



National Transportation Safety Board Aviation Accident Final Report

Location:	Sellersburg, IN	Accident Number:	CEN11LA265
Date & Time:	03/23/2011, 2250 EDT	Registration:	N303FZ
Aircraft:	Dassault-Breguet Falcon 10	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	3 None
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

The pilot was landing the airplane in a strong and gusty left quartering headwind and, as the airplane touched down, it encountered a wind gust that raised the left wing. The pilot corrected with a left roll input as he simultaneously reduced the airplane's pitch in an attempt to place the nosewheel onto the runway, but the airplane became airborne and drifted off the runway. The airplane touched down for the second time in the grassy area alongside the runway, where the subsequent landing roll was completed. The pilot reported that there were no preimpact mechanical malfunctions or failures that would have precluded normal operation of the airplane.

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 control of the airplane during landing in strong and gusty wind conditions.

Findings

Aircraft	Directional control - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Pilot (Cause)
Environmental issues	High wind - Ability to respond/compensate Gusts - Ability to respond/compensate

Factual Information

On March 23, 2011, about 2250 eastern daylight time, a Dassault-Breguet model Falcon 10 business jet, N303FZ, was substantially damaged when it departed the runway during landing at Clark Regional Airport (KJVY), Sellersburg, Indiana. The captain, first officer, and sole passenger were not injured. The airplane was registered to and operated by Aviation Transport Solutions LLC, under the provisions of 14 Code of Federal Regulations Part 91 as a business flight. Night visual meteorological conditions prevailed and an instrument flight rules flight plan had been filed for the flight from Butler County Regional Airport (KHAO), Hamilton, Ohio, that departed about 2200.

The captain, an airline transport pilot, reported that he was the pilot-flying during the accident flight. After departure, the flight had to circumnavigate around numerous thunderstorms that affected the planned route of flight. When the flight was within 25 nautical miles (nm) of its intended destination, the flight crew canceled the instrument flight plan and concluded the flight under visual flight rules. The local weather conditions were obtained from the destination airport's automatic weather observing system. The captain noted the wind was from 310 degrees at 19 knots, gusting 27 knots. A 5 nm straight-in final approach was flown to runway 36 (5,500 feet by 100 feet). The captain reported that the landing reference speed (Vref) was 110 knots, which included a 5 knot gust factor. As the airplane touched down on its main landing gear, it encountered a wind gust that raised the left wing. The captain corrected with a left roll input as he simultaneously reduced the airplane's pitch in an attempt to place the nose wheel onto the runway, but the airplane became airborne and drifted off the runway. The airplane touched down for the second time in the grassy area alongside the runway where the subsequent landing roll was completed without further incident. The captain reported that there were no preimpact mechanical malfunctions or failures that would have precluded normal operation of the airplane.

A postaccident examination of the airframe revealed that the right main landing gear had shifted/twisted inside the wheel well damaging both forward and aft spar assemblies. Additionally, the aft movement of the nose landing gear had damaged the forward pressure bulkhead. Both engines appeared to have ingested foreign object debris past their first compressor stages.

The nearest aviation weather observation station with recorded historical weather information was at Bowman Field Airport (KLOU), about 10 nm south of destination airport, which was equipped with an automated surface observing system (ASOS).

At 2253, the KLOU ASOS reported the following weather conditions: Wind 310 degrees at 22 knots, gusting 29 knots; visibility 10 miles; sky clear; temperature 14 degrees Celsius; dew point 4 degrees Celsius; altimeter setting 29.65 inches of mercury. The report also noted a peak wind velocity was recorded at 2223 measuring 38 knots from 310 degrees.

History of Flight

Landing-flare/touchdown	Other weather encounter
Landing	Loss of control on ground (Defining event) Runway excursion

Pilot Information

Certificate:	Airline Transport	Age:	62, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 With Waivers/Limitations	Last Medical Exam:	04/06/2011
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	08/20/2010
Flight Time:	13777 hours (Total, all aircraft), 300 hours (Total, this make and model), 11704 hours (Pilot In Command, all aircraft), 89 hours (Last 90 days, all aircraft), 31 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Co-Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	32, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 With Waivers/Limitations	Last Medical Exam:	03/30/2011
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	08/20/2010
Flight Time:	2642 hours (Total, all aircraft), 140 hours (Total, this make and model), 124 hours (Last 90 days, all aircraft), 39 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Dassault-Breguet	Registration:	N303FZ
Model/Series:	Falcon 10	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	218
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	03/16/2011, Continuous Airworthiness	Certified Max Gross Wt.:	18740 lbs
Time Since Last Inspection:		Engines:	2 Turbo Fan
Airframe Total Time:	7640 Hours	Engine Manufacturer:	Garrett
ELT:	Installed, not activated	Engine Model/Series:	TFE731-2-1C
Registered Owner:	Aviation Transport Solutions, LLC	Rated Power:	3230 lbs
Operator:	Aviation Transport Solutions, LLC	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night
Observation Facility, Elevation:	KLOU, 546 ft msl	Observation Time:	2253 EDT
Distance from Accident Site:	10 Nautical Miles	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	14° C / 4° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	22 knots/ 29 knots, 310°	Visibility (RVR):	
Altimeter Setting:	29.65 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hamilton, OH (KHAO)	Type of Flight Plan Filed:	IFR
Destination:	Sellersburg, IN (KJVY)	Type of Clearance:	VFR
Departure Time:	2200 EDT	Type of Airspace:	Class G

Airport Information

Airport:	Clark Regional Airport (KJVY)	Runway Surface Type:	Asphalt
Airport Elevation:	474 ft	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	5500 ft / 100 ft	VFR Approach/Landing:	Full Stop; Straight-in

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	38.365556, -85.738333 (est)

Administrative Information

Investigator In Charge (IIC):	Andrew T Fox	Adopted Date:	01/17/2012
Additional Participating Persons:	Bradley P Behnke; Federal Aviation Administration, Indianapolis FSDO; Plainfield, IN		
Publish Date:	01/17/2012		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=78759		

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