

## Aeronca 11AC Chief, G-IVOR

<b>AAIB Bulletin No: 3/2004</b>	<b>Ref: EW/G2003/08/55</b>	<b>Category: 1.3</b>
<b>Aircraft Type and Registration:</b>	Aeronca 11AC Chief, G-IVOR	
<b>No &amp; Type of Engines:</b>	1 Continental A65-8F piston engine	
<b>Year of Manufacture:</b>	1940	
<b>Date &amp; Time (UTC):</b>	30 August 2003 at 1400 hrs	
<b>Location:</b>	Bodmin Airfield, Cornwall	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - 1
<b>Injuries:</b>	Crew - None	Passengers - 1 (Minor)
<b>Nature of Damage:</b>	Passenger hand swinging the propeller suffered severe laceration and a broken bone in his right hand	
<b>Commander's Licence:</b>	Private Pilot's Licence	
<b>Commander's Age:</b>	55 years	
<b>Commander's Flying Experience:</b>	115 hours (of which 65 were on type)	
	Last 90 days - 28 hours	
	Last 28 days - 12 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

Following the before start checks and normal cold start priming, the standard start procedure was carried out. This involved the pilot's colleague hand swinging the propeller. On the second swing the engine is reported to have 'coughed and kicked back'. The metal trailing edge of a propeller blade struck the starter's right hand between the base of the little finger and the wrist causing a deep laceration and breaking a bone. The pilot switched off the (non-impulse) magnetos and first aid was administered immediately. (The significance of non-impulse magnetos is that they require a more energetic swing of the propeller to start the engine than that needed by impulse magnetos. Furthermore, impulse magnetos produce a spark at the optimum point during the engine's rotation.)

On a previous day, the pilot's colleague had spent almost two hours swinging the propeller without managing to start the engine. On this occasion he swung the propeller without expecting the engine to 'fire' and was caught off guard when it did and the propeller kicked back.

Since February 2000 this is the fifth reported instance of a propeller hand swing starter suffering injury during the engine start sequence. On three of these occasions the person injured was not expecting the engine to start.