Aviation Investigation Final Report

Location:	Las Vegas, Nevada	**Accident Number:**	WPR14CA387
Date & Time:	September 21, 2014, 15:00 Local	**Registration:**	N15RJ
Aircraft:	Beech E33A	**Aircraft Damage:**	Substantial
Defining Event:	Ground collision	**Injuries:**	2 None
Flight Conducted Under:	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

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

Factual Information

History of Flight

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

Pilot Information

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

Other flight crew Information

Certificate:	Flight instructor	**Age:**	24
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	Unknown
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 1 Unknown	**Last FAA Medical Exam:**	June 17, 2013
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	March 25, 2014
Flight Time:	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

Aircraft Make:	Beech	**Registration:**	N15RJ
Model/Series:	E33A	**Aircraft Category:**	Airplane
Year of Manufacture:	1968	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	CE-199
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	July 1, 2014 Annual	**Certified Max Gross Wt.:**	3300 lbs
Time Since Last Inspection:	20 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	3690 Hrs at time of accident	**Engine Manufacturer:**	CONT MOTOR
ELT:	Installed, not activated	**Engine Model/Series:**	IO 520 SERIES
Registered Owner:	On file	**Rated Power:**	285 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:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Las Vegas, NV (KVGT)	**Type of Flight Plan Filed:**	None
Destination:	Las Vegas, NV (KVGT)	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	

Airport Information

Airport:	North Las Vegas KVGT	**Runway Surface Type:**	
Airport Elevation:	2205 ft msl	**Runway Surface Condition:**	Dry
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	None

Wreckage and Impact Information

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

Administrative Information

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