

## **SAFETY RECOMMENDATION made on 9 October 2007**

On 9 August 2007, the DHC-6 registered F-OIQI crashed into the sea after take-off from the island of Moorea in French Polynesia. This public transport accident caused twenty deaths. In accordance with the French Civil Aviation Code, the BEA is conducting the investigation into this accident, with the participation of the Transportation Safety Board of Canada, the State of Manufacture of the airplane.

During the laboratory examinations that were performed in the course of the investigation, it was found that the two stabilizer control cables, made of stainless steel, showed areas that were heavily worn by chafing when passing through the cable guides located aft of station 426. This wear, which was accompanied by broken wires, had reduced the loaded section of the cable by more than 50% in some parts.

It was also found that these worn areas were difficult to identify without an in-depth examination. They were thus not noticed during the initial visual examination. In addition, the cables had been inspected on at least two occasions since 17 November 2006, during programmed maintenance checks.

**Consequently, the BEA recommends that Transport Canada and the European Aviation Safety Agency:**

- **Require operators to perform an inspection as soon as possible on stainless steel stabilizer control cables installed on DHC-6 Twin Otter airplanes, with particular attention being paid to chafing areas in contact with cable guides;**
- **Consider extending these inspections to carbon steel cables that may also be installed on the stabilizer control system of this airplane.**