No: 10/92

Ref: EW/G92/08/14

Category: 1c

Aircraft Type and Registration:

Beech 19A Musketeer Sport III, G-AWTS

No & Type of Engines:

1 Lycoming O-320-E2C piston engine

Year of Manufacture:

1969

Date & Time (UTC):

14 August 1992 at 1510 hrs

Location:

Rushett Farm Airstrip, Kingston upon Thames, Surrey

Type of Flight:

Private

Persons on Board:

Crew - 2

Passengers - None

Injuries:

Crew - None

Passengers - N/A

Nature of Damage:

Damage to right wing, tailplane, left wing tip

and pitot head

Commander's Licence:

Airline Transport Pilot's Licence with Instructor Rating

Commander's Age:

38 years

Commander's Flying Experience: 4,679 hours (one on type)

4,679 hours (one on type Last 90 days - 140 hours Last 28 days - 43 hours

Information Source:

Aircraft Accident Report Form submitted by the pilot

The aircraft was intended to be flown on an air test, having had a recent annual inspection and engine top overhaul. The engine had been ground run for a total of approximately two hours after the work was carried out. A magneto drop that became apparent during this time was rectified prior to flight.

A flying instructor who was familiar with operations from Rushett Farm Airstrip, but had only limited experience on this type of aircraft, was asked by the maintenance organisation to carry out a one hour flight with the intention of "running in" the engine. The instructor, who was the commander, occupied the right seat of the aircraft, along with its new owner in the left seat. The owner held a PPL but was very inexperienced and was not familiar with the Airstrip. The commander was designated as the handling pilot, but stated that the owner was "following through" on the flying controls.

Normal pre-flight checks and engine run up were carried out satisfactorily, the commander stating that the engine attained 2350 RPM prior to brake release, which was correct for this type. Take-off was initiated from the north/north-easterly runway, into a wind stated to be 350°/5-8 kt, with a temperature of 22°C. The runway surface was grass, stated to be 1-2 inches tall, with zero slope, and an available

length of approximately 475 metres. The climb out area was traversed by rows of tall trees and power cables.

The commander stated that he used one stage of flap, and the soft/short field take-off technique, and that the aircraft initially became airborne at approximately 60 kt with a high nose attitude. He attempted to lower the nose, but the aircraft failed to accelerate and started to drift to the right. In order to avoid a collision with the trees, he elected to close the throttle and put the aircraft back onto the ground. During this time the right wing contacted several fence posts and the left wing tip came into contact with the ground, damaging the pitot head. The aircraft was stopped without an over-run. There was no fire, despite the fuel tank being ruptured, and the occupants vacated the aircraft by the normal means.

The aircraft was loaded to half of the maximum fuel capacity, giving a take-off weight estimated to be approximately 100 lbs below the maximum authorised take-off weight for this type.

The commander considered retrospectively that the take-off should have been made in the opposite direction, thus avoiding the climb out obstacles, once the wind conditions were favourable.