Aviation Investigation Final Report

Location:	STONINGTON, Connecticut	**Accident Number:**	NYC93LA147
Date & Time:	August 11, 1993, 19:45 Local	**Registration:**	N98382
Aircraft:	PIPER J3C-65	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT WAS MANEUVERING AT A LOW ALTITUDE IN CONDITIONS OF HIGH HUMIDITY, WHEN THE ENGINE LOST POWER. ACCORDING TO THE FAA, THE PILOT SAID HE HAD USED CARBURETOR HEAT PRIOR TO THE MANEUVER. AFTER THE POWER LOSS, THE PILOT SAID THE AIRPLANE ENTERED A SPIN AND REGAINED CONTROL BUT NOT IN TIME TO AVOID IMPACTING WATER. THE EXAMINATION OF THE AIRCRAFT DID NOT DISCLOSE EVIDENCE OF MECHANICAL MALFUNCTION. ACCORDING TO THE CARBURETOR ICING CHART, THE TEMPERATURE/DEWPOINT WAS IN THE AREA OF, 'MODERATE ICING - CRUISE POWER OR SERIOUS ICING - GLIDE POWER.' THE FAA REPORTED THE CARBURETOR HEAT BOX WAS DAMAGED, BUT THE HEAT APPEARED TO BE ON.

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 ADEQUATE AIRSPEED WHICH RESULTED IN AN INADVERTENT STALL/SPIN, AND THE PILOT'S IMPROPER USE OF THE CARBURETOR HEAT WHICH RESULTED IN THE ACCRETION OF CARBURETOR ICE. A FACTOR WAS CARBURETOR ICING CONDITIONS.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: MANEUVERING

Findings
1. (F) WEATHER CONDITION - CARBURETOR ICING CONDITIONS
2. FUEL SYSTEM,CARBURETOR - ICE
3. (C) CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: DESCENT - EMERGENCY

Findings
4. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
5. (F) STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
6. TERRAIN CONDITION - WATER

Factual Information

On Wednesday, August 11, 1993, at 1945 eastern daylight time, a Piper J3C-65, N98382, operated by William A. Whitmarsh, of Watford, Connecticut, struck the water in Wequetequack Cove, Stonington, Connecticut, after the engine lost power. The airplane received substantial damage and the pilot received serious injuries. Visual meteorological conditions prevailed and no flight plan had been filed for the flight operating under 14 CFR 91.

In a written statement made to the Stonington Police Department, the pilot stated:

...I landed at the Old Stonington Airport, but before landing, I felt the engine hesitate, (believed to be carburetor icing). I applied carburetor heating and then landed the plane and dropped Sally off. I went back-up returning to the air, to clear the carburetor from icing conditions...I made 2 low passes over the airfield to check on my passenger. Once at 1000 [feet] I turned 180 degrees to the right and the engine failed. The right wing was already down, the plane went into a nose dive and went into a spin to the right. I corrected the procedure for the spin and recovered after 2 1/2 to 3 turns. I broke the stall about 30'[feet] above the water, and attempted to recover control of the aircraft. At that point I did not have enough altitude and consequently the right wing struck the water and the plane went out of control....

One witness, Mr. Donald Ascare stated, "...on one pass he was heading north toward RT # 1, pulled the nose of the plane up and banked steeply to the right. The engine speed and noise was low. I don't think the plane came up to speed. Shortly after this, I heard a thud....

Another witness, Ms. Cheryl Fisher stated, "...On the third circle the plane flying in a northerly direction comes down low over the trees on the side of the air strip. I saw the plane fly up again and it was out of my sight to the north...I heard a crash....

FAA Operations Inspector, Tim Olmsted, of the Windsor Locks Flight Standards District Office stated:

...Inspector[s] Olmsted and Labbe conducted an extensive inspection of the airframe and engine. All airframe components were fully functional at the time of the accident. While the engine failed to produce adequate compression during the investigation due to corrosion effects, all engine components were functional and no indication of an internal failure was found....

...Mr Whitmarsh told Inspector Olmsted he was performing Chandelle and Lazy 8 maneuvers...[He said] that after retarding the throttle during the end of one maneuver, upon returning the throttle to cruise the engine failed to respond. Carburetor heat was

applied before entering the maneuver that should have prevented the icing conditions....

Additionally, according to FAA Inspector, Mr. Bertrand J, Labbe, "...Carburetor heat box was badly damaged on impact, but appears to be selected 'ON'."

The recorded temperature at Groton, Connecticut, was 68 degrees fahrenheit. The dew point was out of service for rec- certification. The reading could not be offically reported. According to the FAA controllers on duty, the dewpoint was between 60 and 62 degrees fahrenheit.

According to the carburetor icing chart supplied by the FAA, the temperature/dewpoint spread would produce, "Moderate icing - cruise power or Serious icing - glide power."

The pilot failed to complete the NTSB Form 6120.1/2 as requested.

Pilot Information

Certificate:	Commercial	**Age:**	48,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Rear
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 2 Unknown	**Last FAA Medical Exam:**	November 8, 1991
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	4600 hours (Total, all aircraft), 1600 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	**Registration:**	N98382
Model/Series:	J3C-65 J3C-65	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	18657
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	May 12, 1993 Annual	**Certified Max Gross Wt.:**	1220 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	2500 Hrs	**Engine Manufacturer:**	CONTINENTAL
ELT:	Installed	**Engine Model/Series:**	A-65-8
Registered Owner:	LESLIE HALEY	**Rated Power:**	65 Horsepower
Operator:	WILLIAM A WHITMARSH	**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:	GON ,10 ft msl	**Distance from Accident Site:**	7 Nautical Miles
Observation Time:	19:45 Local	**Direction from Accident Site:**	270°
Lowest Cloud Condition:	Scattered / 20000 ft AGL	**Visibility**	15 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	0°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	19:40 Local	**Type of Airspace:**	Class G

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Serious	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	Hancock, Robert
Additional Participating Persons:	A G OLMSTEAD; WINDSOR LOCKS , CT BERTRAND J LABBE; WINDSOR LOCKS , CT
Original Publish Date:	September 26, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=38625