

ACCIDENT

Aircraft Type and Registration:	Van's RV-6A, G-RVSA	
No & type of Engines:	Lycoming IO-360-A4M piston engine	
Year of Manufacture:	2004	
Date & Time (UTC):	15 July 2006 at 1601 hrs	
Location:	Inverness Airport	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Damage to nose landing gear	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	52 years	
Commander's Flying Experience:	17,031 hours (of which 3 were on type) Last 90 days - 110 hours Last 28 days - 42 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

During takeoff from a grass strip, the nosewheel suddenly dug in to the ground, causing the aircraft to pitch forward and damage the nose landing gear. The flight continued to Inverness, where abrasion damage occurred to the nosewheel spat and wheel attachment fitting during the landing.

History of the flight

The pilot and passenger had planned a flight to Inverness from a grass strip at Knockbain Farm, near Dingwall, in Ross-shire. The east-west runway has an up-slope at each end, with a crest in the middle. The commander reported that just before the aircraft attained flying speed, which was at the crest of the runway, the nosewheel suddenly dug into the ground, causing the aircraft to pitch forward.

This was accompanied by a jolt, which the pilot heard and felt through the controls. However, he continued with the takeoff, the aircraft becoming airborne a few seconds later, but was sufficiently concerned about the event to carry out a fly-past at the airstrip, where observers on the ground confirmed that the nose landing gear was damaged. The leg had been bent aft by approximately 30° and the nosewheel yoke assembly distorted such that the front of the wheel spat was pointing downwards at an angle of around 45°.

The pilot decided to continue the flight to Inverness, where, during the landing, the nosewheel was held off the runway surface until the speed had reduced to approximately 15 kt. The nosewheel yoke attachment

nut and the spat sustained abrasion damage as the aircraft rolled to a halt.

This was the first occasion the pilot had flown the RV-6A aircraft into Knockbain. Although he only had three hours on type, he has considerable general aviation experience and owns a Piper Cub, which he has frequently operated into this airfield. He commented that the relatively high tyre pressure and short wheelbase

of the Vans may contribute to a tendency to porpoise on certain surfaces; a characteristic that may well have been exacerbated by his relative inexperience, and which he considers makes the aircraft unsuitable for this type of airstrip. Additionally, he commented that any change in the wind speed and direction at the time the aircraft reached the runway crest during the takeoff may have contributed to the pitch down event.