The Leader In Recreational Aviation

Chapter 736 Newsletter for December 2019

Laminar Research Unveils Full-Featured Smartphone Version of X-Plane

The smartest of smartphones these days can handle plenty of meaty chores like text, audio, photo and even video editing. When it comes to gaming though, most fall pretty short. Nowhere is this more apparent than when we airplane geeks try to recreate our flying with any of the flight simulator apps. Even Laminar Research's first attempt at bringing their well-known X-Plane flight simulator to a phone or a tablet left users wanting more of the features available from the desktop version.

On December 9, Laminar Research released a new mobile version of the X-Plane 10 flight simulator designed for Apple iOS and Android users whether they run it from their phone or on a tablet. No external controls are needed to run X-Plane 10, only the courage to tilt the phone and your head around in public while staring at a tiny screen that offers some of the most realistic scenery around.

This newest version of X-Plane mobile offers gamers an opportunity to choose from some 30,000 different airports, 11,000 of which include custom scenery the company says looks just like the area surrounding these airports. Laminar Research said the new mobile edition, "opens up new possibilities for training/currency, because it lets the pilot use X-Plane to simulate locations and aircraft that are relevant to their real-world applications."

When *Flying* spoke to Thomson Meeks, Laminar Research's director of customer experience, we asked how much memory an iPhone—for instance—might need in order to keep up with the software's demands. He said, "about 700 mb should be enough." At first that sounded minimal considering that Meeks said the mobile app's goal was to bring much of the fidelity of the flight simulator on a desktop machine to a handheld device. Meeks said the new app includes "70 and 80 percent of the desktop simulator capabilities." The best way to play the new X-Plane on an iPhone is to first chose the intended route and then download the necessary scenery while in range of a good wifi connection. That leaves the phone free to run the simulator later on its own.

The 3D scenery available on the new X-Plane looks simply unbelievable on a phone. The cockpit views even include a heads-up display device that will quickly prove to simmers why this technology has really taken hold as a way to improve aircraft control while reducing pilot workload. The Cessna 172, for example, also comes with fully functional Garmin 430 or 530 units that a pilot can program any way they choose. Using a finger to scroll, the user can view any portion of the cockpit or outside view of any of the 17 aircraft models available through Laminar Research for the app. Additionally, the new mobile X-Plane allows users to set the time of day, local weather conditions and even potential system failures.

Meeks says the company hopes a major side benefit to the near desktop-like X-Plane will be getting more young people excited about aviation. Running X-Plane on a desktop machine can be expensive, "But everyone has a phone or an iPad," Meeks said. "If we can engage kids with the tools they have in their pockets that's a win for us and the industry."

X-Plane software can be downloaded for free and includes the Cessna 172 and Cirrus Vison Jet. What makes the app really pop though is the rich scenery and extra aircraft. A monthly subscription to the scenery runs $5.99 and includes these additional aircraft: Piper Cub, Douglas DC-3, Beechcraft Baron, Piaggio Avanti, Beechcraft King Air 90, Bombardier CRJ, Airbus A320, Boeing 777, Boeing 737, McDonnell-Douglas MD-80, Boeing 747, A10 Thunderbolt, McDonnell-Douglas F4 Phantom and F22 Raptor.

A news helicopter was struck by a suspected drone over Los Angeles

A Los Angeles news helicopter made an emergency landing when an object struck its tail, and crew on board believe it was a drone.

KABC's Air7 HD chopper was flying just east of downtown at about 1,100 feet when crew heard a pop, then a loud bang.
"We felt it, we heard it and we all looked at each other; didn't really know what it was," the pilot said of Wednesday night's incident.
He thought a bird might have flown into the chopper -- but when the crew safely landed and assessed the damage, "it was a different story," he said.

The object had ripped through the tail of the helicopter and left other dents and scratches in other spots of the aircraft.
The pilot saw a flash of light -- what crew believed could've been a drone's green and red navigational lights.

The Los Angeles Police Department said the event "could have been a disaster" if the damage had been more severe. "It was a scary couple of minutes,".
The Federal Aviation Administration is investigating the incident, KABC reported. The National Transportation Safety Board also is investigating.

Illegal drones cause headaches
If a drone did hit the helicopter, it might've been flying illegally. The FAA requires recreational users to fly drones at or below 400 feet in airspace where air traffic control is absent and bans drones from flying in controlled airspace near airports.

Airports scramble to handle drone incidents
Los Angeles has a similar ordinance, banning people from flying drones over 400 feet or within five miles of an airport without prior approval from the airport's air traffic control staff. Users also can't fly drones in a way that interferes with manned aircraft.
Illegal drones aren't just a nuisance -- they're a real danger, authorities say.
Last month, firefighting planes sent to quell the Maria fire in Santa Paula were grounded for several hours after a drone sighting, the Los Angeles Times reported.
The National Interagency Fire Center said aerial firefighting efforts had been suspended at least nine times in 2019 due to drone interference.
A collision with the hard, plastic object could send a part of the plane into failure, a 2017 FAA report found.

First ISO approved drone safety standards announced

The world's first ISO approved drone standards have been announced by the International Organisation for Standardisation (ISO), following a 12-month period of consultation with drone professionals, academics, businesses and the general public.

The final publication of these new international safety and quality Standards for Unmanned Aircraft Systems (UAS) are expected to have a massive impact on the future growth of the drone industry throughout the world, and, are the product of several years of cooperation and rigorous interrogation from all sectors of society.

This important first step is part of a wider deliverable by ISO which is expected to trigger rapid acceleration in the use of air drones by organisations keen to reap the rewards of this transformative technology, against a background of reassurance on safety and security within a new framework of approved regulatory compliance.

The announcement by the ISO represents significant progress in the standardization of the global drone industry and is of particular significance in addressing the operational requirements of the more recognized and prevalent air drones, also known as UAS.

The new Standards include protocols on Quality, Safety, Security and overall 'etiquette' for the operation of commercial air drones, which will help shape future regulation and legislation. It is the first in a series of emerging standards for air drones, with others due to address General Specifications, Product Manufacture and Maintenance, Unmanned Traffic Management (UTM) and Testing Procedures. The Product Manufacture standards for UAS, which are due to be published next year, will combine with the operational standards already published to establish a full-airworthiness suite of standards for UAS.

Commenting on today's announcement, Robert Garbett, Convenor of the ISO Working Group responsible for global air drone operational Standards, Chairman of the BSI Committee for UK Drone Standards and Founder of Drone Major Group, the world's first global drone consultancy, said: "I am delighted that the operating Standards for air drones have now been approved and published. This success follows four years of collaboration involving ISO, BSI and other national standards bodies from all over the world, reinforced through expert input from a wide range of industry and public sector stakeholders. The Standards will deliver a new confidence among investors in the safety, security and compliance of commercial drone operations, which together with the Product Manufacture and Maintenance Standards, is expected in turn to facilitate a massive expansion in the availability and use of drone technology in the years to come

"Drones are a transformative global phenomenon, offering an unprecedented economic opportunity for those businesses and countries with the foresight to embrace this technology. My own conversations with Government, businesses and other stakeholders have shown that the new Standards will be enthusiastically welcomed and will empower organisations to discover how they can use drone technology to enhance their competitive position, adding value and creating growth and jobs."

Air safety

A key attribute of the ISO Standards announced today is their focus on air safety**,** which is at the forefront of public attention in connection with airports and other sensitive locations. The new Standards promotes an 'etiquette' for drone use that reinforces compliance towards no-fly zones, local regulation, flight log protocols, maintenance, training and flight planning documentation. Social responsibility is also at the heart of the Standards, which strengthens the responsible use of a technology that aims to improve and not disrupt everyday life. The effectiveness of the Standards in improving air safety will be further strengthened by the continuing rapid development of geo-fencing and counter-drone technology, providing frontline protection against 'rogue' drone operators.

Privacy and data protection

The Standards also seek to address public concerns surrounding privacy and data protection, demanding that operators must have appropriate systems to handle data alongside communications and control planning when flying. The hardware and software of all related operating equipment must also be kept up to date. Significantly, the fail-safe of human intervention is required for all drone flights, including autonomous operations, ensuring that drone operators are held accountable.

Air drones are beginning to provide solutions to some of the most pressing economic, transport, security, environmental and productivity challenges faced by governments and industry throughout the world, reducing road traffic, easing congestion, saving lives through a reduction in accidents and reducing pollution in our cities. As well as speeding up the delivery of large-scale infrastructure projects, drones are expected to reduce the need for some expensive new major transport infrastructure altogether.

Revolutionary approaches are emerging for freight and passenger transportation, with drones providing a cost-effective and environmentally responsible alternative to traditional methods, relieving the burden on our already stretched urban road networks. Further applications in the agricultural, maritime, construction and energy sectors among others, are already transforming businesses, with virtually all industries and business sectors set to benefit from the Standard-led adoption of rapidly evolving drone technology.

A number of recent reports have attempted to forecast the economic impact of air drones globally. For instance, in its report *Drones Reporting for Work*, Goldman Sachs has estimated that the size of the global drone industry will reach $100 billion by 2020. Most recently, analysts at Barclays estimate that the global commercial drone market will grow tenfold from $4bn in 2018 to $40bn in five years. They believe the use of drones will result in cost savings of some $100bn. These predictions relate solely to air drones, demonstrating that the economic benefits offered by drone technology are vast, with growth set to accelerate across surface, underwater, air & space, as well as emerging hybrid drone applications.

Happy Holidays