



Aviation Investigation Final Report

Location:	Plant City, Florida	Accident Number:	ERA19TA211
Date & Time:	June 29, 2019, 09:10 Local	Registration:	N80JF
Aircraft:	Cessna 208	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Skydiving		

Analysis

The pilot reported that he was conducting skydiving operations and that the airplane was on final approach to the runway, about 80 ft above ground level and a "few feet before the threshold," when the airplane's windshield became "foggy" and he could not see the runway. He did not attempt to go around because the skydivers were in the area, and he did not want to hit them or trees surrounding the runway. Review of a witness video recording of the landing revealed that the airplane's nose landing gear contacted the runway first, followed by the main landing gear. The airplane bounced, and the nose landing gear impacted the runway again and then collapsed. The pilot reported no preimpact mechanical malfunctions or failures with the airplane that would have precluded normal operation. The airplane was equipped with a defrost system for the forward cabin windshield. However, the system was likely not being used at the time of the accident.

Probable Cause and Findings

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

The pilot's improper landing flare due to reduced visibility from a foggy windshield and his failure to use the airplane's windshield defrost system, which resulted in a hard landing and subsequent nose landing gear collapse.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Landing flare - Not attained/maintained
Aircraft	Heating system - Not used/operated
Personnel issues	Use of equip/system - Pilot

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
Landing-flare/touchdown	Landing gear collapse

On June 29, 2019, about 0910 eastern daylight time, a Cessna 208B, N80JF, was substantially damaged while landing at Blackwater Creek Ultralight Flightpark (9FD2), Plant City, Florida. The commercial pilot was not injured. The airplane was registered to ISR Aviation LLC and operated as Title 14 *Code of Federal Regulations* Part 91 skydiving flight. Visual meteorological conditions prevailed at the time of the accident, and no flight plan was filed for the flight. The local flight originated about 0900.

According to the pilot, the airplane performed normally during the preflight, takeoff, and skydiving operations. Then, while on the final approach leg to runway 35, about 80 ft above ground level and a "few feet before the threshold," the windshield became "foggy outside" and the pilot could not see the runway. He did not attempt to abort the landing because the jumpers were in the area and he did not want to risk hitting any of them or trees surrounding the runway. The pilot maintained the airplane heading and descent, he felt the main landing gear touchdown, applied reverse thrust, and then felt the nose landing gear collapse before the propeller struck the ground and the airplane came to rest.

Review of a witness video recording revealed that during the landing, the nose landing gear contacted the runway first, followed by the main landing gear, and the airplane bounced. Next, the nose landing gear impacted the runway prior to collapsing and the airplane continued down the runway out of view.

An examination of the wreckage by a Federal Aviation Administration inspector revealed that the nose landing gear separated from the airplane. In addition, part of the fuselage structure and an engine mount were substantially damaged.

The pilot completed Pilot/Operator Aircraft Accident/Incident Report (NTSB form 6120.1/2) and reported no preimpact mechanical malfunctions or failures with the airplane that would have precluded normal operation. Furthermore, in the "Operator/Owner Safety Recommendation" section of the report he stated that the pilot should "use heater/defroster system to prevent sudden visibility restrictions like foggy windshield."

A review of the Pilot Operating Handbook (POH) indicated that the airplane was equipped with a defrost system for the forward cabin. According to the POH, the "push-pull control, labeled DEFROST-PULL, FWD CABIN-PUSH, is located on the cabin heat switch and control panel. With the control in the DEFROST position (pulled out), forward cabin air is directed to two defroster outlets located at the base of the windshield."

Pilot Information

Certificate:	Commercial; Private	Age:	31, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
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 1 With waivers/limitations	Last FAA Medical Exam:	June 27, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	January 19, 2019
Flight Time:	6252 hours (Total, all aircraft), 1545 hours (Total, this make and model), 2943 hours (Pilot In Command, all aircraft), 188 hours (Last 90 days, all aircraft), 86 hours (Last 30 days, all aircraft), 2.5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N80JF
Model/Series:	208 B	Aircraft Category:	Airplane
Year of Manufacture:	1993	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	208B0352
Landing Gear Type:	Tricycle	Seats:	20
Date/Type of Last Inspection:	100 hour	Certified Max Gross Wt.:	8750 lbs
Time Since Last Inspection:		Engines:	1 Turbo prop
Airframe Total Time:		Engine Manufacturer:	Honeywell
ELT:	Installed, not activated	Engine Model/Series:	TPE331-12JR
Registered Owner:	ISR Aviation LLC	Rated Power:	900 Horsepower
Operator:	ISR Aviation LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ZPH,90 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	09:15 Local	Direction from Accident Site:	355°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	80°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.13 inches Hg	Temperature/Dew Point:	25°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Plant City, FL (9FD2)	Type of Flight Plan Filed:	None
Destination:	Plant City, FL (9FD2)	Type of Clearance:	VFR flight following
Departure Time:	09:00 Local	Type of Airspace:	

Airport Information

Airport:	Blackwater Creek 9FD2	Runway Surface Type:	Grass/turf
Airport Elevation:	80 ft msl	Runway Surface Condition:	Dry;Vegetation
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	2300 ft / 150 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	28.1375,-82.146667(est)

Administrative Information

Investigator In Charge (IIC):	Kemner, Heidi
Additional Participating Persons:	Camanche Cain; FAA/FSDO; Tampa, FL
Original Publish Date:	January 28, 2021
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=99784

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](#).