eBOSS

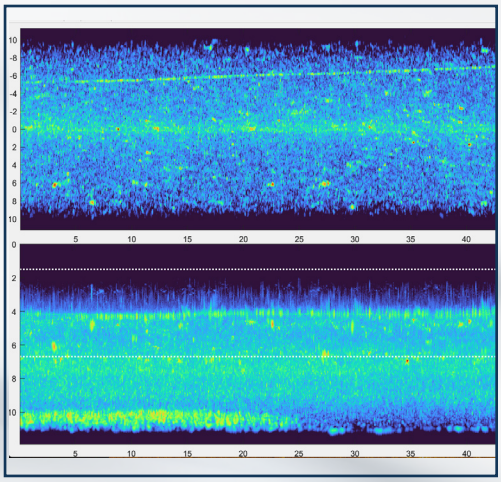
EDGETECH BURIED OBJECT SONAR SYSTEM

FEATURES

- 3D Sub-Bottom SAS Processing
- Dual 5 kHz to 25 kHz broadband projectors
- Enhanced PVDF Receivers
- Full Spectrum CHIRP
- Real-time and post processed data
- 3+ meter depth penetration
- Swath widths from ~20 to 60 meters

APPLICATIONS

- Buried UXO & MCM surveys including non-ferrous aluminum targets
- Buried pipeline & cable tracking
- Direct depth of burial measurement
- Route surveys
- Environmental site investigations
- Geological surveys
- Archeological surveys
- Asset Integrity



EdgeTech's innovative Buried Object Sonar System (eBOSS) is an advanced sub-bottom sonar system capable of penetrating the seabed to accurately detect, locate, classify, and identify buried and partially proud objects. This low-frequency acoustic imaging system can be operated in real-time for general survey purposes such as cable & pipe tracking and route surveys or have the data post processed utilizing synthetic aperture sonar (SAS) processing to render 3-dimensional images of buried objects.

eBOSS utilizes 2 hemispherical low frequency (5-25 kHz) projectors for enhancing resolution for 3D processing without increasing sonar size. It can travel at speeds up to 4 knots. Survey swath widths typically range from 20 to 60 meters wide depending on the height the sonar is flown off the bottom. Penetration depths of 3+ meters can be expected depending on sediment type.

eBOSS is part of an extensive line of industry-leading Full Spectrum CHIRP sub-bottom profiling sonar systems from EdgeTech. Originally developed for unexploded ordnance (UXO) e.g. 155 mm howitzer projectiles and smaller. The system easily captures larger items such as mine-like objects (MLO's), obstructions, and pipelines & cables. Available for custom installations on towed vehicles, ROV, AUV/ASV, provided survey criteria are met. Rigorously vetted on a MacArtney FOCUS 3 ROTV integration included a 2205 dual frequency bathymetric side scan sonar for simultaneous proud object detection and identification.

For more information please visit EdgeTech.com

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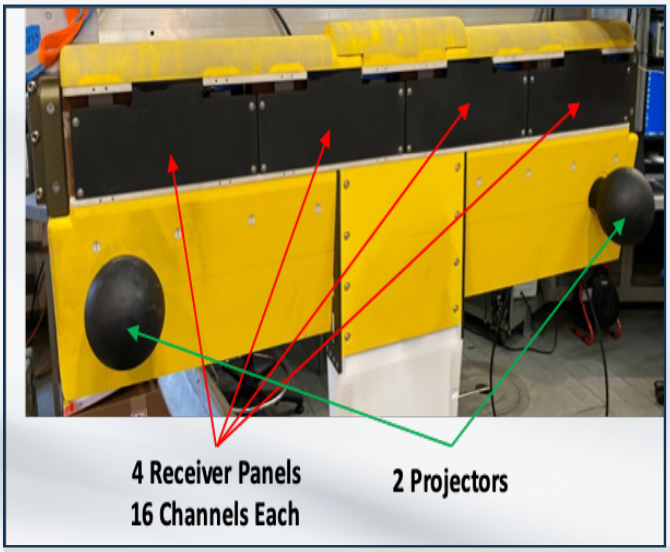
KEY SPECIFICATIONS

SONAR	
Frequency Range / Bandwidth:	5-25 kHz
Penetration in coarse calcareous sand/ rock in silt/mud/clay	~3 m (10 feet) ~10-15 m (30-45 feet)
Resolution (final/resultant) in all 3 dimensions	0.05 m
Resolution (physical)	Range: ~0.04 m Across-track: ~1.4o Along-track: ~0.03-0.15 m
Swath width (typical)	~20 m @ 5 m Height Off Bottom (HOB) ~60 m @ 15 m HOB – with reduced resolution
Survey Speed	2-4 knots
Max Depth	1000 m
TOPSIDE PROCESSOR	
Hardware	GPU accelerated PC for real-time SAS processing, visualization, and acquisition using EdgeTech and CTI software
Display	Real-Time 3D SAS; top-down and side-view maximum intensity projection (MIP) images
File Format	Native JSF with optional full volume storage
Input/Output	Gigabit Ethernet
Power Input	24 or 48 V
Power Usage (sonar only)	~100 W



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