Pitts S-2A, G-SPIN, 24 June 2002

AAIB Bulletin No: 11/2002	Ref: EW/G2002/06/29	Category: 1.3
Aircraft Type and Registration:	Pitts S-2A, G-SPIN	
No & Type of Engines:	1 Lycoming AEIO-360-A1A piston engine	
Year of Manufacture:	1977	
Date & Time (UTC):	24 June 2002 at 1000 hrs	
Location:	Meppershall Airfield, Bedfordshire	
Type of Flight:	Private	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew 1 (Minor)	Passengers - N/A
Nature of Damage:	Upper wing, tail section, propeller, engine shockloaded	
Commander's Licence:	Airline Transport Pilots Licence	
Commander's Age:	55 years	
Commander's Flying Experience:	12,467 hours (of which 1 was on type)	
	Last 90 days - 220 hours	
	Last 28 days - 79 hours	
Information Source:	Aircraft Accident Report Forms submitted by the pilots and further enquiries by the AAIB	

The aircraft was an aerobatic biplane with a tandem seat configuration and dual controls. The accident flight was a test flight to renew the aircraft's Certificate of Airworthiness (C of A). The C of A pilot (commander of the flight) was unfamiliar with the aircraft and therefore requested that the owner accompany him on the flight. The owner briefed the commander on the particular aspects of the Pitts S2-A and it was agreed that the owner would occupy the front seat as an observer. It was also agreed that the owner would demonstrate the first approach and landing whilst the commander 'followed through' on the controls.

After an uneventful test flight the commander positioned the aircraft approximately 5 nm out on the extended centreline of Runway 20 at a height of 1,500 feet and then handed control to the owner. The wind at an airfield nearby was reported to be 290° at 10 kt to 12 kt and a witness to the accident estimated the wind to be from 270° at 5 kt. To counter the crosswind from the right, the owner carried out a right wing down sideslip during the approach. This approach technique

restricted the owner's view to his left where there was a maintenance hanger on the left side of the approach end of Runway 20. To avoid risking a collision with the hangar, the owner offset his flightpath to fly down the right hand edge of the grass runway. As the aircraft crossed the airfield boundary the commander alerted the owner to the proximity of two trees. The owner applied power to clear them. The commander was aware that they were flying close to the runway's right hand edge but he believed that as the wings were levelled, the effect of the crosswind would result in a touchdown on the runway centreline. As the wings were levelled the commander lost sight of the runway. During the flare he became aware of a strange noise but before he could respond, the wheels touched down in a field of corn approximately 10 feet to the right of the runway. The aircraft decelerated rapidly, pitched over and came to a rest inverted in the field. The owner had believed that he was over the grass runway when he initiated the flare.

The commander established contact with the owner and then he switched off the fuel, magnetos and the electrical master switch. The owner was able to exit the inverted aircraft from the front cockpit but there was insufficient ground clearance for the commander to slide the canopy rearwards and vacate the rear cockpit. The owner informed the commander that there was no sign of fire and that help was on its way. People working at the airfield arrived on scene after approximately two minutes and raised the tail of the aircraft. This increased the clearance between the ground and the canopy which enabled the commander to exit the aircraft.