

Aviation Investigation Final Report

Location:	BANGOR, Maine		Accident Number:	NYC95LA093
Date & Time:	April 24, 1995, 16:55	Local	Registration:	N62EC
Aircraft:	CESSNA	185	Aircraft Damage:	Substantial
Defining Event:			Injuries:	2 None
Flight Conducted Under:	Part 91: General avia	ition - Personal		

Analysis

THE PILOT HAD CONDUCTED A SHORT FIELD APPROACH TO RUNWAY 33. DURING THE LANDING ROLL OUT, THE RIGHT MAIN GEAR COLLAPSED. THE FAA STATED '...THE IMPACT AND WEIGHT OF THE AIRCRAFT CREATED AN EXCESSIVE SIDE LOADING. THIS CAUSED THE RIGHT MAIN SPRING STEEL GEAR TO EXERT A TREMENDOUS UPWARD PULL ON THE SINGLE BOLT SECURING THE GEAR TO THE BOX BEAM. THE BOLT...HAD PULLED THROUGH THE...NUT....' THE WINDS REPORTED AT THE TIME OF THE ACCIDENT, WERE FROM 300 DEGREES AT 10 KNOTS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper flare, which resulted in a hard landing and collapse of the right main gear.

Findings

Occurrence #1: HARD LANDING Phase of Operation: LANDING

Findings
1. (C) PROPER DESCENT RATE - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: GEAR COLLAPSED Phase of Operation: LANDING - ROLL Findings 2. (F) DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED - PILOT IN COMMAND 3. LANDING GEAR,MAIN GEAR ATTACHMENT - SEPARATION

Factual Information

On April 24, 1995, about 1655 eastern daylight time, a Cessna 185, N62EC, was substantially damaged during landing at Bangor Airport, Bangor, Maine. The pilot and passenger were not injured. Visual meteorological conditions prevailed, and no flight plan was filed for the personal flight operated under 14 CFR Part 91.

According to the pilot, he was conducting a short field approach to runway 33. The pilot further stated, in the NTSB form 6120.1/2,

...On landing the aircraft ballooned slightly, followed by a normal 3 point landing. Upon rollout, taxiing to Kilo intersection, aircraft began turning slightly left. Pilot applied right rudder than right brake to correct. Without any indication the right main landing gear folded under aircraft. Aircraft continued turning striking the right wing tip....

In the Federal Aviation Administration Inspector's post accident examination report, he stated,

...During the investigation, it was calculated that the PIC [pilot in command], during a crosswind landing, had apparently lost control and laid the aircraft on a steep angle causing the right main wheel to tuck under the belly of the aircraft. This was evident by the scrap marks on the rim of the wheel halves. The impact and weight of the aircraft created an excessive side loading. This caused the right main spring steel gear to exert a tremendous upward pull on the single bolt securing the gear to the box beam. The bolt...had pulled through the...nut....

The winds reported at the time of the accident, were from 300 degrees at 10 knots.

Pilot Information

Certificate:	Airline transport	Age:	35,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:	No
Instructor Rating(s):	Airplane multi-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Unknown	Last FAA Medical Exam:	July 28, 1994
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	7610 hours (Total, all aircraft), 2460 hours (Total, this make and model), 6910 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N62EC
Model/Series:	185 185	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18504435
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	April 30, 1995 Annual	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2380 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-520-D
Registered Owner:	ALTON BOUCHARD	Rated Power:	285 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:	CENTRAL MAINE FLYING SERVICE	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BGR ,192 ft msl	Distance from Accident Site:	
Observation Time:	17:05 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 4000 ft AGL	Visibility	75 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	14°C / -4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	AUGUSTA , ME (AUG)	Type of Flight Plan Filed:	None
Destination:	(BGR)	Type of Clearance:	None
Departure Time:	15:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	BANGOR INTERNATIONAL ARPT BGR	Runway Surface Type:	Concrete
Airport Elevation:	192 ft msl	Runway Surface Condition:	
Runway Used:	33	IFR Approach:	None
Runway Length/Width:	11439 ft / 300 ft	VFR Approach/Landing:	Full stop

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):	Jones, Dennis	
Additional Participating Persons:	DOUGLAS H BORDEAUX; PORTLAND , ME	
Original Publish Date:	August 23, 1995	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=38948	

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