

THUNDER ALLEY: SEASON RULES ADDITIONS

1. QUALIFYING ROUNDS

This rule introduces a qualifying round before each race to select which drivers will participate. It rewards consistently high finishes by reducing the odds that a well-performing driver misses qualifying, while still allowing uncertainty and competition.

1.1. Qualifying Field

Each player has 6 drivers on their team to attempt to qualify for the upcoming race.

1.2. Scoring-Based Qualifying Weights

Each driver's recent race finishes, relative to cars of the same team, are used to calculate qualifying weights that adjust the likelihood of that driver qualifying. Use the last N races (or just the previous race, if preferred) to assign a qualifying score per driver. For example:

- 1st place = 6 points (Race Win: +4 points)
- 2nd place = 5 points
- 3rd place = 4 points
- 4th place = 3 points
- Did not qualify / did not finish = 2 points

Higher total points increase the driver's chance to qualify.

1.3. Qualifying Procedure

1. **Calculate Qualifying Score:** Sum each driver's points from recent races as above.
2. **Convert Scores to Weights:** For each driver, set their qualifying weight proportional to their qualifying score (minimum weight >0 for drivers with 0 points to keep chance alive).
3. **Random Selection:** For each player, randomly select 4 drivers out of their 6 to qualify, weighted by their qualifying scores. See 1.4.
4. **Tie Breaks:** If multiple drivers have very close or identical weights, resolve by a die roll or by referencing the Team Bar on a Race Card drawn specifically for tie-break purposes.

1.4. Weighted Random Selection Process

1. **List Drivers and Their Weights:** For each player, list their 6 drivers along with their qualifying scores. The qualifying scores will serve as weights representing each driver's likelihood to be selected.
2. **Normalize Weights:** Calculate the total sum of all qualifying scores for that player's 6 drivers.
For each driver, compute their normalized weight = (driver's qualifying score) / (total sum).
3. **Select Drivers One by One Without Replacement:** Initialize a list of remaining drivers (all 6 initially). Repeat the following until you have selected 4 drivers:
 - A. Calculate the sum of qualifying scores for the remaining drivers.
 - B. Generate a random number between 0 and that sum
 - C. Iterate through the remaining drivers, summing their weights cumulatively until the sum exceeds the random number. Select that driver.
 - D. Remove the selected driver from the remaining drivers list so they cannot be picked again.
4. **Result:** The 4 drivers selected are the qualifiers for that player's team for this race.

1.5. Starting Grid Assignment

Qualified drivers are placed on the starting grid in order of their qualifying scores (highest score at pole), with ties broken as above. Drivers who fail to qualify do not participate in the race.

2. PLAYOFF ROUND SYSTEM

The purpose of the Playoff Round is to determine the Individual Champion by creating a competitive elimination series that builds excitement and rewards consistent high performance throughout the racing season.

2.1. Playoff Point Accumulation

Drivers accumulate playoff points during the regular season based on their performance in each race. Points are awarded as follows:

- A 1st place finish earns 16 playoff points.
- Finishing positions below 1st earn points equal to the maximum of (14 minus the finishing position) or 1 point, ensuring points never fall below 1.
- A finishing position of zero or no result earns zero playoff points.

Playoff points are tracked individually for each driver and carried into the playoff rounds to reward consistent high performance.

2.2. *Playoff Qualification*

At the end of the regular season, drivers qualify for the playoff based on the following criteria:

- **Automatic Qualification:** All drivers with at least one regular season race win qualify automatically.
- **Points Qualification:** Remaining playoff spots are filled by drivers with the highest total playoff points who have not qualified via a win.

In the event of a tie in playoff points for the final qualifying positions, tie-breakers are resolved by the driver's finishing position in the most recent race or by a random draw referencing the Team Bar.

2.3. *Playoff Standings and Field*

The total number of drivers qualifying for the playoffs is fixed (e.g., 12 or 16 drivers based on the league size). Playoff standings reflect each driver's accumulated playoff points, which include carry over points from the regular season and additional points earned in playoff races. Teams may have multiple drivers in the playoffs, but are limited to a set maximum number of playoff drivers racing per event (e.g., no more than 4 cars per team).

2.4. *Playoff Structure and Advancement*

The playoffs consist of a series of elimination rounds (e.g., Round of 12, Round of 8, Championship Round). Each round comprises a predetermined number of races. After each round, a set number of drivers with the lowest playoff points are eliminated from championship contention. Drivers advancing to the next round carry their playoff points accumulated so far, plus any bonus points earned during the round. Race wins during playoff rounds automatically secure driver advancement to the next round, regardless of point standings.

2.5. *Thunder Alley Individual Champion*

At the end of the season, the Thunder Alley Individual Champion is the driver who has accumulated the highest total points across the entire series of races, including both the regular season and playoff rounds.

- **Points Calculation:** Each driver's total points include finishing position points awarded at each race, bonus points for leading at least one turn, and for leading the most turns during a race, as well as any playoff points earned throughout the season.

- **Final Standings:** Drivers are ranked by their cumulative points after the final race in the playoff series.
- **Ties:** If two or more drivers have the same point total, the tie is broken in favor of the driver with the higher finishing position in the final race of the season.
- **Recognition:** The Series Champion title honors the most successful driver—demonstrating consistent performance throughout multiple races.