General Avia F22-A, G-FZZA

AAIB Bulletin No: 6/2002 Ref: EW/G2001/11/21 Category: 1.3

Aircraft Type and Registration: General Avia F22-A, G-FZZA

No & Type of Engines: 1 Lycoming O-235-N2C piston engine

Year of Manufacture: 1998

Date & Time (UTC): 28 November 2001 at 1305 hrs

Location: Welshpool Aerodrome

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - None Passengers -

None

Nature of Damage: Damage to propeller and nose landing gear

Commander's Licence: Private Pilots Licence

Commander's Age: 19 years

Commander's Flying

Experience: 74 hours (of which 8 were on type)

Last 90 days - 2 hours

Last 28 days - 2 hours

Information Source: Aircraft Accident Report Form submitted by the

pilot

and information supplied by the operator

The pilot reported that the aircraft was joining the circuit from the dead side of Runway 22 on returning to Welshpool from a local flight of approximately 70 minutes duration. The engine began to 'splutter'. He checked the carburettor temperature gauge and the carburettor heat control, confirmed that the electric fuel pump was switched on, that the mixture was rich and that both magnetos and the fuel selector were on.

The spluttering grew worse, and the pilot feared that an immediate engine stoppage would occur. He therefore made a Pan call and turned towards the airfield. He made a further general radio call to ensure that pilots of any aircraft in the vicinity knew that he was landing.

As he approached the field, he realised that he was not well positioned with regard to speed and height. He stated that he deployed full flap in order to shed as much speed as possible. The aircraft struck the runway at a speed estimated by the pilot as about 70 kt. It then ballooned. The pilot recognised that the situation was getting worse as he was close to over-running the runway. In view of the evidently deteriorating operational state of the engine, however, he considered that going round was not an option.

The pilot called to his passenger to brace and the latter responded appropriately. The pilot managed to keep the aircraft on the runway, the machine coming to a halt with a collapsed nose leg.

A senior official of the airfield operating company reported that he became aware of the Pan call when he was in the operations office. He proceeded to the viewing area where he observed the aircraft approaching the airfield at high speed. In his opinion it was flying at approximately 120 kt. After travelling about half way along the runway, the pilot appeared to force it onto the surface. It then made three severe bounces and the nose leg collapsed.

Emergency services were reported to have reached the scene within 90 to 120 seconds, followed by the company official. The latter noted that no spillage of fuel was present and none occurred during the recovery operation.

It was further reported that when electrical power was subsequently applied to the aircraft, the flap indicator showed that the flaps were not fully lowered (this agreed with an external estimate of flap position). The fuel gauge indicated empty. When the Chief Engineer attempted to empty the fuel tank, he was only able to extract just under one litre of fuel.

The Aircraft Flight Manual indicates that the unusable fuel quantity is 1.5 litres. The available refuelling records were not sufficiently detailed to establish retrospectively the precise fuel contents at the time the aircraft took-off.