

Aviation Investigation Final Report

Location:	Kissimmee, Florida	Accident Number:	MIA01LA181
Date & Time:	July 11, 2001, 16:30 Local	Registration:	N720BF
Aircraft:	Floback Lancair 4	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

A witness stated he saw the accident and described the takeoff as "normal." He saw the airplane turn cross wind, continue to climb and turn down wind. He stated the airplane then "...appeared to slow rapidly at around 300 to 400 feet...made a couple of abrupt moves from side to side then turned away from the airport...nosed over and impacted the ground." The post crash fire destroyed about 60 percent of the airplane. An engine teardown revealed no discrepancies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the failure of the pilot to maintain airspeed, which resulted in an inadvertent stall/spin, and subsequent impact with the terrain.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: DESCENT - UNCONTROLLED

Findings 1. (C) AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND 2. STALL/SPIN - INADVERTENT - PILOT IN COMMAND Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED

Findings 3. TERRAIN CONDITION - GROUND

Factual Information

On July 11, 2001, about 1630 eastern daylight time, a Floback Lancair 4 homebuilt airplane, N720BF, registered to Missionair Inc., operating as a Title 14 CFR Part 91 personal flight, impacted with the ground and was consumed by fire shortly after takeoff from the Kissimmee Municipal Airport, Florida. Visual meteorological conditions prevailed. No flight plan was filed. The airplane was destroyed. The airline transport rated-pilot was fatally injured. The flight was originating when the accident occurred.

The director of maintenance (DM) for the owner of the airplane witnessed the accident and stated that before the flight the pilot hd intended to take a "routine flight around the pattern." When the pilot tried to start the airplane the pilot felt that the battery was too low, so he charged it for "a couple of hours." After charging the battery the pilot started the airplane "a couple of times and performed ground run-ups," After shutting the engine down, he re-installed the top engine cowling. He again re-started the engine and "performed ground run-ups." The DM then watched the airplane take off from runway 24, to "remain in the pattern." The DM described the takeoff as "normal." He stated that "gear up [was] during climb-out." He saw the airplane turn cross wind, continue to climb and turn down wind. The airplane then "...appeared to slow rapidly at around 300 to 400 feet approximately...aircraft made a couple of abrupt moves from side to side then turned away from the airport...nosed over and impacted the ground."

According to the FAA, the airplane had traveled about 3 miles south of the airport, when witnesses reported that they saw it oscillate, and then go into an attitude with the wings perpendicular to the ground. The airplane disappeared behind trees, and then was heard exploding. The postcrash fire destroyed about 60 percent of the airplane. The right wing was destroyed and the left wing did not show any fire damage. The engine displayed very little fire damage. Examination of fuel flow divider revealed that it was dry. The fuel selector valve was removed and found in the "LEFT" position. A teardown of the valve revealed the seals were melted due to the fire. No fuel was noted in the valve. An engine teardown revealed no discrepancies except for fiberglass blocking about 30 percent of the intake manifold.

MEDICAL AND PATHOLOGICAL INFORMATION

Dr. Sara H. Irrgang performed an autopsies on the pilot, at the Medical Examiners Office, Orlando, Florida, on July 12, 2001. According to the autopsy report the cause of death was "crush injuries of head, torso and extremities."

Toxicological tests were conducted at the Federal Aviation Administration, Research Laboratory, Oklahoma City, Oklahoma, and revealed, "No ethanol detected in Blood...no drugs detected in Blood."

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	52,Male
Airplane Rating(s):	Single-engine land; 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; Airplane single-engine; Instrument airplane	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical–w/ waivers/lim	Last FAA Medical Exam:	April 5, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	April 9, 2000
Flight Time:	3193 hours (Total, all aircraft), 65 hours (Total, this make and model), 2952 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Floback	Registration:	N720BF
Model/Series:	Lancair 4	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	010
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	March 2, 2001 100 hour	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:	15 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	65.2 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	TSIO-550B1B
Registered Owner:	Missionair Inc.	Rated Power:	350 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ISM,82 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	15:50 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 3500 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	29°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Kissimmee, FL (ISM)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	16:30 Local	Type of Airspace:	Unknown

Airport Information

Airport:	Kissimmee Municipal ISM	Runway Surface Type:	Asphalt
Airport Elevation:	82 ft msl	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	None
Runway Length/Width:	5000 ft / 150 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	28.289722,-81.436943

Administrative Information

Investigator In Charge (IIC):	Yurman, Alan
Additional Participating Persons:	Edwin Nowell; FAA; Orlando, FL
Original Publish Date:	May 28, 2002
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=52680

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.