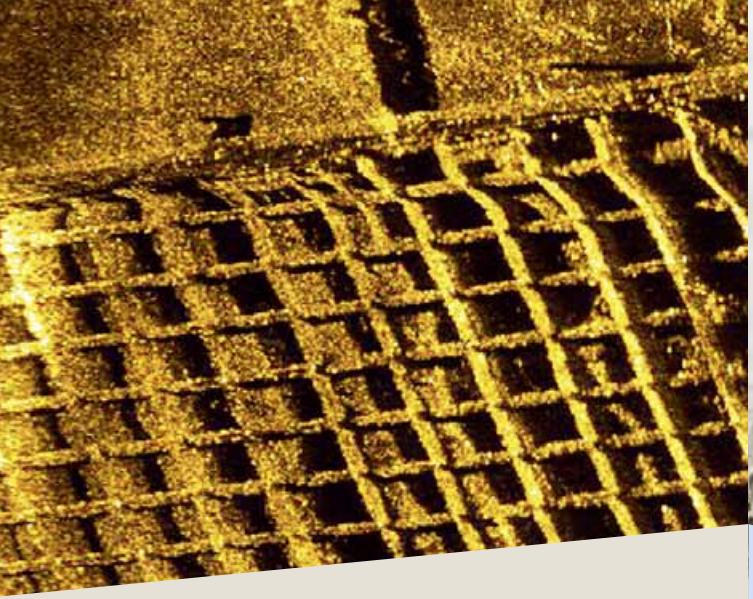


## APPLICATIONS

- **Pre-site surveys**
- **Seafloor analysis**
- **Obstacle avoidance for geomagnetic surveys**
- **Object identification and discrimination (UXOs, cables, anchors, wrecks, ...)**

**SIDESCAN** SONAR

# CONNECTING THE PIECES

High resolution sidescan sonars allow localization and identification of objects on the seafloor like rocks, anchors, as well as UXOs.


EGGERS
EGGERS GRUPPE
KAMPFMITTELBERGUNG

Telefon: +49 (0)4109 2799-156
info@eggers-kampfmittelbergung.de
www.eggers-kampfmittelbergung.de



EGGERS
EGGERS GRUPPE
KAMPFMITTELBERGUNG

EGGERS
EGGERS GRUPPE
KAMPFMITTELBERGUNG

## SEAFLOOR INVESTIGATION

Object identification gives evidence of a potential bomb on the seafloor.

# BACKGROUND AND THEORY

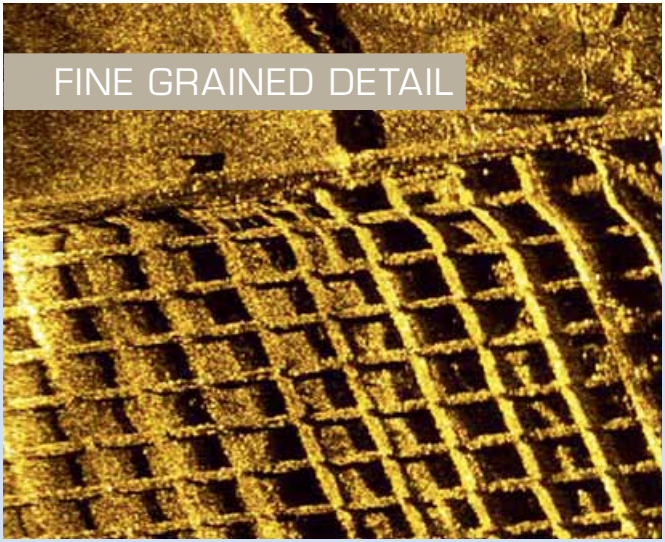
Sidescan sonars transmit sound energy whereby the seafloor is scanned fan-shaped beneath the sonar. It analyses reflected signal traveltime and amplitude and thereby collects information about depth and structure of the seafloor.

Backscatter of compact objects (for example UXO) is much higher than from the plain seafloor. Parameters of detected objects are used for further discrimination (length, width, height and shape). By using different frequencies a creation of a general overview as well as a more detailed investigation of particular objects are possible.

# PRACTICE

For wide area surveys parallel lines are measured. The coverage of a sonar swath depends on its height above the seafloor. In combination with positioning devices (GPS, USBL) georeferenced mosaics of the seafloor are created.

- Qualitative overview of seafloor relief
- Confirmation or exclusion of magnetic anomalies



## FINE GRAINED DETAIL

In combination with geomagnetic surveys sidescan sonars are a powerful device in UXO detection. In case of UXO surveys sidescan sonars are used for identification and further discrimination of objects at the seafloor as well as pre-site surveys for following geomagnetic surveys.