Aviation Safety Investigation Report 199602242

Cessna Aircraft Company Skyhawk de Havilland Canada Dash 8

15 July 1996

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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: 199602242 Occurrence Type: Incident

Location: 20km S Port Macquarie, Aerodrome

State: NSW Inv Category: 4

Date: Monday 15 July 1996

Time: 1340 hours **Time Zone** EST

Highest Injury Level: None

Aircraft Manufacturer: de Havilland Canada

Aircraft Model: DHC-8-102

Aircraft Registration: VH-TQO Serial Number: 004

Type of Operation: Air Transport Low Capacity Passenger

Damage to Aircraft: Nil

Departure Point: Sydney, NSW

Departure Time:

Destination: Port Macquarie, NSW

Aircraft Manufacturer: Cessna Aircraft Company

Aircraft Model: 172P

Aircraft Registration: VH-TBF Serial Number: 17275019

Type of Operation: Instructional Dual

Damage to Aircraft: Nil

Departure Point: Kempsey, NSW

Departure Time: 1258 EST

Destination: Kempsey, NSW

Approved for Release: Thursday, December 5, 1996

FACTUAL INFORMATION

An instrument flight rules (IFR) flight plan had been submitted for a training flight in a Cessna 172 aircraft departing from Kempsey to Port Macquarie and various other points before returning to Kempsey. The flight was a navigation exercise with a student pilot accompanied by an instructor. The flight plan had been received by the relevant flight information centre.

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The student pilot broadcast a taxi call on very high frequency (VHF) radio while on the ground at Kempsey but he did not receive a response from flight service. The taxi call was in accordance with radio transmissions required for IFR flights and the pilot included the term "IFR" in his transmission. The Cessna was not fitted with a high frequency (HF) radio and the pilot continued the flight using the VHF radio. The Cessna became airborne at Kempsey without the pilot nominating an estimated time of departure for search and rescue ("ETD for SAR") with flight service. The first contact with flight service was after becoming airborne at Kempsey. The pilot then reported departure but did not advise the flight service officer that the flight was operating under the IFR category.

The flight plan had been processed in the flight service centre and a strip posted in the suspense bay on the console applicable to the Kempsey region. However, the flight service officer did not notice the flight strip and assumed the Cessna was a visual flight rules (VFR) category flight because the pilot did not notify the flight as IFR when he reported airborne at Kempsey. Consequently, the officer did not provide traffic information or activate the strip which remained in the suspense bay. During the period between the time the pilot of the Cessna 172 reported airborne and the time he reported his departure from Kempsey, the flight service officer handed over duties to a new officer. The new officer acknowledged the departure report and advised the pilot the area QNH. As there was no strip in the active bay, and the fact that the previous officer had not briefed her on the Cessna during the handover, the new officer also assumed the flight was VFR category. The new officer did not observe the flight progress strip for the Cessna in the suspense bay and did not provide traffic information.

At the same time, a DeHavilland Dash 8 aircraft conducting a regular public transport flight (RPT) from Sydney, inbound to Port Macquarie on descent, reported on the flight information area frequency. The crew of the Dash 8 received traffic information on two other IFR flights in the area but not on the Cessna. Nor did the pilot of the Cessna receive traffic information on the Dash 8 or any other IFR aircraft. The crew of the Dash 8, after making an inbound broadcast on the Port Macquarie mandatory broadcast zone (MBZ) frequency, established communications with the Cessna pilot. During the exchange of position information, the crew of the Dash 8 ascertained that the Cessna was IFR category. The Dash 8 crew then queried the flight service officer regarding traffic information on the Cessna and the officer replied that she was unaware of the Cessna. The flight service officer then contacted the pilot of the Cessna on the area frequency, obtained flight details and provided traffic information to, and about, other IFR aircraft. The pilot of the Cessna observed the Dash 8 as that aircraft descended for landing at Port Macquarie. The Cessna did not conflict with the Dash 8 or other IFR- category aircraft. The flight service officer later found the flight strip for the Cessna amongst other strips in the suspense bay.

ANALYSIS

The Aeronautical Information Publication (AIP) OPS NCTL - 3 para. 47.1 states that an "IFR aircraft operating from non-controlled aerodromes must report to ATS before taxiing. If unable to establish contact, proceed in accordance with para. 45.1." Paragraph 45.1 of the AIP indicates that if an aircraft is unable to contact air traffic services on VHF or HF while taxiing, the flight may proceed on a broadcast basis provided:

- (a) contact is established as soon as possible after takeoff, and
- (b) for non-RPT flights, an estimated time of departure for search and rescue (ETD for SAR) has been established with a maximum of 30 minutes from ETD.

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In this incident the pilot of the Cessna was unable to establish communications with flight service but continued the flight on a broadcast basis without establishing an ETD for SAR. The act of nominating an ETD for SAR may possibly have alerted the flight service officer to the fact that the flight was IFR. Also, the incident may not have occurred if the pilot had reported the IFR category of the flight to the flight service officer on first contact, or during the departure report. If the report had been made, the flight service officer would have been alerted that the flight was IFR category and would have provided the appropriate traffic and SAR alerting service. This would have probably been the situation whether the officer observed and used the flight strip or not.

While both flight service officers should have been alerted to the flight by the presence of the flight strip, the lack of IFR category notification in the transmissions from the pilot of the Cessna predisposed both officers to believe the flight was VFR category. Consequently, they did not re-check the suspense bay for a flight strip nor seek confirmation from the pilot. The instructor in the Cessna was aware that the flight service officer had not provided information appropriate for an IFR flight but did not query the officer. Confirmation by the instructor or the pilot of the IFR category of the flight would have ensured that the appropriate service was provided.

Both flight service officers displayed poor work technique on the handover/takeover, which was inadequate. They did not review all the information that was available to them on the console. Had either officer checked the suspense bay on an opportunity basis they may have observed the strip and recognised the flight was IFR category.

The Cessna pilot's adherence to MBZ procedures in broadcasting position information when approaching Port Macquarie was an active defence in the incident and served to break the chain of events. The pilots of the Cessna and the Dash 8 were able to ensure their own immediate separation by providing position reports using the MBZ frequency and to subsequently establish the Cessna's category with flight service. Ultimately, this enabled all IFR aircraft in the area to receive the necessary traffic information and for the Cessna to be provided with a traffic and SAR alerting service.

SIGNIFICANT FACTORS

- 1. The pilot of the Cessna 172 did not report "IFR" on first contact with flight service.
- 2. Neither flight service officer adequately scanned the console during the handover/takeover procedure.

SAFETY ACTION

Local safety action

As a result of this incident and other recent minor occurrences, the Manager Flight Service Sydney has:

- (i) reviewed handover/takeover procedures; and
- (ii) formed a post-incident review committee to vet incidents for deficiencies and to recommend measures to minimise recurrences.

Bureau of Air Safety Investigation safety action

The Bureau of Air Safety Investigation issued interim recommendation IR960096 to Airservices Australia on the 5 November 1996:

"The Bureau of Air Safety Investigation recommends Airservices Australia amend the Aeronautical Information Publication to clarify the requirement for IFR category flights to report "IFR" on first contact with ATS when operating from non-controlled aerodromes."