



National Transportation Safety Board Aviation Accident Factual Report

Location:	DAINGERFIELD, TX	Accident Number:	FTW99LA078
Date & Time:	02/02/1999, 1615 CST	Registration:	N44174
Aircraft:	Taylorcraft BC12-D1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor

Flight Conducted Under: Part 91: General Aviation - Ferry

On February 2, 1999, at 1615 central standard time, a Taylorcraft BC12-D1 tail-wheel equipped airplane, N44174, was substantially damaged when it impacted trees following a loss of control during cruise flight near Daingerfield, Texas. The airline transport pilot, who was the sole occupant, sustained minor injuries. The airplane was registered to and operated by C&B Aircraft of Powderly, Texas. Visual meteorological conditions prevailed for the Title 14 CFR Part 91 ferry flight and no flight plan was filed. The flight originated from the Shreveport Regional Airport, Shreveport, Louisiana, at 1507, and was destined for Paris, Texas.

According to the pilot, the airplane was in cruise flight at 2,100 feet MSL, when he heard a "loud pop." Subsequently, the airplane entered a "flat spiral to the left." The airplane spiraled 2.5 times before it impacted 75-foot trees and came to rest suspended in tree limbs 25 feet above the ground. The pilot exited the airplane and climbed down the tree unassisted.

An FAA inspector examined the airplane and reported that a wing spar was damaged and the propeller was destroyed. The fuselage, aft of the cockpit, was structurally damaged. In the enclosed Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2), the pilot stated that "the cause of the accident was structural failure."

According to an aircraft mechanic, who examined the airplane in the presence of the FAA inspector, the left wing cross brace wires were found loose and intact, but he could not say with certainty if the loose wires were a pre-impact condition. The mechanic also stated that a bolt in the right aileron had been installed upside down, "causing it to rub against the wing." He could not determine if the bolt had restricted the pilot's ability to move the ailerons. The pilot could not remember if the aileron movement was restricted; he could only remember applying full right rudder in an attempt to keep the airplane from rolling left inverted. Photographs of the airplane in the tree show the ailerons positioned for a turn to the right (right aileron full up and left aileron full down).

According to the airplane's maintenance records, the last annual inspection on the engine and airframe was completed on November 15, 1998. Total time on the 1946 model airplane was reported at 1,632 hours. No other pertinent maintenance entries were noted.

Pilot Information

Certificate:	Airline Transport	Age:	33, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	04/01/1998
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	2980 hours (Total, all aircraft), 18 hours (Total, this make and model), 2480 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Taylorcraft	Registration:	N44174
Model/Series:	BC12-D1 BC12-D1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	9974
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	11/15/1998, Annual	Certified Max Gross Wt.:	800 lbs
Time Since Last Inspection:	8 Hours	Engines:	1 Reciprocating
Airframe Total Time:	1632 Hours	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	A-65-8
Registered Owner:	KENNY W. HELM	Rated Power:	65 hp
Operator:	KENNY W. HELM	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	TXK, 391 ft msl	Distance from Accident Site:	38 Nautical Miles
Observation Time:	1553 CST	Direction from Accident Site:	225°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	17° C / 6° C
Precipitation and Obscuration:			
Departure Point:	SHREVEPORT, LA (SHV)	Type of Flight Plan Filed:	None
Destination:	PARIS, TX (PRX)	Type of Clearance:	None
Departure Time:	1507 CST	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	NICOLE LUPINO
Additional Participating Persons:	ALAN KASHER; DALLAS, TX
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/ .