

FletchAir Inc.

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CRITICAL SERVICE BULLETIN

SB 188

Contains information pertaining to a threat to the continued safe operation of an aircraft or to the safety of persons or property on the ground unless The aircraft owner takes some specific action.

DATE: December 15, 1999
SUBJECT: Ruptured instrument pressure lines.
MODLE/SERIALS AFFECTED: All AA-5, AA-5A, AA-5B Manufactured by American Aviation Grumman American Gulfstream Aerospace.
TIME OF COMPLIANCE: The next scheduled inspection. and each annual inspection.

General

We have received reports of the inflight loss of all engine oil and/or some loss of fuel in the cabin area. Subject aircraft have rigid aluminum fuel and oil lines that feed to each respective pressure gage. Oil pressure line P/N 5500006-1, 5500009-1, 804005-503, 804005-504 and fuel pressure line P/N 5500006-4, 5500009-2, were originally wrapped with foam protective tape in the area forward of each gage. This foam tape has deteriorated with age and in some cases allowed the defrost hose P/N 406002-4 to make contact. Steel wire reinforcing in the defrost hose has made contact, setting up dissimilar metal corrosion and caused subsequent sudden failure of the pressure line. Each pressure line has a restrictor fitting on the engine and carburetor to prevent rapid loss of engine fluids in case of a line failure, however reports indicate that all engine oil has been lost in just a few minutes even with the restrictor in place.

Inspection

To prevent in flight loss of all engine oil and/or some fuel into the cabin area accomplish the following:

1. Remove forward glare shield cover and inspect the full length of both oil and fuel pressure lines for corrosion. Carefully inspect the area that may have made contact with hoses, insulation, or other equipment since leaks may occur from a pin hole size spot.
2. Check the fuel line is properly secured with Adel clamps and not making contact with equipment or insulation.

Repair

1. Suspect corroded lines should be replaced with new lines and protected with zinc chromate or equivalent paint. Pressure lines should be wrapped with new foam tape or spiral wrap in the area directly forward of the pressure gages and in any other area that may have potential for contact with installed hoses or equipment.
2. Lines that have insufficient corrosion to reject should be painted and protected as described above.
3. Do not allow defrost or radio cooling hoses to make contact with fuel or oil pressure lines.
4. Verify pressure gages have not rotated in housing after installing lines, leak check, record compliance in aircraft logbook.

The technical contents of this Service Bulletin are FAA approved.