SAVE THE WEEK!

Week 40 will be a special week in Östergötland, Sweden – not just one live drone demonstration will take place but as many as three. Three demonstrations will be carried out – LMDS, SESAR DAA (ERICA PJ13) and CORUS-XUAM.

During these three days of demonstrations, we will be happy to accompany you and share what the projects consist of, the objectives and the potential of U-space and Air traffic management (ATM) for the technological, industrial and commercial development of unmanned aircraft and advanced air mobility.

Demo 1: Test Arena Autonomous Airport with Last Mile Delivery Service (LMDS)
5th of October
Location: Linköping, Sweden

Global trends are driving transformation within air travel and transportation, and we foresee great potentials for future Advanced Air Traffic.

The Test Arena Autonomous Airport project has been started to develop required infrastructure to meet future needs within the Advanced Air Traffic.

The first use case in the Test Arena will be an application that demonstrate Last Mile Delivery Scenarios with a large number of simulated drones in cooperation with physical drones over a city providing deliveries. The demonstration will show new technology combined with, the soon into effect, U-Space regulations.

Demo 2: European Detect & Avoid (DAA) Flight Demo (SESAR ERICA/PJ13)
5th of October
Location: Linköping, Sweden

When will DAA solutions be ready to allow Remotely Piloted and Autonomous Aircraft to be fully integrated in controlled airspace?

Today, Remotely Piloted Aircraft Systems (RPAS), or any form of Unmanned Aerial Systems/Vehicles (UAS/ UAVs) or Drones, are limited to flying within line-of-sight, segregated or to specific operations with restrictions. DAA is a key enabler to allow this long-sought-for integration, allowing RPAS/UAS/Drones to operate safely along with other manned and unmanned aircraft, significantly expanding flexible use of these vehicles and their operations.

The flight will demonstrate real-time operations of DAA onboard UMS Skeldar V-200 Vertical Takeoff and Landing (VTOL) RPAS, with live intruder encounters. The demonstration is part of the European Commission sponsored SESAR2020 program, project ERICA/PJ13. The DAA system is based on the European DAA concept and technology, developed over some years for both military and civil use, currently being validated in SESAR2020, standardized in EUROCAE and also worked on the European Defence Funds program EUDAAS, towards a 100% European solution (with global interoperability).
Demo 3: Concept of operations for European UTM systems – Extension for urban air mobility (CORUS - XUAM)  
6-7th of October  
Location: Norrköping, Sweden

What are the urban challenges when establishing a U-space service between two cities?

A unique intercity flight will take-off next to the military airforce base in Linköping and visitors will greet the Katla Aero drone at its arrival at Norrköping’s Airport. A flight corridor between the two cities will be activated at the time of the flight estimated to last 20-25 minutes. The KATLA will fly Beyond Visual Line of Sight (BVLOS) over a distance of approximately 60 km.

The overall objectives of the demonstration are to perform a fast, safe and efficient cargo transport while demonstrating the operational requirements for a well-functioning regional UAM system, crossing both controlled and uncontrolled airspace. The operational focus is the integration of ATM and UTM systems meeting interregional cargo needs.

Contact:

Test Arena Autonomous Airport with Last Mile Delivery Service (LMDS)
Catarina Lindholm SAAB  
Catarina.Lindholm@saabgroup.com

European Detect & Avoid (DAA) Flight Demo (SESAR ERICA/PJ13)
Gunnar Frisk SAAB  
Gunnar.frisk@saabgroup.com

Concept of operations - Extension for urban air mobility (CORUS - XUAM)
Billy Josefsson  
Billy.josefsson@lfv.se