COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF CIVIL AVIATION

## AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Reference No.

AS/703/1060

1. LOCATION OF OCCURRENCE

2. THE AIRCRAFT

Make and Model Registration Valid from Valid to Certificate of Airworthiness Beech 23, "Musketeer" VH-UAS 17.5.66 16.5.75 egistered Owner Degree of damage to aircraft W.L. Gillespie, Fogarty's Field, Substantial Griffith Street. Other property damaged Toolern Vale, Nil Bacchus Marsh, Victoria. Victoria.

Defects discovered

Nil.

3. THE FLIGHT

| Last or intended departure point | Time of departure | Next point of intended landing | Purpose of flight | Class of operation |  |
|----------------------------------|-------------------|--------------------------------|-------------------|--------------------|--|
| Property one mile south          | 1530              | Fogarty's Field,               | Tworest           | Desirente          |  |
| of Gunbower                      | 1000              | Toolern Vale                   | Travel            | Private            |  |

THE CREW

| Name               | Status | Age | Class of licence | Hours on type | Total hours | Degree of injury |
|--------------------|--------|-----|------------------|---------------|-------------|------------------|
| John Albert TREBLE | Pilot  | 37  | Private          | 3.10          | 171         | Nil              |

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

| Name                              | Status                 | Degree of injury | Name             | Status    | Degree of injury |
|-----------------------------------|------------------------|------------------|------------------|-----------|------------------|
| John BARTLETT<br>Mrs. J. BARTLETT | Passenger<br>Passenger | Nil<br>Nil       | Frederick AITKEN | Passenger | Nil              |
| 1                                 | 1                      | 1                | · ·              | l .       | i                |

## 6. RELEVANT EVENTS

After landing at Kerang on Saturday, 21 November, the pilot was later informed of the existence of an airstrip near Gunbower. The following day he filled the aircraft's fuel tanks and flew to the airstrip, landing without incident. The marked strip, aligned approximately east-west, was 1,525 feet long.

Preparing for departure the pilot positioned the aircraft as close to the western end of the paddock as possible, which provided an additional ground roll of about 565 feet before the commencement of the marked strip. Fifteen degrees of flap was lowered and full throttle applied with the brakes on. With the brakes leased and in near calm conditions the aircraft began its take off run but did not become airborne when expected. As an irrigation channel beyond the eastern end of the strip came into view the pilot realised he was committed to continue and at a point 114 feet past the end of the strip but 36 feet before the irrigation channel the aircraft was lifted into the air, probably at a low airspeed. It sank back to the ground beyond the irrigation channel and the pilot, realising he was unlikely to become safely airborne over obstacles ahead, abandoned the take off and endeavoured to stop the aircraft, but he was unable to do so before it entered a swamp where the nose landing gear was torn off. The aircraft came to rest in swamp grass, substantially damaged.

For the reported conditions the take off weight chart included in the aircraft's flight manual indicated that for a take off at the maximum permissible weight a strip length of 2000 feet was required. Investigation of the loading of the aircraft indicated that it had been loaded beyond the maximum permissible all up weight by an estimated 119 pounds.

## 7. OPINION AS TO CAUSE

From the evidence available it has not been possible to determine positively the cause of the accident. One causal factor established was that the pilot did not give proper consideration to the loading of the aircraft and to the effect of loading on strip length requirements.

Report released Suchaner,

(D.S. GRAHAM)

Assistant Director-General (Air Safety Investigation)

30.11.72

## 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".