

WM MANAGER

The Wilhelmsen Ship Management Newsletter - NO. 5-2009 (Offshore Edition)



Managing Complex Offshore Vessels

Professional. Like you.



**Wilhelmsen
Ship Management**

Part of Wilhelmsen Maritime Services,
a Wilh. Wilhelmsen group company

Contents



LNG Golar Maria

Carl Schou: Prepared for 2010	3
An Extremely Complex Operation	4
SX121 SARAH Tomorrow's ship	6
Offshore Crewing	8
News & Updates	10
Regulatory Column	12



Finishing Touch: A crew member performs a final adjustment to one of the streamers on Geo Caribbean. Read more about Geo Caribbean on page 4



Sarah during the sea trials



Mr Wilhelm Wilhelmsen and guests during the WSM Shipping Seminar in Tokyo

Prepared for 2010



The year 2009 has passed by very quickly. Overall, it was a year full of adventures and challenges.

As the saying goes – it is through challenges that one grows. Coming to the end of this year, we are very proud to say that we feel that we have “weathered” off the storm, and that we are emerging as a much stronger company.

We shall continue to provide you with better and more value added services. During the year we conducted a customer satisfaction survey; we thank all of you who participated in this exercise and provide us with valuable feedback. Based on your feedback, we will adjust and make appropriate changes to meet your requirements and expectations.

In this issue, we have invited stories from our offshore clients, Fugro AS where they will talk about their unique 3D Seismic Survey Vessel, The Geo Caribbean. Geo Caribbean can tow up to 14 streamers at 100m apart with the length of some 6800m. It therefore requires careful and uninterrupted operations to the vessel. This is the reason why, the Survey operation can last up to six months at a time when the streamers are rolled out. WSM have been working with Fugro AS since the delivery of Geo Caribbean in 2008.

We are also happy to cover the story of SX121 Sarah, which specialises in deep-water subsea well intervention and is packed with innovative technology, of which Marine Subsea AS is the proud owner. Two vessels of the same category were already in operation with successful track records. Sarah along with her sister vessel, Karianne has the characteristic new X-Bow shape which improves fuel efficiency, thus being friendly to the environment.

We also highlight the story about the challenges faced by our crewing department in the offshore segment. In order to crew those hi-tech and sophisticated vessels comprise of seismic, well stimulation, multi-purpose support vessels, accommodation barges and cable layers etc, our marine personnel department in Norway, faces the challenge to find the right competence and experience for each vessel. This is because the offshore market is changing all the time, and the competence gap defined by STCW and offshore segment is increasing. Besides that, they also need to work hard in motivating and retaining good crew. Therefore, long term planning for offshore crew is essential.

As the year is nearing its end, we take this opportunity to thank all of you for your support to us. We are looking forward to working with you, our valued customers next year.

I wish you – A very Happy and Prosperous New Year.

Best wishes,

Carl Schou
President
Wilhelmsen Ship Management





(Photo Above) Standing By: A Fast Rescue Craft (FRC) is constantly on call in case of an emergency situation

(Photo Below) Work Horse: This small work boat is readily at hand whenever a problem with the streamers or other equipment needs attending to

An extremely complex operation

Operating a seismic survey vessel like Geo Caribbean is a very complex procedure indeed. Regardless of sea and weather conditions she criss-crosses the oceans to collect data of vital importance to the oil companies - and to the world.

Typically, a seismic survey expedition at sea consists not only of the seismic survey vessel itself, but also a support vessel for the supply of fuel, provisions and crew exchange. A number of Fast Rescue Crafts and work boats are also part of the operation, to support its all important purpose: the uninterrupted collecting of seismic data from below the seabed.

A seismic survey gathers underground geologic information by transmitting acoustic (sound) waves into the ground and then recording the reflected signals that bounce back from underground layers and rock formations.

The sound waves are generated by an energy source built up by a number of air guns, chambers filled with high pressure air that are instantaneously released into the water - like punching a hole in a balloon.

A COMPLEX OPERATION.

This is advanced technology indeed, used both on land and at sea, where the operation becomes a lot more complicated both due to the shifting forces of wind and waves, and by the sheer size of the operation, which can cover areas of 2 000 sq. km or more during a month of collecting data.

3D seismic survey vessel Geo Caribbean represents the latest state-of-the-art technology used for the purpose. She is operated by Fugro Norway Marine Services AS, and is at present working off the coast of French Guiana, South America. The company is the marine subsidiary of the Dutch company Fugro N.V.

Geo Caribbean is equipped with two diesel electrical main engines that can operate independently of each other, thus preventing any disruption of the operation.

“She can tow up to 14 streamers, each being kept 100 metres apart, and each with a length of some 6 800 metres,” says Dag Sigurd Stensholt, Vice President Operations and Managing Director at Fugro Norway.

The rolling out (or in) of streamers is a complex, time consuming process to be avoided unless necessary. So, once in



position, a seismic survey operation can last for up to six months at the time.

“Our core competence is the geophysical and geotechnical parts of the operation. We have chosen to outsource the marine management of the ten ships in our fleet to external partners,” says Mr. Stensholt.

“Wilhelmsen Ship Management has been working with us since Geo Caribbean was delivered in December 2008. Although a relatively new acquaintance, we regard WSM as a professional and high quality company, which provides good service and competent crews.”

Text: Einar Chr. Erlingsen
Photos: Fugro AS

(Photo above) Keeps The Distance: Each streamer is equipped with paravanes like this one to keep them from getting entangled into each other. If this occurs, it means a huge loss of time – and money



(Photo above) Geo Caribbean: The high technology 3D seismic survey vessel

(Photo below left) Complex Operation: Geo Caribbean with her 14 streamers for seismic data collecting in tow

(Photo below right) Geo Caribbean: The state-of-the-art, high technology seismic research vessel was delivered to Fugro in December 2008. Wilhelmsen Ship Management is responsible for full technical management and crewing (marine crew)

GEO CARIBBEAN

Vessel type	3D seismic survey vessel
Length	100.8 m
Width (max)	28 m
Gross tonnage	12 109
No. of streamers	up to 14



SARAH: A state-of-the-art specialised vessel for deep-water well intervention and other specialised offshore functions. Here she is photographed during her recent sea trials. (Photo: Marine Subsea AS)



SX121 SARAH

Tomorrow's ship

The multipurpose/well intervention vessel SX121 Sarah is one of the most technically sophisticated ships ever built. Her purpose: to improve oil recovery from existing wells through deep-water well intervention.

Subsea well intervention is typically performed by lowering specialised tools from a vessel's moon pool into the oil well to perform logging, re-perforation/cleaning, repairs etc.

Traditionally, these operations have been carried out by semi-submersible exploration oil rigs.

However, this can also be performed faster and at considerably lower costs by using a purpose built vessel such as SX121 Sarah. Built at the Ulstein group's shipyard in Western Norway and costing approximately USD 150 million, she is scheduled for delivery to owners Marine Subsea AS, Oslo in the near future. Karianne, an identical vessel, will be delivered from the same yard before the end of 2010.

Both ships have the characteristic new X-Bow shape, which improves fuel efficiency, allows more space for accommodation in the bow and gives improved motion characteristics.

SX121 Sarah - Key features

- Length: 120 metres
- Width: 25 metres
- Draft: 7.5 metres
- Accommodation: 100 persons
- Deck crane: 140 tonnes down to 2500 metres
- ROV systems: two - work class to 3000 metres
- Dead weight: 8700 tonnes
- Speed: 14.5 knots
- Well intervention depth: 2500 metres



Two vessels of the same category are already in operation with successful track records.

SX121. The SX121 vessels are designed for multiple functions and customized for deep-water subsea well intervention. The ships are dynamically positioned (DP3) and therefore do not require mooring lines when stationed over the work site – even at depths of 1,500 meters or more. The vessels are designed with a central moon pool in the deck and a derrick over.

Core competence vs. outsourcing. Marine Subsea aims at becoming a leading international provider of offshore oil and gas services. The founders and major owners of the company have operated in West Africa since the early 1980s, and three of their other vessels are currently based there.

Two additional vessels will be delivered in November 2009 and three more vessels are under construction or planning for their defined operational sectors: drilling, well intervention and offshore support.

The company's strategy includes providing the vessel and the well intervention team. Operations associated with wireline, coil tubing, ROV and logging/testing of the well will be outsourced to subcontractors. Full technical ship management, including crewing, purchasing and maintenance are outsourced to Wilhelmsen Ship Management (WSM).

“Our core competence is the well intervention equipment and its use,” says



Svein H. Gulteig, Technical Director at Marine Subsea. The company performed a comprehensive evaluation process when selecting a supplier of full technical ship management and crewing services. Seven candidates were evaluated and two shortlisted, before WSM was finally selected for both Sarah and Karianne.

“WSM was chosen because they have a solid reputation, are efficient and easy to work with,” says Mr. Guldeig. Although the ship is yet to be delivered, we are already working closely together. My experience is that the WSM representatives are positive and quick to act whenever we bring up a subject requiring their attention.”

Text: Einar Chr. Erlingsen
Photos: Marine Subsea AS

Marine Subsea AS

- An international oil service company with a focus on the West African offshore market
- Owns a fleet of eight units in operation or under construction:
- Two multipurpose/intervention vessels (incl. SX121 Sarah)
- Five offshore support units
- One semi-submersible crane vessel



Offshore crewing - a Nordic perspective

Wilhelmsen Ship Management's crewing operation in Norway coordinates assignments for more than 50 vessels, including seismic, well stimulation, multi-purpose support vessels, accommodation barges and cable layers.

In addition, it provides personnel services for around 375 officers and 50 ratings, mainly Norwegian through Wilhelmsen Marine Personnels, the crewing arm of Wilhelmsen Ship Management.

Espen Sending, head of the crewing organisation in this part of the world talks about some of the challenges of supplying marine personnel to the company's offshore fleet.

Competence and experience are the keys

In general, the financial crisis in 2008 led to a better balance between supply and demand for marine personnel. In the offshore sector, however, it is still a challenge to recruit people with relevant competence and experience.

It takes longer to train offshore crew and get them to the required level of competence. In addition they must attend a variety of courses to be certified to work onboard. Deck personnel working on well stimulation, multi-purpose support vessels and cable layers, for example, must have a Dynamic Positioning certificate.

Personnel working on vessels with a helipad must also have specialised training in underwater helicopter escape training, for example. Hence, long term crew planning is the key word in this business.

Offshore clients are demanding regarding crew experience. They want officers and seamen with offshore experience. This is related to the crucial nature of operations where the risk is higher than normal. For example, if you operate a seismic vessel and have 16 streamers out, the last thing you want is a navigational failure which will lead to major consequences.

The oil majors have also played a

central role in defining the demand for competence and experience. Their requirements are often included in contracts with suppliers and reflected throughout the supply chain.

The offshore market is changing all the time, and the gap between competence as defined by the IMO STCW standard and what the offshore market demands is increasing.

What's in it for me?

We observe that the seaman of today thinks longer term. He or she is concerned about career planning and development, keeping up to date. Can he work on other types of vessel to get more experience? What will be available when he one day tires of life at sea?

Our focus is to employ those ambitious seafarers and make sure they have a planned career onboard our vessels. This is also one of the reasons why Wilhelmsen Ship Management has managed to build a crewing pool of over 7,000 officers and ratings and maintain a high level of loyalty.



Photo left:
SX121 SARAH

Photo above:
RAMFORM CHALLENGER:
The pride of Petroleum Geo
Services

Photo below:
NEXANS SKAGERRAK: A
ship not quite like any other,
purpose built for cable laying
and repair operations at
great depths.



Snap at reception from left : Wilhelm Wilhelmsen, HE Arne Walther, Norwegian Ambassador to Japan, Ms. Yasuyo Arikado, Marine Division, Nissui Marine Kogyo, Mr. Keita Koda, Project Director, Seismic Vessel Project Team, Japan Oil, Gas and Metals National Corporation and Mr. Hiroshi Sakamoto, General Manager, Marine Division, Nissui Marine Kogyo



WSM Shipping Seminar for customers in Tokyo

On 5 November, 2009, WSM invited some 100 customers and prospects all over Tokyo to its shipping seminar at the Royal Norwegian Embassy in Tokyo.

“The response had been overwhelming this year.” said Carl Schou, President WSM. “This is probably due to the interesting and relevant topics which we have chosen for this event.” Schou added.

“We have also received great support from our parent company, WMS where Mr Dag Schjerven had introduced the maritime shaper concept along with the ACT range of Environmental products. Mr Wilhelm Wilhelmsen, Chairman of the WW ASA Board also showed his graceful presence and delivered a welcome speech at the seminar.”

The Norwegian Ambassador has kindly granted the use of the embassy for the seminar and hosted a buffet dinner.

We have also invited our sister companies WSS Japan, WSE Japan and a guest speaker from DNV Norway, Mr Wilhelm Magelssen, Senior VP.

Topics selected for the event were:

- Challenges and possibilities for shipowners based on the Environmental requirements and expectations
- Crew – Demand trends and crew costs
- Cost control and sustainability during the economic crises: Things we can do to reduce Opex
- Seafarers Training & Development – Why is Cadet Programme necessary?

We received many interesting queries from the floor and provide our clarifications and feedback.

The guests and delegates were later invited to a buffet dinner at the Ambassador’s Residence after the seminar with the Ambassador and his wife as host and hostess.



Speech by Wilhelm Magelssen, Senior VP of DNV



Welcome speech by Wilhelm Wilhelmsen, Chairman of WW ASA Board



(Top Photo) HE Arne Walther & wife (purple dress) welcome the guests
 (Bottom photos left to right) Dag Schjerven, CEO of Wilhelmsen Maritime Services delivering his speech • Kanpai speech at the reception by Carl Schou
 • Norwegian cuisine specially prepared for guests and delegates

New Vessels On Management



Golar Maria
 LNG Carrier
 Owner: Golar LNG 2234 Corporation
 Wilhelmsen Ship Management, Norway

MV Tomar
 PCTC
 Owner: Wilhelmsen Lines Car Carriers Ltd.
 Wilhelmsen Lines Car Carriers, UK

MV Toreador
 PCTC
 Owner: Wilhelmsen Lines Car Carriers Ltd.
 Wilhelmsen Lines Car Carriers, UK

MV Toscana
 PCTC
 Owner: Wilhelmsen Lines Car Carriers Ltd.
 Wilhelmsen Lines Car Carriers, UK



MV Molitor
 Bulk Carrier
 Owner: Setaf Saget
 Wilhelmsen Ship Management, Singapore



Sarah
 Deepwater Intervention Vessel
 Owner: Marine Subsea AS
 Wilhelmsen Ship Management, Norway



MV Cypress Pass
 PCTC
 Owner: Eidsiva Rederi ASA
 Wilhelmsen Ship Management, Korea



African Worker
 Multipurpose Work Accommodation Vessel
 Owner: Marine Subsea AS
 Wilhelmsen Ship Management, Norway

Contact Us

Oslo

Strandveien 12, Lysaker
Norway
T +47 67 58 47 00
F +47 67 58 47 95

Kuala Lumpur

17th Floor, 1-Sentral
Jalan Travers
Kuala Lumpur Sentral
Malaysia
T +603 2084 5600
F +603 2084 5604

Houston

9400 New Century Drive
Pasadena, Texas 77507
USA
T +1 281 867 2038
F +1 281 657 6691

Singapore

1 Kim Seng Promenade
#16-09 Great World City
West Tower
Singapore 237994
T +65 6379 5033
F +65 6379 5104

Southampton

3rd Floor, Friary House
Briton Street, Southampton
United Kingdom
T +44 23 8038 6190
F +44 23 8063 3393

Busan

#1002 10th Floor
Marine Center Building
79-1, 4 Ga, Jungang- Dong
Jung-gu, Busan
Rep of Korea 600-715
T +82 51 711 0711
F +82 51 711 0717

Website

www.wilhelmsen.com/
shipmanagement

Online

wmanager@wilhelmsen.com



African Worker the multipurpose work accommodation vessel of Marine Subsea AS

Regulatory Column

Offshore Classification

Adequate safe and reliable offshore classification will provide assurance that applicable rules and regulations are met during the asset's design, construction and operation phases.

The operation of Mobile Offshore Units (MOUs) for exploration and production of offshore oil and gas poses tough challenges with regards to documentation of acceptable safety standards. MOUs include semi-submersibles, jack-ups, drill ships, FPSOs, TLPs, SPARs and other types of deep draft floaters. Requirements are set both by state authorities based on local rules and regulations as well as flag state authorities on common requirements from the International Maritime Organization (IMO).

Statistics show that many offshore new build project delays resulting in huge financial losses to its stakeholder. An investigation carried out by DNV showed that most delays are caused during the commissioning activities which include the following:

- Systems not mechanically complete before commissioning, resulting in increased frequency of test and re-test.
- The philosophy behind how shut down systems are supposed to function are not clearly defined, resulting in many design queries.

What are the major differences between the factors causing project delays in offshore and shipping projects?

Many ships are relatively simple in design and the systems have been used for years. Most of the major systems are 'plug-and-play' which means the vendor supplies the equipment, the yard installs it, switches it on and it will work. However, for an offshore vessel, each system may have several vendors. The vendors supply various components for the systems and the yard ties them together. This integration is usually complicated and often underestimated as there may be several software which have to 'communicate' with each other. The most significant challenge during the commissioning process is to know the critical path;

- Identifying what system needs to be completed before testing and in which order to prevent testing having to be carried out several times.
- It is important that the correct sequence is adhered to because good philosophies followed by good design and good commissioning procedures.
- It is critical that same people from the design department and the owner are involved in the development of the philosophies, design and commissioning procedures. This will allow continuity throughout all phases of the project.

What can an owner do to resolve problems during commissioning?

The best solution would be that the same person who is involved in design and review or indeed writing of philosophies, is involved in the commissioning.

What can the yard do to resolve problems during commissioning?

Assign one person responsible for the complete integration process. This person should ensure the critical path is followed and all systems are mechanically completed before commissioning.

Christina Cheh

Head of Global Health,
Safety, Environment & Quality

christina.cheh@wilhelmsen.com