



Aviation Investigation Final Report

Location:	New Marlboro, Massachusetts	Accident Number:	NYC05CA127
Date & Time:	July 31, 2005, 17:00 Local	Registration:	N1003G
Aircraft:	Yakovlev 55M	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Positioning		

Analysis

The weather was deteriorating as the pilot approached his destination airport. Approximately 20 miles from his destination, the previously scattered cloud layer became solid and blocked off the view of the sky. Approximately 7 miles from his destination, the pilot observed lightning several miles to the southeast. The pilot thought the storm "was well south" of his current position, and he elected to continue to his destination. He further stated "...not many seconds later, I was in the storm with torrential rain, lightning within 3 miles, and heavy turbulence...". The pilot elected to perform a precautionary landing to a field, on slight uphill terrain. While on approach to the south, the pilot reduced the engine power, and the airplane developed a high sink rate. The pilot added power; however, the airplane landed hard, and was substantially damaged. After the accident, the pilot noted that the winds were strong, and probably from the north, with the possibility of downdrafts and wind shear. A weather observation taken at an airport located about 30 miles east-southeast of the accident site, about the time of the accident, included the remarks: "LTG DSNT SW AND W."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper weather evaluation which resulted in a precautionary off airport landing; and his improper flare which resulted in a hard landing. A factor in this accident was weather associated with thunderstorm activity.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER

Phase of Operation: CRUISE

Findings

1. WEATHER CONDITION - THUNDERSTORM
2. (C) WEATHER EVALUATION - IMPROPER - PILOT IN COMMAND

Occurrence #2: HARD LANDING

Phase of Operation: LANDING

Findings

3. (F) WEATHER CONDITION - THUNDERSTORM
4. (C) FLARE - IMPROPER - PILOT IN COMMAND
5. TERRAIN CONDITION - GRASS

Factual Information

On July 31, 2005, about 1700 eastern daylight time, a Yakovlev 55M, N1003G, was substantially damaged during a precautionary landing near New Marlboro, Massachusetts. The certificated commercial pilot was not injured. Instrument meteorological conditions prevailed near the accident site, and no flight plan had been filed for the flight destined for North Canaan Airport (CT24), North Canaan, Connecticut. The personal flight was conducted under 14 CFR Part 91.

In a written statement, the pilot reported that the flight originated at Rockland, Maine, and included a refueling stop in Orange, Massachusetts. The pilot initially flew at an altitude of 4,500 feet above a scattered cloud layer. He noticed that the scattered cloud layer was becoming more solid, and he descended to about 2,500 feet. Approximately 20 miles from his destination, the cloud layer became solid, and blocked off the view of the sky. Approximately 7 miles from CT24, the pilot observed lightning several miles to the southeast. The pilot further stated:

"...There was still a visible ceiling above me and visibility ahead. Figuring the storm was well south of me and with only 3 minutes or so to my destination, I chose to proceed thinking at the time that was my safest option, with Great Barrington (GER.), Massachusetts, a few miles to the north as another option. However, not many seconds later, I was in the storm with torrential rain, lightning within 3 miles, and heavy turbulence. Visibility went down to very little. I immediately did a 180 degree turn, but the sky and visibility back to the northeast was closed in...."

The pilot observed a field, and elected to perform a precautionary landing to the south, on slight uphill terrain. While on approach, the pilot reduced the engine power, and the airplane developed a high sink rate. The pilot added power; however, the airplane landed hard, and was substantially damaged. After the accident, the pilot noted that the winds were strong, and probably from the north, with the possibility of downdrafts and wind shear.

The pilot reported that he did not obtain any formal weather briefings. On the morning of the accident, he received weather for his route of flight by watching the weather channel. He also spoke with another pilot who was based at Simsbury, Connecticut, who did obtain a weather briefing.

A weather observation taken at an airport located about 30 miles east-southeast of the accident site, about the time of the accident, included the remarks: "LTG DSNT SW AND W."

Pilot Information

Certificate:	Commercial	Age:	55, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
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:	June 1, 2004
Occupational Pilot:	No	Last Flight Review or Equivalent:	February 1, 2004
Flight Time:	2300 hours (Total, all aircraft), 750 hours (Total, this make and model), 2300 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Yakovlev	Registration:	N1003G
Model/Series:	55M	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1003
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	June 1, 2005 Annual	Certified Max Gross Wt.:	1900 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	780 Hrs at time of accident	Engine Manufacturer:	Vendenev
ELT:	Not installed	Engine Model/Series:	M14-P
Registered Owner:	Drew M. Hurley	Rated Power:	360 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	BAF,271 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	16:53 Local	Direction from Accident Site:	300°
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:	Broken / 11000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.2 inches Hg	Temperature/Dew Point:	23°C / 17°C
Precipitation and Obscuration:	In the vicinity - Thunderstorm - Rain		
Departure Point:	Orange, MA (ORE)	Type of Flight Plan Filed:	None
Destination:	North Canaan, CT (CT24)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	North Caanan CT24	Runway Surface Type:	
Airport Elevation:	658 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	Unknown
Runway Length/Width:		VFR Approach/Landing:	Unknown

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	42.094165,-73.304443

Administrative Information

Investigator In Charge (IIC):	Schiada, Luke
Additional Participating Persons:	David Larochelle; FAA FSDO-03; Windsor Locks, CT
Original Publish Date:	October 27, 2005
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=62101

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