



Aviation Investigation Final Report

Location:	HARPSWELL, Maine	Accident Number:	NYC00LA065
Date & Time:	January 8, 2000, 21:00 Local	Registration:	N8463X
Aircraft:	Piper PA-32R-301T	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot departed on runway 32, an unlighted turf runway on a dark night. When he rotated, he lost sight of the trees on the sides of the runway, and the runway ahead. The right wing of the airplane struck trees on the right side of the runway prior to the departure end of the runway. The pilot continued with the takeoff and climbed to altitude. He reported that he was not certain if the wind drifted the airplane to the right, or he initiated a slight right turn. Winds in the area were reported to be from 210 to 220 degrees at 10 to 14 knots. Upon landing at a nearby airport, examination of the airplane revealed the right main landing gear was bent rearward, and the spar of the right horizontal stabilator had been bent rearward.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: was the improper decision of the pilot to depart at night, from an unlighted runway with no visual references to obstructions on the sides of the runway. Factors were the dark night conditions, and the lack of runway side lights.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) LIGHT CONDITION - DARK NIGHT

2. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
3. (F) AIRPORT FACILITIES, RUNWAY EDGE LIGHTS - NOT INSTALLED

Factual Information

On January 8, 2000, about 2100 eastern standard time, a Piper PA-32R-301T, N8463X, was substantially damaged as it departed Farr Field Airport (ME33), Harpswell, Maine. The certificated private pilot and passenger were not injured. Visual meteorological conditions prevailed for the personal flight that was destined for Portland International Jetport (PWM), Portland Maine. No flight plan had been filed for the flight that was conducted under 14 CFR Part 91.

The pilot reported that the flight originated from Bedford, Massachusetts (BED), earlier in the day, and he landed at ME33 during the day. He had kept his fuel load low, and planned on a short flight to PWM to refuel prior to returning to BED.

The pilot reported that when he arrived at the airport for departure, it was a dark night, with no moon. The runway was below the level of surrounding trees and he did not notice a wind. He elected to depart on runway 32, and a vehicle was driven to the departure end of the runway and pointed toward the airplane with the lights on.

The pilot further reported in the NTSB Form 6120.1/2:

"...immediately upon rotation the trees on both sides disappeared from sight. That's because the nose was up and the wing tip lights do not point outward but somewhat inward from the wingtips. So, with a dark sky above, I was effectively IMC the second I lifted off... reflexively went to the instruments to check attitude and heading but I had not anticipated that would I have to do so. Precious seconds were lost. I had just gotten my scan going when my wife [spoke]...It caused me to look outside, just in time to see the top branches of a tree lit by the right wingtip light. There was no time to react: the branches impacted with a loud thud. I do not know whether a slight wind aloft pushed me into a drift or whether I was too slow going from visual to instruments and allowed a small turn...."

The pilot continued with the takeoff, and flew toward PWM. En route he retracted the wing flaps and landing gear, and then noticed a flutter through the control wheel. Nearing PWM, he declared an emergency and landed without further incident.

An inspector from the Federal Aviation Administration (FAA), who examined the airplane, reported that the right horizontal stabilator was substantially damaged with leading edge damage, and the spar bent rearward. In addition, the right main landing gear was bent rearward.

Wind data from Brunswick Naval Air Station (NHZ), located 8 nautical miles (NM) north; and from PWM, located 15 NM west, revealed winds from 220 degrees at 14 knots, and 210

degrees at 10 knots respectively.

According to the pilot, and data from the FAA, ME33 was an unlighted field with a turf surface. The runway was 1,900 feet long and 100 feet wide. The pilot reported that trees lined both sides of the runway, and the runway surface was firm.

Pilot Information

Certificate:	Private	Age:	57, Male
Airplane Rating(s):	Single-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 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	November 5, 1999
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2625 hours (Total, all aircraft), 2475 hours (Total, this make and model), 2625 hours (Pilot In Command, all aircraft), 42 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 1 hour (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N8463X
Model/Series:	PA-32R-301T PA-32R-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	32R-8229009
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	November 20, 1999 Annual	Certified Max Gross Wt.:	3617 lbs
Time Since Last Inspection:	35 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3354 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	TIO-540-S1AD
Registered Owner:	PATRICK P. DE CAVIGNAC	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	NHZ ,75 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	20:55 Local	Direction from Accident Site:	43°
Lowest Cloud Condition:	Scattered / 12000 ft AGL	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	0°C / -8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(ME33)	Type of Flight Plan Filed:	None
Destination:	PORTLAND , ME (PWM)	Type of Clearance:	None
Departure Time:	21:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	FARR FIELD AIRPOT ME33	Runway Surface Type:	Grass/turf
Airport Elevation:	70 ft msl	Runway Surface Condition:	Dry
Runway Used:	32	IFR Approach:	None
Runway Length/Width:	1900 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Hancock, Robert
Additional Participating Persons:	SANDY TAYLOR; PORTLAND , ME
Original Publish Date:	November 29, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=48464

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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](#).