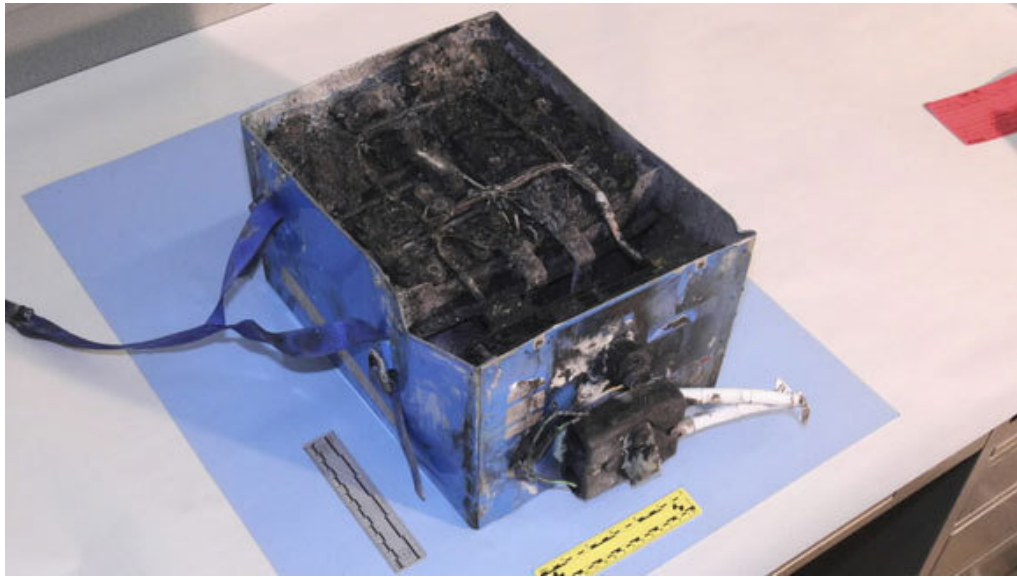


NTSB takes microscopic look at burnt 787 battery



The burnt auxiliary power unit battery removed from a Japan Airlines Boeing 787 Dreamliner is seen in a photo provided by the National Transportation Safety Board.

The National Transportation Safety Board said on Tuesday that it was carrying out a detailed, microscopic investigation of a battery that caught fire on a Boeing Co. 787 Dreamliner in Boston this month.

All 50 Boeing Dreamliners remain grounded around the world, as the U.S., Japanese and French governments continue to investigate that fire and a separate battery-related incident that forced another 787 to make an emergency landing in Japan.

The NTSB said experts at the U.S. Naval Surface Warfare Center laboratories were looking at a second, undamaged lithium-ion battery pulled from the Japan Airlines plane that caught fire in Boston for signs of in-service damage and manufacturing defects. Both batteries were built by GS Yuasa, a Japanese company.

Boeing was giving investigators fleet information about the 787, which would help investigators understand the operating history of lithium-ion batteries on those airplanes, the NTSB said.

U.S., Japanese and French safety inspectors -- aided by industry officials -- have been trying to determine what caused the battery fire in Boston and a separate smoke incident that forced the other 787 to make an emergency landing in Japan the following week.

After four weeks of investigation in Japan and various sites in the United States, officials do not have any answers, raising concerns that Boeing and the airlines that operate the world's newest airliner

will face a bigger-than-expected financial hit while it remains grounded.

Boeing's shares closed 0.5 percent lower at \$73.65 on the New York Stock Exchange Tuesday. Investors are looking for news about how long the probe will take when Boeing reports its fourth quarter earnings Wednesday.

A one-month delay in 787 deliveries could cost Boeing \$1.2 billion in revenue this year, said Zafar Khan, an analyst at Society Generale. He has a "sell" rating on the stock.

Neither the NTSB, nor the Federal Aviation Administration, which is looking at a broader range of problems with the 787, have set timetables for completing their work.

On Tuesday, the NTSB said its work on the damaged battery from the Boston incident, part of an auxiliary power system, had transitioned from macroscopic to microscopic examinations and included chemical and elemental analysis of the areas of short circuiting and thermal damage.

The undamaged battery being examined by Navy experts provides backup power for flight controls on the 787. They are using mechanical and electrical tests to determine the performance of the battery and to find signs of degradation in expected performance, the NTSB said.

Other investigators were looking at data from the digital flight data recorders on the aircraft for any further clues about battery performance and operation of the charging system, which was built by Securaplane, a unit of Britain's Meggitt Plc.

Investigations are also continuing in Seattle, where Boeing builds the planes, and in Japan.

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