

**Aviation Safety Investigation Report
199403812**

**Boeing Co
B767
Unknown
Glider**

17 December 1994

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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.

The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

Occurrence Number:	199403812	Occurrence Type:	Incident
Location:	Bacchus Marsh		
State:	VIC	Inv Category:	4
Date:	Saturday 17 December 1994		
Time:	1535 hours	Time Zone	ESuT
Highest Injury Level:	None		
Aircraft Manufacturer:	Boeing Co		
Aircraft Model:	767-277		
Aircraft Registration:	VH-RMD	Serial Number:	22692
Type of Operation:	Air Transport Domestic Training		
Damage to Aircraft:	Nil		
Departure Point:	Melbourne VIC		
Departure Time:			
Destination:	Avalon VIC		
Aircraft Manufacturer:	Unknown		
Aircraft Model:	Glider		
Aircraft Registration:		Serial Number:	
Type of Operation:	Non-commercial Pleasure/Travel		
Damage to Aircraft:	Nil		
Departure Point:			
Departure Time:			
Destination:			

Approved for Release: Thursday, May 16, 1996

During descent to Avalon, and while in controlled airspace, the Boeing 767 (B767) passed in close proximity to three gliders which were operating near Bacchus Marsh. The glider pilots later reported that the confliction occurred at the Common Traffic Advisory Frequency (CTAF) boundary south of the airfield, at 4,000 ft, within Area Alpha. The horizontal separation with one glider was estimated to have been less than 300 m.

Three gliding clubs and one powered aircraft training organisation operate at Bacchus Marsh airfield. The CTAF boundaries are, 3 NM radius of the airfield and 2,000 ft above mean sea level (AMSL). The vertical boundary is determined by the 2,000 ft base of overlying controlled airspace. Area Alpha partially overlays the CTAF and has a 4,000 ft vertical limit. Air Traffic Control (ATC) will, on request, release Area Alpha to the gliding clubs.

The design of Area Alpha was negotiated between the gliding clubs and ATC. It was intended to provide suitable airspace to cater for the traffic density, and to meet the needs of the training syllabus for glider pilots. For example, the average 1,500 ft between ground level and the base of the 2,000 ft step is insufficient for spin recovery training which is mandatory for all glider pilots.

The gliding clubs have a record book adjacent to the telephone in the club house to record details of the release of the airspace, and have an 'Alpha Open' sign at the launch point to advise pilots when release approval has been obtained from ATC.

During the launch of the three gliders the 'Alpha Open' launch point sign was displayed although no request for release had been made to ATC, and no approval had been given. The glider pilots were not aware that Area Alpha had not been released. ATC routed the B767 through the area in the belief that glider traffic was conforming to the area step restrictions. Weather conditions at the time were such that the gliders were able to climb to 4,000ft.

There was no indication in the record book adjacent to the club house telephone that any contact had been made with ATC, and ATC did not have any record of telephone calls received from the clubs.

The gliding clubs were not able to determine who had displayed the sign that day, and were not sure that the sign had been removed after the previous days flying.

The B767 had been correctly routed through the area. The crew was alert to the high density traffic and was maintaining a heightened visual scan during the descent into Avalon.

Significant factors.

The following factors were considered relevant to the development of the incident:

1. The 'Area Open' sign was displayed when an ATC clearance was not available.
2. ATC was not aware that the gliders were operating in controlled airspace.

SAFETY ACTION

During the investigation, Airservices Australia revealed that as part of the implementation of the ICAO Airspace structure on 20 June 1996, the upper limit of the airspace available for gliding OCTA ('G' airspace) will be 3,500 ft over Bacchus Marsh and 4,500 ft to the west of Bacchus Marsh.

The following safety actions have also been taken.

The gliding clubs have:



- a) alerted all glider pilots operating at Bacchus Marsh to the circumstances of this incident;
- b) tightened up the mandatory recording of telephone requests for the release of Area Alpha airspace;
- c) manufactured a sandwich board indicator of 'Area Open' that shows the date, the name of the person who obtained the clearance and any conditions attached to the clearance;
- d) required that the sandwich board be placed in the club house adjacent to the telephone at the completion of each days flying; and
- e) required that during the first launch after the sandwich board is placed at the launch point the tug pilot is to call ATC to confirm that Area Alpha is open.

