

ALTAIR ADAS^d ENGINE TREND MONITORING - TROUBLESHOOTING

1. General

- A. This section gives troubleshooting information for the Altair ADAS^d Engine Trend Monitoring (ETM) system. The troubleshooting information given in this section refers to the startup of the ETM system. Also, this section provides many troubleshooting procedures for errors in the log file that might be found in the Monitor Link Program (MLP).

B. Use the Altair Avionics Corporation, MLP Users Guide GSS-T-301-1 for correct procedures to connect to the processor.

2. System Indications (Engine Off)

- A. The ETM FAULT message is shown.

(1) Download the log file and do the troubleshooting to correct the error. Refer to ALTAIR ADAS^d Engine Trend Monitoring System - Description and Operation.

- B. The PREV EXCEED message is shown.

(1) An engine parameter was exceeded in a previous flight and the log file was not downloaded from the processor. Download the log file to clear the event.

3. System Start-Up and Communication

- A. If the laptop doesn't connect with the processor, do the steps that follow.

NOTE: Due to the interface between the G1000 and the ETM processor some events occur regularly in the log file, mainly "No communication" and "Sensor Error" faults. These are normal because of the interface method and when received, check the time data to make sure that all the sensors are recording when the engine is running. The events are not valid if the engine was not running when the events were recorded.

- (1) Make sure that the airplane battery cables are connected to an APU or a battery.
- (2) Make sure that each of the two the circuit breakers that follow, found on the relay box assembly, forward of the firewall, are engaged:
 - (a) ETM POWER.
 - (b) ETM CONTROL POWER.
- (3) Make sure that the Garmin Integrated Avionics Unit (GIA 63W) is serviceable. Refer to Chapter 34, Garmin Integrated Avionics System - Adjustment/Test.
- (4) Reset the processor as follows:
 - (a) Disengage the ETM POWER circuit breaker then disengage the ETM CONTROL POWER circuit breaker.
 - (b) Engage the ETM CONTROL POWER circuit breaker and then engage the ETM POWER circuit breaker.
- (5) Do the steps that follow:
 - (a) Close the MLP.
 - (b) Log off windows on the laptop.
 - (c) Log back on to windows.
 - (d) Open the MLP.
- (6) Make sure that the download port is connected to the processor found behind the side panel
- (7) Make sure that wiring connection to the processor is correct.
- (8) Make sure that the correct software (driver) is installed for the USB interface.
- (9) Monitor the CAS messages while the avionics system starts up.
 - (a) Make sure that after the avionics system starts up, ETM CAPTURE and PREV EXCEED messages are not shown.

NOTE: If ETM CAPTURE and PREV EXCEED messages are shown after the log is cleared, then the processor did not finish the start up process.
- (10) If the system starts successfully, but other issues continue, contact Cessna Propeller Aircraft Product Support for assistance; (316) 517-5800 or Fax (316) 942-9006.

4. Processor Not Auto-Trending

NOTE: Auto-Trending takes 5 second samples during cruise flight. Power, altitude, and airspeed must remain

relatively constant (see the configuration setup). Refer to Altair ADASd Engine trend Monitoring System - Adjustment/Test.

- A. If the processor is not trending do the steps that follow:
 - (1) Make sure that the correct configuration is loaded to the processor.
 - (2) Complete a live data run and verify all necessary sensors are communicating accurately.
 - (3) Make sure that the Particle Separator and Emergency Power Level (EPL) discrete signals are correct.
 - (4) When in cruise flight, press the CAPTURE softkey after cruising for 2 minutes.
 - (a) Download the data and determine which sensor is stopping the auto-trend functionality.

5. G1000 Not Responding to Discrete Inputs

- A. If the G1000 apparently is not responding to discrete inputs do the steps that follow:
 - (1) Put the PFD 1 in configuration mode. Refer to Chapter 34, Garmin Integrated Avionics System - Adjustment/Test.
 - (a) Scroll to the 'GIA page'.
 - (b) Select the 'GIA I/O Configuration page'.
 - (c) Make sure that the correct discrete box turns green when that discrete is grounded. Refer to the 208 Wiring Diagram Manual.

6. System Troubleshooting

- A. For additional troubleshooting, refer to Figure 101 and Figure 102.

Figure 101 : Sheet 1 : ARINC Troubleshooting

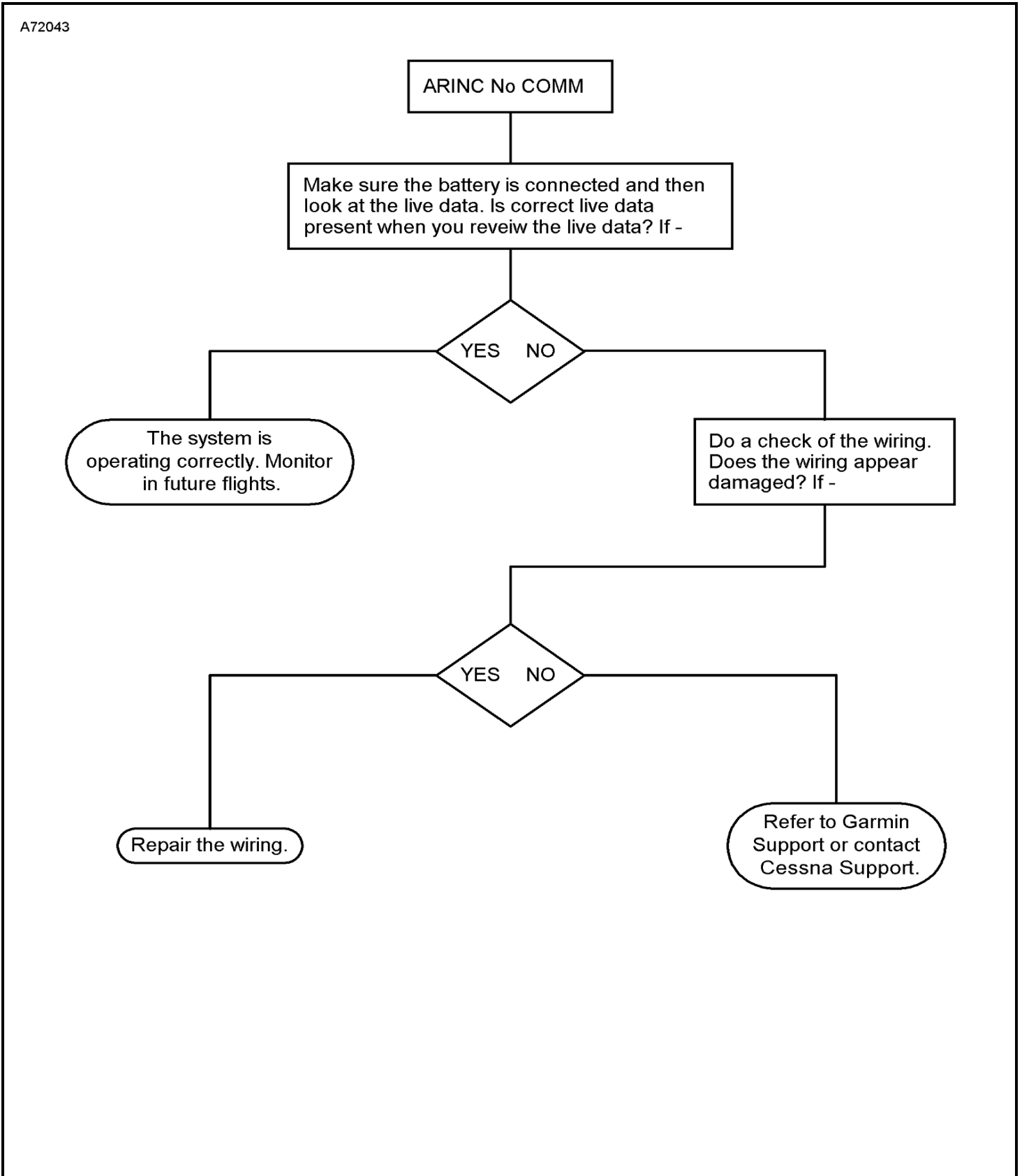


Figure 102 : Sheet 1 : Sensor Troubleshooting

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