BULLETIN CORRECTION

This report was originally published in AAIB Bulletin 7/2014, page 67. However, following reassessment and prior to publication on 10 July 2014, the report has been corrected for a factual error on the number of circuits flown. The original version of the report appears in the hard copy version of Bulletin 7/2014, but the online version has been corrected. The corrected version follows:

ACCIDENT

Aircraft Type and Registration:	Cessna 152, G-BIDH	
No & Type of Engines:	1 Lycoming O-235-L2C piston engine	
Year of Manufacture:	1981 (Serial no: 152-80546)	
Date & Time (UTC):	11 April 2014 at 1715 hrs	
Location:	Beverley (Linley Hill) Aerodrome, Yorkshire	
Type of Flight:	Training	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Nose leg collapse and bending damage to propeller tips, engine frame, cowling and firewall	
Commander's Licence:	Student Pilot's licence	
Commander's Age:	42 years	
Commander's Flying Experience:	23 hours (of which all were on type) Last 90 days - 9 hours Last 28 days - 3 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and enquiries made by the AAIB	

Synopsis

During a solo circuit the student pilot made an approach and was observed to flare the aircraft high. The aircraft descended and bounced on touchdown. The nose then dropped and the nose landing gear collapsed on impact with the ground. The aircraft came to a stop resting on the underside of the engine cowl, having sustained damage to the airframe, propeller and nose landing gear. The pilot was uninjured and vacated the aircraft without further incident. The accident was caused by mishandling after the bounce on touchdown.

History of the flight

The weather conditions on the day of the incident were good, with a 9-10 kt wind directly down the runway and clear visibility. The pilot had performed two satisfactory circuits under dual instruction with no intervention. He was then sent to perform a pair of solo circuits,

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consisting of a touch-and-go followed by a full-stop landing, and then to repeat the exercise. He completed the first pair of solo circuits satisfactorily.

On the first of the second pair of solo circuits his instructor watched him fly the correct circuit pattern before the student made an RTF call to confirm which flap setting he should use. The instructor advised him to select either 20º or 30º according to his judgement. On approach the pilot flared the aircraft slightly higher than normal and bounced on touchdown. The nose then dropped, the aircraft descended and on impact with the ground the nose landing gear collapsed. The aircraft came to a stop resting on the underside of the engine cowl with the nose gear still attached but bent and twisted beneath the aircraft. The propeller tips were distorted and the aircraft had sustained structural damage to the engine frame and firewall. The pilot vacated the aircraft uninjured.

Pilot's observations and discussion

The pilot's previous solo flights and landings had all gone very well so on this occasion he was disappointed in his performance. Afterwards he carried out his own analysis of the accident:

> After his RTF call he had selected what he believed to be 20º of flap; the aircraft was actually set at 30º of flap. This flap setting, along with wind speed and direction on the day, may have contributed to the high flare on approach as he compensated for the nose-down attitude caused by this flap setting. He also considered he had not recognised that he had flared high and, because he not previously experienced a poor landing, was unable to identify the deteriorating situation.

He also discussed the outcome with his instructor and concluded that after the first bounce he had felt he was losing control and thus did not attempt a go-around, as he had been taught. As a result he had opted for a more determined attempt to land the aircraft by lowering the nose, which created an excessive rate of descent onto the nose landing gear.

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