



SUBJ: NAVIGATION, ATTITUDE, AND DIRECTION DATA SYSTEM

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) informs registered owners/operators of an airworthiness concern for aircraft equipped with **Aspen EFD1000 primary flight display** under Supplementary Type Certificate (STC) SA10822SC. Specifically, this SAIB notifies owners and operators of possible misleading heading and attitude displays when activating electrical equipment, especially electrical equipment that draw high electrical currents.

At this time, the airworthiness concern is not an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

We were recently notified of an Electromagnetic Interference (EMI) issue on an Air Tractor AT-802A operating under night Visual Flight Rules, which was equipped with an Aspen EFD1000 primary flight display. After activating the aircraft's underwing work light system, there was a 40-degree shift in both the aircraft's wet compass and the EFD1000's heading display, followed by a 15-degree shift in both the EFD1000's pitch and roll indications. This interference was later observed to be repeatable in ground tests. The cause of the interference event is currently under investigation.

Recommendations

The FAA recommends that owners and operators flying with STC-installed electronic flight displays be aware of the potential for misleading indications when using electrical equipment, especially electrical equipment that draws high electrical currents. Operators should take particular caution when flying at night, in Instrument Meteorological Conditions, or under Instrument Flight Rules. Misleading indications may involve more than one indicator and may consistently provide the same misleading information. Operators are advised to cross-reference other instruments to validate indications.

The FAA also requests that owners, operators, and installers of the Aspen EFD1000 primary flight display notify the FAA contacts listed below of any similar reports of misleading indicators when electrical equipment is activated.

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. Under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the OMB has approved the information collection contained in this SAIB, and assigned OMB Control Number 2120-073 I. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. All responses to this collection of information are voluntary. Send

comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, ASP-110.

For Further Information Contact

Kristi Bradley, Aerospace Engineer, AIR-7F2, ACO Branch, 10101 Hillwood Pkwy, Fort Worth, TX 76177; phone: (817) 222-5485; email: kristin.bradley@faa.gov.

Mahmood Shah, Aerospace Engineer, AIR-7F1, ACO Branch, 10101 Hillwood Pkwy, Fort Worth, TX 76177; phone: (817) 222-5133; e-mail: mahmoood.shah@faa.gov.