



Fugro

Complementary Capacity and Capabilities

Paul Seaton 2011

Independent and Cost Effective Survey Support

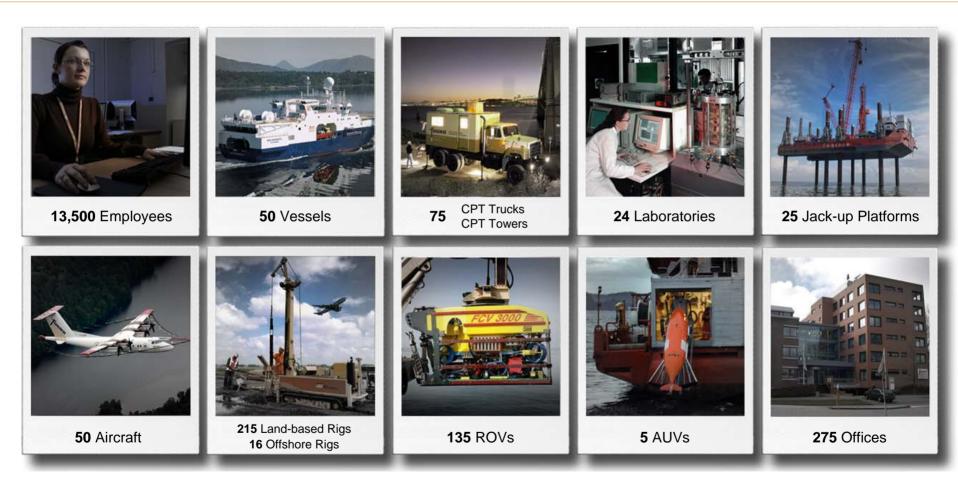




We aim to provide the most **accessible**, **reliable**, **safe** and **cost effective** survey support service in the world. In tune with the needs and constraints of our customers, we provide **flexible**, **multi-disciplinary**, **fit-for-purpose solutions**.

Resources





Fugro's people, vessels, equipment and facilities expand and develop to meet the demands of new challenges in new regions and provide continuous high quality service that **exceeds the expectations** of our customers.

Local Presence - Global Perspective

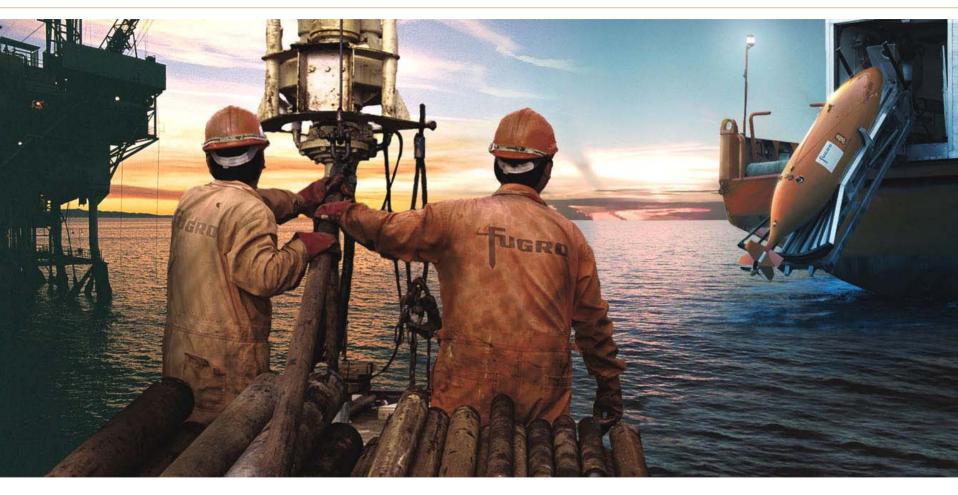




Fugro delivers these services from a **global network** of offices and facilities. Localised services are backed by an internationally acclaimed **knowledge base** and **resource provision**.

Oil & Gas





The global **oil and gas industry** relies on quality data collection, assessment and interpretation services over the entire life of field, contributing to exploration, development, production, decommissioning and remediation.

Public Sector





Accurate information about a country's territorial waters and coastal marine environment is critical to the **effective governance of operations**, **navigation and safety management** at a local, regional and national level.

Fugro Academy





The Fugro Academy offers continuous **educational and technical training** designed to advance the career development opportunities of our employees and safeguard Fugro's future access to knowledge and expertise.

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Mobile Learning

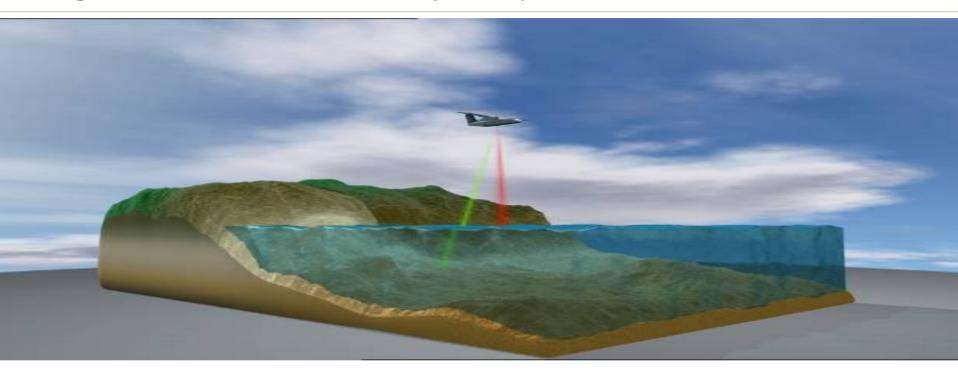
- E-Learning
- Tailored Solutions.
- Partnerships for professional development





Fugro Airborne Lidar Bathymetry

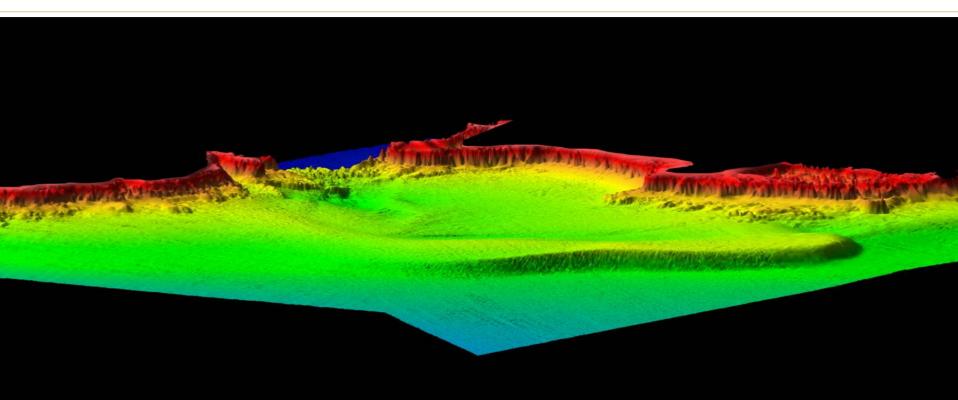




- Global leader in Airborne Lidar Bathymetry application and technology
- Hydrographic survey system mounted inside an aircraft
- Pulses of laser light are used to measure the depth of water and height of features (ie rocks, islands, beach gradients)

Advantages of Lidar Bathymetry





Seamless data across the land water interface.

Cost effective and rapid survey option.

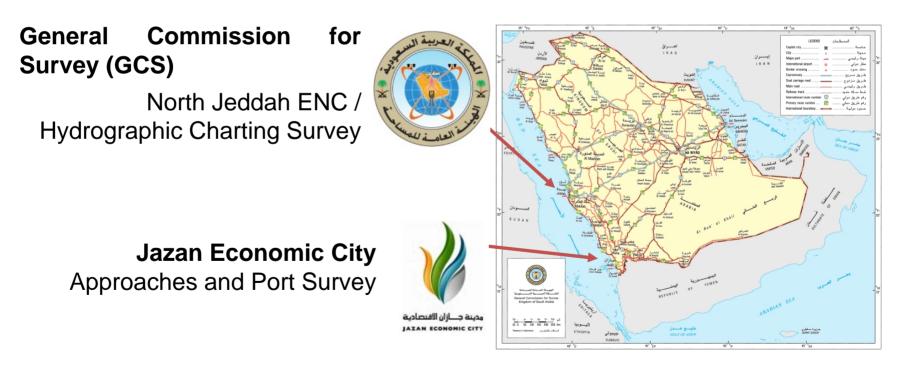
Safe in hazardous areas

Access to remote areas



An Example: GCS/Fugro Red Sea Survey

Survey of Complex Coastal and Deep Water Tropical Bathymetry for IHO S44 standard Navigational Charting and Port Engineering, Red Sea, Kingdom of Saudi Arabia.



Total Area ~5400 km²

North Jeddah: Acquisition Overview

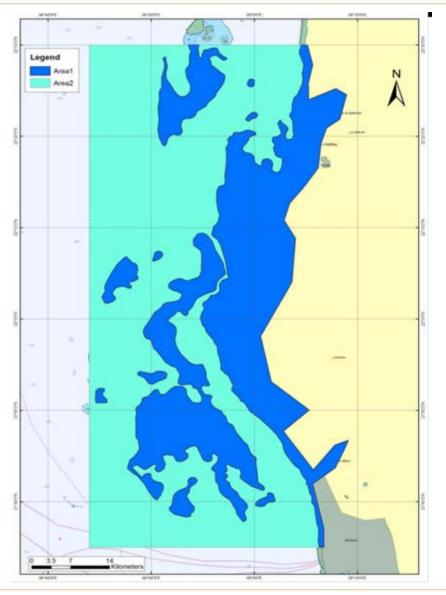


Total Project surveyed area: 3852 km²

Lidar: 1517 km² (Area 1)

MBES: 2635 km² (Area 2)

Date acquired in Mar-June 2010





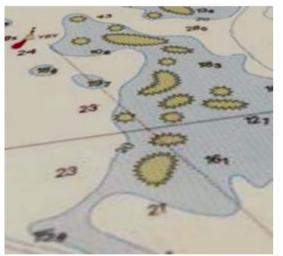
North Jeddah: Chart Comparison



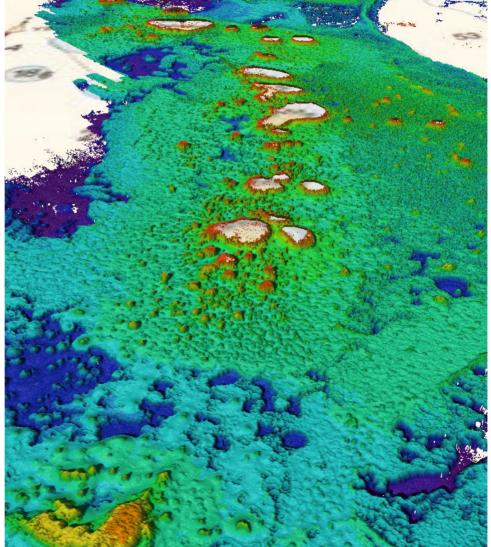
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North Jeddah: Chart Comparison



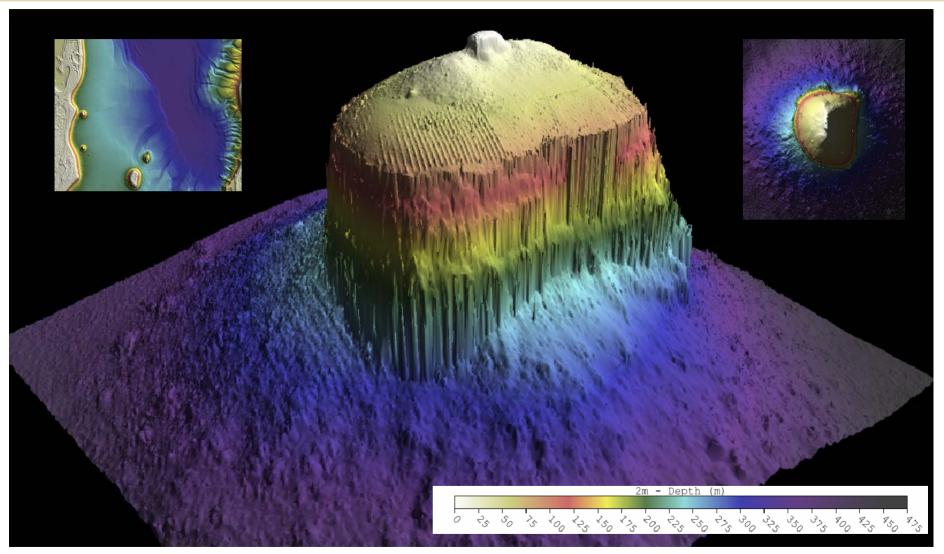


Larger drying coral approx. 100x200m



Deep to Shallow



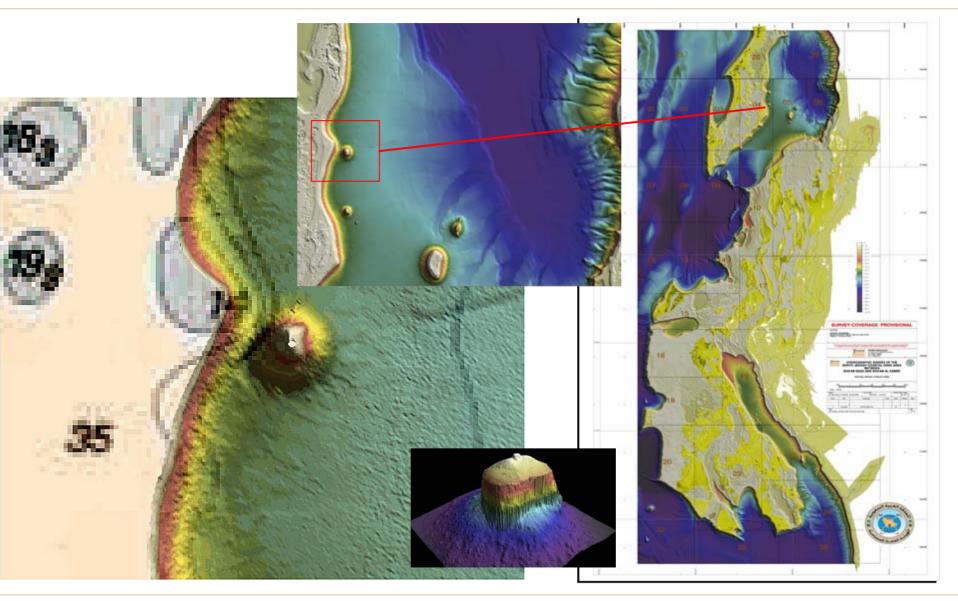


Seamount feature shoaling from 355m to 2m

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What it's all about: Safety









Thank You