Aviation Safety Investigation Report 199601339

Amateur Built Aircraft BD-4

16 April 1996

Readers are advised that the Australian Transport Safety Bureau investigates for the sole purpose of enhancing transport safety. Consequently, Bureau reports are confined to matters of safety significance and may be misleading if used for any other purposes.

Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

Investigations commenced after 1 July 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with the Transport Safety Investigation Act 2003 (TSI Act). Reports released under the TSI Act are not admissible as evidence in any civil or criminal proceedings.

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.

The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

Occurrence Number:	199601339	Occurrence Type:	Accident
Location:	Aldinga, (ALA)		
State:	SA	Inv Category:	4
Date:	Tuesday 16 April 1996		
Time:	1030 hours	Time Zone	CST
Highest Injury Level:	None		

Aircraft Manufacturer: Amateur Built Aircraft					
Aircraft Model:	BD-4				
Aircraft Registration:	VH-XBD	Serial Number: S-19			
Type of Operation:	Instructional Dual				
Damage to Aircraft:	Substantial				
Departure Point:	Aldinga SA				
Departure Time:	1010 CST				
Destination:	Aldinga SA				

Crew Details:

	Hours on		
Role	Class of Licence	Туре Но	urs Total
Pilot-In-Command	Commercial	14.3	17000

Approved for Release: Tuesday, May 21, 1996

Factual Information

The aircraft had just completed a landing on runway 21 when the nose wheel collapsed. The engine cowl and propeller struck the ground and the aircraft came to a stop.

The aircraft had a history of nose wheel shimmy on takeoff and landing.

Analysis

The manufacturer's design specifies a Cessna 185 tail wheel as the nose wheel for this aircraft type. The nose wheel is fully castoring with no controls and is free to castor during ground operations. A fixed fairing over the nosewheel prevents any pre-flight inspection of the mounting.

This aircraft has experienced two previous nose wheel collapses. The aircraft owner is considering modifications to convert the aircraft to a tail wheel configuration.