

**Aviation Safety Investigation Report  
199703197**

**Cessna Aircraft Company  
182R  
British Aerospace Plc  
BAe 146-300**

**13 July 1997**

Readers are advised that the Australian Transport Safety Bureau investigates for the sole purpose of enhancing transport safety. Consequently, Bureau reports are confined to matters of safety significance and may be misleading if used for any other purposes.

Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

Investigations commenced after 1 July 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with the Transport Safety Investigation Act 2003 (TSI Act). Reports released under the TSI Act are not admissible as evidence in any civil or criminal proceedings.

**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](http://www.atsb.gov.au).**

---

<b>Occurrence Number:</b> 199703197 <b>Location:</b> 9km ENE Ayers Rock, Aerodrome <b>State:</b> NT <b>Date:</b> Sunday 13 July 1997 <b>Time:</b> 1133 hours <b>Highest Injury Level:</b> None	<b>Occurrence Type:</b> Incident  <b>Inv Category:</b> 4  <b>Time Zone:</b> CST
---	---

<b>Aircraft Manufacturer:</b> British Aerospace Plc <b>Aircraft Model:</b> BAe 146-300 <b>Aircraft Registration:</b> VH-NJL  <b>Type of Operation:</b> Air Transport Domestic High Capacity Passenger Scheduled <b>Damage to Aircraft:</b> Nil <b>Departure Point:</b> Ayers Rock NT <b>Departure Time:</b> 1133 CST <b>Destination:</b> Cairns Qld	<b>Serial Number:</b> E3213
--	-----------------------------

<b>Aircraft Manufacturer:</b> Cessna Aircraft Company <b>Aircraft Model:</b> 182R <b>Aircraft Registration:</b> VH-SGU <b>Type of Operation:</b> Non-commercial Pleasure/Travel <b>Damage to Aircraft:</b> Nil <b>Departure Point:</b> Ayers Rock NT <b>Departure Time:</b> <b>Destination:</b> Alice Springs NT	<b>Serial Number:</b> 18267908
---	--------------------------------

**Approved for Release:** Thursday, October 23, 1997

The pilot of a Cessna 182 was conducting a local pleasure flight in the Ayers Rock mandatory broadcasting zone (MBZ). On departure from Ayers Rock to the Olgas at 1123 CST, the pilot transmitted his intention to track from Ayers Rock to the Olgas on high frequency (HF) 4693Hz. The transmission was faint and attempts by Adelaide Flight Information Service (FIS) to establish communications with the pilot on HF were unsuccessful. Adelaide FIS transmitted on the area frequency of 127.7MHz, requesting any aircraft on that frequency to respond.

The crew of a BAe146, on the ground at Ayers Rock, were monitoring the area frequency as well as the MBZ frequency. They assisted Adelaide FIS by transmitting an all stations broadcast on the Ayers Rock MBZ frequency of 126.7 MHz (as FIS are unable to transmit on, or monitor an MBZ frequency) to all pilots listening on the frequency that a Cessna 182 was operating in the MBZ on an incorrect frequency.



At 1125, when the BAe146 was taxiing at Ayers Rock to depart for Cairns, the crew was advised that communications with the Cessna 182 had not been established. Eight minutes later, the pilot of the BAe146 reported departing Ayers Rock, and that he had narrowly avoided colliding with another aircraft.

At 1139, the pilot of the Cessna 182 again transmitted on HF4693 reporting, "Ayers Rock 0200 on climb to 5,000 ft track 060 degrees". Adelaide FIS requested the BAe146 crew to retransmit the Cessna's position report on the Ayers Rock MBZ frequency for the benefit of other aircraft operating in the MBZ. At the same time, the pilot of the Cessna 182 transmitted on 127.7MHz, advising that he had experienced radio problems and that the matter had been resolved.

During the course of the investigation, the Cessna 182 pilot advised that he had observed the BAe146 during its takeoff roll on runway 13. In addition, there was conflicting evidence from the pilots of both aircraft on the estimated distance between the aircraft at the time of passing. The pilot-in-command of the BAe146 estimated the distance as 250 metres to 300 metres whereas the Cessna 182 pilot's estimation was four to five miles. There were no other witnesses.

On the day before the incident, after arriving at Marla, the Cessna 182 pilot had not been able to establish communications with Adelaide FIS using very high frequency (VHF). He had then cancelled his SARTIME with Adelaide FIS using HF.

The following day the pilot flew the aircraft to Ayers Rock. During this flight and on the incident flight, the pilot had not repositioned the transmitter selector from HF to VHF. On departure from Ayers Rock, the pilot transmitted his flight details on HF, which meant that each of his transmissions could not be heard by other pilots listening on the MBZ VHF frequency. The Cessna 182 pilot had followed the Scenic Flight Routes procedure in the Enroute Supplement Australia (ERSA) by tracking to the Ayers Rock aerodrome at 4,000 ft. The Cessna pilot overflew the aerodrome as he watched the BAe146 depart on runway 13.

The pilot of the Cessna overflew the airfield, maintaining 4,000 ft as the BAe146 turned left on climb after departing runway 13. The BAe146 came into conflict with the Cessna while turning left on climb to set heading for Cairns. The BAe146 pilot was aware that a Cessna was in the MBZ and experiencing radio problems. Under the Civil Aviation Regulations it is the responsibility of individual pilots operating in an MBZ to maintain visual separation with other aircraft.

The Cessna pilot did not establish the reasons for his radio problems until approximately 16 minutes after his original transmission at 1123. This was after monitoring a transmission from the BAe146 to FIS which stated "is that Cessna 182 not VHF equipped or what is going on". This transmission was made after the near miss.

#### **SAFETY ACTION**

In response to recent similar occurrences the Bureau of Air Safety Investigation developed Interim Recommendation (IR) 970110 which was forwarded to Airservices Australia and the Civil Aviation Safety Authority on the 4 July 1997. The Interim Recommendation stated:

"The Bureau of Air Safety Investigation recommends that Airservices Australia and the Civil Aviation Safety Authority:

1. implement methods for the timely dissemination of the MBZ or CTAF frequency to pilots;



2. implement methods of providing to pilots confirmation of the correct selection and operation of an MBZ or CTAF frequency;
3. examine the requirement for the establishment and operation of traffic alerting services at all aerodromes during RPT operations;
4. examine the provision of additional radar coverage in the Bundaberg area; and
5. examine the provision of surveillance for other locations serviced by RPT operations."

The following response was received from Airservices Australia on  
1 September 1997:

"Reference is made to the Bureau's Air Safety Interim Recommendation No IR970110 which relate to communications procedures for MBZ and CTAF. With regard to Interim Recommendation 1, Airservices have issued a NOTAM instructing pilots to report the frequency to which they are changing as part of the "Changing To" call. The frequency quoted is, whenever practicable, recorded by ATS for the information of other pilots. Airservices do not intend providing the MBZ or CTAF frequency to pilots on an individual basis as a matter of routine. Other methods of disseminating the MBZ or CTAF frequency, e.g. via AWIB broadcast will be taken into consideration. It should be noted however, that the longevity of this procedure is not great, given the likely directions of Airspace 2000 and introduction of the National Advisory Frequency (NAF) in Class G airspace. Interim Recommendations 2 and 3 fall within the CASA areas of responsibility for a response. Interim Recommendations 4 and 5 relating to the provision of additional surveillance in the Bundaberg area and for other locations serviced by RPT will be considered by Airservices."

No response has been received from the Civil Aviation Safety Authority.

