



Aviation Investigation Final Report

Location:	Union Mills, Indiana	Accident Number:	CEN09CA148
Date & Time:	February 1, 2009, 12:30 Local	Registration:	N53576
Aircraft:	Cessna 172	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The certificated flight instructor (CFI) and student pilot departed on an introductory instructional flight towards a training area where they performed basic flight maneuvers. They then flew to an airport where the CFI demonstrated a simulated forced landing which was to be followed by a go-around to a runway that was reportedly covered with about 12-14 inches of snow. During the demonstration, the CFI reduced engine power to idle from an altitude of 2,000 feet mean sea level and executed a descent to an altitude of about 5 - 6 feet above ground level at 60 knots indicated airspeed. The CFI did not increase engine throttle during this descent to clear the engine. The CFI applied full throttle during the go-around, but the engine hesitated and the airplane continued to descend. The main landing gear wheels followed by the airplane's nose contacted the snow. The left wing contacted the ground followed by the right wing.. Both wings buckled, resulting in substantial damage to the airplane. The Federal Aviation Administration Flight Training Handbook states in the section under 'Descents (Maximum Distance Glides)' that during power-off descents, the engine should be cleared periodically to prevent excessive cooling and fouling.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The certificated flight instructor's failure to follow correct engine clearing procedures. A factor was the unsuitable landing area.

Findings

Personnel issues	(general) - Instructor/check pilot
Personnel issues	Delayed action - Pilot
Aircraft	Powerplant parameters - Not specified
Environmental issues	Snow/slush/ice covered surface - Effect on equipment

Factual Information

History of Flight

Approach-IFR final approach	Simulated/training event
Approach-VFR go-around	Attempted remediation/recovery
Approach-VFR go-around	Collision with terr/obj (non-CFIT) (Defining event)

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	67, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	November 1, 2007
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 10, 2008
Flight Time:	3204 hours (Total, all aircraft), 1568 hours (Total, this make and model), 2991 hours (Pilot In Command, all aircraft), 59 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Student pilot Information

Certificate:	None	Age:	52
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:	Unknown	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N53576
Model/Series:	172 S	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	172S9398
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	October 24, 2008 100 hour	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3136 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	I0360
Registered Owner:	Aerogramm LLC	Rated Power:	180 Horsepower
Operator:	J.S. Aviation Inc.	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	Eagle Aircraft	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	VPZ	Distance from Accident Site:	
Observation Time:	11:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	Broken / 10000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	2°C / -4°C
Precipitation and Obscuration:			
Departure Point:	Valparaso, IN (VPZ)	Type of Flight Plan Filed:	Unknown
Destination:	Valparaso, IN (VPZ)	Type of Clearance:	None
Departure Time:	10:50 Local	Type of Airspace:	

Airport Information

Airport:	Flying U Ranch 4C1	Runway Surface Type:	Grass/turf;Snow
Airport Elevation:	740 ft msl	Runway Surface Condition:	Snow
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	2745 ft / 100 ft	VFR Approach/Landing:	Go around;Simulated forced landing;Straight-in

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	41.453887,-86.792221(est)

Administrative Information

Investigator In Charge (IIC):	Gallo, Mitchell
Additional Participating Persons:	Samuel Heiter; Federal Aviation Administration; South Bend, IN
Original Publish Date:	April 28, 2011
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.nts.gov/Docket?ProjectID=73304

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