

# SPECIAL AIRWORTHINESS **INFORMATION BULLETIN**

| SUBJ: Fuel: Piper PA-28 Series Aircraft Fuel Vent and Supply Hose | SAIB: | CE-09-17       |
|---|-------|----------------|
| Condition   | Date: | March 10, 2009 |
| This is information only Recommendations aren't mandatory         |       |                |

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### Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners, or operators, of all serial numbers of Piper Aircraft, Inc. (Piper) PA-28 series airplanes of an airworthiness concern and the potential for environmental deterioration of the fuel inlet and fuel vent lines installed internal to the wings. Leakage of fuel or vapor from these lines may result in fuel odors noted during preflight inspections, fuel odors in the aircraft cabin, or evidence of fuel staining on the lower surfaces of the wing.

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

# Background

The Piper maintenance manuals applicable to the Piper PA-28 series aircraft recommend that the fuel supply and vent hoses are to be replaced at 8 calendar years or 1,000 hours time-inservice intervals. On August 15, 1997, Piper issued Service Bulletin 1006 applicable to these models to recommend the removal of the wing fuel tanks such that the main spars could be inspected for corrosion at seven-year intervals. Based upon the magnitude of work required to remove the fuel tanks for this inspection, Piper also recommended that fuel supply and vent lines be replaced during the conduct of this seven-year recurrent inspection in that they were readily available with the fuel tanks removed. A review of service difficulty reports (SDRs) relative to fuel supply and vent hose leaks indicates that multiple yearly events were recorded up until the release of the noted service bulletin. Though the rate at which we receive SDRs has dropped since the release of the bulletin, we continue to receive sporadic reports of fuel leakage events associated with these hoses. Though the number of reports has declined, the severity of deterioration that has been reported appears to be increasing. In many cases that have been investigated, there is no evidence that the fuel hoses have ever been inspected or replaced since the original installation at Piper. This lack of inspection/replacement may relate to the limited access provisions provided to the interior wing areas of this series of aircraft.

### **Recommendations**

The purpose of this SAIB is to highlight the potential of fuel or fuel vapor leakage from aging fuel vent and supply hoses internal to the wings of PA-28 series aircraft. As a preventative measure, the FAA recommends replacement of the fuel vent and supply lines when other maintenance actions necessitate access to the internal areas and the hoses are near their eight-year recommended replacement interval. Additionally, we recommend inspection of the fuel vent and supply hoses condition any time that a fuel odor is detected in the vicinity of the wings during a preflight, a fuel odor is detected in the aircraft cabin, or if fuel staining is noted on the lower wing surfaces.

# **For Further Information Contact**

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