COMMONWEALTH OF AUSTRALIA-BUREAU OF AIR SAFETY INVESTIGATION REFERENCE NO. AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT SI/822/1001 LOCATION OF OCCURRENCE Elevation: 480 feet "Brobenah", 6 km north of Leeton, N.S.W. Time: Date: Zone: 4.1.82 1350 hours ESuT 2. THE AIRCRAFT Registration: Make and Model: Schleicher KA6 CR VH-GUP ertificate of Airworthiness: Issued on 12.8.68 Prtificate of Registration Issued to: Operator: ..A.A.F. Richmond Formation Welfare, R.A.A.F. Richmond Gliding Club, R.A.A.F. Base, R.A.A.F. Base, RICHMOND, N.S.W. RICHMOND, N.S.W. Degree of Damage to Aircraft: Other Property Damaged: Nil Destroyed Defects discovered: Nil THE FLIGHT Departure Point: Time of departure: "Brobenah" 1350 hours Destination: "Brobenah" Erpose of flight: Solo training Class of Operation: Aerial Work 4. THE CREW Hours on Total Degree of Name Status Age Class of Hours Injury Licence Type Jeffrey Neville TAYLOR Pilot 28 Fatal 31 1/2 Certificate 5. OTHER PERSONS (ALL PASSENGERS AND PERSONS INJURED ON GROUND) Name Status Degree of Injury

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6. RELEVANT EVENTS

The pilot was a member of the RAAF Richmond Gliding Club and was attending a camp, held annually by the club at various locations in western New South Wales, to gain experience at cross-country gliding. He completed several flights in a Blanik two-seat glider and was given instruction in the winch launch procedures in use at 'Brobenah'. These differed from the aero-tow launches used at RAAF Richmond in that the glider would become airborne very rapidly and climb at a much steeper angle. The permissible speed range during a winch launch was also less than during an aero-tow launch. The pilot's training progressed to the stage where, on 3.1.82, he completed his first solo winch launch in the Blanik.

The standard procedure laid down by the Flying Federation of Australia in the event of a launch failure, such as a cable break, during take-off is to lower the nose of the glider to regain and maintain a safe flying speed, then operate the cable release twice and land straight ahead. An alternative to landing ahead is to complete a circuit before landing, but this is only to be attempted if the glider has reached a minimum height of 400 feet. During his training at the camp the pilot was tested on launch failures, but only above 400 feet where he carried out a circuit before landing.

On 4.1.82, the pilot planned to carry out a cross-country exercise but weather conditions were unsuitable for soaring. Instead, it was arranged that he would make his first solo winch launch in the single-seat KA6 CR glider. He had flown this type of glider on three previous occasions, but only by aero-tow launch. For aero-tow the take-off speed range was 45 to 75 knots but for winch launch this was reduced to 45 to 54 knots. Prior to the flight, the pilot was briefed by the club's Chief Flying Instructor on aircraft handling and procedures. The instructor also contacted the senior winch operator to alert him that the pilot was making his first launch on the KA6 CR and to ensure an experienced person was operating the winch.

The take-off was commenced into the southwest, on a 1380 metres long strip. The surface wind was a southwesterly at about 8 knots. After a normal ground roll, the glider became airborne but adopted an excessively steep climb attitude. Its speed also appeared slower than normal. The climb angle was then reduced and the glider's wing 'waggled' in the standard signal for more power. This was observed by the winch operator and power was increased. At about this time the tow cables fell away from the glider. The nose of the glider was then lowered slightly and, although only at a height of approximately 200 feet, a right turn was commenced. Glider pilots on the ground who observed this manoeuvre described it as similar to the standard procedure following release from an aero-tow launch. After turning through some 40 degrees, the right wing suddenly dropped and the glider entered a spin. This continued to ground impact, which was in a near-vertical attitude, 35 metres to the right of the strip and 150 metres from where the take-off had commenced.

Subsequent examination found no evidence of mechanical defect or malfunction which might have contributed to the accident. There was no evidence of pilot incapacitation.

7. RELEVANT FACTORS

- 1. The pilot rotated the glider to an excessive climb angle on take-off, with a resultant loss of airspeed.
- 2. After a decision to abandon the launch, the pilot did not follow the standard, safe procedure of regaining airspeed and landing straight ahead.
- 3. The pilot attempted to turn the aircraft at too low a speed, resulting in a stall and spin.
- 4. The pilot's behaviour was possibly adversely affected by the stress of making his first solo launch in the KA6 CR glider.

Approved for publication under the provisions of Air Navigation Regulation 283(1)

(P.E. Choquenot)

Date:

Director

19.7.83