

Aircraft Type and Registration: i) Bellanca Champion 7GCBC Citabria, G-BDBH
ii) Reims Cessna FRA150M Aerobat, G-BDAI

No & Type of Engines: i) 1 Lycoming O-320-A2D piston engine
ii) 1 Rolls-Royce Continental O-240-E piston engine

Year of Manufacture: i) 1975
ii) 1975

Date & Time (UTC): 14 August 1994 at 1645 hrs

Location: Thruxton Airfield, Andover, Hampshire

Type of Flight: i) Private
ii) Private (Training)

Persons on Board: i) Crew - 1 Passengers - None
ii) Crew - 2 Passengers - None

Injuries: i) Crew - None Passengers - N/A
ii) Crew - None Passengers - N/A

Nature of Damage: i) None
ii) Damage to propeller, spinner, engine and airframe

Commander's Licence: i) Private Pilot's Licence
ii) Airline Transport Pilot's Licence with Instructor rating

Commander's Age: i) 68 years
ii) 53 years

Commander's Flying Experience: i) 439 hours (of which 290 were on type)
Last 90 days - 32 hours
Last 28 days - 19 hours
ii) 10,500 hours (of which 200 were on type)
Last 90 days - 30 hours
Last 28 days - 10 hours

Information Source: Aircraft Accident Report Forms submitted by the pilots

On the day of the accident the weather was fine with good visibility and a surface wind of 330°/08 kt.

The Citabria, fitted with 180 feet of tow rope, was being used as a tug for aero-tow glider operations. Earlier in the day the aircraft had suffered an AC generator fault which could not be rectified and which led the pilot to continue operating his aircraft without electrics and hence without a radio. Permission had been granted by the airfield controller for the aircraft to continue operations as non-radio traffic.

For the tug's 26th launch of the day the active runway was changed from 07 to Runway 31 with left-hand circuits for powered traffic and right-hand circuits for gliders and the tug. The tug and glider departed Runway 31 as normal with the glider releasing at 2,000 feet agl. After release the tug pilot recovered to the airfield and started his descent on a right-hand circuit. On a short base leg he raised the nose of the aircraft, lowered the first stage of flap and reduced speed to 70 mph. Local instructions specify that tug aircraft, with tow ropes fitted, are to cross the motor racing circuit situated around the airfield perimeter at 300 feet agl. This gives rise to a steeper than normal descent in the latter stages of the approach. The aircraft was flown as instructed and entered a sideslip in order to lose height once clear to the race track. At 50 feet on finals the pilot felt a sharp jerk, the aircraft pitched nose down and there was a loud bang. The pilot applied full power and carried out a successful go-around landing a second time without incident.

The Cessna, with an instructor and student on board, had been engaged on a stalling and aerobatic familiarisation flight. The aircraft, which was being flown by the student, was landing on Runway 31 and was about to enter the flare when ATC warned the pilots of a glider tug descending above them. Both occupants looked above to see the Citabria 'filling the windscreen'. At the same time the tow rope made contact with the aircraft, initially hitting the airframe. The student pilot throttled back the engine just as the rope became entangled with the propeller. The aircraft landed heavily on the nosewheel and moments later the engine stopped abruptly. The Cessna was pulled for some distance before the rope finally broke and it had sufficient inertia to coast to a stop just clear of the runway. Both pilots vacated the aircraft unscathed to inspect the damage.

Both commanders reported that the cause of the accident was due to the failure of either pilot to see the confliction in time to take avoiding action. The Cessna pilot reported that the situation was possibly exacerbated by the tug's steep curving descent on short finals.