

**ACCIDENT**

<b>Aircraft Type and Registration:</b>	Piper PA-34-200T Seneca II, G-RVRB	
<b>No &amp; Type of Engines:</b>	2 Continental Motors Corp TSIO-360-EB piston engines	
<b>Year of Manufacture:</b>	1979 (Serial no: 34-7970440)	
<b>Date &amp; Time (UTC):</b>	14 May 2018 at 14:30 hrs	
<b>Location:</b>	Sleap Aerodrome, Shropshire	
<b>Type of Flight:</b>	Training	
<b>Persons on Board:</b>	Crew - 2	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Nose landing gear collapsed, fuselage and propellers damaged; engines shock-loaded	
<b>Commander's Licence:</b>	Airline Transport Pilot Licence	
<b>Commander's Age:</b>	54 years	
<b>Commander's Flying Experience:</b>	10,340 hours (of which 10 were on type) Last 90 days - 100 hours Last 28 days - 30 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot and additional enquires by the AAIB	

The pilot reported a normal, stable approach, with all three landing gear indicating down and locked. Approximately two seconds after touchdown, the nose landing gear collapsed and the aircraft came to rest on the runway.

The PA-34 nose landing gear is forward-retracting and the wheel axle is forward of the oleo strut pivot. When retracted, the gear is held up by hydraulic pressure in the actuator. When extended, the gear is prevented from collapsing by drag links which are held in an overcentre position by a spring-loaded downlock link.

The maintenance agency reported that the drag link assembly would not remain overcentred and further examination found that the downlock link attachment bolt was distorted. A new bolt was installed, and the drag links then remained locked when overcentred.

The AAIB has investigated several nose landing gear collapses on PA-34 aircraft, including N43GG (AAIB Bulletin 5/2006), the findings of which were similar to G-RVRB.

An FAA Airworthiness Directive mandates a periodic inspection of the PA-34 nose landing gear installation. G-RVRB was compliant with this inspection and the operator believed that the most likely scenario is that the aircraft was involved in one or more unreported heavy landings.