

SH09 FLIES AFTER MAJOR RETROFIT

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The SH09 third prototype (P3) recently took off, at Mollis, Switzerland, following a major modification. This was part of the planned product development roadmap, towards the final Type Certificate configuration, as presented by Kopter during the 2020 HAI exhibition.

This modification programme was successfully implemented thanks to the joint efforts of the Kopter and Leonardo teams. It includes a new main rotor head design, a new main gear box with an extended mast, and new flight controls configuration. Another significant change is the installation of the state-of-the-art Garmin G3000H integrated flight deck, flown for the first time on a helicopter.

The expected improvement of P3 handling qualities and stability were immediately apparent to the crew; during the first flight it was possible to complete a set of low-speed envelope maneuvers up to 35 kts, including forward, rearward and sideward flights as well as spot turns.

Subsequently, several flights have taken place and the crew has been able to expand the flight envelope to climb, descents, autorotation and turns up to 5000ft.

Richard Grant, Kopter Chief Test pilot commented: “The overall helicopter response to control inputs has been improved. All maneuvers could be performed accurately with deliberate and precise inputs.”

The Garmin G3000H has performed as expected, thus confirming the importance of anticipating its integration in the P3 configuration to fully develop its potential and benefits in the next generation SH09 helicopter.

Michele Riccobono, Kopter CTO and Head of Flight Operations stated: “The results of these first flights with this new configuration are the evidence of the Kopter engineering capability to accurately predict the helicopter behavior and successfully drive the design towards the required performance improvements”.

The flight test programme is now continuing with the expansion of the weight, speed and altitude envelopes while assessing the new flight deck avionics suite.



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