



Aviation Investigation Final Report

Location:	CATAWISSA, Pennsylvania	Accident Number:	NYC92LA006
Date & Time:	October 12, 1991, 15:15 Local	Registration:	N5NH
Aircraft:	BELL 47G-3B-1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 Minor
Flight Conducted Under:	Part 91: General aviation		

Analysis

THE HELICOPTER HAD FUNCTIONING DUAL CONTROLS INSTALLED. THE PILOT BOARDED THREE PASSENGERS, 2 LARGE ADULTS AND ONE CHILD (TOTALING 520 LBS) FOR A SIGHTSEEING FLIGHT. THE THREE PASSENGERS WERE SEATED IN A DOUBLE SEAT AND HELD BY ONE SEAT BELT. AFTER TAKEOFF, THE PILOT EXPERIENCED AN UNCONTROLLED RIGHT TURN AND THE RIGHT SKID STRUCK THE GROUND FLIPPING THE HELICOPTER OVER. HE SAID THE CYCLIC WAS JAMMED AGAINST ONE OF THE PASSENGERS LEG. POST CRASH EXAMINATION OF THE WEIGHT AND BALANCE DISCLOSED THE TAKEOFF CENTER OF GRAVITY WAS 1.3 INCHES FORWARD OF THE FORWARD LIMIT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: PILOT FACTOR IN THAT THE PILOT USED POOR JUDGEMENT AND LOADED MORE PASSENGERS THAN WERE SEATS ON THE HELICOPTER THIS RESULTED IN CONTROL INTERFERENCE AND SUBSEQUENT LOSS OF CONTROL. CONTRIBUTING WAS THE PILOT'S FAILURE TO CHECK THE WEIGHT AND BALANCE FOR THE FLIGHT WHICH RESULTED IN FLIGHT OUTSIDE THE FORWARD LIMITS.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) PREFLIGHT PLANNING/PREPARATION - IMPROPER - PILOT IN COMMAND
2. (C) CYCLIC - RESTRICTED - PASSENGER
3. REMEDIAL ACTION - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

4. TERRAIN CONDITION - GRASS

Factual Information

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	56, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Glider; Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Glider; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	March 27, 1991
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	3850 hours (Total, all aircraft), 1730 hours (Total, this make and model), 14 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N5NH
Model/Series:	47G-3B-1 47G-3B-1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3825
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	January 2, 2000 Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	28 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5403 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	TVO-435-D1B
Registered Owner:	SUTLIFF FARMS	Rated Power:	270 Horsepower
Operator:	SUTLIFF FARMS	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	50 miles
Lowest Ceiling:	Broken / 2000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	10°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:15 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	3 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 Minor	Latitude, Longitude:	40.950729,-76.459007(est)

Administrative Information

Investigator In Charge (IIC):	Hancock, Robert
Additional Participating Persons:	JOSEPH KIMBALL; HARRISBURG , PA RAY STEICH; HARRISBURG , PA
Original Publish Date:	April 27, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=37088

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