



Official IDRL Rulebook v14 | Last Updated: Dec 13th, 2022

**** IDRL SAH Rulebook begins on Page 6 ****

A. Important terms

- **DNS:** Did Not Start
- **DNF:** Did Not Finish
- **DQ:** Disqualified
- **OOB:** Out of Bounds
- **E:** Eliminated from entire race

B. General Rules

1. Pilots must first arrive at the IDRL Registration Desk, register their official IDRL Callsign with the registrar and show Fail Safe and Arming/Disarm Working.
2. **Drone Specs:**
 - Battery Minimum :: 3S
 - Battery Max :: 6S
 - Props Minimum :: 3 inch
 - Props Max :: 6 inch
 - Configurable LEDs which can be changed on demand are a must for IDRL Night Races. Your quad must be brightly lit in the night sky to be visible from a far distance to the spectators. You will be assigned your colors and frequencies on race night.
No LEDs = No entry
 - FPV goggles / FPV screen compulsory. No Line of Sight Flying allowed.
 - Any material for props but not Carbon Fiber.
 - No Weight Limit
 - VTx Rating = Switchable 25mW/200mW 5.8 Ghz for FPV with at least 40 channels with support for Raceband Channels.
 - These channels need to be supported on VTx and VRx:
 - **Raceband Channels (5658, 5695, 5732, 5769, 5806, 5843, 5880, 5917) and Channels 5645, 5740, 5800, 5860, 5945**
 - **Turtle Mode is allowed at IDRL** to flip and recover your quad.
3. Pilots will carry a minimum of 2 batteries.
4. Pilots will carry their own battery chargers, charging points would be provided.
5. Pilots should bring their own soldering and other materials.
6. All frames must pass a safety and airworthiness inspection. Once the airframe has been checked and approved, it must not be modified or changed, or it will need to be re-inspected.



7. **Pilots are allowed to bring custom launchpads that do not impart any energy into the drone.**
8. **Pilots will only use circular antennas on quads and antennas must be in good condition.**
9. **Pilots will ensure that their respective freqs, VTX output levels & LEDs are set according to the Event Pilot Roster before entering the pit area / racetrack.**

C. Venue Rules

1. Pilots must adhere to all rules within the competition venue, and will not fly in any other part of the venue unless it is a designated flight zone.
2. No pilot other than those actively participating in the current heat will plug in their quads until the heat is completed and all the pilots have landed. This will be announced by the race director.
3. All batteries in possession of non-flying pilots for a heat will have to be handed over and placed on dedicated placards assigned to each pilot on long tables.

***** Any pilot not obeying this rule will be immediately disqualified from the entire race and will be asked to leave the pit area *****
4. Pilots must arrive at the venue with their complete setup 1 hour before the official race time and must be in complete READY-TO-GO state 15 mins before race time.
5. Pilots will NOT be given any practice sessions during the 30 mins before race starts.
6. **Pilots who are not in READY-TO-GO state 15 mins prior to race start will be disqualified from participating in the race.**
7. Pilots MUST NOT assume any change of race time until it is officially announced by the organizers.
8. Pilots must contain all equipment and airframes within the pilot pit area and must not solder, weld or cause any spark within the pit area. There will be established workbench areas for soldering, repairs and modifications.
9. Pilots are required to bring their own battery chargers to the race and any other tools/equipment required to setup, program or repair their quads such that their quads are always in the ready to fly state.
10. General charging of electronic devices including radios or any device with a self-contained power supply is permitted.
11. All batteries must be stored in a LiPo-safe bag or in an approved, fire resistant container.

D. Race Format

1. All races will be governed by an appointed team of judges/organizers.
2. All races will follow the general rules and regulations of the competition.
3. Each race will be monitored by judges, cameras, timing/lap systems and volunteers to maintain fair and accurate competition.
4. There will be 2-3 Rounds of Qualifiers with pilots categorized into multiple heats.
5. Each Heat will run for 3 laps which usually lasts for 3-4 mins.
6. In the Qualifiers, each pilot will be given a chance to set their fastest recorded time.
7. Top X number of pilots (usually 8 pilots where X is dependent upon the number of attending pilots) based on their fastest time set in the Qualifiers will progress through to the A Main Round.
8. Pilots ranked beyond 8 in the Qualifiers will go into the B Main Round.
9. One Pilot from B Main Round based on fastest lap timing will join the 8 pilots into the Semi Finals which will have a total of 9 pilots.
10. 2 or 3 Rounds of Semi Finals will then be held depending upon the available time during the day with 3-4 pilots qualifying into the Finals based on fastest lap timing.
11. The Final Round will follow a “Chase the Ace” Format, ie. the pilot that takes first place, twice (based on finishing order) will take Gold.
 - 11.1 - The Final Round will consist of a maximum of 6 heats, comprising 3 or 4 pilots.
 - 11.2 - A pilot placing 1st in **any two of the 6 heats (need not be consecutive)** will mark the end of the Final Round and obtain Gold. Silver & Bronze positions will be then calculated based on summation of points outlined in 11.3 below.
 - 11.3 - Point Structure
 - a) 1st Place : 3 points
 - b) 2nd Place : 2 points
 - c) 3rd Place : 1 point
 - d) DNS, DNF : 0 points
 - 11.4 - In case of a tie in cumulative points, podium order will be decided based on the fastest timing in the event.
12. Any pilot garnering 3 successive **DQs** will attain E (Elimination from the entire race).



13. Any pilot found non-adherent to specified frequencies, VTX output levels and LED color after the initiation of a heat will convey a **DNS** to the race director or will risk attaining a **DQ**.
14. Beginner Race Selections for Pro Race: Top 3 Pilots from Beginner Race automatically qualify for Pro Race. The remaining pilots are individually judged by the race judges on various parameters of flying such as speed and control of their drone to see if their skills can enable them to run the Pro Race and are accordingly qualified or disqualified. There is a “feel” system employed where the judges need to become confident of the beginners ability to qualify for the Pro Class.
15. In the event of a mid-air collision after the start gate, pilots can resume the race if they are able to take off again without intervention, otherwise their heat is considered a DNF.
16. Any practice or behavior deemed unsafe, (i.e. flying above the max ceiling height) will result in an immediate disqualification.

E. Race Rules

1. In the event of a night race, external LEDs (12 bright LEDs recommended) per quad are mandated. Said LEDs should be such that the drone is brightly and clearly visible in the night sky irrespective of the drone’s physical orientation. Failure in conforming to this will result in attaining a **DQ** as per the discretion of the race manager.
2. Pilots must stay within all prescribed flight paths.
3. Pilots must keep all aircraft in the disarmed state until they have been given the “ARM” signal. This will happen only when the aircraft has been placed on the starting deck.
4. After the competition of a heat, pilots will immediately land and disarm only on the specified landing zone/ landing pad.
5. All pilots will be allotted their respective frequencies and split into heats well before race day. Frequencies will be primarily allotted from Raceband Channels (**5658, 5695, 5732, 5769, 5806, 5843, 5880, 5917**) or from **5645, 5740, 5800, 5860, 5945** in case of certain situations where Raceband is problematic.
6. Hard 2 min Pilot seated Goggles Down Timeout Timer with drone placed on race pod or ground. No excuses tolerated for even 1 extra sec. DQ for heat if timeout and E if complaining further and delaying others.
7. In event of unexpected media intervention while Timeout timer, timer paused and resumed on announcement.
8. E for any non flying pilot discovered to have plugged in at the pits during any heat.
9. 1 Race of 4 Pilots for Finals with winners based on First Finish order.



10. Any heat including finals will restart only if there is a false start or contact between any two drones resulting in a crash previous to the start gate.
11. No assumptions for any new rules tolerated until incorporated in the Official IDRL Rulebook.
12. Given race circumstances, all pilots have to say yes to a suggested modification for the rule to be applied to that race.
13. Pilots will **NOT be given any Retries**
14. Pilots will be given a best of 3 rounds max. in which to record their best lap time in the Qualifier Rounds. 1 round is mandatory while 2 rounds are optional if the pilot is happy with his/her lap time in any of the 3 rounds max.
15. Pilots must adhere to the prescribed launch sequence. No movement before the starting signal. False starts will incur a penalty.
16. Pilots must maintain control of their aircraft at all times and only fly within their skill level. Any pilot who exhibits unsafe flying procedures may be disqualified at any time.
17. Once pilots have successfully completed all laps, they must return to the start/finish pad, land and DISARM.
18. Pilots that have crashed at any point during the heat and are unable to resume racing must DISARM their aircraft and wait until the heat is over.
19. Race tracks would have gates, pilots must successfully fly through all gates, around the flags, and other obstacles (if any) on the course. If a pilot misses an obstacle or gates, they must safely turn around and attempt the obstacle again. If they don't turn around and continue to race, that entire heat would not be counted.
20. If a pilot due to any reason, knowingly/unknowingly/accidentally goes out of bounds then pilots first priority should be to get the drone back in the bounds. And continue to race. If such an incident occurred multiple times then organizers have full right to disqualify the pilot from heat or the whole event.
21. In the event of a crash or the inability to resume flight safely, the pilot must immediately DISARM their aircraft and give the Thumbs Down signal. For that heat pilot is deemed as DNF.
22. Pilots may have multiple airframes, and each airframe must pass all safety and airworthiness checks before flying.
23. Modifications to any of the above or new Race Rules require a majority vote in the IDRL Premier X Group.

Sample Race Spreadsheet: <https://goo.gl/cMu9wt>

Official IDRL SAH (STAY@HOME) CHAMPIONSHIPS Rulebook

A. Roster Format

IDRL SAH Team Roster														
GRP	Q Rank	Pilot	Team Name	Total Pts	R1	R2	R3	R4	R5 (3)	R6	R7	R8	R9	R10 (3)
GRP A	1		Udd Da Punjab	0	0	0	0	0	0	0	0	0	0	0
	1		Bangalore Buzzers	0	0	0	0	0	0	0	0	0	0	0
	2		Udd Da Punjab	0	0	0	0	0	0	0	0	0	0	0
	2		Bangalore Buzzers	0	0	0	0	0	0	0	0	0	0	0
	3		Udd Da Punjab	0	0	0	0	0	0	0	0	0	0	0
	3		Bangalore Buzzers	0	0	0	0	0	0	0	0	0	0	0
GRP B	4		Udd Da Punjab	0	0	0	0	0	0	0	0	0	0	0
	4		Bangalore Buzzers	0	0	0	0	0	0	0	0	0	0	0
	5		Udd Da Punjab	0	0	0	0	0	0	0	0	0	0	0
	5		Bangalore Buzzers	0	0	0	0	0	0	0	0	0	0	0
	6		Udd Da Punjab	0	0	0	0	0	0	0	0	0	0	0
	6		Bangalore Buzzers	0	0	0	0	0	0	0	0	0	0	0

Example IDRL SAH Team Roster Table

1. If there are **3 Pilots per team** then we have GRP A only i.e. max 6 pilots available.

- Run 10 Rounds until R10 with 1 min break between each round.
- Rounds R1 to R10 are played one after the other with all 6 pilots flying at once.

- In Rounds R1 to R9, same ranked players from each team based on their qualifier rank (Q Rank) internally compete against each other to score 1 point.
- The winner of each round gets 1 point and the loser gets 0 points.
- In Round R10, only the Top two pilots from round score 5 and 3 points for their team. This is to keep it exciting till the end so that any team can come back from behind and clinch the win.

2. If there are **> 3 Pilots per team** then we have GRP A and GRP B i.e. max 12 pilots available.

- Run 5 Rounds with 1 min break between each round until R5 and in R5 only the Top pilot's winning team takes 3 points.
- All 6 pilots from GRP A fly together at once and remaining pilots from GRP B fly together at once.
- Run R1, R2 for GRP A, then R1, R2 for GRP B, then R3, R4 for GRP A, then R3, R4 for GRP B, then R5 for GRP B and finally R5 for GRP A.
- In Rounds R1 to R4 for both GRP A and GRP B, same ranked players from each team based on their qualifier rank (Q Rank) internally compete against each other to score 1 point.
- In Round R5, only the Top two pilots from round score 5 and 3 points for their team. Round R5 like Rounds R1 to R4 occurs twice, once for GRP A and once for GRP B.
- This is to keep it exciting till the end so that any team can come back from behind and clinch the win.

B. Definitions and Formulae

1. **Official IDRL Currency** = Debatas (Symbolic Value = D formatted in the style of letter D from official IDRL logo)

2. **Pilot Match Value (PMV in Debatas)** = 10000 Debatas * **PMV Ratio** = X Debatas

PMV Ratio = ((Total Points Scored in Match / Rounds played) + 1) - (Qualifying Rank / 10)

3. **Team Match Value (TMV in Debatas)** = Σ PMV of all team pilots

C. Rules

1. Each IDRL SAH match during the SAH season will be played on every Saturday at 9:30 pm IST as a Saturday Night Live (SNL) match between two city teams across India.
2. Track for an SNL match between two teams according to the SAH Season Race Schedule will be released by midnight on Wednesday of that week.



3. All the pilots of the two teams scheduled for a particular episode must join the IDRL Discord Voice Channel at sharp 9 pm IST. The pilots should maintain decorum and not chit chat needlessly on the voice channel. Only if there are issues or points that the pilots need to address then they will be heard. The pilots must also tune to all announcements of the Race Director sent on the same Voice Channel.
4. **If there is an odd even number of pilots across the two competing teams, then the number of participating pilots from each team will be equal to the maximum pilots available from the team that has the lower number of pilots with a minimum of 3 pilots available.**
5. If it's an even number then all pilots will compete.
6. **There will be a cap of Max. of 6 pilots per team that can participate in each episode.**
7. Team captains can call in for pilot replacements in the event that a pilot is disabled for technical or other reasons.
8. Teams can be of different sizes. **But a minimum of 3 pilots per team is required either by virtue of the original team players or by max. 1 sub trade from an external team.** Also captains can take two approaches to form their squad for a particular episode:
 - A. Selection based on pure merit i.e. as per fastest qualifying time.
 - B. Selection based on group vote provided all those selected have set their times on the track for that episode. This allows for rotation of pilots to occur.
9. **Each of the points above requires pilots to have set a qualifier timing on the track leaderboard by 8:30 pm IST.**
10. If one or more pilots of any team are scheduled to go for the next round starting in 1 min, and if they are disconnected from the game server for **any reason** then a timeout timer of 2 mins will be started for that pilot(s). If the pilot(s) is unable to reconnect to the game server and is in a ready to go position on the start launch pad before the timeout timer expires then the point goes to the opposing pilot competing internally (as per A. Roster Format given above). If both the pilots from two teams timeout then they both are awarded 0 points for that round.
11. **Most Important Rule: The time that the next round starts after the previous round ends is exactly 1 min. Irrespective of how many and which pilots are available for the next round, the next round will start exactly in 1 min. There will be no excuses tolerated for not being available for the next round. The points are awarded as per A. Roster Format above.**
12. The Team Points for each match are awarded as per follows:

Win: 2 Points | Loss: 0 Points | Draw: 1 Point | No Show: -3 Points

13. If two competing teams tie at Knockout Stage, then their TMV (See Definitions and Formulae) will be considered which is aggregated over matches of that SAH Season.
14. If within a particular round of the match if two pilots tie (this is extremely rare, more like an impossibility since total lap time is calculated upto msec) but still to be accounted for, the pilots will be given 1 point each.
15. A pilot must complete 3 laps in order to be eligible to get 1 or more points per round. The last place is an exception since it's inconsequential.
16. **Each pilot must have a valid IDRL X Membership to enter the Knockout Stage and be eligible to receive their prize money share.**
17. The prize money that each pilot of the season's winning teams receives will be proportional to their contribution throughout the series. If a pilot misses a race he is still eligible for the prize share. The captains can override this performance based distribution rule with equal pay if they feel that all pilots should receive equal amounts.
18. Only participating pilots will upload their timings. Strict penalties for pilots from other teams uploading their times. Please make sure your auto upload feature is turned off.
19. **If 1 pilot from each team fails to upload timing by 8:30 pm then the race will still proceed with those 2 defaulting pilots included.**
20. **If a team has only 1 or 2 pilots who have uploaded the timings while the other team has 3 or more, then the former team has to either sub in a player from an external team to make the total count to at least 2 pilots so that they can play handicap or else forfeit the match.**
21. **Subs can only be allowed from an external team to avoid circular dependency loopholes.**
22. **Only 1 sub can be traded in by any team.**
23. **No subs will be entertained who do not have a valid leaderboard timing.**
24. **No subs will be entertained who have used a different callSign to set their timings.**
25. **If your team needs a sub then the sub should have the time uploaded on the leaderboard by 8:30 PM IST on Race Night.**
26. If only 1 pilot from each team has uploaded timings then both teams will get forfeit points i.e. -3 and the match will be abandoned.
27. **If any team forfeits twice in any SAH Season Championship then they will be ineligible to play further and will lose claim of any winnings for that Season.**
28. Team captains will have until 8:30 pm IST to set their leaderboard times for that episode.

29. Debatas are used as a currency value for ranking pilots in the league and play a critical role in pilot trading during pilot auctions between city teams.
30. Debatas are also a measure of a team's net worth and they represent the standing capacity of the team to buy / sell pilots to increase the team's strength.
31. As of present, **the captains of each team cannot be traded** and only the captains or their appointed team managers are allowed to trade pilots.
32. It is advised that you should always have a backup player at hand.
33. If all 3 players of your team have uploaded timings before 8:30 pm and all three are available then you are good to go.
34. However, if 2 players have uploaded their timings only and you do not have any other player from either your team or any other team that has uploaded timing by 8:30 pm then you will have to forfeit the game.
35. If there is a third timing before 8:30 pm in the absence of the original 3rd player of a team, then you need to spend 10k Ds to acquire the said player from another team.
36. **The individual team captains will report with a valid issue and this will be cross checked in the absence of a 3rd player. The captains can then choose to sub in an extra player by trading 10k Ds provided that player has a valid timing set on the leaderboard by 8:30 PM IST on race night.**
37. No other pilots should or are allowed to publish their timings if it's not their match and their timing will not be considered.
38. In the event that the backup player also fails to appear then the team will have to forfeit the game.
39. Teams are allowed to appoint team managers to handle pilots / financial matters which can be purchased by the team via the means of offering a certain D stake in the team.
40. Team captains and managers need to first find and recruit the best talent from their home city followed by their state before turning in to trade inter-city and international players via auctioning.
41. Debatas will be used as a currency value for the purposes of betting on SAH matches.
42. Based on their net worth in Debatas, one or more interested sponsors can invest to hold an ownership stake in the city franchise team to sponsor all the needs of the pilots.
43. There will be a direct correlation between Indian Rupee (INR) and IDRL Debatas (D) at the time of sponsor investment.
44. A variety of merchandise for team city pilots and fans will be available as the IDRL SAH Championships progress.

45. Subs are allowed at any point throughout the Season including the Knockout Stage.
46. Player trades i.e. buying/selling of pilots between two city teams are allowed throughout the Season in the Group Stage and a maximum of 1 trade is allowed per team in the Knockout Stage.
47. Sub will mean either a player from your own team or any other player who hasn't yet joined a team and Subs outside your team will incur a cost to your team that is paid out to the subbed in pilot.
48. Trading will refer to exclusively trading a pilot that is already a part of another team.
49. No Rules or Assumptions should be made outside of the rules that are contained in this Rulebook.
50. Any change to the rules contained in this Rulebook will have to go through a strict review process that is approved by a majority vote on the IDRL Discord Channel.

IDRL SAH Season 4 Race Schedule: [Available here](#)

Contributors and Credits

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