MRC GHANA 2027
CATEGORY INFORMATION SHEET

Drones

Precision piloting missions

19–20 February 2027 · Accra, Ghana · Venue to be announced

The current official H.E.R.O. rules take precedence
This sheet is a plain-English summary prepared by the MRC Ghana 2027 organisers. Always check the official rules before building or competing: https://www.he-ro.gr/mrc-drones

Sport overview

Drones is a precision flying challenge. A team's pilot (the Technician) flies a small, guarded indoor drone by remote control through a course of hoops, obstacles, take-off points and landing pads.

Each element on the course carries its own points value. The layout, route and points are kept secret until the competition day, so teams win through solid piloting skills rather than memorising a course.

This is not Drone Soccer: Drones is an individual-team piloting mission, while Drone Soccer 3×3 is an alliance-based aerial football match.

Competition objective

- Fly the announced route in the correct order — elements completed out of order do not score.
- Pass through hoops and over obstacles cleanly and land accurately on the marked pads.
- Complete the mission within the three-minute attempt limit.

Age eligibility

One division; each age category competes separately.

Age category	Published ages
Kids	10 to 12 years
Teens / Senior	12+ to 18 years
Adults	18+ years

Team requirements

- Teams of 2 to 3 members. Individual entries are not accepted.
- Each team names one Technician — the only team member allowed in the waiting and competition area. The Technician may change between attempts or matches.
- Every team member must be at least 10 years old.
- Each team needs a coach aged 20 or over. A coach must bring one assistant for every three teams they register.
- One robot per team. Robots may not be swapped during the competition or shared between teams.

Format and scoring

- Each team has two attempts. Every team completes Round 1 before Round 2 begins.
- Each attempt lasts up to three minutes. The drone must take off within five seconds of the referee's whistle.
- Flight height must stay at or below 2 m at all times.
- Start order is first-come, first-served in the Technicians' queue.
- Points are shown on each pad or hoop and count only when that element is completed correctly and in order.
- The attempt score is the total of points earned. An attempt that runs out of time scores no points.
- Ranking uses each team's best attempt. Ties are broken by fastest time, then combined score, then an extra mission.
- 1st, 2nd and 3rd place are awarded in each age category.

Robot and equipment requirements

- Remote-controlled flight only — autonomous flight is not permitted. Wireless links may be used for flight control only.
- Maximum size 25 × 25 cm including propeller guards and anything mounted on the drone.

- Maximum all-up weight 300 g, including battery, guards and camera.
- Plastic propellers with guards around the full perimeter. No sharp parts.
- 1S or 2S LiPo/LiHV batteries only; teams may bring up to two packs.
- Indoor micro-class drones. The official page lists examples of accepted and not-accepted models — check it before buying. Models not listed need organiser pre-approval at least 7 days before the event.
- At inspection the drone must hold a flight height of 1–2 m without the pilot controlling altitude, and must be able to cut power instantly (kill switch).

Preparation checklist

- [ ] Confirm your drone model meets the size, weight and battery rules (or request pre-approval).
- [ ] Fit full-perimeter propeller guards and remove any sharp parts.
- [ ] Test altitude hold at 1–2 m and practise using the kill switch.
- [ ] Prepare two charged batteries and a safe charging/storage bag.
- [ ] Practise hoop runs, precision landings and fast route planning.
- [ ] Pack protective goggles for the pilot.

Safety notes

- The pilot must wear protective goggles.
- Propeller guards, battery condition, the 2 m height limit and the kill switch are all checked at technical inspection.
- Missing the technical inspection slot means automatic exclusion.
- Rule ZERO applies: if you are not sure something is allowed, assume it is not and ask the organisers.

Awaiting clarification

- For MRC Ghana 2027, ages are counted on 19 February 2027, the first day of the competition. The official rules do not set this date themselves, and adjacent bands share boundary ages (for example '10 to 12' and '12+'); the Ghana organising committee will confirm the category for anyone on a boundary age.
- The official page describes both a three-minute 'demonstration' and a precision mission announced on the day; it is not fully clear whether these are the same attempt.
- The page excludes DIY and 3D-printed micro drones but permits DIY drones in the Adults category if they meet the specifications.
- The altitude-hold inspection requirement may not suit every model on the indicative list; confirm with the organisers before buying.

Registration guidance

- Register through the official MRC Ghana 2027 registration application: https://www.mrcghana.com/register
- Have your team name, team members, coach details and chosen sport(s) ready.
- Registration closes on 15 January 2027. Registration fees: to be announced.
- Participant information is collected only through the official registration application.
- Questions: partnerships@makersplacegh.com

Official rules and source

Official H.E.R.O. rules
https://www.he-ro.gr/mrc-drones

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