Aviation Safety Investigation Report 199702435

Beech Aircraft Corp Duchess

28 July 1997

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Aviation Safety Investigation Report

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Occurrence Number: 199702435 **Occurrence Type:** Incident
Location: Maroochydore
State: QLD **Inv Category:** 4
Date: Monday 28 July 1997
Time: 1355 hours **Time Zone** EST
Highest Injury Level: None

Aircraft Manufacturer: Beech Aircraft Corp
Aircraft Model: 76
Aircraft Registration: VH-OFD **Serial Number:** ME-403
Type of Operation: Instructional Check
Damage to Aircraft: Nil
Departure Point: Archerfield QLD
Departure Time:
Destination: Maroochydore QLD

Crew Details:

Role	Class of Licence	Hours on Type	Hours Total
Pilot-In-Command	Commercial		8300

Approved for Release: Monday, March 23, 1998

FACTUAL INFORMATION

History of the flight

The pilot was undergoing a flight test for the initial issue of a multi-engine command instrument rating under the supervision of an Air Test Officer (ATO). The ATO was the owner, chief pilot, and chief flying instructor of the flying training school with which the private pilot was undertaking his training. He had been working long hours and had not taken a holiday for at least a year.

The flight was from Archerfield to Kilcoy, Maroochydore, Brisbane, then return to Archerfield. Although a flight plan had been submitted, no contact with the controllers at Maroochydore had been made in order to arrange for the instrument approach training.

Some aerial work was conducted in the Kilcoy area prior to tracking to Maroochydore. At some point around, or shortly after leaving, Kilcoy the ATO fell asleep. When the aircraft was about 22 NM from Maroochydore the pilot under test made a position report and requested an airways clearance. He was instructed to track overhead Maroochydore at 4,000 ft and make a sector entry. Since the normal commencement altitude for an approach at Maroochydore was 3,000 ft, the controller was expecting the pilot to report overhead when ready to descend to 3,000 ft in preparation for an instrument approach.

The controller saw the aircraft east of the control tower after it had passed overhead. He anticipated that the pilot would soon request descent for the approach and had cleared other aircraft in such a way as to keep the airspace free for the approach. He did not speak to the pilot as he was aware that aircraft on instrument training can sometimes conduct operations in the holding pattern for some time before requesting an approach. After arriving over Maroochydore the pilot under test conducted the planned instrument approach. When the aircraft was about half way through the approach and turning inbound towards the aerodrome the ATO woke up. As the aircraft was then at the point in the approach at which he intended simulating an engine failure for the pilot under test, the ATO did this without comment.

The next transmission from the aircraft occurred on final approach for runway 18 when the pilot requested a landing clearance. The controller questioned how the aircraft had progressed to that point but issued a landing clearance and a clearance to continue the planned flight. The ATO deduced that the aircraft had descended without a clearance.

A few minutes prior to the pilot's request to land an aircraft had departed from runway 12 at Maroochydore and had turned left to track to the north west to the training area. Since the controller was not aware of the presence of the aircraft so close to the circuit area, no separation standard had been applied to the departing aircraft. By coincidence, it is likely that the aircraft did not conflict.

Personnel information

The ATO held a commercial pilot licence with a current medical certificate. He claimed a total flying experience of 8,300 hours, and he had flown 20 hours during the month of the incident. He had been working at least six days a week for more than a year. Although he considered that his flight crew duty times did not contravene the current regulations, this calculation did not involve the additional time spent in managing the flying school.

The ATO said that for about four weeks prior to the incident he had been suffering from influenza, but had not seen a doctor or taken himself off flying duties. He considered that his presence at work, and his flight test duties, were necessary in order to maintain the success of the business. He indicated that he had fallen asleep briefly on previous flights. Following the subject incident he had attended a doctor who informed him that he was suffering from bronchitis.

An accurate assessment of the pilot's activities and food intake in the days leading to the incident could not be made as the pilot could not remember his activities nor his meal intake. He had commenced work at 0800 on the day of the incident and other days had been unremarkable as far as his normal routine was concerned.

ANALYSIS

At the time of this incident the pilot under test was expected to be able to conduct the flight as a single pilot operation. His failure to obtain a clearance for the approach is considered a factor.

The ATO did not notice the failure to obtain a descent / approach clearance because he was asleep. He was suffering from fatigue and an illness. This is considered a factor.

The controller had observed the aircraft overhead at an appropriate time and therefore had no need to request position information from the pilot. He was anticipating a request for descent from the pilot and did not intend prompting the pilot unless the request was well overdue.

The ATO considered that he complied with the existing flight crew duty limitations if only his flying activities were considered. He considered that he was not within those limitations if his business work was considered. While flying can be a cause of an increase in fatigue, a person's fatigue state is determined by the total consideration of a person's waking / sleeping cycles and total activity. In this case, if the person's total lifestyle had been considered, he would not have been flying.

SIGNIFICANT FACTORS

1. The pilot in command fell asleep due to fatigue and illness.

2. The pilot under test conducted a descent and approach without a clearance.

SAFETY ACTION

The interpretation and application of flight and duty times has been raised as a safety concern in previous investigations and safety studies. More recently, the Bureau conducted a study of the safety of Australian regional airlines. The need for an understanding of, and pragmatic approach to, fatigue management principles was highlighted in that study. Safety action relating to this issue is currently being drafted.