

# Supplemental Regulations

## SGWT #6

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## PAX Application Explained:

- Current rules are the sum total of times set in Cars 1 and 2 is the final time that determines finishing position.
- There will be a PAX multiplier that will be added to the summed time to produce a PAX time.
- A driver's PAX multiplier will be published in the run groups spreadsheet for that event.
- If a driver has not participated in a previous Sim Goats World Tour for the competition year, they will receive a final PAX Multiplier of 1 for the event.
  - This means at the season opener, everyone has a PAX Multiplier of 1.
- Each driver who participated in a previous Sim Goats World Tour shall receive two multipliers.
  - The first multiplier is determined by their finishing position. Please see the PAX Index Table to compare finishing position to PAX Index values.
  - The second multiplier is determined by how close a driver was to the fastest driver of that day. We find how slow a driver is to the fastest driver in terms of percentage, divide that by 2 and then take the inverse.
- The product of the two multipliers are then applied to the driver's summed time at the end of the current event to result in a PAX time.
- If a driver misses the previous Sim Goats World Tour event but has competed in a past Sim Goats World Tour event, we will use the PAX Multiplier resulted from the end of their most recent competition event (for that competition year)
- If two drivers have the same final times from the previous event (or PAX times for subsequent events), then their first multiplier will be taken of the lower of the two positions from the PAX Index Table.
  - For example if two drivers were tied for 7th position, then they will receive the PAX Index Multiplier for 8th position of 1.008. This is because on a list they will take positions 7 and 8 even though they are tied for 7th.
  - The calculation for the second multiplier is the same, and considering they set the same final time, this second multiplier will be the same for both drivers.
  - The final multiplier for both drivers will be the same as a result.

- If a driver is found to have registered under a pseudonym to receive a PAX Multiplier of 1 multiple times in the same competition year, they will automatically be penalized with the highest PAX Multiplier for that competition day.

## PAX Multiplier Calculation:

- The first multiplier is taken from the PAX Index Table, if the driver is the fastest driver of the previous event they will get 1.015. The second fastest driver will get 1.014
- The second multiplier calculation is as follows:
 
$$1 \div ((SlowDriverTime \div FastDriverTime) + 1) \div 2$$
  - For example Driver A's second multiplier will simply be 1. If Driver B had set the second fastest time that was 2% slower, then their second multiplier will be  $0.99 = 1/1.01$ .
- The final product for Driver A's PAX Multiplier is 1.015. Driver B's PAX Multiplier will be 1.00396.
- Final formulae:
  - $PAX = PAXIndex \div ((SlowDriverTime \div FastDriverTime) + 1) \div 2$
  - $PAX Time = (Time 1 + Time 2) \times PAX$

## PAX Index Table:

<https://docs.google.com/spreadsheets/d/1Mjtgr7mndq2JN8T3Rz8DZPxHCv6T2-EswoHXPudCqaw/edit?usp=sharing>

## Format Changes:

- Due to the length of the Nurburgring Nordschleife we will be changing the format of the SGWT #6
- There will only be one track and one car
  - Track: Nurburgring Nordschleife
  - Car: Mercedes AMG GT Black Series
- The final time a driver sets will be their fastest time (fastest time + penalties).
  - PAX Multipliers will apply as stated in this document.
  - A driver will only need to set one time
- There will be no practice sessions.
- All sessions will be considered a timed session. A total of 4 timed sessions per driver.
- A driver during their session will be able to set one lap of the Nordshleife
- There will be a 12 minute hard cap. Drivers who do not finish the lap will be assigned as 13 minute lap time.
- Drivers who set a lap cannot set another lap in their timed session
  - Meaning after their final session they will have attempted 4 laps.

- All invalid laps (determined by the game) will be considered valid with a penalty.
  - We do not have control over whether the game marks a lap as invalid. Please respect track limits. Do not cut corners.
  - Laps considered invalid will have a 30 second penalty added to their raw time.
  - A driver that is assigned the 12 minute hard cap laptime will not receive the 30 second penalty.