COMMONWEALTH OF AUSTRALIA DEPARTMENT OF CIVIL AVIATION

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Reference No.

AS/703/1004

1.	LOCATION	<u>OF</u>	OCCURRENCE

Time (Local) Height a.m.s.l. (ft) Date Zone 15 miles south of Waratah, Tasmania. 1,400 feet 9.1.70 About 1429 TST

THE AIRCRAFT

Registration	Certificate of	Valid from	Valid to
VH-AHG Airworthin		21.10.66	20.10.75
Operator		Degree of damage to	aircraft
Rotor-Work Pty	. Ltd.,	Destroyed	
Box 174,		Other property damaged	
Avalon Beach, 1	New South Wales.	Nil.	
	VH-AHG Operator Rotor-Work Pty Box 174,	VH-AHG Operator Rotor-Work Pty. Ltd.,	VH-AHG Operator Rotor-Work Pty. Ltd., Box 174, Certificate of Airworthiness 21.10.66 Degree of domage to Destroyed Other property domage to Destroyed

Defects discovered

Because of the inaccessibility of the site and the extensive fire damage, the examination of the engine and airframe was necessarily limited. The examination, however, did not disclose any significant defect.

3. THE FLIGHT

Last or intended departure point	Time of departure	Next point of intended landing	Purpose of flight	Class of operation
Huskisson Camp Helipad	About 1427	Mt. Bischoff Helipad Waratah	Carriage of pass- engers and freight	Charter
4. THE CREW				

Nome	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury
Anthony Ireson BOOTH	Pilot	41	Commercial Helicopter	714	4,641	Serious

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

Name	Status	Degree of injury	. Nome	Status	Degree of injury
Geoffrey KHALELEE Graeme Edward COOK	Passenger Passenger	Fatal Minor			

CONTRAVENTIONS OF REGULATIONS AND ORDERS

Regulation or Order No.	Nature of contravention				
A.N.R. 38(1)	A person carried out maintenance of the aircraft who was not a person (a) holding a certificate of approval (b) holding a licence endorsed with the appropriate rating, (c)				
	working under the supervision of a person holding the appropriate rating or (d) authorised for the particular purpose.				
A.N.R. 34(3)	The aircraft was flown during a period for which its certificate of airworthiness was deemed to be suspended under the provisions of A. N. R. 34(1)(b).				

RELEVANT EVENTS

The pilot had made only one previous take-off from the Huskisson camp helipad. This was during an area familiarisation flight which he had conducted earlier in the day. Prior to the familiarisation flight he had not flown a Bell 47 series aircraft for several months.

The aircraft load on take-off consisted of two passengers and 35 pounds of baggage and freight. The temperature was about 18 degrees centigrade and a light north-easterly breeze gave a tailwind component of 3 to 5 knots in the take-off direction. The flight path after take-off was dictated by the terrain and lay across a heavilytimbered gully towards a saddle slightly higher than the pad. During the lift-off and initial hover the engine operation appeared normal. Because of the tailwind an increase in power became necessary during transition to forward flight. After travelling about 100 yards, during which time he applied full power, the pilot decided that the aircraft would be unable to clear the trees ahead. He turned back towards the take-off point and, when it became apparent that the rotor speed was decaying, continued the turn and allowed the aircraft to settle towards a partly-cleared area at the bottom of the gully. At a height of about 40 feet, the main rotor struck the surrounding trees. The aircraft fell heavily to the ground and burst into flames on impact.

OPINION AS TO CAUSE

From the evidence available it has not been possible to determine the cause of the accident.

Report approved Tra ham Designation Date Assistant Director-General (D.S. GRAHAM) 26,10,71 (Air Safety Investigation)

DEFINITIONS

- ACCIDENT An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all those persons have disembarked and in which
 - (a) any person suffers death or serious injury as a result of being in or upon the aircraft or by direct contact with the aircraft or anything attached to the aircraft; or
 - (b) the aircraft suffers substantial damage.

FATAL INJURY - Any injury which results in death within 30 days.

SERIOUS INJURY - Any injury other than a fatal injury which

- (a) requires hospitalisation for more than 48 hours, commencing within seven days from the date the injury was received; or
- (b) results in a fracture of any bone (except simple fractures of fingers, toes or nose); or
- (c) involves lacerations which cause severe haemorrhages, nerve, muscle or tendon damage; or
- (d) involves injury to any internal organ; or
- (e) involves second or third degree burns, or any burns affecting more than five percent of the body surface.

MINOR INJURY - Any injury other than as defined under "Fatal Injury" or "Serious Injury".

DESTROYED - Consumed by fire, demolished or damaged beyond repair.

SUBSTANTIAL DAMAGE - Damage or structural failure which adversely affects the structural strength, performance or flight characteristics of the aircraft and which would normally require major repair or replacement of the affected component. The following types of damage are specifically excluded: engine failure, damage limited to an engine, bent fairings or cowling, dented skin, small punctured holes in the skin or fabric, taxi-ing damage to propeller blades, damage to tyres, engine accessories, brakes, or wingtips.

MINOR DAMAGE - Damage other than as defined under "Destroyed" or "Substantial Damage".