Piper PA-31, G-OPRA

AAIB Bulletin No: 9/99 Ref: EW/G99/04/02 Category: 1.2

Aircraft Type and Registration:	Piper PA-31, G-OPRA
No & Type of Engines:	2 Lycoming TIO-540-A1B piston engine
Year of Manufacture:	1967
Date & Time (UTC):	5 April 1999 at 1446 hrs
Location:	Blackpool Airport, Lancashire
Type of Flight:	Public Transport (Passenger)
Persons on Board:	Crew - 1 - Passengers - 2
Injuries:	Crew - None - Passengers - None
Nature of Damage:	Damage to left wing and landing gear door
Commander's Licence:	Commercial Pilot's Licence with Instructor Rating
Commander's Age:	33 years
Commander's Flying Experience:	2,017 hours (of which 545 were on type)
	Last 90 days - 188 hours
	Last 28 days - 61 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot and further inquiries by AAIB

On the approach to Blackpool with 10 miles to run the pilot selected gear down and obtained green lights for the nose and right hand gear, and a red 'gear unsafe' light. He attempted to reselect the gear up, but the handle would not move past the horizontal (neutral) position. A flypast of the tower revealed that the left main landing gear inboard door was down, but not the left gear leg. After several unsuccessful attempts to select the gear up, the pilot initiated the emergency gear lowering procedure, followed by another flypast of the tower and two touch and go circuits to try and unlock the left leg.

In view of the reducing fuel state, and after engineering consultation, the pilot decided to land. He shutdown the left engine, feathered the left propeller, used the starter motor to align the blades with the horizontal and carried out an asymmetric circuit, instructing the passengers to brace before the landing. The touchdown was on the right main and nose wheels and the pilot shut down the right engine and held the left wing tip up as long as possible. The left wing then contacted the runway and the aircraft was steered onto the grass.

Engineering investigation revealed that the left main landing gear oleo had deflated due to a seal that had rolled instead of sliding down the fescalised portion of the ram. The reduced length of the oleo prevented the uplock from releasing. The oleo seal had been changed approximately one month before the accident.