Cessna F177RG, G-AZVP

AAIB Bulletin No: 11/2000 Ref: EW/G2000/03/07 Category: 1.3

Aircraft Type and Registration:	Cessna F177RG, G-AZVP
No & Type of Engines:	1 Lycoming IO-360-A1B6D piston engine
Year of Manufacture:	1972
Date & Time (UTC):	9 March 2000 at 1553 hrs
Location:	Elstree Airport, Hertfordshire
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - None
Injuries:	Crew - None - Passengers - N/A
Nature of Damage:	Propeller, landing gear door, engine shock-loaded
Commander's Licence:	Private Pilot's Licence
Commander's Age:	53 years
Commander's Flying Experience:	450 hours (of which 118 were on type) Last 90 days - 14 hours Last 28 days - 5 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot and telephone enquiries by the AAIB

The landing gear was extended during the downwind leg and the gear down green indicator (single light) illuminated, indicating that the gear was down and locked. The aircraft touched down on the main wheels and the nosewheel was initially held off. When the nose was lowered the nose leg folded back, the propeller struck the runway and the aircraft came to rest on its main wheels and the nose. Eyewitnesses confirmed that touchdown was on the main wheels first and reported that the nose leg appeared to move rearwards at initial touchdown before the nosewheel contacted the ground.

For recovery, the tail was held down and it was attempted to extend the nosegear. The leg would not move until the system relief valve was opened and the hand pump was used. The gear was subsequently operated successfully using the hand pump.

An over-centre mechanical linkage provides a positive mechanical down lock for the nosewheel. The over-centre dimension at the nose leg downlock was found to be within limits although close to its minimum. The overcentre adjustment screw was correctly wire locked. There was detectable

wear in some of the pivot bushes and the left main downlock was found to be broken but otherwise nothing was found wrong with the system.

Following repair of the worn and damaged components identified above the aircraft re-entered service with no defects reported on the landing gear.