TRAINING COURSE

UAS-ICAW - Initial and Continuing Airworthiness of Unmanned Aircraft Systems (UAS)

Introduction

The Initial Airwortiness (IAW) processes for the Classes of small UAS intended for the the 'open' category of UAS operations and for the standard scenarios in the 'specific' category, are based on the EU 'new' and 'global' approach for the safefy of industrial procudts, adminstered by industry and culminating in the CE marl and the Declaration of Conformity, based on Parliament Regulation 765/2008 , Commission Delegated Regulation 2019/945 and related European Norms (EN) 4709-00X.

In the specific category requirements escalate from processes identical to the open category, to Design Verification and up to Type Certificate (TC) based on Part 21 and covering both the aircraft and the Control and Monitoring Unit (CMU).

The issuance of the TC leads to the individual Certificate of Airworthiness (CofA) and to requirements for Continuing Airowrthiness on what shall be done (i.e. Part ML.UAS) under responsibility of a specific organisation (i.e. Part CAO.UAS) and under oversight bya competent authority (i.e. Part AR.UAS).

Similar processes, but with more strigent requirements, in particular for system safety assessment, apply to UAS, RPAS or VTOL Capable Aircraft (VCA) intended to be used in the certified category and possibly carrying humans on board.

The EU aproach for IAW and Continuing Airworthiness (CAW) in the certified category is consistent with Annex 8 to the Chicago Convention, effective since 2021.

A package of five EU Regulations type #3 (i.e. pilot on-board) certified operations was issued in 2024, covering inter alia IAW and CAW.

EASA has already published a number of special conditions , to facilitate the development of the certfication basis, among which the system safety assessment (so called '1309') is the most relevant.

Furthermore, EASA has published several Means of Compiance (MoC) for design of UAS (e.g. at SAIL III in the specific category) and for Instructions (ICA) for CAW to be delivered by manufacturer.

JARUS has already published four airworthiess codes: CS-LURS, CS-LUAS, CS-UAS and CS-HAPS.

Specific equipment is necessary for UAS (e.g. geofencing, electronic identification), for which Minimum Operational Performance Specifications are emerging from Standard Development Organisations (SDOs).

The course will provide an overview of the developments summarised above for IAW and CAW of UAS, RPAS and VCA, highlighting the differences with traditional aviation and suggesting how the airworthiness could be demonstrated for UAS of different configurations, MTOM and categories, in the context fo the evolving regulations.

🕐 COURSE DURATION

3 Days: 09:00 - 17:00 hrs.

👤 TARGET GROUP

Target audience:

→ Middle managers, policy advisors, rulemaking officials and inspectors of CAAs;

→ Middle managers, designers and aviation professionals desiring to receive detailed information on the international standards and rules applicable to initial and continuing airworthiness of non-military drones;

→ Entrepreneurs involved in drone or drone equipment manufacturing and wishing to expand their activity by certyfing or declaring conformity of respective products.

Read more about the course Content, Learning Objectives and Pre-requisites on the website: www.jaato.com