

SEMBship



Major Upgrading of Integra Duckling Successfully Completed

to Comply with latest IACS URS Rules for Bulk Carriers

In April 2004, Sembawang Shipyard successfully re-delivered the 22-year old bulk carrier *Integra Duckling* to owner, Taiwan Maritime Transport Ltd (TMT), Taiwan after completing major upgrading

and life-extension work in compliance with the latest International Association of Classification Societies (IACS) URS Rules governing the world's bulk carrier fleet. A massive 2,500 tons of new steel

plate and internals were carried out on the 134,828 dwt bulk carrier in one of the biggest steelwork upgrading projects undertaken by Sembawang Shipyard in recent years.

For this major project, pre-planning by the yard's dedicated Project Team in close collaboration with Owner's representative started since end December 2003. For instance, UT gauging commenced immediately to assess and identify the scope of steelwork required to meet Class rulings. With the helpful assistance and cooperation from Det Norske Veritas (DNV), we were able to propose a stretched repair schedule, highly challenging in view of the massive workscope of the project.



Newly refurbished *Integra Duckling* ready for her new commercial life.



Led by our experienced Marine Manager Mr C.T. Chua and assisted by Project Engineers Gerard Theseira and C.K. On, our refit team successfully executed the following major works:

IACS : URS Rules related work:

- S24 - Installation of Detection of Water Ingress System in cargo holds
- S26 - Strengthening & securing of small hatches on exposed fore deck
- S27 - Strengthening of fore deck fittings and equipment
- S30 - Cargo hatch covers securing arrangement
- S31 - Renewal of side shell frames and brackets



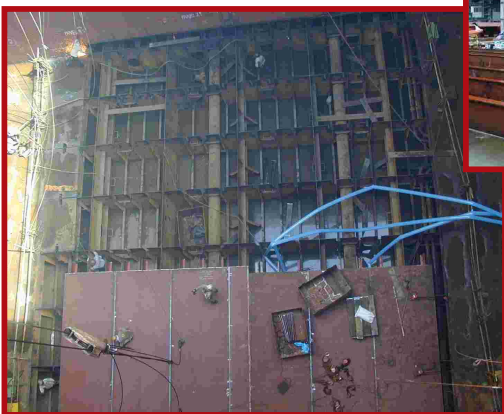
Renewal of side shell frames and brackets.

Other major renewal included:

- Major hydrojetting work on deck, monkey island, forward deck, life boat deck, all topside tanks, aft peak tank
- Complete re-tubing of exhaust gas boiler (economiser) with partial renewal of casing plate
- Double bottom tank top renewal for No.1 – No.5 DBT (P/S) in No. 1 – No. 9 cargo holds
- Corrugated bulkhead renewal
- Renewal of hatch coaming corner plate



Complete re-tubing of exhaust gas boiler (economiser) with partial renewal of casing plate.



Double bottom tank top renewal for No. 1 – No. 5 DBT (P/S) in No. 1 – No. 9 cargo holds.



Corrugated bulkhead renewal.

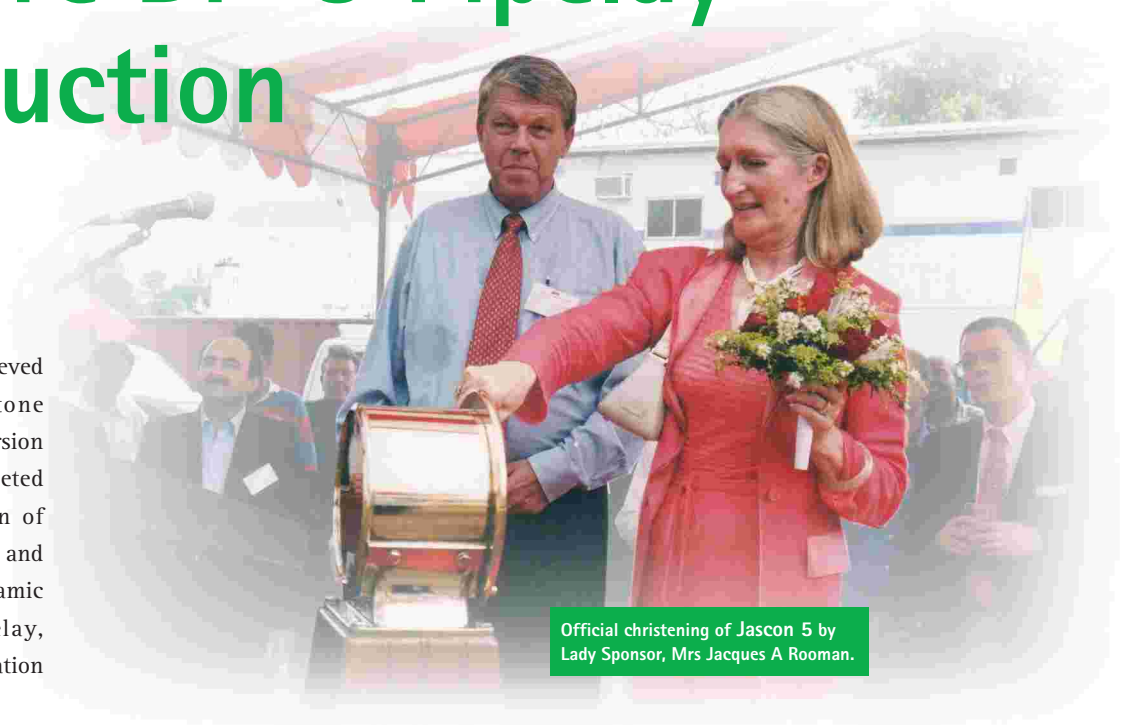
We successfully carried out the sea trials and the newly refurbished *Integra Duckling* sailed for South America on 15 April 2004 to commence her commercial commitment. TMT's Technical Manager Mr C K Chen was pleased with the overall refit and gave a Very Good rating for the yard's overall performance for this highly challenging project.

Despite strong competition from Chinese shipyards who are known for their cheaper steelwork, Sembawang Shipyard was awarded this major project based on the yard's highly innovative and competitive package offered to TMT Ltd, which included competitive pricing, commitment for timely delivery, high Quality and HSE (Health, Safety and



Christening of Jascon 5, Offshore DP-3 Pipelay Construction Barge

Sembawang Shipyard achieved another major milestone in the area of offshore conversion when we successfully completed the sophisticated conversion of *Jascon 5* to a newly outfitted and commissioned Offshore Dynamic Positioning Class 3 Pipelay, Construction and Accommodation



Official christening of *Jascon 5* by Lady Sponsor, Mrs Jacques A Rooman.

Continued from page 2

Major Upgrading of Integra Duckling Successfully Completed

to Comply with latest IACS URS Rules for Bulk Carriers

Environment) standards and expert project management that encompassed the management of critical classification requirements on behalf of Owners. In particular, our ability to deliver the ship on time and our excellent reputation for zero shipyard-induced defects after refits were the critical success factors. Faced with a bullish dry bulk freight market, timely delivery by the yard would translate into minimal off-hire time thereby maximizing the trading days of the vessel. Principally, we were also chosen over the Chinese shipyards despite the price differential due to our high quality performance and excellent safety track record.

The success of this major project led to the signing of a Favoured Customer Contract (FCC) between TMT Ltd and Sembawang Shipyard in March 2004. The FCC contract was signed in our shipyard by Mr Nobuyoshi Morimoto, Chief Executive Officer of TMT Ltd and Mr Heng Chiang Gnee, Chairman of Sembawang Shipyard. This milestone contract is Sembawang Shipyard's first long term contract with a major Asian shipping company and we are grateful for TMT's strong confidence in our shipyard's ability to deliver consistently high quality and timely refits that conform with world-class HSE standards. TMT Ltd is a major and fast expanding Taiwanese shipping company with a diversified fleet of more than 40 ships comprising bulk carriers, VLCCs, ro-ro ships, woodchip carriers and LNG carriers. ⚓