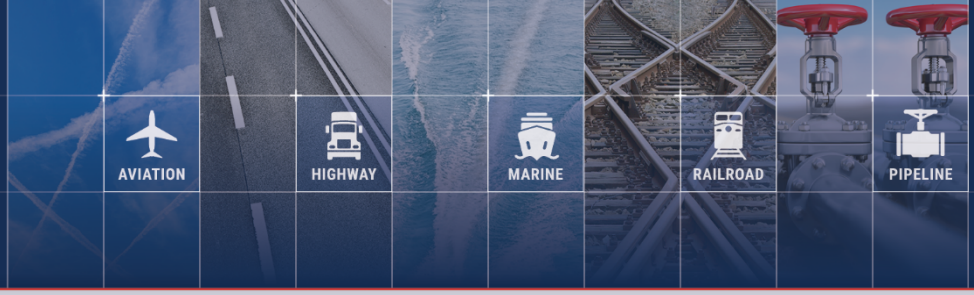

Aviation Investigation Final Report

Location:	New Roads, Louisiana	**Accident Number:**	DFW05FA170
Date & Time:	June 23, 2005, 19:00 Local	**Registration:**	N62BL
Aircraft:	Beech E90	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	5 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

A 4,000-hour multi-engine private pilot lost control of the airplane while performing a go-around maneuver. The airplane subsequently pitched up, stalled and impacted a corn field in a nose low attitude where a post-impact fire ensued. Communications data and radar data compatible with the Radar Audio Playback Terminal Operations Recording (RAPTOR) program was used to plot the airplane's flight path on a topographical map. The plots appeared to indicate the airplane was on final, left of the extended runway 36 centerline. Detailed post-accident examinations of the airframe, engines and propellers were conducted and no anomalies were noted.

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 airspeed and subsequent loss of control during a go-around maneuver.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: GO-AROUND (VFR)

Findings
1. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
2. (C) STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
3. TERRAIN CONDITION - GROUND

Factual Information

HISTORY OF FLIGHT

On June 23, 2005, approximately 1900 central daylight time, a twin-engine turbo-prop Beech E90 airplane, N62BL, registered to and operated by a private individual, was destroyed following a loss of control while attempting a go-around at the False River Regional Airport (HZR), near New Roads, Louisiana. The instrument rated private pilot and four passengers sustained fatal injuries. Visual meteorological conditions prevailed and an instrument flight rules (IFR) flight plan was filed for the 14 Code of Federal Regulations Part 91 personal flight. The 310-nautical mile cross-country flight originated from the Jonesboro Municipal Airport (JBR), near Jonesboro, Arkansas, approximately 1700 and was destined for HZR.

Three witnesses in the vicinity of the accident site, who either heard or observed the airplane prior to impact, where interviewed by or provided, written statements to the NTSB investigator-in-charge. Summaries of their statements are listed below:

The first witness was traveling eastbound along State Highway 1, which runs perpendicular to and approximately 2,000 feet south of the approach end of Runway 36 at HZR. The witness reported observing an airplane flying over the highway towards the airport. The airplane "caught his eye" because the "airplane was coming in very fast." The witness slowed his vehicle to see if the airplane had landed successfully, when he "saw the airplane come up again, turning to the left." The witness reported the airplane was at about midfield, "real low", and the wings were "straight up and down." The airplane subsequently, "fell straight into the ground and exploded on impact."

The second witness, an airline transport rated pilot, was located approximately 2 1/2 miles southeast of the airport when he observed the airplane on final approach to Runway 36 at HZR. The witness stated that, "the airplane appeared to be in a normal position and configuration to land on the north runway." The witness further reported there was nothing unusual about the airplane, and both engines "appeared to be running."

The third witness was sitting on his front porch approximately 1,230 yards east of the airport, when he heard the airplane approaching the runway. The witness reported that he heard the "motor cutting out", and it appeared that the "[air]plane hit the runway and got back in the air." The witness further reported that the airplane veered to the left over a hangar, the airplanes wings became perpendicular to the hangar, and subsequently rolled inverted. He then observed the airplane in a nose down attitude where it then "exploded" on impact.

ATC/RADAR INFORMATION

Communications data and radar data compatible with the Radar Audio Playback Terminal Operations Recording (RAPTOR) program was obtained from the Baton Rouge Radar East Approach Control near Baton Rouge, Louisiana.

The radar targets attributable to N62BL were identified by a transponder code of 1532. Targets began at 23:43:42 and ended at 23:59:03 Coordinated Universal Time (UTC). The distance covered was approximately 35 nautical miles. Initial radar data indicated N62BL had tracked a southerly course at 11,000 feet mean sea level (msl) and remained at that altitude until 23:45:48 when the pilot was cleared by ATC to descend and maintain 3,000 feet msl. At 23:50:45 the pilot was then cleared to descend and maintain 1,600 feet msl. At 23:54:44 the pilot reported he was turning to a heading of 140 degrees; the controller responded by stating that the airport would be at the pilot's "12 o'clock, 6 miles." The pilot then stated he had the airport in sight and canceled his IFR flight plan. The controller then responded by stating, "radar service terminated, squawk VFR, change to advisory frequency approved." The pilot acknowledged the clearance and no further communications were recorded.

At 23:55:02, approximately 6 nautical miles from HZR, the transponder code for N62BL changed from 1532 to 1200 (VFR squawk code). The following is an excerpt of the radar data plots for the pilot's turn from base to final on the approach sequence to HZR. Utilizing the data points, when plotted on a topographical map; the aircraft appeared to be on final, left of the extended runway 36 centerline.

Time (UTC)	ALT (msl)	Heading	Knots	LAT	LON
23:58:21	722	061	136	N 30:41.10.77	W 91:29.19.12
23:58:25	516	042	135	N 30:41.20.12	W 91:29.12.99
23:58:30	531	013	151	N 30:41.33.21	W 91:21.10.14
23:58:35	448	020	143	N 30:41.36.51	W 91:29.02.97
23:58:40	346	016	142	N 30:41.50.75	W 91:28.58.66
23:58:44	304	005	135	N 30:41.53.89	W 91:29.01.97
23:58:49	292	359	129	N 30:42.04.62	W 91:28.59.96
23:58:54	247	354	122	N 30:42.10.67	W 91:29.01.00
23:58:58	254	354	114	N 30:42.19.66	W 91:29.00.49
23:59:03	263	354	107	N 30:42.25.65	W 91:29.00.14

Using a hand held Global Positioning System (GPS) unit, the accident site coordinates were 30 degrees 43.01 minutes north latitude and 091 degrees 29.00 minutes west longitude, at an elevation of 49 feet mean sea level (msl). The coordinates for the runway 36 centerline touchdown zone is 30 degrees 42.43 minutes north latitude and 091 degrees 28.45 minutes west longitude. The coordinates for runway 36 centerline abeam the accident site is 30 degrees 43.01 minutes north latitude and 091 degrees 29.00 west longitude.

PERSONNEL INFORMATION

The pilot held a valid FAA private pilot certificate with airplane single-engine land (ASEL), airplane multi-engine land (AMEL), and instrument airplane ratings. His most recent third-class medical certificate was issued on March 11, 2004, with a restriction to wear corrective lenses for near and distant vision. The pilot reported 4,000 hours total flight time on his last medical certificate application, dated March 11, 2004.

According to available records, dated December 1, 2004, the pilot had 2,993 total hours flown in multi-engine airplanes, of which 1,790 hours were flown in the accident airplane. Persons familiar with the pilot reported that he regularly flew into False River Regional Airport, and that he had owned the accident airplane for at least 12 years. According to records, the pilot's last biennial flight review was completed in April 2004.

Records showed that the pilot had completed FAA approved recurrent ground/flight training courses to serve as pilot-in-command in King Air E90 series aircraft on March 18, 2002, March 19, 2003, and April 12, 2004 respectively. All of the competency training courses were accomplished at M&M Aviation Services, near North Little Rock, Arkansas.

According to information provided by the initial emergency responders, the pilot's body was found adjacent to the left front area of the cockpit within the wreckage.

Note: According to records provided by the FAA, there was another rated airman on-board the airplane at the time of the accident. The airman held a valid private pilot certificate with ASEL, AMEL, and instrument airplane ratings, and a current medical certificate. Additionally, he previously owned a King Air. According to information provided by the initial emergency responders, this airman was found in the vicinity of the right front cockpit area within the wreckage. A person who was located at Jonesboro witnessed the pilot occupy the left cockpit seat and the other rated pilot occupy the right cockpit seat prior to departure.

Conclusive evidence of which airman was in-control of the airplane during the approach or at the time of the accident could not be determined.

Forensic examination of the accident pilot was conducted by the Earl K. Long Medical Center, Department of Pathology near Baton Rouge, Louisiana.

Toxicological Testing was conducted by the FAA Toxicology Accident Research Laboratory, near Oklahoma City, Oklahoma.

AIRCRAFT INFORMATION

The pilot acquired the 1978 model E90, Serial Number LW-272, aircraft on December 21, 1993, at an airframe total time of 6,481.7 hours. According to available airframe records, the airframe had a total time of 7,166.4 hours as of April 15, 2005, which was the last recorded maintenance activity on the airplane.

METEOROLOGICAL INFORMATION

False River Airport did not have a weather reporting facility. According to reports from several residents, the weather was partly cloudy, visibility about 10 miles with light variable breeze. Visual meteorological conditions prevailed throughout the area.

The nearest weather reporting facility was located at the Baton Rouge Metropolitan Airport (BTR), near Baton Rouge, Louisiana, approximately 21 miles southeast of HZR. At 1853, the automated surface observing system (ASOS) at BTR reported wind from 080 degrees at 06 knots, visibility 9 statute miles, few clouds at 3,500 feet, temperature 88 degrees Fahrenheit, dew point 67 degrees Fahrenheit, and an altimeter setting of 30.02 inches of Mercury.

AIRPORT INFORMATION

The False River Regional Airport (HZR), field elevation 39 feet, is located two miles northwest of New Roads, Louisiana. HZR is a non-towered airport utilizing a Unicom frequency. Runway 18/36, a 5,002-feet long by 75-feet wide asphalt runway was resealed, remarked and reopened by a NOTAM at 0600 on June 20, 2005, an inspection of the runway by NTSB and FAA investigators did not reveal any surface damage resulting from a tire or propeller matching the signature of a model E90 aircraft. Airport lighting consisted of a white-green beacon; pilot controlled Medium Intensity Runway Lights, a two light Precision Approach Path Indicator and Runway End Identifier Lights. Instrument approach procedures: LOC runway 36, VOR/DME-A, NDB or GPS runway 36, GPS runway 18.

WRECKAGE AND IMPACT INFORMATION

The main wreckage was located in a sugar cane field approximately 1,600 feet, on a bearing of 280 degrees from the midfield runway centerline at HZR. Ground impact marks indicate that the airplane impacted terrain at an angle of approximately 80 degrees nose down on a magnetic heading of approximately 060 degrees. The airplane came to rest in the upright position on a heading of 040 degrees, where a post-impact fire ensued.

The right wing Plexiglas navigation light cover was located just forward of the right wing tip. There was also an impact mark in the ground that appeared to be from the leading edge of the right wing; just forward of where the right wing came to rest. The leading edge of the right wing was crushed aft along its entire length. The post impact fire consumed approximately 2/3 of the wing. The post impact fire consumed the right aileron, except for the outboard tip. An ash pattern was evident on the ground matching the profile of the aileron. The right outboard flap remained attached to the wing, and the post impact fire consumed the outboard end. The right inboard flap remained attached to the wing. The inboard flap exhibited some heat damage, but remained intact.

The left wing remained intact from the wing attachment fittings outboard. The leading edge of the wing exhibited some small dents in the leading edge, but was not crushed aft like the right

wing. The post impact fire consumed the center section of the wing, from the wing attachment fittings inboard. The left upper main spar attachment fitting exhibited a crack along the top, parallel to the attachment bolt. The left aileron, along with the aileron trim tab, remained attached to the wing. The left outboard flap remained attached to the wing. The left inboard flap remained attached to the wing by its outboard hinge. The flap exhibited both impact and post impact fire damage.

The forward portion of the fuselage exhibited an extensive amount of impact damage, and was crushed aft. Impact forces and the post impact fire destroyed the cockpit. The post impact fire consumed a majority of the fuselage from just aft of the airstair door forward. The post impact fire consumed the upper half of the airstair door, from the door handle up. The door was found in the closed position.

The empennage remained attached to the aft fuselage and was relatively undamaged. Both horizontal stabilizers remained intact with both elevators still attached. Both elevator trim tabs remained attached to the elevators. The vertical stabilizer remained intact with the rudder attached. The rudder trim tab remained attached to the rudder.

Flight controls

The control column assembly was located in the cockpit remains. The pilot's side control wheel was still attached to the control column tube assembly, but both handgrips had separated. The co-pilot's control wheel was not attached to the control column tube assembly, and was not located. The aileron chain remained attached to both of the sprockets on the control column assembly. Both forward aileron cables remained attached to the aileron chains, and were intact as they traveled aft to the center section of the wing. The aileron control quadrant in the center section of the wing was not located. A portion of the aileron control quadrant was still attached to one of the forward aileron control cables. The other forward aileron control cable separated in the center section area. Its terminating end was not located. The separation was clean with no broomstrawing or fraying evident. The control cable exhibited thermal damage from the post impact fire where the separation occurred. The forward left aileron control cable, coming from the aileron control quadrant outboard, separated in the center section area. The separation was clean and did not exhibit any broomstrawing or fraying. Its terminating end, where it connects to the aileron quadrant, was not located. The cable exhibited some thermal damage where the separation occurred. The left rear cable remained intact outboard to the aileron bellcrank. Both left aileron cables remained attached to the left aileron bellcrank. The Left aileron pushrod remained attached to both the bellcrank and the aileron. The aileron trim actuator measured approximately 1.5 inches, which corresponds to 15° up tab, which is its full extent of its up travel. Both left flap actuators were found fully extended, indicating the flaps were in the full down position. Both right aileron cables remained intact outboard to where they attached to the right aileron bellcrank. The right aileron pushrod remained attached to both the aileron bellcrank and the aileron. The right outboard flap actuator was fully extended, indicating the flaps were in the full down position. The right inboard flap actuator separated from the flap, and its housing

was consumed by the post impact fire. Because of the fire damage, no determination could be made as to flap position.

The forward portion of the elevator pushrod remained attached to the base of the control column. The pushrod tube was consumed by the post impact fire. The aft end of the forward elevator pushrod, in addition to the forward elevator bellcrank were not located. The forward terminating end of one of the elevator control cables was located in a mass of solidified molten material. The other forward terminating end was not located. The cable had separated in the cockpit area. The separation point was clean with no broomstrawing or fraying noted. The cable exhibited thermal damage in the area of the separation. The terminating end was not located. The elevator cables were traced aft, and were intact to the aft elevator bellcrank. Both aft elevator pushrods remained attached to the aft bellcrank and both elevator torque fittings. Both elevator trim actuators remained intact, and both elevator trim actuators measured approximately 0.8 inches, which corresponds to 8° down tab (up trim).

The forward terminating ends of both rudder cables were located in the cockpit remains. The forward elevator bellcrank was consumed by the post impact fire. The right rudder cable separated in the center section area. The separation point was clean with no broomstrawing or fraying evident. The left rudder cable remained intact. Both rudder cables remained attached to the rear rudder bellcrank. The rudder trim actuator measured 8.87 inches, which corresponds to its neutral position.

Seats and restraints

A majority of the seats were consumed by the post impact fire, leaving the steel seat frames. The pilot and co-pilot seats remained in the cockpit area. The seat track rails were consumed by the post impact fire. The pilot and co-pilot lap belt buckles were located in the cockpit area, and were found engaged. The lap belt webbing was consumed by the post impact fire. The cabin seats remained attached to their seat track rails. The cabin was configured with four seats in a club configuration

Landing Gear

The right main landing gear remained attached to the remains of the right wing, and exhibited fire damage. The right landing gear drag brace was found in the down and locked position. The left main landing gear remained attached to the left wing, and sustained damage from the post impact fire. The left drag brace was found in the down and locked position. The nose landing gear was located in the remains of the forward fuselage. A determination of its preimpact position could not be determined. The cockpit gear selector handle was located loose in the cockpit area, and was in the UP position.

Engines and Propellers

The right engine separated from the airplane, and was found standing vertically, with its

forward end, including the propeller, imbedded in the ground. The reduction gear box and rear accessory section was consumed by the post impact fire. Several turbine blades were found loose in the bottom of the exhaust case, and their tips exhibited light rub marks.

The left engine remained partially attached to the airplane and was found lying just forward of the left wing. The engine did sustain some damage from the post impact fire, but remained relatively intact. Several turbine blades were found loose in the bottom of the exhaust case, and their tips exhibited light rub marks.

The airplane was equipped with four-bladed McCauley propellers (model number 4HFR34C762/94LMA-4, serial numbers 880191 and 880193). The right propeller remained attached to the engine. The left propeller separated from the engine, and was located a few feet forward of the left engine. All four propeller blades remained attached to the hub on both propellers. The post impact fire consumed one blade tip from the left propeller. Both propellers exhibited some blade twisting toward low pitch. Damage signatures on both propellers were symmetrical.

TESTS AND RESEARCH

A teardown inspection of the left and right propellers was conducted on October 17 and 18, 2005, by representatives from McCauley Propeller Systems. The inspection was observed by a representative from the Raytheon Aircraft Company and was under the supervision of an NTSB investigator. The following observations were noted: all propeller damage was the type consistent with impact forces; with gross deflections, and was of sudden failure type. The type and extent of damage for both propellers including blade bending and twisting is indicative of impact with power higher than idle power. There were no indications of any type of fatigue failure. The type and direction of the blade bending indicates the propellers were not feathered at impact. The internal pitch change beta spring coil marks found on the blade butts of each propeller indicate a blade angle at impact of approximately 14.0 degrees.

The wreckage was recovered to the facilities of Air Salvage of Dallas, near Lancaster, Texas.

Pilot Information

Certificate:	Private	**Age:**	61,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:**	Yes
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	March 1, 2004
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	April 1, 2004
Flight Time:	4000 hours (Total, all aircraft), 1790 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N62BL
Model/Series:	E90	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	LW-272
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	April 1, 2005 Annual	**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	2 Turbo prop
Airframe Total Time:	7166 Hrs as of last inspection	**Engine Manufacturer:**	Pratt & Whitney Canada
ELT:	Installed, not activated	**Engine Model/Series:**	PT6A-28
Registered Owner:	Robert J Landry	**Rated Power:**	1050 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	BTR	**Distance from Accident Site:**	20 Nautical Miles
Observation Time:	18:53 Local	**Direction from Accident Site:**	140°
Lowest Cloud Condition:	Few / 3500 ft AGL	**Visibility**	9 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots / 0 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	80°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.02 inches Hg	**Temperature/Dew Point:**	31°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Jonesboro, AR (KJBR)	**Type of Flight Plan Filed:**	IFR
Destination:	New Roads, LA (KHZR)	**Type of Clearance:**	IFR;Traffic advisory
Departure Time:	17:00 Local	**Type of Airspace:**	

Airport Information

Airport:	False River Regional Airport HZR	**Runway Surface Type:**	Asphalt
Airport Elevation:	39 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	36	**IFR Approach:**	Visual
Runway Length/Width:	5002 ft / 75 ft	**VFR Approach/Landing:**	Go around;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	4 Fatal	**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	5 Fatal	**Latitude, Longitude:**	30.667222,-91.483329

Administrative Information

Investigator In Charge (IIC):	Lemishko, Alexander
Additional Participating Persons:	Mike Chapman; Baton Rouge Flight Standards District Office; Baton Rouge, LA Robert Hardwick; FAA Flight Standards District Office; Baton Rouge, LA Craig Hatch; National Transportation Safety Board; Arlington, TX Paul Sledzick; National Transportation Safety Board; Washington, DC Robert Ramey; Raytheon; Wichita, KS Mike Gibbons; Raytheon; Wichita, KS Tom Berthe; Pratt & Whitney Canada; South Burlington, VT Yvonne Chenevert; False River Airport Manager; New Roads, LA Anthony Plauche; Captain - Point Coupee Parish Sherrifs Office; New Roads, LA
Original Publish Date:	July 31, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=61788