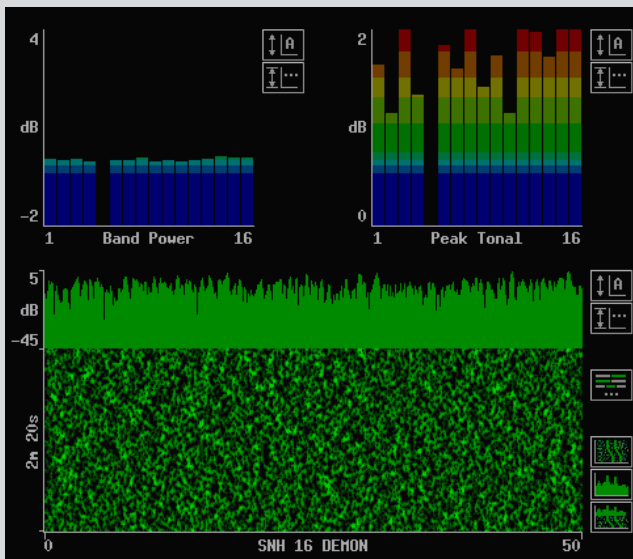# Circe

Submarine Systems

Circe
Submarine Self Noise Monitoring System

Circe is an easy use, accurate system that is designed to monitor and record real-time acoustic data from the Self Noise Hydrophones.

Circe can be correlated with machinery status information and navigation data harvested from the sonar network to:

- Continuously monitor the own-ship self noise signature while at sea

- Immediately detect and therefore reduce the duration and impact of unexpected own ship noise

- Localise own ship noise sources such as:

  - A cavitating propeller

  - Noisy machinery operating within the submarine

  - Any loose or unsecured items

  - External to the pressure hull

  - An object fouling the hull

  - Flow related noise resonances

- Provide the long term noise trend of the machinery through regular and consistent monitoring

- Allow collection of signatures for comparison across the class platforms and over time

Capabilities

- Easy to operate

- Monitor individual machinery state

- Record data for further analysis

- Set and monitor the vessels self noise baseline

... a sound decision

SONARTECH ATLAS
A company of the ATLAS ELEKTRONIK Group

Variety of Views for Data Analysis:

- LOFAR gram
- DEMON gram
- Amplitude Line Integration (ALI)
- Band Power
- Peak Tonal

Display machinery status and noise levels:

- Pumps and Fans
- Engines and Generators
- Coolers and Refrigeration
- Masts and Snorkels