ACCIDENT

Aircraft Type and Registration:	Flight Design CTSW, G-KFLY	
No & Type of Engines:	1 Rotax 912ULS piston engine	
Year of Manufacture:	2007	
Date & Time (UTC):	2 July 2009 at 1415 hrs	
Location:	Damyn's Hall Aerodrome, Essex	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Damage to the engine frame and its mountings, and the nose landing gear attachment points	
Commander's Licence:	National Private Pilot's Licence	
Commander's Age:	48 years	
Commander's Flying Experience:	90 hours (of which 22 were on type) Last 90 days - 28 hours Last 28 days - 4 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The aircraft's approach to the runway was stable with a flare initiated at the normal height. Just before the aircraft touched down, it was caught by a gust of wind from the left, landed heavily and bounced. The pilot carried out a go-around and diverted to Southend Airport where he landed safely. The next day he inspected the aircraft and discovered damage to the engine frame and mountings and the nose landing gear.

History of the flight

The pilot had intended to carry out a flight from Sywell Aerodrome to Abbeville in France, stopping at Damyn's Hall Aerodrome on the outbound leg. He recalled that the weather for the flight was warm and sunny with a moderate wind from the northwest and that the visibility was reducing in haze as he progressed south. There was a small amount of cloud at about 4,000 ft agl and he considered that the weather was within limits for the flight.

The flight from Sywell to Damyn's Hall was uneventful and, after lunch, the pilot and his passenger departed for France. Their route took them to Dover, before crossing the English Channel at its narrowest point. The transit altitude was 3,500 ft in VMC but with the visibility reducing. Shortly after crossing the coast, the visibility reduced to about 2 nm with no horizon and only the vessels and their wakes providing a reference. The pilot then realised that the direction of the vessels was changing and the aircraft was in a tight, left turn, descending rapidly. He began to experience disorientation and, with considerable effort, managed to stop the left turn and level the wings. He decided to turn back and carried out a gentle right turn until the cliffs came into view which provided him with a horizon.

The experience had left the pilot shaken and he noticed his flying was "wooden" and mechanical. Instead of returning to Sywell he decided to land back at Damyn's Hall and take stock. As he approached the airfield he called on the radio but received no response and joined overhead for Runway 03. The windsock indicated a crosswind from the left which was within his limits.

On the final approach, 15° of flap was selected and the airspeed reduced to the normal approach speed of 55 kt. The approach and flare were normal but as the aircraft was about to touch down, a gust of wind caught it and it

landed heavily and bounced. The pilot countered a roll to the right and the aircraft veered to the left towards some buildings, so he executed a go-around. Having climbed back to circuit height he re-assessed the situation and elected to divert to Southend where he made a safe landing. The next day he inspected the aircraft and found damage to the engine frame and mountings and the nose landing gear, all of which was sustained during the heavy landing.

Analysis

Throughout the latter part of the flight following the disorientation experience, the pilot was aware that his handling of the aircraft was not as smooth and natural as usual. The wind conditions for the landing at Damyn's Hall on the return flight were not as difficult as those in which he had previously landed the aircraft safely. He considered that he had been shaken by the experience of the disorientation over the Channel and this had affected his flying ability.