

AAIB Bulletin No: 4/94

Ref: EW/G94/02/04

Category: 1.3

Aircraft Type and Registration: Yak 52, LY-ALO

No & Type of Engines: 1 Vedenev M14P radial piston engine

Year of Manufacture: 1984

Date & Time (UTC): 2 February 1994 at 1430 hrs

Location: Bourn Airfield, Cambridgeshire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Propeller damaged, left aileron and bell crank damaged, left wing skin wrinkled

Commander's Licence: Commercial Pilot's Licence with Instrument and Flying Instructor Ratings

Commander's Age: 41 years

Commander's Flying Experience: 5,450 hours (of which 78 were on type)
Last 90 days - 80 hours
Last 28 days - 19 hours

Information Source: Aircraft Accident Report Form submitted by the pilot and telephone inquiries by the AAIB

The aircraft was on a local flight from Bourn Airfield where the asphalt Runway 19 was in use. This runway has a declared Landing Distance Available (LDA) of 633 metres. Weather conditions were fine and the surface wind was reported to be 260°/5 to 8 kt.

The pilot reports that having completed all rejoining and landing checks, which included a check of the pneumatic braking system, he positioned the aircraft on left base for landing on Runway 19. The touchdown was close to the threshold and the nose landing gear was held off until the aircraft had reached approximately one third of the landing distance available. The nose was then lowered and gentle braking applied. Initially a small amount of retardation was felt and the pneumatic air system could be heard to be operating. The brakes were re-applied at a position estimated to be three quarters along the runway length when the pilot considered that braking action was negligible. He therefore applied full right rudder and the aircraft turned slowly onto the grass. In an attempt to decrease the radius of turn he applied a burst of power whilst continuing to re-apply the brakes using the the control

column mounted lever both in short snatches and longer applications. The aircraft continued to turn right but the radius of turn was slightly greater than that of the curve in the adjacent taxiway, and the left main landing gear entered a ditch where the aircraft came to a stop. The pilot made all switches safe and vacated the aircraft without injury.

The aircraft is fitted with a castoring nosewheel and steering is by differential braking operated by the rudder pedals. The maintenance company repairing the aircraft found no faults in the pneumatic braking system.