

Log 1497

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: September 6, 1983

Forwarded to:

Honorable J. Lynn Helms
Administrator
Federal Aviation Administration
Washington, D.C. 20591

SAFETY RECOMMENDATION(S)

A-83-58

On June 14, 1982, a Trans American Airways Piper Apache, PA-23-160, N4072P, with two crewmembers onboard, experienced an engine failure about 600 feet above the ground after takeoff from Peachtree Dekalb Airport, Chamblee, Georgia. Both the pilot and the copilot heard a loud "pop" and felt the airplane swerve to the right. The pilot, who was in the left seat, feathered the right propeller and reported to the tower that he had lost an engine and was turning back for an emergency landing. The copilot noticed that one propeller blade did not move to the feathered position. The airplane was not able to maintain altitude, and it struck trees in a residential area about one-half mile west of the airport. The airplane came to rest on the roof of a residence that was uninhabited at the time of the accident. The pilot and copilot were able to leave the airplane before it burst into flames. The pilot sustained serious injuries, and the copilot sustained minor injuries.

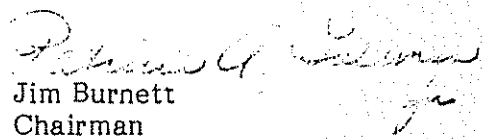
The investigation disclosed that one propeller blade of the Hartzell Model HC-82XC-2C propeller (hub serial number K3529) was in the feathered position while the other blade was loose in its hub and free to move to any position. The engine casing was intact; however, there was a large hole in the propeller spinner. Removal of the spinner revealed that one counterweight and a portion of the propeller retaining clamp had separated from the propeller hub assembly. Disassembly and inspection of the engine revealed no evidence of preimpact failures or malfunctions. Examination of the failed clamp, S/N D-3995-TH, revealed a fatigue fracture originating at the lubricator fitting threaded hole located 9/16 inch from the clamp parting line. The hub assembly had been in service since the aircraft was manufactured in 1959. The airplane, engine, and propeller records were destroyed in the postimpact fire; therefore, it could not be determined when the clamp was last inspected.

As a direct result of finding cracks located in the area of the lubricator fitting threaded hole of certain C-3 clamp assemblies, the manufacturer issued Bulletin No. 126, dated July 9, 1980. This bulletin recommended that all clamps with the lubricator fitting hole located 9/16 inch from the clamp parting line be retired from service at the next propeller overhaul.

Because of the serious consequences of this failure and the potential for similar failures, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Issue a General Aviation Airworthiness Alert (AC-43-16) to all owners and operators of airplanes with Hartzell () HC-() (X, V) ()-() model propeller assemblies, apprising them of the circumstances of this accident and advising them to inspect all C-3 clamp assemblies, S/N K6336 and earlier, for cracks in the area of the lubricator fitting threaded hole that is located 9/16 inch from the clamp parting line. The alert should include information regarding the availability of redesigned clamp assemblies and should specify that Hartzell Bulletin No. 126 pertains to this subject. (Class II, Priority Action) (A-83-58)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and McADAMS, BURSLEY, and ENGEN, Members, concurred in this recommendation.


By: Jim Burnett
Chairman