



LUFTHANSA TECHNIK AND HENSOLDT TAKE THE “BLACK BOX” TO AN ALL NEW LEVEL

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Lufthansa Technik and HENSOLDT have jointly launched a new generation of onboard recording devices for the Airbus A320 family, which offer significant improvements over previous cockpit voice and flight data recorders (CVR/FDR). With the corresponding retrofit solution, airlines are not only well equipped for much stricter future regulations regarding recording times, but they can also read out the stored data without removing the respective devices. In addition, their maintenance operations benefit from significantly increased reliability and thus significantly extended replacement intervals.

Stricter legal requirements in the USA mandate that commercial aircraft there must ensure much longer data storage in the future, and not just for flight parameters (FDR), but also for cockpit voice recordings (CVR): Instead of two hours as in the past, both units of the so-called “black boxes” –

which are actually not painted black but bright orange – must now store their recorded data for a period of at least 25 hours before they can be overwritten. This new requirement applies in particular to the CVR and was decided as part of the FAA Reauthorization Act 2024. Aircraft in the US currently equipped with old recording technology must also be retrofitted to the new standard by 2030 at the latest. Authorities in other world regions could soon follow suit.



These new requirements are precisely the aim of a new generation of flight data recorders in the SferiRec series, manufactured by HENSOLDT and distributed exclusively by Lufthansa Technik. They not only meet the stricter regulatory requirements, they far exceed them. While the new CVR stores up to 45 hours of cockpit conversations and up to 170 hours of so-called datalink recordings (text-based messages between the aircraft and the ground), the new FDR even has a capacity of up to 1,600 hours. HENSOLDT has almost 40 years of experience in the field of flight data recorders, especially for military applications.

Another major advantage of the new generation is that the recorders can remain permanently installed in and connected to the aircraft for the stored data to be read out. This is made possible by a special On-wing Readout Kit, whose software can be installed on a standard laptop computer, requires no additional hardware, and is available for extracting both the FDR and the CVR data. Especially in times of limited maintenance capacities or scarce stocks of replacement recorders, such an on-wing readout can significantly reduce maintenance costs while complying with all operational and regulatory standards. With a much higher mean time between failures (MTBF), the number of unscheduled removals and the associated use of OEM-bound services is also greatly reduced compared to the current generation.

With its EASA Part 21J-certified design organization, Lufthansa Technik develops customized yet flexible retrofit solutions that allow HENSOLDT's advanced recorder technology to be seamlessly integrated. As a true "plug & play" solution, the new devices can thus provide a one-to-one replacement for all previous A320 family recorder solutions with separate CVR/FDR. A certification for other Airbus and also Boeing aircraft types is also being sought. Lufthansa Technik's global network is available to provide comprehensive technical support around the clock.



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