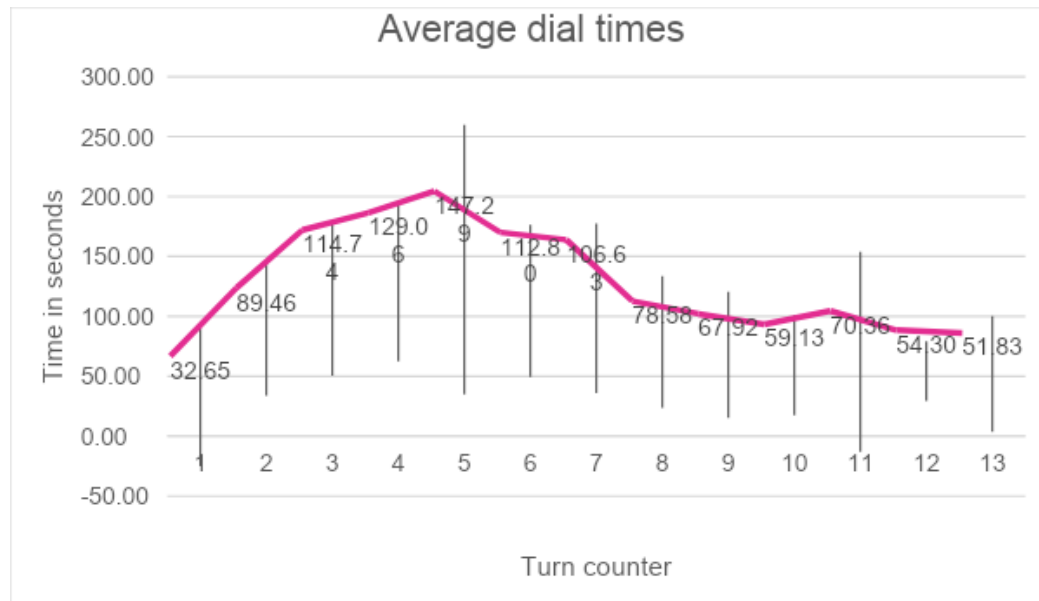


For the past year I have been taking down data for pace of play which includes but is not limited to: dial times, movement time, attack time, number of attacks, number of dials, time of death, average dial times, and average time of all phases.

With the current data the average time of setting dials for all players ships, for an entire match, is 90 seconds(with a standard deviation of 60 seconds). This is a fluctuating time throughout the whole of a match, but this is an average time to set for all dials (regardless of the number of ships). The time it takes to set dials is completely determined by the skill of a player. Skilled players take less time on dials regardless of ship count.

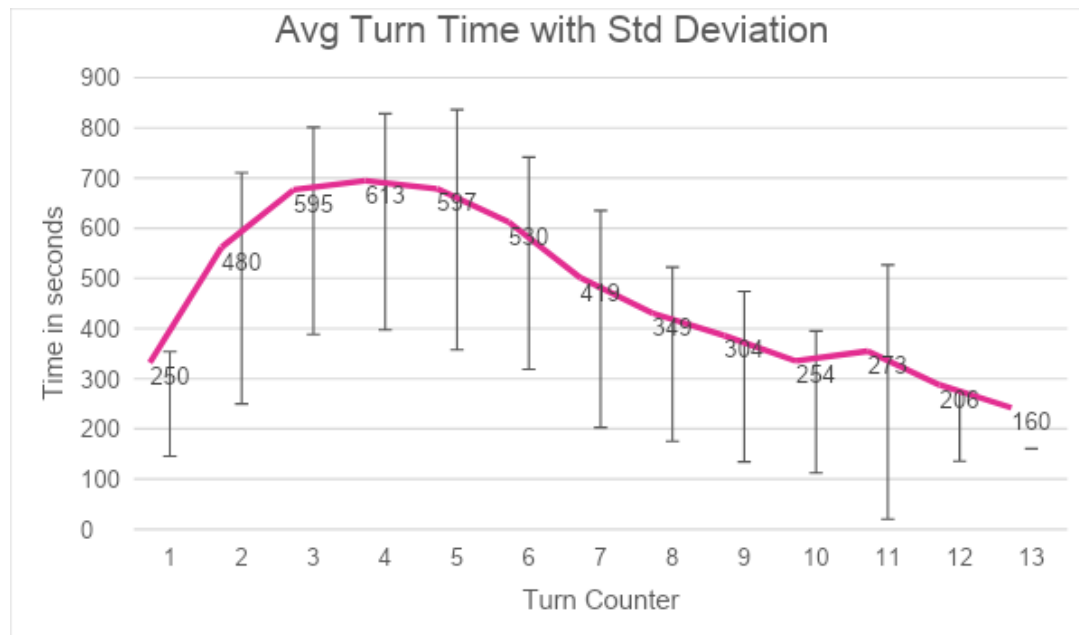
The Graph below depicts the average dial times for all level of players throughout a 75 minutes match. You may notice turn 5 has a much higher deviation than the other turns. This is when the game is at its most intensity provided that engagement happens at turn two to three. It is common for players to take extended time on deciding to place dials at this time. This is also the average turn in which a ship(s) is removed from play. After turn five you start to see a significant descent in pace of play, as ships are removed, and there are less options for a player to choose on their dial (engaged in rocks, stressed, ionned and so on)



Note: (turn 1 may see a high dial count as people are still setting up while the timer is running)

While documenting the data, the spectrum of skill was from new players to veterans. That was tracked by averages and then tracked for deviation. While tracking pace of play, we cannot only track top tier players. Their skill is at a faster pace than those at the lower tier. So, an average between the two must be determined to allow all levels of players to strive for or exceed. However, all players are susceptible to going below the average times at certain occasions during a match. This does not mean it will or should become normal for the remainder of the match. Pace of play should always return to the average curve after deviating from the average

times. One example is taking 30-40 seconds to decide to barrel roll or not. The situation can arise, but should not be a standard practice for a player or accepted by a judge or opponent.



Note: (The games pace of play peaks at about turn 3-5 and then decends)

There are two types of delay of game definitions. One is slow play which is intentional. The other is playing slowly. Playing slowly is unintentional and should be addressed in a way which helps the player improve their match times. The level of play should reflect the judge's decision when making a ruling. The one topic I do not hear is fast play. Fast play is an issue if one player notices they need (X) amount of turns to win. They will then play at a faster pace above the average and try to force their opponent into making a mistake or taking advantage of added turns. Both situations should be monitored and addressed when a call is made or noticed while viewing a match. If a player is moving at a faster pace than their opponent, you still need to verify if the slower player is playing at an irregular pace. IF the slower player is at a normal pace, then they are under no obligation to play faster and give their opponent a chance to win.

With the change from first edition to second edition we see a drastic change in number of ships and time of engagement. In second edition we saw a 33% increase in ship count on average. (3 ships avg to 4). We have also seen initial engagement change from 3 to between 2 and 3 on the average. With faster engagements, the ships tend to become destroyed at a faster pace than first edition. Average game times have gone from 61 minutes to 65 and average turn count dropped from 11 to 9.

Second Edition:

First Engagement Average		First Death	Second Death	Avg ship count	Avg game Turns	Average game time (min)	
2.58		5.24	6.56	3.79	9.20	66	

First Edition:

First Engagement Average	First Death	Second Death	Avg ship count	Avg Game Turn	Average Game Time (min)
3.02	6.29	8.84	8.84	10.50	61.96

With the difference from the editions timing, we must break down where the time is being allocated:



Note: (These averages are for any match regardless of ship count, game time, number of turns.)

On the average, players are spending 49% of their games moving ships. Keep in mind that this is the average whether the game goes to time or not. This is also the average regardless of the number of ships in play at the start of a match. From the data documented, there is no evidence that the more ships on the table, the slower the game is. Dial times vary depending on the game's situation and players' skill. A game in which players engage on turn 1 may be significantly shorter in turns due to the amount of attacks and how many ships are still alive after each turn. The longer a player's ships stay alive the fewer turns you shall experience and a lower score count(unless the players are not engaging, this will cause a higher turn count)

The correlation, with all factors involved, was discovered after counting the number of attacks per turn. After totaling the number of attacks, I found the average to be 26 (std deviation of 6). This does not account for attacks per player but combines both players as a whole during a match. This was the first time documenting this factor and it truly can show pace of play for a single match. While comparing the number of attacks with all other data, you can see if the game was irregular. If the attack count is too low (below 21) you can check the other data

points and verify slow play if the game did go to time. If the game didn't go to time you can verify the impact of all (X) amount of attacks to see if there were crucial outcomes. For example: a player rolls all blanks on multiple defense dice while flying low health ships and then conceding. If the attack count is too high (above 31) a judge can see multiple shots were fired with low impact to either player over several turns.

From the multiple points recorded I have determined several rulings that can assist judges in recognizing or declaring unacceptable pace of play. On the subject of setting dials, players will keep at one another's pace. This is due to one player using more time and their opponent utilizing that time to correct a single\multiple dial(s). This contributes to the added dial times as a whole. With the average dial time being 90 seconds (all ships per player), I would suggest if a single player has their dials set, their opponent has 60 seconds to set their dials without exceeding 4 minutes (4 minutes from the start of going back to dials) or 240 seconds. If one or both players are not set after 4 minutes, they should receive a warning. If they continue that trend, the judge should proceed with their own ruling. (2 forwards on unset dials, game loss, DQ, ETC.). This does not mean a player can spend 4 minutes each turn on their dials. They still must have dials down 60 seconds at the point when their opponent's last dial was set. If a warning was issued then strict guidelines of 90 seconds (ignoring opponents time), for their total dial time that turn, must be enforced.

On the issue of moving ships, and more accurately deciding actions for ships, it is more difficult to determine an average. As the game progresses the ship count remaining diminishes at different times. Including the turn of engagement, damage effects, bumping, linked actions, pilot abilities and so on. With the number of ships and movement times, the average time spent per ship during the movement phase is 55 seconds; this of course is too high. If we understand a ship's action phase is technically at the start of its activation, we can get that number to a reasonable amount. If we include pre-movement actions, revealing the dial, moving the ship, actions, linked actions and measuring for actions we can see how 55 seconds can happen. So, the average movement per turn is 221 seconds or 3 minutes and 40 seconds. If we subtract the std deviation (78) to account for extra circumstances from the original 221 seconds, then divide it by average ship count, we get an average of 35 seconds. On the average, when a player reveals a dial, he or she should have NO more than 35 seconds to move the ship and decide any action. This includes pre movement actions, linked actions, abilities and so on. However, Issues like snapshot can cause that previously mentioned variance of 20 seconds while adding to movement times. This would not be included in the total time a player would have, out of their 35 original seconds, to move and decide actions. Players attempting to use all 35 seconds, for each ship, would be called for slow play as not all circumstances should require the use of 35 seconds. Ships that have limited actions due to their card or positioning can only take actions like focus. This timing window can be one of multiple points to determine if a player is not at the regular pace of the game. Players tend to set dials slowly, take longer for actions and choice of attack.

Attacking was a similar path to determining how long someone should spend on an attack. The average amount of time spent attacking was 133 seconds (for all ships and players in one turn). If we apply the same deviation tactics, we get a standard deviation of 45 seconds. Subtracting that from 133 and dividing that into the 26 average attacks per game, we get 30 seconds. This includes, activating a ship, selecting a target, rolling dice and modifying both attack and defense dice. The deviation comes from marking ships to measure arc, triggers or abilities, calling for

judges to measure, Dealing damage and so on. A player may take time to determine a target but should be reminded or warned by a judge if they exceed 30 seconds after activating that ship. (granted there are no other effects that trigger adding to the player's original 30 seconds.) Judges must also be mindful of players defending as they can delay the 30 second timer for the attacking player due to the board state. Those circumstances can be but are not limited to: Crack shot, Juke, Quick Draws ability, Tavson, Kylo Ren and so on.

When you are playing or judging an event, everyone must remember there is a harmonious effect that is in each game. Players do feed and react off of their opponent. When one player is much faster at playing they try to compromise their pace of play to match one another. So faster players tend to check their dials several times while making last minute changes. Their opponent still is holding a dial since the start of the turn and has not made a final decision. Players who are familiar or in a positive circumstance, they may spend more time talking, going over the last turn, introducing someone else and so on. Games are quite difficult to track for an exact time. If we are talking about the highest level of competition, we can and should implement these time constraints if we want a more competitive look. At lower levels of competition, we can be much more relaxed. We can assist slower players to make decisions faster and explain why one choice is superior to another. I leave all my findings with the community to discuss in detail. You may email me at reconspecialisttv@gmail.com with any questions, information, data, concerns, and hate mail.

Thank you everyone for making this possible from my office. All the players who agree to be on stream and the streamers who make the effort to bring the game to anyone who wants to watch. Keep up the great work and see you on the tables.