

FAQs on DRONE OLYMPICS

(I) Technical FAQs

Q.	What would be the size/shape/mounting details/ content of the payload in the weight drop competition?
A.	A dummy weight shall be attached by the participant of at least 15cmx15cmx15cm volume, with a weight of 2 kilogram, verified by judges before the competition. Any appendages/attachments shall not count as the weight of the payload. There is no specific requirement with respect to design of Mounting used by the participant.
Q.	Is hand launching/catapult launching/ bungee launching allowed to save on the weight of the landing gear?
A.	MTOW (Maximum takeoff weight) shall be measured by all equipment used to provide take-off/landing capability to the systems. In the case of catapultetc, the weight of the ground equipment shall be added.
Q.	Is the weight drop challenge totally autonomous mission or first person view?
A.	The drop must be autonomous.
Q.	Are engines or any other means of propulsion allowed other than pure batteries for all the challenges?
A.	Only batteries will be allowed.
Q.	How will the accuracy of payload drop be calculated?
A.	The drop needs to happen on a 25m by 25m square. The Lightest UAV to perform the drop shall win the competition.
Q.	Will GPS coordinates for payload drop be provided?
A.	Yes.
Q	Is Landing gear mandatory?
A	Not mandatory but mechanical devices used to propel the aircraft in take-off shall

	be counted in the MTOW eg: catapult, bungee etc.
Q.	What does HYBRID Design specify? Can it be a CONVENTIONAL fixed wing airplane?
A.	Hybrid Design is a Fixed wing UAV capable of Vertical Takeoff & Landing.
Q.	Will pilot be available from the organizers? if not should a pilot from participant have RC LICENSE?
A.	Pilots shall not be provided by the organizers. No RC License required since the operating frequency is in the de-licensed band. Refer to the Terms & Conditions for more information on Indian DoT / WPC Norms.
Q.	In the Surveillance Competition and weight drop challenge does the UAV have to fly autonomous or manual?
A.	Both are allowed, but autonomous will be given preference.
Q.	What type of UAVs are eligible for the Weight Drop Challenge?
A.	All configurations of UAVs are allowed in the weight drop challenge, however, the MTOW shall include the complete weight of any mechanical parts used to launch the UAV, such as Bungee, catapult etc.
Q.	What method will be used for Detection of human sized targets (manually or should be detected automatically by a software?)
A.	Detection is to be done manually.
Q.	Does the Payload need to be dropped or can be disengaged at the end point? and can payload be dropped while in air or had to land and place the payload?
A.	Payload can be dropped while in air. Participant can either drop or disengage the payload.
Q.	What is meant by human sized targets?
A.	Human sized targets can refer to actual humans that need to be surveyed by the system or a dummy that can function as a substitute
Q.	What is meant by flight time? Will there be a track in which all the drones

	race and their time will be noted?
A.	Flight time refers to the endurance of the aircraft, that is the time the aircraft is able to stay in the air. The competition will be preferring UAVs which are able to stay in the air for a longer time. Currently, there is no drone race category for the Drone Olympics
Q.	Can the clamping device be used to attach the payload to the drone?
A.	The mechanisms to drop the payload can be decided by the participant, however, the weight of the UAV will include the weight of the mechanism. Participants will be judged on the MTOW - the weight of the supplies.
Q.	Will the target be within LoS(Line of Sight)?
A.	No, participants shall be judged based on their live transmission range in full HD (Carries 40% weightage)
Q.	Can all the formations be done by 15 drones?
A.	Formations that are of the same number are to be done in the same flight, therefore using the same 15 drones to do all the formations is out of the purview of this competition. Further, maximum formation strength is defined as 12 in the competition
Q.	Should the formations be pre-programmed?
A.	Both Autonomous and remotely piloted formations are allowed. However, preference shall be given to Autonomous (i.e., pre-programmed) flying.
Q.	Should all the drones be identical?
A.	The drones can be different; however, all the different types/models of the Drones need to be declared and listed in the prescribed format given on the Drone Olympics India website
Q.	Can one system be utilized for 2 competitions?
A.	Yes, systems can be utilized for multiple competitions. There is a provision of listing the number of competitions a type of equipment is going to be flown in the registration form given on the drone olympics website.

(II) General FAQs

Q.	How can I watch the Drone Olympics as a spectator as the Aero India is not open for general public on 21st Feb 2019.
A.	For general public an area known as ADVA (Air Displaying Viewing Area) is open on all days of Aero India 2019. You may watch Drone Olympics from ADVA.
Q.	Can Student participate in the Drone Olympics?
A.	Yes, an individual can participate, however he must be at least 18 years old.
Q.	Should UAV be registered to DGCA if it is made/manufactured in India?
A.	UAVs in the competition are being demonstrated for defence/military purposes and thus shall not require registration for use during the course of the competition. Any usage outside the competition premises shall be governed by the DGCA. Refer to the CAR on RPAs for out of competition usage of UAVs.
Q.	What should be attached at company identity, in case of a Student participant?
A.	The Student can attach their Student ID Card in the absence of company ID.
Q.	If students are allowed to participate, should they register as individual or organization?
A.	Students are to register as individuals
Q.	What proof is required to be attached in case a Student has to register as Organisation?
A.	The Organisation's identity documents in case of a registered entity, else individual's documents and declaration that they are applying under an organisation's name that is yet to be incorporated.
Q.	In the UAV/Equipment details form, what should be added in the "List of systems with serial number column" ?
A.	The UAV Type denotes a single "model" of a UAV. Once the model has been defined, the participant has to list each and every UAV that falls under that model, with individual serial numbers. Eg:

	<p>UAV Type: Fixed Wing UAV X</p> <p>List of Systems: FW-UX-1, FW-UX-2, FW-UX-5</p>
Q.	How many competitions a team can participate in?
A.	A team can choose to participate in all competitions they are interested in.
Q.	Under what category should participants register? Exhibitors or visitors for the event?
A.	Participants should apply via the register button on this link: https://aeroindia.gov.in/Drone
Q.	Can an engineering student and working in company can display their model?
A.	The Drone Olympics competition is for participants only and no provision is given for equipment display.
Q.	Is there any entry fees for participation in the competition?
A.	There are no entry fees for the competition.
Q.	How many days before competition will the system be allowed inside the arena?
A.	The details shall be uploaded on the website after all the entries are received by the department.
Q.	Is there a restriction on the size of the team?
A.	The team size should preferably be not more than five.
Q.	Does the endurance need to be showcased separately in a different arena or has to be shown in flight/mission?
A.	Endurance testing shall be done as a part of a Preliminary round. More information on this shall be released later.
Q.	Where would the competition take place?
A.	The preliminary rounds of competition are likely to be conducted at Challakere Aeronautical Test Range, Chitradurga, Karnataka. Only the final event will be conducted at Air Force Station Yelahanka,

	Bengaluru, Karnataka. The detailed information will be released later.
Q.	Will there be a pre-evaluation test / showcase before the competition? is yes then how many days prior to the competition?
A.	Yes, there will be a preliminary round for the competition. More information shall be released in due course.