FINAL REPORT

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In accordance with the provisions of SI 205 of 1997, the Chief Inspector of Accidents, Mr. Jurgen Whyte, appointed himself on 14 April 2006, as the Investigator-in-Charge to carry out a Field Investigation into this Accident and prepare a Synoptic Report.

Aircraft Type and Registration:	Jodel D 120[1], G-CCBR.
No. and Type of Engines:	1 x Continental C90-14F.
Aircraft Serial Number:	59.
Year of Manufacture:	1957.
Date and Time (UTC):	14 April 2006 @ 17.40 hrs.
Location:	Runway (RWY) 19 Kilrush Airfield, Co. Kildare.
Type of Flight:	Private.
Persons on Board:	Crew - 1 Passenger - 1
Injuries:	Crew - Nil Passengers - Nil
Nature of Damage:	Undercarriage collapsed, propeller, lower cowling, air intake and filter box damaged.
Commander's Licence:	Irish PPL.
Commander's Details:	Male, aged 46 years.
Commander's Flying Experience:	148 hours (of which 4 hours were on type).
Information Source:	Pilot Accident Report Form submitted by Pilot. AAIU Field Investigation.

SYNOPSIS

Following touchdown on RWY 19 at Kilrush, directional control was lost, the aircraft departed the right side of the tarmac runway and entered soft ground. The undercarriage collapsed and other associated low speed impact damage was caused to the aircraft. Both the Pilot and the passenger exited the aircraft unaided. There was no fire or injuries.

[1] The Jodel D120 is a tail wheel aircraft.

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1. FACTUAL INFORMATION

1.1 History of the Flight

Returning from a navigation exercise to Carlow, the Pilot, who was relatively new on the Jodel aircraft, planned for an approach to and "touch and go" on RWY 19, followed by a landing on RWY 29. The weather conditions were sunny with few cloud and light winds (<3 kts) from the south.

As the Pilot positioned for a left downwind for RWY 19, he observed another aircraft taxiing on the taxi strip for RWY 19 and a tractor moving on the grass area on the leftside of the runway. Following a soft main wheel touchdown, the aircraft proceeded down the runway and then drifted slightly to the left. The Pilot applied right rudder but the aircraft continued to drift left on the runway. He then decided that he would carry out the planned go-around. However, the tractor had now positioned closer to the side of the runway and the pilot felt that he would be on a collision course with the tractor if he applied full power and initiated the go-around.

The Pilot decided to abort the idea of a go-around and concentrate on keeping the aircraft on the runway. Following a number of rudder corrections to the right and left, the aircraft ground looped right 90 degrees and departed the right hand side of the runway surface. The aircraft entered soft grassy ground and the undercarriage collapsed gently as the main wheels dug into the ground. There was no impact as the aircraft stopped in a tail high position. The Pilot switched off the magnetos, the master switch and fuel and evacuated the aircraft with his passenger. There was no fire or injuries.

2. Damage

The main undercarriage collapsed following entry into soft grassy ground. Associated damage included impact damage to the propeller, the lower engine cowling, the air intake manifold, the air filter box and some fabric damage on the port wing.

3. Comment

The main difference between a nosewheel and tailwheeled aircraft is that the centre of gravity (CG) is forward of the main gear on the tricycle gear aircraft and behind the main gear of the tailwheeled aircraft. Since the CG is behind the main wheels on the tailwheeled aircraft, the aircraft is not directionally stable while manoeuvring on the ground. The tendency is for the aircraft to yaw as the CG is pushing from behind.

During taxiing, take-off and landing of a tailwheeled aircraft, constant rudder corrections are necessary to keep it rolling straight. On or after landing, if the aircraft is not straight (no drift or crab), the CG will be offset and will try to swing the tail around. If the drift is slight, it can normally be corrected through opposite rudder. If the drift is significant or if there is a strong crosswind, there may not be sufficient rudder control or differential braking action available to re-establish directional control.

In this particular event, the wind conditions were calm and the runway surface was dry. Following a two wheel touchdown, as the aircraft proceeded down the runway, a slight drift to the left occurred and the corrective action was insufficient to arrest the drift. Subsequent corrections caused the aircraft to ground loop and depart the runway.

The presence of an aircraft manoeuvring on the RWY 19 taxiway and a tractor operating in relatively close proximity to the left side of RWY 19, may have distracted the Pilot from ensuring that the aircraft remained straight (through constant and appropriate rudder corrections) on the runway, following touchdown.

The skill of maintaining directional control of a tailwheeled aircraft requires practice and currency. In that regard, it is noted that the Pilot was relatively new on type and only had a total of 29 hours tail wheel experience.

4. Safety Recommendations

This report does not sustain any Safety Recommendation.

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