

## Playing Defense in “Breakaway” is BAD For your OWN Seeding Ranking!



Why?

New this year: Win/Loss record no longer used for seeding determination! Seeding rank now entirely determined by “Match Seeding Points” plus “Coopertition<sup>TM</sup> Bonus”:

### 9.3.4 Match Seeding Points

All teams on the winning ALLIANCE will receive a number of seeding points equal to the penalized score (the score with any assessed penalties) of the winning ALLIANCE.

All teams on the losing ALLIANCE will receive a number of seeding points equal to un-penalized score (the score without any assessed penalties) of the winning ALLIANCE.

In the case of a tie, all participating teams will receive a number of seeding points equal to their ALLIANCE score (with any assessed penalties).

### 9.3.5 Coopertition<sup>TM</sup> Bonus

All teams on the winning ALLIANCE will receive a coopertition bonus: a number of seeding points equal to twice the un-penalized score (the score without any assessed penalties) of the losing ALLIANCE.

In the case of a tie, all participating teams will receive a coopertition bonus of a number of seeding points equal to twice their ALLIANCE score (with any assessed penalties).

Impact of Above, from a “Defense” Perspective:

Consider a match in which the winner (Alliance W) gets W points, and the loser (Alliance L) gets L points, with no penalties:

- Seeding Points for Winner =  $W + 2 * L$
- Seeding Points for Loser = W

Conclusion: Allowing the other team to score INCREASES your own seeding points!

- As the winning alliance, you get a 2x bonus for every ball scored by the losing alliance.
- As the losing alliance, you get points based upon how many points the winning alliance scored!
- In either case (whether your alliance wins or loses), allowing the other alliance to score only increases your own alliance’s qualification points!

Our Suggestion: It is also in our collective best interests to NOT play defense against each other’s alliance. We will not play defense in qualification matches and will try to convince our alliance to play no defense against your alliance!



## Specific Scoring Examples:

Example: Consider a match between two alliances, where the Red Alliance has three relatively good robots, where a total of 10 points could be scored by the alliance with no defense against them, and the Blue Alliance has three typical robots, where a total of 6 points could be scored by the alliance with no defense against.

Seeding Point summary:

$$\text{Winners SP} = W + 2 * L$$

$$\text{Losers SP} = W$$

- Case 1: Neither alliance plays defense
  - Red Alliance scores 10 points: Win: Seeding Points =  $10 + (2 * 6) = 22$
  - Blue Alliance scores 6 points: Lose: Seeding Points = 10
- Case 2: Both alliances devote 1 robot to defense, cutting each alliance's score in half
  - Red Alliance scores 5 points: Win: Seeding Points =  $5 + (2 * 3) = 11$
  - Blue Alliance scores 3 points: Lose: Seeding Points = 5
- Case 3: Blue alliance devotes 1 robot to defense; Red alliance plays no defense
  - Red Alliance scores 6 points: Win: Seeding Points =  $6 + (2 * 5) = 16$
  - Blue Alliance scores 5 points: Lose: Seeding Points = 6
- Case 4: Blue alliance has 2 “spectacular defense” robots; Red alliance plays no defense
  - Red Alliance scores 2 points: Lose: Seeding Points = 4
  - Blue Alliance scores 4 points: Win: Seeding Points =  $4 + (2 * 2) = 8$
- Scoring Summary:
  - Best Red Alliance Outcome: Match #1, where neither alliance played defense!
  - Best Blue Alliance Outcome: Match #1 where neither alliance played defense!
- Summary:
  - Playing Defense **reduces** your own alliance's seeding points!
    - If you win, you would have had more SP, if you let the other alliance score more!
    - If you lose, you would have had more SP if you let the other alliance score more!
  - For qualification rounds, best to play no defense!
  - (Note elimination rounds are different – want to win; defense will matter then.)