



National Transportation Safety Board Aviation Accident Final Report

Location:	KANSAS CITY, MO	Accident Number:	CHI93GA046
Date & Time:	12/01/1992, 2051 CST	Registration:	N640KC
Aircraft:	SCHWEIZER 269C	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal

Flight Conducted Under: Part 91: General Aviation - Public Aircraft

Analysis

WHILE ON A ROUTINE NIGHT PATROL THE POLICE HELICOPTER EXPERIENCED THE LOSS OF THE LARGE CLEVIS PIN IN THE CLUTCH CONTROL SPRING ASSEMBLY. THE LOSS OF THE SPRING ASSEMBLY DISCONNECTED THE POWERPLANT FROM THE ROTOR SYSTEM. THE PILOT INITIATED AN AUTOROTATION. THE TERRAIN UNDERLYING THE LANDING ATTEMPT WAS A RAVINE WITH HIGH TREES. THE PILOT WAS NOT ABLE TO JUDGE THE DISTANCE BETWEEN THE HELICOPTER AND THE GROUND TO SUCCESSFULLY EFFECT AN AUTOROTATIONAL LANDING.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT-IN-COMMAND'S MISJUDGING THE DISTANCE DURING THE AUTOROTATION.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: CRUISE

Findings

1. (F) ROTOR DRIVE SYSTEM, CLUTCH ASSEMBLY - DISENGAGED

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

Findings

2. AUTOROTATION - INITIATED - PILOT IN COMMAND

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

Findings

3. (F) LIGHT CONDITION - DARK NIGHT
4. (C) DISTANCE - MISJUDGED - PILOT IN COMMAND
5. (F) TERRAIN CONDITION - RAVINE

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

Findings

6. REMEDIAL ACTION - NOT POSSIBLE - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial; Private	Age:	48, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	11/05/1991
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	2400 hours (Total, all aircraft), 2100 hours (Total, this make and model), 75 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	SCHWEIZER	Registration:	N640KC
Model/Series:	269C 269C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	S1474
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	10/30/1992, 100 Hour	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:	74 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2174 Hours	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	HIO-360-D1A
Registered Owner:		Rated Power:	190 hp
Operator:	BOARD OF POLICE COMMISSIONERS	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	MCI, 1026 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	2105 CST	Direction from Accident Site:	320°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	12 knots / 20 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	6°C / -6°C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:	(3M01)	Type of Clearance:	None
Departure Time:	2030 CST	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	STEPHEN A WILSON	Report Date:	06/21/1993
Additional Participating Persons:	LARRY G BECHERER; KANSAS CITY, MO CAPT GLENN CHERRY; KANSAS CITY, MO JONATHAN D KURTZ; MESA, AZ LARRY H JOHNSON; BIG FLATS, 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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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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](#).