



# Aviation Investigation Final Report

---

<b>Location:</b>	Las Vegas, Nevada	<b>Accident Number:</b>	WPR14CA387
<b>Date &amp; Time:</b>	September 21, 2014, 15:00 Local	<b>Registration:</b>	N15RJ
<b>Aircraft:</b>	Beech E33A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Ground collision	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

---

## Analysis

The owner/pilot had recently purchased the high performance, complex airplane, and he wanted to have another pilot accompany him while he familiarized himself with the airplane's flight and operational characteristics. He contacted a flight instructor, who was referred to him by another individual, to fulfill that role. Based on discussions with the owner, and the owner's significant number of flight hours, the instructor planned to perform in the role of safety pilot, as opposed to providing instruction. The airplane was parked in a row of aircraft that was separated from another row of aircraft by a strip of pavement about 60 feet wide. The airplane pitch and roll flight controls were of the "throwover" design, where there was only one yoke, which could be shifted to either the left or right cockpit position. The right cockpit position was not equipped with brake pedals. The owner took the left seat, while the safety pilot took the right seat. The owner's preflight and pre-start procedures all seemed normal and uneventful, and did not give the safety pilot any reason to more closely observe or doubt the owner's abilities. According to the safety pilot, the engine started "very aggressively," increased to a high rpm, and the airplane immediately began moving rapidly forward out of its parking spot. Once the safety pilot realized that the airplane was accelerating towards the row of airplanes on the other side of the pavement, he moved his left foot over and tried to apply the brakes, in part by stepping on the owner's right foot. After the airplane had traveled about "10 to 15 feet," the safety pilot also fully retarded the mixture control to cut the engine. The airplane continued across the ramp, and struck a parked, unoccupied airplane. The parked airplane received substantial damage to its fuselage and wing structure. The left wing of the accident airplane was substantially damaged. The safety pilot recalled that prior to and during the engine start, the throttle control appeared to be in a sufficiently retarded position for engine start, but the owner reported that he had positioned the throttle control inappropriately for engine start. Postaccident examination of the throttle control system did not reveal any mechanical anomalies 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 incorrect engine start procedures, which included improper throttle position and failure to keep the brakes applied, which resulted in a loss of directional control and subsequent collision with a parked airplane.

### Findings

<b>Personnel issues</b>	Use of equip/system - Pilot
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Environmental issues</b>	Aircraft - Not specified

## Factual Information

### History of Flight

<b>Standing-engine(s) start-up</b>	Ground collision (Defining event)
<b>Standing-engine(s) start-up</b>	Airport occurrence
<b>Standing-engine(s) operating</b>	Attempted remediation/recovery
<b>Standing-engine(s) operating</b>	Loss of control on ground

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	88
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	June 5, 2014
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	July 25, 2014
<b>Flight Time:</b>	(Estimated) 4800 hours (Total, all aircraft), 4000 hours (Total, this make and model)		

### Other flight crew Information

<b>Certificate:</b>	Flight instructor	<b>Age:</b>	24
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Unknown	<b>Last FAA Medical Exam:</b>	June 17, 2013
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	March 25, 2014
<b>Flight Time:</b>	670 hours (Total, all aircraft), 0 hours (Total, this make and model), 670 hours (Pilot In Command, all aircraft), 148 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N15RJ
<b>Model/Series:</b>	E33A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1968	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	CE-199
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	July 1, 2014 Annual	<b>Certified Max Gross Wt.:</b>	3300 lbs
<b>Time Since Last Inspection:</b>	20 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3690 Hrs at time of accident	<b>Engine Manufacturer:</b>	CONT MOTOR
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO 520 SERIES
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	285 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Las Vegas, NV (KVGT)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Las Vegas, NV (KVGT)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	North Las Vegas KVG T	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	2205 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	36.210556,-115.194442(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Huhn, Michael
<b>Additional Participating Persons:</b>	Mark Hutton; FAA; Las Vegas, NV
<b>Original Publish Date:</b>	January 12, 2015
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=90153">https://data.nts.gov/Docket?ProjectID=90153</a>

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](#).