



Aviation Investigation Final Report

Location:	Hibbing, Minnesota	Accident Number:	CEN16LA343
Date & Time:	August 31, 2016, 11:30 Local	Registration:	N1726D
Aircraft:	Cessna 170A	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was conducting a personal flight, and his last recollection of the flight was when he entered the traffic pattern for the runway. He stated that he was unsure if he "had a bad landing or tried to go around" when the accident occurred. The airplane came to rest upright in the grass alongside the runway facing southeast; the forward fuselage was crushed aft, which was consistent with a nose-down impact. The flaps were found fully retracted. A postaccident examination of the runway did not reveal any tire skid marks that could be associated with a loss of directional control after the airplane touched down. The initial point of impact was where the left wingtip had hit the ground about 30 ft from the left edge of the runway. The propeller exhibited damage consistent with minimal engine power at impact. The wreckage examination did not reveal any mechanical malfunctions or failures of the airplane that would have precluded normal operation. Based on the available information, the pilot lost airplane control, but it could not be determined if this occurred while landing or during a go-around attempt.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to maintain aircraft control, which resulted in impact with terrain near the runway.

Findings

Personnel issues

Aircraft control - Pilot

Factual Information

History of Flight

Landing	Loss of control in flight (Defining event)
Landing	Collision with terr/obj (non-CFIT)

On August 31, 2016, about 1130 central daylight time, a Cessna 170A airplane, N1726D, was substantially damaged while landing on runway 31 at Range Regional Airport (HIB), Hibbing, Minnesota. The pilot was seriously injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot reported that he arrived at HIB about 0800 to preflight the airplane before he departed about 0900 on a pleasure flight to Anderson Field, a private airstrip, located about 25 miles north of HIB near Bear River, Minnesota. The pilot stated that he made 8 uneventful landings at the private airstrip before taking a half hour break on the ground. He noted that the winds were "picking up" when departed the private airstrip about 1100 for the return flight to HIB. The pilot stated that the air was "turbulent" during the return flight to HIB. The pilot stated that his last recollection of the flight was when he entered the traffic pattern for runway 31 at HIB. The pilot was unsure if he "had a bad landing or tried to go around" when the accident occurred. The pilot stated that although he has a brief memory of a first responder speaking to him after the accident, his first substantive memory was after he woke up in the hospital a week after the accident.

According to the Hibbing Police Department, an individual called 911 around 1256 to report the accident. There were no witnesses to the final portion of flight.

The airplane was examined by a Federal Aviation Administration (FAA) Airworthiness Inspector. The FAA inspector stated that he did not observe any tire skid marks that could be associated with a loss of directional control after the airplane touched down. The initial point-of-impact was where the left wingtip hit the ground about 30 ft from the left edge of the runway. The airplane came to rest in the grass area along the left side of runway 31, about 1,375 ft from the approach end of runway 31 and about 65 ft off the left edge of the runway. The airplane was upright at the accident site and facing southeast. The forward fuselage was crushed aft, which was consistent with a nose-down impact. The wings exhibited upward bending near both wing tips and buckling along both wing roots. The upper wing surfaces were buckled along their entire span. There was no evidence of leading edge wing damage. The aft fuselage and empennage appeared undamaged. Flight control cable continuity was confirmed from the cockpit controls to the ailerons, elevator, rudder, and flaps. Both flaps were found fully retracted, which was consistent with the position of the cockpit flap control lever. Both the pitch trim tab and the associated pitch trim indicator were in a mid-range position. The fuel selector had been turned off by a first responder; however, the first responder noted that there was fuel draining from a fuel line leading to the engine before the fuel selector was turned off. The left main landing gear leg was bent slightly forward. The right main landing gear leg appeared to be undamaged. The right brake system operated normally when tested. The left brake system could not be tested due to a damaged master cylinder; however, the remaining components of the left brake system did not exhibit any

anomalies. The tailwheel assembly had fractured where it attached to the tailwheel spring; however, the observed fracture features were consistent with impact related damage. The tail wheel rotated freely and there was no evidence of a malfunction of the tailwheel steering components. The postaccident examination did not reveal any anomalies that would have precluded normal airplane operation during the flight.

The engine remained partially attached to the firewall, and the propeller remained attached to the crankshaft flange. Engine control cable continuity could not be verified due to impact related damage. The propeller blades exhibited minor chordwise scratches and leading edge damage. Both propeller blades exhibited aft bends. Compression and suction were noted on all six cylinders in conjunction with crankshaft rotation. The lower spark plugs were removed and exhibited features consistent with normal engine operation. The magnetos remained attached to their respective installation point and provided spark on all posts while the engine crankshaft was rotated. The carburetor had separated from the engine during impact. The postaccident examination did not reveal any anomalies that would have precluded normal engine operation during the flight.

The pilot held a private pilot certificate with ratings for single-engine land and sea airplanes. The pilot reported having about 160 hours of total flight experience, of which 21.5 hours were flown in the accident airplane. The pilot received his tailwheel endorsement the day before the accident.

Pilot Information

Certificate:	Private	Age:	66,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	August 13, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 29, 2016
Flight Time:	(Estimated) 160 hours (Total, all aircraft), 21.5 hours (Total, this make and model), 36.5 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N1726D
Model/Series:	170A	Aircraft Category:	Airplane
Year of Manufacture:	1951	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	20169
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	March 7, 2016 Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	7 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2816.4 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	C91A installed, not activated	Engine Model/Series:	C145-2
Registered Owner:		Rated Power:	145 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HIB, 1354 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.22 inches Hg	Temperature/Dew Point:	19°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Bear River, MN (PVT)	Type of Flight Plan Filed:	None
Destination:	Hibbing, MN (HIB)	Type of Clearance:	None
Departure Time:	11:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	Range Regional Airport HIB	Runway Surface Type:	Asphalt
Airport Elevation:	1354 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	6758 ft / 150 ft	VFR Approach/Landing:	Unknown

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	47.380832,-92.831108(est)

Administrative Information

Investigator In Charge (IIC):	Fox, Andrew
Additional Participating Persons:	David R Nelson; Federal Aviation Administration, Minneapolis FSDO; Minneapolis, MN
Original Publish Date:	June 8, 2020
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=93934

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