COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF CIVIL AVIATION

## AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Height a.m.s.l. (ft)

29 feet

Date

7.10.69

Reference No.

Time (Local)

1302

AS/691/1030

Zone

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1	LC	CATION	OF	OCCURRENCE	

Maryborough Airport, Queensland.

2. THE AIRCRAFT					
Make and Model	Registration	Registration Certificate of Airworthiness		Valid to	
Fokker F27/400	VH-FNR			2.2.76	
Registered Owner Ansett Transport Industries (Ops) Pty. Ltd., 489 Swanston Street, Melbourne, Victoria.	Pty. Ltd.,	Operator Ansett Transport Industries (Ops) Pty. Ltd., 489 Swanston Street,		Degree of damage to aircraft Substantial Other property damaged Nil	

Defects discovered

The nosewheel tyre had two splits in the internal lining, of one and two inches in length. The nosewheel tube had two fret marks, in positions which corresponded with the splits in the tyre, and one of the marks penetrated the tube.

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Last or intended departure point	Time of departure	Next point of intended landing	Purpose of flight	Class of operation
Brisbane	1220	Maryborough	Carriage of Passengers	Regular Public Transport
THE CREW				-

Nome	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury
Kenneth G. BIELENBERG Neville K. HARGREAVES	Captain First Officer	46 38	First Class ATP Second Class ATP	•	20,211 7,555	Nil Nil

5. OTHER PERSONS (All passengers and persons injured on ground)

Name	Status	Degree of injury	Nome	Status	Degree of injury
Victoria Evelyn PRICE Joan SAMPSON	Hostess Hostess	Nil Nil	Thirty passengers	Passengers	Nil

## 6. RELEVANT EVENTS

While making a turn shortly after commencing to taxy at Brisbane, the captain thought the nosewheel steering felt slightly stiffer than usual. However, during the subsequent taxying and flapless take-off at Brisbane and the undercarriage extension at Maryborough there were no indications of any abnormality in either the nosewheel steering or undercarriage systems. An approach was made to land on Runway 17 at Maryborough with a light crosswind from the left. The aircraft touched down lightly on the main wheels about 1,200 feet ast the threshold. The nosewheel was lowered onto the runway and ground fine pitch was selected. Almost mmediately severe nosewheel shimmy was noticed, accompanied by vibration and noise. The captain applied back pressure to the control column, in order to lighten the weight on the nosewheel, and ordered the first officer to carry out the impact drill. The severe vibration continued, and then, at 3,100 feet beyond the threshold, the downlock mounting lug on the nose undercarriage assembly failed allowing the assembly to pivot rearwards beyond its normal "DOWN" position. The captain applied the brakes as the aircraft continued rolling with the nosewheel pivot bracket and wheel lever fork-end skidding along the runway surface. The aircraft came to a halt 550 feet short of the southern end of the runway. Investigation showed that the nosewheel tyre was in a substantially deflated condition at touchdown and that the tube subsequently became mutilated and bunched in one section of the tyre resulting in an unbalanced nosewheel condition which generated fore and aft loads which were at or near the natural frequency of the nose undercarriage assembly.

## 7. OPINION AS TO CAUSE

The cause of the accident was that the deflated nose tube became asymmetrically positioned in the nosewheel tyre leading to the inducement of abnormal balance stresses in the nose undercarriage assembly.

Pepper released

(D.S. GRAHAM)

Designation Assistant Director-General (Air Safety Investigation)

8.5.72