FAA to review of Boeing 787, but calls plane safe

January 11 2013, by Joan Lowy

In this Sept. 25, 2011 file photo, Boeing 787s sit at the company's assembly plant in Everett, Wash. The U.S. Federal Aviation Administration announced Friday, Jan. 11, 2013 that the agency is conducting a comprehensive review of the design, manufacture and assembly of the Boeing 787, even while government officials declared the plane safe despite recent incidents including a fire and a fuel leak earlier this week. (AP Photo/John Froschauer, File)

(AP)—The U.S. government stepped in Friday to assure the public that Boeing's new 787 "Dreamliner" is safe to fly, even as it launched a comprehensive review to find out what caused a fire, a fuel leak and

other worrisome incidents this week.

Despite the incidents, Transportation Secretary Ray LaHood declared, "I believe this plane is safe, and I would have absolutely no reservations about boarding one of these planes and taking a flight." Administrator Michael Huerta of the Federal Aviation Administration said his agency has seen no data suggesting the plane isn't safe but wanted the review to find out why safety-related incidents were occurring.

The 787 is the aircraft maker's newest and most technologically advanced airliner, and the company is counting heavily on its success. It relies more than any other modern airliner on electrical signals to help power nearly everything the plane does. It's also the first Boeing plane to use rechargeable lithium ion batteries, which charge faster and can be molded to space-saving shapes compared to other airplane batteries. The plane is made with lightweight composite materials instead of aluminum.

A fire ignited Monday in the battery pack of an auxiliary power unit of a Japan Airlines 787 empty of passengers as the plane sat on the tarmac at Boston's Logan International Airport. It took firefighters 40 minutes to put out the blaze. Also this week, a fuel leak delayed a flight from Boston to Tokyo of another Japan Airlines 787.

On Friday, Japan's All Nippon Airways reported two new cases of problems with the aircraft. ANA spokeswoman Ayumi Kunimatsu said a very small amount of oil was discovered leaking from an engine of a 787 flight from southern Japan's Miyazaki airport to Tokyo.

The jet returned to Miyazaki, and after checks found no safety risk it flew to Tokyo. ANA said that on another flight, to Matsuyama on the island of Shikoku, glass in a cockpit window cracked, and the aircraft was grounded for repairs. ANA said it has no specific plan for inspections and will continue regular operations, though it said it would

comply with instructions from the FAA and other authorities.

The FAA review announced Friday, which will be conducted jointly with Boeing, will include the design, manufacture and assembly of the 787 with an emphasis on the plane's electrical power and distribution systems. The review will also examine how the plane's electrical and mechanical systems interact with each other.

There is no obvious trend or similarity to the problems, which suggests they are more likely the result of quality control than a design flaw, aviation safety experts said.

"These appear to be isolated incidents," said John Goglia, a former National Transportation Safety Board member. However, the battery fire remains a special concern because "they overheat or burn with such intensity, at such high temperatures, they can cause damage to the surrounding aircraft structure," he said.

Boeing has insisted that the 787's problems are no worse than it experienced when its 777 was new in the mid-1990s. That plane is now one of its top-sellers and is well-liked by airlines.

"Every new commercial aircraft has issues as it enters service," said Ray Conner, the president and CEO of Boeing's commercial aircraft division, who joined Huerta and LaHood at a Washington news conference.

Some of Boeing's airline customers joined the chorus affirming support for the plane. United Airlines, the only U.S. carrier whose fleet includes the 787, said it has confidence in the airliner and will continue to operate its six 787s as scheduled. Air India said it planned no changes. Qatar Airways CEO Akbar Al Baker called the troubles "minor setbacks." LOT, the Polish airline, said that it has conducted a series of reviews of all systems in both its Boeing 787s. "All the tests were completed

positively—the systems are efficient and work well," the airline said.

Transportation Secretary Raymond LaHood listens at left as Boeing Commercial Airplanes President Ray Conner speaks during a news conference at the Transportation Department in Washington, Friday, Jan. 11, 2013, to discuss a comprehensive review of Boeing 787 critical systems, including the design, manufacture and assembly. The Federal Aviation Administration (FAA) on Friday launched a comprehensive review of the critical systems of Boeing's 787, the aircraft maker's newest and most technologically advanced plane, after a fire and a fuel leak earlier this week. (AP Photo/Susan Walsh)

The FAA's decision to conduct a comprehensive review of the 787 is fairly remarkable but was necessary to reassure the public, airline analysts said.

"Most likely, you're looking a manufacturing issue that will change as they learn to build the aircraft, but there's also the possibility that some systems might need tweaking," said Richard Aboulafia of the Teal Group in Fairfax, Virginia. "Either way, we're not looking at anything that undermines the aircraft's long-term prospects, just something that creates a large number of upfront headaches for Boeing and its customers."

In this May 7, 2012 file photo, a Boeing 787 Dreamliner arrives at Ronald Reagan National Airport as part of a worldwide "Dream Tour" in Washington. The U.S. Federal Aviation Administration said Friday, Jan. 11, 2013 it is launching a comprehensive review of the critical systems of the 787 after a fire and a fuel leak earlier this week. (AP Photo/Evan Vucci, File)

Boeing has delivered 50 of the 787s, starting in late 2011, and has orders for nearly 800 more. To get through the backlog, Boeing is ramping up

production to build 10 787s per month in Washington state and South Carolina by the end of the year. Boeing also said Friday it will open a third factory the Salt Lake City area to fabricate a tail piece for the plane.

By comparison, it builds more than one 737, Boeing's best-seller, every day.

The company said in November that it had begun making five 787s per month. But if any major manufacturing changes are needed to fix the problems, it could fall further behind in deliveries.

Carter Leake, an analyst who follows the industry for BB&T Capital Markets, said the broad review raises the chances that the FAA will find other things to scrutinize at Boeing. "You are more exposed than normal to something else being opened up," he said.

But he said Boeing is unlikely to slow down production, even if it ends up having to change the way part of the plane is built.

Huerta and LaHood rejected the notion that FAA may have not have been vigilant enough when it certified the 787 for commercial operations. LaHood noted that FAA technical experts logged some 200,000 hours on testing and reviewing the plane's design before it was certified in August 2011.

Boeing first applied to make the 787 in 2003. The first one flew in December 2009, and six test planes ran up some 4,645 flight hours. About a quarter of those hours were flown by FAA flight test crews, the agency said in 2011.

The battery that burned on Monday is used to start the plane's auxiliary power unit, a small engine in the back of the plane that acts as a

generator to provide power on the ground, or if the jet engines quit. Other planes use hot air from the outside to start the APU. But one of the fuel-saving designs in the 787 was to get rid of the hot air system used by other planes, so its APU is started with electricity.

Lithium-ion batteries are potentially more susceptible to fire because, unlike other aircraft batteries, the liquid inside of them is flammable. The potential for fire increases if the battery is depleted too much or overcharged. Boeing has built in special circuitry and other safeguards designed to prevent that situation.

The review also raises questions about the 787's ability to win approval to fly extremely long distances away from airports. That's a big issue, since the 787's long range is one of its main selling points. Regulators want to know that long-range planes are safe to fly even if the nearest airport is more than an hour away. Such certification is important for flights across the Pacific.

The 787 already has approval for flights up to three hours away from the nearest airport. It has met the flight test requirements to go up to 5.5 hours away but doesn't have permission yet because of a rule change by the FAA, said 787 chief engineer Mike Sinnett on Wednesday.

Boeing's 777 won such approval in December 2011.