

Cessna 120, G-BUKO

AAIB Bulletin No: 2/98 Ref: EW/G97/12/15 Category: 1.3

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| Aircraft Type and Registration: | Cessna 120, G-BUKO |
| No & Type of Engines: | 1 Continental Motors Corp C85-12 piston engine |
| Year of Manufacture: | 1947 |
| Date & Time (UTC): | 28 December 1997 at 1330 hrs |
| Location: | Manor Farm, west of Salisbury, Wiltshire |
| Type of Flight: | Private |
| Persons on Board: | Crew - 1 - Passengers - 1 |
| Injuries: | Crew - None - Passengers - None |
| Nature of Damage: | Propeller bent; right-hand landing gear torn off; fuselage in cabin area distorted; right-hand wing tip damaged |
| Commander's Licence: | Private Pilot's Licence |
| Commander's Age: | 30 years |
| Commander's Flying Experience: | 274 hours (of which 210 were on type) Last 90 days - 10 hours Last 28 days - 2 hours |
| Information Source: | Aircraft Accident Report Form submitted by the pilot |

The pilot was familiar with the farm strip, which is oriented 09/27, is 447 metres long and slopes downwards to the east. Two bushes beside the strip each mark a distance covered and a distance to go of 180 metres in either take-off direction; the bushes are 87 metres apart. On the day before the accident the pilot had aborted two take-off attempts, using Runway 27 into a 7 kt headwind. The surface of the strip was soft and the grass was long and wet, but the third take off was successful when the aircraft was running over grass which had been flattened during the previous runs.

On the day of the accident the aircraft loading was similar to the preceding day, with two less gallons of fuel. The runway conditions were also similar and the aircraft had just been successfully operated by the owner/operator. The wind was 220° at 2 to 3 kt and temperature +3°C. In view of his difficulties the previous day, the pilot decided to take off from Runway 09 taking advantage of the downslope and based on his experience that such a light tailwind had

negligible effect on this aircraft's performance. The engine was run up successfully to 2,100 RPM and a 'shortfield' take-off initiated. Acceleration appeared to be normal and, on reaching a position adjacent to the second bush marker (180 metres remaining), the pilot attempted to rotate the aircraft. He did not consider that the aircraft was ready to become airborne and so he returned the control column to that position best suited for the take-off run and held it for a few seconds before making a second attempt to become airborne. This was also unsuccessful and the pilot therefore closed the throttle and applied the brakes. Despite an attempt to ground loop the aircraft near to the end of the runway, the pilot was unable to prevent it from crashing through a barbed wire fence and into a cutting of a farm track adjacent to the eastern end of the strip. The aircraft came to an abrupt stop in the far bank of the cutting. The pilot switched off the fuel and electrics before he and his passenger exited the aircraft. The pilot summoned assistance on his mobile telephone.

In a comprehensive report the pilot reports that after the accident he noticed that the wind occasionally picked up to 5 or 6 kt. He also considers that the surface condition of the strip affected his braking performance adversely. Nevertheless, he is of the opinion that his decision to abort the take off was preferable to attempting to continue with a strong possibility of either striking the obstacle at speed or stalling due to insufficient airspeed.