

# **Aviation Investigation Final Report**

Location: Bullhead City, Arizona Accident Number: WPR09LA221

Date & Time: April 8, 2009, 10:00 Local Registration: N3224Q

Aircraft: RAYTHEON AIRCRAFT COMPANY Aircraft Damage: Substantial

**Defining Event:** Loss of control on ground **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

As the flight approached its destination, the pilot listened to the automated surface observation station weather report at an airport located about 7 nautical miles north of the destination airport. According to the pilot, the wind at the nearby airport was out of the northwest at 10 mph gusting to 15. The pilot stated that he flew over the destination airport and determined that the winds were as reported at the nearby airport. The final approach to Runway 35 appeared normal to the pilot, and he noticed a crosswind presence. The pilot commented that the "airplane was responding as usual, and there was no indication of severe gusting or any unusual wind condition." The pilot said that as the airplane touched down, "an extreme unpredictable northwest dust devil and/or whirlwind hit the front of my airplane causing the airplane to veer to the right." The airplane veered to the right, exited the runway, and impacted bushes adjacent to the runway. The nose landing gear and left main landing gear collapsed, and the left wing tip fuel tank and left aileron were bent and wrinkled. About 1 hour before the accident, the reported wind at the nearby airport was from 270 degrees at 11 knots, gusting to 18 knots. Near the time of the accident, the reported wind was from 300 degrees at 12 knots, gusting to 22 knots. About 1 hour after the accident, the reported wind was from 300 degrees at 14 knots gusting to 22 knots. Based on the reported gusty northwest winds, it appears likely that what the pilot called a "northwest dust devil and/or whirlwind" was actually a gust of wind from the northwest.

### **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 gusting crosswinds and his failure to maintain directional control during landing.

### **Findings**

Personnel issues Aircraft control - Pilot

Aircraft Directional control - Not attained/maintained

**Environmental issues** Crosswind - Response/compensation

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#### **Factual Information**

#### **History of Flight**

Landing-flare/touchdown Loss of control on ground (Defining event)

Landing-landing roll Runway excursion

Landing-landing roll Collision with terr/obj (non-CFIT)

On April 8, 2009, approximately 1000 mountain standard time, a Beech A36, N3224Q, sustained substantial damage when it veered off the runway during the landing roll and impacted bushes at Eagle Airpark, Bullhead City, Arizona. The private pilot and his passenger were not injured. The pilot/owner was operating the airplane under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed, and no flight plan was filed for the personal cross-country flight. The personal flight originated from Chino, California, approximately 1 hour before the accident.

As the flight approached Eagle Airpark, the pilot listened to the automated surface observation station weather from Needles Airport, Needles, California, located about 7 nautical miles north of Eagle Airpark. According to the pilot, the wind at Needles was "out of the northwest at 10 mph gusting to 15." The pilot reported that he flew over the Eagle Airpark to determine present wind and any unusual conditions at the airport. He determined that "the winds were as reported at Needles."

The pilot stated that the final approach to runway 35 "appeared normal," and he "noticed a crosswind presence." The "airplane was responding as usual, and there was no indication of severe gusting or any unusual wind condition." The pilot stated that as the airplane touched down, "an extreme unpredictable northwest dust devil and/or whirlwind hit the front of my airplane causing the airplane to veer to the right." The airplane exited the right side of the runway and impacted bushes about 5 to 10 feet from the edge of the runway. The nose landing gear and left main landing gear collapsed, and the left wing tip fuel tank and left aileron were bent and wrinkled.

Recorded data from Needles Airport's automated surface observation station indicated that at 0856 the wind was from 270 degrees at 9 knots gusting to 18 knots. At 0956, the wind at Needles was from 300 degrees at 12 knots gusting to 22 knots. At 1056, the wind at Needles was from 300 degrees at 14 knots gusting to 20 knots.

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### **Pilot Information**

Certificate:	Private	Age:	65,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 With waivers/limitations	Last FAA Medical Exam:	January 14, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	February 19, 2009
Flight Time:	3200 hours (Total, all aircraft), 200 hours (Total, this make and model), 35 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

# **Aircraft and Owner/Operator Information**

Aircraft Make:	RAYTHEON AIRCRAFT COMPANY	Registration:	N3224Q
Model/Series:	A36	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	E3224
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	May 1, 2008 Annual	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	835 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, not activated	Engine Model/Series:	IO-550 SERIES
Registered Owner:	On file	Rated Power:	310 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

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## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	EED,983 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	09:56 Local	Direction from Accident Site:	180°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 22 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	19°C / -3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Chino, CA (CNO)	Type of Flight Plan Filed:	None
Destination:	Bullhead City, AZ (A09)	Type of Clearance:	VFR flight following
Departure Time:	09:00 Local	Type of Airspace:	

## **Airport Information**

Airport:	Eagle Airpark A09	Runway Surface Type:	Asphalt
Airport Elevation:	485 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	4800 ft / 50 ft	VFR Approach/Landing:	Full stop;Straight-in

# 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:	34.888053,-114.616386

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#### **Administrative Information**

Investigator In Charge (IIC): Struhsaker, James

Additional Participating Persons: Terry Zavilla; Federal Aviation Administration; Scottsdale, AZ

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Last Revision Date: Investigation Class: Class

Note: Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=73757

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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.

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