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The Global Information Newsletter for the Whole Submarine Cable Industry

EDITORIAL



Eckhard Bruckschen

Welcome to the November issue of SubCableNews.

Another long distance submarine fibre optic cable will be build: IMEWE India - Middle East - Western Europe. We just see a recovery of the Trans-Atlantic routes, over-built in 2000/1. SEA-ME-WE 4 & FALCON and the recent upgrades of SEA-ME-WE 3 have provided this route a large amount of extra capacity. Are we over-building here again?

In one of our special reports we are presenting the Case Study: Estlink: Helping develop the Nordic and Baltic energy markets (by Global Marine Systems Ltd.)

Furthermore, we have a quick look at the Submarine Networks World 2006 conference, the world's most established global telecoms infrastructure conference.

And of course we are presenting another cable ship of the world, the CS "Tyco Decisive" from Tyco Telecommunications.

In this issue you will find the latest project updates and company news from the submarine cable community.

Enjoy reading our Newsletter.

The Editor

Eckhard Bruckschen

tyco / Telecommunications



CS "Tyco Decisive"

Picture: Tyco Telecommunications (US) Inc.

**Submit your industry photo
(Installations, cables, office, people etc.)
And be published (free of charge)
With your company logo
On the first page of
SubCableNews**

CABLE SHIPS OF THE WORLD

Tyco Decisive



The Tyco Telecommunications fleet of cable ships has navigated the world for decades, installing and maintaining more than 350,000 km of the undersea fibre optic cables that shape the backbones of international telecommunications networks worldwide. The Reliance class cable ships, delivered in 2003, are some of the most capable and innovative in the industry.

Tyco Telecommunications' six purpose-built Reliance class vessels were constructed to service the cable installation and maintenance

industries, yet are versatile enough to lend support to a range of offshore services. These vessels, equipped with the latest technology and proven design elements, are the foundation of Tyco Telecommunications' cable ship fleet. Their size, capability and payload enable Tyco Telecommunications to provide customers with the world's most reliable installation and maintenance services at competitive prices.

The Reliance class cable ships are multi-role cable ships that exceptionally support today's cable maintenance and installation markets. Each vessel employs a broad range of cable handling equipment, including two 4-meter cable drum engines (CDE) and a 20 pair longitudinal cable engine (LCE). The vessels are able to mobilize and operate multiple sub-sea systems simultaneously, while enabling the vessels to deploy for cable operations that entail plowing, remote-operated vehicles (ROVs) and deep sea cable operations. These capabilities also facilitate the vessels' support of industries outside of the traditional submarine cable market. The Tyco Decisive exemplifies this versatility.



Tyco Decisive

The Tyco Decisive is a versatile 140 meter vessel christened on May 30, 2003 and is based in Baltimore, MD. The vessel has an advanced propulsion and dynamic positioning system 2 (DPS-2) classification, enabling a variety of complex offshore operations anywhere in the world. The CS Tyco Decisive features an automated cable lay management system; a state-of-the-art bridge; an automated unmanned engine room; stern working capability; bulbous bow; independent purpose built ROV and plow launch and recovery systems which include a 65 ton A-frame, as well as many additional advancements.

This modern Reliance-class vessel is capable of maintaining station during cable installation and repair operations under the most severe operating conditions. The Tyco Decisive is part of Tyco's third generation of cable vessels and is among the best-designed and skillfully operated ships in the world, resulting in world-class cable installation and repair services. Each senior member of the shipboard management team has a minimum of 15 years of cable ship experience, further illustrating Tyco Telecommunications' depth of cable ship expertise.

Tyco Decisive Deployments

The Tyco Decisive has an impeccable track record of deep sea deployments. Since its christening, the vessel has been called upon to assist the offshore community in the support of trenching and inspection work, cable installation, as well as disaster recovery.

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CABLE SHIPS OF THE WORLD

Tyco Decisive

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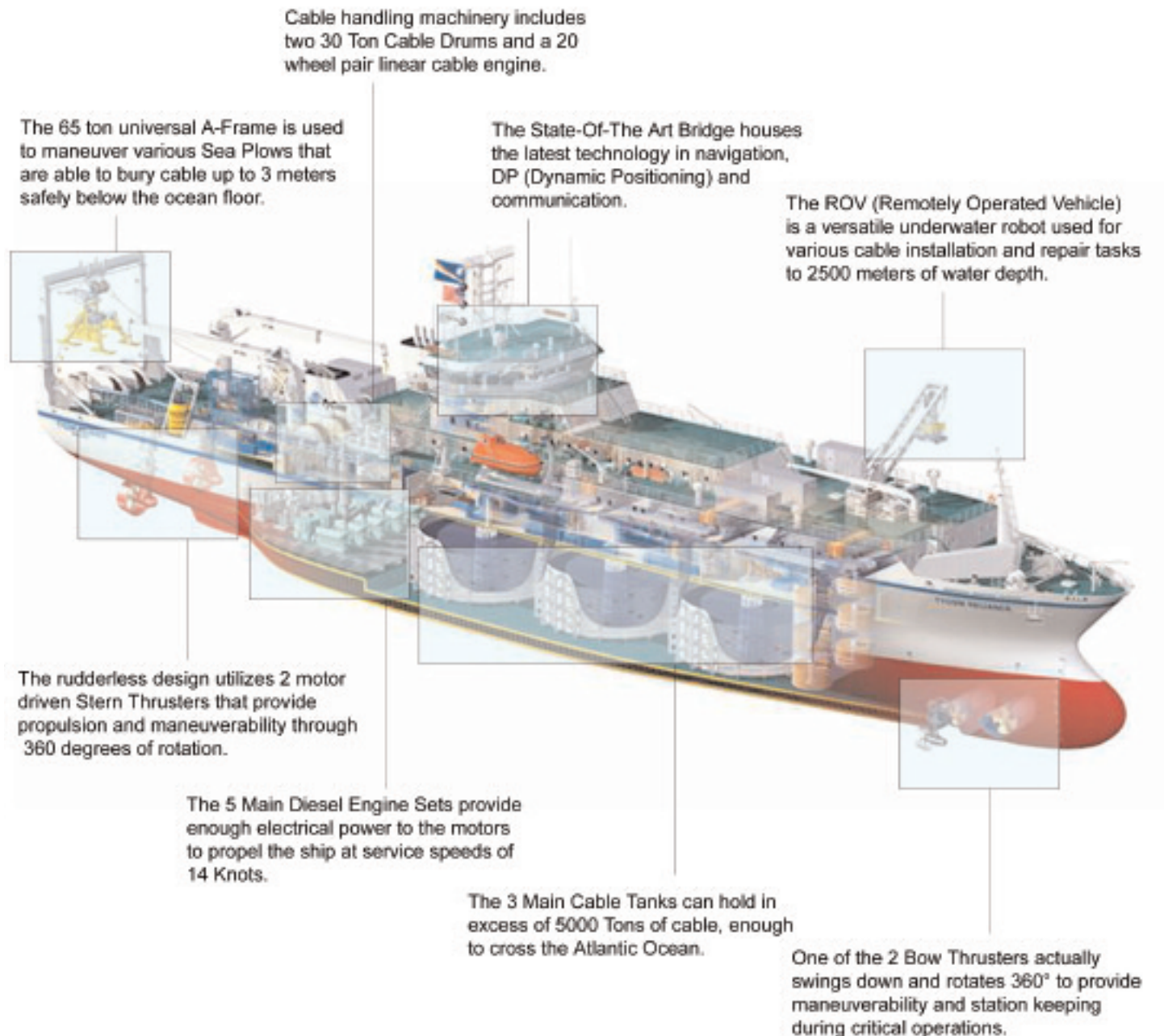
Offshore Installations

Tyco Telecommunications has been chosen to construct an undersea fiber optic system serving offshore platforms in the Gulf of Mexico. Tyco Telecommunications will deploy long haul undersea telecommunications technologies adapted for the unique requirements of offshore applications.

Tyco Telecommunications will manufacture the key elements of the fiber optic system at its plants in Newington, New Hampshire and Lowell, Massachusetts. The Tyco Decisive will then haul and deploy the undersea plant and make the connections to offshore platforms. Using optical multiplexing in undersea branching units, each platform will have direct optical

connectivity to both landing stations, ensuring continued operations, independent of any other platform in the system, during hurricane events.

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CABLE SHIPS OF THE WORLD

Tyco Decisive

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Offshore Charters

The Tyco Decisive has been chartered to an energy-service company which provides alternative solutions to the oil and gas industry worldwide to function as the support platform for two ROVs, including the pipeline trencher Supertrencher II and the work-class ROV Triton XL.

The Tyco Decisive provides the oil and gas industry an innovative and cost-effective alternative to traditional solutions at a time when resources are limited and prices are rising. Tyco Telecommunications' excellent track record as a vessel operator instills confidence in its ability to serve as a platform for complex ROV operations.

Commitment to the Industry

Tyco Telecommunications' commitment to the industry is evidenced by its longstanding affiliation with industry consortiums as a supplier of Reliance Class cable ships. Tyco Telecommunications supplies the Tyco Decisive along with two other Reliance class vessels and ROVs for the maintenance and repair of submarine cables in oceans worldwide. The Tyco Decisive and its ROV Nereus, combined with the additional support of Tyco Telecommunications R&D facilities, enable consortium members to provide their customers with reliable high capacity networks.

Baltimore City Rescue Efforts

The City of Baltimore witnessed a sad and tragic accident on March 6, 2004, when a water taxi

Propulsion & Maneuvering Equipment	
Type	Diesel Electric
Main Engines	5 x KRGB-9 Bergen 1990kW each
Forward Bow Thruster	1 x Ulstein – 1700 kW/ 0-900 RPM
Aft Bow Thruster	1 x Ulstein – 1700 kW/ 0-1800 RPM
Azimuthing Stern Thrusters	2 x Ulstein – 3100 kW/ 0-720 RPM
Bollard Pull	120 Ton
Dynamic Positioning	Kongsberg Simrad SDP 21 DP System

Cable Handling Equipment	
Stern Linear Cable Engine	1 x ODIM, 20 wheel pair, 16 ton capacity
Stern Drum Cable Engines	2 x Kley France (ODIM), 4 m diameter, 30 ton lifting capacity
Dynamometers	WAMAC roller type and Load Cells
Draw Off / Hold Back	2 x ODIM, 4 wheel pair, 4 ton capacity
Stern Sheaves	3 x 3.5 m diameter
After Deck Cranes	2 x 10 ton SWL
A-Frame	65 Ton traversing
Mobile Cable Transporters	3 x 1.5 tons (T-2000)

Cable Burial & Inspection Tools	
ROV	Perry Trittech – Triton ST200 Series SMD-Nereus
Sea Plow	Perry Trittech/SMD – 1.5 / 3.0 m Jetting Plow

overturned in Baltimore Harbor during a sudden and vicious storm, throwing 25 passengers into the 43 degree water. Twenty-one of those passengers were rescued by first responder emergency workers. Nonetheless, one person was killed and three were missing and presumed dead. Three

days later, the Baltimore City Fire Department called Tyco Telecommunications and asked for assistance in locating the three missing victims.

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CABLE SHIPS OF THE WORLD

Tyco Decisive

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Tyco Decisive Vessel Particulars

The Tyco Decisive was strategically positioned near sites where the victims were thought to lay, and, based on this data, the ROV Nereus was deployed with the sad task of searching for the missing persons. Working within a range of approximately 10 meters and utilizing sonar equipment, the Tyco ROV crews were able to rule out debris and positively pinpoint the location of the missing victims.

Using Tyco Decisive as a command center, the Baltimore City Fire Department Special Operations Dive Team and Tyco Telecommunications' team worked together to brief divers, showing them a video of the ROV position and victims' positions. Tyco Decisive created a lee for the dive support boat and the ROV umbilical served as a down line for the Baltimore City Fire Department divers. This technique reduced dive time to a minimum and greatly assisted the divers who worked in the extremely cold and dark waters.

Vessel Particulars	
Year Built	2003
Range	25,000 nautical miles or 60 days
Accommodations	80 personnel
Service Speed	14 knots
Length Overall	140.0 m
Molded Beam	21.0 m
Deep Draft	8.4 m
Gross Registered Tonnage	12,184
Deadweight	9,200 MT; 9,056 LT
Classification	(ABS)+ACCU, +AMS, +DPS-2, NBLES, UWILD

Capacities	
Cable Capacity	5,465.5 MT – Total for three tanks
Rope Tank Capacity	107.0 MT
Fresh Water	440.5 MT
Fuel Oil	3,242.9 MT
Water Ballast	4,403.0 MT
Automation Control	S.V.C.
Software Tool	WinFrog, Makkai

