National Transportation Safety Board
Aviation Accident Final Report

Location:	Port Clinton, Ohio	**Accident Number:**	CHI08FA061
Date & Time:	January 12, 2008, 12:39 Local	**Registration:**	N2637Y
Aircraft:	Cessna 340	**Aircraft Damage:**	Substantial
Defining Event:	Loss of control in flight	**Injuries:**	4 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

During the landing approach, a witness saw the twin-engine airplane slow and stall. The airplane crashed short of the runway, in a residential backyard. An airport manager flew with the pilot 8 days before the accident. The manager reported that during his flight the pilot flew the approach and landing with the aural stall warning horn activated. The manager advised the pilot of the aural warning, however no corrective action was taken by the pilot during that flight. An on-scene investigation revealed no preimpact mechanical anomalies. The pilot had about 12.6 hours of flight time in the accident airplane, of which 7.7 hours were dual instruction. Due to the lack of any mechanical problems with the airplane, the pilot's minimal experience in twin-engine airplanes, and his history of flying the airplane too slow, it is probable that he allowed the airspeed to decay below a safe speed, and inadvertently stalled it.

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 sufficient airspeed to avoid a stall during the landing approach.

Findings

Aircraft	Airspeed - Not attained/maintained
Personnel issues	(general) - Pilot

Factual Information

HISTORY OF FLIGHT

On January 12, 2008, about 1239 eastern standard time, a Cessna 340, N2637Y, operated by a private pilot, sustained substantial damage on impact with terrain during a reported approach for landing to runway 27 (5,004 feet x 75 feet, asphalt) at the Carl R Keller Field Airport (PCW), near Port Clinton, Ohio. The personal flight was operating under 14 CFR Part 91. The pilot, pilot-rated passenger in the right seat, and two passengers were fatally injured. Visual meteorological conditions prevailed at the time of the accident. The flight originated from the Mansfield Lahm Regional Airport (MFD), near Mansfield, Ohio, and was destined for PCW.

A Federal Aviation Administration (FAA) Inspector reported that the flight was tracked on Cleveland approach radar through visual flight rules (VFR) flight following from MFD. VFR flight following was cancelled near PCW.

An employee at PCW heard the airplane's transmission prior to the accident on the Unicom radio at the airport. The employee stated:

> Aircraft 2637Y called a 10 mile approach to the airport. The pilot requested traffic advisories three times as he approached the airport. He next announced downwind for [runway] 27. That is the last transmission I heard.

A witness, who was a pilot and Federal Aviation Administration Inspector, saw the accident. The inspector stated:

> While driving north on [Route] 2 and on the 269N exit, a twin engine airplane caught my attention as it appeared to be flying very slow east bound. The plane appeared to be level but slowly descending with the landing gear extended. The aircraft continued to slow then stopped flying and stall. The nose and left wing dropped sharply as the plane entered a counterclockwise spin. It made about 11/2 to 2 turns then disappeared below the tree line. I notified 911 and proceeded to the scene. N2637Y was what I saw at the scene, a Cessna 340.

PERSONNEL INFORMATION

The pilot held a FAA private pilot certificate with single and multiengine land airplane and instrument ratings. He held a FAA third class medical certificate dated August 23, 2006, with a limitation for corrective lenses.

The pilot's logbook indicated that the pilot had accumulated a total flight time of approximately 1,160 hours. He accumulated about 27 hours of flight time in the last 90 days and 252 hours in multiengine airplanes. The pilot accumulated about 12.6 hours of flight time in the accident

airplane.

A FAA inspector interviewed the pilot's certified flight instructor (CFI). The CFI indicated that the pilot received 12.2 hours of classroom instruction, 7.7 hours of flight training in the accident airplane, and 10.3 hours of time on a desktop training device. The inspector had asked the CFI "if [the accident pilot] utilized or was able to maintain a stabilized approach platform during landings for both single and two engine approaches." The record of interview showed the CFI stated "that no, he had to remind [the pilot] not to get slow throughout the training but noted some improvement during training, and [the CFI] thought departures and approaches would continue to improve with experience."

According to the airport manager, the pilot landed at Port Bucyrus-Crawford County Airport, near Bucyrus, Ohio, for fuel on January 4, 2008. The airplane was fueled with 54.4 gallons of 100 low lead aviation gasoline. The pilot offered the manager a flight in the accident airplane. The manager, in part, reported:

> We flew for approximately 25-30 minutes in the general area of Marion, Upper Sandusky and back to Bucyrus, Ohio. [The pilot] was very vigilant about his checklist usage I noticed. After going through the appropriate prelanding checklist and he announcing several position reports we entered crosswind and turned downwind for runway 22 at Port Bucyrus (17G). [The pilot] continued to follow the items indicated on the checklist, proceeding to turn base and then on to what I would estimate about a mile and a half final approach. During this process the stall warning horn activated and maintained a steady tone. I pointed this out to [the pilot] and suggested he may want to take corrective action. No corrective action was noted, he verbalized "three in the green" on final and again noted to him that the stall warning horn was on and again suggested taking action to correct this situation. Again no action was taken, the aircraft crossed the runway threshold and [the pilot] retarded the remaining power and landed the airplane rather firmly.

The airplane landed at MFD on January 12, 2008, prior to its departure to PCW. According to air traffic control tower employees the airplane landed long on runway 14 (9,001 feet by 150 feet) near midfield and stopped at the end of the runway. The pilot asked the tower if he could exit the airplane and push the airplane back because he could not make the turn on the remaining runway. The pilot was given clearance to do that. He re-entered the airplane, restarted the engines, and taxied to parking.

AIRCRAFT INFORMATION

N2637Y was a 1972-model Cessna 340, serial number 340-0013, which was a pressurized twin-engine, low-wing, all-metal airplane, featuring retractable tricycle landing gear. Two 310-horsepower Continental TSIO-520-J (1) reciprocating engines, installed under supplemental type certificate (STC) SA1881SW, powered the airplane. The left engine's serial number was 218975-R and the right engine's serial number was 218983-R. Each engine drove a McCauley 3-bladed, full-feathering constant speed propeller. The airplane was equipped with vortex

generators indicated in STC SA4934NM, which increased the airplane's maximum gross weight to 6,290 pounds. The vortex generators decreased the airplane's minimum controllable airspeed to 71 knots indicated airspeed.

A review of the airplane's maintenance logbooks revealed that the last annual inspection was performed on January 5, 2007, with a airframe total time of 6,820.2 hours.

METEOROLOGICAL INFORMATION

At 1215, the recorded weather, about 35 miles and 290 degrees from the accident site, at the Metcalf Field Airport, near Toledo, Ohio, was: Wind variable at 4 knots; visibility 10 statute miles; sky condition scattered clouds 2,400 feet; temperature 2 degrees C; dew point -4 degrees C; altimeter 30.09 inches of mercury.

AIRPORT INFORMATION

The airport elevation at PCW was 590 feet MSL. The airport was located about three miles east of Port Clinton. PCW was a nontowered airport with two runways, 9/27 and 18/36. Runway 9/27 was 5,004 feet long and 75 feet wide. Runway 18/36 was 4,001 feet long and 75 feet wide. Both runways were composed of asphalt.

WRECKAGE AND IMPACT INFORMATION

The airplane was found nose down impacted into terrain in the back yard of 5150 East Port Clinton Road. The empennage was bent forward on to the fuselage. The emergency exit window separated from the fuselage. The main tanks, left and right auxiliary tanks, and left and right locker tanks exhibited were breached. The smell of fuel was present at the site. The engines and their propellers were impacted in terrain. The nose of the airplane was crushed rearward to the cabin area in an accordion like fashion. The lower fuselage exhibited accordion like crushing aft of the wings. The landing gear were extended. The trim tabs were about neutral in their settings.

An on-scene investigation was conducted. Flight control cables were traced from the cockpit flight controls to their respective control surfaces. All breaks in the flight control cables were in overload. Flight control continuity was established. The engine control cables were traced from the controls to their respective engine control and engine control continuity was established. A liquid consistent with aviation gasoline (avgas) was found in both fuel selector valves. The engines were recovered from about three feet below the surface. Both propellers' blades exhibited leading edge abrasion and were bent rearward. Both engines' manifold valves contained liquid consistent with the smell of avgas. Both engines' fuel pump drive couplings were intact and undamaged. The top sparkplugs from both engines were removed and they exhibited no anomalies. Thumb compression and continuity was established with every cylinder of both engines when their respective crankshafts were rotated. Each set of magnetos from both engines produced spark when their respective drive couplings were rotated. Both

exhaust turbine housings exhibited rotational scoring witness marks. No pre-impact anomalies were detected with the airplane and engines.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot by the Lucas County Coroner's Office.

The FAA Civil Aerospace Medical Institute prepared a Final Forensic Toxicology Accident Report. The report was negative for the tests performed.

History of Flight

Approach-VFR pattern downwind	Loss of control in flight (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	**Age:**	67,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	August 1, 2006
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	December 1, 2007
Flight Time:	1160 hours (Total, all aircraft), 13 hours (Total, this make and model), 27 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N2637Y
Model/Series:	340	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	340-0013
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	January 1, 2007 Annual	**Certified Max Gross Wt.:**	6290 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:	6820.2 Hrs as of last inspection	**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	TSIO-520-J(1)
Registered Owner:		**Rated Power:**	310 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:	TDZ,622 ft msl	**Distance from Accident Site:**	35 Nautical Miles
Observation Time:	12:15 Local	**Direction from Accident Site:**	290°
Lowest Cloud Condition:	Scattered / 2400 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.09 inches Hg	**Temperature/Dew Point:**	2°C / -4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MANSFIELD, OH (MFD)	**Type of Flight Plan Filed:**	None
Destination:	Port Clinton, OH (PCW)	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	

Airport Information

Airport:	CARL R KELLER FIELD PCW	**Runway Surface Type:**	Asphalt
Airport Elevation:	590 ft msl	**Runway Surface Condition:**	Unknown
Runway Used:	27	**IFR Approach:**	None
Runway Length/Width:	5004 ft / 75 ft	**VFR Approach/Landing:**	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Substantial
Passenger Injuries:	3 Fatal	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	4 Fatal	**Latitude, Longitude:**	41.527221,-82.870002

Administrative Information

Investigator In Charge (IIC):	Malinowski, Edward
Additional Participating Persons:	Edward W Skuza; Federal Aviation Administration; North Olmsted, OH Thomas J Teplik; Cessna Aircraft Company; Wichita, KS Jason Lukasik; Teledyne Continental Motors Inc.; Mobile, AL
Original Publish Date:	June 30, 2008
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=67368

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available here.