

## Airbus A330MRTT completes first 100% SAF test flight on both engines

- RAF Voyager's 100% Sustainable Aviation Fuel flight is world first for an in-service military transporter
- Robust Test Plan has allowed world's first flight without a single drop of fossil fuel on board

**Brize Norton, 18 November 2022** – The Royal Air Force, Airbus and other industry partners have carried out the world's first 100% Sustainable Aviation Fuel (SAF) flight using an in-service military aircraft. It is also the first 100% SAF flight of any aircraft type carried out in UK airspace.

An RAF Voyager – the military variant of the Airbus A330 commercial jetliner - took to the skies above RAF Brize Norton in Oxfordshire, England, on Wednesday powered completely by 100% Sustainable Aviation Fuel on both engines, paving the way for a range of possibilities for the future of flying military aircraft.

The flight was a joint endeavour between the RAF, aircraft manufacturer Airbus, the UK Ministry of Defence's Defence Equipment and Support agency, British aircraft leasing company AirTanker and engine manufacturer Rolls-Royce, with the fuel supplied by Air bp.

Michael Schoellhorn, CEO of Airbus Defence and Space, said: "True to our purpose of 'pioneering aerospace', we have gladly supported the Royal Air Force on this landmark sustainable-fuel test flight. I commend our UK customer for this achievement which helps pave the way for a sustainable reduction of carbon emissions of our military aircraft fleets. Airbus engineers have made a significant contribution to this RAF mission by providing on-the-ground expertise in recent weeks and securing the necessary MoD military flight permits."

Sustainable Aviation Fuel – which is made from waste-based sustainable feedstocks, in this case used cooking oil – reduces lifecycle carbon emissions by up to 80% compared to the conventional fuel it replaces, lessens the RAF's reliance on global supply chains and improves operational resilience by reducing the necessity for fuel resupplying.

As different approaches will suit different platforms and environments, a range of alternative fuel options are being looked at to ensure the UK is at the forefront of this developing technology.

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The 90-minute return flight from RAF Brize Norton, flown by a combined Airbus, RAF and Rolls-Royce flight-test crew, replicated an air-to-air refuelling sortie and was witnessed by senior RAF and industry representatives. The RAF said it demonstrated the potential for its future operational capability, ensuring the ability to contribute to UK defence wherever and whenever it was required.



**The Airbus A330MRTT RAF Voyager takes off from RAF Brize Norton for the first time powered by 100% SAF on both engines.** (MoD Crown Copyright)

Experimental test pilot and Captain of the flight, Jesus Ruiz, said: “From the crew perspective, the SAF operation was ‘transparent’, meaning that no differences were observed operationally. The Test Plan was exhaustive and robust and has allowed us to compare SAF with JET1 culminating in a flight without a single drop of fossil fuel. Teamwork was a key contributor, harmonising experience from Airbus, Rolls-Royce and the RAF. We feel very proud to be a small part of this huge step for sustainable aviation.”

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#### Additional quotes for use by media:

UK Defence Minister Baroness Goldie said: “The Royal Air Force has flown the UK’s first military air transport flight using 100% sustainable aviation fuel on one of their operational Voyager aircraft. They should be rightly proud of this achievement; it is a breakthrough moment for the RAF and an exciting development for the MOD. Through the RAF’s pioneering spirit, expertise and partnership with UK industry, British science and engineering is leading the way in improving operational resilience and developing future operating capability in a climate-changed world.”

Chief of the Air Staff, Air Chief Marshal Sir Mike Wigston said: “Climate change is a transnational challenge that threatens our resilience, our security and our collective prosperity. That is why I have set the RAF the ambitious challenge of becoming the world’s first net-zero Air Force by 2040. The way we power our aircraft will be key to meeting that challenge and the RAF is already thinking about how we will operate beyond fossil fuels. This exciting trial flight of a Voyager from RAF Brize Norton powered entirely by Sustainable Aviation Fuel is an important milestone on that journey, and marks another technological first for the RAF alongside our industry partners.”

Alex Zino, Executive Vice President Business Development and Future Programmes, **Rolls-Royce** said: “Across Rolls-Royce we are committed to partnering with our customers to help them become more resilient to climate change. Ensuring our engines are compatible with sustainable aviation fuel is just one of the ways we are doing this. This flight demonstrates what we can achieve through effective collaboration between industry and our armed forces customers, and I am delighted to see that those partnerships have enabled this achievement to take place.”

Martin Thomsen, Senior Vice President, **Air bp** said: “We are delighted to be continuing our collaboration with Rolls-Royce on this RAF sustainable aviation fuel test flight. Our ambition is to be the decarbonisation partner to the aviation industry and we are working at pace with industry players to promote SAF availability, accessibility and affordability to support the aviation industry to meet its lower carbon goals.

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