

## How do you determine Ranking for Alberta?

To explain this, we will examine the NDA, the NOTIONAL Derby Association. This Association of Teams is comprised of 7 Teams, being Teams 1-6 and Team UNICORN. 'cause who doesn't like Unicorns? We will follow Team UNICORN.

### NOTIONAL DERBY ASSOCIATION

#### Rankings as of December, 2017



1	Team 1	1575.50
2	Team 2	1450.20
3	Team UNICORN	1300.60
4	Team 3	1280.70
5	Team 4	1066.05
6	Team 5	975.00
7	Team 6	654.80

At the end of December, Team UNICORN was in 3<sup>rd</sup> place overall, with a Ranking score of 1300.60.

While reading this explanation, this process may seem complicated, and wordy, it is actually an elegant solution to Ranking Teams.

This follows the WFTDA calculator, exactly.

## TEAM UNICORN at the end of December

	POINTS	Decay	RPA	Game Points	Total Ranking	OS	games
	<b>1496</b>	<b>10.00</b>	<b>149.6</b>	<b>1151</b>	<b>1300.6</b>	<b>1.00</b>	<b>8</b>
December	200	1.00		112			1
November							
October	125	1.00		97			1
September	450	2.00		255			2
August							
July							
<b>June</b>							
May	365	3.00		301			2
April							
March	144	1.50		86			1
February							
January	212	1.50		300			1
	<b>1496</b>	<b>10.00</b>		<b>1151</b>			<b>8</b>

This is the data entry for Team UNICORN. They have played 8 games total in the last 12 months. Ranking is based on a 'rolling' 12 month period. Older games fall off.

**POINTS** – this is the sum of all points scored by Team UNICORN.

**DECAY** – games in the most recent 6 months have a Decay Factor of 1.00. Games older than 6 months, and here below the yellow line, have a Decay Factor of 1.50. Team UNICORN has a total Decay Factor or 10.00.

**RPA** – Ranking Point Average is the POINTS divided by the Decay.  $1496 / 10.00 = 149.6$  RPA is used to determine OS, or Opponent Strength.

**Game Points** – every game played has a value assigned to it according to the OS of the Team you are playing. Game Points are added to the RPA and that is the Team Total Ranking. For Team UNICORN, it is 1300.6

# Alberta Roller Derby Assoc.

## How do you determine Opponent Strength OS?

RPA is calculated at the end of every month, and is used to generate the OS for each Team. Remember, this is  $\text{Points} / \text{Decay} = \text{RPA}$

<b>RPA</b>	
Team 1	210.30
★ Team 2	195.24
Team 3	150.70
Team 4	135.75
Team 5	105.10
Team 6	97.50
Team UNICORN	151.06

<b>OS</b>	<b>RPA sorted</b>	
1.40	Team 1	210.30
1.30	Team 2	195.24
1.00	Team UNICORN	151.06
1.00	★ Team 3	150.70
0.90	Team 4	135.75
0.70	Team 5	105.10
0.65	Team 6	97.50

The RPA box shows the RPA for each Team, calculated on the last day of each month. The RPA are then sorted, greatest to least. Team 3 is shaded as this is the MEDIAN team, the Team in the middle.

Every Team OS is now determined off of the MEDIAN Team RPA. Team UNICORN has an RPA of 151.06. Take your Team RPA and divide it by the MEDIAN RPA. So  $151.06 / 150.70 = 1.002$ . Rounded up this is 1.00. Team UNICORN has an OS of 1.00.

## What is OS and what does it do?

OS is Opponent Strength. You apply OS to get the Game Points awarded for each game in that month. So Team UNICORN contracts for a Bout with Team 1. We'll look at that. Team 1 has an OS of 1.40.

Game Points are found by  $(OS \times W / L) \times 100 = \text{Game Points}$ .

A Win (W) has a multiplier of 2.00. A Loss (L) has a multiplier of 1.00.

If Team Unicorn wins the Bout against Team 1, you get:

$(1.40 \times 2.00) = 2.80 \times 100 = 280$ . Team UNICORN would add 280 Game Points to their total.

If Team Unicorn loses the Bout against Team 1, you get:

$(1.40 \times 1.00) = 1.40 \times 100 = 140$ . Team UNICORN would add 140 Game Points to their total.



# Alberta Roller Derby Assoc.

## What happens to Bouts older than 12 months?

Bouts older than 12 months fall off of the sheet.

### TEAM UNICORN at the end of December

	POINTS	Decay	RPA	Game Points	Total Ranking	OS	games
	<b>1496</b>	<b>10.00</b>	<b>149.6</b>	<b>1151</b>	<b>1300.6</b>	<b>1.00</b>	<b>8</b>
December	200	1.00		112			1
November							
October	125	1.00		97			1
September	450	2.00		255			2
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July							
<b>June</b>							
May	365	3.00		301			2
April							
March	144	1.50		86			1
February							
January	212	1.50		300			1
	<b>1496</b>	<b>10.00</b>		<b>1151</b>			<b>8</b>

### TEAM UNICORN at the end of January

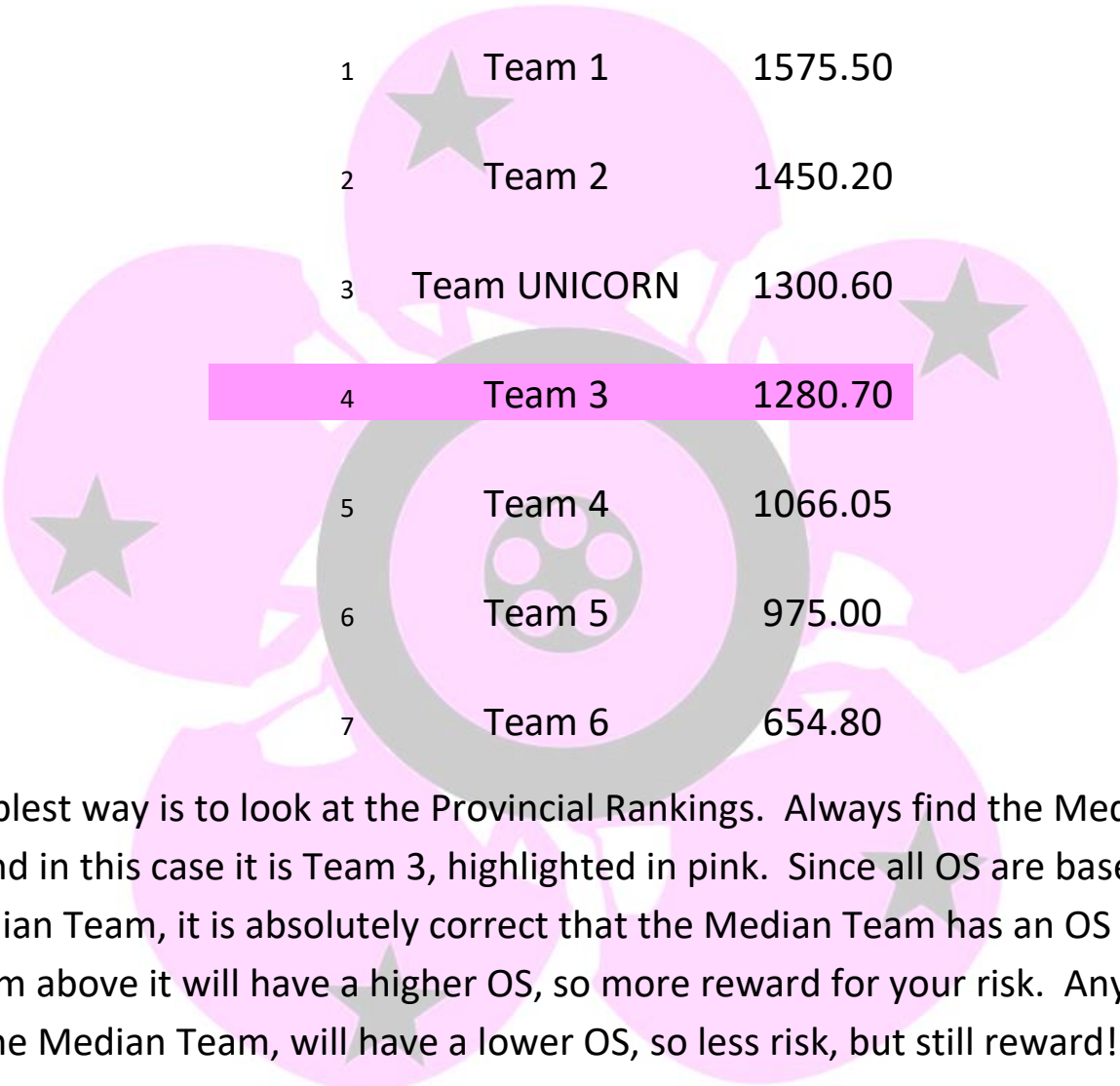
	POINTS	Decay	RPA	Game Points	Total Ranking	OS	games
	<b>1284</b>	<b>8.50</b>	<b>151.06</b>	<b>851</b>	<b>1002.06</b>		<b>7</b>
January	200	1.00		112			1
December							
November	125	1.00		97			1
October	450	2.00		255			2
September							
August							
<b>July</b>							
June	365	3.00		301			2
May							
April	144	1.50		86			1
March							
February							
	<b>1284</b>	<b>8.50</b>		<b>851</b>			<b>7</b>

In December, the top sheet, Team UNICORN had a Bout from January 2016 at the bottom of their sheet. The Points were 212, the Decay was 1.50 and the Game Points were 300. The bottom sheet shows that game has dropped off at the end of January 2018. Team UNICORN now has a Total Ranking of 1002.06.

You're a mean man and won't tell me my Team OS. What do I do?

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The simplest way is to look at the Provincial Rankings. Always find the Median team, and in this case it is Team 3, highlighted in pink. Since all OS are based off of the Median Team, it is absolutely correct that the Median Team has an OS of 1.00. Any Team above it will have a higher OS, so more reward for your risk. Any Team below the Median Team, will have a lower OS, so less risk, but still reward!

**Please keep in mind that:**

**unranked teams**  
**WFTDA Teams**  
**Out of Province Teams**  
**Co Ed Teams**  
**Exhibition Teams**

ALL have an OS of 0.5, per WFTDA. Regardless of who you play, there is a reward!