



Aviation Investigation Final Report

Location:	Oshkosh, Wisconsin	Accident Number:	CEN19CA227
Date & Time:	July 20, 2019, 09:20 Local	Registration:	N143MS
Aircraft:	Vans RV-8	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he was the second airplane in a flight of two and had been instructed by the air traffic controller to land on the orange dot on the runway (dots were used to facilitate multiple landings for the fly-in). During the descending turn from the base leg to the final leg, the pilot saw a third airplane. The third airplane appeared to be landing straight-in to the same runway. The air traffic controller instructed the flight of two to land further down the runway, on the green dot, to accommodate the third airplane. As the pilot adjusted the engine power and descent rate for the new landing point, he noted that the closure rate with the lead airplane in his flight of two had increased and that the lead airplane decelerated quickly as it landed. The pilot increased the pitch to overfly and avoid a collision with the lead airplane. After he confirmed that he was past the lead airplane, he adjusted the pitch and engine power to land, but the airplane landed hard. During the landing, the airplane settled left wing down and veered left off the runway, and the left main landing gear collapsed. The airplane sustained substantial damage to both wings and the fuselage. The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

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 adequate spacing from the lead airplane while landing following revised landing instructions, which necessitated that the pilot conduct an improper landing flare and resulted in a hard landing.

Findings

Aircraft	Landing flare - Not attained/maintained
Personnel issues	(general) - Pilot
Environmental issues	Traffic congestion - Contributed to outcome

Factual Information

History of Flight

Landing-flare/touchdown	Air traffic event
Landing-flare/touchdown	Hard landing (Defining event)

Pilot Information

Certificate:	Commercial; Private	Age:	49, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	October 23, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 22, 2019
Flight Time:	1445 hours (Total, all aircraft), 315 hours (Total, this make and model), 1350 hours (Pilot In Command, all aircraft), 45 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Vans	Registration:	N143MS
Model/Series:	RV-8	Aircraft Category:	Airplane
Year of Manufacture:	2017	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	83140
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	April 24, 2019 Condition	Certified Max Gross Wt.:	1900 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	315 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	AEIO-390-EXP
Registered Owner:	On file	Rated Power:	210 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:	KOSH,802 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	09:53 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Few / 3700 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	11 knots / 18 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.75 inches Hg	Temperature/Dew Point:	28°C / 25°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	De Kalb, IL (KDKB)	Type of Flight Plan Filed:	None
Destination:	Oshkosh, WI (OSH)	Type of Clearance:	None
Departure Time:	08:30 Local	Type of Airspace:	Class D;Special

Airport Information

Airport:	Wittman Regional Airport OSH	Runway Surface Type:	Concrete
Airport Elevation:	808 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	6179 ft / 150 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	43.984443,-88.556663(est)

Administrative Information

Investigator In Charge (IIC):	Rodi, Jennifer
Additional Participating Persons:	Peter Hupfer; Milwaukee FSDO; Milwaukee, WI Jon Weston; Milwaukee FSDO; Milwaukee, WI
Original Publish Date:	May 21, 2020
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=99889

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