No: 1/93 Ref: EW/G92/11/08 Category: 1c

Aircraft Type and Registration: Ryan PT 22, G-BPUD

No & Type of Engines: 1 Gladden Products Kinner R56 piston engine

Year of Manufacture: 1941

Date & Time (UTC): 8 November 1992 at 1100 hrs

Location: Great Ryburgh, Norfolk

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - Minor Passengers - Minor

Nature of Damage: Wings and landing gear detached, fuselage distorted,

propeller broken

Commander's Licence: Private Pilot's Licence

Commander's Age: 36 years

Commander's Flying Experience: 313 hours (of which 43 were on type)

Last 90 days - 5 hours Last 28 days - 1 hour

Information Source: Aircraft Accident Report Form submitted by the pilot

The object of the flight was to photograph G-BPUD in formation with a Stearman biplane of similar vintage. The pre-flight briefing was conducted by the pilot of the camera ship which was a Chipmunk and it was intended that all three aircraft would take off from Swanton Morley on runway 18 and enter a left-hand circuit. The aircraft would then formate on the downwind leg which was to be extended to clear the circuit before turning onto a westerly heading. Since the photographer wanted to photograph the Ryan and the Stearman at low level the formation was to descend at this point, not below 500 feet, for photography to commence.

After a 20 minute ground run to achieve the required 20°C oil temperature on the Ryan's engine, the Stearman took off first, followed by the Ryan and then the Chipmunk. Everything appeared normal as the aircraft turned downwind at a height of 1,000 feet and started to descend to 650 feet agl but, as the formation turned onto a westerly heading, the pilot of the Ryan noticed the other aircraft pulling away from him as the engine started to lose power. He immediately selected carburettor heat but this had no effect and the engine stopped. After a quick check of the fuel and magneto controls the pilot realised

that he would have no chance of restarting the engine (which would require a dive to windmill the propeller) and commenced a forced-landing having warned his passenger to tighten his straps.

The field directly in front ran east-west but had recently been ploughed and looked very soft; a stubble field at right-angles to it looked more promising. The pilot set up his glide to reach this field, hoping to have enough height to clear some trees on the boundary of the ploughed field in a left turn into the stubble field. However, the rate of descent increased rapidly and he had no option but to land in the ploughed field, deliberately stalling the aircraft onto the ground. This broke off the landing gear and wings before the aircraft slid to a halt on its left side. Both occupants evacuated without difficulty from the open cockpit and there was no fire.

The pilot has stated that he believes that some sort of fuel or carburettor icing problem may have been responsible for the loss of power but the lack of any period of rough running was different from his previous experience of the latter phenomenon. He acknowledges that the weather conditions at the time were conducive to a serious risk of icing at any power and that the aircraft had just completed a descent. He advised that if a decision is taken to repair the aircraft, diagnostic work on the engine would be done and any defects found would be notified to the AAIB.