Date of Accident: 8 May 2015

Location: Atlanta, GA

NTSB File No.: ERA15FA208

Aircraft: Piper PA-32-300

Registration No.: N5802V

Serial No.: 32R-7780365

Operator: per FAA registry:

TLT and GGB LLC
141 E. Euclid Pkwy
Asheville, North Carolina 28804

Written by: Daniel Boggs
Air Safety Investigation Manager

Date: 25 May, 2015

Contents:

ACCIDENT SYNOPSIS

According to the NTSB preliminary report, “On May 8, 2015, about 1010 eastern daylight time, a Piper PA-32R-300, N5802V, collided with a highway barrier during a forced landing attempt near Chamblee, Georgia. The commercial pilot three passengers were fatally injured and the airplane was destroyed. The airplane was registered to and operated by TLT and GGBB LLC. as a personal flight. Day, visual meteorological conditions prevailed for the flight, which operated on an instrument flight rules flight plan. The flight originated from Peachtree DeKalb Airport (PDK), Chamblee, Georgia, about 1008 eastern daylight time and was destined for University-Oxford Airport (UOX), Oxford, Mississippi.

A review of the air traffic control (ATC) transcript revealed that the pilot contacted clearance delivery for an IFR clearance. ATC provided the clearance, which included radar vectors, and "climb and maintain 3,000; expect 8,000 in 10 minutes." The pilot read back the clearance correctly, and confirmed that he had the most recent automatic terminal information service (ATIS), which was information "Whiskey." The pilot contacted ground control, and indicated that he was ready to taxi. Ground control instructed the pilot to taxi for runway 3R, via bravo, hold short 3L, and the pilot read back the instructions correctly. The pilot then contacted the tower controller informing them that he was holding short 3L and ready. The tower controller instructed the pilot to "fly heading 360 and cleared for takeoff." The pilot then questioned the controller regarding which runway to take off from and the controller cleared the pilot for takeoff from runway 3L. Approximately two minutes after departure the tower controller called the pilot to verify heading. The pilot responded "zero-two-victor, I'm having some problem climbing here." Followed by "zero-two-victor; were going down here at the intersection." This was the last transmission made by the pilot.

A witness stated that he was about 2,300 feet off the departure end of the runway. He stopped to look at the airplane because it was moving extremely slow and only 75-100 feet above ground level when it went over his head. He went on to say that the engine sounded normal and despite the slow speed the airplane was not "wobbling" left to right. He continued to watch the airplane as it flew out of his view.”

Aircraft Damage: Destroyed
Injuries: 4 on board, 4 fatal

SUMMARY AND ANALYSIS OF FINDINGS

One blade was fractured off the hub. The spinner dome was torn off the spinner bulkhead. All three blades showed rotational scoring and curling of the blade tips. There were impression marks on the preload plates indicating that the propeller was in the low blade angle position prior to impact.

CONCLUSION

The propeller showed signs of power ON prior to impact.

There were no discrepancies noted that would preclude normal operation. All damage was consistent with impact damage.

Propeller Teardown Report

Date of Investigation: 11 May, 2015

Location: Griffin, GA Atlanta Air Salvage

Propeller Model: HC-C3YR-1RF with F7663R blades

Representatives:

Daniel Boggs	Hartzell Propeller Inc.
Eric Alleyne	NTSB
Edmundo Rolon	FAA

General Comments:

This type propeller is a 3-blade single-acting, hydraulically operated, constant speed model. Oil pressure from the propeller governor is used to move the blades to the high pitch (blade angle) direction. A spring and blade twisting moment move the blades toward the low pitch direction in the absence of governor oil pressure. The blades and hub are of aluminum construction. Propeller rotation is clockwise as viewed from the rear.

Installation Data: (Data reference the 30-inch station)

Low Pitch:	12.4 ± 0.2 degrees
High Pitch:	32.0 ± 1.0 degrees

Service History:

	S/N	Date of manufacture	TTSN	TSO
Hub	DY6452B	01/12/2005	Unknown	Unknown
Blades	K15194	01/12/2005	Unknown	Unknown
	K15192	01/12/2005	Unknown	Unknown
	K15191	01/12/2005	Unknown	Unknown

Hub Serial Number: DY6452B

Blade Model: F7663R

S/N # A: K15194
S/N # B: K15192
S/N # C: K15191

Blade Orientation:

The blades were arbitrarily number A-B-C clockwise as viewed from the rear of the propeller. The hub serial number was between the A and C blades.

As Received Condition:

See pictures on page 6.

The propeller was received with the propeller fractured off the engine, One blade was fractured off the hub. The spinner dome was torn off the spinner bulkhead. All three blades showed rotational scoring and curling of the blade tips. There were impression marks on the preload plates indicating that the propeller was in the low blade angle position prior to impact.

The cylinder was fractured off the hub. The piston was smashed against the hub and had to be cut off at the pitch change rod to facilitate splitting the hub unit.

Spinner Dome:

The spinner dome was fractured into several pieces.

Spinner Bulkhead:

The spinner bulkhead was bent around the edges.

Propeller Cycling:

Propeller cycling was not possible due to impact damage.

Engine/Propeller Mounting:

The engine to propeller mounting was fractured in several pieces with 5 of the six bolts missing. The remaining bolt was fractured in half.

Photo #1, propeller as received.

Photo #2, propeller as received.

Cylinder:

The cylinder was smashed and fractured around the base.

Piston:

The piston was fractured in several pieces. The piston had to be cut off the hub.

Pitch Change Rod:

The pitch change rod had to be cut in order to remove the piston and facilitate the opening of the hub.

Fork:

The fork was intact and unremarkable.

Spring:

The spring was bent and smashed. It had to be cut in half to facilitate the removal of the piston.

Pitch Stops:

Low Pitch Stop: The low pitch stop was missing.

High Pitch Stop: The high pitch stop was intact.

Hub Assembly:

The hub was fractured at the “B” blade due to impact. The cylinder mount threads were stripped off.

Preload Plates:

1-2 preload plates were scratched and had impression marks at the low pitch setting.

3 preload plate was fractured around the blade knob cut-out. There was an impression mark at the low pitch setting.

Blade Bearings and Blade Pitch Change Knobs:

The bearings and bearing races were missing for the #3 blade. The blade knobs were fractured off on the #1 and #3 blades.

Propeller Blades:

See [pictures on page 9.

1 blade
paint, camber side - rotational scoring.
paint, flat side - intact.
bend - aft at tip.
twist - tip curled under.
lead edge damage - gouges, nicks, and dents.
trail edge damage - gouges, nicks, and dents.
knob condition - fractured off.

2 blade
paint, camber side - rotational scoring.
paint, flat side - intact.
bend - aft at tip.
twist - tip curled under.
lead edge damage - gouges, nicks, and dents.
trail edge damage - gouges, nicks, and dents.
knob condition - intact.

3 blade
paint, camber side - rotational scoring.
paint, flat side - intact.
bend - aft at tip.
twist - tip curled under.
lead edge damage - gouges, nicks, and dents.
trail edge damage - gouges, nicks, and dents.
knob condition - fractured off.

Photo #3, propeller blades.

Photo #4, propeller blades.

PHOTOGRAPHIC SUMMARY

NOTE: The following digital photographs are original and unedited and available on compact disc. The numbering sequence may not be chronological as some may have been deleted if out-of-focus, too dark, redundant, etc. Photos used in the text of this report are taken from photos on this list but may have been adjusted from the original. Modifications to images used in the report are limited to cropping, magnification, file compression, or enhancement of color, brightness, or contrast for the sole purpose to improve clarity of the report. No other alterations are permitted.

PHOTOGRAPH NUMBER	DESCRIPTION
P1020300.JPG	spinner dome.
P1020301.JPG	cylinder.
P1020302.JPG	spinner dome.
P1020303.JPG	propeller as received.
P1020304.JPG	propeller as received.
P1020305.JPG	curled tip.
P1020306.JPG	curled tip.
P1020307.JPG	curled tip.
P1020308.JPG	model number.
P1020309.JPG	serial number.
P1020310.JPG	hub.
P1020311.JPG	hub with fork.
P1020312.JPG	hub.
P1020313.JPG	hub.
P1020314.JPG	preload plates.
P1020315.JPG	preload plate.
P1020316.JPG	preload plate.
P1020317.JPG	preload plate.
P1020318.JPG	piston.
P1020319.JPG	cylinder.
P1020320.JPG	blades.
P1020321.JPG	blades.
P1020322.JPG	blades.
P1020323.JPG	blade butt.
P1020324.JPG	blade butt.
P1020325.JPG	blade butt.
P1020326.JPG	blade knobs.