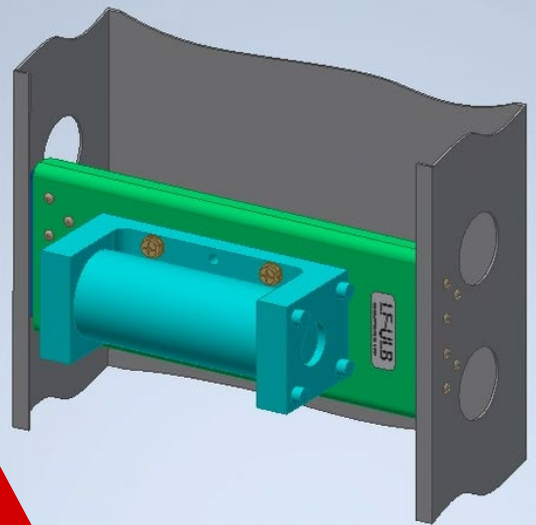


LOW-FREQUENCY UNDERWATER LOCATOR DEVICE (LF-ULD) INSTALLATION

EMBRAER LF-ULD INSTALLATION



SOLUTIONS AVAILABLE FOR:

- ERJ 170 Series
- ERJ 190 Series

ADDING CAPABILITY, INCREASING UTILITY
DESIGN & PRODUCTION SERVICES

DESCRIPTION

In accordance with EASA Air-OPS CAT.IDE.A.285(f) all aircraft with a MCTOM >27,000 kg and with a MOPSC of more than 19 and all aeroplanes with a MCTOM of >45,500 kg shall be fitted with a securely attached 8.8 kHz LF-ULD if the aircraft is operated on routes greater than 180 NM from shore.

This mandate came into effect for applicable aircraft on 1st January 2019.

The Low-Frequency Underwater Locator Device (LF-ULD) is a self-powered device that provides an effective solution for improving the search and recovery of submerged aircraft. The LF-ULD is not to be confused with the Underwater Locator Beacon (ULB) which is attached to the Cockpit Voice / Flight Data Recorder and operates at 37.5 kHz.

The LF-ULD is mounted directly to the aircraft structure and supplements the ULB's. In the event of the aircraft becoming submerged in either fresh or salt water the LF-ULD emits a low frequency 8.8 kHz signal in order to provide an extended detection range aiding in locating the aircraft. The LF-ULD will transmit for a minimum of 90 days.

SOLUTION

Gama Aviation (Engineering) Ltd provides a UK CAA 21J approved STC and installation kit, complete with Form 1.

The kit contains everything needed to complete the installation:

Dukane Seacom DK180 LF-ULD, Mounting Bracket, Support Assembly, Placard and Fixings.

The LF-ULD is mounted to the aircraft structure away from the wings and empennage.

Service Bulletin embodiment time of 5.5 Hours per aircraft.

Design
Office

BENEFITS

- Easy access for installation and maintenance
- Self-powered and self-contained
- Increased detection range 7.0-12.0 NM
- Approved under the authority of DOA ref UK.21J.0174
- Meets the following:
 - EASA Air-OPS CAT.IDE.285(f)
 - OTAR Part 121.715 (f)(6) & (g)(6)
 - TSO-C200a & TSO-C142a
 - SAE-AS6254a
 - ARINC-677

TECHNICAL SPECIFICATIONS

- Operating Frequency 8.8kHz $\pm$ 1kHz
- Operating Depth Surface to 20,000 ft (6096 m)
- Battery Life 6 Years
- Operating Life 90 Days Minimum
- Activation in Fresh or Salt Water
- Acoustic Output 160 dB re 1 μ Pa at 1m
- Pulse Width 10 Milliseconds Minimum
- Pulse Repetition Rate 10 Sec Maximum
- Installation Weight Approx 1.41 kg



For more information, please contact Gama Aviation (Engineering) Ltd: doa@gamaaviation.com