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Aviation Safety Investigation Report 199000014

Cessna 210-N

29 July 1990

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

Occurrence Number: 199000014 Occurrence Type: Accident

Location: Lake Eyre North, 53 km north-west Muloorina station SA

Date: 29 July 1990 **Time:** 1050

Highest Injury Level: Nil

Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	5
Total	0	0	0	6

Aircraft Details: Cessna 210-N
Registration: VH-XAG
Serial Number: 21063456
Operation Type: Charter
Damage Level: Substantial
Departure Point: Innamincka SA

Departure Time: 0908

Destination: William Creek SA

Approved for Release: 17th September 1991

Circumstances:

The aircraft was conducting a scenic flight over an area of Lake Eyre North, where the surface of the lake is 30-40 feet below sea level. Weather conditions were fine. High cloud and calm conditions resulted in a glassy lake surface with diminished horizon definition. Passengers on the flight reported that the pilot had mentioned the possibility of flying below sea level, and later when approaching the lake he remarked that it would be "tricky" without an horizon. He gave no indication that the aircraft was experiencing any difficulties which would affect its ability to maintain flight. The aircraft contacted the lake in a near level attitude, and in cruise configuration. The nearest landfall was twelve kilometres distant, and after several hours the passengers were reached and assisted by a rescue party. Rescue attempts by helicopters were abandoned when unable to safely hover due to the illusory effects created by the glassy surface. The passengers had not been provided with the required flotation safety equipment for this particular flight.

Significant Factors:

The following factors were considered relevant to the development of the accident

- 1. The pilot attempted to cross the lake at an extremely low level.
- 2. The pilot had insufficient experience to recognise the danger of the prevailing conditions.
- 3. The pilot was unable to maintain an adequate definition of the lake surface, due to visual illusions created by the glassy water surface conditions.

Reccomendations:

- 1. It is recommended that the Civil Aviation Authority publish an article in the Aviation Safety Digest addressing the dangers inherent in low flight, particularly the visual illusions created by areas of water during calm conditions.
- 2. It is recommended that the Civil Aviation Authority publish an article in the Aviation Safety Digest to emphasise the requirement for the carriage of flotation equipment in accordance with CAR 258 and CAO 20.11 with respect to areas of water other than ocean. This accident was not the subject of an on-scene investigation.