CHECK SHEET - CONLUSION PROCESSING

FILE REF: 6/752/1051

ACTION	DATE	OFFICER
REVIEW COMPLETED	25-3-77	SIGN
CONCLUSIONS SUBMITTED		
CONCLUSIONS APPROVED		
DRAFT PROOF READ		
DRAFT TO PPC		
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CONCLUSIONS DESPATCHED TO REGION		

COMMONWEALTH OF AUSTRALIA DEPARTMENT OF TRANSPORT

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Publication of this report is authorised by the Secretary under the provisions of Air Navigation Regulations 283 (1)

Reference No. SI/752/1051

1. LOCATION OF OCCURRENCE

	Height a.m.s.l.	Date	Time (Local)	Zone
Sydney Kingsford-Smith Airport N.S.W.	6 feet	24.10.75	1640	EST

2. THE AIRCRAFT

Make and Model	Registration	Certificate of Airworthiness
Boeing 707/338C	VH-EAE	

Certificate of Registration issued to	Operator	Degree of damage to aircraft
Qantas Airways Limited 70 Hunter Street Sydney NSW 2000	Qantas Airways Limited 70 Hunter Street, SYDNEY NSW 2000	Substantial Other property damaged Substantial to Fox aircraft tug.

Defects discovered

3. THE FLIGHT

Last or intended departure point	Time of departure	Next point of intended landing	Purpose of flight	Class of operation
Sydney		Den Pasar, Indonesia	Regular Public Transport	Regular Public Transport

4. THE CREW

Name	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury
Ronald Eric LEAVER	Captain	42	ATPL	4650	9563	Nil
	First Officer	38	ATPL	528	4755	Nil

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

Name	Status	Degree of injury	Name	Status	Degree of injury
Norman Ernest ELLIS	Tug driver	Fatal			

6. RELEVANT EVENTS

The aircraft was positioned at gate 2 of the international terminal where it was prepared for operations as RPT flight No. QF729. At the time of the accident loading had been completed and there were 99 persons on board, including the crew. A towbar was attached to the aircraft's nosewheel and a Fox aircraft tug was positioned in front of the aircraft about 30 cm from the end of the towbar. The tug was waiting to push the aircraft back from the terminal after all four engines were started. One engine had been started and the second engine was in the process of being started when the tug driver was seen to raise himself from his seat and look downwards towards the end of the towbar when the tug suddenly accelerated forward. The tug struck and deflected the towbar and then collided with the aircrafts nosewheel structure, pushing it backward. The nose section of the aircraft crushed the tug cabin, killing the driver.

Subsequent investigation has shown that because it is difficult for Fox tug drivers to see the tug/towbar hookup point from a seated position, drivers often adopt a semi standing position and this suggested a design deficiency.

The driver suffered from epilepsy and a post mortem blood analysis indicated that he had not taken drugs as prescribed and was not fully protected against the occurrence of an epileptic attack. It was also reported that, although his visual acuity with both eyes would not be seriously impaired, he had a serious diminished visual acuity of his left eye. Neither of these conditions were known to his employers, Qantas Airways. The post mortem blood analysis also indicated a blood alcohol concentration of 0.11%.

7. OPINION AS TO CAUSE

The cause of the accident was that the tug driver lost control of the tug in circumstances where there was insufficient time for recovery to be effected.

Approved for publication	Delegate of the Secretary	Date