

FAA Approves Boeing Plan To Fix 787's Batteries

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WASHINGTON (AP) — A Boeing plan to redesign the 787 Dreamliner's fire-plagued lithium-ion batteries won approval Tuesday from the Federal Aviation Administration, moving the cutting-edge planes a step closer to flying passengers again.

The plan includes changes to the internal battery components to minimize the possibility of short-circuiting, which can lead to overheating and cause a fire. Among the changes are better insulation of the battery's eight cells and the addition of a new containment and venting system, the FAA said in a statement.

The FAA statement didn't provide an estimate for when the grounded planes might return to service. Rep. Rick Larsen, D-Wash., who was briefed by the agency, said that if all goes well, the FAA could give final approval by mid- to late April for the 787 to resume flight.

Boeing would still have to retrofit the 50 planes already delivered to eight airlines in seven countries, Larsen said in an interview. That could mean the plane wouldn't return to the skies until late April or early May, he said.

First, Boeing's redesigned batteries have to pass a series of 20 separate lab tests, Larsen said, then flight tests would follow.

"If there's any one test that isn't passed, it's back to the drawing board for that particular part of the tests," he said.

So far, test flights of two 787s have been approved — one with a complete prototype of the new battery, the other with only a new, more robust containment box for the battery, Boeing spokesman Marc Birtel said.

The plan is an outline for a recertification of the plane's batteries, the FAA said. The 787 has two identical lithium-ion batteries, one of which is located toward the front of the plane and powers cockpit electrical systems, the other toward the rear and used to start an auxiliary power unit while the plane is on the ground, among other functions.

Every item that is part of an airplane, down to its nuts and bolts, must be certified as safe before FAA approves that type of plane as safe for flight.

The 787 fleet worldwide has been grounded by the FAA and civil aviation authorities in other countries since Jan. 16, following a battery fire on a Dreamliner parked in Boston and a smoking battery that led to the emergency landing of another 787 in Japan.

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Published on Industrial Maintenance & Plant Operation (<http://www.impomag.com>)

"This comprehensive series of tests will show us whether the proposed battery improvements will work as designed," Transportation Secretary Ray LaHood said in a statement. "We won't allow the plane to return to service unless we're satisfied that the new design ensures the safety of the aircraft and its passengers."

All Nippon Airways, the largest customer for the plane so far, said in a statement from Japan that it saw the FAA decision as significant progress. "Putting safety as the first priority, we hope to get the planes back in the air as soon as possible," the airline said.

The airliner's troubles have raised concerns that the FAA has ceded too much responsibility for evaluating the safety of new aircraft to manufacturers. To save manpower, the FAA designates employees at aircraft makers and their subcontractors to conduct the safety testing of new planes. Boeing's battery testing concluded that short-circuiting wouldn't lead to a fire and that the chance of a smoke event was one in every 10 million flight hours.

Instead, there were two battery failures when the entire fleet had clocked less than 52,000 flight hours.

The FAA's approval of Boeing's plan "is a critical and welcome milestone toward getting the fleet flying again and continuing to deliver on the promise of the 787," Jim McNerney, the aircraft maker's CEO, said in a statement.

The 787 is Boeing's newest and most technologically advanced plane. Its grounding on Jan. 16, an enormous black eye for Boeing, marked the first time since 1979 that FAA had ordered every plane of a particular type to stay out of the air for safety reasons.

UBS analyst David Strauss estimated that the 787 will cost Boeing \$6 billion this year. Besides the battery problems, the plane already costs more to build than it brings in from customers.

United Airlines is the only U.S. carrier with Dreamliners in its fleet. It has six, plus another 44 on order. American and Delta have also ordered 787s. Boeing has orders for more than 800 of the planes from airlines around the globe.

Steven Udvar-Hazy, CEO of Air Lease Corp., which has ordered 12 of the planes, said it could still take months for the plane to fly again and that a very long-term grounding could damage the 787 Dreamliner brand.

"It's important to get the airplane back in the air," Udvar-Hazy said while attending an airplane finance conference in Orlando, Fla. "Every plane has mechanical issues, but this was one that was considered serious by the authorities and I think Boeing has done everything it can to get that under control."

Udvar-Hazy has had weekly updates from Boeing's CEO of commercial airplanes, Ray Conner, and daily conversations with others at the airplane manufacturer. He has then relayed that information to his airline customers around the world.

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"Boeing has been very transparent and I think they've made a very concerted effort to address this issue ... to come up with a fix that hopefully is a permanent fix, not just sort of a Band-Aid solution," he said.

Boeing plans to begin test flights within days, Birtel said. The new battery design will be tested on a plane that has been identified elsewhere as being built for LOT Polish Airlines. Boeing also plans to fly a 787 that is used exclusively for testing. That plane has the stronger battery box, and will also be used for unrelated engine tests.

Before the fire on Jan. 7, Boeing shares had closed at \$77.69. They closed as low as \$73.65 three weeks later, after the planes had been grounded. But the shares have been recovering as anticipation grew for a battery fix. Boeing's gains have outpaced the strong rise in the Dow Jones industrial average, of which Boeing Co. is a member.

On Tuesday, Boeing shares rose \$1.22 to close at \$84.16, and rose another 28 cents to \$84.44 in aftermarket trading.

Source URL (retrieved on 04/27/2015 - 9:04am):

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