AAIB Bulletin No: 4/2005 **Ref: EW/G2005/02/08** **Category: 1.3**

Aircraft Type and Registration:	Reims Cessna F152, G-BHZH
No & Type of Engines:	1 Lycoming O-235-L2C piston engine
Year of Manufacture:	1980
Date & Time (UTC):	16 February 2005 at 1635 hrs
Location:	Exeter Airport, Devon
Type of Flight:	Training
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Left wing and nose wheel damaged
Commander's Licence:	Student pilot
Commander's Age:	50 years
Commander's Flying Experience:	19 hours (all on type) Last 90 days - 10 hours Last 28 days - 3 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

The student pilot had completed three successful circuits with an instructor and was performing a solo circuit with a flapless 'touch and go' landing. The landing on Runway 08 was smooth and on the centreline but, when he applied full power to take off again, the aircraft suddenly yawed to the left. He immediately applied right rudder to correct the yaw, which caused a violent change of direction to the right and he attempted to correct with left rudder. Realising that he had now lost control of the aircraft, he fully closed the throttle. The aircraft departed the left side of the runway, but he did not apply the brakes at first to avoid upsetting the balance of the aircraft. When it failed to slow down on the grass as expected, he applied gentle braking. The aircraft then bounced and the left wing dropped, causing the wingtip to strike the ground. It then continued forward, crossing an area of hard standing before finally coming to rest on the grass beyond. The nosewheel was damaged on striking a ridge at the edge of the hard standing.

Immediately after the accident, a second flying instructor took the student for a flight in another aircraft. He noted that whilst the student was very competent, on two occasions whilst taxiing, he

applied left rudder when he intended to turn right. The student accepted that he may have reacted incorrectly during the touch and go by applying left rudder as he applied full power.

Given the aircraft's natural tendency to yaw to the left when power is applied, inadvertently applying left rudder at a relatively high airspeed during a touch and go would produce a sudden yaw to the left. Excessively large corrective rudder inputs at such an airspeed can lead to over-controlling and a loss of directional control.