Aviation Investigation Final Report

Location:	OLATHE, Kansas	**Accident Number:**	CHI00LA069
Date & Time:	February 12, 2000, 13:23 Local	**Registration:**	N711VS
Aircraft:	Beech A36	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The aircraft impacted terrain approximately 900 feet from the end of the runway during a simulated engine failure. The pilot had just finished a flight review when he requested to simulate an engine failure in the pattern with the instructor. The pilot said, 'I pulled the power back to idle after we passed the end of runway 18. As I was turning to runway 18 I...lowered the landing gear...When we both came to the conclusion that we were not going to be able to make the runway without power, I advanced the throttle. The engine coughed a couple of times and never developed power.' A Federal Aviation Administration inspector interviewed the instructor. When asked if he saw the pilot pull the propeller control full aft, he responded, 'Yes.' When asked if he saw the pilot return it to full forward at any time, he responded 'No.' The pilot maneuvered the aircraft away from a road and runway approach lights ultimately coming to rest in a plowed farm field. A post accident functional test of the engine showed that the engine produced power at idle and low power settings.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilots improper use of powerplant controls. A factor in the accident was the plowed farm field.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: APPROACH

Findings
1. (C) POWERPLANT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING

Findings
2. (F) TERRAIN CONDITION - PLOWED/FURROWED

Factual Information

On February 12, 2000, at 1323 central standard time, a Beech A36, N711VS, piloted by a commercial pilot, sustained substantial damage during a forced landing near Olathe, Kansas. The 14 CFR Part 91 instructional flight was operating in visual meteorological conditions. The pilot had filed an instrument flight rules flight plan that was subsequently cancelled. The pilot and the certified flight instructor reported no injuries. The local flight originated from the Johnson County Executive airport, Olathe, Kansas. The pilot reported that the flight originated at 1310.

The pilot, in a written statement, stated that he had just completed the BFR when he requested to practice a simulated engine failure with the instructor. The pilot said, "I pulled the power back to idle after we passed the end of runway 18. As I was turning to runway 18, I slowed the aircraft to approximately 80 knots. [The instructor] mentioned that he thought the plane would descend too rapidly from where we started to make it. I thought we had a good chance based on my experience with the plane and went ahead and lowered the landing gear, thinking that I would want it down even if I needed to apply power to make the runway. The wind was reported at about 6 knots. When we both came to the conclusion that we were not going to be able to make the runway without power, I advanced the throttle. The engine coughed a couple of times and never developed power." The aircraft came to rest in a plowed farm field.

During a post accident examination, performed by the Federal Aviation Administration, the throttle was found full forward, the mixture was found full forward, and the propeller control was found full aft. During an interview with a FAA inspector, the instructor was asked about the position of the powerplant controls. When asked if he touched or moved any of the controls, he replied "No." When asked if he saw the pilot pull the propeller control aft, he responded "Yes." When asked if he saw the pilot return it to full forward any time after that, he replied "No." According to FAA Advisory Circular 61-23C, "Pilot's Handbook of Aeronautical Knowledge", "When power settings are being decreased, reduce manifold pressure before RPM. When power settings are being increased, reverse the order - increase RPM first, then manifold pressure."

According to FAA Inspector statements, post flight examinations of the aircraft revealed, "both fuel tanks were indicating about 3/4 full. All three propeller blades were bent." After the accident a functional engine test was performed. According to the FAA inspector who witnessed the test "the engine was started and run for a short period of time; long enough to perform a magneto check at idle and 1400 RPM. The magneto check was normal in both instances. The engine idled at 700 RPM with the throttle pulled all the way out to the idle position. There was no indication of excessively lean or rich mixture at idle that would contribute to the engine not idling properly."

Pilot Information

Certificate:	Commercial	**Age:**	46,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	February 7, 2000
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	1492 hours (Total, all aircraft), 500 hours (Total, this make and model), 1350 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N711VS
Model/Series:	A36 A36	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Utility	**Serial Number:**	E756
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	September 24, 1999 Annual	**Certified Max Gross Wt.:**	3600 lbs
Time Since Last Inspection:	22 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	1813 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	IO-520
Registered Owner:	JEFFREY J. MILNE	**Rated Power:**	285 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	OJC ,1096 ft msl	**Distance from Accident Site:**	
Observation Time:	12:53 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	3 miles
Lowest Ceiling:	Overcast / 1200 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	170°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	1°C / -3°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:	(OJC)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	VFR
Departure Time:	13:10 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	JOHNSON COUNTY EXECUTIVE OJC	**Runway Surface Type:**	Concrete
Airport Elevation:	1096 ft msl	**Runway Surface Condition:**	
Runway Used:	18	**IFR Approach:**	None
Runway Length/Width:	4099 ft / 75 ft	**VFR Approach/Landing:**	Simulated forced landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	ALFRED RAGER; KANSAS CITY , MO
Original Publish Date:	March 9, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=48622