

ACCIDENT

Aircraft Type and Registration:	Beech A36TP Bonanza, N7205T	
No & Type of Engines:	1 Rolls-Royce/Allison 250B-17F2 turboprop engine	
Year of Manufacture:	1984 (Serial no: E-2182)	
Date & Time (UTC):	30 August 2013 at 1630 hrs	
Location:	Near Tatenhill Airfield, Staffordshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 4
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Damaged beyond economic repair	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	53 years	
Commander's Flying Experience:	2,766 hours (of which 1,635 were on type) Last 90 days - 23 hours Last 28 days - 9 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The aircraft was taking off when the pilot reportedly saw birds on the runway ahead. Shortly after takeoff he saw that the engine torque gauge was reading zero. He performed a forced landing in a field with the landing gear retracted which resulted in major damage to the aircraft but without injury to the occupants. No physical evidence of bird impact was found either on the airframe or the engine.

Description of the aircraft

The A36TP model is a turboprop conversion of the original, piston-engined Beech A36 Bonanza aircraft. The US Supplemental Type Certificate (STC), which introduced the conversion, also added wingtip tanks to increase the fuel capacity from 74 USG to 114 USG.

Performance figures supplied by the pilot showed that the aircraft had a Maximum Take Off Weight (MTOW) of 3833 lbs and a basic weight of 2630 lbs. He had allowed 544 lbs for 81 USG of fuel and 596 lbs for himself and his four passengers. With 10 lbs allowed for baggage, this gave a weight at takeoff of 3,780 lbs

History of the flight

The pilot and five passengers were taking off from Tatenhill Airfield for a destination in North Yorkshire. Witnesses on the ground said they saw the aircraft lift off after an unusually long takeoff roll. It then levelled off at about 100 ft and flew level for a short time before pitching

nose-up into a climbing attitude, following which they observed what appeared to them to be the right wing dropping before the aircraft descended out of sight.

The pilot has stated that after performing the normal pre-takeoff checks, he started the takeoff roll and, shortly afterwards, he was aware of birds on the runway ahead. He throttled back as the birds passed either side of the aircraft and then increased power and rotated to a climbing attitude. He initially levelled out at about 100 ft whilst the landing gear was retracted. However, having resumed a climbing attitude again, at a height of 300-400 ft he noticed that the torque gauge was reading zero.

The pilot attempted to turn the aircraft back towards the airfield but realised that he had insufficient height and airspeed to achieve this. Instead, he prepared for a wheels-up forced landing in what appeared to be the nearest and most appropriate field, although it contained a crop of tall maize. The subsequent impact was described as “heavy” but there was no fire and both he and his passengers were able to exit the aircraft normally and without injury.

At the time of preparation of this Bulletin, the engine had not been subjected to a detailed examination, although the maintenance company reports that a visual examination of the airframe and the engine intake and compressor did not reveal any evidence of birdstrike or ingestion. The pilot’s opinion is that the engine lost power during the climb, that the sequence of events as reported by the eyewitnesses was consistent with his recollection and was as a result of the presence of birds.