

Grant Robinson

From: McConnell, DAVE P <dave.p.mcconnell@lmco.com>
Sent: Tuesday, December 27, 2016 4:54 PM
To: Grant Robinson
Subject: S-76D Mixer Deck Closeout Panel
Attachments: C0048989 Customer Letter.pdf

Grant;

HVE recently had a heavy leak into the cockpit. The leak was traced to an improperly sealed panel located on the mixer deck forward of the broom closet opening. I wrote an FTR requesting more information on this panel, which is not common with the C++. The FTR response is below and a customer letter is attached.

After the FTR response I received an email from Ken Buckman clarifying that the panel is a closeout panel, not an access panel. It was created to cover the opening where the legacy controlex cables used to run. Ken stated that this panel was intended to be a permanent closure and as such should be heavily sealed and the screw heads encapsulated.

Case Number: C0048989
Customer: Thai Aviation Services Limited
Aircraft S/N: 761063
Aircraft Model: S-76D
Aircraft TT: 100
ATA: 53
Part Number: 76205-28001-063
Case Subject: 90-Day Delivery-Water Ingress To Cockpit

Problem Description:

Crew returning from a flight offshore in heavy rain reported water dripping onto the center console from the rotor brake slot in the pilot's overhead trim panel.

Reference attached JPEG images.

Troubleshooters removed the pilot's trim panel and noted moisture around the area of a large, irregularly shaped access panel located on the mixer deck forward of the broom closet.

This access panel is not present on legacy C++ A/C, and there is no reference to it in the AMM.

Troubleshooters noted that the screws securing the panel were apparently installed dry. The screw heads were not encapsulated with Proseal, this in spite of the very forward location of the panel, immediately behind the nose of the racecar.

Further inspection revealed a bead of Proseal around the periphery of the panel. The bead had at least two voids in the forward facing edge. The voids were thought to be the likely source of the water leak.

In order to minimize downtime during a busy flight day, troubleshooters encapsulated the screw heads with silicone sealant, packed silicone sealant into the Proseal voids and wrapped the leading edge of the panel in Al tape.

A permanent repair will be made at operator convenience.

This discrepancy resulted in a 1.0 hour flight delay.

Please provide:

- 1) P/N of the access cover and attaching hardware, including P/N of nutplates engaged by the access cover attach screws

- 2) Purpose of the access cover
- 3) A procedure for panel installation to ensure watertight integrity

EoM

Problem Resolution:

1. Access cover part number: 76205-71004-103. Hardware: MS27039C1-08 screws, NAS1149D0316K washers, and MS21060-3 nutplates installed with MS20426AD3 rivets. Cover is sealed with AMS 3265 sealant per SS8630 type 3.
2. Given the area of the aircraft where this panel is found, and that the title of the drawing is 'SEALING PLATE, ENGINE CONTROLS, CANOPY' it looks like it has to do with being able to access the engine controls of the aircraft.
3. Drawings provided to customer in 'C0048989 Customer Letter.pdf'. Document is in FSR-Thailand (Thailand) docpak.

McConnell, David P. S-70243
Thai Aviation Services S-76D
A/C S/N 761063 A/C TT 99.8

Area of
Proseal void

Water leaked into cockpit overhead
past the sealant of the access panel

David P. McConnell

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