

What's new in tankers?

A roundup of the latest developments in tanker design, construction, equipment and services

Hellespont names ULCCs

Piraeus-based Hellespont Shipping Corp named the first of its series of four double-hull ultra-large crude carriers (ULCCs), the 442,000-dwt Hellespont Alhambra, at a ceremony recently held in Dubai. The remaining three ships in the series are to be delivered over the course of this year and will be named the Hellespont Metropolis, the Hellespont Fairfax and the Hellespont Tara.

All four ULCCs feature a number of unique design characteristics, including full-time inerting of the ballast spaces for safety and corrosion protection and a white external paint system to protect internal coatings.

"We are proud to set new standards with these ships," says Basil Papachristidis, chairman of the Hellespont Group. "Hellespont Alhambra sets new benchmarks for safety, longevity, commercial flexibility and ease of maintenance. And she extends frontiers of efficiency and economy in the ocean transportation of oil."

NKK Integrated monitoring for Croatian Suezmaxes

Two 166,000 dwt Suezmax tankers under construction at the Split Shipyard for the Croatian shipowner Tankerska Plovidba are to be fitted with integrated monitoring and control systems supplied by Kongsberg Marine Ship Systems (KMSS). The package for each ship encompasses level gauging and alarm systems for all cargo, ballast and service tanks. Management of the networks will be controlled by a DataChief C20 machinery automation system which is linked to two local operator stations on each ship.

Cargo tank levels will be monitored and controlled using AutoCargo GL-100 radar-based level gauging systems. Ballast tank levels will be measured using submerged GT303 pressure transmitters, while GT302 transmitters will carry out a similar function for the engine room service tanks.

The Split shipyard is one of four major commercial shipyards in Croatia and all are currently building tankers. The combined orderbook features 35 product tankers and four crude oil carriers. Croatia is now the world's fifth largest shipbuilding nation.

Primorye tests icy Sakhalin waters

Primorsk Shipping Corporation (Prisco) has utilised the 105,177 dwt, double-hull Primorye, its newest and largest tanker in a fleet of 46 such vessels, to prove that it is possible to use Aframax-size tankers to export oil produced in the Sakhalin Islands in the northern part of the Sea of Japan on a year-round basis.

The Aframax tanker, accompanied by two icebreakers, recently completed a successful two-week trial voyage from Seoul to the Sakhalin Islands area known as De-Kastri, in extreme ice conditions. The ship's behaviour, including its hull structural performance, was extensively monitored and measured throughout the voyage. Satellite communications equipment and helicopter ice patrols were also used to gather relevant data. The Primorye was delivered to Prisco by Hyundai Heavy Industries in 2000.

Exxon Neftegaz Limited, a subsidiary of ExxonMobil Corporation and operator of Sakhalin I, plans to build up crude oil production levels to 8 million tonnes per annum (mta), beginning in 2005. The company had always envisaged constructing a pipeline to De-Kastri to enable the export of Sakhalin 1 oil from a new terminal in Aframax tankers to Japan on a continuous, year-round basis and, with this goal in mind, has been encouraged by the results of the Primorye test voyage. The trial has provided practical experience of De-Kastri as a base port and will help in deciding what further

infrastructure developments may be required as well as what additional specifications may be required for future tanker newbuildings.

Sakhalin also has extensive gas reserves and oil and gas company participants are pushing ahead with a scheme to develop LNG exports under the banner of the Sakhalin 2 project. The waters around Sakhalin have an ice cover for about six months of the year.

Prisco, Russia's only private tanker owner and operator, has been active in Far Eastern waters for over 30 years and its Russian crews have extensive practical experience transporting oil around the Sakhalin Islands as well as in other, similar extreme ice conditions.

Kongsberg simulator for Novoship

Russian tanker operator Novorossiysk Shipping Company (Novoship) has awarded a contract to Kongsberg Maritime Ship Systems (KMSS) to supply its Full Mission Ship Handling Simulator to the company's training facility in Russia.

The system will consist of a simulator software package, a main visual bridge, three secondary bridges, a software development station and four PC-based Desktop Cargo Handling Simulators.

The three secondary bridges will include screen-based radar/ARPA, ECDIS and software controls, in addition to real hardware controls for steering, throttle, distress alert and communications. The four Desktop Cargo Handling simulators will operate Kongsberg's software for product tankers, chemical tankers and LNG carriers

ITOPF pinpoints designated persons

The International Tanker Owners Pollution Federation Ltd (ITOPF) has published the 2002/2003 edition of its annual handbook. The publication provides an overview of ITOPF's spill response and information services, the impact of oil spills on the environment, the mitigating techniques used once oil is in the water and the various international conventions governing compensation for spilled oil, bunkers and hazardous substances.

In the interests of raising awareness within tanker owners' technical departments, ITOPF has sent out a survey questionnaire to its members. The main aim of the survey is to establish the identities of the 'designated persons' (as per the ISM Code) within those companies, i.e. the people who are most likely to require ITOPF's technical services in the event of an oil spill. According to managing director Dr Ian White, ITOPF is keen to establish a closer working relationship with these people.

"For historical reasons, going back to the days when we administered TOVALOP [Tanker Owners' Voluntary Agreement concerning Liability for Oil Pollution 1969], most of our contacts within ITOPF member companies have tended to focus on the insurance side of the business, and we found ourselves rather isolated from the technical departments. It is the technical people who want to use our services in the event of a spill," he says.

So far, over 100 ISM "designated persons" have been identified, and ITOPF hopes that this number will be greatly increased.

The Handbook and the survey are available upon request from ITOPF on +44 (0)20 7621 1255.

ATC achieves SQE Certification

Alaska Tanker Company, LLC (ATC) has become the first company with US-flagged vessels to achieve Safety, Quality and Environmental (SQE) and ISO 14001 certification from classification society American Bureau of Shipping (ABS).

The certification demonstrates the company's commitment to continual improvement in the areas of safety, quality and the environment. Recent improvements in these

areas include reductions in personnel injury, fuel and energy savings and opacity of stack emissions

V. Ships goes offshore

The V. Ships Group has announced the establishment of V. Ships Offshore, a company which will offer a range of management and crew services for floating production, storage and offtake vessels (FPSOs), shuttle tankers, drilling rigs, supply ships, specialist and multipurpose support vessels and cable layers.

V. Ships Offshore is based in Aberdeen and is headed by Graham Robson, previously manager of international marketing at Tidewater Marine, the offshore industry's largest vessel operator.

A searchlight in the dark

ColorLight AB of Sweden has developed a new marine searchlight for detecting oil spills in the dark. Designed for mounting on a boat, the searchlight uses ultraviolet (UV) light, which picks up the aromatics in crude oil and petroleum products.

The ColorLight searchlight contains both halogen and UV lights in one unit.

According to the company, the halogen light range is approximately 4,000 metres in clear weather, while the UV light range is 1,400 metres. The light is remotely operated by joystick and can be rotated through 360°. In addition, it is housed in acid-proof stainless steel and is IP66-approved for use in heavy seas.

Videotel launches The Safety Officer

Videotel Marine International, in conjunction with V. Ships, has launched "The Safety Officer", a new interactive CD-Rom training package. The package, which has been designed for maritime officers who have to carry out the role of safety officer onboard ship, is accredited by the Nautical Institute.

Upgraded manuals from QSE

QSE, in collaboration with Quadrant Marine Consultants of Dubai, is offering shipowners revised, up-to-date versions of their fire control and SOLAS training manuals. According to QSE, a UK-based consultancy, many fire control plans and SOLAS training manuals have become outdated; others do not incorporate the IMO-recommended symbols; and many do not have the immediate visual impact they should have. Also, ship plans and manuals are increasingly coming under scrutiny by port state control inspectors. By utilising modern CAD/CAM techniques in upgrading plans and manuals, QSE is providing a means of holding them on file pending any further changes. QSE reports that the service also extends to the preparation and upgrading of ballast water management plans and cargo securing manuals.

NKK to reduce ship design lead time

NKK Corporation has signed an agreement with IBM and Dassault Systemes which will enable the Japanese shipbuilder to introduce improved life-cycle product management (LPM) techniques that could reduce ship design lead times by 20-30 per cent. Under the partnership agreement NKK will work with Dassault Systemes and the IBM shipbuilding team to establish new methodologies utilising existing LPM technologies which have been developed in other industries and are in the process of being adapted for shipbuilding.

NKK will carry out the development work on a step-by-step basis, starting this year, with the aim of achieving full operational status for the new methodology in 2004/2005. Initial work will comprise a series of trials to evaluate the capabilities of the Catia V5 computer-aided design (CAD) system, with its high performance modelling functions, for ship outfit design.

Amongst other ship types, NKK constructs very large crude carriers, LNG carriers and LPG carriers. The shipyard is hoping to reduce its current average ship design lead time from nine months to about six to seven months with the deployment of three-dimensional LPM solutions based on Catia software developed by Dassault and marketed by IBM.

Green LNGCs from MHI

Mitsubishi Heavy Industries (MHI) is to apply classification society Lloyd's Register's (LR) Environmental Protection notation to four LNG ships under construction at its Nagasaki yard: the Abadi, a joint venture between the Bruneian government, Mitsubishi Corporation and Shell, to be delivered in June of this year, and the Galea, the Gallina and the Gemmata, to be delivered to Shell from September 2002 through to May 2004. Before now, LR's environmental notation had never been applied to any LNG or Japanese-built ships.

The notation requires that all vessels undergo a comprehensive process of plan appraisals, surveys and audits to demonstrate compliance with requirements for NOSUBxSUB and SOSUBxSUB exhaust emission levels; refrigeration gases and firefighting systems; oil pollution prevention; garbage management; sewage treatment; hull antifouling systems; and ballast water management. Compliance with the notation is voluntary and can be applied to any ship classed with an IACS society.

Liquefied gas do's and don'ts

The Society of International Gas Tanker and Terminal Operators Ltd (SIGTTO) has prepared "Liquefied Gas Carriers - Personal Safety Guide", a primer-type publication for the crews of liquefied gas carriers, particularly junior crew members and those with limited experience on this type of vessel. The booklet, which is published by Witherby & Co, provides basic, but important, advice and guidance which is backed with numerous diagrams. Translations into Spanish and Chinese are also being considered. SIGTTO says that the Guide has been conceived as a useful and valuable addition to each gas carrier cabin and hopes ship operators will make them freely available on their vessels on this basis.

LNGC fuel control from Texon

The Swedish automated control system manufacturer Texon recently retrofitted a 72,000 cu m LNG carrier with an integrated fuel control system, including combustion, gas and burner management controls and monitoring systems.

The retrofit, the fourth such LNGC carried out by Texon over the past year, took place at the Elefsis Shipyard in Greece and was overseen by classification society American Bureau of Shipping (ABS).

According to Texon, the vessel's fuel oil consumption has been reduced due to its ability to run "gas only" operations safely through the use of the newly installed control systems. In addition, claims the company, the need for boiler maintenance has been drastically reduced.