Aviation Safety Investigation Report 199003093

Cessna 404

17 August 1990

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

Occurrence Number: 199003093 Occurrence Type: Accident

Location: Pormpuraaw East QLD

Date: 17 August 1990 **Time:** 1325

Highest Injury Level: Nil

Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	9
Total	0	0	0	10

Aircraft Details: Cessna 404 Registration: VH-TMU Serial Number: 404-0205

Operation Type: Regular Public Transport

Damage Level: Substantial

Departure Point: Pormpuraaw East QLD

Departure Time: N/A

Destination: Cairns QLD

Approved for Release: 9th May 1991

Circumstances:

Shortly after full power was applied for takeoff, the pilot noticed that the aircraft was tracking to the left of the strip centre. He turned gently right to correct the situation and the nosegear leg collapsed soon after. Metallurgical examination concluded that the nosegear leg mounting trunnions contained fatigue cracks. One trunnion had failed during this takeoff. The aircraft had accrued almost 20,000 hours and an inspection recommended by the aircraft manufacturer less than one year prior to the accident had not been conducted. Had the inspection been conducted, the fatigue cracks should have been detected. Some time after this aircraft was manufactured the manufacturer altered the design of the mounting trunnions to make them stronger.

Significant Factors:

The following factors were considered relevant to the development of the accident

- 1. Nose leg mounting trunnions of weaker design than later versions.
- 2. The operator had not conducted inspections recommended by the manufacturer.
- 3. The aircraft was frequently operated on rough strips.
- 4. Fatigue fracture of the nose gear mounting trunnion.