

Piper PA-28-161, G-BTNE

AAIB Bulletin No: 3/97 Ref: EW/G96/12/09 Category: 1.3

Aircraft Type and Registration:	Piper PA-28-161, G-BTNE
No & Type of Engines:	1 Lycoming O-320-D3G piston engine
Year of Manufacture:	1981
Date & Time (UTC):	8 December 1996 at 1641 hrs
Location:	Wellesbourne Mountford Airport, Warwick
Type of Flight:	Private (Training)
Persons on Board:	Crew - 1 - Passengers - 2
Injuries:	Crew - None - Passengers - None
Nature of Damage:	None
Commander's Licence:	Basic Commercial Pilot's Licence with IMC and Night Ratings
Commander's Age:	35 years
Commander's Flying Experience:	1,483 hours (of which 241 were on type) Last 90 days - 130 hours Last 28 days - 38 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Shortly after take-off all three occupants of the aircraft detected the distinct smell of electrical burning. A short time later, the visibility in the cockpit was reduced due to the presence of a thin veil of smoke. The pilot switched off all the electrical services, opened the cabin air vents and changed the aircraft's heading towards the departure airfield. Because the aircraft was above cloud and daylight was diminishing, the pilot considered it prudent to declare an emergency and the return to the departure airfield was completed without further incident. Subsequent extensive ground tests, checks by engineers and a test flight failed to reveal any fault. It was noted by the engineers that there was a total absence of a 'hot', or burning, smell in the aircraft immediately following the landing and during the subsequent investigations. In retrospect, the pilot recalled that during the pre-flight checks it took a number of operations of the navigation light ON/OFF switch before the lights would function correctly. However, no fault was found associated with this switch during the investigations. Since this incident, the aircraft has been operating with no further occurrence of burning smells or smoke in the cockpit.