



National Transportation Safety Board Aviation Accident Final Report

Location:	CAMPBELLSVILLE, KY	Accident Number:	IAD96LA102
Date & Time:	06/30/1996, 1240 EDT	Registration:	N3870C
Aircraft:	Beech 65	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	3 Serious, 1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

According to an FAA inspector, the airplane '...was unable to get airborne...' during the takeoff roll. He stated that after travelling the full length of the 4,997-foot runway, the airplane ran off the departure end of runway 5 and continued approximately 2,257 feet through an open field, a fence, a corn field and into a depression where it impacted terrain and came to rest. The pilot reported that during the takeoff roll he discovered that he had not removed the gust lock from the control column and that his attempts to remove it were unsuccessful. The pilot stated that the aircraft '...went off the end of the runway through a fence and impacted an earthen berm that collapsed the gear [and] bladestrikes that stopped the engines.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate preflight preparation, his failure to remove the control lock, and his failure to abort the takeoff.

Findings

Occurrence #1: OVERRUN

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
 2. (C) REMOVAL OF CONTROL/GUST LOCK(S) - NOT PERFORMED - PILOT IN COMMAND
 3. (C) ABORTED TAKEOFF - NOT PERFORMED - PILOT IN COMMAND
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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

4. OBJECT - FENCE
5. TERRAIN CONDITION - BERM

Factual Information

On June 30, 1996, at 1240 eastern daylight time, a Beech 65, N3870C, was destroyed when it ran off the end of the runway and collided with a fence and terrain during an attempted takeoff from Taylor County Airport (AAS), in Campbellsville, Kentucky. The commercial rated pilot and two of the three passengers received serious injuries. The third passenger sustained no injuries. The airplane was destroyed by impact and postimpact fire. Visual meteorological conditions prevailed at the time of the accident, no flight plan was filed. The flight was conducted under 14 CFR 91.

According to a Federal Aviation Administration (FAA) inspector, the airplane "...was unable to get airborne..." during the takeoff roll. The FAA Inspector stated that after traveling the full length of the 4997 foot runway, the airplane ran off the departure end of runway 05 and continued approximately 2257 feet through an open field, a fence, a corn field and into a depression where it impacted terrain and came to rest. He reported that the aircraft engines separated from the airframe and the fuselage was destroyed by a post crash fire.

The pilot said that while performing pre-takeoff checks he was interrupted by one of the passengers on board the aircraft. He reported, "After the interruption I failed to complete all the pre-takeoff steps [and] gust lock pin was not removed. Power was applied [and] takeoff speed was attained. When I attempted to rotate the A/C [aircraft], I found that the controls would not move. I attempted to remove the pin holding the controls, but was unsuccessful. The A/C [aircraft] went off the end of the runway through a fence and impacted an earthen berm that collapsed the gear [and] bladestrikes that stopped the engines."

On scene examination of the accident site and the aircraft wreckage was performed by investigators from the FAA, the Campbellsville Police, the airframe manufacturer, and the aircraft engine manufacturer. According to one report, "No evidence of aircraft deceleration or braking was apparent up to the point of main landing gear collapse at the base of the first hill. Ground scars made by both propellers were found at the point of first ground impact ... Both propeller assemblies were found on the ground where they (impact) separated from the engines at the reduction gear case due to impact overload. Both propellers equally exhibited signs of absorbing high power on impact. Pronounced torsional blade bending, heavy leading edge nicks and gouges and tip damage was noted ... Examination of the pilots control wheel and shaft assembly revealed that the shaft support housing was fractured diagonally across the control lock pin hole location."

According to the Owner's Manual (PN 65-001021-33A3), at maximum gross weight (7700 pounds), "Distance required to take- off and climb to 50 ft, flaps up, take-off power. Take-off speed: 95 mph (83kts.) TIAS."

Altitude	Outside Air Temperature			Feet	0 F	25 F
50 F	75 F	100 F				
Sea Level	1363	1501	1645	1810	1962	2000
1496	1659	1814	1990	2166		

According to a representative of the airplane manufacturer, using the Accelerate and Stop Distance chart from the Owner's Manual, "...the accelerate and stop distance ... determined from the chart at a gross weight of 7,700 pounds and under the following conditions:

1. With the Pressure Altitude at Sea Level and Outside Air Temperature at 100 F the Accelerate and Stop Distance computed to be 3630 feet.
2. With the Pressure Altitude at 2,000 feet MSL and Outside Air Temperature at 100 F the Accelerate and Stop Distance computed to be 3920."

Pilot Information

Certificate:	Commercial	Age:	45, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane; Instrument Helicopter	Toxicology Performed:	
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	01/04/1995
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	3500 hours (Total, all aircraft), 100 hours (Total, this make and model), 2811 hours (Pilot In Command, all aircraft), 16 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N3870C
Model/Series:	65 65	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Utility	Serial Number:	LC-212
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	07/01/1993, Annual	Certified Max Gross Wt.:	7700 lbs
Time Since Last Inspection:	32 Hours	Engines:	2 Reciprocating
Airframe Total Time:	2549 Hours	Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	IGSO-480-A1E6
Registered Owner:	TERRY LEE JOHNSON	Rated Power:	340 hp
Operator:	ADVANTAGE AVIATION INC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	AAS, 921 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1711 EDT	Direction from Accident Site:	230°
Lowest Cloud Condition:	Scattered / 4700 ft agl	Visibility	7 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	32° C / 23° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1240 EST	Type of Airspace:	Class G

Airport Information

Airport:	TAYLOR COUNTY (AAS)	Runway Surface Type:	Asphalt
Airport Elevation:	921 ft	Runway Surface Condition:	Dry
Runway Used:	5	IFR Approach:	None
Runway Length/Width:	4997 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:	2 Serious, 1 None	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Serious, 1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	BRIAN C RAYNER	Report Date:	08/25/1997
Additional Participating Persons:			
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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