



CIAM BUREAU MEETING

Dubai - 3 & 4 December 2015

CIAM & DRONES ITEM



Impact of the CASI decision relative to UAV

- **Decision:** UAV activities moved to CIAM
 - **Argumentation**
 - Drone is a 'hot' worldwide subject at the moment and has to be handled globally by FAI regarding impact on sport CIAM activities
 - The same product can be used both both for commercial and recreational / sportive purposes
 - CIAM has the focus on the subject and the expertise to handle all types of drones records and CASI is not the best place to develop record activities
 - Allows reduction of the number of sub-classes for records
- ↪ *As approved by CASI Meeting in Rotterdam, CIAM will now cover all drones activities including class U (UAV)*



CIAM classes

- **2 classes relative to models:**
 - **Class F**- Model Aircraft
 - **Class S** - Space Models
- **2 classes relative to aircraft which does not carry a human being:**
 - **Class F**- Model Aircraft
 - **Class U** - Unmanned Aerial Vehicle (UAV)
 - ↳ ***Sporting Code Section 12 (Class U records activities) to be included in Section 4 (Records Volume)***



Definitions

- **Model Aircraft (Class F)**
 - a) A model aircraft is an aircraft of limited dimensions, with or without a propulsion device, not able to carry a human being and to be used ***for competition, sport or recreational purposes***
 - b) For the whole flight, a radio-controlled model aircraft **must be within visual line of sight (VLOS) of the person who assumes directly its control or who is in a situation to take the direct control at any moment, including if the model is being flown automatically to a selected location**
- **UAV (Class U):** An *aerodyne* with means of propulsion that does not carry a human, and which is designed ***for scientific research, commercial, governmental or military purpose***
- **Visual line of sight (VLOS):** The flight operator who assumes directly the control of the model aircraft **must maintain direct unaided visual contact with the model aircraft**



'Drones' regulatory context is moving

- **International Civil Aviation Organization (ICAO)**
 - Circular 328 AN/190 relative to Unmanned Aircraft Systems (UAS) published in 2011
 - Remotely Piloted Aircraft Systems Panel (RPASP) created to produce for 2018 a draft Standards and Recommended Practices (SARPs) focused on international operations
- **European Aviation Safety Agency (EASA)**
 - Advance Notice of Proposed Amendment 2015-10 (31 July 2015) 'Introduction of a regulatory framework for the operation of drones'
 - EASA finally followed the general usage of the term 'drone' with the following definition : *'aircraft without a human pilot on board, whose flight is controlled either autonomously or under the remote control of a pilot on the ground or in another vehicle'*
- **Federal Aviation Administration (FAA):** Small UAS Notice of Proposed Rulemaking (NPRM) proposed in March 2015

⇒ **CIAM must take attention to this moving context**



CIAM general considerations

- **Impact of technology on the actual FAI model aircraft classes** (*competition and records*)
 - Actual FAI model aircraft classes are defined for competition purposes only
 - Use of electronic devices offers possibility of increased performances
 - ⇒ *Each CIAM Sub-Committee defines how such devices can (or cannot) be used and the appropriate requirements and limitations*
- **New types of aircraft with possibility of different events** (*recreational, competition and records*)
 - CIAM must take attention on new activities possible with current available technology especially FPV Racing
 - CIAM must show its interest for new types of model aircraft such as multi-rotor (multi-copter)



CIAM UAV Working Group

- **Terms of Reference:** Version 1.0 - June 2014
- **Mission**
 - Evaluation of the impact for CIAM activities of the current available technology especially regarding the sporting activity and events
 - Preparation of a draft rule to be considered as a base for future sporting events and consider whether a test event can be organized
- **Produced documents**
 - **UAV WG Report** Edition 2 - 20 January 2015 (final report as evaluated by the CIAM Bureau and presented at the CIAM Plenary Meeting)
 - **Draft Rule for Drone Model Aircraft Events** Edition 1 - 1st May 2015 covering two types of events:
 - Contest event for multi-rotors (FPV Racing and Freestyle Aerobatics)
 - Recreational event for based on a list of flight tasks to be done (for multi-rotors and/or fixed wing drones)
- **Term:** appointed from June 2014 to April 2015



CIAM Organising Committee for FAI International Events for Drones

- **Terms of Reference:** published in July 2015
- **Mission**
 - Identify contact persons in FAI members countries interested in sporting events for drones
 - Define the best format for FAI International Sporting Events to be organised from 2016 and common rules for these events
 - Encourage organisation of FAI International Sporting Events for Drones in as many countries as possible
 - Find partners and sponsors for the FAI International Sporting Events for Drones
 - Work closely with the FAI Media and Communication office to make all this activity public
- **Term:** appointed from 1st July 2015 to 2017 CIAM Plenary Meeting



Composition of the CIAM Organising Committee for FAI IED

- **Chairman:** Bruno DELOR - France (CIAM 1st VP and CIAM delegate)
- **Members:**
 - Bob BROWN – USA (CIAM Delegate)
 - Robert HERZOG - Belgium (CIAM Delegate)
 - John LANGFORD - USA (CIAM Space Models Delegate)
 - Bengt LINDGREN - Sweden (CIAM Delegate and CASI member)

⇒ *In complement, contact persons (PoC) in about 20 FAI members countries interested in sporting events for drones.*



Context analysis

- **CIAM must be proactive and flexible** regarding drones sport activities if we want to be an effective and recognized actor in that field.

We have to consider that drone sport concerns a new breed of participants (pilots and investors) who **never** heard about FAI and CIAM, or national established bodies, or even regulations authorities

- **FPV Racing has a high potential of development:**
 - Rapid worldwide development
 - Exciting for competitors
 - Well adapted for spectators (possibility to report pilot video camera view on large screens), for medias (possibility of a large audience by use of Watch HD Live Streaming video possibilities) and for sponsors

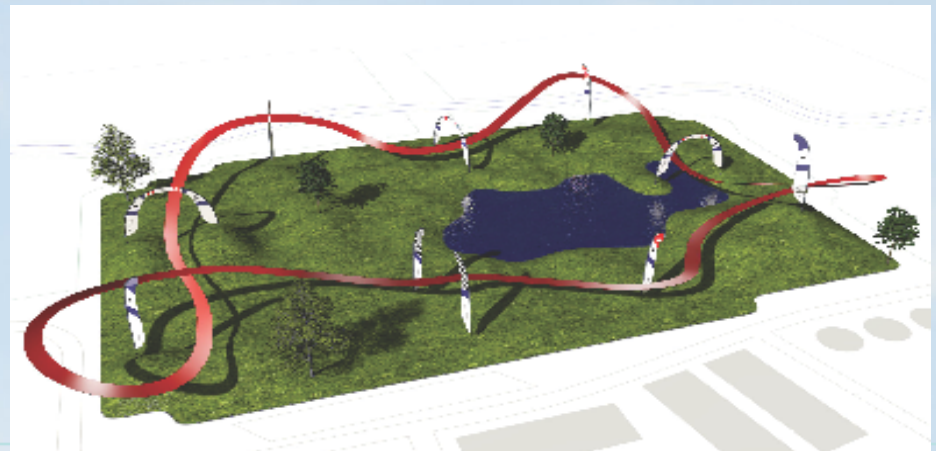
⇒ ***Priority for 2016 on FPV Racing activities***



Proposals for FPV Racing development

- **F3U provisional class** (Multi-rotor FPV Racing)
 - Rules based on the experience of the 2015 international events (FPV Race 28 in June in Chartres and US National Drone Racing Championships in September in Sacramento)
 - Effective 1st January 2016 as provisional rules with possibilities of amendments on behalf the CIAM Organising committee for FAI IED
- **FPV Racing World Cup** to encourage organisation of FAI International competitions : to be effective in 2016 in case of a minimum of 5 FAI competitions

⇒ **CIAM Bureau proposals**



Other Drone Racing initiatives

- **2016 World Drone Racing Championships** (20 to 22 October at Kualoa Ranch in Hawaiï)
 - Four world-class courses (250 Class, 1000 Class, Wing Class, EMS Class) and six separate racing events
 - Announced with \$ 200.000 total cash, prizes and trophies

⇒ <http://droneworlds.com/>
- **European Rotor Sport Association (ERSA) and World Rotor Sport Association (WRSA)** : associations made up with nations or organizations in order to promote rotor sports

⇒ ***Proposal of an agreement (MoU?) with FAI/CIAM***