

## ALTAIR ADAS<sup>d</sup> ENGINE TREND MONITORING - DESCRIPTION AND OPERATION

### 1. General

A. This section gives a general description and the operation of the Altair engine trend monitoring system.

### 2. Description/Operation

A. Description.

(1) The Airplane Data Acquisition System Digital, known as the ADAS<sup>d</sup>, has three functions:

(a) Exceedance Event Recording.

1 The ADAS<sup>d</sup> monitors important engine parameters and records instances when preset values are exceeded.

(b) Engine Trend Monitoring.

1 The ADAS<sup>d</sup> records and stores engine data for trend analysis.

(c) Cockpit Indication.

1 The ADAS<sup>d</sup> will warn the pilot if an exceedance occurs. It can also show prior exceedance on engine start or shutdown. A cockpit self-test can be done.

(2) The ADAS<sup>d</sup> lets the operator control and schedule the engine maintenance operations.

(3) In its data acquisition role, the ADAS<sup>d</sup> is a passive receiver of information.

(4) It can record trend data either manually or automatically.

B. Operation.

(1) Manual operation.

(a) The pilot can record a dataset from all of the sensors with the TRND/ACK or CAPTURE softkeys.

(2) Automatic Operation.

(a) The system can automatically record exceedance events and data samples that can be analyzed for trends.

(3) Retrieving data.

(a) Data is collected through a download serial port.

(b) The Altair Avionics Monitor Link Program (MLP) can be used to download data and upload system configuration files.

(c) The MLP is also used for system diagnostics and real-time live sensor display.

(4) System configuration.

(a) The ADAS<sup>d</sup> system is shipped without a configuration.

(b) The configuration is downloaded from the ALTAIR website and then uploaded to the processor for correct operation.

### 3. Tools, Equipment and Manuals

**NOTE:** Equivalentents are approved.

NAME	NUMBER	MANUFACTURER	USE
Computer Laptop (with internet access)		Commercially available	To access the ADAS <sup>d</sup> to get information and upload configurations.
Serial Interface Adapter (Serial Cable)	TREND-C-033-1	Altair Avionics Corporation Customer Service Department 106 Access Road Norwood, MA 02062 Phone: (781) 762-8600 Web: www.altairavionics.com Web: www.turbinetracker.com	To connect a laptop computer to the Altair Engine Trend Monitoring System.

Serial Interface Adapter (USB Cable)	TREND-C-053-1	Altair Avionics Corporation Customer Service Department 106 Access Road Norwood, MA 02062 Phone: (781) 762-8600 Web: www.altairavionics.com Web: www.turbine tracker.com	To connect a laptop computer to the Altair Engine Trend Monitoring System.
MLP Users Guide	GSS-T-301-1	Altair Avionics Corporation	Used to help the customer use the Monitor Link Program.

#### 4. Retrieving Data from ADAS<sup>d</sup> Processor

A. Get access to the processor data.

**NOTE:** Data collected is accessed through a download serial port under the copilot's instrument panel on the right side.

- (1) Use the Altair Avionics Monitor Link Program (MLP) to retrieve data from the ADAS<sup>d</sup> processor.
- (2) For the vendor publication, refer to Altair ADAS<sup>d</sup> Engine Trend Monitoring - Description and Operation.

#### 5. Uploading Data

A. Upload the data.

- (1) To upload the data you must have a current Turbine Tracker account with Altair Avionics Corporation.
- (2) To get an account, contact Cessna Propeller Aircraft Product Support for assistance; (316) 517-5800 or Fax (316) 942-9006.