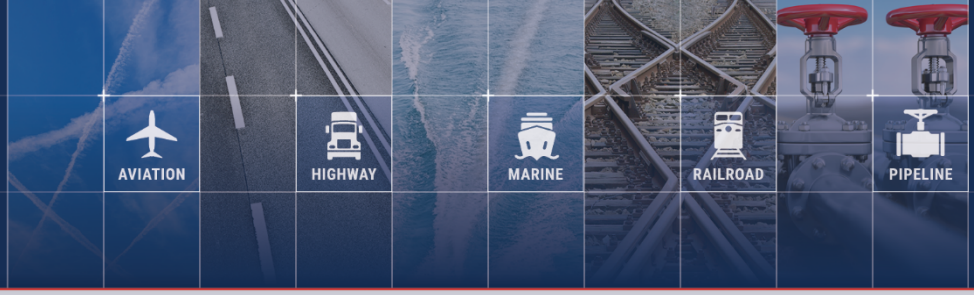

Aviation Investigation Final Report

Location:	Houston, Texas	**Accident Number:**	CEN14LA458
Date & Time:	August 26, 2014, 18:45 Local	**Registration:**	N8176M
Aircraft:	Beech A36	**Aircraft Damage:**	Substantial
Defining Event:	Loss of control in flight	**Injuries:**	4 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot said that, shortly after takeoff, the airplane seemed to have a "performance/power loss" and that it was not climbing. He lowered the airplane's nose in an attempt to gain airspeed and retracted the landing gear. The airplane immediately descended back onto the runway, slid on its belly, and then struck several approach lights. A Federal Aviation Administration inspector witnessed the accident and said that, after the airplane departed, it entered a nose-high, exaggerated cross-control condition with the airplane's tail only about 10 ft above the runway. The inspector momentarily lost sight of the airplane, but, when he saw it again, it had landed on its belly and was sliding off the runway. According to the Pilot's Operating Handbook, the landing gear should only be retracted on takeoff once a positive climb rate has been established. No preimpact mechanical deficiencies were identified 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 failure to maintain airplane control during takeoff. Contributing to the severity of the accident was the pilot's retraction of the landing gear before establishing a positive climb rate, which resulted in a gear-up landing.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Airspeed - Not attained/maintained
Aircraft	Altitude - Not attained/maintained
Environmental issues	Runway/taxi/approach light - Contributed to outcome
Personnel issues	Use of equip/system - Pilot
Personnel issues	Incorrect action performance - Pilot

Factual Information

History of Flight

Takeoff	Loss of control in flight (Defining event)

On August 26, 2014, at 1800 central daylight time, N8176M, a Beechcraft A-36 single-engine airplane, sustained substantial damage on takeoff from West Houston Airport (IWS), Houston, Texas. The private pilot and the three passengers were not injured. An instrument flight rules flight plan was filed for the personal flight that was destined for Monroe, Louisiana. Visual meteorological conditions prevailed for the personal flight that was conducted under the provisions of 14 Code of Federal Aviation Regulations Part 91.

The pilot stated that he conducted a preflight inspection and engine run-up before takeoff and everything was normal. He then departed and rotated at 80 knots and the airplane began to climb. The pilot said, "A couple of seconds into the climb, I seemed to have a performance/power loss - no ability to climb. I leveled the nose in an attempt to gain airspeed - then slightly down. I engaged the landing gear up-switch, the plane began to descend." The airplane then landed back on its belly and slid off the runway and struck the runway's precision approach path indicator (PAPI) lights.

A Federal Aviation Administration (FAA) inspector was at the airport and witnessed the accident. He said he watched the airplane depart and cross in front of him from left to right "with a nose high attitude and in an exaggerated cross control condition." The inspector estimated the tail of the airplane was about 10 feet above the surface of the runway. The airplane disappeared from the inspector's view for a brief second and the next time he saw the airplane it was sliding on its belly. The inspector later examined the airplane and reported that it had sustained substantial damage to the fuselage, empennage and firewall. The three bladed propeller was also damaged. One blade was missing approximately 4 inches from the tip and bent backwards in an arc covering approximately 2/3's of the blade. The other two blades where intact and were both bent backwards over 2/3 of the blade. No mechanical deficiencies were identified that would have precluded normal operation of the airplane and engine at the time of the accident.

According to the Beech Bonanza A-36 Pilot Operating Handbook (POH), Section IV, TAKEOFF checklist, the landing gear is only to be retracted once a positive rate-of-climb is established.

The pilot held a private pilot certificate for airplane single-engine land. He reported a total of 928 hours, of which, 149 hours were in the same make/model as the accident airplane.

Pilot Information

Certificate:	Private	**Age:**	59
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Unknown
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:**	July 22, 2014
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	May 22, 2014
Flight Time:	928 hours (Total, all aircraft), 149 hours (Total, this make and model), 46 hours (Last 90 days, all aircraft), 19 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N8176M
Model/Series:	A36 UNDESIGNAT	**Aircraft Category:**	Airplane
Year of Manufacture:	1991	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	E-2602
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	July 30, 2014 Annual	**Certified Max Gross Wt.:**	3650 lbs
Time Since Last Inspection:	10 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	4107 Hrs as of last inspection	**Engine Manufacturer:**	Teledyne
ELT:	Installed, not activated	**Engine Model/Series:**	IO-550-B
Registered Owner:	N8176M LLC	**Rated Power:**	300 Horsepower
Operator:	N8176M LLC	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	IAH,96 ft msl	**Distance from Accident Site:**	19 Nautical Miles
Observation Time:	17:53 Local	**Direction from Accident Site:**	240°
Lowest Cloud Condition:	Scattered / 5500 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	Broken / 25000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	9 knots / 18 knots	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:	70°	**Turbulence Severity Forecast/Actual:**	/ N/A
Altimeter Setting:	29.92 inches Hg	**Temperature/Dew Point:**	34°C / 21°C
Precipitation and Obscuration:			
Departure Point:	Houston, TX (IWS)	**Type of Flight Plan Filed:**	IFR
Destination:	MONROE, LA (MLU)	**Type of Clearance:**	IFR
Departure Time:	18:00 Local	**Type of Airspace:**	Unknown

Airport Information

Airport:	West Houston IWS	**Runway Surface Type:**	Asphalt
Airport Elevation:	111 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	15	**IFR Approach:**	None
Runway Length/Width:	3953 ft / 75 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:	3 Minor	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	4 Minor	**Latitude, Longitude:**	29.77062,-95.679115(est)

Administrative Information

Investigator In Charge (IIC):	Yeager, Leah
Additional Participating Persons:	
Original Publish Date:	March 26, 2015
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=89961