

# Japan 787 Probe Finds Thermal Runaway In Battery

Elaine Kurtenbach, AP Business Writer

TOKYO (AP) — An investigation into a lithium ion battery that overheated on a Boeing 787 flight in Japan last month found evidence of the same type of "thermal runaway" seen in a similar incident in Boston, officials said Tuesday.

The Japan Transportation Safety Board said that CAT scans and other analysis found damage to all eight cells in the battery that overheated on the All Nippon Airways 787 on Jan. 16, which prompted an emergency landing and probes by both U.S. and Japanese aviation safety regulators.

They also found signs of short-circuiting and "thermal runaway," a chemical reaction in which rising temperature causes progressively hotter temperatures. U.S. investigators found similar evidence in the battery that caught fire last month on a Japan Airlines 787 parked in Boston.

Photos distributed by the Japanese investigators show severe charring of six of the eight cells in the ANA 787's battery and a frayed and broken earthing wire — meant to minimize the risk of electric shock.

All 50 Boeing 787s in operation are grounded as regulators and Boeing investigate the problem. The Japanese probe is focusing on flight data records and on the charger and other electrical systems connected to the damaged battery.

Lithium ion batteries are more susceptible to catching fire when they overheat or to short-circuit than other types of batteries. Boeing built in safeguards to gain safety certification for use of the relatively light and powerful batteries to power various electrical systems on the 787, the world's first airliner made mostly from lightweight composite materials.

Investigators earlier said they found no evidence of quality problems with production of the 787's batteries by Kyoto, Japan-based, GS Yuasa, whose own aerospace ambitions are on the line.

Yuasa said Tuesday that its April-December net profit fell 3.6 percent to 5.5 billion yuan (\$59.6 million) from a year earlier, as demand for batteries lagged due to sluggish demand in Japan and overseas.

The company has struggled to turn its lithium ion business to profitability. In April-December its lithium ion business posted a 7.2 billion yen (\$78.2 million) loss, it said, compared with an operating loss of 3.26 billion yen in the full-year that ended March 31, 2012.

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