Solid-State Recorders and ULBs

New requirements!

Recently there have been a number of changes related to the rules of Cockpit Voice and Flight Data (tape) Recorders as well as Underwater Locator Beacons. Several authorities have or will mandate the use of Solid-State Recorders and Underwater Locator Beacons with increased capacity. For those aircraft not flying with compliant hardware, Fokker Services offers you the latest equipment to become compliant. Besides the new rules there are other advantages related to the installation of Solid-State Recorders.

Request information about our integrated solution for your fleet today!

Your needs

It is expected that by 2019 all flight recorders are of the solid state type and in 2018 all flight recorder mounted underwater locator beacons must be of the 90 day duration type. Besides new requirements the availability of Solid-State Recorders creates new possibilities for avoiding day-to-day concerns about the performance and reliability of the data recording system. The recorders are equipped with on-aircraft read-out features and with the latest memory technology and improved crash survivability. The introduction of the Solid-State Recorders provides you with an improved and a far more reliable system.

To become compliant, you will need the following:

› An approved Fokker Service/Engineering Bulletin with all installation/test procedures.
› A Solid-State Cockpit Voice Recorder with 120 min recording time.
› A Solid-State Flight Data Recorder.
› An Underwater Locator Beacon providing a minimum of 90-days uninterrupted operation on each Recorder.
› Aircraft Documentation Updates.

Your benefits

The installation of Solid-State Recorders on your aircraft fleet will improve your Technical Dispatch Reliability (TDR). This results in a direct improvement on your Direct Operational Costs (DOC) and therefore on your Direct Maintenance Costs (DMC).

The benefits of the innovative Solid-State Recorders, when compared with the traditional tape-version recorders are as follows:

› Exceptional reliability.
› No preventive or scheduled maintenance due to non-moving parts.
› Less unscheduled maintenance due to much better MTBF figures.
› Reduction of the maintenance costs because of avoiding maintenance task.
› Light weight.
› Long life/low operating power.
› Reduction in maintenance and repair replacement cost.
› Installation of this new recorder will not affect the existing aircraft wiring (plug and play).
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Product description

Solid-State Cockpit Voice Recorder
The Solid-State Cockpit Voice Recorder is a lightweight design which meets or exceeds all regulatory standards with up to 2 hours of high-quality recording on all four channels. The units MTBF exceeds 50,000 hours with a weight of just 10 lbs (4.5 kg) and low power consumption of 12 W (AC) or 10.5 W (DC).

Solid-State Flight Data Recorder
The Solid-State Recorder is a lightweight design with rapid data retrieval and analysis without removing the recorder from the aircraft by means of computer based download equipment. The new flight data recorder meets or exceeds all regulatory standards and is available with a storage capacity of 25 hours with 64, 128 or more words per second depending on the configuration of the FDAU in your fleet. The units MTBF exceeds 50,000 hours with a weight of just 11 lbs. (5 kg) and low power consumption of 8.5 W (AC) or 7.5 W (DC).

Underwater Locator Beacon
The ULB is a battery-operated underwater acoustic pulse generator (beacon/pinger) that is activated when it is immersed in either salt or fresh water. The new beacon will provide a minimum of 90-days (was 30) of uninterrupted operation once activated. The ULB is capable of operating at depths of 20,000 ft. (6,000 m) with a detection range of 2,000 to 4,000 yards (1,800 to 3,600 m). It operates at 160dB at 37.5 kHz with a 10 ms pulse. Routine maintenance is every 2-years, with a 6-year battery replacement.

Aircraft Applicability
The modification will be available for a wide range of aircraft, including Airbus, Boeing, Bombardier, Fokker and other aircraft. Also Fokker can act as a one-stop-shop for your mixed fleet needs.

References

Regulatory document:
SSCVR: TSO-C123a
SSFDR: TSO-C124a
ULB: TSO-C121b.

Specs:
SSCVR: ARINC 404A and 757
SSFDR: ARINC 404A and 573/717 (64/128 wps), 747 (64/128/256/512/1024 wps).