



*The Leader In Recreational Aviation*

## Chapter 736 Newsletter for September 2016

### **Museum of Flight teams up with Microsoft for virtual reality tours of historic airplanes**

It's not easy to crawl through the guts of a World War II bomber, but a new virtual reality project from Microsoft and Seattle's Museum of Flight turns it into a snap on a screen.

[The Aviation Pavilion Virtual Tour](#) (click this link to visit the site) is actually a series of VR tours, highlighting interior views of planes ranging from the B-17F Flying Fortress and the B-29 Superfortress to Boeing's 737 and 747 jets.

"For the first time, visitors – both on site as well as remotely – will be able to 'step inside' the cockpits and interiors of these carefully preserved artifacts through high-fidelity 360-degree virtual tours," the museum says.

There are clickable screen tours that were created from scans with the Matterport 3D Camera. The interface is similar to Google Street View: Click on the vantage point you want to get to, and you're there. You can also use arrow keys to navigate, or zoom out to see the full floor plan or "dollhouse" in a cutaway display.

There's also a score of 360-degree panoramas captured by photographer Lyle Jansma. You can twist and turn your vantage point on a computer screen – or set the imagery into VR mode, optimized for Homido goggles (which happen to be available at the Museum of Flight's store).

The museum's docents and volunteers will be using Microsoft Surface Pro tablets to show off the 3-D imagery, and museum goers can also peek through Lumia 950 smartphones equipped with VR gear.

Virtual reality has been on the Museum of Flight's agenda for more than a year. At last November's Space Fest, VR developers from Valve showed off a virtual reality environment from Mars, based on imagery from NASA's Curiosity rover and adapted for the HTC Vive system.

The Valve team also put together a VR rendering of the comet currently being studied by the European Space Agency's Rosetta mission.

"The response to the test run was overwhelmingly positive," museum developers reported.

Now a VR rendering of the museum's full-size space shuttle trainer is in the works. So get ready to strap on your goggles and float through the cockpit, even if your bones are too creaky to get through the hatch.

### **Senator seeks to further ease private pilot medical requirements**

A Republican senator is trying to relax the medical requirements for private pilots who fly small planes, drawing complaints from Democrats who say he is going back on a compromise that became law only two months ago.

Sen. James Inhofe of Oklahoma, an avid, 81-year-old pilot who has had a quadruple heart bypass, is trying to eliminate a requirement that pilots have a statement from their doctor saying that they don't have a medical condition that would interfere with their ability to safely operate a plane.

Inhofe, a member of the Senate Armed Services Committee, has proposed the change as part of House and Senate negotiations on a major defense bill, according to congressional aides familiar with the discussions. The aides spoke on condition they not be named because they weren't authorized to speak publicly.

The defense bill already includes a "pilots' bill of rights" sponsored by Inhofe — a series of provisions aimed at simplifying the medical approval process and helping pilots who contest enforcement actions by the Federal Aviation Administration.

But a compromise was reached earlier this year on the medical provisions, which were ultimately added to a bill extending the FAA's policies and programs that was passed by Congress and signed into law in July.

That compromise means nearly 200,000 pilots who fly planes weighing less than 6,000 pounds and with up to six seats no longer have to be certified every two years as medically fit to fly by an FAA-approved medical examiner.

Under the compromise system, which the FAA is still implementing, pilots can get a physical from any doctor — not just an FAA-approved medical examiner — and the doctor can simply attest that no prohibitive medical concerns were found.

The Aircraft Owners and Pilots Association and other groups whose members include recreational pilots had sought the changes, saying the previous system was overly bureaucratic and expensive, and discouraged pilots from flying.

The U.S. recreational flying industry has shrunk significantly. The number of general aviation pilots declined from 827,000 in 1984 to 593,000 in 2014. Industry officials say they are trying to encourage interest in flying.

But eliminating even the "moderate safety precaution" of having the doctor sign a statement that the pilot is fit to fly "would leave pilots with the exclusive responsibility

for coming to a medical judgment about their own fitness to fly, which we believe would represent an unacceptable risk to the safety of our airspace," Democratic Sens. Dianne Feinstein of California and Richard Blumenthal of Connecticut said in a letter this week to defense bill negotiators.

The letter urges them to reject the proposal. "Changes to civil aviation policy have no place in a military policy bill, recently negotiated compromises should not be re-litigated mere weeks after passage into law, and the safety of our airspace is too important to put at risk," the senators wrote.

Donelle Harder, a spokeswoman for Inhofe, declined to comment on the specifics of the pilot medical changes the senator is seeking. "Things change by the hour, and Inhofe has a strong record of trying to find a middle ground that benefits all stakeholders," she said. Jim Coon, the pilots association's top lobbyist, said his group isn't aware of what proposals have been discussed but supports the medical provisions already in the law.

### **Drone Operators Could Outnumber Private Aviation Pilots In Just One Year**

Two months after the Federal Aviation Administration released regulations governing the use of drones, thousands of would-be pilots have lined up to take the test to get licensed to fly on the first day it became available. The rush to fly the unmanned aircraft isn't just for the novelty, it's opening the door for new business possibilities for companies and entrepreneurs alike.

Bloomberg reports that with more than 3,300 people signed up to take the test. The FAA estimates that drone pilots could outnumber the 171,000 private pilots currently licensed to fly in the U.S. within a year.

Under the FAA regulations drone operators must be at least 16 years old, register their drones online, and pass an aviation knowledge exam at an approved testing center.

A passing grade gives operators drone pilot certification that lasts for 24 months. They'll also have to provide identification for a security vetting process akin to those general aviation pilots undergo.

Other rules are a lot like those for model aircraft hobbyists: the drone must be within sight at all times, night flights are banned, no flying over people, and no going higher than 400 feet or faster than 100 mph.

Prior to the new rules, prospective drone operators had to have a pilot's license, limiting the number of people allowed to legally fly the unmanned aircraft.

But that's all changing, and it could create a boon of sorts for commercial drone operations, including aerial photography, telecom companies, delivery services, farming, and other industries.

California-based Autodesk Inc., which sells computer tools to engineers, plans to expand services into construction, agricultural, and other industries with drones equipped with special sensors.

Other companies like AT&T and Amazon have already announced future plans to use drones for things like providing a flying LTE antennae or delivering packages, respectively.

### **NextMeeting**

To be determined.