



Aviation Investigation Final Report

Location:	Farmingdale, New Jersey	Accident Number:	NYC04LA181
Date & Time:	July 31, 2004, 10:15 Local	Registration:	N53748
Aircraft:	Bellanca 7KCAB	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Other work use		

Analysis

The pilot took off, climbed out normally and then proceeded with a banner pick-up. A witness reported that the pilot did not add full power until about 15 feet prior to the banner pick-up poles. The airplane picked up the banner, then immediately pitched up steeply. The wings began to rock back and forth and the airplane began to descend with the banner connected. The pilot released the banner; however, the airplane descended into wires and impacted a hangar. According to the operator, the normal banner pick-up procedure with regards to engine power was to add full throttle about 100 to 125 feet prior to the banner pick-up poles. Examination of the airplane did not revealed any mechanical malfunctions.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate airspeed which resulted in a stall and collision with wires.

Findings

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

Findings

1. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
2. STALL

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: MANEUVERING

Findings

3. OBJECT - WIRE,STATIC

Factual Information

On July 31, 2004, about 1015 eastern daylight time, a Bellanca 7KCAB, N53748, was substantially damaged while maneuvering at the Monmouth Executive Airport, Farmingdale, New Jersey. The certificated commercial pilot sustained minor injuries. Visual meteorological conditions prevailed and no flight plan was filed for the commercial banner tow flight that was conducted under 14 CFR Part 91.

The pilot reported that he was conducting his first banner pick up of the day. After contacting the banner, he began to climb; however, at 200 feet above the ground, he encountered a wind gust. The airplane began to lose altitude and airspeed, and the pilot noticed that the engine rpm was at 2,200. The pilot released the banner and attempted to climb; however, wind shear pushed the airplane down, and into power lines.

According to a Federal Aviation Administration (FAA) inspector, witnesses observed the airplane in a steep nose-up attitude. After the banner was released, the airplane rolled to the left, struck power lines and then impacted a hanger.

According to the owner of the banner tow company, the pilot took off, climbed out normally and then proceed with the banner pick up. The pilot did not add full power until about 15 feet prior to the banner pick-up poles. The airplane picked up the banner, then immediately pitched up steeply. The wings began to rock back and forth and the airplane began to descend with the banner connected. He radioed the pilot to release the banner. The banner was released; however, the airplane "stalled" into wires and impacted a hanger. He further stated that the normal banner pick up procedure with regards to engine power was to add full throttle about 100 to 125 feet prior to the banner pick-up poles.

Examination of the airplane by an FAA inspector did not revealed any mechanical malfunctions.

The banner poles were aligned with runway 14. Winds reported at the airport, about the time of the accident, were from 210 degrees at 6 knots.

The pilot reported 362 hours of total flight experience, which included 63 hours in the same make and model as the accident airplane.

Pilot Information

Certificate:	Commercial	Age:	26, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	June 30, 2004
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	July 8, 2003
Flight Time:	362 hours (Total, all aircraft), 63 hours (Total, this make and model), 252 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	Registration:	N53748
Model/Series:	7KCAB	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	538-75
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	May 1, 2004 Annual	Certified Max Gross Wt.:	1650 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2185 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	IO-320-E2B
Registered Owner:	United Aerial Advertising of Delaware, Inc	Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BLM,159 ft msl	Distance from Accident Site:	
Observation Time:	10:15 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 1800 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 4400 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	28°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Farmingdale, NJ (BLM)	Type of Flight Plan Filed:	None
Destination:	(BLM)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Monmouth Executive BLM	Runway Surface Type:	
Airport Elevation:	159 ft msl	Runway Surface Condition:	
Runway Used:	14	IFR Approach:	None
Runway Length/Width:	7300 ft / 80 ft	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:	40.186668,-74.124725

Administrative Information

Investigator In Charge (IIC):	Schiada, Luke
Additional Participating Persons:	Ken Symons; FAA Teterboro FSDO; Saddlebrook, NJ
Original Publish Date:	September 13, 2005
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=59825

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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](#).