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Department of Transport

AIB Bulletin

9/85

No: 9/85 Ref: EW/G84/10/13

Aircraft type and registration:

Piper PA 32R-300 (Lance 1) G-GOMM (light single engine fixed

wing aircraft)

Year of Manufacture: 1977

Date and time (GMT): 11 October 1984 at 1735 hrs

Location: Bantry Aerodrome

Type of flight: Private (pleasure)

Persons on board: Crew — 1 Passengers — 1

Injuries: Crew — Minor Passengers — Minor

Nature of damage: Right main undercarriage collapsed. Damage to right wing,

propeller and cowlings

Commander's Licence: Private Pilot's Licence

Commander's Age: 22 years

Commander's total

flying experience: 119 hours (of which 31 were on type)

Information Source: Aircraft Accident Report Form submitted by pilot.

After an uneventful cross country flight the pilot joined the circuit and completed his downwind checks satisfactorily. A pre landing check including undercarriage indications was made during final approach.

This Bulletin contains facts relating to the accidents which have been determined up to the time of issue. This information is published to inform the public and the aviation industry of the general circumstances of the accidents at the preliminary/stage and must necessarily be regarded as tentative and subject to alteration or correction if additional evidence becomes available.

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The pilot reported that on flaring to land a scraping noise was heard which he thought was the propeller striking the gound. He attempted to keep the nose of the aircraft up but the scraping continued. When the main wheels touched down the right wing sank and struck the ground and the pilot then attempted to hold it in the air as long as possible. When the pilot applied the brakes the aircraft veered off the runway to the left and struck a wall.

Inspection of the touchdown area revealed the presence of propeller strike marks on the runway.

Examination of the aircraft showed that whilst the nose and left main undercarriages were intact, the upper trunnion assembly of the right main undercarriage had failed. Laboratory examination of this trunnion revealed the presence of pre-existing fatigue cracking on the aft side at the lower end of its strengthening fillet.

The trunnion is similar to that which is used on the undercarriage of the PA 34 (Seneca) and PA 44 (Seminole). Both these latter aircraft are the subject of Piper Service Bulletin No 787 which is considered mandatory by the manufacturer. This Bulletin calls for inspection of the trunnion in the area of the aft side at the lower end of the fillet every 100 hours after the aircraft achieves 1000 hours in service if it had not been replaced by a modified type of trunnion.

The Civil Aviation Authority is aware of this similarity and is engaged in discussion with the manufacturer with a view to expanding the compass of Service Bulletin 787 to include the PA 32R type.