



National Transportation Safety Board Aviation Accident Final Report

Location:	COLUMBUS, IN	Accident Number:	CHI98LA302
Date & Time:	08/06/1998, 0450 CST	Registration:	N5MJ
Aircraft:	Cessna 421B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Serious, 4 Minor
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

Upon reaching an altitude of 400 agl after takeoff, the left side door on the nose baggage door opened. The pilot-in-command initiated a left turn to return to the airport. During the turn the stall horn sounded. The airplane then descended and impacted the terrain. Investigation revealed that both pilots did a portion of the aircraft preflight inspection. Both pilots were qualified to act as PIC for the flight and this flight would typically have been a single pilot operation. However, the company who hired the operator to transport their employees requested two pilots. The operator did not have any written procedures regarding the division of duties for a two pilot operation on this type of aircraft.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot-in-commands failure to maintain airspeed and the subsequent stall/mush. Factors associated with the accident were the open baggage door and the inadequate aircraft preflight.

Findings

Occurrence #1: MISCELLANEOUS/OTHER

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) DOOR,CARGO/BAGGAGE - OPEN
 2. (F) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
 3. PROCEDURES/DIRECTIVES - INADEQUATE - COMPANY/OPERATOR MANAGEMENT
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Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

4. (C) AIRSPEED - INADEQUATE - PILOT IN COMMAND
 5. (C) STALL/MUSH - INADVERTENT - PILOT IN COMMAND
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

6. TERRAIN CONDITION - GROUND

Factual Information

On August 6, 1998, at 0450 central standard time, a Cessna 421B, N5MJ, operated by Rhodes Aviation, collided with the terrain at the Columbus Municipal Airport while attempting to return to land shortly after takeoff. The airline transport rated pilot, the co-pilot, and two passengers received minor injuries. The remaining two passengers were seriously injured. The airplane was substantially damaged by impact with the terrain and a post impact fire. The 14 CFR Part 135 flight was operating in visual meteorological conditions on an IFR flight plan. The intended destination of the flight was Detroit, Michigan.

The pilot-in-command (PIC) reported that shortly after takeoff, upon reaching an altitude of about 400 feet above the ground, the left side nose baggage compartment door opened. He reported he informed the co-pilot that the door was opened and that they were going to return to land on runway 14. They had departed on runway 05. He reported he raised the gear and made a maximum power turn the left. He rolled the wings level and lowered the nose. He reported that at this time he thought perhaps the right side nose baggage door opened. He reported, "...knew I was going down so I put gear down tried to land in field. Landed and left wheel caught rut and broke landing gear causing left tip tank to hit ground catching fire and sliding sideways." He reported that after coming to a stop he went into the back of the airplane, opened the door and got everyone out.

The co-pilot reported that after takeoff she heard the PIC say something about the door. She reported she turned around, looked at the rear door, and told the PIC that it looked fine. She continued to report that the PIC started a left turn at which time the stall warning came on and the PIC stated they were "going down." She reported that she did not see the field which the airplane impacted. She reported that after the impact there was fire on the left wing. The PIC then opened the rear door and everyone exited the airplane.

Post accident inspection of the airplane was conducted by Inspectors from the Federal Aviation Administration Indianapolis, Indiana Flight Standards District Office. They reported the airplane touched down in the field on a northerly heading. It then slid around coming to rest on a southwesterly heading. They reported all three landing gear were separated from the airplane. The airplane had sustained severe fire damage. The left nose baggage door was open.

The investigation revealed that both pilots were qualified to act as PIC of the flight and both had completed portions of the aircraft preflight. This flight would have normally been a single pilot operation; however, the company whose employees were being transported requested two pilots for the flight. The operator did not have any written procedures regarding the division of duties for a two pilot operation for this type of aircraft.

Pilot Information

Certificate:	Airline Transport	Age:	39, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	02/24/1998
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	2145 hours (Total, all aircraft), 594 hours (Total, this make and model), 1162 hours (Pilot In Command, all aircraft), 127 hours (Last 90 days, all aircraft), 43 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5MJ
Model/Series:	421B 421B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	421B0925
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	07/29/1998, AAIP	Certified Max Gross Wt.:	7450 lbs
Time Since Last Inspection:	4 Hours	Engines:	2 Reciprocating
Airframe Total Time:	6925 Hours	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	GTSIO-520-H
Registered Owner:	JACK RHODES AIRCRAFT SALES	Rated Power:	375 hp
Operator:	JACK RHODES AIRCRAFT SALES	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:	RHODES AVIATION	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	(BAK)	Type of Flight Plan Filed:	IFR
Destination:	DETROIT, MI (DTW)	Type of Clearance:	IFR
Departure Time:	0449 CST	Type of Airspace:	Class D

Airport Information

Airport:	COLUMBUS MUNICIPAL (BAK)	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	2 Serious, 2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious, 4 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PAMELA S SULLIVAN	Report Date:	07/02/1999
Additional Participating Persons:	DOUG TATE; INDIANAPOLIS, IN		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/ .		

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