## **Mooney M20E, G-ASUB**

AAIB Bulletin No: 6/98 Ref: EW/G98/01/04 Category: 1.3

Aircraft Type and Registration: Mooney M20E, G-ASUB

No & Type of Engines: 1 Lycoming IO-360-A1A piston engine

Year of Manufacture: 1964

**Date & Time (UTC):** 10 January 1998 at 1535 hrs

**Location:** North Coates Airfield, Lincolnshire

**Type of Flight:** Private

**Persons on Board:** Crew - 1 - Passengers - None **Injuries:** Crew - None - Passengers - N/A

Nature of Damage: Damage to propeller and lower fuselage

**Commander's Licence:** Private Pilot's Licence

Commander's Age: 38 years

**Commander's Flying Experience:** 151 hours (of which 24 were on type)

Last 90 days - 2 hours

Last 28 days - 2 hours

**Information Source:** Aircraft Accident Report Form submitted by the pilot

The aircraft had been out of service for three months prior to its Certificate of Airworthiness renewal, during which time work had been carried out on the engine. The pilot therefore considered it prudent to practice circuits and, in particular, glide approaches and landings. On the day of the accident the weather was favourable and the circuit clear. The pilot decided that in order to maintain the best glide performance from the aircraft he would not lower the landing gear downwind as usual, but leave it until he was sure of reaching the field from the glide. At that point drag would be added to steepen the approach by lowering the landing gear, and then the flaps as needed. The circuits progressed satisfactorily until the fifth approach, during which the aircraft was kept intentionally high on finals, when the landing gear was selected down and locked into place. At this time a radio call was received from another aircraft, reporting overhead Covenham Reservoir for a rejoin to the circuit and requesting G-ASUB's position. The pilot replied that he was on short finals for Runway 24, glide approach for a go-around. On short finals and as the aircraft was still high the pilot selected first and second stages of flap before starting a left sideslip into wind. This was sufficient to lose the excess height and the sideslip was removed. The subsequent flare was normal with the main landing gear making a positive contact with the runway sufficient to produce a slight bounce. The flare was continued and the following gentle touchdown was accompanied by a loud scraping noise. The pilot initially began to apply power, then, realising that the wheels were up, closed the throttle and the aircraft slid to a halt about halfway along the runway.

An eye witness was reported as having seen the aircraft touchdown and bounce slightly, at which point the landing gear retracted. The landing gear retraction lever was found to be unlocked, close to the up and locked position. The landing gear is manually retracted with spring assistance by moving the lever through 90\_ and locking it at the end of its travel. With the landing gear unlocked

a single red light is illuminated and the gear warning horn circuit is armed, if the throttle is then closed the gear warning horn will sound. The horn is positioned behind the co-pilot's control panel and is only just audible whilst wearing headsets with the engine running.