



National Transportation Safety Board Aviation Accident Final Report

Location:	STERLING, MA	Accident Number:	NYC87LA217
Date & Time:	08/01/1987, 2020 EDT	Registration:	N9078Z
Aircraft:	ROBINSON R22	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

BEFORE FLYING SOLO, THE STUDENT PLT & HIS INSTRUCTOR (CFI) PRACTICED AUTOROTATIONS FOR ABOUT 1/2 HR. THE CFI DEPLANED & THE STUDENT TOOK OFF ON A SOLO FLT. HE FLEW TO A RESERVOIR AREA FOR MORE PRACTICE. AFTER DESCENDING FROM ABOUT 1000' TO 500', THE ENG LOST POWER. THE STUDENT MADE AN AUTOROTATION TO THE AN OPEN AREA NEAR THE RESERVOIR. HOWEVER, DURING TOUCHDOWN ON SLOPING TERRAIN, THE HELICOPTER ROLLED OVER. A POST-ACDNT EXAM WAS MADE, BUT NO ENG OR FUEL SYSTEM DISCREPANCIES WERE FOUND.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

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

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

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

Findings

2. AUTOROTATION

Occurrence #3: ROLL OVER
Phase of Operation: LANDING

Findings

3. (F) TERRAIN CONDITION - ROUGH/UNEVEN
4. (F) LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Student	Age:	27, Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	24 hours (Total, all aircraft), 24 hours (Total, this make and model), 2 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ROBINSON	Registration:	N9078Z
Model/Series:	R22 R22	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	0288
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	O-320-B2C
Registered Owner:	AVIATION TRAINING ACADEMY	Rated Power:	124 hp
Operator:	AVIATION TRAINING ACADEMY	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	0 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	STERLING, MA	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	0000	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	VINCENT D MARCANTELLI	Report Date:	04/24/1989
Additional Participating Persons:			
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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](#).