

No: 10/90**Ref: EW/G90/06/01****Category: 1c****Aircraft Type
and Registration:**

Pitts S-1S, G-IIIIX

No & Type of Engines:

1 Lycoming O-360-A4A piston engine

Year of Manufacture:

1969

Date and Time (UTC):

10 June 1990 at 1134 hrs

Location:

Newcastle-upon-Tyne International Airport

Type of Flight:

Private

Persons on Board:

Crew - 1

Passengers - None

Injuries:

Crew - 1 (minor)

Passengers - N/A

Nature of Damage:

Left exhaust pipe fractured and left mainwheel bungees destroyed

Commander's Licence:

Private Pilot's Licence

Commander's Age:

42 years

**Commander's Total
Flying Experience:**

1,108 hours (of which 510 were on type)

Information Source:

Aircraft Accident Report Form submitted by the pilot

The aircraft was flying in formation from Glenrothes to Newcastle when the pilot detected a minor change in engine note. He checked the engine instruments and noted a slight reduction in power. Through the transparent plexiglass floor panel the pilot saw that the left exhaust pipe was slightly displaced from its normal position and saw it move back onto the left mainwheel bungees, which separated under the heat.

The pilot decided to land at Newcastle and, when he detected hot fumes entering the enclosed cockpit, he put out a Pan call to Newcastle Approach, advising that the landing gear was likely to collapse on landing. The tower was informed and a Full Emergency was implemented.

Attempting to clear the fumes from the cockpit, the pilot opened the sliding canopy fully but this actually made the situation worse as additional fumes were drawn through the cockpit. He then moved the canopy to its first notch of opening and, applying a pronounced yaw, found this the most effective way of keeping the cockpit clear of fumes. On the approach he began to feel very ill but managed to land on the right mainwheel and the tailwheel and was able to keep the aircraft balanced down to a slow speed. The airport fire service was in immediate attendance and were able to assist the pilot out of the aircraft and revive him with oxygen before he was taken to hospital.

The examination of the aircraft showed that a crack had propagated across the left exhaust system, resulting in the lower portion moving back, attached to the aircraft only by the smoke injector fittings. Considering the loads applied to the exhaust system in a highly aerobatic aircraft, the pilot has fitted a stainless steel exhaust system to the aircraft and has been entirely satisfied with its performance.

Information Source:	Aircraft Accident Report Form submitted by the pilot
Commander's Flying Experience:	152 hours (of which 77 were on type)
Commander's Age:	49 years
Commander's Licence:	Private Pilot's Licence
Nature of Damage:	Substantial damage to fuselage, wings and landing gear
Injuries:	Crew - None Passengers - None
Persons on Board:	Crew - 1 Passengers - 1
Type of Flight:	Private
Location:	White Waltham Airfield, Maidenhead, Berkshire
Date and Time (UTC):	28 May 1990 at 1330 hrs
Year of Manufacture:	1968
No & Type of Engines:	1 Continental O-200-A piston engine

The aircraft took off from White Waltham for a two hour pleasure flight. After leveling off in the cruise however, the pilot noticed a roughness in the engine at cruise rpm. Recalling that other members of the flying group had made similar observations, the pilot elected to return to the airfield. The approach to runway 11 was made with 10° of flap selected. The aircraft bounced twice on touch-down and so the pilot decided to go-around. He retracted the flap and applied full power; however the aircraft failed to accelerate above approximately 50 mph, with the stall warning sounding. The pilot lowered the nose of the aircraft and it continued to roll, but with no increase in speed. By now the aircraft was approaching a hedge at the airfield boundary. The pilot pulled back on the controls and the aircraft clipped the top of the hedge, and another one on the far side of a public road, before landing in the field beyond. The aircraft came to rest upright but badly damaged; the harnesses held during the impact and the occupants were uninjured.

The aircraft owner was aware of the problem of intermittent rough running of the engine. Investigations had failed to identify the cause, although it was considered that plug fouling may have been a possibility. The pilot was unable to recall if the engine ran roughly after the application of power during his attempted go-around.