



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	WATKINS GLEN, NY	<b>Accident Number:</b>	BF092LA085
<b>Date &amp; Time:</b>	07/02/1992, 1100 EDT	<b>Registration:</b>	N330TT
<b>Aircraft:</b>	SCHWEIZER 269D	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None

**Flight Conducted Under:** Part 91: General Aviation -

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## Analysis

DURING A CERTIFICATION TEST FLIGHT INVOLVING A SERIES OF DESCENTS AT LOW ROTOR RPM AND LOW AIRSPEEDS, THE ENGINE OF THE PROTOTYPE HELICOPTER LOST POWER. AN AUTOROTATION WAS INITIATED AND THE AIRCRAFT IMPACTED THE GROUND IN A TAIL LOW CONDITION, CAUSING DAMAGE TO THE TAIL ROTOR AND MAIN ROTOR. THE AIRCRAFT WAS BEING OPERATED AT A HIGH GROSS WEIGHT AND AFT CENTER OF GRAVITY TO MEET CERTIFICATION CRITERIA. THE RIGGING BETWEEN THE THROTTLE AND FUEL CONTROL UNIT WAS EXAMINED AND FOUND TO BE IMPROPERLY SET, CAUSING THE PREVENTION OF CONTINUOUS ENGINE POWER THROUGHOUT THE FLIGHT TEST PROFILE.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FUEL STARVATION AS A RESULT OF IMPROPER RIGGING OF THE FUEL CONTROL UNIT.

## Findings

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Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: HOVER

### Findings

1. (F) FLUID,FUEL - STARVATION
2. (F) FUEL SYSTEM,FUEL CONTROL - OTHER
3. (C) MAINTENANCE,ADJUSTMENT - INADEQUATE - PRODUCTION/DESIGN PERSONNEL

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

### Findings

4. AUTOROTATION - INITIATED - PILOT IN COMMAND

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Occurrence #3: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	39, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Instrument Helicopter	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	01/09/1992
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	8250 hours (Total, all aircraft), 4300 hours (Total, this make and model), 6500 hours (Pilot In Command, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	SCHWEIZER	<b>Registration:</b>	N330TT
<b>Model/Series:</b>	269D 269D	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Experimental	<b>Serial Number:</b>	51246T
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	01/02/2000, Unknown	<b>Certified Max Gross Wt.:</b>	2050 lbs
<b>Time Since Last Inspection:</b>	95 Hours	<b>Engines:</b>	1 Turbo Shaft
<b>Airframe Total Time:</b>	1189 Hours	<b>Engine Manufacturer:</b>	ALLISON
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	250/C2OW
<b>Registered Owner:</b>	SCHWEITZER AIRCRAFT CORP.	<b>Rated Power:</b>	420 hp
<b>Operator:</b>	SCHWEITZER AIRCRAFT CORP.	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ELM, 155 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	1050 EDT	Direction from Accident Site:	350°
Lowest Cloud Condition:	Scattered / 11000 ft agl	Visibility	30 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	20° C / 10° C
Precipitation and Obscuration:			
Departure Point:	ELMIRA, NY (ELM)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1120 EDT	Type of Airspace:	

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	JEFFREY B GUZZETTI	Report Date:	05/26/1993
Additional Participating Persons:	EDWARD J DICK; ROCHESTER, NY		
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 <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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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](#).