

Piper PA-34 Seneca, N32625, 19 January 1998 at 1115 hrs

AAIB Bulletin No: 4/98 Ref: EW/G98/01/11 Category: 1.3

Aircraft Type and Registration:	Piper PA-34 Seneca, N32625
No & Type of Engines:	2 Teledyne Continental TSIO 360 piston engines
Year of Manufacture:	1974
Date & Time (UTC):	19 January 1998 at 1115 hrs
Location:	Guernsey Airport, Channel Islands
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - 2
Injuries:	Crew - None - Passengers - None
Nature of Damage:	Nose and left main landing gear, left propeller, left wing and lower forward fuselage damaged. Aircraft assessed as being beyond economical repair
Commander's Licence:	Commercial Pilot's Licence with Instrument Rating
Commander's Age:	47 years
Commander's Flying Experience:	1,454 hours (of which 680 were on type) Last 90 days - 35 hours Last 28 days - 8 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot and engineering report submitted by an aircraft maintenance organisation

After take off the landing gear failed to fully retract, as indicated by the cockpit landing gear in-transit lights remaining illuminated. When the landing gear was selected 'down' only the cockpit nose gear 'down-and-locked' light illuminated; the main gear in-transit lights remained on. When the landing gear emergency lowering system was activated there was no change in the cockpit indications. A fly-by on Runway 27 followed by a fly-past of the Guernsey Airport control tower confirmed that only the nose gear appeared to be in its correct position whereas both main gears were extended, but not quite in their locked positions. The pilot decided to reduce possible damage by shutting down one engine during the subsequent approach to land, however the aircraft then landed heavily whereupon the nose and left main landing gears collapsed. The pilot assessed that the reason for the heavy landing was due to shut down of the second engine at a low airspeed during the final landing approach. When the aircraft came to rest there was a small fire from leaking fuel, but this was quickly extinguished by the Airport Fire Service. Subsequent engineering examination of the aircraft revealed that the main hydraulic 'up' pipe from the hydraulic power pack had suffered corrosion perforation under a 'P' clip in the nose landing gear bay which, when the landing gear had been selected 'up', had allowed all the hydraulic system fluid to escape overboard. In addition, examination

of the main landing gears showed that the pivot bushes associated with the drag links / 'A' frame joints were corroded even though adequate amounts of grease were found to be present. It was noted that there was evidence, from staining on the lower fuselage skinning, of a long term hydraulic fluid leak from the area of the nose landing gear bay. The aircraft had been parked generally outside in a salt laden atmosphere at Alderney airport and the owner had previously been advised about possible related corrosion problems and the need to lubricate the aircraft regularly. An annual maintenance check had been carried out in August 1997.