

# Cessna 421C, N6315X

## AAIB Bulletin No: 5/98 Ref: EW/G98/01/02 Category: 1.2

<b>Aircraft Type and Registration:</b>	Cessna 421C, N6315X
<b>No &amp; Type of Engines:</b>	2 Continental GTSIO-520-D piston engine
<b>Year of Manufacture:</b>	1981
<b>Date &amp; Time (UTC):</b>	2 January 1998 at 1235 hrs
<b>Location:</b>	Denham Aerodrome, Middlesex
<b>Type of Flight:</b>	Private
<b>Persons on Board:</b>	Crew - 1 - Passengers - 2
<b>Injuries:</b>	Crew - None - Passengers - None
<b>Nature of Damage:</b>	Severe damage to right wing, flap, aileron, landing gear strut, propeller and tailplane
<b>Commander's Licence:</b>	Commercial Pilot's Licence (USA)
<b>Commander's Age:</b>	39 years
<b>Commander's Flying Experience:</b>	1,600 hours (of which 650 were on type) Last 90 days - 35 hours Last 28 days - 14 hours
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot

The aircraft was landing on the wet hard surface Runway 06 at Denham after a VFR flight from Dublin. The pilot reported that he landed at an operating weight of 6,650 lb, at the normal speed of 90 kt, touching down just before the runway designator numbers, with about 15 or 16 kt crosswind. On application of the brakes, the aircraft appeared to slide down the runway. When it became apparent that the aircraft would not stop within the remaining distance, the pilot raised the flaps and shut down the engines. The aircraft overran the end of the paved surface at an estimated speed of 19 kt and came to rest on a minor public road beyond the aerodrome boundary. The occupants vacated the aircraft by the normal means.

The pilot considered that the aircraft may have aquaplaned on the wet surface. He reported that the surface wind at the time had backed from 030° at 20 kt on approach to become 360° at 20 kt on landing.

An aftercast from the Meteorological Office indicated that at the time of the accident, there was a depression of some 975 mb centred over the Fens moving steadily northeast producing occasional rain or drizzle at Denham. The cloud was scattered base 500 feet, scattered base 1,200 feet, broken base 3,500 feet. The visibility was 15 to 20 km, and the mean sea level pressure was 983 mb. The surface wind was from 300°/20 kt, gusting to 25 to 30 kt. The temperature was +6°C.

Runway 06 at Denham is of asphalt construction, total length 779 metres, with a displaced landing threshold giving a Landing Distance Available of 701 metres.

The Pilot's Information Manual for the Cessna 421C contains data for the landing performance of the aircraft. For an operating weight of 6,600 lb, the quoted target speed at 50 feet is 96 kt. For the ambient conditions (using full flap but assuming a dry runway surface) the ground roll distance using Maximum Effective Braking is about 600 feet (183 metres). The total distance to clear a 50 foot obstacle is about 2,170 feet (661 metres). No corrections are quoted for the effect of a wet runway surface. The calculated hydroplaning speed for the normal tyre pressure of 80 psi is 80.5 kt.