Beechcraft A-36, N250TP

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Aircraft Type and Registration:	Beechcraft A-36, N250TP
No & Type of Engines:	1 Allison 250-B17 turboprop engine
Year of Manufacture:	1988
Date & Time (UTC):	14 March 1997 at 1530 hrs
Location:	Ledbury, Herefordshire
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - 1
Injuries:	Crew - None - Passengers - None
Nature of Damage:	Nose gear collapsed, propeller damaged, engine destroyed
Commander's Licence:	Private Pilot's Licence
Commander's Age:	36 years
Commander's Flying Experience:	1,102 hours (of which 39 were on type) Last 90 days -39 hours Last 28 days -10 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot plus telephone enquiries

The aircraft had been modified with a 420 shaft horsepower turbopropengine under a supplemental type certificate. The powerplantutilised a constant speed propeller with reverse thrust capabilitywhich enabled the aircraft to take off and land in shorter distancesthan the piston powered Bonanza variants. For instance, at theMTOW of 3,850 lb in ISA conditions using 30% flap the aircraftrequires a take-off ground run of 600 feet and a take-off distanceof 900 feet to clear a 50 foot high obstacle. These distancesare increased by 20 feet for a flapless take off. At the timeof the accident there was 80 US gallons of AVTUR in the tanksgiving a take-off weight of 3,048 lb.

Ledbury has a single grass strip orientated Runways 07/25 whichis 830 metres long and 28 metres wide. The weather was fine witha light surface wind of 280°/05 kt. The pilot had flownthe aircraft in and out of Ledbury before and this was his secondtake off on the day of the accident. He decided to take off flaplessand began the take-off roll by applying full power against thebrakes. During the ground run all the engine indications appearednormal. The pilot rotated at what he thought was the normal rotatespeed and the aircraft became airborne just past the mid-pointof the runway. At this

stage the nose was high and the rightwing lost lift so he decided to abandon the take off. Unfortunatelywhen the aircraft touched down it was no longer aligned with thestrip and it ran off the side of the prepared surface into a cropof oil seed rape whereupon the nose gear collapsed and the powerplantwas severely damaged.

The pilot later stated that he normally rotated for take off atbetween 55 and 60 kt. The stalling speed with flaps up and poweroff at 3,048 lb weight is about 60 kt. Candidly the pilotadmitted that he probably over-rotated on take off. The villageof Much Marcle is on the extended centreline of Runway 25 aboutone mile beyond the end of the strip; a mile beyond that is MarcleHill which rises to 530 feet amsl.