



**New scoring system
for the
annual overall ranking
of the
CONTEST Eurotour
in the
competition category F5J
from 2024**

(Short version)

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1 Introduction

This document is the short version of explaining the new scoring system for the annual overall ranking of the CONTEST Eurotour in the competition category F5J for 2024. This document contains only the explanation for the application of the new evaluation system without explanations of background.

At the Contest Eurotour competition results from different competitions must be added together as fairly as possible. In order to end the injustice that has existed so far with the old scoring system, a new, suitable scoring system is needed for the CONTEST Eurotour that, so to speak, standardizes the competition results of different competitions and thus makes them more fairly comparable. As it goes without saying in a competition, each individual flight group is normalized to 1000 in order to compensate for the changing weather conditions every 15 minutes. In the same way, it is necessary to normalize the actual rankings and therefore the performance of the pilots in different competitions with completely different boundary conditions. The latter has not yet taken place simply by adding up the percentage results of the old scoring system.

A solution for a fairer evaluation is a scoring system that is based solely on the ranking achieved by a pilot in a competition, rather than on the percentage of flight results.

It is the responsibility and duty of the CONTEST Eurotour to provide the best possible, fair and class-specific scoring system. For the F5J competition class, the CONTEST Eurotour has therefore made the decision to introduce a new ranking-based scoring system (B) for the 2024 competition season, which will be presented in the next section "without" an explanation of the background and detailed considerations in such a way that the calculation methodology of the new one scoring system becomes clear and comprehensible.

F5J CONTEST Eurotour Tourmanager
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New scoring system for the annual overall ranking of the CONTEST Eurotour in the F5J competition category from 2024

Preliminary remark

To avoid misunderstandings. The new scoring system refers “solely” to how the results of the competitions for the individual pilots are added together in terms of points based on the ranking achieved in order to calculate the overall annual result for the CONTEST Eurotour. There will be no changes at all to the implementation and evaluation of the individual competitions. Competitions are conducted and evaluated 100% in accordance with the original FAI rules in force - without any changes.

Old scoring system used up to 2023

For the sake of completeness, here is the initial situation as to how the annual result for a pilot were previously determined:

Up until now, the CONTEST Eurotour has been like this, that the total result (sum of points) of the winner of the “qualifying rounds” was normalized to 100% and all other pilots get the proportionate percent as score.

And additionally, a bonus was granted for the best placed of the fly-off:

1st = 3,0%, 2nd = 2,0%, 3rd = 1,5%, 4th = 1,0%, 5th = 0,5%

By that, the maximum possible result of a competition is 103% and the maximum possible overall annual result as a sum of 3 competitions could be up to 309%.

Up until now there were no limitation in size of competitions and there were no normalization of the competition depending of size and weather conditions and other parameters.

The only basic requirement was (,is and will be), that at a CONTEST Eurotour competition must take part pilots from at least 2 nations, that this competition can be accepted as an international competition and is not only a local event.

New scoring system from 2024

Core items:

The new scoring system is based on the ranking that pilots achieve in a competition, and not on the percentage result. This means it doesn't matter whether a competition had a tiny spread in results because of super thermal flight conditions or whether there was a large percentage spread because of difficult flight conditions. This is the core idea of the normalization and comparability of different competitions under different weather conditions, seasons and deciding geographical factors.

The rank achieved is assigned a new “calculated” number of %-points, which then represents the competition result for a pilot and is included in the overall annual result.

The new number of %-points is calculated depending on the total number of participants in the competition and the number of participants in the fly-off, so that an appropriate comparison of competitions of different sizes can take place. See the calculation example below using the attached Excel table.

To date, there have been no requirements regarding the minimum number of participants for a competition.

A definition of at least 10 participants has now been made. A competition that has fewer participants will not be included in the annual ranking. Not even if the competition was included in the official CONTEST calendar.

And there is also the following new definition. For a pilot's annual ranking, the sum of his maximum 3 best competition results from competitions in which in sum at least 70 participants took part counts. There is no minimum requirement when entering just one or two competitions.

Explanation of the calculation using the attached Excel table

New F5J scoring system 2024 (calculation example B) based on Excel spreadsheet B

Calculation example B is the objectively fairest compromise from all suggestions, wishes and the specifications from the FAI regulations. Therefore, this version was selected as the new scoring system for the F5J CONTEST Eurotour and will be introduced for the 2024 annual round.

The experiences gained from this can then be the starting point for future modifications.

Calculation example B, like the old scoring system, is based on adding the preliminary round result and a bonus for the fly-off placement achieved.

In this example B, the bonus for the fly-off is chosen, so that in every mathematically possible combination, the winner of the fly-off also becomes the winner on points - even if he was the last to get into the fly-off with the lowest number of points. The second in the fly-off is always second in points and the third in the fly-off is always third in points. The distribution of final sum of points for the remaining places is no longer based on the fly-off placement, but rather with a dominance of the preliminary round results. To make this mathematically possible, there is a slightly larger spread in the results of a maximum of 11,5% points than in the alternatively discussed versions A1/A2 and C1/C2 (refer to the long version of this document). However, the spread of 11,5% points is still significantly smaller than it could have been in a competition with difficult weather conditions according to the old points system (in extreme cases up to 25% points). Explanation: The spread is the maximum possible percentage point distance including the fly-off bonus from the best winner (= 1st of the preliminary rounds and winner of the fly-off) to the worst fly-off participant (last of the ins Fly-Off and finished last there).

Procedure for determining the points:

Step 1:

In cell B 86, enter the total number of participants in the competition.
Here in the example "100"

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	
83																									
84	Number of participants/pilots (Np) in the preliminary rounds who actually flew at least 1 flight and the resulting number of participants for the fly-off according to the rules																								
85																									
86		Np =	100				Nf = 30% from Np	30																	
87			v																						
88			Resulting number of participants for the fly-off according to the rules																						
89			v																						
90		47 up to max		44 to 46		40 to 43		37 to 39		34 to 36		30 to 33		27-29		24 to 26		20 to 23		17 to 19		14 to 16		10 to 13	
91		v		v		v		v		v		v		v		v		v		v		v		v	
92			Columns = Number of pilots in Fly-Off																						
93			14		13		12		11		10		9		8		7		6		5		4		3
94																									

Step 2:

For all valid results, only look at the columns that correspond to the assigned number of participants for the fly-off.

A fly-off with 14 participants should first be considered here.
So now only column B should be considered. Compare cell B93.

There is always linear interpolation between the first outside the fly-off and the last.
 This means that, depending on the total number of participants, a fair distribution of points based on size is achieved.

With 100 participants, 30th place receives 74.294 percentage points (cell B130)

For comparison: With 50 participants, 30th place receives 51.857 percentage points (cell B130)

83		
84	Number of participants/pilots (Np) in	
85		
86	Np =	50
87	v	
88	Resulting number of participant	
89	v	

	A	B	C
126	26	62,029	
127	27	59,486	
128	28	56,943	
129	29	54,400	
130	30	51,857	
131	31	49,314	
132	32	46,771	
133	33	44,229	
134	34	41,686	

For further consideration of the points calculation, column B with the 14 participants in the fly-off is the reference size for calculating the points for competitions with a smaller number of fly-off participants. In a first step, the new comparison places of the smaller fly-off are scaled down linearly to the size of the fly-off with 14 participants. In the second step, the points from reference column B are then determined for each calculated comparison position by linear interpolation and thus assigned to the actual positions in the smaller fly-offs.

94	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X						
95	Scoring for the preliminary rounds based on the placement depending on the total number of participants and the number of participants in the fly-off																													
96																														
97	The evaluation is based on the actual number of participants at the Fly Off (e.g. because the area does not allow enough starting places)																													
98																														
99	Columns = Number of pilots in Fly-Off = Nf																													
100	Place	14	13 - New place	13	12 - New place	12	11 - New place	11	10 - New place	10	9 - New place	9	8 - New place	8	7 - New place	7	6 - New place	6	5 - New place	5	4 - New place	4	3 - New place	3						
101	1	100,000	1,000	100,000	1,000	100,000	1,000	100,000	1,000	100,000	1,000	100,000	1,000	100,000	1,000	100,000	1,000	100,000	1,000	100,000	1,000	100,000	1,000	100,000						
102	2	99,500	2,083	99,479	2,182	99,455	2,300	99,425	2,444	99,389	2,625	99,344	2,857	99,286	3,167	99,208	3,600	99,100	4,250	98,988	5,333	98,933	6,200	98,890	7,500	98,825	9,667	98,717	14,000	98,505
103	3	99,250	3,167	99,208	3,364	99,159	3,600	99,100	3,889	99,028	4,250	98,988	4,714	98,964	5,333	98,933	6,200	98,890	7,500	98,825	9,667	98,717	14,000	98,505						
104	4	99,000	4,250	98,988	4,545	98,973	4,900	98,955	5,333	98,933	5,875	98,906	6,571	98,871	7,500	98,825	8,800	98,760	10,750	98,663	14,000	98,505	95,000	92,957						
105	5	98,950	5,333	98,933	5,727	98,914	6,200	98,890	6,778	98,861	7,500	98,825	8,429	98,779	9,667	98,717	11,400	98,630	14,000	98,505	95,000	92,911	86,130							
106	6	98,900	6,417	98,879	6,909	98,855	7,500	98,825	8,222	98,789	9,125	98,744	10,286	98,686	11,833	98,608	14,000	98,505	95,000	92,864	86,044	84,196								
107	7	98,850	7,500	98,825	8,091	98,795	8,800	98,760	9,667	98,717	10,750	98,663	12,143	98,593	14,000	98,505	95,000	92,814	85,955	84,067	82,261									
108	8	98,800	8,583	98,771	9,273	98,736	10,100	98,695	11,111	98,644	12,375	98,581	14,000	98,505	95,000	92,762	85,860	83,932	82,089	80,326										
109	9	98,750	9,667	98,717	10,455	98,677	11,400	98,630	12,556	98,572	14,000	98,505	95,000	92,707	85,762	83,791	81,909	80,111	78,391											
110	10	98,700	10,750	98,663	11,636	98,618	12,700	98,565	14,000	98,505	95,000	92,650	85,659	83,643	81,721	79,886	78,133	76,457												
111	11	98,650	11,833	98,608	12,818	98,559	14,000	98,505	95,000	92,590	85,550	83,488	81,524	79,651	77,864	76,156	74,522													
112	12	98,600	12,917	98,554	14,000	98,505	95,000	92,526	85,436	83,325	81,317	79,405	77,581	75,841	74,178	72,587														
113	13	98,550	14,000	98,505	95,000	92,459	85,316	83,154	81,100	79,146	77,286	75,512	73,818	72,200	70,652															
114	14	98,505	95,000	92,389	85,189	82,974	80,872	78,875	76,976	75,167	73,442	71,795	70,222	68,717																
115	15	95,000	85,056	82,784	80,632	78,590	76,650	74,805	73,048	71,372	69,773	68,244	66,783																	
116	16	92,314																												

Let's assume that the fly-off participant number is only 7 pilots (cell P100).
 Then the comparable reference place is first calculated in column O with respect to column B.
 With 7 pilots, 4th place is the "middle" place corresponds relatively speaking to 7,5th place in a fly-off with 14 participants (cell O104).
 The pilot therefore receives 98.825 points for fourth place (cell P104). That is the average value between place 7 and 8 of a Fly-Off with 14 participants (compare cells B107/B108). One could say that 3rd place in a 7-man fly-off is only worth 7.5th place in a 14-man fly-off. That's fair in that respect, because not only is the fly-off smaller, but the entire competition is also smaller, and it was therefore easier to achieve fourth place in the preliminary rounds. Yet another example.

Let's assume that the fly-off participant number is 10 pilots (cell J100).
 Then the comparable reference position is first calculated in column I with respect to column B.
 With 10 pilots, 3rd place corresponds relatively speaking to 3,889 place in a fly-off with 14 participants (cell I103).
 The pilot therefore receives 99.028 points for third place (cell J103). This is slightly more than 3rd place with 7 fly-off participants and slightly less than the fly-off with 14 participants. The value 99.028% points is now calculated by linear interpolation between the values from 3rd and 4th place in column B - i.e. cells B103 and B104.

If a competition ends "without" a fly-off due to bad weather, for example, these results from the table from line 101 in the corresponding column are also the final competition results.

Step 3:

If the fly-off is carried out, there will be a new order in the placement.
 In this order, the fly-off participants now receive a bonus, which is added to their personal result from the preliminary round.

For this purpose, we now look again at a fly-off with 14 participants in column B from line 63

Place	14	13 - New place	13	12 - New place	12	11 - New place	11	10 - New place	10	9 - New place	9	8 - New place	8	7 - New place	7	6 - New place	6	5 - New place	5	4 - New place	4	3 - New place	3
1	10,000	1,000	10,000	1,000	10,000	1,000	10,000	1,000	10,000	1,000	10,000	1,000	10,000	1,000	10,000	1,000	10,000	1,000	10,000	1,000	10,000	1,000	10,000
2	8,500	2,083	8,375	2,182	8,227	2,300	8,050	2,444	7,833	2,625	7,563	2,857	7,214	3,167	6,750	3,600	6,100	4,250	5,250	5,333	4,167	7,500	2,500
3	7,000	3,167	6,750	3,364	6,455	3,600	6,100	3,889	5,667	4,250	5,250	4,714	4,786	5,333	4,167	6,200	3,350	7,500	2,500	9,667	1,583	14,000	0,000
4	5,500	4,250	5,250	4,545	4,955	4,900	4,600	5,333	4,167	5,875	3,625	6,571	3,071	7,500	2,500	8,800	1,850	10,750	0,938	14,000	0,000		
5	4,500	5,333	4,167	5,727	3,773	6,200	3,350	6,778	2,917	7,500	2,500	8,429	2,036	9,667	1,583	11,400	0,650	14,000	0,000				
6	3,500	6,417	3,188	6,909	2,818	7,500	2,500	8,222	2,139	9,125	1,719	10,286	1,286	11,833	0,542	14,000	0,000						
7	2,750	7,500	2,500	8,091	2,205	8,800	1,850	9,667	1,583	10,750	0,938	12,143	0,464	14,000	0,000								
8	2,250	8,583	1,958	9,273	1,682	10,100	1,425	11,111	0,722	12,375	0,406	14,000	0,000										
9	1,750	9,667	1,583	10,455	1,159	11,400	0,650	12,556	0,361	14,000	0,000												
10	1,500	10,750	0,938	11,636	0,591	12,700	0,325	14,000	0,000														
11	0,750	11,833	0,542	12,818	0,295	14,000	0,000																
12	0,500	12,917	0,271	14,000	0,000																		
13	0,250	14,000	0,000																				
14	0,000																						

The winner of the fly-off receives a bonus of 10% points (cell B63). This bonus will be added to his result from the preliminary rounds. The 2nd fly-off pilot receives a bonus of 8.5% points (cell B64). And so forth...

If the fly-off has fewer participants, then the fly-off bonus is calculated accordingly by double calculation (first the new reference place and then the interpolated percentage points). After all, it is the identical calculation as above.

In a fly-off with 10 participants, the third place gets the new comparison position 3,889 (cell I65).
 From cells B65 and B66, the fly-off bonus is then calculated here at 5.667 % points (cell J65) using linear interpolation. This value will be added to his preliminary round result to form his overall result for this competition.

That's all.

(Examples are on the next page)

