



Aviation Investigation Final Report

Location: Windsor Locks, Connecticut Accident Number: NYC06TA161

Date & Time: June 23, 2006, 12:37 Local Registration: N20

Aircraft: Beech C90 Aircraft Damage: Substantial

Defining Event: 2 None

Flight Conducted Under: Public aircraft

Analysis

After touchdown, while performing a touch-and-go landing, the pilot flying (PF) set takeoff power and initiated the takeoff. The non-flying pilot (NFP) then asked if the PF if he "wanted flaps up." The PF replied "yes," and the NFP inadvertently raised the landing gear instead of the flaps. The airplane's landing gear subsequently retracted, and the underside of the airplane contacted the ground. The PF then aborted the takeoff, and the airplane skidded to a stop on the runway. Examination of the airplane revealed substantial damage to the fuselage, and no mechanical anomalies with the landing gear system were identified.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The non-flying pilot's improper procedure, which resulted in his inadvertent retraction of the landing gear while the airplane was on the ground.

Findings

Occurrence #1: GEAR RETRACTION ON GROUND Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) PROCEDURES/DIRECTIVES - IMPROPER - COPILOT/SECOND PILOT

Factual Information

On June 23, 2006, at 1237 eastern daylight time, a Beech C90, N20, was substantially damaged while landing at Bradley International Airport (BDL), Windsor Locks, Connecticut. The two certificated airline transport pilots were not injured. Visual meteorological conditions prevailed for the flight that originated at the Portland International Jetport (PWM), Portland, Maine. The public use training flight was conducted under 14 CFR Part 91.

The purpose of the flight was for two Federal Aviation Administration (FAA) inspectors to maintain currency, while ferrying the airplane between Flight Standards District Offices (FSDOs). According to the inspectors, the flight to BDL was routine, and they requested four instrument landing system (ILS) approaches once they arrived in the BDL area. The first ILS approach was terminated prior to the missed approach point, due to traffic. During the second approach, the pilot flying (PF) intended to perform a touch and go landing. After touchdown the PF set takeoff power and initiated the takeoff. The non-flying pilot (NFP) then asked if the PF if he "wanted flaps up." The PF replied "yes," and the NFP inadvertently raised the landing gear instead of the flaps. The airplane's landing gear subsequently retracted, and the underside of the airplane contacted the ground. The PF then aborted the takeoff, and the airplane skidded to a stop on the runway.

Examination of the airplane by an FAA inspector revealed substantial damage to the fuselage. No mechanical anomalies were noted with the landing gear system.

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	55,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	April 1, 2006
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 1, 2005
Flight Time:	10000 hours (Total, all aircraft), 1400 hours (Total, this make and model), 10000 hours (Pilot In Command, all aircraft), 7 hours (Last 90 days, all aircraft)		

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Co-pilot Information

Certificate:	Airline transport; Flight instructor	Age:	52,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	June 1, 2006
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 1, 2006
Flight Time:	5583 hours (Total, all aircraft), 46 hours (Total, this make and model), 5230 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N20
Model/Series:	C90	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	LJ-912
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	May 1, 2006 AAIP	Certified Max Gross Wt.:	9650 lbs
Time Since Last Inspection:	72 Hrs	Engines:	2 Turbo prop
Airframe Total Time:	10245 Hrs at time of accident	Engine Manufacturer:	Pratt & Whitney
ELT:	Installed, not activated	Engine Model/Series:	PT-6A-21
Registered Owner:	Federal Aviation Administration	Rated Power:	1100 Horsepower
Operator:		Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BDL,173 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	12:51 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 5500 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 16000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	31°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Portland, ME (PWM)	Type of Flight Plan Filed:	IFR
Destination:	Windsor Locks, CT (BDL)	Type of Clearance:	IFR
Departure Time:	15:05 Local	Type of Airspace:	

Airport Information

Airport:	Bradley International Airport BDL	Runway Surface Type:	Asphalt
Airport Elevation:	173 ft msl	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	ILS
Runway Length/Width:	9510 ft / 200 ft	VFR Approach/Landing:	Touch and go

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	41.938888,-72.683052

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Administrative Information

Investigator In Charge (IIC): Andrews, Jill

Additional Participating Paul Falzarano; FAA/FSDO; Lexington, MA

Persons:

Original Publish Date: January 31, 2007

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=63993

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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