

Airbus Helicopters, Schiebel demo MUM-T



Airbus Helicopters and Schiebel have demonstrated Manned Unmanned Teaming (MUM-T) capabilities between an H145 helicopter and Camcopter S-100 UAS, Airbus announced on 24 April.

The flights were carried out with the help of the Austrian Armaments and Defence Technology Agency. The aircraft flew together in different scenarios which also included the detection of objects hidden in places not accessible by manned helicopters.

The Camcopter S-100 was controlled and piloted by an operator in the helicopter. During flight, the control was also temporarily handed over to a ground-based control station in order to simulate the return of the manned helicopter for refuelling.

The trials demonstrated level of interoperability five (LOI 5), with the manned platform exercising full control of the UAS including its take-off and landing.

The challenges of data transfer interference and electromagnetic compatibility of the UAS with the helicopter as well as the integration of a complete UAS mission planning and control system into the helicopter's architecture were successfully managed. The next step will be to optimise the human machine interface based on a thorough analysis of the crew workload using the results of the flight tests.

Mark Henning, program manager at Airbus Helicopters, said, 'MUM-T multiplies the capabilities of both systems. Smaller UAS with vertical take-off and landing capabilities can, for example, fly around obstacles as trees or buildings closer than a helicopter could. They are able to explore unknown territory and deliver information to the helicopter crew which is operating from a safe position and which can then step in with the helicopter's superior effects, having received a clear picture from the UAS.'