

AirScore CheatSheet for NZ Paragliding Comp Scorers v22+

This guide suits NZ Paragliding Competition Rules V22 (2020) and on.

This is a guide to how to set-up and score a NZ Paragliding Competition using the online HighCloud system which is created and maintained by Geoff Wong in Australia.

Accessing AirScore

For general pilots, the URL is : <http://xc.highcloud.net>

For administrator users (scorers) you need an admin login which can be obtained from the New Zealand PCC

Creating a new competition

1. Login to AirScore at the Admin page. The admin page is <http://xc.highcloud.net/login.php>
2. You will now be in the Competition Administration page. You will probably see a list of 'test competitions'. You will also see here any competition that has you added as an administrator.
3. On the right, enter the following details:

Field	Value	Example
Name	A clear name for your competition	Auckland Regional Comp 2015
Type	Race	
Date From	The first day of your competition in yyyy-mm-dd format	2015-12-31 (NB: the date format)
Date To	The last* day of your competition	2015-01-07
Director	Comp Organisers name	e.g.: Johnny Hopper
Location	The name of the club running the comp	Auckland
Abbreviation	I don't know what this is for but I make something up	AKLREG15
Time Offset	Time zone difference from GMT	13 (usually for NZ in the summer months)

* On the last day of the competition the "Final Scores" will not be visible to the general pilots. If you want to avoid this feature then send the "Date To" field to one day after your final day.

4. Click [Create Competition](#)
5. Note: If you create a competition with the word 'test' as part of the name then the competition will NOT appear in the list for general pilots, but is still editable and can be viewed by other administrators. It's a good idea to create a test competition while practising the use of AirScore.
6. Your competition will now be showing in the list of comps. It might be buried somewhere in the list. Find it and click it.
7. You are now on the page where you set up your new competition. The top section is general settings for the comp, and most of them are already filled in. You can alter them here if required, but you don't have to change anything in this top area.
8. The addition fields that you see in this area should all be left at the default values, listed here, unless FTV is being used to score the comp

Field	Value
Class	PG
Pilot Entry	Open
Scoring	All (or FTV if appropriate)
Score param	75 (this affects FTV)
Team Scoring	Aggregate
Team Over	Best
Team Size	4

9. The next section down is the Administrator and you can use it to select and add another administrator for your comp. Note though that once you add an administrator you will not be able to remove them.
10. The RACE formula section is important, and we have to change the default values in 7 fields though most of the fields are not relevant to NZ.

Field	Explanation	Value (unless requested otherwise by the PCC)
Formula	The race formula used to determine the scoring. We have our own formula.	NZL
Year	Year in yyyy format	e.g. 2015
Nom Dist. (km)	The Nominal Distance as per NZ rules: Para.2.13.3	30 (but 40 if the comp is in Australia)
Min Dist. (km)	Pilots who fly less than this will still score as if they flew this. This is sometimes known as the "Bombout Distance"	3
Distance Measure	?	Average
Nom Time (min)	The Nominal Time as per NZ rules	90 minutes
Goal/ SS Penalty (0-1)	The is how much you want to penalise pilots of their timepoints if they achieve the End of Speed Section but fail to meet the actual goal. Enter 0.5 for example to dock a pilot 50% of their time points in the event that this happens.	If not specifically briefed before the task (or in the comp specific rules) then this shall be 1 (i.e. no time points unless you actually make goal)
Stopped Glide Bonus	This is also known as "altitude points" and effects the bonus points given to pilots (in the event of a stopped task) depending on their altitude. The value represents the glider angle that is used to calculate this.	Usually 4, but local rules can affect this.
Start Weighting	This affects KLO (KMBONUS) if it is activated	0.1

Nom Goal %	These fields are not relevant to our scoring formula so just ignore them	
Linear Dist (0-1)		
Diff Dist (km)		
Diff Ramp		
Diff Calc		
Speed Weighting		Defaults to .7
Arrival Weighting		

11. Now press Update Formula. Your competition is now created. If you later find something wrong then you can come back in here and change it, making sure to press Update Formula again.

Task Creation

The bottom part of the Competition data screen is for adding tasks to the comp.

1. Fill out the fields as shown here. Do this as soon as you can after the task (presuming that you were flying) or during the task if possible. Don't worry – if you haven't done this before other pilots start uploading flights then you can still do it and their flights will not be lost. It is a good idea on the evening /morning before each task to set up a 'dummy' task, even if it's just a date and some times

It's important to enter all times in hh:mm:ss format (24 hours notation)

Field	Value	Example
Task Name	A clear name for the task, can be a number of a day of the week for example	Saturday
Date	The date of the task in yyyy-mm-dd format	2015-12-31
Region	This is related to the waypoint files. Find the region that applies to you.	Auckland2015
Task Type	'Race' or 'Speedrun-Interval' (for multiple start gates) or 'Speedrun'	Race
Task Start	The actual time that the LAUNCH was opened in	13:30:00
Task Finish	The time the goal was closed	17:45:00
Start Open	The time of the race start	14:00:00
Start Close	The time that the LAUNCH is closed	16:00:00
Gate Interval	On a 'multiple start gate task you can set this to how many minutes you want between each start gate. If no start gates were used then leave blank. It is specified in seconds. E.g.: 15 minutes	900
Depart bonus	Provides for KLO (lead out points)	kmbonus
Arrival bonus	Change this to off	Off

2. Press Add Task and you task will appear as the first in a list of tasks. The del button will delete it from the list if you need to. Click the task.
3. All the fields at the top are still set but can be changed here if required. The additional field "Height Bonus" should be left off.
4. The Comment section is used for writing a message on to the task page that the pilots will see when viewing the scores. Put something informative or amusing here like: 'Task stopped due wind. BBQ at Johnnys tonight 6pm' and press Update Task.
5. At first the task has no waypoints, so should be showing as 0 kms.
6. I suggest using numbers 10, 20, 30 etc to number the waypoints (rather than 1, 2, 3..) so that if you need to slot another one in the middle you could enter it as number, say, 15
7. So enter 10 in the field next to the Add Waypoint button (if you go over 9 waypoints it will put the tenth (10) it will treat it like waypoint 1 again. You'll need to make the tenth '91'. Rarely will you need to have more waypoints and if you do it'd be ok to change a couple at the end!
8. For the take off waypoint use the following values for the other fields on this row

Field	Value	Example
Way	The waypoint for the take off	L001
Type	start	
How	Exit	
Shape	circle	
Size	400	This must be big enough to cover the whole take off area on large launches – this number is not shown on most task boards

9. So note that what AirScore calls *Start* is the launch zone. What Airscore calls *Speed* is what is usually called '*Start of Speed Section*' (*SS*) or *Start Cylinder* in NZ. where the Race begins.
10. Press Add Waypoint and you will see the waypoint has appeared as the first in a list above. If you need to delete it there is a del button. If you need to change something you can but **remember** to press the up button for that row immediately.
11. Now you continue to add the other waypoints, using the numbers to keep them in order.
12. Usually the next waypoint is of Type Speed (for the start cylinder) and generally in NZ this should be set to Exit in the How field. All waypoints should be circles.
13. Then you add the normal turnpoints that are Type waypoint and generally How is entry
14. Penultimately you must specify an 'end of speed' (ESS) cylinder and finally a goal. Once you've set the goal you will see the km value of the task update. The first value is the total distance between waypoint centres, and the second value is the value over the optimal task line. You **must** have a 'start' (as in a takeoff) and a 'goal'
15. A typical task may appear as shown in this example:

	Way	Type	How	Shape	Size
20	S03	start	exit	Circle	400
30	W42	speed	exit	Circle	1000
35	W33	waypoint	entry	Circle	400
40	W42	waypoint	entry	Circle	400
50	W55	endspeed	entry	Circle	2000

60	W55	goal	entry	Circle	400
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16. Note the “Copy Task” feature where you can copy in a task from a previous day in your comp and alter it if required – that can save a bit of time
17. Once tracks start to be submitted they will appear in the list for pilots but no scores will be (re-)calculated until you press Score Task (which will take you to the Scoring Administration page)
18. The other features on this page are not used and untested in NZ, except Team Score which is out of scope for now.
19. If you want to see a map of your task choose “Scores” from the main menu bar at the top. You are now in the normal pilot view. You will see a table (blank if it’s your first task and no tracks are in yet). Click map at the top to see the task map. Check everything. Use the browser map button to get back to administrating it.
20. About FTV – this a setting that affects the scoring of the entire competition. It is selected (as shown above) in the “Scoring” field on the comp parameters page. Whether a comp is using FTV is a Comp Director decision. It is recommended to use FTV for PGOpen rounds, but not necessarily for shorter comps where it becomes less relevant.
21. About KLO – (commonly called ‘leadout’ (short for ‘Kilometre Lead Out’) points). This is a setting that affects individual tasks. It is set by setting KMBONUS (not ‘Leadout’) in the “Depart Bonus” field on the task parameters page. For example, task 1 could use KLO but task 2 not. This is a task committee decision. On multiple start gate tasks it is quite OK to use ‘KmBonus’ as this encourages pilots to take the first gate.

Scoring

So pressing Score Task brings you to the Scoring Administration page. In the top right you will see detail including the DistQ, TimeQ and LaunchQ data which determine the Quality.

22. You will see a list of flights. Click on the pilots name to examine the map, just like in regular pilot view.

You can manually update the Glider description if required.

You can manually update the DHV which effects the class.

You can manually update / adjust the distance.

You can add a penalty. If you want to add bonus points (e.g. for Safety DNF or assisting a wounded pilot) then do this here as a negative penalty.

Don’t forget to hit up on the right hand side, after each update.

23. Down the bottom of this page there are fields for manually entering flight details for a pilot who didn’t submit a track.

Set FAI to the AirScore number of the relevant pilot.

Type should be set to abs if you want to mark the pilot as absent (this will not affect LaunchQ). Set it to dnf if the pilot signed in but didn’t fly (this *will* effect LaunchQ).

You can use lo if the pilot flew but you never got a tracklog. This gives 0 points to the pilot but does affect LaunchQ (because the pilot is counted as having flown). Of course, DistQ will be negatively affected so remember to encourage all pilots to submit tracklogs.

24. In New Zealand we award “bomb out points” for any pilot who didn’t take off because of safety reasons and stated this at the time. To score this, list the pilot as dnf until all the tracks are in. Once all tracks are in change the ‘dnf’ in the list to 3 (as if the pilot flew 3km) – note the score produced. Then change it back to ‘dnf’ and enter a negative penalty (of that score) for that pilot. That will award them the same points as a 3km flight, without affecting the LaunchQ (i.e. the pilot is counted as *not* having flown)
25. Airspace check: On the task page insert the desired airspace to be checked. E.g. NZA541 (this can be found by using the Airspace checker located on the NZHGPA website / Competition/ PG competition downloads). ‘Add’ the airspace and then ‘check’. Note: Highcloud has an inbuilt 100m buffer, so that if a pilot is within a 100m of the airspace (vertically) the program will say ‘violated’ but this just means that that pilot got within 100m of the airspace. Check the finer details.
26. Take a photo of the Task board with times etc before you launch or get the Comp director to send you the task details. Ask the CD / launch marshall to give you the number of pilots that flew the task including those that did not sign in ...oops!(see Comp Rules penalties and manually adjust for those pilots

Troubleshooting

Problem	Possible Cause	Solution
A pilot flew a distance but is scoring hardly any, or no, points	The pilot took-off from outside the ‘start’ circle (i.e. the launch, not the start of speed section)	If it was a reasonable takeoff then change the size of the ‘start’ circle radius, to include the pilots take off spot and rescore the task.
	The ‘start’ circle is set to entry	Ensure that the ‘start’ circle is set to ‘exit’
Something is generally munted	You might not have your dates and times in the correct format, so yyyy-mm-dd for dates and hh-mm-ss for times	Check all dates and times in the comp and task settings
Pilots got tracks muddled up and uploaded against wrong names and such chaos	Muppets	Choose <u>Tracks</u> from the main menu at the top. VERY carefully ensure that you have found the correct track that is contentious and delete it. The pilot must then upload their track correctly. Use extreme caution that you don’t delete the wrong track from the wrong comp.
The scores are all weird	An incorrect parameter or formula type	Check that all the formula fields are defined as above

A pilot has submitted a tracklog but it is not appearing for the comp	The pilot has submitted it under the wrong comp	Choose <u>Tracks</u> from the main menu at the top. VERY carefully ensure that you have found the correct track that is contentious and delete it. The
		pilot must then upload their track correctly. Use extreme caution that you don't delete the wrong track from the wrong comp. The pilot should ensure that they select the correct comp this time, before pressing <u>submit</u>
	The date time is wrong on the pilots igc file.	Locate the flight via the <u>Tracks</u> list and examine it. Open the raw igc file and examine it too. Check the timestamp appears reasonable. If you have good excel skills you can fix the munted timestamp, or you could argue that a valid igc file was not produced
Some scores don't make sense, with some pilots scoring more than others who flew further	Did the other pilots really fly further? They may have just missed an earlier turnpoint	Inspect the map for the pilots who "didn't score enough". The checkboxes on the bottom left only appear for turnpoints that were <i>not</i> hit.
KLO points aren't appearing	Incorrect setting	Ensure you selected KMBONUS and not LEADOUT in the Departure Bonus field on the task parameters screen