Pentagon stands by use of lithium-ion batteries on F-35 fighters

Andrea Shalal-Esa, Reuters

(Reuters) - The Pentagon said it plans to continue using lithium-ion batteries on the new F-35 fighter jet despite problems with similar batteries that have grounded Boeing Co's new 787 airliner and are causing Airbus to rethink their use on its A350 jet.

Joe DellaVedova, spokesman for the Pentagon's $396 billion F-35 program office, said on Tuesday that the lithium-ion batteries used on the new radar-evading fighter were made by different manufacturers than those used on the 787, and the jet's battery systems had been rigorously tested.

"The bottom line is the lithium-ion batteries used on the F-35s have been through extensive tests and have redundant systems to protect the aircraft and battery compartments; they are considered safe," DellaVedova said.

DellaVedova said there had been some irregularities with the lithium-ion batteries not starting properly in cold temperatures that were being addressed, but no issues affecting flight safety had come up during years of testing.

All 50 Boeing Dreamliners in commercial service were grounded worldwide on January 16 after a series of battery-related incidents, including a fire on board a parked 787 at Boston's Logan International Airport and an in-flight problem on another airplane in Japan.

The groundings have cost airlines tens of millions of dollars, with no solution yet in sight, and have sparked growing concerns among aerospace industry executives about whether the powerful but delicate backup energy systems are technically "mature", or predictable.

The U.S. National Transportation Safety Board, which is examining the 787 fire in Boston, said it was looking at the total design of the Boeing 787 battery, built by Japan's GS Yuasa Corp on behalf of France's Thales SA, including the charging system, electrical interconnections, and their thermal isolation of different battery cells from each other.

BATTERY SAFETY

Two of the biggest lithium-ion batteries on the F-35 warplane are made by the French company Saft Groupe SA, which also makes batteries for Airbus, part of European aerospace group EADS NV. Saft last month expressed confidence that lithium-ion technology was safe.

But people familiar with the matter have said that Airbus officials are reconsidering use of the batteries on the A350, which would be the second large passenger jet to fly on lithium-ion batteries for backup electrical power after the Dreamliner, which pioneered their use in passenger transport to support an increasing array of electrical systems.

Airbus said last week it had a plan B for its battery and time to respond to any rule changes.

DellaVedova said military officials remained confident in the lithium-ion batteries used on the F-35, and there were no discussions under way to swap them out for heavier nickel-cadmium batteries.

Lockheed Chief Executive Marillyn Hewson last month underscored her confidence in the lithium-ion batteries, telling reporters that the batteries on the F-35 were made by a different company and had been tested extensively.

Lockheed spokesman Mike Rein said more than a dozen F-35 jets were wired with extensive monitoring equipment to carry out development testing and no flight safety issues had been detected with the batteries during over 6,000 hours of flight testing on the airplanes.

"We are monitoring our full battery system on a daily basis as we flight test. We have continual data updates, and we've had no indication that we are connected to the same issues that grounded the 787," Rein said.

The F-35's battery system has run into a different problem on the ground, with some airplanes failing to start during cold temperatures under 10 degrees Celsius, DellaVedova said.

He cited "minor irregularities" that had been traced back to a software issue in the jet's battery charger control unit, and a fix was in the works for new jets in production and would be retrofitted on earlier jets. The problem, he said, was not related to the batteries themselves.

In the meantime, he said, measures were being taken to warm the area near the battery on cold days prior to start.

One defense official said maintainers at Eglin Air Force Base in Florida were using space heaters in some to warm the jets, which required removing a panel of the plane's stealthy coatings. "It's not ideal when you're talking about a fighter jet that has to be ready to go at a moment's notice," said the official, who was not authorized to speak on the record.

Separately, the Pentagon's F-35 program office on Tuesday lifted a January 18 order that grounded nine F-35B developmental test aircraft after a fuel line detached just before a training flight at Eglin Air Force Base in Florida.

Vice Admiral David Dunaway, head of Naval Air Systems Command, was briefed

Tuesday on the inspections of the faulty components, and could lift flight restrictions on 16 additional F-35B model jets being used for training as early as Wednesday, according to two sources familiar with the matter.

(Additional reporting by Tim Hepher in Paris; Editing by Edmund Klamann)

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