Aviation Safety Investigation Report 198902545

Piper PA34-200

27 February 1989

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

Occurrence Number: 198902545 **Occurrence Type:** Accident
Location: Bankstown NSW
Date: 27 February 1989 **Time:** 1953
Highest Injury Level: Nil
Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	1
Total	**0**	**0**	**0**	**2**

Aircraft Details: Piper PA34-200
Registration: VH-CJI
Serial Number: 34-7250099
Operation Type: Private
Damage Level: Substantial
Departure Point: Bankstown NSW
Departure Time: 1855
Destination: Parafield SA

Approved for Release: 14th February 1991

Circumstances:

After take-off the pilot had selected gear up. During climb, at about 1600 feet, he noticed that the red gear unsafe light was still illuminated, and by checking the nacelle mirror, that the nosegear was still extended. The wheel also appeared to be turned at an angle. The aircraft returned to Bankstown, where it was observed that the nosewheel was turned through about 80 degrees to the right. Use of full rudder travel and cycling of the landing gear failed to produce any change in the position of the nosegear, although the maingear retracted and extended normally. After seeking engineering advice, the pilot elected to land on grass and an area was prepared on the left of, and parallel to Runway 11 Left. He advised that he intended to shut down the engines on late final and position the propellers to preclude ground contact on landing. At about 200 feet on final approach he closed both mixtures, but had insufficient time to reposition the propellers. The aircraft dropped with a high sink rate and touched down 110 metres short of the intended landing area. On initial ground contact, the left main gear pushed up through the wing and broke off. The aircraft slewed to the left and the nose gear broke off during the 85 metre ground slide. It was found that the right hand nose wheel steering stop had been sheared, probably during ground handling operations. This resulted in detachment of the tiller roller from the steering channel and bending of the torque link pivot bolt. The torque link subsequently failed across the pivot bolt hole, allowing the nose leg to turn approximately 80 degrees.

Significant Factors:

The following factors were considered relevant to the development of the accident:

1. Rough ground handling by persons unknown, resulting in damage to the nosegear mechanism.

2. Overconcentration by the pilot on attempting to manipulate the position of the propellers.

3. Pilot failed to maintain sufficient speed on approach, resulting in undershoot and heavy landing.

Reccomendations:

1. This is another example of a pilot causing a more serious accident by attempting to do the "right thing". For many types of emergencies, no guidance is given by the manufacturer. It is recommended that the Civil Aviation Authority publish an article in the Aviation Safety Digest on the landing techniques to be employed with certain undercarriage malfunctions, such as defective nose gear.