

Investigation Synopsis

Whilst climbing to FL190 en-route to Charles De Gaulle Airport, Paris the pilots received an alt mismatch message and they elected to return to Exeter Airport. Following an inspection after landing, a small white crystalline deposit was found covering three of the four static pressure holes on the left primary pitot static probe. It is probable that the use of a non-approved product, to improve the seal between a test adaptor and the pitot static probe during maintenance immediately prior to this flight, may have resulted in the blockage of the static holes and led to the alt mismatch message. Two Safety Recommendations have been made; one to the air data accessory kit manufacturer and one to the aircraft manufacturer to improve the instructions for the use of testing kits when carrying out leak tests of the pitot/static system and to only use approved lubricants. The maintenance organisation has taken Safety Action to introduce tighter controls on the test kit equipment.

Justification Text**Safety Recommendation 2019-010**

The kit manufacturer's recommended lubricant is sometimes missing from the kits and the AMM and the kits instructions do not include any details on installation or sealing. Therefore to reduce the risk of pitot static tube contamination during testing.

It is recommended that Nav-Aids Ltd amend the manual supplied with air data accessory kits to include more specific installation instructions, and to include warnings against using non-approved materials to aid sealing.

Date Safety Recommendation made:

24/10/2019

Response Status

Adequate

Action Status

Planned actions completed

Safety Recommendation status

Closed

LATEST RESPONSE

Response received:

30/10/2020

Nav-Aids have advised that have taken action to amend their manual supplied with air data accessories to include more specific instructions.

AAIB Assessment – Adequate - Closed

(EU Regulation 996/2010 article 18 refers).

RESPONSE HISTORY

N/A

Safety Recommendation 2019-011

The kit manufacturer's recommended lubricant is sometimes missing from the kits and the AMM and the kits instructions do not include any details on installation or sealing. Therefore to reduce the risk of pitot static tube contamination during testing.

It is recommended that De Havilland Aircraft of Canada Ltd amend the instructions in the Aircraft Maintenance Manual for the DHC-8-402 for testing pitot static probes to include more specific installation instructions, and to include warnings against using non-approved materials to aid sealing.

Date Safety Recommendation made:

24/10/2019

Response Status

Adequate

Action Status

Planned actions completed

Safety Recommendation status

Closed

LATEST RESPONSE

Response received:

21/01/2020

De Havilland Aircraft of Canada Ltd appreciates the chance to respond to your proposed Safety Recommendation.

While safety is of utmost concern in our industry, it is our belief that, in this particular situation, any qualified technical staff should review and utilize the manual for any of the required pieces of test equipment that are external to the basic airframe. The information necessary to utilize the test equipment is specific to the each type of test equipment and different again, depending on each supplier of the various types of test equipment.

Furthermore, these type of instructions are already available, as well as being authored by those who manufacture the equipment.

One of the manufacturers has an on-line video available to aid use of a preferred lubricant for installation of the adapter (<http://navaidsltd.net/LF5050-Lubricating-Fluid.html>)

AAIB Assessment – Adequate - Closed

(EU Regulation 996/2010 article 18 refers).

RESPONSE HISTORY

N/A