



Aviation Investigation Final Report

Location:	CHICAGO, Illinois	Accident Number:	CHI86FA129
Date & Time:	April 25, 1986, 09:06 Local	Registration:	N660DD
Aircraft:	BELL 222B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Executive/Corporate		

Analysis

THE AIRCRAFT HAD JUST DISCHARGED TWO PASSENGERS ON THE ROOFTOP HELIPAD AND WAS PREPARING FOR DEPARTURE. THE AIRCRAFT WAS PICKED UP TO A HOVER AND THE TAILROTOR STRUCK A HELIPORT SURFACE PERIMETER LIGHT. THE TAILROTOR SEPARATED FROM THE AIRCRAFT AND THE AIRCRAFT ROTATED TO THE RIGHT. THROTTLES WERE REDUCED TO STOP THE ROTATION AND THE AIRCRAFT SETTLED BACK DOWN TO THE HELIPAD. THE AIRCRAFT BOUNCED SIDE TO SIDE AND ROLLED OFF THE HELIPAD AND CAME TO REST ON ITS LEFT SIDE. THE PILOT EXITED AND EXTINGUISHED A SMALL FIRE THAT HAD STARTED NEAR THE ENGINE EXHAUST.

Probable Cause and Findings

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

Findings

Occurrence #1: PROPELLER/ROTOR CONTACT TO PERSON
Phase of Operation: HOVER

Findings

1. (C) VISUAL LOOKOUT - NOT MAINTAINED - PILOT IN COMMAND
2. (C) PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
3. (F) LACK OF FAMILIARITY WITH GEOGRAPHIC AREA - PILOT IN COMMAND
4. (F) SELF-INDUCED PRESSURE - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: HOVER

Occurrence #3: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #4: ROLL OVER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Airline transport	Age:	33, Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	January 21, 1986
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2978 hours (Total, all aircraft), 58 hours (Total, this make and model), 123 hours (Last 90 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N660DD
Model/Series:	222B 222B	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	47132
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	100 hour	Certified Max Gross Wt.:	8250 lbs
Time Since Last Inspection:	12 Hrs	Engines:	2 Turbo shaft
Airframe Total Time:	614 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	LTS-101-750C1
Registered Owner:	DD66 CORP	Rated Power:	684 Horsepower
Operator:	OMNIFLIGHT	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	[EMS]	Operator Designator Code:	13GL

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MDW ,619 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	08:50 Local	Direction from Accident Site:	270°
Lowest Cloud Condition:	15000 ft AGL	Visibility	8 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	22°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SOLON MILLS , IL (RLA)	Type of Flight Plan Filed:	None
Destination:	CHICAGO , IL (RLA)	Type of Clearance:	None
Departure Time:	08:40 Local	Type of Airspace:	Class G

Airport Information

Airport:	RLA	Runway Surface Type:	Metal/wood
Airport Elevation:	0 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	41.780666,-87.599456(est)

Administrative Information

Investigator In Charge (IIC):	Sebastian, Ronald
Additional Participating Persons:	ROBERT SEALES; CHICAGO , IL TIMOTHY ANDERSON; CHICAGO , IL DONALD WARNER; CHICAGO , IL DAVID C DOSKER; FORT WORTH , TX
Original Publish Date:	April 25, 1988
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=13255

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).