

TRAINING COURSE

UAS-Emergency Management at Aerodromes: Systems & Operations

Introduction

Project ALBATROS, funded by Horizon Europe through CINEA and coordinated by NLR has inter alia explored possibilities for using drones (UAS) for emergencies at aerodromes.

But 'drones in the box' may also serve the needs of other industry segments for routine surveillance or to respond to any events. These industry segments include but are not limited to rail, landslide control, roads/bridges, power lines, rivers, plants and facilities.

To employ drones in the box in Beyond Visual Line-of-Sight (BVLOS), three logical phases are envisaged:

1. System definition, procurement, implementation and approval.
2. Setting up operations, obtaining approvals for them and then executing operations, possibly in coordination among various stakeholders.
3. Governing the flight of the drone and acquiring data from its sensors, which is covered by other UAS courses at JAA-TO.

This course UAS-EMG-SYS&OPS, covers items 1) (SYS) and 2) (OPS) and therefore it is not addressed to remote pilots.

The systems may be defined, procured, implemented and brought to regulatory approval by several stakeholders, including the aerodrome operator, a utility company, a UAS company contracted for the purpose, Rescue and Fire Fighting Services (RFFS) or others.

Possible training needs for defining which systems to procure and organise subsequent operations include:

- knowing and applying the processes for initial and continuing airworthiness in the specific category of UAS operations
- identifying which authorities and other legal actors may be involved
- differentiate drones in the box from vertiports

- taxonomy of automation and autonomy and general knowledge on the rules for autonomous operations in the specific category
- knowing who and which processes need to be followed to properly deploy and take advantage of drones in the box and monitoring the outcome of the mission
- knowing the task not only of the Remote Pilot (RP), but also of the Fleet Manager (as defined in ISO 21384-3) and competency requirements of such Fleet Manager (ISO 23665)
- practical skill to set destination and location to be reached
- familiarity with the emergency management plan of the airport and respective role and responsibilities of involved actors, including ATS and UAS operator
- Role of the Fire Brigade and support to their needs

COURSE DURATION

3 days, starting at 09:00 and ending at approx. 17:00 each day.

TARGET GROUP

- UAS inspectors and other CAA personnel involved in oversight of UAS operations in the specific category
- Aerodrome and ATS personnel potentially involved in emergency response
- Professionals of other industry segments (e.g. rail, landslide control, roads/bridges, power lines, rivers, plants and facilities) which could benefit from application of 'drones in the box' solutions
- UTM/U-space service providers which accommodate emergency flights with priority
- UAS manufacturers, importers, vendors and operators
- Middle managers of Rescue and Firefighting Services (RFFS) or other civil protection entities

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