



National Transportation Safety Board Aviation Accident Final Report

Location:	Hamlin, TX	Accident Number:	CEN13LA323
Date & Time:	06/01/2013, 1030 CDT	Registration:	N4946X
Aircraft:	ROCKWELL INTERNATIONAL S-2R	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

During the landing, the airplane encountered a strong, gusting right crosswind. The pilot attempted to perform a go-around; however, the airplane ground-looped. The prevailing wind resulted in a right quartering tailwind with a gusting crosswind component of 23 knots. The maximum crosswind velocity for the accident airplane was 15 miles per hour; therefore, the calculated crosswind component exceeded the capability of the airplane. The pilot should not have landed with a crosswind that exceeded the airplane's capabilities. The pilot reported no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's decision to land the airplane with a crosswind that exceeded the airplane's capabilities.

Findings

Personnel issues	Aircraft control - Pilot (Cause)
Environmental issues	Crosswind - Effect on operation

Factual Information

On June 1, 2013, about 1030 central daylight time, a Rockwell International S-2R airplane, N4946X, impacted terrain while landing at the Hamlin Municipal Airport (14F), Hamlin, Texas. The commercial pilot sustained minor injuries. The airplane sustained substantial damage. The airplane was registered to and operated by Tri-County Sprayers, Inc., under the provisions of 14 Code of Federal Regulations Part 137 as an aerial application flight. Visual meteorological conditions prevailed for the flight, which was operated without a flight plan. The flight originated from 14F at 0925.

According to the pilot, during the landing to runway 34 (3,200 feet by 50 feet, asphalt), the airplane encountered a "strong and gusty" crosswind from the right. The pilot attempted to perform a go around; however, the airplane groundlooped resulting in substantial damage to both wings, the empennage, and the firewall. The pilot reported that the wind was 090 degrees at 23 knots, gusting to 28 knots. The closest official weather station, located 28 miles to the southwest of 14F, recorded the wind as 100 degrees at 12 knots, gusting to 18 knots. The maximum crosswind was calculated to be 23 knots based upon the reported winds from the pilot. The pilot reported no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

History of Flight

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

Certificate:	Commercial	Age:	49
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without Waivers/Limitations	Last Medical Exam:	10/23/2012
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	01/03/2013
Flight Time:	738 hours (Total, all aircraft), 318 hours (Total, this make and model), 725 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	ROCKWELL INTERNATIONAL	Registration:	N4946X
Model/Series:	S-2R	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	5007R
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	04/27/2013, Annual	Certified Max Gross Wt.:	6000 lbs
Time Since Last Inspection:		Engines:	1 Turbo Prop
Airframe Total Time:	11956 Hours	Engine Manufacturer:	Honeywell
ELT:	Not installed	Engine Model/Series:	TPE-331-1-101
Registered Owner:	TRI COUNTY SPRAYERS INC	Rated Power:	600 hp
Operator:	TRI COUNTY SPRAYERS INC	Air Carrier Operating Certificate:	Agricultural Aircraft (137)

Meteorological Information and Flight Plan

Observation Facility, Elevation:	SWW, 2380 ft msl	Observation Time:	1035 CDT
Distance from Accident Site:	28 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	135°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Scattered / 4000 ft agl	Temperature/Dew Point:	26° C / 17° C
Lowest Ceiling:	Overcast / 5000 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	23 knots/ 18 knots, 90°	Visibility (RVR):	
Altimeter Setting:	29.96 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hamlin, TX (14F)	Type of Flight Plan Filed:	None
Destination:	Hamlin, TX (14F)	Type of Clearance:	None
Departure Time:	0925 CDT	Type of Airspace:	

Airport Information

Airport:	Hamlin Municipal Airport (14F)	Runway Surface Type:	Asphalt
Airport Elevation:	1753 ft	Runway Surface Condition:	Dry
Runway Used:	34	IFR Approach:	None
Runway Length/Width:	3200 ft / 50 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor		

Administrative Information

Investigator In Charge (IIC): Stuart E Bothwell Adopted Date: 02/10/2014

Additional Participating Persons:

Publish Date: 02/10/2014

Investigation Docket: <http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=87109>

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