Morane Saulnier Rallye 235E, G-BGMT

AAIB Bulletin No: 5/98 Ref: EW/G98/02/04Category: 1.3

Aircraft Type and Registration:	Morane Saulnier Rallye 235E, G-BGMT
No & Type of Engines:	1 Lycoming O-540-B4B5 piston engine
Year of Manufacture:	1978
Date & Time (UTC):	7 February 1998 at 1700 hrs
Location:	Tatenhill Airfield, Leicestershire
Type of Flight:	Private
Persons on Board:	Crew - 2 - Passengers - None
Injuries:	Crew - None - Passengers - N/A
Nature of Damage:	Damage to nose cowlings, nose landing gear, propeller and engine
Commander's Licence:	Private Pilot's Licence with IMC Rating
Commander's Age:	40 years
Commander's Flying Experience:	307 hours (of which 47 were on type)
	Last 90 days - 8 hours
	Last 28 days - 5 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot and AAIB enquiries

The aircraft was on a pleasure flight from a private airstripnear Dinston, Stafford, to Tatenhill Airfield with two personson board. The weather was suitable and the wind was 240°/10kt. The flight was uneventful and the pilot reported that theapproach and landing on Runway 26 were normal with the aircraftflaring at 60 kt and touching down on its mainwheels at about50 kt. The pilot then maintained back pressure on the controlcolumn until the nosewheel touched down, as normal, after whichlight braking was applied. At this point vibrations were feltfrom the front of the aircraft and these rapidly became violentbefore the nosewheel assembly detached. The nose of the aircraftcontacted the ground causing damage to the propeller and cowling,and shock loading of the engine. The aircraft came to rest about120 metres from the threshold of Runway 26, having left the nosewheelsome 50 metres behind. The occupants, who were uninjured, evacuatedthe aircraft normally.

The associated maintenance organisation advised that the vibrationand detachment of the nosewheel assembly had been caused by nosewheelshimmy. There had been at least one report of nosewheel shimmybefore this accident, but the amplitude of the vibration had beenminor. The aircraft was fitted with a self-castoring nosewheelwith a friction type anti-shimmy device, and the maintenance organisationreported that this and several other areas of the nose landinggear would be stripped and inspected for serviceability.