



National Transportation Safety Board Aviation Accident Final Report

Location:	Houston, TX	Accident Number:	FTW03LA154
Date & Time:	05/18/2003, 0935 CDT	Registration:	N2SM
Aircraft:	Beech BE-300	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The aircraft overran the departure end of the runway while landing on Runway 33. The 5,200-hour pilot reported that while on the base leg, the annunciator light for the "low pitch stop" propeller system on the right side illuminated. The pilot pulled the circuit breaker and left it out, as per the pilot operating handbook (POH). During the landing-roll, the pilot encountered a severe yaw to the right. The pilot added power to the right engine and realigned the airplane down the centerline. He then applied brakes and reverse thrust. The pilot stated that "it felt like I had no braking action and then felt the right side grab and brake, but not the left." The combination of right side braking and the right low pitch system malfunction caused considerable adverse yaw, jerking the plane to the right. The pilot applied power again and straightened the nose of the airplane. He then made the decision to go around, but at this point did not have adequate airspeed or runway length to safely accomplish a go around. He applied the brakes again, and the airplane immediately yawed to the right again, at which time the pilot was unable to compensate before the airplane caught the edge of the runway. The airplane went into the grass, where the pilot attempted to control the direction of the airplane and bring it to a complete stop. Examination of the hydraulic brake hoses from the left and right main landing gears revealed that both hoses appeared to have been damaged with a hand tool.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The severed hydraulic brake hoses induced a loss of braking action, which resulted in the pilot's failure to control the aircraft.

Findings

Occurrence #1: OVERRUN

Phase of Operation: LANDING - ROLL

Findings

1. (C) HYDRAULIC SYSTEM,LINE - CUT/SEVERED
2. (C) LANDING GEAR,NORMAL BRAKE SYSTEM - LOSS,TOTAL
3. (C) AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

4. TERRAIN CONDITION - SOFT

Factual Information

On May 18, 2003, at approximately 0935 central daylight time, a Beech BE-300 twin-engine airplane, N2SM, registered to and operated by OSO-RIO LLC of Houston, Texas, was substantially damaged during a runway overrun while landing on Runway 33 at the West Houston Airport (IWS), near Houston, Texas. The airline transport pilot, who was the sole occupant of the airplane, received minor injuries. Visual meteorological conditions prevailed for the Title 14 Code of Federal Regulations Part 91 personal flight, and a flight plan was not filed. The flight departed William P. Hobby Airport (HOU) at approximately 0915.

The 5,200-hour pilot stated in the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2) that while on the base leg for IWS, the annunciator light for the "low-pitch stop" propeller system on the right side illuminated. The pilot pulled the circuit breaker and left it out, as per the pilot operating handbook (POH). During the landing-roll, the pilot encountered a severe yaw to the right. The pilot added power to the right engine and realigned the airplane down the centerline. He then applied brakes and reverse thrust. The pilot stated that "it felt like I had no braking action and then felt the right side grab and brake, but not the left." The combination of right side braking and the "right low-pitch stop" system malfunction caused considerable adverse yaw, jerking the plane to the right. The pilot applied power again and straightened the nose of the airplane. He then made the decision to initiate a go-around, but at this point did not have adequate airspeed or runway length to safely accomplish a go around. He applied the brakes again, and the airplane immediately yawed to the right again, at which time the pilot was unable to compensate before the airplane caught the edge of the 3,953 feet long by 75 feet wide asphalt runway.

The airplane went into the grass, where the pilot attempted to control the direction of the airplane and bring it to a complete stop. The airplane continued pulling to the right until it was moving in a sideway direction in relation to the runway. The airplane came to rest in a bayou located approximately 20 feet beyond the departure end of Runway 33. The pilot exited the aircraft unharmed.

An inspection of the airplane by the operator revealed the "right low-pitchstop" system was not completely assembled, and the left brake line was leaking fluid and appeared to have been ruptured. Examination of the hydraulic brake hoses from the left and right main landing gears was conducted by Materials Analysis, Inc., and revealed that both hoses appeared to have been damaged with a hand tool. There was no evidence to suggest that the damage was caused by foreign objects striking the hoses, such as runway debris picked up the tires. No evidence of progressive failure was found on any of the fracture faces.

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	35, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last Medical Exam:	11/13/2002
Occupational Pilot:		Last Flight Review or Equivalent:	04/18/2003
Flight Time:	5200 hours (Total, all aircraft), 3400 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Beech	Registration:	N2SM
Model/Series:	BE-300	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	FL-24
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	15000 lbs
Time Since Last Inspection:		Engines:	2 Turbo Prop
Airframe Total Time:		Engine Manufacturer:	Pratt & Whitney
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	PT6A-60A
Registered Owner:	OSO-RIO LLC	Rated Power:	1050 hp
Operator:	Christopher Neil Ortiz	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Observation Time:	
Distance from Accident Site:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	26 °C / 17 °C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:		Visibility (RVR):	
Altimeter Setting:	29.94 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	William P Hobby, TX (HOU)	Type of Flight Plan Filed:	None
Destination:	Houston, TX (IWS)	Type of Clearance:	VFR Flight Following
Departure Time:	0915 CDT	Type of Airspace:	Class B

Airport Information

Airport:	West Houston Airport (IWS)	Runway Surface Type:	Asphalt
Airport Elevation:	117 ft	Runway Surface Condition:	Dry
Runway Used:	33	IFR Approach:	Unknown
Runway Length/Width:	3953 ft / 75 ft	VFR Approach/Landing:	Full Stop

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:	29.818056, -95.672500

Administrative Information

Investigator In Charge (IIC):	Alex Lemishko	Adopted Date:	03/30/2004
Additional Participating Persons:	Thomas J Latson; Flight Standards District Office (SW09); Houston, TX		
Publish Date:			
Investigation Docket:	NTSB accident and incident docket 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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