CYBICOM
ATLAS DEFENCE
A Joint Company of Cybicom & ATLAS ELEKTRONIK

info@cadefence.com | www.cadefence.com

SUPPORT SERVICES, SYSTEM INTEGRATION
PROTOTYPING, PRODUCT DEVELOPMENT

ESCAPE TRUNK LIGHTING AND SIGNALLING SYSTEM




The **Escape Trunk Lighting and Signalling System** (**ETLSS**) is installed on board class 209 submarines and is used as a means of optical, via light signalling, and acoustic, via a buzzer in the **CIC**, communication when deploying divers/special forces team when carrying out special operations (deliver and receive divers/special forces team) or crew escape from a submarine if the submarine has sunk and/or the submarine is damaged. Hence, this system has been design and built with safety in mind and forms part of the safety critical items on board the submarine.

The **ETLSS** equipment is used as the means of signalling to indicate diver presence outside the submarine, when the Access and Escape Trunk can be filled with water and pressurised, when hatches can be opened and closed and the when the escape trunk can be drained and vented permitting entry into the submarine or exit from the submarine.

SYSTEM SPECIFICAITONS AND PERFORMANCE:

SHOCK, VIBRATION AND EXPLOSION:
The ETLSS is qualified against the MIL-S-901 D (class B) specifcation.

ELECTROMAGNETIC COMPATIBILITY AND INTEFERENCE:
The **ETLSS** is qualified against the MIL-STD-461F specifcation.

ENVIRONMENTAL CONDITIONS FOR INBOARD EQUIPMENT:
The **ETLSS** inboard equiopment is designed and tested for the following conditions:

- **Temperature:**
  - Transport and Storage: -30 C to +70 C
  - Normal Operation: 0 C to +50 C
- **Atmospheric Humidity:**
  Normal Operation: max 80% at +35 C
  Temporary Operation : 100% at +35 C for one hour
- **Ambient Pressure:**
  - Normal Operation: 800 to 1400 hPa
  - Temporary Operation: 600 to 800 hPa (max 3 minutes)

Environmental Conditions for Outboard Equipment:
The ETLSS outboard equipment is designed and tested for the following conditions:

- **Temperature:**
  - Transport and Storage: -30 C to +70 C
  - Normal Operation: 0 C to +50 C
- **Water Pressure:**
  - Normal Operation: up to 45 bar
  - Test Pressure: 60 bar (max 15 minutes)

Power Supply:
115 V 60 Hz single phase ± 5% (max 55VA)

Battery Backup and System holdup time:
The **ETLSS** provides for a mimum operational backup time in excess of 8 hours before switching to emergency mode.