Aviation Safety Investigation Report 199601106

Cessna Aircraft Company Skywagon

09 April 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.

Occurrence Number:			Occurrence Type: Accident				
Location:	Tipplers Passa	ge, South S	tradbroke	Island, (ALA	·		
State:	QLD				Inv Cat	egory:	4
Date:	Tuesday 09 April 1996						
Time:	1430 hours				Time Z	Time Zone	
Highest Injury Level:	Minor						
Injuries:							
		Fatal	Serious	Minor	None	Total	
	Crew	0	0	1	0	1	
	Ground	0	0	0	0	0	
	Passenger	0	0	4	0	4	
	Total	0	0	5	0	5	
Aircraft Manufacturer: Cessna Aircraft Company							
Aircraft Model:	A185F						
Aircraft Registration:	VH-TSF		Serial 1	Serial Number: 18503832			
Type of Operation:	Charter	Passenger					
Damage to Aircraft:	Substantial						
Departure Point:	Sth Stradbroke Isl Resort						
Departure Time:	1415 EST						
Destination:	Sth Stradbroke Isl Resort						

Crew Details:

	Hours on				
Role	Class of Licence	Type Hour	rs Total		
Pilot-In-Command	Commercial	133.6	439		

Approved for Release: Thursday, September 26, 1996

The takeoff was being conducted in a northerly direction along a curving sea channel when the float-equipped aircraft struck a sandbar in the channel. It nosed-over and came to rest inverted. All five occupants received minor injuries; three sustained head and neck injuries.

From the information provided by the pilot and passengers it was determined that the aircraft was correctly loaded and the centre of gravity was within limits.

The pilot reported that there was a light crosswind and the tide was low which created a narrower than usual channel for the takeoff. However, he was familiar with the prevailing conditions having operated the aircraft along the same channel, in the same direction, with similar loadings, on several previous occasions. The planned take-off path followed the channel to the north west before changing to a north easterly direction. This meant that the first part of the takeoff would have a quartering tailwind which would change to a quartering headwind after the aircraft rounded the first bend. From experience the pilot expected the aircraft to become airborne soon after rounding the bend.

The pilot reported that once the aircraft was on the step it continued to accelerate normally and all power indications and flight controls were normal during the takeoff. As the aircraft approached the first bend in the channel the pilot decided to abandon the takeoff because the sandbar appeared to be larger and the bend tighter than usual. After closing the throttle the pilot held back pressure on the control column, but was unable maintain enough rudder directional control to prevent the aircraft from floating onto the sandbar. The aircraft skidded along the sandbar until the floats entered a depression, causing the aircraft to nose over. The pilot assisted the passengers to vacate the aircraft through the left cockpit door.

Passengers reported that the pilot had given a pre-takeoff safety briefing. A passenger who had occupied the rear cabin seat said that he had not fastened his seat belt because he could not find the end of the belt. He said that he did not inform the pilot about the seat belt because he had previously taken a similar flight which was uneventful and he was confident that nothing would happen on this occasion.

Significant factors

1. The pilot misjudged the distance available to the sandbar during the takeoff run.

2. The decision to reject the takeoff was taken too late to avoid impact with the sandbar.