ACCIDENT

Aircraft Type and Registration:	Beech B58 Baron, N80HC
No & type of Engines:	2 Continental IO-520C piston engines
Year of Manufacture:	1975
Date & Time (UTC):	4 July 2006 at 1154 hrs
Location:	Guernsey Airport
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Strikes to both propellers, engines shock loaded, damage to underside of forward fuselage
Commander's Licence:	Private Pilot's Licence
Commander's Age:	64 years
Commander's Flying Experience:	1,658 hours (of which 120 were on type) Last 90 days - 29 hours Last 28 days - 13 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot, AAIB telephone enquiries and examination of photographs of damaged components

Synopsis

The pilot heard a loud bang during landing and carried out a go-around. He determined that the nose leg was unlocked and could not be correctly locked down. Considerable damage was inflicted during the subsequent landing. Examination revealed that a bolt in the operating mechanism had failed, causing a change of geometry which allowed excessive loads to be applied to the system, leading to further failure.

History of the flight

The pilot reported that during a visual approach to Runway 27, all landing checks were completed and a normal touchdown was made. As the nosewheel was lowered on to the runway, a loud bang was heard, followed by the landing gear warning horn sounding, the nose gear green light being seen to have extinguished and the gear unsafe light illuminating. Up elevator and go-around power were both applied and during the subsequent go-around it could be seen in the mirror on the left engine cowling that the nose leg was swinging free and unlocked. A flyby of the tower was carried out which did not reveal any further information.

A hold was carried out to the south of the airport where a partial retraction, followed by gear extension using the manual emergency system, was carried out. The

nose leg remained in the same position throughout this procedure. An approach and landing was then carried out on Runway 27. As the main gear contacted the runway, the engine mixture levers were selected to CUT OFF and the magnetos were selected to OFF. As elevator authority reduced, both propellers contacted the ground. The aircraft came to rest in a nose down attitude; the pilot selected the fuel and master switches OFF before evacuating via the main door.

Engineering investigation

Subsequent examination of the aircraft by the repair company revealed that a bolt locating a drive rod operating the drag brace had sheared, thus affecting the geometry. As a result the normal over-centring action could not take place during the gear extension phase and the nose leg could not be locked down.

The landing gear assembly was returned to a company in the USA for repair and overhaul. No details of the failure mode of the bolt have so far been received. If any significant new information is received by the AAIB, this will be published in a further AAIB Bulletin.