

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

AS/734/1024

Publication of this report is authorised by the Director-General of Civil Aviation under the provisions of Air Navigation Regulation 283(i)

1. LOCATION OF OCCURRENCE

Batchelor Airfield, Northern Territory

Height a.m.s.l.
330 feetDate
7.10.73Time (Local)
1145 hoursZone
CST

2. THE AIRCRAFT

Type and Model
Cessna 172DRegistration
VH-RKP

3. CONCLUSIONS

(i) At approximately 1145 hours CST on 7 October, 1973 a parachutist was fatally injured by impact with the ground following a free-fall descent at Batchelor Airfield, Northern Territory.

(ii) The parachutist, Gabrielle Steele, aged 23 years, had previously made nine static line jumps and 19 free falls with delays of up to 20 seconds. This was the first occasion on which she was to attempt a delay of 25 seconds and it was her first jump for the day.

(iii) The parachutist was equipped with a back mounted type 5TU main parachute and a Pioneer chest mounted reserve parachute each of which was manually operated. The ripcord handle for the main parachute was attached on the front left shoulder harness for operation with the right hand across the body. The ripcord handle for the reserve parachute was fitted on the reserve parachute pack.

(iv) The parachutist wore a pair of goggles and a helmet, both of which she had borrowed, and she was also equipped with a North American Aerodynamics "North Star" wrist altimeter.

(v) The main parachute was the property of the Ace Parachute Centre and had been used for a descent earlier in the day. It was repacked by three members of the Ace Parachute Centre under the supervision of George Angelo Papa and was then used by Miss Steele.

(vi) At the time of the accident the weather was fine, with a visibility of 28 kilometres and no significant cloud. The wind velocity at ground level was light and variable.

(vii) The descent on which the accident occurred was from a Cessna 172D aircraft registered VH-RKP, which was flown by Wallace Baxter Pendray, the holder of a valid commercial pilot licence. The holder of the Certificate of Registration for the aircraft was George Angelo Papa. Also on board the aircraft were the jumpmaster Richard Frystak and a student parachutist, Dianne Covey.

(viii) Prior to departure Miss Steele was assisted with her preparations for the jump by other members of the Ace Parachute Centre. The release pins on the main parachute were set to the "half pin" position, which involves partially withdrawing the release pins with the aim of minimising the force necessary to operate the ripcord. At this time also it was noted that the pins appeared to move freely and that the cones in which they were inserted were in good order.

(ix) The descent was planned to take place from 6000 feet with a 25 second delay before deployment of the main parachute. It was arranged that Miss Steele would perform turns and other exercises during the free fall segment of the descent. These exercises were to be observed by the jumpmaster who was to leave the aircraft immediately after Miss Steele had jumped.

(x) The student parachutist, Dianne Covey, left the aircraft at 2500 feet and completed her jump without incident. As the aircraft continued climb to 6000 feet the altimeter worn by Miss Steele was checked against the aircraft altimeter and appeared to be operating satisfactorily. Approaching the exit point she complained that her helmet was not properly secured and the jumpmaster found that the slide locking bar of the buckle had jammed open. His rectification action was to twist the loose end of the helmet chin strap around the chin guard.

(xi) Miss Steele made a satisfactory exit from the aircraft and was followed immediately by the jumpmaster, who then manoeuvred to within 7 to 10 metres of her and observed the manner in which she carried out the planned exercises. At a height estimated to be 3000 feet she signalled to the jumpmaster that the exercise was completed and he turned away and deployed his parachute. As he did so he noticed that Miss Steele's right hand moved to her right side as if to make a "right outward" pull.

(xii) The jumpmaster temporarily lost sight of Miss Steele but saw her helmet falling to the ground. She was then observed to continue in stable fall until, at between 1000 feet and 500 feet above the ground, she began to tumble. Neither the main nor the reserve parachute were deployed and she was killed on impact with the ground.

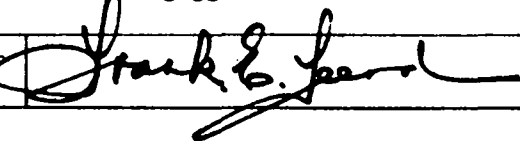
(xiii) Examination of the equipment after the accident revealed that the main parachute ripcord handle was out of its stowage, but the release pins had not been extracted from the cones. Tests indicated that a pull on the ripcord of at least 12.7 kilogrammes would have been necessary to open the parachute pack. There was no evidence to show that any attempt had been made to deploy the reserve parachute which was serviceable in all respects. Miss Steele's helmet came to rest some 90 metres from the scene of the accident and her goggles could not be found, having apparently been lost at some time during the descent. The buckle from the helmet chin strap also could not be located.

(xiv) Miss Steele wore contact lenses and had said, following a previous incident in which she had lost her goggles, that she had closed her eyes to retain these lenses. Such an action on this occasion could have deprived her of reference to her wrist altimeter and of visual cues as to her proximity to the ground.

4. OPINION AS TO CAUSE

The cause of the accident was that the parachutist, having encountered difficulty in activating her main parachute, did not deploy her reserve parachute possibly because of the distraction arising from the loss of her helmet and goggles.

Approved for
publication



(Frank E. Yeend)

Delegate of the Director-General of Civil Aviation

Date

30.10.1974

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".