



National Transportation Safety Board Aviation Accident Data Summary

Location:	CHERRY POINT, NC	Accident Number:	ATL01LA043
Date & Time:	04/01/2001, 1400 EDT	Registration:	N78321
Aircraft:	Globe GC1B	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Air Race/Show		

Analysis

A Globe GC1B lost a propeller blade in-flight while maneuvering in the number two position of a formation of three airplanes, a propeller blade separated from the propeller hub assembly. The second propeller blade, along with the hub assembly, subsequently separated from the engine crankshaft. Examination of the recovered propeller hub fracture faces disclosed fatigue cracking. The fatigue fracture propagated until it intersected the outside hub surface. According to McCauley Propeller the fatigue fracture reduced the propeller hub load carrying capacity until it was no longer a sufficient cross section to carry the centrifugal load of the propeller.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Fatigue cracking of the propeller hub that resulted in the in-flight separation of a propeller blade.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: MANEUVERING

Findings

1. (C) PROPELLER SYSTEM/ACCESSORIES,HUB - FRACTURED
2. (C) PROPELLER SYSTEM/ACCESSORIES,HUB - FATIGUE

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Pilot Information

Certificate:	Age:	58
Airplane Rating(s):	Instrument Rating(s):	
Other Aircraft Rating(s):	Instructor Rating(s):	
Flight Time:	6500 hours (Total, all aircraft), 2500 hours (Total, this make and model), 6000 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)	

Aircraft and Owner/Operator Information

Aircraft Make:	Globe	Registration:	N78321
Model/Series:	GC1B	Engines:	1 Reciprocating
Operator:	MICHAEL P. KENNEDY	Engine Manufacturer:	Continental
Operating Certificate(s) Held:	None	Engine Model/Series:	IO 360C
Flight Conducted Under:	Part 91: General Aviation - Air Race/Show		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	NKT, 28 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Overcast / 2000 ft agl	Wind Speed/Gusts, Direction:	5 knots / , 160°
Temperature:	12° C	Visibility	6 Miles
Precipitation and Obscuration:			
Departure Point:	CHERRY POINT, NC (NKT)	Destination:	CHERRY POINT, NC

Airport Information

Airport:	Cherry Point (NKT)	Runway Surface Type:	Asphalt
Runway Used:	32L	Runway Surface Condition:	Dry
Runway Length/Width:	8000 ft / 150 ft		

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	35.067222, -77.415556		

Administrative Information

Investigator In Charge (IIC):	PHILLIP POWELL	Adopted Date:	08/26/2002
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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