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News Release

DSTA, THE RSAF AND AIRBUS DEFENCE AND SPACE ACHIEVED

FULL CERTIFICATION OF A3R CAPABILITY

Singapore's Defence Science and Technology Agency (DSTA), in partnership with the Republic of Singapore Air Force (RSAF) and Airbus Defence and Space, has achieved full certification for the Automatic Air-to-Air Refuelling (A3R) capability on the Airbus A330 Multi-Role Tanker Transport (MRTT). The certification was granted by the Spanish National Institute for Aerospace Technology (INTA), which followed an extensive qualification and flight-test campaign that evaluated the A3R system under both day and night conditions.

A3R is a valuable capability that lightens the operator's workload through automation and enhances the RSAF's mission effectiveness. Recognising this, DSTA and the RSAF embarked on a pioneering collaboration with Airbus Defence and Space in 2020 to develop A3R. Through the partnership, DSTA contributed to system design reviews and improvements to the algorithm, which can be tailored to specific needs of the users.

After undergoing multiple flight test campaigns, the first operational deployment of A3R for daytime refuelling was achieved in 2022, with the RSAF being the first in the world to operate the A3R system. The latest and final certification extends the capability to night operations this year.

DSTA's Chief Executive, Mr Ng Chad-Son said: "Achieving full certification of A3R is a significant achievement as Singapore's A330 MRTTs can now perform automatic refuelling both in daytime and at night. DSTA worked very closely with the RSAF and Airbus to advance innovation, enhance safety and reduce crew workload. This attainment showcases effective technology integration and sets a new benchmark on automatic aerial refuelling globally."

Major-General Kelvin Fan, Chief of Air Force at Republic of Singapore Air Force said: "The RSAF is pleased to have partnered with DSTA and Airbus in pioneering the world's first A3R capability. This development will enhance the RSAF's aerial refuelling operations, contributing to greater operational effectiveness. It also reflects the RSAF's commitment to working with industry partners to innovate and remain at the leading edge of technology."

Michael Schoellhorn, Chief Executive Officer at Airbus Defence and Space said: "The certification of A3R with Singapore is a historic achievement and a clear demonstration of what long-term partnership can deliver. Singapore has consistently led the adoption and development of next-generation aerospace technologies, and Airbus is proud to support the RSAF and DSTA in fielding a capability that will shape the future of air-to-air refuelling."

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About Defence Science and Technology Agency

The Defence Science and Technology Agency (DSTA) is a leading technology organisation that drives innovation and delivers state-of-the-art capabilities to make the Singapore Armed Forces a formidable fighting force. Harnessing and exploiting science and technology, our engineers and IT professionals leverage multidisciplinary expertise to equip our soldiers with advanced systems to defend Singapore. DSTA also contributes its technological expertise to support national-level developments. To achieve our mission, DSTA excels in systems engineering, digitalised platforms, cyber, software development and more.

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