

Schiebel completes acceptance tests of new heavy fuel S2 engine for Camcopter S-100 UAS for Royal Australian Navy



Schiebel has successfully completed the acceptance tests of its new Schiebel-designed heavy fuel S2 engine for its Camcopter S-100 UAS for the Royal Australian Navy (RAN).

With more than 12 years of experience developing engines for the Camcopter S-100, Schiebel has learned a variety of lessons from extensive operations across the globe that have helped in the development of the S2.

“Given the single fuel policy adopted by the world’s Navies, we have responded to the requirement and have now developed, tested and produced our own Schiebel-designed heavy fuel engine for the Camcopter S-100 system,” says Hans Georg Schiebel, chairman of the Schiebel Group.

“We are thrilled to have successfully completed the acceptance activities of the new capability for the Royal Australian Navy.”

The S2 has been delivered as a next generation replacement for the current propulsion unit, as it further increases the overall capability of the Camcopter S-100. With the enhancements offered by the S2 engine, the RAN will be able to continue expanding its test and evaluation program, as it examines advanced Vertical Takeoff and Landing (VTOL) UAS capabilities ahead of the Sea 129 Phase 5 Programme. According to Schiebel, this program will select the future UAS capability for the RAN’s new Arafura Class Offshore Patrol Vessels (OPVs), as well as other ships.

The endurance and Maximum Take Off Weight (MTOW)—with multiple payloads—were demonstrated during a comprehensive series of test flight activities, showing that the Camcopter S-100 meets all of the RAN’s requirements.

The Camcopter S-100 was equipped with several technologies during the tests, including a L3 Harris Wescam MX-10 real-time Electro-Optical/Infra-Red (EO/IR) camera, an Automatic Identification System (AIS), a L3 Harris Bandit transceiver and a Mode-S Automatic Dependent Surveillance Broadcast (ADS-B) transponder. According to Schiebel, this unique configuration provides operators with the capability to locate and confirm the identity of vessels at sea. This configuration also allows operators to transmit the information in real time to users equipped with Rover remote video terminals.

The S2 is initially cleared for JP-5 (F-44) and Jet-A1 fuels with other fuel types to be approved in the future. The engine increases the operational performance and maintainability of the S-100, and it has “sufficient capacity to meet anticipated future market growth needs,” according to Schiebel.