

BDRA

BRITISH DRONE RACING CHAMPIONSHIPS

PILOT BRIEFING & SAFETY PACK

JCB KEVIN QUARRY, STAFFORDSHIRE | 12-13 SEPTEMBER 2026

READ BEFORE ARRIVAL

Attendance at the on-site safety briefing is mandatory. This pilot summary does not replace the full BDRA Rules 2026, the JCB site rules, the risk assessment, or a direct instruction from the Race Director or Safety Director.

Venue	JCB Kevin Quarry, ST10 3BX	Published class	5-inch Open
Racing	Scheduled from 09:30; final timetable TBC	Rule set	BDRA Rules 2026 - Jan 2026
Parking	Use signed car park; reverse park only	Check-in	Pits shed / nominated official

Essential reminders for every pilot

- **Bring** current proof of insurance and BMFA/BDF membership details.
- **Display** your valid CAA Operator ID on every aircraft; be ready to show the CAA confirmation email if asked.
- **Present** every intended race aircraft for failsafe checking with all propellers removed.
- **Wear** high-visibility clothing in the quarry/track area and sturdy, closed-toe footwear.
- **Keep** the VTx off and propellers off in the pits. Maximum VTx power is 25 mW.
- **Never** enter a live track. Crashed aircraft may only be recovered when authorised to do so.
- **Fly only** inside the approved track area and never higher than the top ridge of the quarry.
- **Land or disarm** immediately when instructed. Safety instructions are not optional.

BDRA Champs 2026 Schedule

- Friday 11th Sept - Access from 2pm (**Volunteers, Livestream and BDRA only**)
 - Arrive with equipment
 - Team safety and schedule meeting
 - Assemble track, live steam, race directors' desk
- Saturday 12th Sept
 - 08:00 - BDRA Committee & volunteers arrive on site, sign in and prep race tech
 - **09:00** - Pilots start to arrive & sign in
 - 10:00 - Pilot & JCB briefing in the grandstand
 - 10:30 - Qualification Starts
 - **16:00** - Qualification Ends & Pilots start to depart
 - 16:00 - HD video track flights
 - 17:00 - Last flight
 - 18:00 - **BDRA Committee last to leave**
- Sunday 13th Sept
 - 08:00 - BDRA Committee & volunteers arrive on site, sign in and prep race tech
 - **09:00** - Pilots start to arrive & sign in
 - 10:00 - Pilot & JCB briefing in the grandstand
 - 10:30 - Warm Up / Last Qualification flights
 - 12:00 - Finals Start
 - 15:00 - Finals Ends
 - **15:30** - Awards
 - 16:00 - Track, livestream and race directors pack up
 - 18:00 - **BDRA Committee last to leave**

VENUE

Arrival, access and site layout

Follow event signage and marshal instructions from the moment you enter the JCB site.

Arrival sequence

- Drive to pits (left at fork)
- Reverse Park
- Check in to site and collect high vis
- Unload equipment into pits building
- Move car to carpark reverse park (Right at fork)
- Walk down to pits



Site overview from the event risk assessment. Boundaries remain subject to final on-site confirmation.

How to read the plan

- **Red:** approved track/flight area. Stay within it at all times.
- **Green:** grandstand and pits. High-vis is not required inside the grandstand.
- **Blue:** bank/interface area. Cross or enter only as directed.
- **Grey:** marked no-video/excluded area. Treat it as out of bounds unless an official directs otherwise.
- **Car park/access road:** keep the route clear for JCB and emergency access.

PILOT LOGISTICS

No EV charging is available. Bring your own pit table/chair and do not rely on fast site internet. Nearby camping is advertised through the event listing at Rue Hill Campsite; check current booking and hookup details before travel.

COURSE

Approved flight envelope and quarry limits

The marked dimensions are site references, not permission to fly outside the final track boundary.

ABSOLUTE FLIGHT CEILING

No aircraft may be flown higher than the top ridge of the quarry. The measured operational height reference must be confirmed at the safety briefing; if uncertain, fly lower.



Approximate dimensions reproduced from the supplied risk assessment.

Flight-area rules

- Remain inside the approved track area and racing line; leaving the track area is a race disqualification.
- Do not fly over spectators, public routes, occupied vehicles, quarry plant or uncontrolled persons.
- The track walk will define every obstacle, turn direction, no-go area, landing zone and safe retry route.
- The course will be closed immediately if a person, vehicle or plant enters the controlled area.

SAFETY

Quarry PPE, track control and emergency stops

Everyone has stop authority when a safety-critical condition is seen.

ON ANY LAND / STOP INSTRUCTION

Land or disarm immediately, remove your goggles, and wait. Do not enter the track and do not attempt to re-arm. Flying resumes only when the Race Director/Safety Director and JCB representative are satisfied that controls are restored.

PPE and pedestrian access

- High-vis must be worn in the quarry/track area; it is not required in the grandstand.
- Wear sturdy, closed-toe footwear. Pilots arriving in unsuitable footwear may be issued JCB steel wellies.
- A hard hat will be provided if JCB requires one for an authorised aircraft recovery.
- Use only designated pedestrian routes. Keep clear of quarry faces, edges, slopes, stockpiles and loose ground.
- Pilots may walk to the start and collection areas only when directed by race officials.

Live-track and recovery rules

- The track becomes live when the first racing round begins and remains live until racing is declared over.
- Track access while any aircraft is in the air is strictly forbidden.
- Wait for the Race Director or Track Marshal before entering to collect any aircraft.
- On recovery, fully power the aircraft off and carry it out. Never re-arm on the track.

Stop flying immediately if...

Aircraft leaves/approaches the boundary	Aircraft approaches/exceeds the top ridge
A person enters a controlled zone	Control link, video link or failsafe is unreliable
Any safety-critical official calls a stop	

Immediate incident actions

1. Alert Race Control / Safety Director and follow the JCB site emergency procedure.
2. Stop all flying and secure the start/landing area.
3. For injury, summon first aid and keep the emergency access route clear.
4. For a LiPo or other fire, evacuate the immediate area; do not take unnecessary risks to recover equipment.
5. Report every incident and near miss before racing resumes.

REGISTRATION

Check-in and technical inspection

All aircraft intended for use must pass the event checks before track access.

Bring to check-in

- Current third-party insurance.
- BMFA/BDF membership details required for the Championship finals.
- Every race aircraft - maximum three unless the Race Director authorises more - with propellers removed.
- Valid CAA Operator ID displayed on each aircraft and confirmation email available if requested.
- Radio transmitter, goggles/receiver and the tools needed to change your assigned channel.

The check sequence

1. Confirm registration, insurance, membership and Operator ID.
2. Demonstrate failsafe: motors must cut on loss of control signal.
3. Demonstrate a working disarm/kill control and identify any known fault.
4. Confirm airframe, propeller, battery and transmitter compliance.
5. Confirm the allocated video channel and power before the aircraft is cleared.

BDRA 2026 technical limits

Item	Limit	Pilot check
Airframe	300 mm max	Measured across motor shaft centres
Motors	6 maximum	All secure; no known fault
Propellers	6 in maximum	No metal, wood or carbon-fibre props
Battery	6S maximum	Undamaged; venue may impose a lower limit
RC link	100 mW maximum	UK-legal system; control equipment off in pits
Video transmitter	25 mW maximum	5.8 GHz; 30 MHz max bandwidth
Digital video	25 Mbps maximum	Assigned event channel; no additional broadcast signal

FAILSAFE STANDARD

On loss of control signal the motors must cut. If a flight controller malfunctions in flight (for example, a yaw spin), disarm immediately and let the aircraft drop; do not try to regain control.

RACE READINESS**Video discipline, start and landing procedure**

Most avoidable race delays begin with an unauthorised or incorrectly configured transmitter.

VTx DISCIPLINE IS MANDATORY

Your VTx may be powered only while you are racing. It must remain OFF at all other times unless the Race Director grants an exception. Contravention may result in disqualification.

Channel and radio rules

- The Race Director will issue the 5.8 GHz channel plan. Pilots must be able to set any required event frequency with reasonable notice.
- The selected channels require at least 35 MHz separation. Use only your allocated frequency.
- No other 5.8 GHz transmission of any kind is permitted anywhere on site during the event.
- For testing or repair in the pits, VTx OFF and propellers OFF. Test hovers/flights require Race Director permission in a designated area.
- Long-range UHF control equipment, including Crossfire-type systems, should be switched off in the pits.
- A personal DVR is strongly recommended and is needed as evidence for a protest or video issue.
- Random VTx inspection may be requested. Each pilot is responsible for knowing how to change and verify their equipment.

Before the start tone

1. Complete your assigned spotting duty and be ready immediately for your own heat.
2. Enter the designated pilot area only when directed and occupy the assigned position.
3. Place the aircraft fully within the start grid, power it on, then immediately leave the grid.
4. Do not arm until every pilot is clear of the start line and the official procedure permits it.
5. Wait for the distinct start signal. Leaving the starting block before the tone can lead to penalties being applied.

At the end of the race

1. After three laps or when instructed, stop racing and land immediately in the designated landing zone.
2. Do not continue flying or perform celebratory manoeuvres.
3. Remove goggles and wait for permission before entering the track.
4. Power the aircraft fully off and carry it from the track; do not re-arm.

Video issue during a race

Raise the issue with the Race Director as soon as practicable. A qualifying rerun may be granted only after review and at the Race Director's discretion. For any protest or appeal, your own DVR is the primary evidence and the Race Director's decision is final.

COMPETITION

Qualifying procedure

The event timetable currently plans eight qualifying rounds, subject to venue confirmation, weather and safe progress.

Heat duration	3 minutes	Race distance	3 laps
Heat size	3-8 pilots	Timing	Heads-up from first start-gate crossing
Planned rounds	10, subject to change	Minimum Event completion	3 rounds ran for a valid competition result

How qualifying runs

- A round contains every heat in sequence so each pilot has one opportunity to fly in that round.
- Heat size remains the same during qualifying.
- The mass-start grid must provide at least 0.4 m between aircraft and be at least 10 m from the first obstacle.
- When three laps are complete or the three-minute time expires, return to the landing area.

Rule 8.1.1 - qualifying method

Method	Ranking	If fewer than 3 laps
Option 1	Fastest time for 3 consecutive laps	2 laps rank above 1; no valid lap ranks last

Missed obstacle and rerun rules

- A lap is invalid unless every obstacle is completed in the correct sequence and direction.
- If you miss an obstacle, retry it when safe. After two unsuccessful retries you may continue, having clearly demonstrated both attempts.
- Waiting for traffic does not count as a retry. Collision with another aircraft during a retry causes disqualification from that race.
- There are no routine qualifying restarts. Exceptional restarts are solely at the Race Director's discretion; a fire requires all pilots to land before the incident is handled.

COMPETITION

Finals, penalties and interruptions

Final positions determine the Championship outcome; timings are adjusted before winners are announced.

Finals fundamentals

- Finals use a mass start and are normally three laps, unless adjusted under the interruption procedure.
- Finals timing starts with the start signal and ends when the pilot crosses the start/finish gate after the final lap.
- A final ends when all pilots have completed the distance or have been deemed crashed out.
- No Show: failure to present or make a reasonable attempt to fly forfeits points and finishing position. DNS: a genuine technical failure arising after grid placement but before the start scores zero in that final.

Permitted 2026 finals formats

Format	How it works	Pilot implication
Triple finals for all	Pilots are grouped by qualifying position and race three legs.	Consistency across all three legs determines the result.

Triple-finals points

Finish	1st	2nd	3rd	4th	5th	6th
6-pilot final	10	7	5	3	1	0
4-pilot final	10	7	5	3	-	-

Race disqualification triggers (At Race Directors Discretion)

- Leaving the starting block before the start signal; leaving the track area; flying unsafely.
- Colliding while retrying a missed obstacle or while obstructing the racing line.
- Continuing after all laps, performing celebratory manoeuvres, or ignoring an instruction to land.

The Race Director announces a disqualification. Land promptly and safely. Failure to land may escalate to disqualification from the event.

Interruption and appeal

- An isolated heat may be abandoned and restarted at the Race Director's discretion.
- For a prolonged interruption, the Race Director may consult the organiser and/or competitors on whether racing can safely continue.
- Protests and appeals, including VTx reception issues and collisions, are at the Race Director's discretion. Bring your own DVR; the final decision is final.

PILOT DUTIES

Spotting, conduct and final event checks

A safe, fair Championship depends on every pilot completing their non-flying duties as reliably as their race heats.

Spotter duty

- You will typically spot the race before your own. Any alternative rota will be announced at the briefing.
- Observe the aircraft/course, count laps, and report a missed obstacle or incorrect course to Race Control.
- Failure to spot or provide a suitable substitute may forfeit the previous round or your best round, at the Race Director's discretion.

Pilot conduct

- Follow Race Director instructions and demonstrate sportsmanlike conduct at all times.
- Violent, threatening, harassing, aggressive, bullying or discriminatory behavior is not tolerated and may result in removal or a ban from future events.
- Do not bring illegal substances to a BDRA-sanctioned event. Declare if fatigue, illness or equipment condition makes you unfit to fly safely

Event format

- Saturday/Sunday registration, briefing, qualifying and finals timetable
- Qualifying method: Option 1
- Finals format: Triple finals for all
- Video channel/frequency scheme and pilot-position allocations tbc

THANK YOU

Read this pack, attend the on-site briefing, respect the quarry controls and help deliver a fast, fair and safe 2026 British Championship.

Facilities on site

- Toilets
- Power for charging (locations will be given with the on site briefing)
- Food and drink limited on site bottled water is available. Sunday there will be a coffee and panini van on site.
- Tea Coffee facilities provided Saturday

Essentials to bring

- Food and drink
- Tables/chairs for your pits
- Power strips/extensions for charging

Sources and live event details

Event listing: ifpv.co.uk/events/874 | Current rules: bdra.uk/current-rules/