ACCIDENT

Aircraft Type and Registration: EC120 B Colbri, G-RCNB

No & Type of Engines: 1 Turbomeca ARRIUS 2F turboshaft engine

Year of Manufacture: 2002 (Serial no: 1333)

Date & Time (UTC): 25 June 2019 at 1120 hrs

Location: Enniskillen Airport, County Fermanagh

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: Damage to rotor blades, head, tailboom,

horizontal stabliser, fenestron and skid gear

Commander's Licence: Private Pilot's Licence

Commander's Age: 60 years

Commander's Flying Experience: 395 hours (of which 13 were on type)

Last 90 days - 19 hours Last 28 days - 3 hours

Information Source: Aircraft Accident Report Form submitted by the

pilot

The pilot had planned a flight from Enniskillen, St Angelo Airport, to a private site at Frosses in Donegal, Ireland. The helicopter was parked on the apron adjacent to the fuel installation where it had just been refuelled to full tanks. Having completed all the pre-start checks from the checklist and carried out a normal start, the pilot performed the pre-takeoff checks and raised the collective pitch lever. He led with right yaw pedal but, as the helicopter became light on the skids, it started to yaw to the left. Due to the close proximity of the fuel storage tanks, he applied left cyclic control to move the helicopter to the left away from them, but the helicopter continued to yaw to the left. After yawing through 360°, the helicopter lost height with the left skid contacting the apron. The helicopter rolled about the left skid and the main rotor contacted the ground and debris was scattered over a wide area. The helicopter continued to yaw through another 90° about the tail before rolling onto its right side. The pilot shut off the fuel before applying the rotor brake and was able to leave the helicopter unassisted through the left door. The airport Rescue and Fire Fighting Service attended the scene immediately and applied a foam blanket to the wreckage.

Over the preceding weekend the pilot had been flying a Robinson R44 helicopter on which the main rotor blades turn anticlockwise when viewed from above. The EC120 main rotor blades turn in the opposite direction ie clockwise when viewed from above. The pilot was aware of this difference and the way it affects the use of the yaw pedals: raising the collective pitch lever in the Robinson requires increasing amount of left pedal to counter the rotor torque, but in the EC120 increasing amounts of right pedal are required. The pilot believed

that during the initial phase of applying collective lever, he had used insufficient right yaw pedal, allowing the helicopter to yaw left, and the application of additional right pedal did not then reduce the yaw rate.