

# Reims Cessna FRA150M, G-BDNR: Anniversary Statement

News story

Engine failure and forced landing caused by failure of the No 3 cylinder retention studs, 4.5 miles NNE of Retford (Gamston) Airport, Nottinghamshire, on 1 August 2021.



This statement provides an update on the ongoing AAIB investigation into an accident involving Reims Cessna FRA150M, G-BDNR 4.5-miles NNE of Retford (Gamston) Airport, Nottinghamshire, on 1 August 2021.

The aircraft had carried out a training flight from Retford (Gamston) Airport. Whilst returning to Retford, 5 nm from the runway, the engine started to run roughly and subsequently failed. During attempts to restore power the instructor noticed that the engine cowling was protruding. The instructor carried out a forced landing 4.5 nm NNE of Retford Airport.

The investigation has identified that the engine failure was due to the engine's No 3 cylinder separating from the crankcase in flight. The No 3 cylinder was not recovered. Laboratory analysis of the cylinder retention studs in the crankcase confirmed that all the studs had failed due to crack propagation in high cycle fatigue. During the investigation, it was found that several overhaul facilities have experienced stud thread failure at torque loadings below the required torque setting. The investigation continues to investigate the failure of cylinder retention studs. The final report into the accident is expected to be published in December 2022.

Published 1 August 2022