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 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)**
  - 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 \textit{(competition and records)}
  – Actual FAI model aircraft classes are defined for competition purposes only
  – Use of electronic devices offers possibility of increased performances

\(\Rightarrow\) 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 \textit{(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)
• **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 1\textsuperscript{st} 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 Hawai’i)
  - 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*