

Commissioners of Irish Lights



Charting the Way Forward
8th November 2007

Charting the Way Forward

- The Commissioners of Irish Lights
- Some Hydrographic Service history
- Good advice on charts
- CIL Capability to Support a Hydrographic Office
- Some issues

HISTORY



Map of

History & Legislation

5th Century St. Dubhan Lights Hook Head

1665 Origins of CIL in Letters Patent from Charles II

1786 Act for Promoting the Trade of Dublin.

1867 Dublin Port Act. CIL under present name.

1894 Merchant Shipping Act (MSA).

1995 United Kingdom MSA.

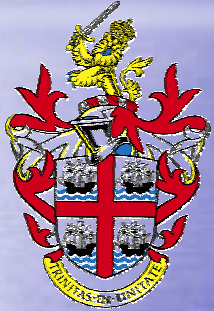
1997 Revisions to Irish MSA

2000 Ports Code & Guide.

GLA Statutory Duty

- Merchant Shipping Acts 1894 & 1995
- Responsibility for provision of AtoN for General Navigation.
- Superintendence, management & inspection of all aids to navigation.
- Wreck outside of statutory harbour areas.

The 3 General Lighthouse Authorities



The Corporation of Trinity House (TH) -
England, Wales & Gibraltar & Channel
Islands



The Commissioners of Northern Lights
(NLB) – Scotland & Isle of Man



The Commissioners of Irish Lights (CIL)
- Ireland

IALA – International Standards

The International
Association of Marine Aids
to Navigation and
Lighthouse Authorities



Motto & Mission

In Salutem Omnium – For the safety of all



To deliver a reliable, efficient and cost effective Aids to Navigation (AtoN) service for the benefit and safety of all mariners.

CIL Aids to Navigation

80 Lighthouses



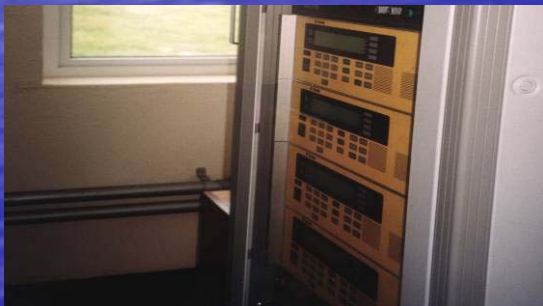
147 Buoys



48 Beacons



3 Differential GPS



3 Lightfloats / Lanbys



21 Racons



Charting the Way Forward

Some Hydrographic Service history

December 1922

Senator William Barrington Motion

".....to obtain from the British Government all the original engraved plates, drawings, triangulations and notes, etc., relating to the Surveys of Ireland; and from the Hydrographic Department of the Admiralty all similar plates, notes, etc., of the Charts of Irish territorial waters, and the larger Scale Plans of the Harbours, Rivers, etc., in Ireland."

AN CATHAOIRLEACH: If there is no objection I shall put the motion. It seems to contain nothing contentious.

Motion put and agreed to.

April 1959 – Dáil Éireann

Mr. Larkin asked the Minister whether the British Admiralty is assuming no further responsibility for the issue of charts of Irish coastal waters; if he is aware that these can now be obtained only at a considerably higher cost than heretofore, or with an accompanying disclaimer of responsibility for inaccuracies; and, if so, what steps he proposes to take to see that accurate, up-to-date charts of all Irish coastal waters are readily available for all who need them.

Minister for Defence I have no information regarding the matters mentioned by the Deputy. The fact is that the British Admiralty is not responsible for the charting of our coastal waters. A Hydrographic Service has not yet been established in this country. The question of arranging a hydrographic survey of the coastal waters has been under consideration for some time but I cannot say when a decision in the matter is likely to be reached.

November 1966 - Dáil Éireann

Mr. Corish asked the Minister for Defence what plans exist for hydrographic surveys of Irish coastal waters

Minister for Defence: No plans exist for hydrographic surveys of Irish coastal waters by the naval service at present.

The British Hydrographic Department has, since 1963, been engaged in carrying out a hydrographic survey of an extensive area of the North Atlantic to the north-west of Ireland including certain Irish harbours and coastal waters. Our authorities are co-operating with the British in this survey, the results of which will be made available to us. To date surveying has been carried out in Lough Swilly, Sligo Harbour and Killybegs Harbour. It is anticipated that the British Hydrographic Department will continue the survey in 1967 but it is not possible at this stage to say what further Irish harbours or coastal waters may be included.

April 2007 - Dáil Éireann

Convention on the International Hydrographic Organisation: Motion.

Mr. Kitt: I move:

That Dáil Éireann, pursuant to Article 29.5.2° of Bunreacht na hÉireann, approves the terms of the accession to the Convention on the International Hydrographic Organisation.

Question put and agreed to.

Some Advice on Charts

Jan de Hartog – A Sailors Life 1954

in the young sailor. But then, charts are not meant to inspire confidence, but to frighten him. The essential contrast between a land-map and a sea-chart is that whereas a land-map coaxes the wanderer onto its brightly coloured roads towards delicately shaded woods and hills full of promise, the sea-chart seems to spell disaster to anyone reckless enough to leave the safety of the harbour. Everything is a warning wrapped in a caution, and the small print at the bottom does nothing to put the young navigator at his ease.

Jan de Hartog – A Sailors Life 1954

shoulder. The only thing to remember is that the little drawings or silhouettes found on charts of distant shores are romantic, but taken from the direction in which your ship is not approaching the coast. As there are only a few basic patterns for mountain groups and headlands, the danger is obvious.

The best use for charts to the young sailor is to give them to his sweetheart, who will pin them on the wall. You will be comforted to find the snapshot of Uncle Bill and his dog over the West Pit, the Devil's Reef or Sandettie Bank. When you come home from your next trip it will be worked into a lampshade, and no one who has not experienced it can imagine the satisfaction of seeing Rear Admiral A. Mostyn-Field, F.R.S., watch over grandma's knitting and hear his grim warnings called "cosy."

CIL Role in Hydrography

- A presence on the coast
- Surveys relevant to AtoN

CIL Role in Hydrography

s.s. "IERNE"

Castletownbere, Co Cork.

13th. July 1963.

Inspector and Marine Superintendant,
Irish Lights Office,
Dublin.

Dear Sir,

I have been observing the soundings in the vicinity of Fastnet Rock over a period to be much less than charted. I sounded the area more comprehensively on 12th. inst. when the weather was suitable and while carrying out the Fastnet relief. The following are the results.

A sharp pinnacle ridge runs from the Fastnet Rock in a direction 230 degrees for a distance of 1 mile from the Rock (i.e. Fastnet Lighthouse directly in line with the Bill of Clear) and the following soundings from 5 cables to one mile from Fastnet were obtained. Soundings reduced to M.L.W.O.S.T.

Bearing of Fastnet L/H	Distance.	Sounding.
050 degrees.	5 Cables	15 Fathoms.
050 "	5 $\frac{1}{2}$ "	13 "
050 "	6 "	14 "
050 "	6 $\frac{1}{2}$ "	10 "
050 "	6 $\frac{1}{2}$ "	9 "
050 "	7 "	9 "
050 "	7 $\frac{3}{4}$ "	12 "
050 "	9 "	14 "
050 "	10 "	15 "

CIL Role in Hydrography

Commander,
"ATLANTA".

IMS/151/63.

1/2/1973.

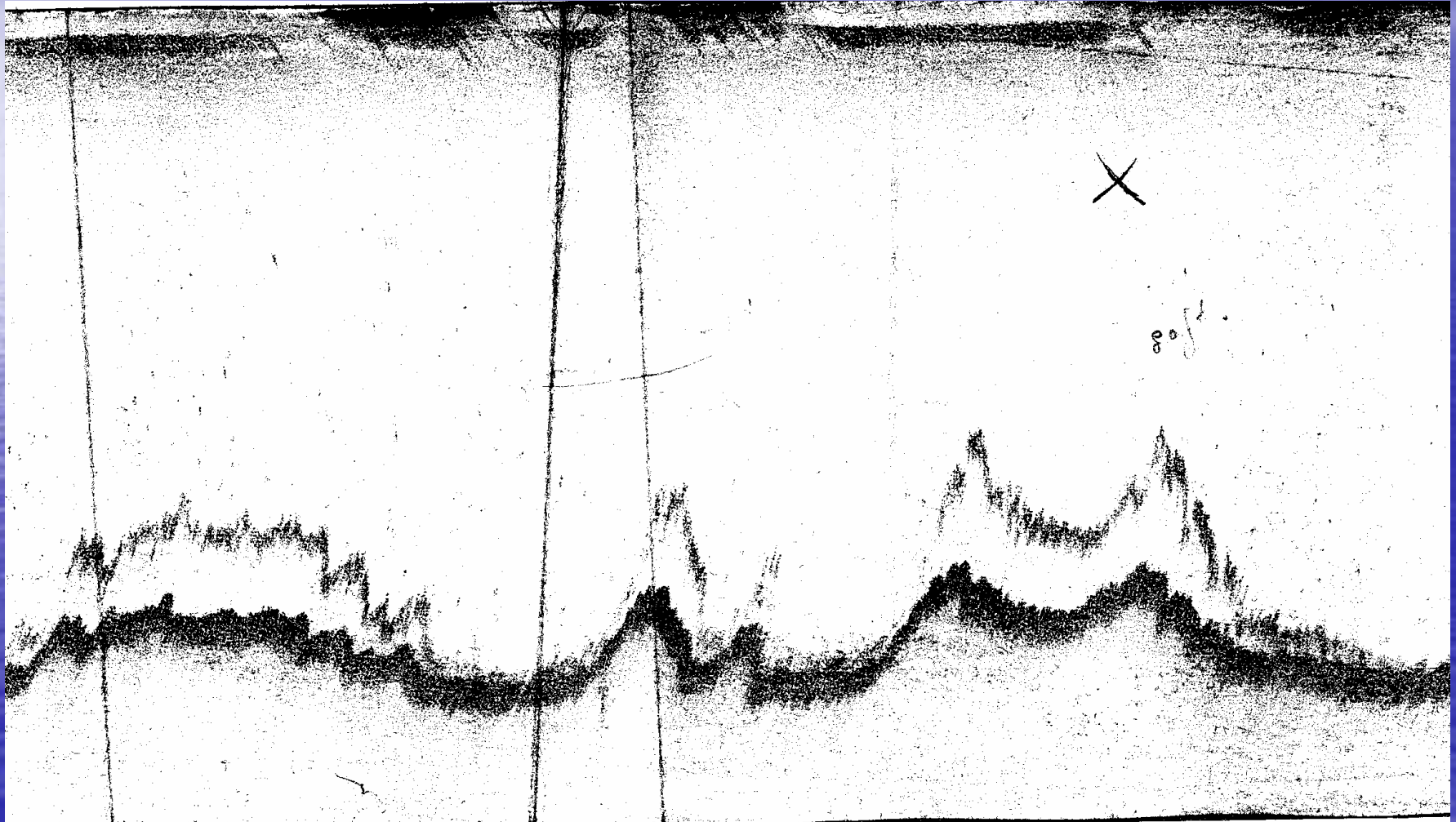
With reference to your letter of the 26th January, enclosing tracing showing soundings reduced to Chart Datum in the vicinity of the North Shear Buoy, please take soundings of the Lucifer Bank between $52^{\circ} 19'$ North and the No. 4 Blackwater Buoy and between the meridians of $6^{\circ} 12'$ and $6^{\circ} 15'$ West, and submit a tracing to this Office showing soundings reduced to Chart Datum to the nearest quarter fathom.



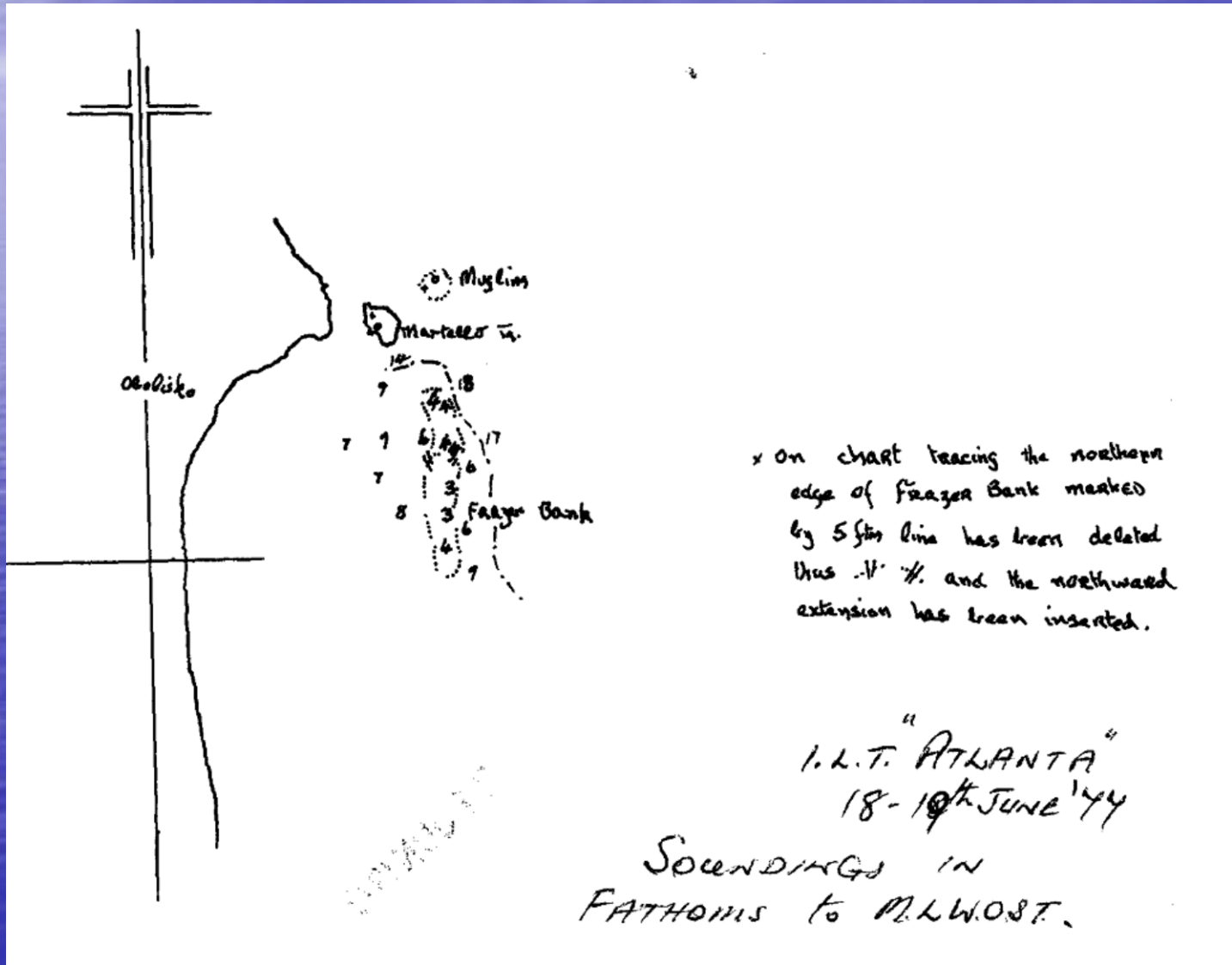
INSPECTOR & MARINE SUPERINTENDENT

CCL 'E/MR.

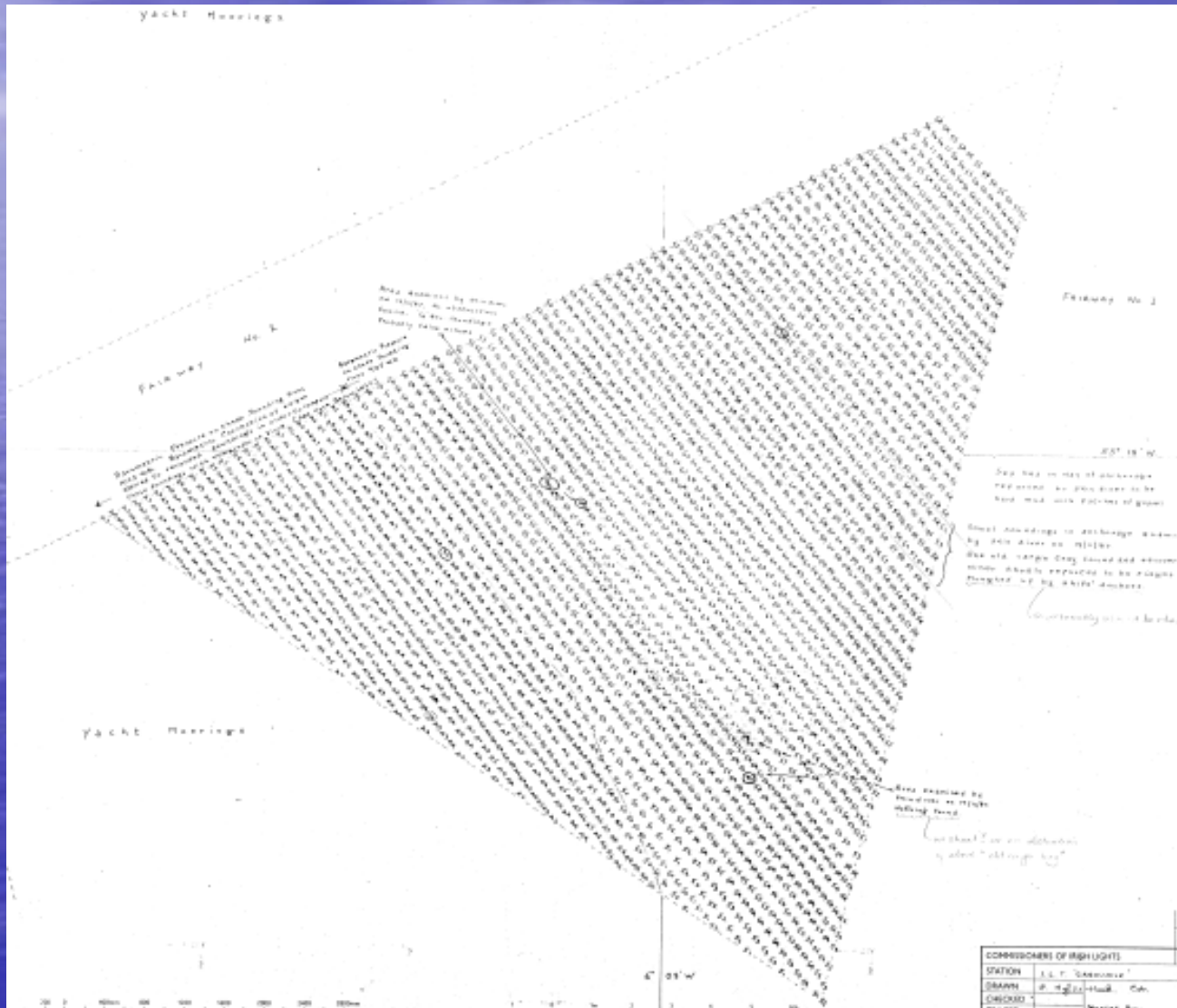
CIL Role in Hydrography



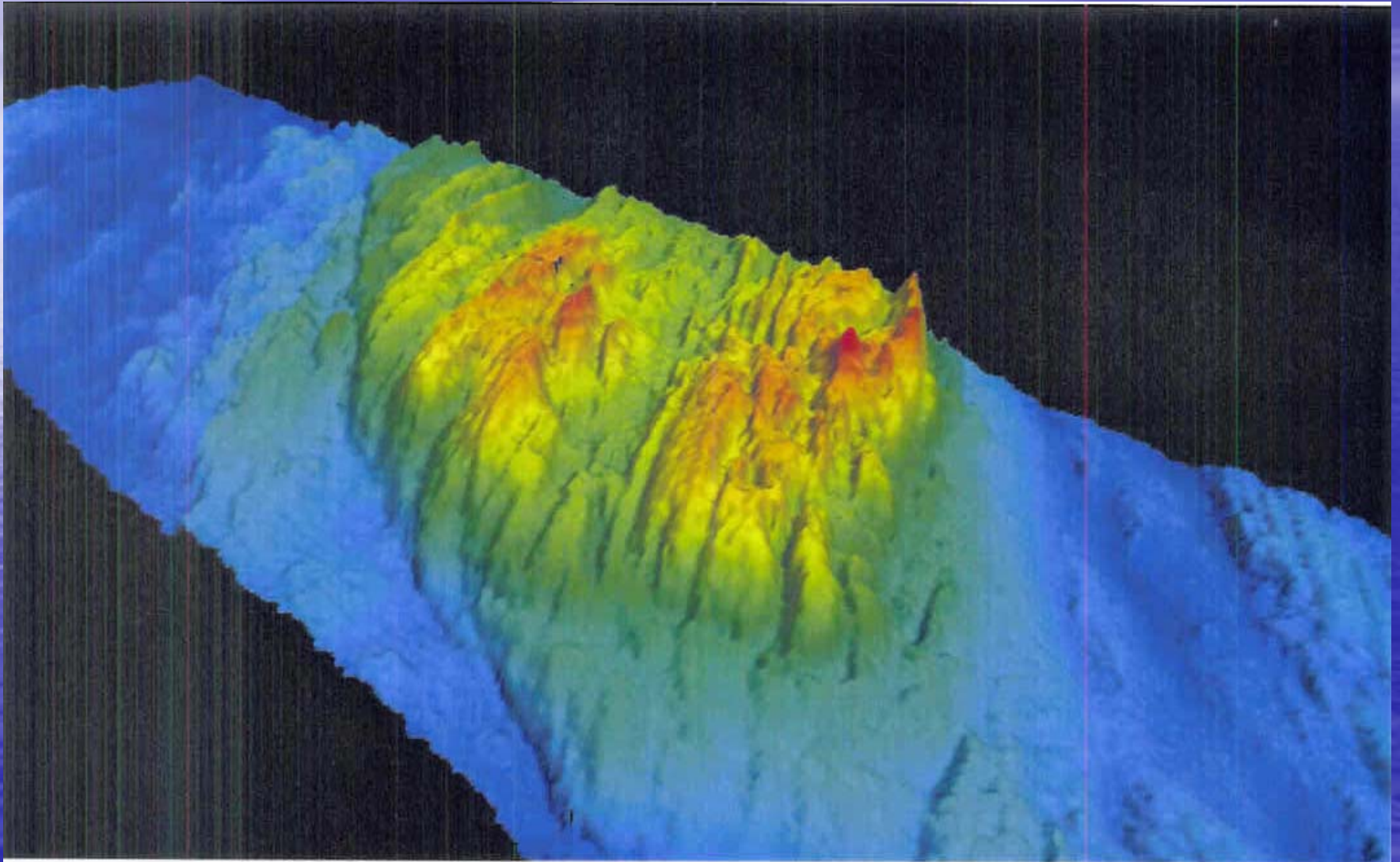
CIL Role in Hydrography



CIL Role in Hydrography



Reanies Point



CIL Role in Hydrography

- A presence on the coast
- Surveys relevant to AtoN
- Contact with Harbours and other Local Lighthouse Authorities

CIL Role in Hydrography

- A presence on the coast
- Surveys relevant to AtoN
- Contact with Harbours and other Local Lighthouse Authorities
- Relationship with UKHO
- Committee on Shipping Hydrography

ILV Granuaile



ILV Granuaile

- Built by Damen Shipyards Ltd
- LOA 79.631 metres
- Beam 15.994 metres
- Depth of Hold 6.0 metres
- Tonnage Gross 2625
- Tonnage Net 787
- Endurance 45 days

ILV Granuaile

Hydrographic Package

- ELAC Multibeam Bottom Chart Mk II
154 Degree Swath / 126 Beams
- Trac C Automatic Track Guidance
- CARIS Post Processing System
- Furuno CN 36 forward looking Sonar
- ELAC LAZ 5000 echo sounder (single beam)
- Seatex MRU-5
- Marimatech SVP-HMS1820
- Kongsberg Seatex Seapath 200

ILV Granuaile

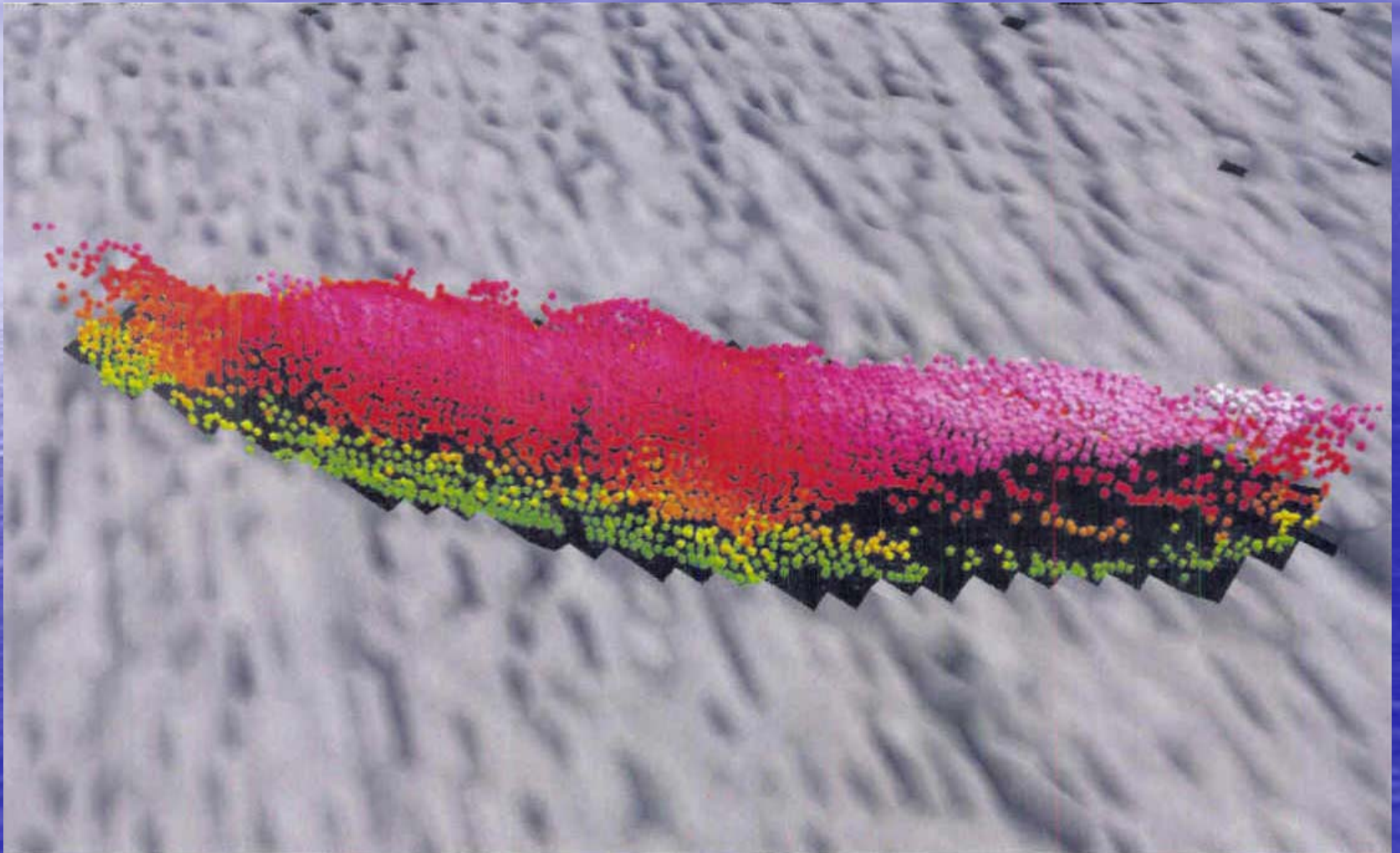
Deck Equipment

- Liebherr Crane, 20 tonne SWL
20 metres outreach
- 2 x 15 tonne Chain capstans
- 2 x 26' wooden motor boats
- 1 x 8 metre RIB with twin water jets
- 2 x Karmform 'chain grabbers
- 16 TEU Single Stack
- 40 tonne bollard pull Towing winch

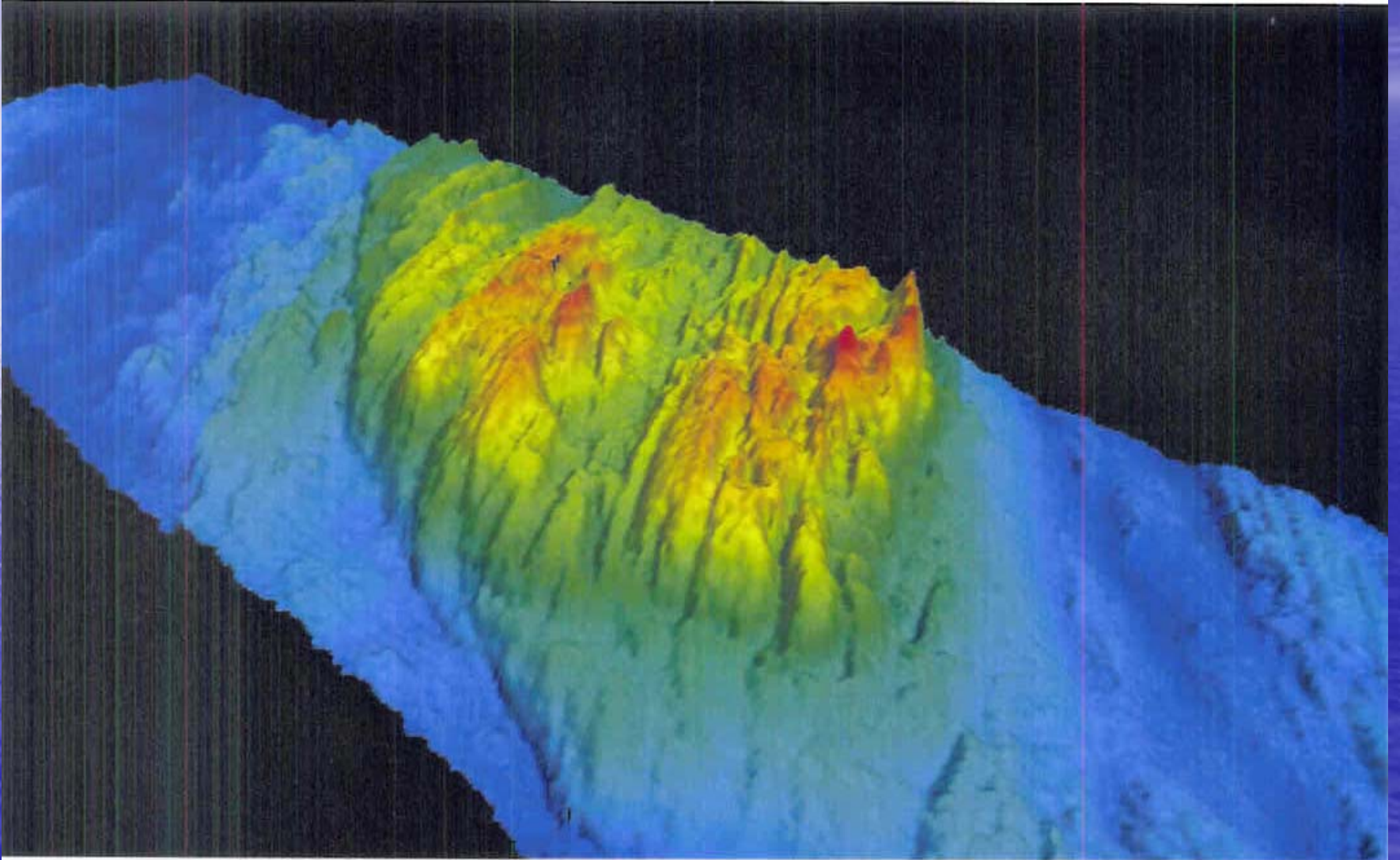
Lusitania



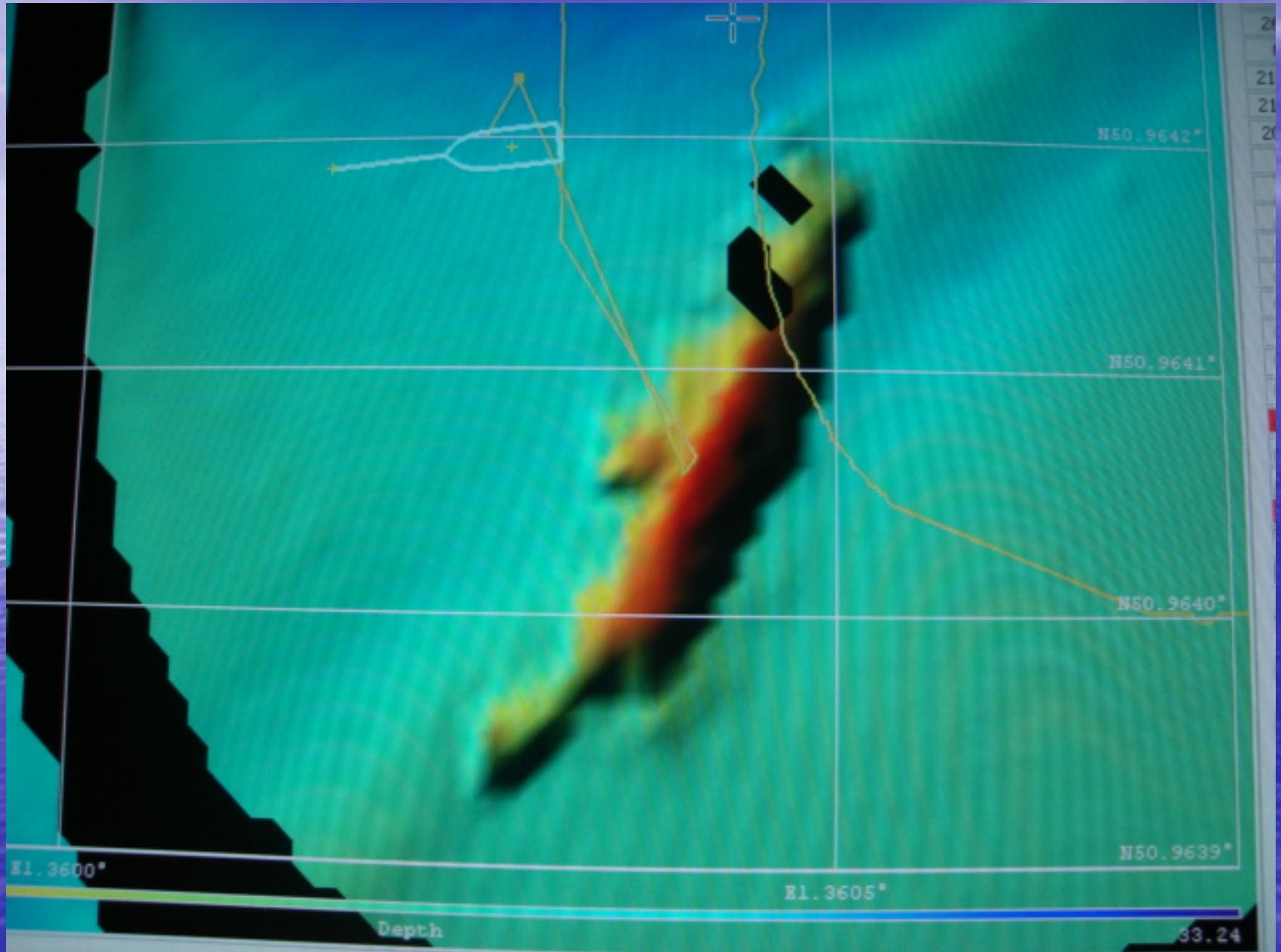
Lusitania



Reanies Point



UB 38 Kongsberg Multibeam



Granuaile Capabilities

- On Scene Co-ordinator for Search and Rescue/Recovery.
- Emergency Towage.
- Oil Spillage Containment Exercise
- Diving Support for Salvage Operations
- Recovery of sunken vessels from seabed.
- Pipeline surveys using ROV at Gas Rigs
- Underwater inspection of offshore platforms
- Wreck internal search
- Vibrocore sampling:
- Hydrographic Surveys:
- Seismic Surveys:
- + + + +

Some issues

- Early action on WGS84 Conversion and ENC rollout

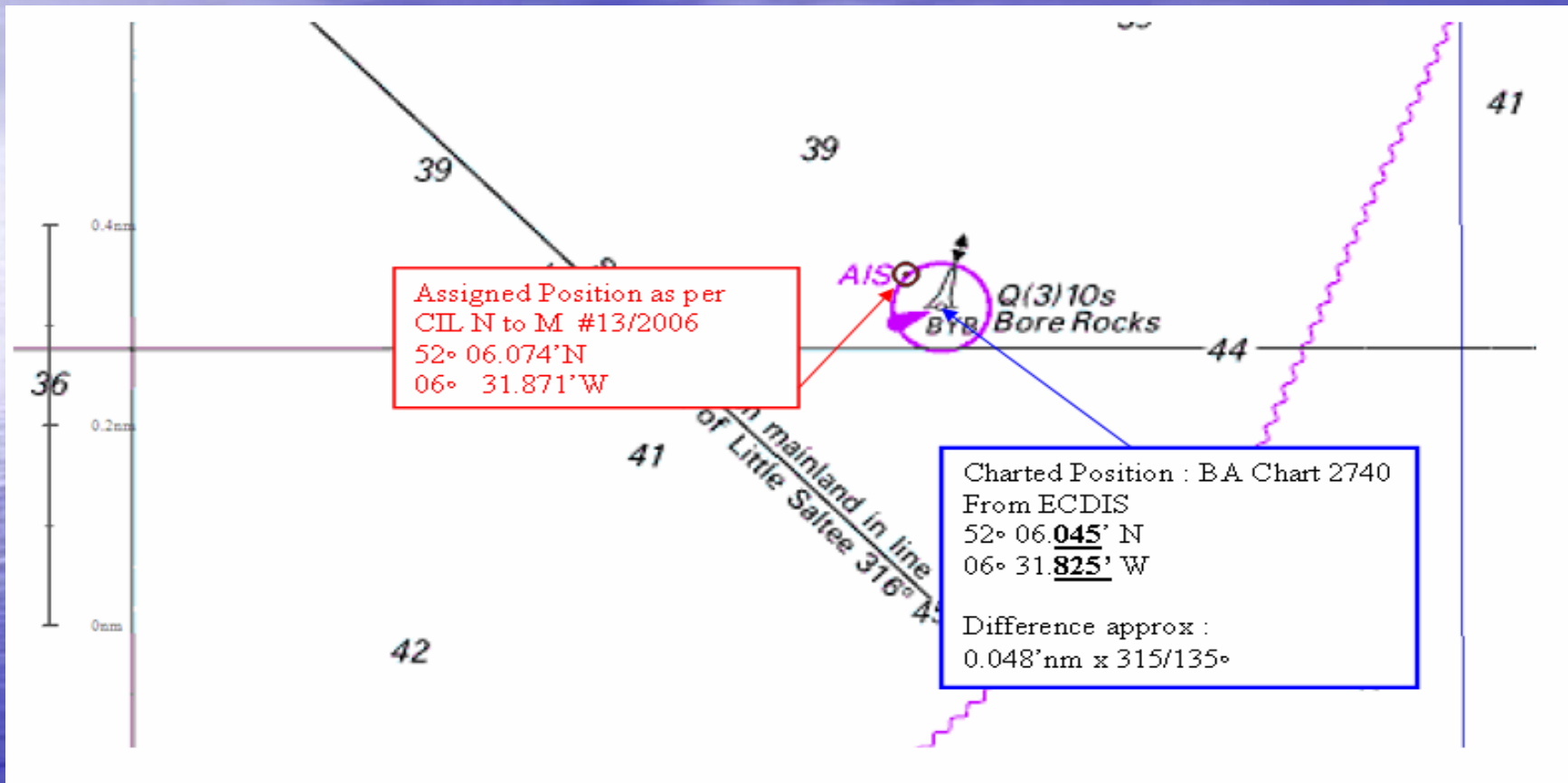
Early action on WGS84 Conversion and ENC rollout



Coordinate Differences

Name	Easting	Northing
Loop Head Lt	-4.02	-43.73
Kilbaha Quay-end Bollard	84.86	1.25
Kilcreaduan Lt	-30.06	-45.16
Kilcreadaun VTS Radar	814.35	-481.97
Carrigatholt Tide Guage	-10.42	-82.85
Corlis Lt Front	-51.70	-46.59
Corlis Lt rear	-60.69	-39.12
Moneypoint west pier	6.54	-21.22
Rinealon Lt	-14.28	-9.19
Oil jettyle-SW coner	-14.09	-22.97
Tarbert Lt	1.12	-7.12
EHB Jetty sw Lt	4.84	-13.44
Tarbert Front Lt	3.58	-29.42
Tarbert Rear Lt	-1.79	-20.26
Garraunbaun Lt	-12.96	-5.85
Browns Castle B'Bunnion	4504.30	-4734.85
Beeves Lt	-13.74	-8.64
Scattery Lt	-60.26	14.44

Early action on WGS84 Conversion and ENC rollout



Original survey 1847 (Chart 2740 / Chart 2049)

Some issues

- Early action on WGS84 Conversion and ENC rollout
- Completion of Coastal & Shallow Water Survey - Infomar

Some issues

- Early action on WGS84 Conversion and ENC rollout
- Completion of Coastal & Shallow Water Survey - Infomar
- Tide Gauge Network and VORF

Some issues

- Early action on WGS84 Conversion and ENC rollout
- Completion of Coastal & Shallow Water Survey - Infomar
- Tide Gauge Network and VORF
- User consultation

Any Questions?



We welcome user feedback

Please let us have your comments

Email: marine@cil.ie

Tel: + 353 1 6321900

Fax: + 353 1 6321946

**Mail: Commissioners of Irish Lights
 16, Lower Pembroke Street
 Dublin 2.**

Web www.cil.ie

Commissioners of Irish Lights



Nautical Institute
Charting the Way Forward
8th November 2007