

N.A. Navion, N2548T

AAIB Bulletin No: 3/98 Ref: EW/G97/10/28 Category: 1.3

Aircraft Type and Registration:	N.A. Navion, N2548T
No & Type of Engines:	1 Continental piston engine
Year of Manufacture:	Not known
Date & Time (UTC):	25 October 1997 at 1500 hours
Location:	Shoreham Airport
Type of Flight:	Private
Persons on Board:	Crew -1 - Passengers - 3
Injuries:	Crew - Nil - Passengers - Nil
Nature of Damage:	Damage to structure from heavy landing
Commander's Licence:	Not known
Commander's Age:	Not known
Commander's Flying Experience:	
	Last 90 days - Not known
	Last 28 days - Not known
Information Source:	AAIB enquiries - Aircraft Accident Report Form returned blank by the pilot

The pilot was engaged on a flight from Guernsey to Shoreham with three passengers. During the final stages of the approach to land at Shoreham, the pilot's seat moved rearwards and the aircraft pitched up due to his inadvertent movement of the control column. The aircraft landed heavily and although there were no injuries, the aircraft suffered damage from the impact and associated inertial loads.

Examination of the aircraft shortly after the accident showed that the pilot's seat locking mechanism was disengaged. The mechanism consists of a single pin sliding vertically in a tube. The pin is moved up or down by a lever with a handle at the front of the seat. A spring assists the engagement of the pin into the seat rail. It was found that the pin could jam in the tube, preventing it from being moved down by the spring. In addition, one of the locating holes in the seat rail appeared slightly undersize such that the pin could not be properly engaged in the hole. Even with the seat not

properly located, it was at times quite difficult to move the seat backwards unless a large force was applied sufficiently low down on the seat structure. Pushing back normally applies a load part way up the seat back and this, together with some of the pilot's weight still acting on the seat squab, was sufficient to prevent movement and possibly gave a false impression of the seat being secure. No damage or obvious defects were found associated with the seat mechanism.

The maintenance organisation took the view that the pilot had probably engaged the seat in the position with the defective hole, causing it to break free later. The pilot stated that the seat was secure throughout the flight, but noted that he had applied pressure to the brakes shortly before landing. He considered that this action could have either dislodged the pin, if it was not properly engaged, or if the seat had been jammed on the rails in an intermediate position, could have freed the seat, allowing it to move later.

Information concerning this accident was obtained through the maintenance organisation and the associated insurance company surveyor. The pilot provided some details to AAIB over the telephone. The normal AAIB Aircraft Accident Report Form was sent to the pilot, but was returned blank except for a comment indicating that as the aircraft was registered in the USA, the UK regulations did not apply. This interpretation was incorrect. The Federal Aviation Administration office at Heathrow Airport has been kept advised of the status of this investigation however, under the provisions of ICAO Annex 13, aircraft accident investigations are the responsibility of the State in which associated accidents occur. UK legislation gives the AAIB legal power to conduct such investigations. The furnishing of the required details to the AAIB is mandatory. This comment is made here to avoid further misunderstanding amongst pilots, and the pilot involved has been advised accordingly.