COMMONWEALTH OF AUSTRALIA-BUREAU OF AIR SAFETY INVESTIGATION AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

REFERENCE NO \$1/811/1019

1. LOCATION OF OCCURRENCE

Gympie Aerodrome, Qld.			Elevation: 260 feet
Date: 8.3.81	Time:	1321 hours	Zone: EST

THE AIRCRAFT

Make and Model: Avionautica Rio S.P.A. M M100 S	Mesange Registration: VH-GXF					
Certificate of Airworthiness: Valid from 19.7.68						
Certificate of Registration Issued to:	Operator:					
Degree of Damage to Aircraft: Destroyed	Other Property Damaged:					
Defects discovered: Unapproved modification instrumentation station	ons carried out to flight c system					

3. THE FLIGHT

Departure Point: Gympie Time of departure: 1311 hours

Destination:

Gympie

Purpose of flight: Local gliding

Class of Operation: Private

THE CREW

Name	Status	Age	Class of Licence	Hours on Type	Total Hours	Degree of Injury
	Pilot	31	'C' Certificat	2	13	Fatal

OTHER PERSONS (ALL PASSENGERS AND PERSONS INJURED ON GROUND)

Name	Status	Degree of Injury			

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6. RELEVANT EVENTS

The pilot commenced gliding training in Blanik gliders on 30.8.80 and became most enthusiastic about the sport. He endeavoured to fly frequently and was reported to have overstated his experience level in order to gain authorisation to fly the more sophisticated M100S single-seat glider. However, on two occasions during his early training he became confused about flight control handling during approaches to land and apparently 'froze' on the controls. He also made comment that he found the M100S 'strange' to fly; that the rudder pedals were uncomfortable, the control column felt unresponsive and he had difficulty in assessing a level attitude by external reference. It could not be established whether he had practiced spin recoveries during the three flights he had made in VH-GXF in the four days prior to the accident.

The glider was winch-launched on Runway 14, into a surface wind of about 7 knots. The take-off was normal and the tow cable was released at a height of approximately 1400 feet above ground level. About 10 minutes later VH-GXF was observed on a left downwind leg for Runway 14, at an estimated height of 450 to 500 feet. The glider then banked steeply to the left and completed three full turns, as if attempting to climb in a thermal. However, there was apparently no gain in height and one witness estimated some 50 feet was lost in the turns. The glider was again straightened onto the downwind leg but its speed appeared low. It then stalled and entered a left spin. The spin was stopped after one turn, at a height of approximately 300 feet, but the glider then entered a spiral dive to the left which continued to the ground. Impact was in a steep nose-down attitude, 240 metres to the northeast of the runway.

There was no evidence of pilot incapacitation. Examination of the wreckage found no defect other than the unapproved modifications to the static system. These included sealing of the fuselage static vents, cutting of a static system line within the fuselage to provide a new source of static air pressure, removal of a rate of climb indicator, fitment of a dynamic bellows assembly to the right-hand variometer and reversal of the connections to the right-hand variometer. It is probable that the static vents were sealed during repairs to the glider in 1979. The circumstances under which the other modifications were carried out were not established.

The effect of the modification on instrument indications could not be accurately determined. There was general knowledge amongst pilots who flew VH-GXF that the right-hand variometer gave erroneous indications and should not be used. However, the instrument was not marked with an unserviceable placard and it could not be confirmed that was aware of its unreliable status. That any error in the other instruments supplied by the static system was probably slight was indicated by the fact that the glider had been safely operated for 164 hours subsequent to the repair work in 1979. Therefore, unless the pilot made reference to the right-hand variometer during the flight, the condition of the static system was probably not a factor in the accident.

7. OPINION AS TO CAUSE

There is insufficient evidence available to enable the cause of the accident to be established.

Approved for publication under the Date:

provisions of Air Navigation Regulation 283(1)

(A.R. Woodward)
Ag. Director

12.11.82