

**TYPE ACCEPTANCE APPLICATION
FOR ACR/RLB-33S**

Attestation Statements:

FCC Type Acceptance is hereby requested for ACR model RLB-33S (FCC ID: B66ACR-RLB-33S) Ship Security Alert System (SSAS).

The RLB-33S (SSAS) is actually our type approved model RLB-33 406 MHz Satellite EPIRB (FCC ID: B668L2ACR-RLB-33) incorporating certain functional changes required for service as SSAS.

The EPIRB with the changes noted herein complies with the recently developed RTCM standard for SSAS (RTCM 110-2004/SC110-STD). That standard was developed to comply with new US Homeland Security requirements as a matter of some urgency. The new SSAS standard was developed within RTCM with oversight and participation by USCG, FCC, NOAA, AFRCC and major beacon manufacturers.

The changes we made to our EPIRB for SSAS service are:

- a) The EPIRB 121.5 MHz homing transmitter is not allowed for SSAS, so that circuit has been deactivated.
- b) The EPIRB strobe light is not allowed for SSAS, so that circuit has been deactivated.
- c) An external antenna (which will be mounted on ships superstructure) is required, so the EPIRB integral antenna has been replaced with a 50Ω coax connector output. The type approval test report for RLB-33 EPIRB includes complete test data for 50Ω output and for integral antenna.
- d) The water sense contacts on the beacon have been adapted to provide for external activation required for SSAS.
- e) Labeling and manuals have been modified to reflect the above mentioned changes as required for SSAS.

The R.F. and modulation circuits are unchanged from the type approved RLB-33. The complete type acceptance technical file for RLB-33 is on file at FCC (ref. ID B668L2ACR-RLB-33) and is incorporated herein by reference.

Details of the changes made to the RLB-33 EPIRB to adapt it for SSAS service and supporting test data are enclosed herewith for your review.

Noting that the changes made to the EPIRB for SSAS service alters the beacon such that it no longer meets all the functional requirements for an EPIRB, we request a separate Type Approval certificate for RLB-33S under a waiver to the EPIRB rule 80.1101 to permit use as an SSAS.

Please note that Circuit Diagrams ACR Y1-01-0638-1, RLB-33 Activation Circuit, RLB-33S Activation Circuit, are hereby submitted as Proprietary data (pursuant to 47 CFR 0.459 of the FCC Rules) with proprietary legend marked on the drawings.