

Dynon Avionics

Heated AOA/Pitot Probe

LAA Engineering has just written to owners who have Dynon heated pitot heads fitted to their aircraft letting them know about a recent Technical Service Bulletin that may affect the operation of their aircraft.

Although we have received no reports to date from LAA members about problems with this device, overseas users have reported to the manufacturers that they have experienced degraded airspeed indications with the heater switched on.

Dynon Avionics identified an issue where, under some circumstances, the pitot probe is unable to separate and drain water that it encounters; as a result it is possible for water to enter the pitot system and, especially if ice forms, create a blockage.

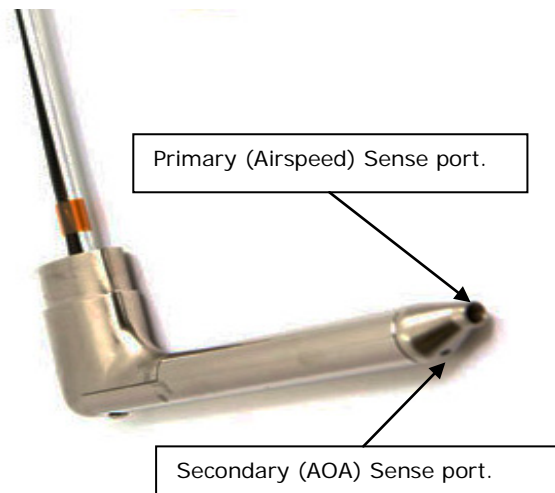


Fig. 1. The Dynon heated pitot probe is configured to measure small changes in pressure caused by a changing angle of attack; the orifice in the lower (angled) forward section is the sensing port for this.

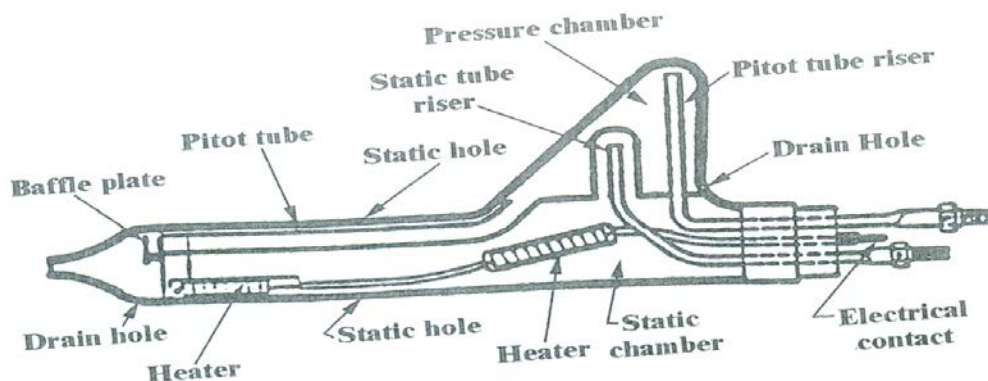


Fig 2. A schematic of a normally configured heated pitot/static probe (AC43)

A blockage in the pitot system can cause inaccurate, fluctuating or zero airspeed information. The Dynon Avionics EFIS (Electronic Flight Information System) as fitted to some LAA aircraft, uses pitot pressure both to directly establish airspeed and indirectly, as part of the angle of attack calculation.

Dynon Avionics recommends in its Service Bulletin that, until a solution to the problem of water ingestion has been found, the pitot heater should not be used.

A copy of the Technical Service Bulletin can be found [HERE](#).