



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Marietta, Pennsylvania	<b>Accident Number:</b>	ERA17LA288
<b>Date &amp; Time:</b>	August 19, 2017, 16:42 Local	<b>Registration:</b>	N7108
<b>Aircraft:</b>	Smith Aerostar601	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The commercial pilot stated that, during the takeoff roll, the airplane swerved to the right, and he corrected to the left and aborted the takeoff; however, the airplane departed the left side of the runway and collided with an embankment. At the time of the accident, a quartering tailwind was present. The pilot had no previous experience in the accident airplane make and model or in any other multiengine airplane equipped with engines capable of producing 300 horsepower. During a postaccident conversation with a mechanic, the pilot stated that the airplane "got away from him" during the attempted takeoff. Because a postaccident examination of the airplane did not reveal any evidence of a preimpact mechanical malfunction or failure of the airplane's flight controls or nosewheel steering system that would have precluded normal operation and the pilot did not have any previous experience operating this make and model of airplane, it is likely that the pilot lost directional control during takeoff with a quartering tailwind.

## 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 directional control during takeoff with a quartering tailwind. Contributing to the accident was the pilot's lack of experience in the accident airplane make and model.

## Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Directional control - Not attained/maintained
Environmental issues	Tailwind - Effect on operation
Personnel issues	Total experience w/ equipment - Pilot
Environmental issues	(general) - Contributed to outcome

# Factual Information

On August 19, 2017, about 1642 eastern daylight time, a Smith Aerostar 601P, N7108, was substantially damaged during takeoff from the Donegal Springs Airpark (N71), Marietta, Pennsylvania. The commercial pilot was not injured. The personal flight was conducted under the provisions of Title 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed and no flight plan was filed for the local flight.

According to the pilot he was hired by the owner of the airplane to reposition it from N71 to New Orleans, Louisiana. After completing a preflight inspection and engine run-up, he taxied the airplane to the active runway for takeoff. During the takeoff roll, the airplane swerved to the right and the pilot corrected to the left and aborted the takeoff; however, the airplane departed the left side of the runway and collided with an embankment.

According to a mechanic, who was hired by the airplane owner to conduct a pre-purchase inspection of the airplane; the pilot was planning to deliver the airplane and had not previously flown the make and model of the accident airplane. He reviewed the operation of the airplane's systems with the pilot, including a specific discussion of the steering and braking systems, and then left the airport. The mechanic later received a call from the pilot who informed him about the accident and during a subsequent conversation the pilot stated that the airplane "got away from him."

Examination of the airplane by a Federal Aviation administration (FAA) inspector revealed that the right wing was buckled, and the right main landing gear separated from the trunnion mount. Examination of the flight control system and the nose wheel steering system did not reveal any anomalies that would have precluded normal operation. During an interview with the FAA inspector, the pilot stated that he had never previously flown the accident airplane make and model, or any multiengine airplanes with engines capable of producing more than 300 horsepower each.

The weather conditions reported at the Harrisburg International Airport (MDT), Harrisburg, Pennsylvania, which was located about 10 miles north of the accident site, included wind from 230° at 5 knots, visibility 10 statute miles, ceiling few at 6,000 ft, temperature 31° C, dew point 19° C, and an altimeter setting of 29.85 inches of mercury. At the time of the accident the airplane was departing with a quartering tail wind.

## History of Flight

Takeoff	Loss of control on ground
Takeoff-rejected takeoff	Loss of control on ground (Defining event)
Takeoff-rejected takeoff	Runway excursion
Takeoff-rejected takeoff	Collision with terr/obj (non-CFIT)

## Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	28,Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane multi-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Unknown	<b>Last FAA Medical Exam:</b>	September 23, 2016
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated) 400 hours (Total, all aircraft), 1 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Smith	<b>Registration:</b>	N7108
<b>Model/Series:</b>	Aerostar601 P	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1967	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	61P-0405-142
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	April 13, 2017 Annual	<b>Certified Max Gross Wt.:</b>	6000 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	3957 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	C91A installed, not activated	<b>Engine Model/Series:</b>	IO540S1A5
<b>Registered Owner:</b>		<b>Rated Power:</b>	290 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MDT,309 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	20:56 Local	Direction from Accident Site:	305°
Lowest Cloud Condition:	Few / 6000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.85 inches Hg	Temperature/Dew Point:	31 °C / 19 °C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Marietta, PA (N71 )	Type of Flight Plan Filed:	None
Destination:	Marietta, PA (N71 )	Type of Clearance:	None
Departure Time:	16:42 Local	Type of Airspace:	Class G

## Airport Information

Airport:	DONEGAL SPRINGS AIRPARK N71	Runway Surface Type:	Asphalt
Airport Elevation:	458 ft msl	Runway Surface Condition:	Dry
Runway Used:	10	IFR Approach:	None
Runway Length/Width:	3250 ft / 50 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	40.092224, -76.574447(est)

## Administrative Information

Investigator In Charge (IIC):	Alleyne, Eric
Additional Participating Persons:	Richard J Harowicz; FAA/FSO; New Cumberland, PA
Original Publish Date:	November 6, 2019
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=95871">https://data.nts.gov/Docket?ProjectID=95871</a>

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).