	217.581				
73.626	65	66.326	65	71.428	211.380				
84.615	44	44.897	74	81.318	210.830				
64.835	65	66.326	67	73.626	204.787				
71.428	58	59.183	67	73.626	204.237				
38.461	88	89.795	69	75.824	204.080				
64.835	65	66.326	65	71.428	202.589				
50.549	65	66.326	74	81.318	198.193				
73.626	67	68.367	51	56.043	198.036				

Inconsistent information

Scoresheets from Omniscore have only competitor number and name.

Results page has only competitor name and country.

That means, to check the results with scoresheets, besides manual calculation, one needs to spend time locating the correct competitor by his or her name.

This slows down the process. In Eloy, judges had to create a system to make cross checking fast and efficient.

This could have been avoided if the correct information is generated and printed.

Explanation:

All scoresheets and results should be created the way to allow for fast checking.

Scoresheets are in the order of jumping. Since there is no way to obtain scores or results in the order of jumping, judges have to compare documents and locate by name to cross check the score and result.

Details on next slide.

Name: _____

Competitor		Entry
Pass 1		
41	Richo Healey	
42	Alan (Wez) Westley	
43	Aurelien Lemaire	
45	Peter Mestak	
44	Stefan Burström	
Pass 2		
48	Joao Antonio	
47	Gerard Burnside	
Pass 3		
52	Curt Bartholomew	
51	Sebastian Dratwa	

Scoresheets:

competitor number and name

17	Kai Bunkus (GER)	2.790
18	Raz Malka (ISR)	2.826
19	Sean Haysom (AUS)	2.982
20	Miles Cottman (AUS)	3.049
21	Stefan Burström (SWE)	2.968
22	John Minos (CAN)	3.219
23	Peter Mestak (CZE)	3.620
24	Adrian Seeman (AUS)	3.378
25	Edward Heady (USA)	3.275
26	Tiago Muller (CAN)	3.093
27	Max Lesziak (CAN)	3.103
28		3.356
29		3.263
30		3.303
31	Taras Zdrovyk (UKR)	3.322
32	Jeannie Bartholomew (USA)	3.314
33	Luke Curnow (GBR)	3.624
34	Cameron Puttee (AUS)	3.462
35	Simon Bouchard (CAN)	3.523
36	Max Lesziak (CAN)	3.646
37	Sergei Fedotov (USA)	0.000
38	Patrick Kessler (USA)	3.635
39	Cornelia Mihai (UAE)	2.311
40	Stephen Simpson (GBR)	0.000
41	Joao Antonio Renato Souza De (BRA)	4.951

Results page:

Competitor name and country.

Final scores and results

Printing final results needs to be tested and approved again.

Obviously, this might have been a problem, as the system during the competition was constantly worked on (also for some unknown reason switched to World Games version and back) – results should be readable with all information clear.

Detailed results should also show immediately on the FAI web site, as per Section 5. 4.16.(5) – that is Official Results have to be posted on ISC Official Results Website. The current version of Omniscore did not allow to show for detailed scores during the competition.

Explanation:

Generating result pages and printing to pdf or to paper is a basic functionality.

It should not require additional programming after the last round and additional work of testing and trial and error.

I have rejected the first printout as not acceptable and Ted had to spend almost two hours getting to the acceptable version.

Example on the next slide.

Other basic information

Country lists should be programmed, so Australia would not be part of European Championship.

Suggestion:

This should be done by default as countries do not change continents and their geographic position.