



*The Leader In Recreational Aviation*

## **Chapter 736 Newsletter for October 2019**

### **Boeing partners with Porsche on electric flying car**

U.S. planemaker Boeing Co said on Thursday it was working with Volkswagen's sports car brand, Porsche, to develop a concept electric flying vehicle capable of transporting people in urban settings.

Boeing is already competing with arch-rival Airbus SE and other companies to introduce small self-flying vehicles capable of vertical takeoff and landing.

Earlier this year, the planemaker conducted an inaugural test flight of an aerial car prototype that could accommodate two to four passengers and fly up to 50 miles.

The test flight was within months of Airbus showcasing a prototype of an autonomous passenger vehicle in partnership with Volkswagen's premium brand, Audi, that has the ability to both fly and drive.

Porsche has been aiming to build flying cars that can be used as taxis and for ride-sharing purposes.

As part of the deal, Boeing and Porsche will analyze the market potential for premium aerial vehicles and their possible use in highly populated cities and metropolises, the companies said.

The partnership comes at a crucial time for both Volkswagen and Boeing.

## **AUTOMATED AIRWORTHINESS CERTIFICATE APPLICATION SYSTEM LAUNCHES**

The FAA has released a new automated tool that allows applicants for airworthiness certificates and some other permits to apply online for the documents they need.

Using the **tool** is preferred for submission of applications for standard and special airworthiness certificates, special flight permits and special flight authorizations, and amended and replacement airworthiness certificates.

According to this **user guide** ([ctrl click to see the guide](#)), a new user must navigate to the system's public-facing portal and create an account, log in, and create applications from the user account's dashboard. The completed application is submitted to your local FAA office. Its status can be tracked online or with email notifications.

The launch of the long-awaited system, with its data-gathering and performance-measurement capabilities, is expected to help the FAA track the effectiveness and efficiency of its aircraft certification services

Applying safety analytics within the integrated system's internal portals for FAA users, including Flight Standards District Offices, Manufacturing Inspection District Offices, Air Safety Inspectors, and the Aircraft Registry, could help the agency identify and anticipate emerging risk factors in the aircraft fleet.

### **Airports Rise to Technology Challenge Posed by Drone Threats**

Airports worldwide still face complex and costly challenges in protecting their operations from the threat of disruption from drone flights, and there remains no “silver bullet” solution to the problems, according to experts addressing the Drone Disruption Summit held in London on October 15. Delegates heard how major international gateways like London Gatwick and Paris Charles de Gaulle and Orly have made multimillion-dollar investments over the last 12 months that have required intense follow-on work to ensure effective integration of detection and protection systems with overall airport operations.

In its immediate response to the damaging four-day closure of London Gatwick from December 19 to 22, 2018, the privately owned airport spent at least \$5 million rapidly deploying hardware. The equipment includes the DJI AeroScope G16 radio frequency detection system, a Metis Skyperion passive RF signal spectrum analyzer, the Chess Dynamics AUDS multi-layered system combining radar, electro-optical camera, thermal imaging, and signal jamming, as well as the Skywall net-projector kinetic-attack system to block drone incursions.

According to London Gatwick Airport's head of security, one of the main lessons learned centered on the need to consider how the new protection technology will safely and effectively integrate with existing airport systems. His team initially purchased a system that conflicted with part of Gatwick's ground control radar network. He also advised airport managers to develop strong working relationships with key agencies such as air traffic

management providers, the police, and the military. He also warned against “snake oil salesmen” offering still-unproven protection technology.

The Gatwick situation proved to be a wakeup call for international airports worldwide when it became clear that protest groups were deliberately flying drones in an effort to seriously disrupt operations. UK government agencies had not advocated investments in new technology on the grounds that experts considered no system mature enough. The thinking has now changed; while no system alone can give the high level of protection that an airport might desire, if authorities deploy a combination of technologies intelligently, they can provide effective protection. He also counseled that leasing technology, rather than buying it, can ensure that combinations of hardware do not become redundant.

After seeing how effectively Royal Air Force air defense specialists provided support during the incident—even though they were using outdated equipment—Gatwick has begun actively recruiting former military specialists to strengthen the human element in its drone defenses.

#### **Next Meeting**

Our next meeting will be held in the Spring of 2020. Have a nice winter