ACCIDENT

Aircraft Type and Registration:	Cosmik Aviation EV-97 Eurostar, G-CEHL
No & Type of Engines:	1 Rotax 912-UL piston engine
Year of Manufacture:	2006 (Serial no: 2928)
Date & Time (UTC):	9 August 2013 at 1224 hrs
Location:	Gloucestershire Airport
Type of Flight:	Training
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Damage to nose landing gear, propeller, engine cowling and firewall
Commander's Licence:	Student pilot
Commander's Age:	64 years
Commander's Flying Experience:	46 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

Synopsis

The student pilot initiated takeoff with an incorrect pitch trim setting. The aircraft pitched nose-down shortly after takeoff and entered a series of pitch oscillations during which it touched down on its nose landing gear, which collapsed.

History of the flight

The student pilot was conducting a solo takeoff from Runway 27 when the accident occurred. The weather was fine, with good visibility and a 9 kt wind from 290°. With full power applied, the aircraft lifted off at 55 to 60 mph and climbed to 8 to 10 ft before pitching nose-down. The student pilot reduced power to idle and allowed the aircraft to settle on the runway, before reapplying full power. The aircraft followed a similar motion as before, this time entering a series of pitch oscillations. This resulted in the nose landing gear collapsing. The aircraft skidded to a halt on the runway and the student pilot made switches safe before vacating. The Airport's RFFS arrived on scene shortly afterwards.

The student's flying instructor witnessed the accident and observed multiple touchdowns on the nose landing gear before it collapsed. He was subsequently able to replicate the pitch and feel of the aircraft by applying more down trim than was normal, and concluded that the aircraft had commenced takeoff with an incorrect pitch trim setting. The instructor noted that the pitch

trim control on the Eurostar aircraft is relatively coarse and has a powerful effect. It was also found that, with training in assertive selection of pitch attitude against unexpected control pressures, it was possible to overcome the effects of an incorrectly trimmed aircraft. Additional training to improve recognition and reaction to such a situation was to be included in the training organisation's syllabus.