

SP-20
Log 1784

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: May 6, 1985

Forwarded to:
Honorable Donald D. Engen
Administrator
Federal Aviation Administration
Washington, D.C. 20591

SAFETY RECOMMENDATION(S)
A-85-31

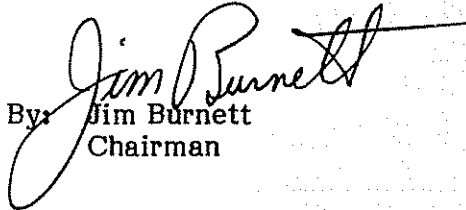
On April 28, 1984, a Piper PA-60-601P Aerostar crashed near Cockeysville, Maryland, while on a flight from Lancaster, Pennsylvania, to Gainesville, Florida. Both occupants aboard the airplane were killed. The accident occurred about 16 minutes after takeoff and was preceded by an emergency call from the pilot reporting a loss of engines and rapid descent. Witnesses on the ground stated that they saw the airplane descend out of the clouds in a dive, transition into a pullup, then spiral into the ground. The right aileron, which was recovered about 1/2 mile from the main wreckage site, reportedly separated as the airplane pulled up from the dive.

The National Transportation Safety Board's investigation of this accident disclosed that the intercostals (Part Nos. 200099-502 and 200099-02) of the right wing extension assembly were not riveted to clips (Part Nos. 200099-504 and 200099-505) on the right wing rib at wing station (WS) 195. The wing extension assembly is normally attached at WS 195 by rivets between the clips and intercostals and by rivets along the upper and lower skin surfaces. Although both the right wing and left wing extension assemblies of the accident airplane were separated as a result of ground impact forces, the evidence indicates that the left assembly had been properly attached and that the rivets on the upper and lower skin surfaces of the right extension assembly had been in place. The Safety Board could not determine why the attachment rivets were missing between the clips and intercostals of the right wing extension assembly or whether their omission was an isolated occurrence.

There is no evidence to indicate that this discrepancy contributed to the cause of this accident. However, the Safety Board is concerned about the degradation of the structural integrity of the Piper Aerostar airplane if the wingtip extension assembly is not properly secured to the wing structure. Therefore, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Issue an Airworthiness Directive to require a one-time inspection (and repair if necessary) of Model PA-60-601B, -601P, and -602P Piper Aerostar airplanes to determine whether the intercostals of the wing extension assemblies are properly attached with rivets to the wing rib structure at wing station 195. (Class II, Priority Action) (A-85-31)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and BURSLEY, Member,
concurred in this recommendation.


By: Jim Burnett
Chairman