

Date: 17 April 2018
To: Thai Aviation Services Limited
Attention: Grant Robinson
Regarding: WOW DISCR During Switch From Gen or Gnd Pwr To A/C Batt
Technical Case #: C0089200

Grant Robinson,

	TAS D60 WOW TROUBLESHOOTING GUIDE
1	Confirm Struts are serviced per MM on D60
2	Confirm S28 and S33 prox switches have the correct gap to the strut
	Wire Checks
3	Remove NO.1 Autopilot computer from E-bay
4	<p>Perform below test as a baseline going forward. Confirm CM1 WOW disappears for 500 msec and returns with below sequence</p> <p>Monitor wire at J1A-G06 of autopilot rack to ground)</p> <p>-----</p> <p>The following steps, with no omissions, cause WOW DISCREPANCY to come on.</p> <p>A) Ground power on and battery on.</p> <p>B) After boot up, pull and reset either, or both, circuit breaker LDG CTRL 1, LDG CTRL 2, or operate left or right WOW prox switch.</p> <p>C) Switch external power off.</p> <p>After a few seconds WOW DISCREPANCY comes on.</p> <p>Switch external power back and on WOW DISCREPANCY remains until AP 1 fail light on AP controller goes out (about 20 seconds).</p> <p>Repeat steps A, B, C with the circuit breakers pulled for FCM1 and no fault occurs.</p> <p>Repeat steps A, B, C with DC1 ESS BUS CTRL pulled (puts K10 in battery PDU in the de-energize position, #1 DC ESS Bus permanently connected to #2 DC ESS Bus), and no fault occurs</p> <p>The WOW DISCR error appears to be originating from FCM 1. If the CB's for FCM 1 are pulled before ground power is placed OFF, there is no message.</p> <p>A latched message can be cleared by cycling A/C power.</p> <p>Troubleshooting in the hangar with ground power applied and a Fluke meter on the WOW 1 input to FCM 1 shows ground (Weight ON Wheels). When ground power is switched OFF, the ground goes away for about 500mS and comes back (caused by the bus switching for WOW 1 power from Generator/Ground power to main battery).</p>

5	Disconnect P105 from NO.1 relay panel. A-Verify P105-61 reads < .5 ohms to ground B-Verify P105-59 reads < .5 ohms to ground C-Perform a continuity between P105-60 to J1A-G06 Verify resistance is < .5 ohm. Also check to make sure wire is not connected to ground.
6	Replace K110, K117 relays, do not swap, replace relays
7	Reinstall autopilot computer, reconnect P105
8	Perform Step 4 again and see if 500 msec delay is still present
9	Disconnect LH MAIN landing Gear harness from J331
10	Verify J331-12 reads < .5 ohm to ground. Flex harness going to TJ block to confirm TJ527-B has a good ground connection
11	Temporarily install a jumper across J331- 4,12 (bypass the proximity sensor)
12	Repeat step 4 to see if there is a 500 msec lag at the autopilot computer
13	Reconnect P331
14	Disconnect P306 from Battery PDU. Remove VMM1 and VMM2 from rack. Confirm P306-P reads ground (< .5 ohms). Flex harness near TJ BATT confirm ground is not intermittent.
	Check continuity between P306-F to VMM1 P101B-J05. P306-F to VMM2 P100B-J05. Confirm <.5 ohm for wire continuity and wire is not shorted to ground.
14	With Ext power on, check P306-B for 28 VDC
15	Reconnect removed plugs and equipment
16	Battery PDU Post E3 (NO.1 DC ESS
17	Monitor voltage while performing Step 4 Test. Confirm 500 msec lag
18	Open up cb panel and locate NO.1 LNDG GR CONT 1 CB. Monitor 28 VDC voltage and confirm 500 msec interrupt by performing step 4 again
19	Replace K103 and K104 in NO.1 relay box. Repeat step 4

Regards,



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