HORIZON Exploration

Horizon Exploration Limited
Shallow Marine Seismic Vessel
m/v Caribbean Horizon

The m/v CARIBBEAN HORIZON has been specially designed for shallow water seismic surveys in coastal and fluvial areas that are inaccessible to the larger, ocean-going type of survey vessel.

She is equipped both for streamer or floating cable operations and can offer a choice of acoustic source – airguns, waterguns or explosive cord.

Duplicate ship's controls are located at the stern to facilitate handling of source and detector arrays.

Air-conditioned accommodation is provided for ten persons in twin-berthed cabins.

To reduce the lift weight during transportation to and from the survey area some heavy items, such as the cable reel and compressors, can be removed.

The flat-bottomed hull enables the vessel to be beached in safety and a special bow ballast tank simplifies refloating procedures.

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DIMENSIONS

Overall length:	22.0 metres
Beam:	6.8 metres
Mean draught:	1.2 metres
Minimum lift:	110.0 tons

PROPULSION

Engines:
Two 195 s.h.p. VOLVO marine diesels, Type TMD 100 drive twin propellor shafts through hydraulic gear box.
Max. Speed:
9 knots.

ELECTRIC POWER SUPPLIES

Primary:
220 KVA, 415V, 50Hz, 3 Ø.
Secondary:
40 KVA, 220V, 50Hz, 1 Ø.

RECORDING SYSTEM

Type:
TEXAS INSTRUMENTS DFS-V
Channels:
48 seismic, 4 auxiliary.
Format:
SEG-B.
Camera:
64 trace, SIE ERC 10C.
Profiler:
EPC 4603.

STREAMER

Type:
LITTON RESOURCES SYSTEMS, transformer matched.
Groups:
48 × 25 metres, 15 LITTON WM-2-036 hydrophones in linear configuration.

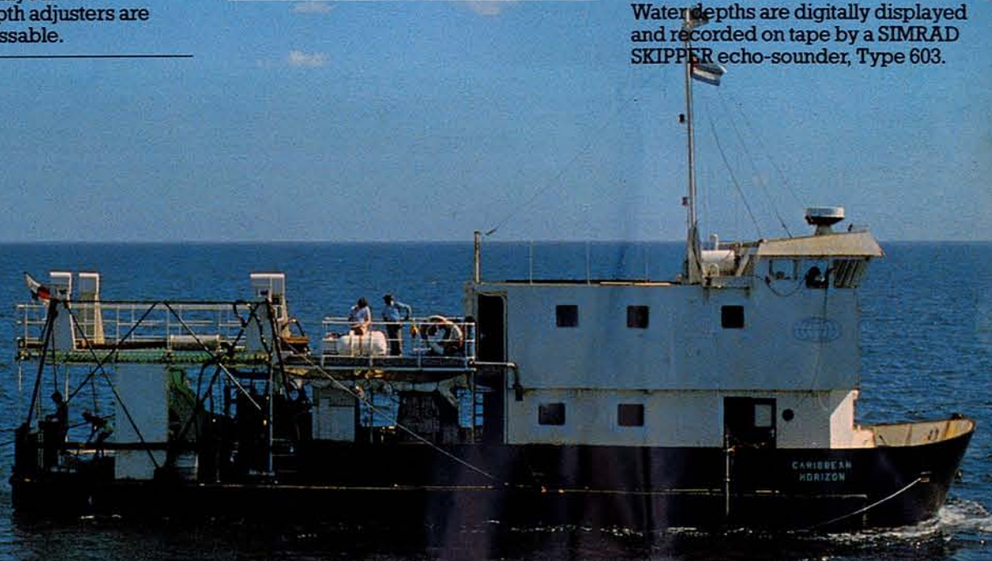
Each 100 metre section contains 1 W/B detector and depth transducer. 6 D/T's and 2 W/B's can be selected to be recorded and displayed.
The SYNTRON depth adjusters are individually addressable.

ACOUSTIC SOURCES

540 cu.in. airgun array (3 × 180 cu.in.).
480 cu.in. watergun array (6 × 80 cu.in.).
Explosive cord.
Monitoring and alignment of gun pressure peaks provided by an AIRCON gun-controller.
3 × 130 c.f.m. HAMWORTHY compressors provide sufficient air @ 2000 p.s.i. for 25 metre shot interval, plus 50% spare capacity.

SURVEY NAVIGATION

Primary navigation is controlled by a SCOPE 85 marine positioning system based on an HP 85 microcomputer. This is normally interfaced to compute ship's position from Trisponder 540 range data but other ranging systems can be integrated to special order.
The ship's track relative to the seismic line is displayed on a plotter and all navigation data are recorded on magnetic tape.
Water depths are digitally displayed and recorded on tape by a SIMRAD SKIPPER echo-sounder, Type 603.



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*Joint Ventures


A

A. *Stern of vessel with port gun frame deployed*

B. *Primacord shot*

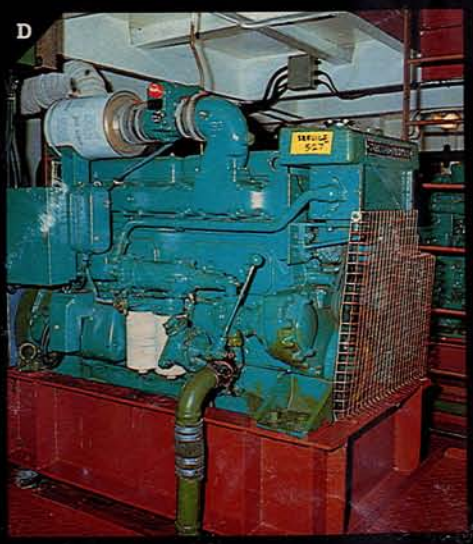
C. *View of streamer deployment from the electrically operated reel*

D. *One of the four Volvo-Penta marine diesels used for propulsion and power generation*

E. *SODERA WATERGUN UNIT*


B


C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