



Aviation Investigation Final Report

Location:	HUTCHINSON, Kansas	Accident Number:	CHI98LA112
Date & Time:	March 31, 1998, 14:44 Local	Registration:	N3020L
Aircraft:	Cessna 310J	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

A flight instructor (CFI) and dual student were practicing an aborted takeoff following a simulated loss of power in the right engine. The student had been briefed regarding the procedure, and he was told that the right engine would be the one with the simulated power loss. The CFI reported that during takeoff at 50 mph, he simulated loss of power in the right engine by reducing the mixture for that engine. The CFI said that the student 'appeared to initiate the correct aborted takeoff procedure by retarding the throttles to idle....' After completing the simulated loss of power and aborted takeoff, the CFI re-advanced the right mixture control. He said the right engine 'caught' (surged with power), and the airplane then veered off the left side of the runway and into soft grass, where the nose gear collapsed. The CFI discovered after the accident that the student had not retarded the right throttle during the aborted takeoff.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the flight instructor's inadequate supervision by failing to ensure that the right throttle had been retarded before re-advancing the right mixture control, which resulted in a loss of directional control, an encounter with soft terrain, and damage to the nose gear. A related factor was that the student improperly performed the aborted takeoff procedure by failing to retard both throttles.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: TAKEOFF - ABORTED

Findings

1. ENGINE SHUTDOWN - SIMULATED - PILOT IN COMMAND(CFI)
2. (F) EMERGENCY PROCEDURE - IMPROPER - DUAL STUDENT
3. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
4. (C) THROTTLE/POWER CONTROL - NOT VERIFIED - PILOT IN COMMAND(CFI)
5. (C) DIRECTIONAL CONTROL - NOT MAINTAINED
6. GROUND LOOP/SWERVE

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: TAKEOFF - ABORTED

Findings

7. (F) TERRAIN CONDITION - SOFT

Occurrence #3: NOSE GEAR COLLAPSED

Phase of Operation: TAKEOFF - ABORTED

Findings

8. LANDING GEAR,NOSE GEAR - OVERLOAD

Factual Information

On March 31, 1998, at 1444 central standard time, a Cessna 310J, N3020L, received substantial damage following a loss of directional control during a planned aborted takeoff on runway 31 (7,001'x100') at the Hutchinson Municipal Airport, Hutchinson, Kansas. The instructional flight was being operated under 14 CFR Part 91. Neither the certified flight instructor (CFI) or the airline transport rated pilot (student) were injured. Visual meteorological conditions prevailed and no flight plan was filed. The flight was originating at the time of the accident.

The CFI reported that they had planned to practice an aborted takeoff following a simulated failure of the right engine. He reported that the student was briefed on the procedure and was told which engine would be "failed." The CFI reported that the student initiated the takeoff, and at an airspeed of approximately 50 mph, the CFI pulled back the mixture on the right engine to simulate the engine failure. He continued to report, "[the student] appeared to initiate the correct aborted takeoff procedure by retarding the throttles to idle...." The CFI reported that when he saw the airplane tracking correctly he advanced the mixture for the right engine at which time the right engine "caught" veering the airplane off the left side of the runway. The CFI reported that he was unaware that the student had not reduced the throttle setting for the right engine during the aborted takeoff procedure.

The airplane traveled into a soft grass area where the nose gear collapsed, damaging the firewall, and the airplane slid to a stop.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	37, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
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 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	December 22, 1998
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1885 hours (Total, all aircraft), 15 hours (Total, this make and model), 1436 hours (Pilot In Command, all aircraft), 133 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N3020L
Model/Series:	310J 310J	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	310J-0020
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	5100 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	IO-470
Registered Owner:	CLIFTON D. LANE	Rated Power:	240 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:	HUT ,1542 ft msl	Distance from Accident Site:	
Observation Time:	14:49 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	10 miles
Lowest Ceiling:	Broken / 4200 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 24 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(HUT)	Type of Flight Plan Filed:	None
Destination:	(HUT)	Type of Clearance:	VFR
Departure Time:	14:44 Local	Type of Airspace:	Class D

Airport Information

Airport:	HUTCHINSON MUNICIPAL HUT	Runway Surface Type:	Asphalt
Airport Elevation:	1542 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	7001 ft / 100 ft	VFR Approach/Landing:	None

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:	38.059139,-97.910774(est)

Administrative Information

Investigator In Charge (IIC):	Sullivan, Pamela
Additional Participating Persons:	DAN BUERKI; WICHITA , KS
Original Publish Date:	October 30, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=10842

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](#).