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Subject: ERA23FA235

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At the request of the NTSB, HondaJet entered landing data for the accident flight into an exemplar CDU onboard an HA-420 flight simulator that was not upgraded with the supplement software issued under Service Bulletin (SB) 420-42-019, titled Navigation - Wet and Contaminated Runway Performance. Photographs of the CDU screen with the calculations were provided to the NTSB. The CDU calculated the following performance data for the accident flight: Vref of 112 knots, and a total landing distance of 4,829 ft.

Per HondaJet, the CDU will not calculate landing distance by arbitrarily entering a Vref speed. However, the CDU does allow a pilot to add a Vref increment when calculating landing distance. In an attempt to determine the landing distance required at a Vref of 120 knots (the Vref the pilot used on the accident flight) a Vref increment of Vref+5 and Vref+10 were entered into the CDU using the same airport conditions used above. The results were:

At Vref+5 or Vref 117, the CDU calculated the required landing distance on a wet/contaminated runway as 5,311 ft.*

At Vref+10 or Vref 122, the CDU calculated the required landing distance on a wet/contaminated runway as 5,794 ft.*

*Per FAA Advisory Circular (AC) 91-79B, titled Aircraft Landing Performance and Runway Excursion Mitigation, states "*As a rule of thumb, a 10 percent increase in final approach speed results in a 20 percent increase in landing distance.*" As such, the "Abnormal LDG DIS" selection on the CDU was increased 10% and 20% respectively to obtain the above landing distances.

When the above landing distances were calculated, the CDU having already been programmed for a 5,000 ft long runway, displayed a prominent caution below the Vref number that stated: "LANDING FIELD LENGTH INSUFFICIENT."