USAC Ranking Points Explained

As the WSBA Cyclocross Director I often get comments and questions concerning the USAC Points ranking system. I will be the first to admit the system is confusing and in the PNW region, typically does not give a clear picture of a rider's ability. However, the USAC ranking system is used for racer call-ups at Cyclocross Nationals and in some USAC sanctioned races so understanding how the ranking system works is very important.

USAC has created a FAQ on the Ranking system, which can be found here: http://www.usacycling.org/usa-cycling-rankings-faq.htm

The USAC FAQ has a lot of information and this post is not intended to replace the FAQ but hope to dispel some rumors about the rankings and describe how the ranking system applies to the PNW.

There are a couple of critical items that need to be understood about the points system. A rider has a ranking between 0 and 600 points. Fewer points means you have a better ranking. So the goal is to earn the fewest points possible. For this reason this post will use the term better ranking to mean less points and worse ranking to mean more points.

In general USAC summarizes the ranking system as follows; "to improve ranking, a rider must beat riders who are currently ranked stronger." This is a true statement but has some nuances, which we will discuss below.

The points system has 3 critical calculations: Race Quality, Points per Place, and Ranking Points.

Race Quality

The Formula for Race Quality is as follows:

$$Race\ Quality = (Avg\ of\ the\ best\ 5\ riders\ finishing\ in\ the\ top\ 10\ places) \times (0.9)$$

If you take any race and only look at the top 10, out of those 10 the riders with the top 5 best points are the 5 critical riders that define the Race Quality. For a race to be a high quality race 5 racers with a strong USAC ranking need to be in the race and they need to finish well. It is interesting to note that the 0.9 factor is applied to Race Quality to ensure that at a minimum a race is valued at 540 points, so that even in fields where there are not any racers with USAC ranking points it is possible to obtain a better USAC ranking.

There is an exception to the Race Quality equation that is important to the PNW. If the average of all of the riders who finish the race is lower than that of the average

of the best 5 in the top 10 then the Race Quality is calculated using the total race average points instead of the average of the best 5 in the top 10. This exception applies as long as the field average is higher than that of the lowest points finisher in the Top 10.

Here is an example the Race Quality equation:

Table 1: Example Race Results

Racer	Place	USAC Points
Racer A	1	250
Racer B	2	200
Racer C	3	400
Racer D	4	220
Racer E	5	500
Racer F	6	350
Racer G	7	300
Racer H	8	280
Racer I	9	540
Racer J	10	330

Out of the top 10 racers we first need to select the top 5 points scorers. In this case this means Racer A, B, D, G, and H have the best points.

$$Race\ Quality = \left[\frac{(250 + 200 + 220 + 300 + 280)}{5}\right] \times (0.9) = 225$$

If for some reason the average of the entire field's points was lower than 225, but higher than 200 (the best points in the top 10) then the field average would be utilized in the Race Quality equation.

Points per Place

The Points per Place is an important calculation as it defines the difference in points a rider would receive by finishing one place higher or one place lower. Points per Place is calculated as follows:

$$Points\ per\ Place = \left[\frac{(\{Avg\ Ranking\ of\ Finishers\} - \{Race\ Quality\}) \times 2}{(\#Finishers - 1)}\right]$$

If we used the example above and assume that there were only 10 racers in the field the Points per Place would be as follows:

$$Points\ per\ Place = \left[\frac{(337 - 225) \times 2}{(10 - 1)}\right] = 24.88$$

In this case this would mean that the difference between 5th place and 6th place would be 24.88 points.

Rank Points

Finally using the results from the Race Quality and Points per Place calculations an individual's points can be calculated.

$$Rank\ Points = Race\ Quality + \ [(Riders\ Place - 1) \times Points\ per\ Place]$$

Continuing with the example above a rider in first place would receive points as follows:

$$Rank\ Points = 225 + \ [(1 - 1) \times 24.88] = 225$$

The points received by all of the racers in the example would be as follows:

Table 2: Example Race Points Earned

Racer	Place	USAC Points	Race Earned Points
Racer A	1	250	225
Racer B	2	200	249.88
Racer C	3	400	274.76
Racer D	4	220	299.64
Racer E	5	500	324.52
Racer F	6	350	349.4
Racer G	7	300	374.28
Racer H	8	280	399.16
Racer I	9	540	424.04
Racer J	10	330	448.92

Additional Examples

In order to see the impact of the field average ranking and the number of finishers in a race, an additional set of examples are shown below. Race Quality is held constant at 225 which allows for a simpler comparison.

Table 3: Additional Example Race Attributes

Race Attributes	Original Example	Example A	Example B	Example C
Race Quality	225	225	225	225
Average Ranking	337	337	400	400
Number of Finishers	10	50	25	50
Points per Place	24.88	4.57	14.58	7.14

In examples B and C it might look like moving the average ranking from 337 to 400 is only a small move, but this represents that all racers outside of the top 10 would average a ranking of 550. In the WSBA region this is exaggerated, but is likely as many of the WSBA riders have very poor rankings and any unranked racer would be counted as 600 points.

Given these new examples the earned points would look as follows:

Table 4: Additional Example Race Points Earned

Racer	Place	USAC Points	Original Example: Race Points Earned	Example A: Race Points Earned	Example B: Race Points Earned	Example C: Race Points Earned
Racer A	1	250	225	225	225	225
Racer B	2	200	249.88	229.57	239.58	232.14
Racer C	3	400	274.76	234.14	254.16	239.28
Racer D	4	220	299.64	238.71	268.74	246.42
Racer E	5	500	324.52	243.28	283.32	253.56
Racer F	6	350	349.4	247.85	297.9	260.7
Racer G	7	300	374.28	252.42	312.48	267.84
Racer H	8	280	399.16	256.99	327.06	274.98
Racer I	9	540	424.04	261.56	341.64	282.12
Racer J	10	330	448.92	266.13	356.22	289.26
Racer Y	25	550	-	334.68	574.92	396.36
Racer AX	50	550	-	339.25	-	403.5

The additional examples show that field size can have a significant impact on the points earned without changing the top 10 results! In the original example the racer in 10th received 448.92 points while in example A the racer earned 266.13 points; a difference of nearly 200 points!

Conclusion

With this better understanding of how the points system works, the real question becomes what can racers do to improve their points?

- Choose races/categories where there are racers with low points
    - Example: Race Cat 1/2 vs Masters Cat 1/2
    - Example: Race Open Cat 1/2/3/4/5 vs Cat 3
    - Example: Race UCI Elite vs Open Cat 1/2/3/4/5
- Choose races where there will be the most participants
    - More participants equals a smaller Points per Place factor and can yield lower points overall
- Travel to races/locations where the field will have an overall lower average which typical means to a region that offers many USAC sanction races.

Hopefully you now have a better understanding of the system, how it works, and ways to achieve the best results within the system.

Good Luck and see you at the races!

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