



Aviation Investigation Final Report

Location:	HOLSTEIN, Nebraska	Accident Number:	CHI00LA204
Date & Time:	July 16, 2000, 09:00 Local	Registration:	N83701
Aircraft:	Bell 47G-3B-1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The helicopter impacted the terrain while maneuvering during aerial application flight. In a written statement, the pilot said, "On the third pass at the top of my turn the wind came up strongly from the E-NE and what airspeed I had at the top of the turn dissipated and became a tailwind of approx[imately] 15-20 knots. I was diving back into the field now with a tailwind, out of translational lift and ended up with what I consider to be settling with power. At my current altitude of approx[imately] 50-60 feet I did not have sufficient room to reenter translational lift and contacted the ground." A postaccident examination of the aircraft failed to reveal any anomalies that could be associated with a preexisting condition. A weather reporting station located about 17 miles and 037 degrees magnetic from the accident site reported at 0753 cdt, wind variable at 03 knots. The same reporting station reported at 0853 cdt, wind variable at 03 knots gusting to 19 knots. At 0900 cdt, the reporting station reported thunderstorms in the vicinity

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the settling with power encountered by the pilot. A factor was the sudden windshift.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. (F) WEATHER CONDITION - SUDDEN WINDSHIFT
2. (C) SETTLING WITH POWER - ENCOUNTERED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Factual Information

On July 16, 2000, at 0900 central daylight time, a Bell 47G-3B-1, N83701, piloted by a commercial pilot, sustained substantial damage on impact with terrain while maneuvering near Holstein, Nebraska. The 14 CFR Part 137 aerial application flight was not on a flight plan. Visual meteorological conditions prevailed. The pilot, who was the sole occupant, reported minor injuries. The local flight originated from Campbell, Nebraska, just prior to the accident time.

In a written statement, the pilot said, "As I made my second pass I noticed that I had a wind from the north [at] approx[imately] 3-5 mph." He said, "On the third pass at the top of my turn the wind came up strongly from the E-NE and what airspeed I had at the top of the turn dissipated and became a tailwind of approx[imately] 15-20 knots. I was diving back into the field now with a tailwind, out of translational lift and ended up with what I consider to be settling with power. At my current altitude of approx[imately] 50-60 feet I did not have sufficient room to reenter translational lift and contacted the ground."

During a postaccident examination of the aircraft by a Federal Aviation Administration Inspector, no anomalies were found that could be associated with a preexisting condition.

A weather reporting station located about 17 miles and 037 degrees magnetic from the accident site reported at 0753 cdt, wind variable at 03 knots. The same reporting station reported at 0853 cdt, wind variable at 03 knots gusting to 19 knots. At 0900 cdt, the reporting station reported thunderstorms in the vicinity.

Pilot Information

Certificate:	Commercial	Age:	43, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	August 2, 1999
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	9700 hours (Total, all aircraft), 1300 hours (Total, this make and model), 30 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N83701
Model/Series:	47G-3B-1 47G-3B-1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3835
Landing Gear Type:	Skid	Seats:	
Date/Type of Last Inspection:	May 31, 2000 Annual	Certified Max Gross Wt.:	0 lbs
Time Since Last Inspection:	10 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	O-435-B1A
Registered Owner:	SKY TRACTOR, INC.	Rated Power:	240 Horsepower
Operator:		Operating Certificate(s) Held:	
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:	HSI ,1961 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	10:00 Local	Direction from Accident Site:	37°
Lowest Cloud Condition:	Scattered / 11000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	77°C / 70°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CAMPBELL , NE	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	08:55 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:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	40.459079,-98.649368(est)

Administrative Information

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	DALLAS BAKER; LINCOLN , NE
Original Publish Date:	September 26, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=49737

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