



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	OSHKOSH, Wisconsin	Accident Number:	CHI00LA222
Date & Time:	July 25, 2000, 17:00 Local	Registration:	N3283V
Aircraft:	Beech BE-35	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The left wing impacted the runway during flare/touchdown. The EAA AirVenture Oshkosh 2000 Air Show was being held, and the Special Air Traffic Management landing instructions, which had been issued in a NOTAM, were in effect during the time of the accident. The Bonanza had made a right downwind pattern and was landing at the 'Green Spot' located 3,000 feet from the runway threshold on the right side of runway 27. Another airplane, a Velocity (N126EE), was behind the Bonanza on final approach, and was instructed to land on the 'Orange Spot,' located 1,500 feet from the runway threshold on the left side of runway 27. The pilot of the Bonanza reported that, 'When I saw the other aircraft next to me suddenly on my left I veered to the right to avoid contact with it. My plane went to the right and then I turned to the left to stay on the runway. My left wingtip contacted the runway.' The pilot of the Velocity reported that he landed near the orange spot and taxied left onto the sod infield as soon as it was safe to do so. He reported that he maintained separation with the Bonanza during rollout. The reduced arrival and departure separation standards were in effect and the instructions informed the pilots they could expect to land on the green or orange dots when landing on Runway 27.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot failed to maintain control of the airplane during flare/touchdown.

Findings

Occurrence #1: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

On July 25, 2000, at 1700 central daylight time, a Beech BE-35, Bonanza, N3283V, was substantially damaged when the left wing impacted the runway during landing. The 14 CFR Part 91 flight had departed Port Huron (PHN), Michigan, at 1530 eastern daylight time, and was making a full stop landing on runway 27 (6,180 X 150) at the Wittman Regional Airport (OSH), Oshkosh, Wisconsin. The pilot and one passenger were not injured. Visual meteorological conditions prevailed and no flight plan was filed.

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The pilot of the Velocity reported that he had been instructed to land on the Orange Spot. He stated that the Velocity's airspeed for landing was about 20 knots higher than the Bonanza's, which made it difficult to maintain separation on final with the Bonanza. He reported that the instructions for arriving aircraft at the air show state that verbal responses to the Air Traffic Controller (ATC) instructions were discouraged. He reported that he turned a right base and right turn to final as he was instructed by ATC. He reported that he landed near the orange spot and continued to roll out on runway 27. He reported ATC instructed him to taxi left onto the sod infield. He reported that he taxied left onto the sod infield as soon as it was safe to do so. He reported that he maintained separation with the Bonanza during rollout.

The ATC transcript indicated that the controller had instructed both aircraft to turn from downwind to base at the same time. (The Velocity was further downwind than the Bonanza.) The controller instructed the Bonanza to land on the green dot and the Velocity to land on the orange dot.

At 1650:11, the controller stated, "E-Z (Velocity) make sure you put it down on the orange dot. Bonanza don't touch down until you get all the way to the green dot, please, all the way to the green dot."

At 1650:17, the controller stated, "E-Z, good job. You can go ahead and touch down as soon as

able now, E-Z. Bonanza, don't drop down until you get all the way down to the green dot. Fly it all the way down. Keep it airborne, Bonanza, good buddy."

At 1650:29, the controller stated, "Bonanza, keep it airborne. E-Z get on the left side of the runway as soon as you can. Bonanza, stay on the right side of the runway. The E-Z is rolling out behind you. I'll tell you when to put it down just momentarily, buddy."

At 2150:38, the controller stated, "E-Z, left into the grass right now please, E-Z, left into the grass. Bonanza, on the right side of the runway, you're cleared to land. Nice job, Bonanza. Excellent job, buddy, cleared to land Rwy 27."

The Special Air Traffic Management VFR Arrival Procedures contained instructions for airplanes arriving at Oshkosh. Reduced arrival and departure separation standards were in effect since July 23, 2000. The instructions informed pilots that, "Reduced runway separation is achieved by instructing pilots to touchdown on different colored circles or "dots" painted on Runway 27 and Runway 09." The instructions informed the pilots they could expect to land on the green or orange dots when landing on Runway 27.

Under the Helpful Hints section, the instructions stated:

- "Don't make unnecessary radio transmissions; Monitor only."
- "After landing, and when speed permits, listen carefully for ATC instructions regarding a right or left turn, onto the sod for camping or parking. DO NOT TURN BACK ONTO THE RUNWAY."

The instructions stated, "BE ALERT FOR LAST MINUTE CHANGES TO PREVIOUSLY ISSUED CLEARANCES OR ANTICIPATED PROCEDURES."

Pilot Information

Certificate:	Private	Age:	49,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 15, 1999
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	400 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N3283V
Model/Series:	BE-35 BE-35	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	D-733
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	June 25, 2000 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	30 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2875 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	E-225-8
Registered Owner:	BLUE J AVIATION	Rated Power:	225 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	OSH ,808 ft msl	Distance from Accident Site:	
Observation Time:	16:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	Broken / 9000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ST. CLAIR (PHN)	Type of Flight Plan Filed:	None
Destination:	(OSH)	Type of Clearance:	VFR
Departure Time:	15:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	WITTMAN REGIONAL AIRPORT OSH	Runway Surface Type:	Asphalt
Airport Elevation:	808 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	
Runway Length/Width:	6180 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:	44.059177,-88.540779(est)

Administrative Information

Investigator In Charge (IIC):	Silliman, Jim
Additional Participating Persons:	RAY PETERSON; MILWAUKEE , WI
Original Publish Date:	April 20, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=49834

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](#).