

## Taylor JT1 Monoplane, G-AYUS

<b>AAIB Bulletin No: 9/2003</b>	<b>Ref: EW/G2003/06/07</b>	<b>Category: 1.3</b>
<b>Aircraft Type and Registration:</b>	Taylor JT1 Monoplane, G-AYUS	
<b>No &amp; Type of Engines:</b>	1 Volkswagen 1600 piston engine	
<b>Year of Manufacture:</b>	1992	
<b>Date &amp; Time (UTC):</b>	1 June 2003 at 1350 hrs	
<b>Location:</b>	Nayland Airfield, Suffolk	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Broken propeller, bent main landing gear and further structural damage to the wing main spar	
<b>Commander's Licence:</b>	Private Pilot's Licence	
<b>Commander's Age:</b>	46 years	
<b>Commander's Flying Experience:</b>	285 hours (of which 19 were on type)	
	Last 90 days - 20 hours	
	Last 28 days - 4 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

The Taylor JT1 Monoplane is a small, single-seat aircraft with a conventional tailwheel landing gear configuration. The pilot was intending to take off from Nayland airfield for a local flight. The weather conditions were favourable, with an overcast layer of cloud above 5,000 feet, excellent visibility and a wind of 4 to 8 kt from 200°. Nayland's one marked runway (14/32) is a grass strip of 600 metres x 20 metres. It is unusual in having a severe upslope to the north-west, strongly favouring takeoffs downhill on Runway 14 and landings uphill on Runway 32. The inclined portion has steep sides on both sides of the strip.

After allowing the engine to warm and performing his checks before takeoff, the pilot taxied to the northern end of Runway 14 and lined up for the downhill takeoff. He then applied power progressively, allowing the aircraft to roll forward and keeping it straight with the rudder. This technique had worked well on his previous takeoffs at Nayland but on this occasion, the engine spluttered for a few seconds and the aircraft swung significantly to the left. The pilot counteracted this swing with right rudder but an abrupt resumption of full power caused a large swing to the right.

By the time the pilot was able to regain control of the aircraft he was approaching the major downslope and, with ineffectual heel operated brakes, he surmised that if he reduced power he would be unable to stop before the end of the runway and might well become airborne at a late and

dangerous stage. Therefore, he elected to continue the takeoff, believing that the aircraft would gain sufficient speed on the downslope to climb away safely. Instead, as the ground dropped away the aircraft became airborne in a condition very close to a stall and by then it was pointing some 20° to the right of the runway centreline.

As the aircraft descended along the runway downslope, the pilot was unable to stop it veering further to the right and he could not generate a positive rate of climb. The aircraft struck the rising ground to the right of the runway and travelled briefly up the sloping right hand side of the strip before coming to a halt, nose-down at an angle of 45°. The pilot switched off the magnetos and fuel and released himself from the aircraft.

In retrospect, the pilot considers that, in view of the limiting conditions of the runway with this aeroplane, he should have abandoned the takeoff as soon as there was any indication of a loss of power or any other factor affecting the acceleration.