



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Harrisburg Flight Standards District Office

400 Airport Drive, Room 101  
New Cumberland, PA 17070  
Telephone No.: 717-774-8271  
FAX No.: 717-774-8327

December 3, 1998

The National Transportation Safety Board  
Attn: Robert Hancock  
2001 Rt. 46, Suite 203  
Parsippany, NJ 07054

Dear Mr. Hancock:

Re: NYC98FA0179

I witnessed the tear down inspection of Lycoming engine model IO-540-G1B5, serial number L-8251-48. This engine was removed from the left position of Aerostar N600JB, which was involved in an accident at Donegal Springs on September 4, 1998.

Present at the tear down were the following persons from Textron Lycoming:

James Brown  
Robert Ohnmeiss  
Lee Netterblade

Cylinders number 1,2,3,4, and 6 were removed. Cylinder number five was the cylinder that came off in flight. Rods were removed and no abnormal damage or wear on the pistons, rings, or the bearings were found. The oil sump was removed and we found a large concentration of aluminum filings, one piece of a broken cylinder hold down stud which matched up with the broken stud in the crankcase at number five cylinder base. We also found several pieces of a broken cylinder hold down nut which was of the same size as the broken stud.

Inspection of the remaining seven cylinder hold down studs at number five cylinder base were closely inspected. None of the threads were stripped. Some aluminum was found in the threads which matched the stud impact marks on the piston relative to the hold down studs.

Sincerely,

  
Joseph E. Green  
Airworthiness Inspector