



Aviation Investigation Factual Report

Location: Panama City, Florida Accident Number: MIA05LA081

Date & Time: March 18, 2005, 06:50 Local Registration: N231SK

Aircraft: Beech C-45H Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 135: Air taxi & commuter - Non-scheduled

Factual Information

On March 18, 2005, about 0650 central standard time, a Beech C-45H, N231SK, registered and operated by Jim Hankins Air Service, Inc., experienced collapse of the left main landing gear during the landing roll at Panama City-Bay County International Airport, Panama City, Florida. Visual meteorological conditions prevailed at the time and an instrument flight rules flight plan was filed for the 14 CFR Part 135 non-scheduled, domestic, cargo flight from Southwest Georgia Regional Airport, Albany, Georgia, to Panama City-Bay County International Airport. The airplane was substantially damaged and the commercial-rated pilot, the sole occupant, was not injured. The flight originated about 0505, from Southwest Georgia Regional Airport.

The pilot stated that the approach to Panama City-Bay County International Airport was uneventful. He lowered the landing gear and observed "3 in the green" and complied with the landing checklist. He reported a normal touchdown with full flaps, and applied moderate reverse thrust with very light brakes. Approximately halfway through rollout, the tower informed him of smoke from his left main gear. About 1 second later, the left wing "dipped" about a foot. Seconds later, the left gear collapsed, the propeller contacted the runway, and the airplane rotated to the left about 70 degrees, coming to rest upright on runway 23.

Postaccident examination of the airplane revealed the left main landing gear cylinder top brace assembly (P/N 404-188406), was fractured. Examination of the left main landing gear cylinder top brace assembly (P/N 404-188406) by the NTSB Materials Laboratory, located in Washington, D.C., revealed the top aft tube and lower angled tube were fractured at or near the cylinder attachment points; whereas, the top forward tube was fractured at the left-most welds where the brace connects to the aircraft structure. Optical examination of all of the fracture surfaces of the welds revealed shear lips and rough fracture features consistent with tensile/shear overstress. Scanning electron microscope (SEM) examination of all fracture surface regions in the welds revealed ductile dimples, confirming overstress fracture. The other two fractures in the tubes propagated on 45 degree slant planes with features consistent with overstress.

The airplane minus the retained top brace assembly was released to Guy P. Owen, Director of Maintenance for Jim Hankins Air Service, Inc, on April 2, 2005. The retained top brace assembly was also released to Guy P. Owen, on July 12, 2005.

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Pilot Information

Certificate:	Commercial	Age:	34,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	April 1, 2004
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 1, 2004
Flight Time:	5544 hours (Total, all aircraft), 987 hours (Total, this make and model), 5385 hours (Pilot In Command, all aircraft), 97 hours (Last 90 days, all aircraft), 47 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N231SK
Model/Series:	C-45H	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	AF-856
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	November 1, 2004 AAIP	Certified Max Gross Wt.:	11500 lbs
Time Since Last Inspection:	110.4 Hrs	Engines:	2 Turbo prop
Airframe Total Time:	35287.2 Hrs as of last inspection	Engine Manufacturer:	Garrett
ELT:	Installed, not activated	Engine Model/Series:	TPE331-1-1018
Registered Owner:	Jim Hankins Air Service Inc	Rated Power:	620 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	EWKA

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KPFN,20 ft msl	Distance from Accident Site:	
Observation Time:	06:45 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	8 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.02 inches Hg	Temperature/Dew Point:	8°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ALBANY, GA (ABY)	Type of Flight Plan Filed:	IFR
Destination:	Panama City, FL (PFN)	Type of Clearance:	IFR
Departure Time:	05:05 Local	Type of Airspace:	

Airport Information

Airport:	PANAMA CITY-BAY CO INTL PFN	Runway Surface Type:	Asphalt
Airport Elevation:	20 ft msl	Runway Surface Condition:	Dry
Runway Used:	32	IFR Approach:	None
Runway Length/Width:	6308 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	30.212223,-85.682777

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Administrative Information

Investigator In Charge (IIC): Monville, Timothy

Additional Participating Persons:

Report Date: July 29, 2005

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=61208

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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