



# NEXT ROLLS-ROYCE STEP IN SUSTAINABILITY DRIVE WITH NEW LOW-EMISSIONS TESTING

News / Manufacturer



Rolls-Royce has started its latest phase of testing on its low-emissions technology for its next generation of engines. An ALECSys (Advanced Low Emissions Combustion System) demonstrator engine – with technology that features in both the Advance3 and UltraFan® programmes - has resumed ground test runs in Derby UK. Reducing emissions from gas turbines is part of the wider Rolls-Royce sustainability strategy, which also involves support for the increased use of sustainable aviation fuels (SAF) and intensive research into disruptive propulsion architectures and technologies.



The lean-burn combustion system improves the pre-mixing of fuel and air prior to ignition – delivering a more complete combustion of the fuel, resulting in lower NOX and particulate emissions. The first series of tests began in 2018 and this latest phase will focus on validating emissions performance, engine control system software and functional performance.



Andy Geer, Chief Engineer and Head of UltraFan, said: “We know that the future of aviation can only be founded on greater sustainability and these tests are one element in our drive to support that goal. We’ve been excited by our results so far and we are now going to push on and see what more ALECSys can deliver.”

The tests commence as Rolls-Royce starts to build the first parts for the UltraFan demonstrator,

which will start ground tests next year. UltraFan offers a 25 per cent fuel saving over the first generation of Trent engine.

The ALECSys programme is supported by the EU via Clean Sky, and in the UK by the Aerospace Technology Institute and Innovate UK.



26 AUGUST 2020

**ARTICLE LINK:**

<https://50skyshades.com/index.php/news/majority/next-rolls-royce-step-in-sustainability-drive-with-new-low-emissions-testing>