



Aviation Investigation Final Report

Location:	Coldwater, Kansas	Accident Number:	CEN18LA286
Date & Time:	July 20, 2018, 13:15 Local	Registration:	N306FR
Aircraft:	Vans RV6	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	2 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was attempting a wheel landing in the tailwheel-equipped airplane after a cross-country flight. He reported that winds were gusty during the long, straight-in approach and that he increased airspeed to compensate for the gusts. During the approach to landing, the airplane encountered turbulent air, and a gust of wind caused the airplane to balloon about 8-12 ft above the runway. The pilot initiated a go-around and said he added full power when the engine hesitated and "stuttered." The airplane settled, the right wing struck the ground, and the airplane spun before it came to rest. A postimpact fire ensued, which consumed most of the cockpit and fuselage. Thermal damage precluded a thorough engine examination.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's loss of control while landing a tailwheel-equipped airplane in gusting wind conditions.

Findings

Personnel issues	Aircraft control - Pilot
Environmental issues	Gusts - Effect on operation

Factual Information

History of Flight

Landing	Other weather encounter
Approach-VFR go-around	Loss of engine power (partial)
Landing	Loss of control in flight (Defining event)
Landing	Collision during takeoff/land

On July 20, 2018, about 1310 central daylight time, a Vans RV-6 airplane, N306FR, was substantially damaged when it was involved in an accident near Coldwater, Kansas. The pilot and passenger were seriously injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 as a personal flight

The pilot reported to responding Federal Aviation Administration (FAA) inspectors, the flight was landing at Commanche County Airport (3K8), Coldwater, Kansas after departing from Austin, Texas. The pilot joined a long, straight in final for runway 17. The pilot added that he did not know the exact winds, but knew that they were gusty, and as such increased his approach airspeed. He flew between 90-93 knots, with the airplane configured with partial flaps. As he attempted a wheel landing in the tailwheel-equipped airplane, there were some turbulent air due to wind, then a gust of wind hit the airplane and it ballooned about 8-12 ft above the runway. The pilot said he initiated a go-around and added full power when the engine hesitated and "stuttered". The pilot stated the engine did not have any abnormalities prior to the go-around.

The airplane settled and the right wing struck the ground. The airplane spun, coming to rest facing southwest. Flames began to enter the cockpit and the pilot and passenger egressed the airplane. They were wearing shorts and flip-flops and received burns during the egress. The pilot was not able to turn off the master switch, so the electric fuel pump continued to move fuel increasing the postimpact fire. The fire consumed most of the cockpit and fuselage.

The FAA inspectors visually inspected the airplane and found that level of thermal damage sustained to the engine precluded a thorough examination. All airplane logbooks were consumed in the fire, and further information is not available.

The nearest aviation weather station was 37 nautical miles away. About the time of the accident, the wind was recorded as 120° at 8 knots, but later increased at the station to 9 knots gusting to 16 knots.

Information

Certificate:	Age:
Airplane Rating(s):	Seat Occupied:
Other Aircraft Rating(s):	Restraint Used:
Instrument Rating(s):	Second Pilot Present:
Instructor Rating(s):	Toxicology Performed:
Medical Certification:	Last FAA Medical Exam:
Occupational Pilot:	Last Flight Review or Equivalent:
Flight Time:	

Aircraft and Owner/Operator Information

Aircraft Make:	Vans	Registration:	N306FR
Model/Series:	RV6 Undesignat	Aircraft Category:	Airplane
Year of Manufacture:	2002	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	24480
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	O-360-A1A
Registered Owner:		Rated Power:	180 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KP28,1535 ft msl	Distance from Accident Site:	37 Nautical Miles
Observation Time:	12:56 Local	Direction from Accident Site:	84°
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.85 inches Hg	Temperature/Dew Point:	34°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Austin, TX	Type of Flight Plan Filed:	None
Destination:	Coldwater, KS (3K8)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	COMANCHE COUNTY 3K8	Runway Surface Type:	Concrete
Airport Elevation:	2086 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	4500 ft / 60 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious	Latitude, Longitude:	37.222778,-99.331947(est)

Administrative Information

Investigator In Charge (IIC):	Aguilera, Jason
Additional Participating Persons:	Keith Allen; FAA FSDO; Wichita, KS
Original Publish Date:	September 14, 2020
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=97848

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).