

# **Aviation Investigation Final Report**

Location:	Bolivar, Missouri	Accident Number:	CHI06CA277
Date & Time:	September 30, 2006, 10:00 Local	Registration:	N1154J
Aircraft:	Rockwell 112TC	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

### Analysis

The airplane was substantially damaged when it impacted terrain adjacent to the runway during an attempted go-around. The pilot and passenger were not injured. The pilot reported that he entered the traffic pattern for runway 18 at the intended destination. He noted that the wind conditions were determined from a windsock prior to landing. The windsock indicated that the wind was directly from the west. The pilot stated: "The air was relatively smooth until turning to final at which point it became increasingly turbulent as I descended. On final approach I was applying right aileron and full left rudder to maintain alignment with the runway centerline. On initial touchdown the plane 'skipped' slightly and at that moment I believe a strong gust of wind from the west/northwest lifted the right wing. Uncomfortable with the plane's attitude I initiated a 'go-around', applying full power and leveling the wings. I was unable to gain altitude quickly and transitioned into a grassy area on the east side of the runway." The pilot noted that when observing the windsock after the accident, the wind direction would vary plus or minus approximately 30 degrees from due west "with strong gusts." The pilot estimated winds at the accident airport as from 270 degrees variable at 20 knots, gusting to 30 knots.

# **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate compensation for the crosswind condition and his failure to maintain directional control during the go-around attempt. Contributing factors were the crosswind and the gusts.

#### **Findings**

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: GO-AROUND (VFR)

Findings

(C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
(C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
(F) WEATHER CONDITION - CROSSWIND
(F) WEATHER CONDITION - GUSTS

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: GO-AROUND (VFR)

Findings 5. TERRAIN CONDITION - GRASS

Occurrence #3: MAIN GEAR COLLAPSED Phase of Operation: GO-AROUND (VFR)

#### **Factual Information**

The airplane was substantially damaged when it impacted terrain adjacent to runway 18 (4,000 feet by 75 feet, asphalt) during an attempted go-around at the Bolivar Municipal Airport (M17), Bolivar, Missouri. The pilot and passenger were not injured. The pilot reported that he entered the traffic pattern for runway 18. He noted that the windsock indicated winds were "directly from the west."

The pilot stated: "The air was relatively smooth until turning to final at which point it became increasingly turbulent as I descended. On final approach I was applying right aileron and full left rudder to maintain alignment with the runway centerline. On initial touchdown the plane 'skipped' slightly and at that moment I believe a strong gust of wind from the west/northwest lifted the right wing. Uncomfortable with the plane's attitude I initiated a 'go-around', applying full power and leveling the wings. I was unable to gain altitude quickly and transitioned into a grassy area on the east side of the runway."

The pilot noted that when observing the windsock after the accident, the wind direction would vary plus or minus approximately 30 degrees from west "with strong gusts." The pilot estimated winds at the accident airport as from 270 degrees variable, at 20 knots, gusting to 30 knots.

Weather reporting was not available at the airport. Wind conditions recorded at the Springfield-Branson Airport (SGF), located about 21 miles south of M17, at 0952, were from 270 degrees at 12 knots. At 1052, recorded winds were from 270 degrees at 16 knots, gusting to 22 knots.

#### **Pilot Information**

Certificate:	Private	Age:	44,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
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 3 Without waivers/limitations	Last FAA Medical Exam:	February 1, 2006
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 1, 2006
Flight Time:	432 hours (Total, all aircraft), 64 hours (Total, this make and model), 398 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Rockwell	Registration:	N1154J
Model/Series:	112TC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	13091
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	May 1, 2006 Annual	Certified Max Gross Wt.:	2850 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1866 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TO-360-C1A6D
Registered Owner:	On file	Rated Power:	210 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

#### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SGF,1268 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	09:52 Local	Direction from Accident Site:	185°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	23°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipita	tion	
Departure Point:	Paola, KS (K81 )	Type of Flight Plan Filed:	None
Destination:	Bolivar, MO (M17 )	Type of Clearance:	None
Departure Time:	09:20 Local	Type of Airspace:	

# **Airport Information**

Airport:	Bolivar Muni M17	Runway Surface Type:	Asphalt
Airport Elevation:	1092 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	4000 ft / 75 ft	VFR Approach/Landing:	Full stop;Traffic pattern

# Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	37.596111,-93.347778

#### **Administrative Information**

Investigator In Charge (IIC):	Sorensen, Timothy
Additional Participating Persons:	Alfred Rager; FAA-Kansas City FSDO; Kansas City, MO
Original Publish Date:	December 28, 2006
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64722

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.