



Aviation Investigation Final Report

Location:	Hastings, Michigan	Accident Number:	CHI02LA122
Date & Time:	May 4, 2002, 11:55 Local	Registration:	N2494B
Aircraft:	Piper PA-38-112	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The airplane sustained substantial damage during an aborted landing attempt. During the instructional flight the student pilot began the landing flare approximately 15 to 20 feet above ground level (agl) and then elected to perform a go-around. During the go-around the aircraft continued to descend and the certified flight instructor (CFI) took over the control of the airplane. The CFI stated, "My first action was to verify throttle and mixture were both forward - which they were. At this time the stall warning horn sounded so I immediately lowered the nose to gain airspeed. At this point we were ~ 5 feet off the ground in ground effect and I remember the right wing was lowered in an attempt to get back to the runway." The student pilot reported, "With full power applied the plane started to sink. The instructor took control of the airplane. The plane refused to fly and went down to the left of runway 12." The airplane impacted three runway edge lights, a runway marker cone, and a runway intersection sign prior to the nose gear collapsing.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure to attain airspeed, inadequate supervision of the flight, and delayed remedial action which resulted in a stall.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: GO-AROUND (VFR)

Findings

1. (C) AIRSPEED - NOT ATTAINED - DUAL STUDENT
2. (C) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND(CFI)
3. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
4. (F) STALL/MUSH

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. (F) OBJECT - RUNWAY LIGHT

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: DESCENT - UNCONTROLLED

Findings

6. (F) OBJECT - AIRPORT SIGN/MARKER

Occurrence #4: NOSE GEAR COLLAPSED

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On May 4, 2002, at 1155 eastern daylight time, a Piper PA-38-112, N2494B, was substantially damaged during a hard landing at the Hastings Airport (9D9), Hastings, Michigan. Visual meteorological conditions prevailed at the time of the accident. The instructional flight was being conducted under the provisions of 14 CFR Part 91 without a flight plan. The certified flight instructor (CFI) and his single student were not injured. The flight departed 9D9 at 1115 for the local flight.

According to the CFI's written statement, after completing some basic flight maneuvers in the practice area they returned to the departure airport to practice landings. The CFI reported that on the first approach to runway 12 (3,900 feet by 75 feet, dry/asphalt) the student, "flared high and drifted left of the runway." The CFI stated the student executed a go-around without incident. The CFI reported that on the second landing attempt, "... the student was maintaining the extended centerline on final, then over the numbers he flared ~15 - 20 ft AGL [feet above ground level] and drifted left of the runway. I called for 'Go around'; the student had already initiated it [the go-around] by applying full throttle and pitching for a climb attitude." The CFI stated during the go-around the airplane continued to "... sink towards the ground. I called 'my airplane', and took over the controls. My first action was to verify throttle and mixture were both full forward-which they were. At this time the stall warning horn sounded so I immediately lowered the nose to gain airspeed. At this point we were ~5 feet off the ground parallel the runway over the left runway lights and still sinking. I was unable to maintain level flight in ground effect and I remember the right wing was lowered in an attempt to get back to the runway. I rolled wings level and raised the nose, then we struck a runway light and landed main wheels first on the grass to the left of the runway. The aircraft impacted a yellow cone (from runway 18-36), then the prop dug in and we spun to a stop nose down in the grass."

According to the student pilot's written statement, during the second landing attempt a go-around was attempted. The student pilot stated, "... I applied full power to abort the landing, as my CFI stated the landing was to be aborted. With full power applied the plane started to sink. The instructor took control of the airplane. The plane refused to fly and went down to the left of runway 12. We hit runway lights and a runway sign. For most of the time as we went down I had my eyes closed and only saw the airplane hit a runway light and the ground [as] we came to a stop."

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	26, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	January 27, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	January 10, 2002
Flight Time:	352 hours (Total, all aircraft), 15 hours (Total, this make and model), 261 hours (Pilot In Command, all aircraft)		

Student pilot Information

Certificate:	Student	Age:	42, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	January 9, 2001
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	28 hours (Total, all aircraft), 26 hours (Total, this make and model), 5 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N2494B
Model/Series:	PA-38-112	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	38-79A0092
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	April 5, 2001 100 hour	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	27 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	8638.6 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-235-L2C
Registered Owner:	Aerosky Aviation Inc.	Rated Power:	112 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	GRR,794 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	10:56 Local	Direction from Accident Site:	333°
Lowest Cloud Condition:	Few / 25000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.22 inches Hg	Temperature/Dew Point:	13°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hastings, MI (9D9)	Type of Flight Plan Filed:	None
Destination:	Hastings, MI (9D9)	Type of Clearance:	None
Departure Time:	11:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	Hastings Airport 9D9	Runway Surface Type:	Asphalt
Airport Elevation:	801 ft msl	Runway Surface Condition:	Dry
Runway Used:	12	IFR Approach:	None
Runway Length/Width:	3900 ft / 75 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	42.650836,-85.279411(est)

Administrative Information

Investigator In Charge (IIC):	FOX, TODD
Additional Participating Persons:	Daniel J Moore; Federal Aviation Administration-Grand Rapids FSDO; Grand Rapids, MI
Original Publish Date:	April 18, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=54672

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