

ACCIDENT

Aircraft Type and Registration:	Rotorway Executive 162F, G-ESUS	
No & Type of Engines:	1 Rotorway RI 162F piston engine	
Year of Manufacture:	1999	
Date & Time (UTC):	20 April 2009 at 1500 hrs	
Location:	Street Farm, Takeley, near Stansted, Essex	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Canopy, right door, main rotor blades and tailboom.	
Commander's Licence:	Private Pilot's Licence (FAA)	
Commander's Age:	74 years	
Commander's Flying Experience:	195 hours (of which 195 were on type) Last 90 days - 10 hours Last 28 days - 3 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and observation of a video recording	

Synopsis

Following a normal flight the helicopter was manoeuvring to shut down on an area of concrete driveway. The right skid touched down on the concrete, while the helicopter was still moving forwards and yawing left, and the helicopter rolled over. There were no injuries to the two persons on board.

History of the flight

The helicopter initially landed on an area of grass but the pilot then wanted to manoeuvre onto a concrete driveway behind, before shutting down. The general area was clear of any buildings or other obstructions and the wind was less than 5 kt.

He lifted off, went backwards slowly across the driveway at a height of 3 to 4 feet (1 m), turned through some 45° to the left and then moved forward to land. The pilot observed a loss of rpm as he was manoeuvring to land and, to avoid a heavy landing on one skid, he attempted to lift off again. The helicopter dropped down fairly rapidly from a height of about 2 feet, while yawing to the left, and the right skid contacted the concrete surface. A roll to the right developed, with the nose of the helicopter still yawing left. The pilot was unable to correct the roll and the helicopter pivoted about the right skid and rolled over.

The touchdown on the concrete occurred before the helicopter was in a stable hover and caught the pilot by surprise. He was unable to act in time to prevent the rollover, either by lowering the collective lever to accept a hard landing, or by lifting off again to a stable hover. The pilot and his passenger exited on the left-hand side through the uppermost door and were not injured in the accident.