

DH 104 (Dove) Series Aeroplanes

AD/DH 104/1 Fire Protection Modifications - Engine Nacelles 8/71

Applicability: All models in transport category.

Requirement: 1. Modify the existing nacelle fire detection system as follows:

1.1 Replace the existing pyrotechnic cord type detector with a minimum of eight (8) unit detectors in approved locations in each engine bay or, alternatively, with an approved continuous type detector. All fire detectors shall be of an approved type.

1.2 Detector Circuits:

(a) Provide separate independent detector circuits for each nacelle.

(b) Install a test switch adjacent to the warning lights for each nacelle and arrange the detector circuit so that the test switch checks the circuit protection, the indicator lamps and the continuity of the detector wiring.

1.3 Indicators:

In addition to the existing warning lights for each nacelle install in the cockpit an audible fire-warning device common to both detector circuits.

2. Oil System:

Rework the following flexible oil lines to ensure that they are rendered fully fireproof:

(a) Hoses from oil tank to engine-driven oil pump.

(b) Hose from oil tank to propeller feathering pump.

3. Electric Cables:

3.1 Ensure that wiring forward of the firewall is PVC insulated glass braided cable to Specification AN-J-C-48a or other cable approved as fire-resistant class 11 for the following circuits:

(a) Fire detectors.

(b) Propeller feathering.

(c) Those sections of the starter motor circuit in which a fault could adversely affect propeller feathering.

3.2 Protect cable with glass outer-braiding from abrasion by wrapping with PVC tape, shrouding with PVC tubing, or by other approved means.

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- 3.3 Ensure that cable and cable runs forward of the firewall are installed in the cooler parts of the engine nacelle. Cable runs shall also be arranged so that they are not exposed to mechanical damage during normal engine operation or during ground maintenance.
4. Firewall Sealing:
 - 4.1 Install a steel slide forward of the present bakelite slides on the engine control rods.
 - 4.2 Install a fire-proofing tube over the slow running cut-out control cable where it enters the engine bay.
 - 4.3 Install a steel cover over the end of the fuel filter that protrudes into the engine bay.
 - 4.4 Install steel covers over all light alloy electrical connectors; or
5. Part 100, Appendix "A" Notice No. 4/21 Issue 2; or
6. De Havilland Drawing DHZ-101A; or
7. ANO 105.1.14.13.5.2.

Compliance: Before 1 September 1971.