National Transportation Safety Board
Aviation Accident Final Report

Location:	Ridgefield, CT	**Accident Number:**	IAD05LA050
Date & Time:	04/02/2005, 1210 EST	**Registration:**	N134DE
Aircraft:	Piper PA-31P-350	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

Prior to departing on the accident flight, a mechanic, who was to perform work on the airplane advised the owner/pilot that the weather was below landing minimums and he should not attempt the trip. During a localizer approach at the airport, the airplane impacted trees that were located west of the approach end of the runway. After executing a missed approach the pilot advised ATC that he had bird strikes on both wings and that it looked like the de-icing boots were damaged. A local resident who witnessed the event stated that "the scraping sound of branches against metal was audible, and I saw the upper branches of the pine trees waving after contact with the plane." The trees were located at a terrain elevation of 599 feet above sea level. The minimum descent altitude for the approach was published as 1,100 feet.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper IFR procedure by flying below the minimum descent altitude, which resulted in the airplane striking trees.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings
1. OBJECT - TREE(S)
2. (C) IFR PROCEDURE - NOT COMPLIED WITH - PILOT IN COMMAND
3. (C) MINIMUM DESCENT ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

On April 2, 2005, about 1210 eastern standard time, a Piper PA-31P-350, N134DE, was substantially damaged when it struck trees in Ridgefield, Connecticut, while on an instrument approach to Danbury Municipal Airport (DXR), Danbury, Connecticut. The certificated commercial pilot/owner was not injured. Instrument meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan was filed for the flight that departed East Hampton Airport (HTO), East Hampton, New York. The personal flight was conducted under 14 CFR Part 91.

According to a mechanic, the purpose of the flight was to reposition the airplane to Danbury, Connecticut to replace a propeller de-icing boot. Prior to departing East Hampton, the mechanic advised the pilot that the weather was below landing minimums, and he should not attempt the trip.

Radar plot data and air traffic control (ATC) transcripts obtained from the Federal Aviation Administration (FAA) revealed that the pilot departed East Hampton, New York, on an IFR flight plan, destined for Danbury, Connecticut. After departure, the pilot initially climbed to 4,000 feet msl and proceeded direct to Bridgeport, Connecticut. A while later, the pilot was given radar vectors to the Localizer Runway 8 approach at Danbury. He crossed the final approach fix at approximately 2,200 feet msl and initiated his descent on the localizer where the last radar return during the descent was recorded at 1,200 feet msl. The altitude readout was then lost by ATC and later reacquired during the missed approach. He then climbed up to an altitude of 3,000 feet msl and advised ATC that he had bird strikes on both wings and that it looked like the de-icing boots were damaged.

The pilot then asked ATC about weather conditions at the Francis S. Gabreski Airport (FOK), Westhampton Beach, New York; however, the reported weather was below landing minimums. ATC then offered the pilot a choice of two other airports that might be suitable for an instrument approach and landing but he advised them that he would then have to "arrange alternate transportation." He then proceeded to Long Island Mac Arthur Airport (ISP), Islip, New York and flew the instrument landing system (ILS) approach for runway 24. He was unable to land, executed another missed approach, and proceeded to Republic Airport (FRG) Farmingdale, New York where he was able to perform the ILS Runway 14 approach, and land.

A statement from a local resident revealed that an airplane had struck trees that were located west of the approach end of runway 08 at the Danbury Municipal Airport. The witness stated that "the scraping sound of branches against metal was audible, and I saw the upper branches of the pine trees waving after contact with the plane."

Topographical data for the local area showed that the trees mentioned in the witness's statement were located at a terrain elevation of 599 feet above sea level. The minimum descent altitude for the Localizer Runway 8 approach was published as 1,100 feet, and the Danbury Municipal Airport was located at a field elevation of 458 feet.

According to a witness statement, on April 4, 2005, the airplane was flown without a special flight permit from Farmingdale, New York, to Danbury, Connecticut. An airframe and powerplant mechanic advised the pilot that he was unable to repair the airplane in a reasonable amount of time, as the wing skins would require replacement. He suggested that the repair work could be accomplished at two other locations, one of which was in Hagerstown,

Maryland.

On April 9,2005 the airplane was flown to Hagerstown, Maryland.

According to an FAA inspector, on April 21, 2005, while inspecting other airplanes located at the Hagerstown Regional Airport (HGR), Hagerstown, Maryland, his attention was drawn to an airplane that appeared to be substantially damaged. Closer inspection by the inspector revealed the presence of wood imbedded in some of the screw heads, joint overlaps, and inspection plates. He was later informed by a mechanic that the airplane had been flown into the airport without a special flight permit.

On May 18, 2005, the airplane was inspected by the Safety Board in Hagerstown, Maryland. The inspection revealed that the airplane had sustained impact damage to both wings, the ailerons, horizontal stabilizers and elevators. The left and right side de-ice boots exhibited scrape marks and tears, the left wing gap fairing was cracked, the left engine exhaust shield exhibited crush marks and the left cowling was wrinkled. The navigation light for the right wing was broken, and numerous antennas were damaged.

The recorded weather at the Danbury Municipal Airport, at 1224, included: winds from 080 degrees at 9 knots; visibility 2 1/2 statute miles in light rain and mist; ceiling overcast at 200 feet; temperature 46 degrees Fahrenheit; dew point 46 degrees Fahrenheit; altimeter setting 29.64 inches of mercury.

Pilot Information

Certificate:	Commercial	**Age:**	46, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 With Waivers/Limitations	**Last FAA Medical Exam:**	10/01/2004
Occupational Pilot:		**Last Flight Review or Equivalent:**	01/01/2004
Flight Time:	1633 hours (Total, all aircraft), 695 hours (Total, this make and model), 1595 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 16 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N134DE
Model/Series:	PA-31P-350	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	31P-8414005
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	02/01/2005, Continuous Airworthiness	**Certified Max Gross Wt.:**	7200 lbs
Time Since Last Inspection:	35 Hours	**Engines:**	2 Reciprocating
Airframe Total Time:	2650 Hours at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	TIO-540-V2AD
Registered Owner:	Steller Air Charter LLC	**Rated Power:**	350 hp
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	DXR, 458 ft msl	**Distance from Accident Site:**	2 Nautical Miles
Observation Time:	1224 EST	**Direction from Accident Site:**	82°
Lowest Cloud Condition:		**Visibility**	2.5 Miles
Lowest Ceiling:	Overcast / 200 ft agl	**Visibility (RVR):**	
Wind Speed/Gusts:	9 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	80°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.64 inches Hg	**Temperature/Dew Point:**	8°C / 8°C
Precipitation and Obscuration:	Light - Rain; Mist		
Departure Point:	East Hampton, NY (HTO)	**Type of Flight Plan Filed:**	IFR
Destination:	Danbury, CT (DXR)	**Type of Clearance:**	IFR
Departure Time:	1100 EDT	**Type of Airspace:**	

Airport Information

Airport:	Danbury Municipal Airport (DXR)	**Runway Surface Type:**	Asphalt
Airport Elevation:	458 ft	**Runway Surface Condition:**	Wet
Runway Used:	8	**IFR Approach:**	Localizer Only
Runway Length/Width:	4422 ft / 150 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	41.362222, -73.526111

Administrative Information

Investigator In Charge (IIC):	Todd G Gunther	**Report Date:**	10/27/2005
Additional Participating Persons:	Susan Fraher; FAA FSDO-03; Windsor Locks, CT		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/.		