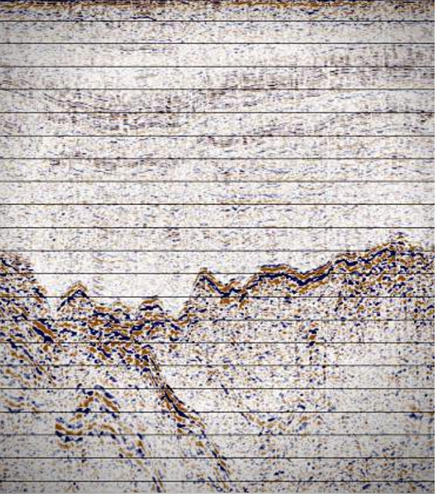

SEP Hydrographic

Company Brochure 2022

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Skelmersdale WN8 8EF
Tel: 01695 729 835

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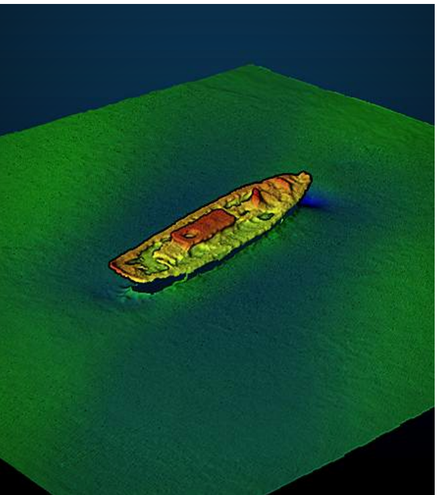
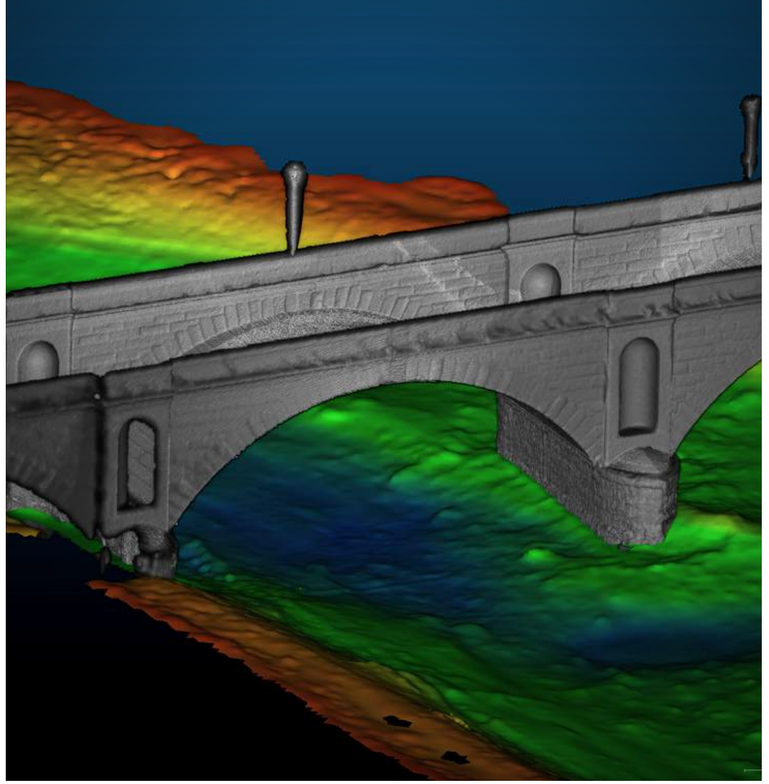




SEP Hydrographic

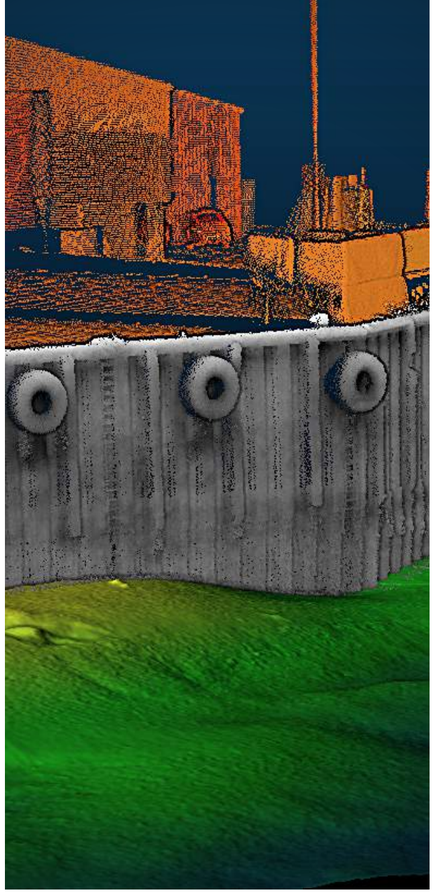
Providing a complete land and marine survey solution

Established in 2020, SEP Hydrographic was founded to meet the growing demand for a complete land and marine survey solution.

Parent company Survey and Engineering Projects have completed thousands of projects, working on some of the most recognisable landmarks in the UK. We continue to expand and diversify our portfolio of services to meet the evolving needs of our clients.

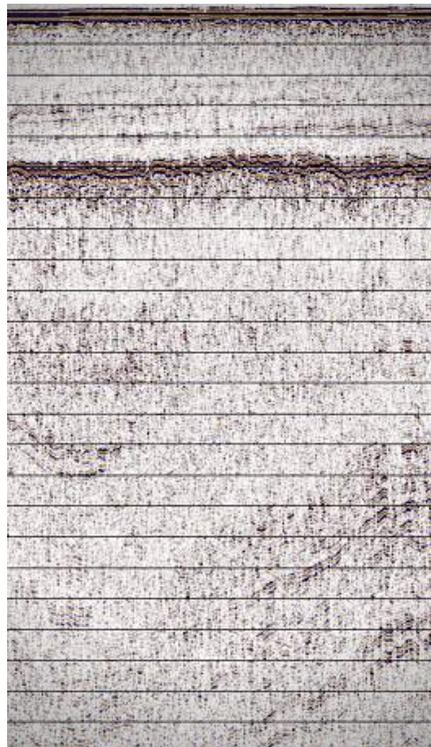
Our SEP Hydrographic leadership team benefits from more than 45 years of experience providing various marine survey services to international oil, gas, renewable energy and utility companies.

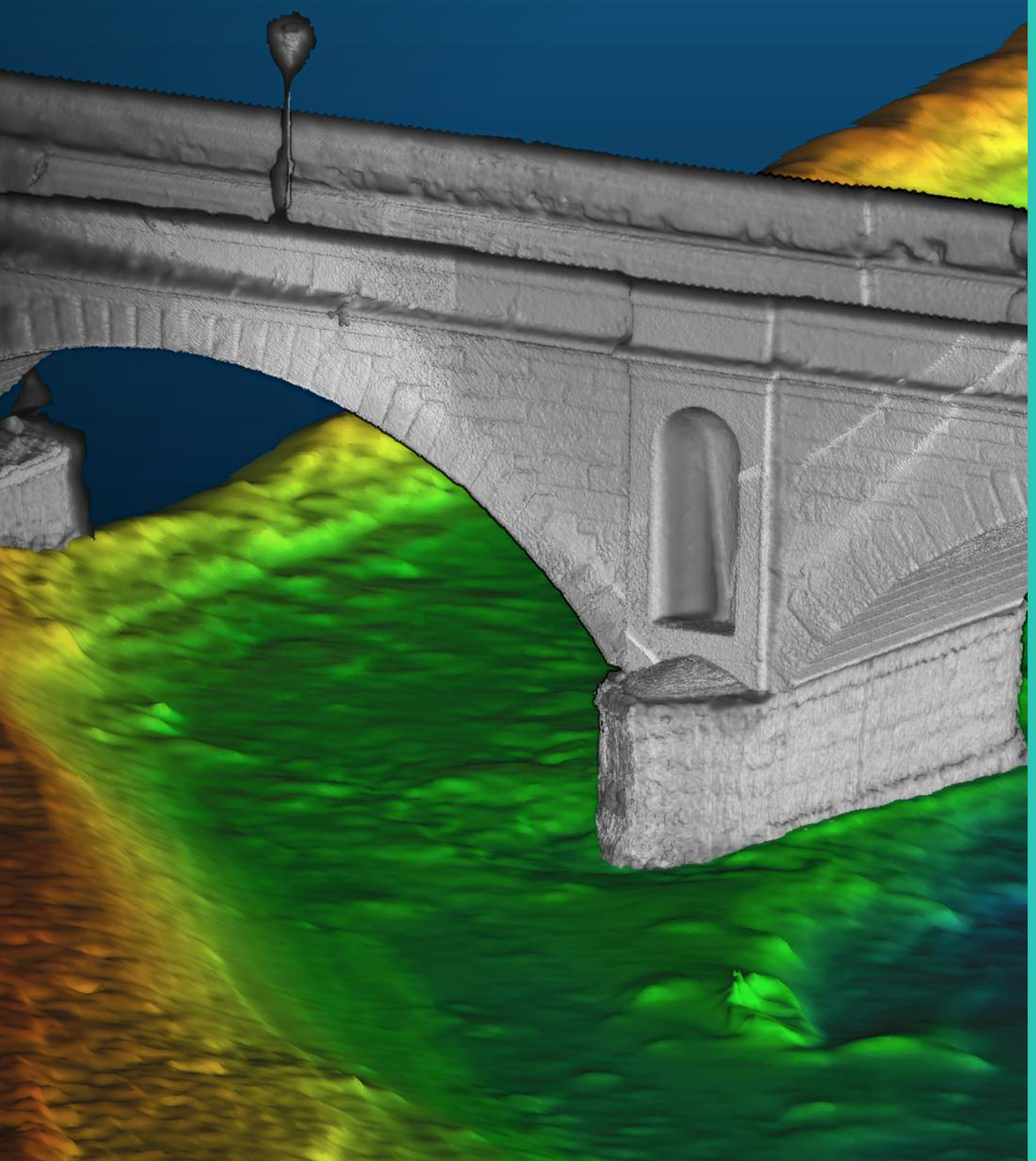
Advanced survey technology



Responsive and personable service

UK-Based





SEP Hydrographic

Our combined land and marine service offering allows us to provide an efficient, integrated solution to our clients.

We work with clients from a range of sectors to provide geophysical site investigation surveys, UXO surveys, asset integrity inspection and monitoring, post-storm or damage event surveys and environmental surveys.

SEP Hydrographic

The highest standards of health and safety

A strong commitment to health and safety is at the core of our business. When joining the business or working with us on a project, personnel are introduced to a robust integrated management system complying with ISO9001, ISO45001 and ISO14001 standards. The company is audited regularly both internally and externally.

SEP Hydrographic

Memberships & Accreditations

SEP Hydrographic is an active member of various trade organisations, supplier prequalification schemes and other initiatives.

The Hydrographic Society UK

Approved Constructionline – A UK Government Certification Service

ISO 9001 ISOQAR REGISTERED alcumus.com

ISO 14001 ISOQAR REGISTERED alcumus.com

ISO 45001 ISOQAR REGISTERED alcumus.com

The Survey Association – Full Member

UVDB empowered by Achilles

CHAS®

Achilles

SSIP Safety Schemes in Procurement

Big Blue Ocean Cleanup™

SEP Hydrographic

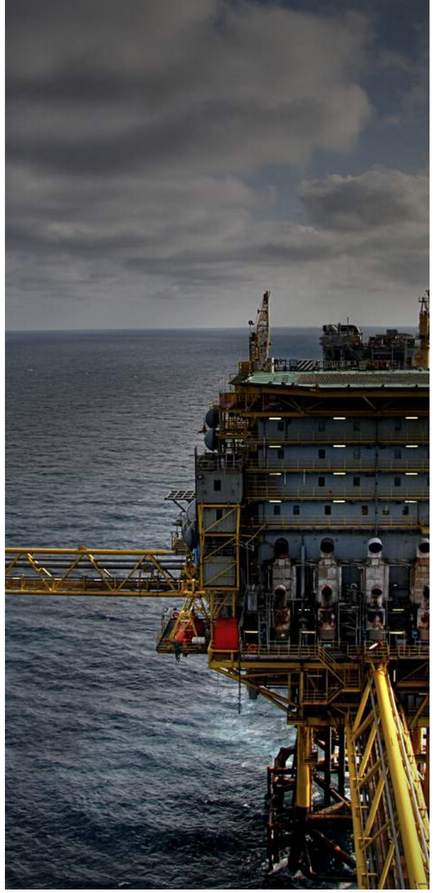
Our Experience

Our senior management team have over 45 years of survey experience on a variety of intertidal, near shore and offshore marine operations for projects including; civil engineering, telecommunications, pipeline routes, inspections and a variety of oceanographic surveys.

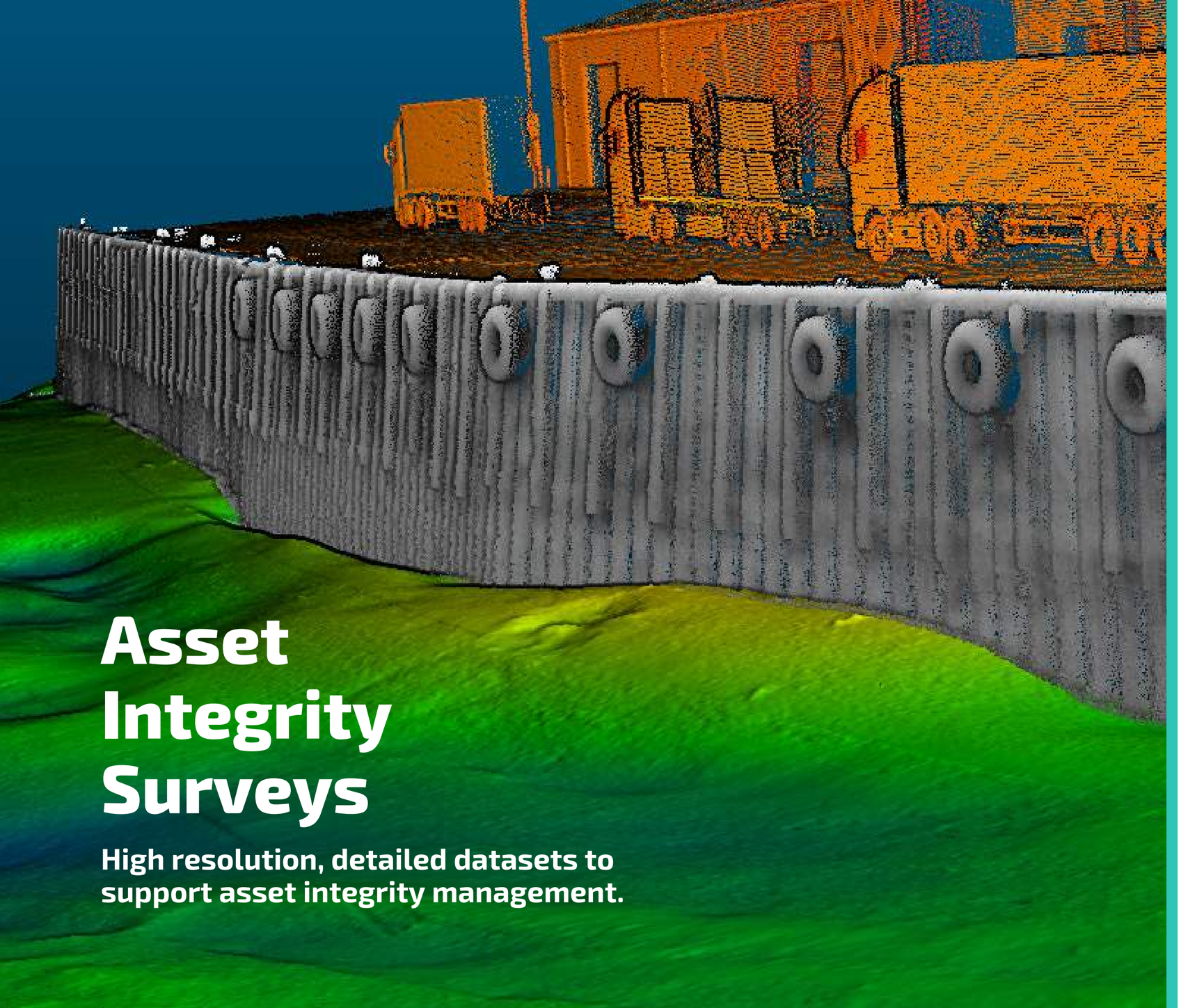
Our clients include some of the largest and most diverse companies globally, covering various well-known developments. Our team have worked some of the largest offshore wind farms in the world, on behalf of internationally recognised organisations.

Within the organisation, our personnel have worked on both nearshore, small-scale pipeline and cable landing surveys, all the way through to multi-vessel, multi-disciplined offshore campaigns comprising thousands of line km of survey data. Experience within SEP Hydrographic covers both pre and post survey and inspection of:

- Bridges & Structures
- Ports & Harbours
- Dams
- Inland Waterways
- Coastal Monitoring
- Utilities
- Offshore Wind Farms
- Oil & Gas assets



Our team have worked on a myriad of large-scale geophysical campaigns



Asset Integrity Surveys

High resolution, detailed datasets to support asset integrity management.

SEP Hydrographic

Backed by the latest in advanced survey technology, we combine multibeam bathymetry, 3D Scanning Sonar, Laser scan and photogrammetry data to provide a detailed picture of subsurface assets, both above and below the waterline.

We provide a 3D perspective of assets that may have previously been inaccessible for efficient and accurate measurement techniques.

Most terrestrial point cloud data datasets are derived from LiDAR scans, acquired from aerial or land-based sensors. However, when considering subsea assets, visible light techniques such as LiDAR are generally unsuitable for use in shallow water environments, due to rapid optical attenuation and turbidity through the water column.

By merging marine and terrestrial survey techniques, we can produce high-resolution imagery of underwater structures, offering a cost-effective substitute for traditional methods such as diving or ROV inspection. The result is an incredibly dense BIM-compatible dataset in comparison to traditional hydrographic surveys, which can then be brought into our accessible online viewer for further interrogation.

SEP Hydrographic

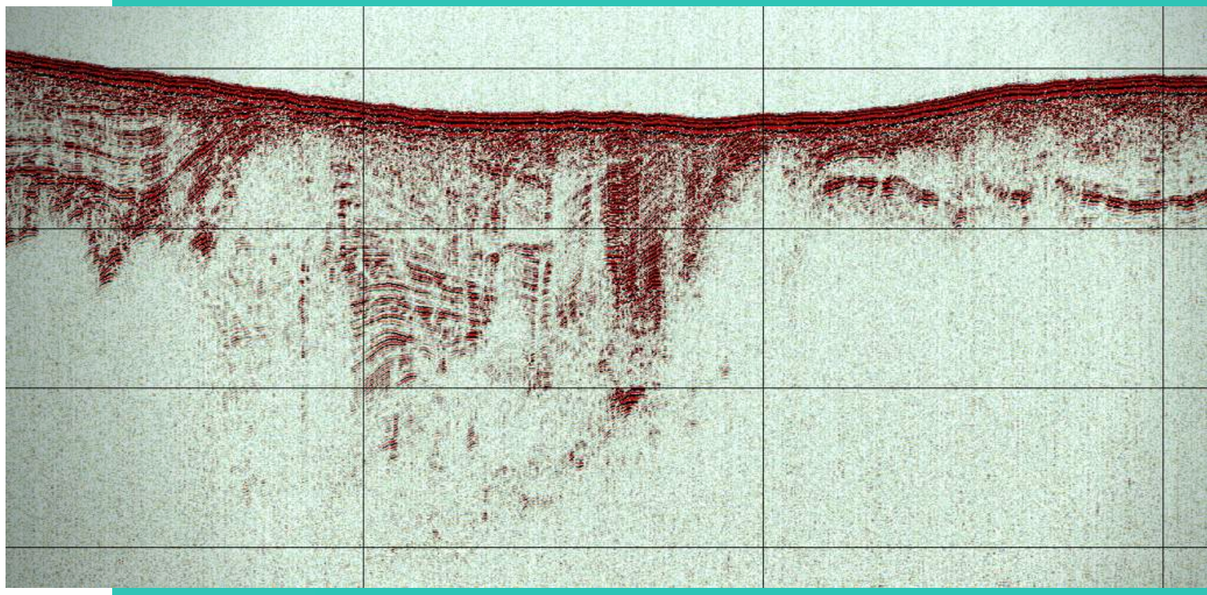
Geophysical Survey Services

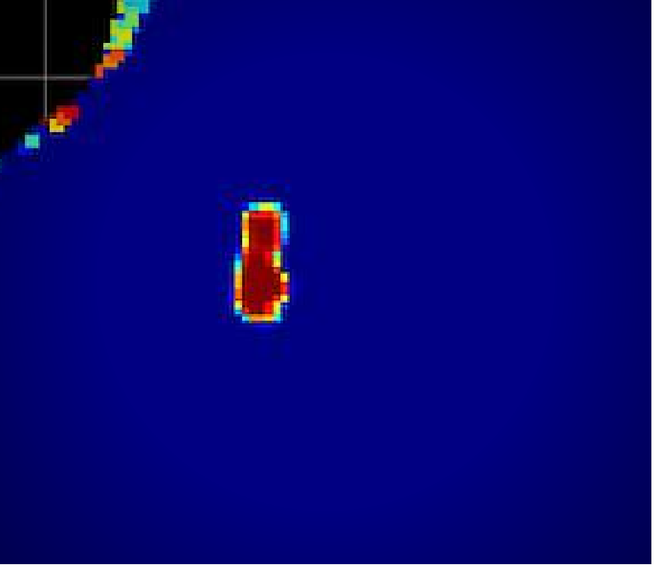
Acquisition of quality geophysical survey data can be a challenge. Our team have worked on various complex projects across the UK and northern Europe covering a range of techniques both land and marine-based.

Our geophysical survey services including a range of land and marine techniques, combining sensors where feasible to create efficiencies in data acquisition. With a focus on the latest innovations from leading suppliers, our range of services include:

- Cable and pipeline route surveys
- Offshore wind farm site surveys
- Pre-engineering surveys
- Geohazard surveys
- UXO surveys

From our inshore vessel Pulsar, we can mobilise a range of sensors simultaneously, chartering in larger vessels for more complex requirement.





UXO Survey Services

Unexploded Ordnance (UXO) around the UK continues to cause problems for site developers, asset owners and contractors, as well as local communities.

SEP Hydrographic

Unexploded mines and bombs deployed during World War II are still present in the subsurface and seabed around the UK, as well as other smaller ammunition, and they continue to pose a threat after decades of inactivity.

There are many challenges associated with UXO, starting with survey and identification through to clearance and disposal. From the perspective of a survey company, there are a few central challenges that we must overcome to deliver a quality survey result.

There is a drive for new and innovative UXO survey techniques to help to overcome some of the technical challenges while reducing the cost of data acquisition. As with many other survey disciplines, autonomy will play a key role in achieving this aim. Whether the sensors are mobilised to Autonomous Surface Vessels (ASVs), Unmanned Aerial Vehicles (UAVs) or Autonomous Underwater Vehicles (AUVs), there are clear benefits to embracing this technology. Other advances include the increasing use of the PanGeo SBI for non-ferrous UXO requirements as well as surveying in built-up areas.

At SEP Hydrographic, our team has decades of experience in UXO survey, and have acquired, processed and interpreted thousands of line km of data. We work closely with trusted partners including PanGeo Subsea to ensure a turnkey UXO risk management solution.

SEP Hydrographic

Land & UAV Survey Services

Aerial surveying using UAVs offers rapid data acquisition and provides an efficient, safe solution to areas that are inaccessible using other techniques.

Combining photogrammetry techniques with UAV LiDAR can give enhanced results across a range of applications from surveying a bridge deck to wind turbine inspections, drones make it easy to cover large or difficult to access areas in minutes. UAV survey data are acquired, processed and presented differently depending upon the project. Gathered data can be supplied in deliverable formats such as orthophoto, DTM, DSM, pointcloud, Revit surface and AutoCAD.

Our in-house staff are experienced surveyors who are professionally trained to and qualified to operate in the UK. Data collection for an extensive survey that would typically take a team of surveyors several days to perform can be achieved by UAV in a fraction of the time.

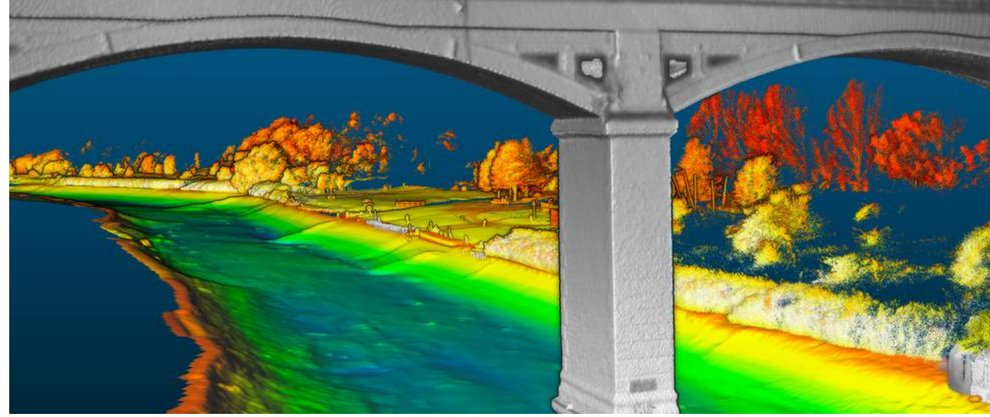
Combined with the right skill set and software, UAV drone surveys can acquire high-resolution data with sub-centimetre accuracy. Results can be faster and more cost-effective for Clients where repeat surveys are needed to monitor environmental conditions or provide situational analysis on an ongoing basis.

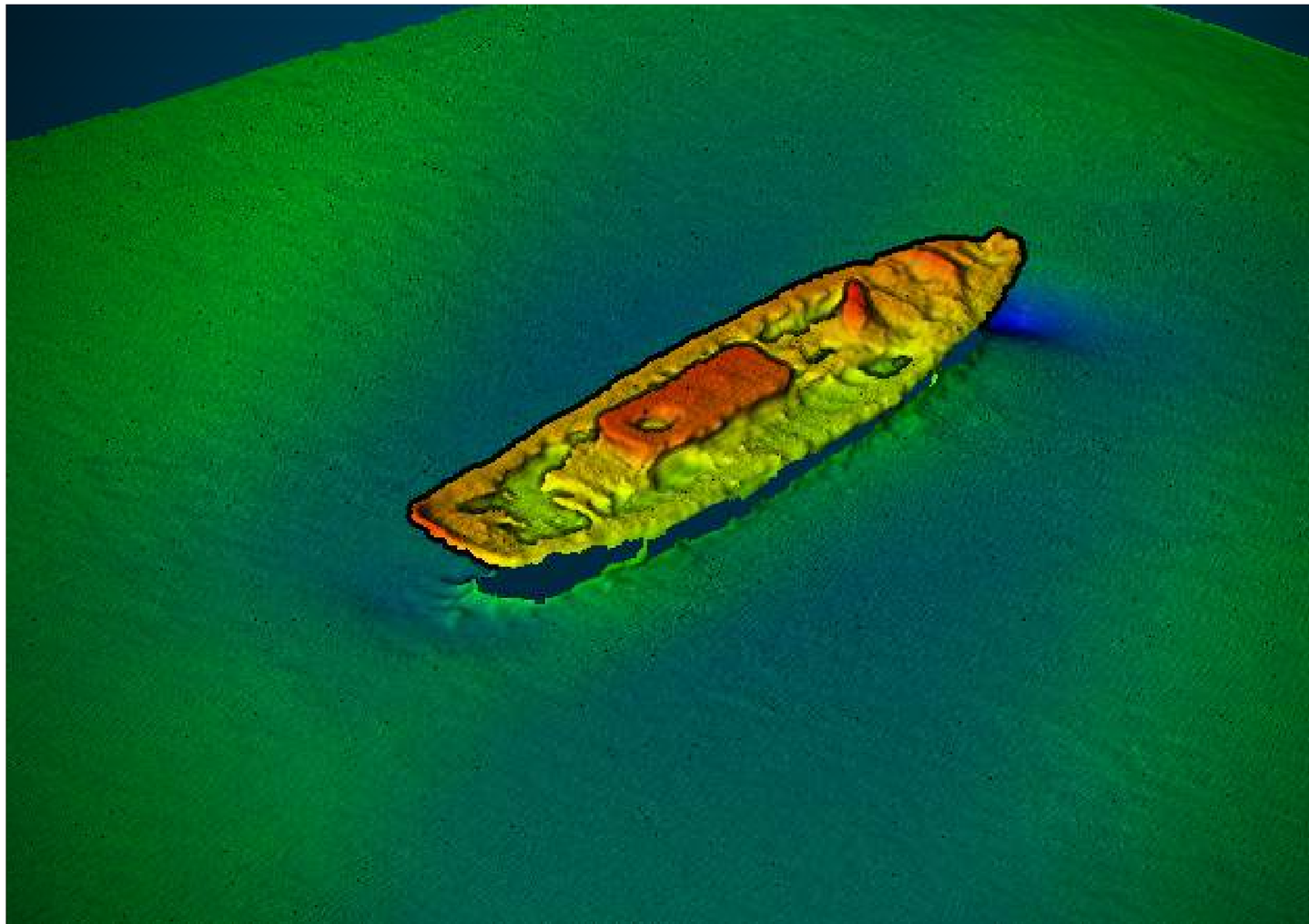
The SEP group of companies offer market-leading land survey services, including topographic surveys, laser scanning, CAD/BIM/Revit, Underground Utility, Utility Verification Surveys, Measured Building Surveys and Monitoring Surveys.

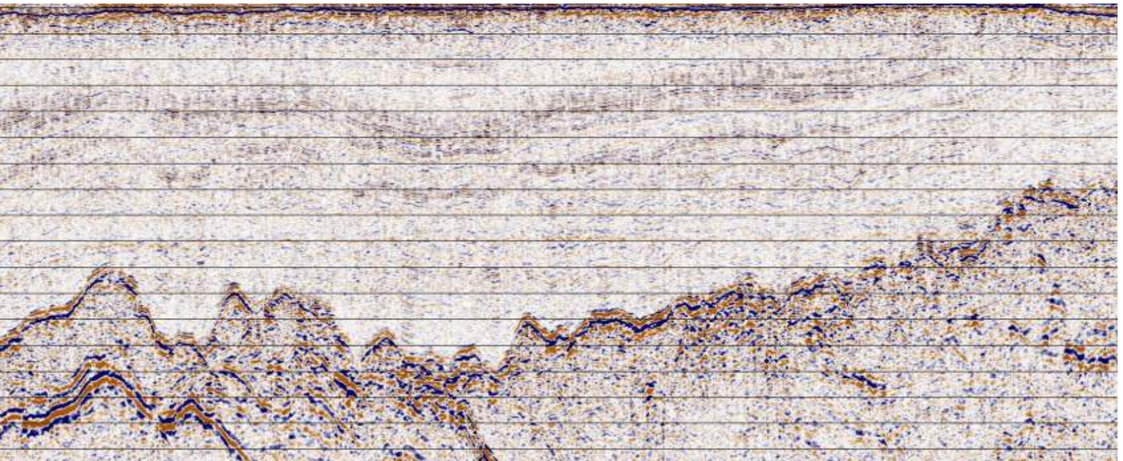
SEP Hydrographic

Processing & Reporting

We use the latest offerings from industry-leading software providers including QPS, Chesapeake Technology, Geosoft, IHS, CodaOctopus, Eiva and others.







SEP Hydrographic

Pulsar

Pulsar is a shallow drafted Cheetah Marine catamaran launched in 2006, and fully refitted during 2018 and acquired by SEP Hydrographic in May 2020

Pulsar is permanently mobilised with a suite of high specification equipment to carry out asset inspection surveys, including a high-resolution scanning sonar, marine laser scanner and multibeam echosounder systems. The vessel can be equipped with additional geophysical survey sensors which can be tailored to project requirements. Our advanced survey equipment is installed using custom-built over the side mounts, providing repeatability.

The survey equipment and personnel are housed within the forward cabin area of the vessel, providing a comfortable working environment. With a purpose-built trailer, the vessel is road-transportable, which enables a responsive and straightforward mobilisation. Depending upon the survey site, deployment and recovery can be facilitated either using a suitable local slipway or vessel hoist or crane.

This responsiveness is particularly useful when dealing with an emergency survey, for example, following damage.

18 knots

Quick Deployment

Permanently Mobilised

Launched	2006
Length (LOA)	7.2m
Beam	2.7m
Draft	0.3m
Cruising Speed	18 knots
Operating Code	MCA Cat 3
Accommodation	12hr

SEP Hydrographic

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