What performance level for the UTM system

June 24, 2021
Mark Wuennenberg, Bosko Rafailovic, Bobby Healy, Antony Evans

Safety performance is the result of the complex interaction between interdependent pillars – aircraft, operator, maintenance, etc. Aviation requires a very high level of safety performance. All elements of the ecosystem have to contribute to the overall performance. Performance targets are best set at the global level to achieve convergence at a high level and maintain trust. We should build the UTM system in a phased approach and so systematically apply standards and use of data to maintain trust. A robust approach to UTM performance relies on simulation.

From an ATM perspective, it is quite a challenge to move from an air traffic controller centric system to an operation centric UTM system. ATM is based on a limited amount of variability in performance – all large commercial aircraft have similar performance profiles. UTM is to cope with the wide variety of operational performance of drones – with difference in speed, mass or flight profile.

When it comes to real business development, autonomous BVLOS operations need to scale to keep costs down and keep drone operations sufficiently attractive, including to deliver low cost items, like a meal for four persons.

The ICAO presentation, together with the speakers’ information of this “Performance Requirements in a UTM environment” webinar, can be found here.

GUTMA Members can access the recordings of the webinars here and the other presentations here.