



Aviation Investigation Final Report

Location:	TOCSIN, Indiana	Accident Number:	CHI98LA179
Date & Time:	May 28, 1998, 18:30 Local	Registration:	N1849Q
Aircraft:	Cessna 177RG	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated the engine was running normally, but the airplane did not seem to want to climb during the takeoff. The pilot stated he raised the landing gear near the end of the runway at which time the stall horn activated. He then raised the flaps from 10 degrees to fully retracted and made a turn to avoid wires ahead of him. He stated the airplane then 'mushed' into the terrain. Post accident inspection of the airplane and engine failed to reveal any reason why the airplane would not have been capable of obtaining a normal rate of climb during the takeoff.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to obtain adequate airspeed during the takeoff climb and the resulting inadvertent stall. A factor in the accident was the pilot's premature raising of the flaps.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) AIRSPEED - INADEQUATE - PILOT IN COMMAND
2. (F) RAISING OF FLAPS - IMPROPER - PILOT IN COMMAND
3. (C) STALL/MUSH - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On May 28, 1998, at 1830 eastern standard time, a Cessna 177RG, N1849Q, operated by a private pilot, was substantially damaged after impacting the terrain shortly after takeoff from the Lazy K Airstrip, near Tocsin, Indiana. The pilot and one passenger reported no injuries. The personal flight was being conducted under 14 CFR Part 91. Visual meteorological conditions prevailed and no flight plan was on file. The planned local flight was originating at the time of the accident.

The pilot reported the engine run-up and takeoff were normal. He stated the engine was running normally, but the airplane did not seem to want to climb. The pilot stated he raised the landing gear near the end of the runway at which time the stall horn activated. He then raised the flaps from 10 degrees to fully retracted and made a turn to avoid wires ahead of him. He stated the airplane then "mushed" into the terrain.

Post accident inspection of the airplane and engine by an Inspector from the Federal Aviation Administration, South Bend, Indiana, Flight Standards District Office failed to reveal any reason why the airplane would not have been capable of obtaining a normal rate of climb during the takeoff. The airplane impacted the terrain approximately 1,300 feet from the end of the runway.

The 1972 Cessna 177RG Owner's Manual states stall speed of 66 miles per hour (MPH) with flaps up, power off and a stall speed of 57 MPH with flaps extended, power off. Takeoff procedures state to climb out at 75 to 85 MPH after which time the landing gear and flaps should be retracted. The maximum performance takeoff procedures state that flaps should not be retracted until "accelerating to at least 80 MPH."

Pilot Information

Certificate:	Private	Age:	40,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 28, 1997
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	192 hours (Total, all aircraft), 14 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N1849Q
Model/Series:	177RG 177RG	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	177RG0249
Landing Gear Type:		Seats:	4
Date/Type of Last Inspection:	November 18, 1997 Annual	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:	50 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2770 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-360
Registered Owner:	GARY W. KOEPKE	Rated Power:	200 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:	Day
Observation Facility, Elevation:	FWA ,815 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	22:54 Local	Direction from Accident Site:	335°
Lowest Cloud Condition:	Scattered / 6000 ft AGL	Visibility	8 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	17 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	29°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(0IN2)	Type of Flight Plan Filed:	None
Destination:	(0IN2)	Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	LAZY K	Runway Surface Type:	Grass/turf
Airport Elevation:	840 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	2900 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:	40.79916,-85.089103(est)

Administrative Information

Investigator In Charge (IIC): Sullivan, Pamela

Additional Participating Persons: DAVID KEPPLE; SOUTH BEND , IN

Original Publish Date: May 19, 1999

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=10897>

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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](#).