

# TOMORROW'S TANKERS:

## Technology, Talent & Training

**The Holy Trinity of tomorrow's tankers involves more than just Worldscale rates, double hulls and logistics. It also might not come with all the usual suspects.**

*By Barry Parker*

**S**hipping is becoming more complicated. Like all businesses, technology is being infused at a rapid rate, but the waterfront has always been slow, if not reluctant to adopt new equipment, techniques and practices. Today's operators have little choice but to get on board the technology train, lest they be left behind in an increasingly complex and automated supply chain. They'll need help, when they do.

With the technological complexity of vessels viewed as an industry wide challenge, ABS CEO Chris Wiernicki recently opined, "... industry will require talent with non-traditional

skill sets such as systems and data engineers from non-traditional sources and a culture that blends traditional and non-traditional talent." That will arguably be easier said than done. That said; unlike the long-suffering drybulk and container trades, the tanker segment has the financial wherewithal to make the requisite investments in both technology, and talent.

### Techie Talent: Home Grown or New Hires?

According to Simon Frank, Vice President and Head of Global Marine HR in TORM A/S, "... the smartest people



THE VLCC ANTIGONE, OPERATED BY EURONAV

Credit: EuroNav

– and that’s perhaps a provocative quote – are sailing in the tanker trades or liquid cargo segments.” They are already the most expensive, as well. He adds, “That’s where the benefits, wages and best working conditions are.” Separately, consultants McKinsey & Company, in their seminal article “*Winning the Battle for Technology Talent*” bemoan the high cost of hiring tech-savvy professionals from the outside, versus going with in-house personnel. They offer that: “... the first imperative in winning the war for technology talent is to develop and retain the team you have.”

Hiring practices for tanker operators don’t differ significantly from any other shipping sector, apart from the fact they typically earn higher wages and therefore attract the top candidates. After recruits have settled in, they are trained to operate increasingly complicated technologies. Yet, the booming tanker market comes at a time of wholesale changes in maritime technology. The twinned concepts of “The internet of things” (where many devices and sensors are linked) and “Big Data” (where better decision-making is the result of potent analytics applied to reams of data from these devices, sensors and from other inputs) now routinely finding their way into presentations at industry events.

In a keynote presentation at the March 2016 Connecticut Maritime Association event, Chris Wiernicki said, “... risk-based, data-centric, cyber-influenced decision-making is defining a new absolute value of talent...” When talking about new categories of maritime officers, and company leaders, he adds, “New technologies are being developed and applied at faster speeds than we’ve ever seen to meet regulatory and operational demands.”

Looking back, hiring practices have been unchanged regardless of economic

**LOOKING BACK, HIRING PRACTICES HAVE BEEN UNCHANGED REGARDLESS OF ECONOMIC CONSIDERATIONS. TRADITIONALLY, EMPLOYEES HAVE BEEN HIRED THROUGH ESTABLISHED SOURCES, AND BEEN TRAINED AS TECHNOLOGY HAS EVOLVED. BUT GOING FORWARD, THE POTENTIAL INFLUX OF ‘SYSTEMS AND DATA ENGINEERS’ PROPHESED BY ABS AND OTHERS COULD POSSIBLY INVOLVE ANOTHER, MORE EXPENSIVE SOURCE.**

considerations. Traditionally, employees have been hired through established sources, and been trained as technology has evolved. But going forward, the potential influx of ‘systems and data engineers’ prophesied by ABS and others could possibly involve another, more expensive source. Or, will they come from within the ranks, as recommended by McKinsey? One way or another, as long as the tanker economics look good, hiring, training and retaining appropriate talent will happen. If the tanker market heads south, all bets are off.

**Reading the Tealeaves**

At the same time that the tanker sector is facing an unprecedented upheaval on the technology side of the equation, it is also being challenged by its volatility. Throughout the spring of 2016, owners of large tankers were experiencing

a sharp rise in hires- best expressed by the time charter equivalent (TCE) of \$/tonne rates agreed with the big charterers. Hire numbers, as represented by the TCE, were all over charts between \$45,000/day up to \$85,000/day. Researchers at Poten & Partners, a New York brokerage, weighed in through an Opinion piece entitled “*Reading Tanker Tealeaves*” earlier this year.

Discussing forecast oil movements from the International Energy Association (IEA), the broker said “In recent years, the tanker market benefited from

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**HIM ULLMAN,**  
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a significant build-up in inventories as oil supply outstrips demand. Unfortunately for the tanker market, this trend is expected to reverse in 2017.” Another consultant, UK-based Maritime Strategies International (MSI) says, “...the shape, and descent of rates to 2018 remains a consistent feature.”

MSI provided additional color, advising clients that fleet supply, going forward, is a worry, saying, “... deliveries, driven by the larger sizes in both the crude and product sectors (VLCCs, Suezmaxes, LRIs) will jump in 2016 and be sustained at high levels over a two to three year period.” On the demand side, they cite several key drivers. Specifically, whether major oil exporters and North American producers might curb their output, what the health of the global macroeconomic environment will look like, and whether sustained low prices might stimulate demand.

Another consultant, Drewry, offers a dramatic visualization (see GRAPH 2) of why 2015 was so strong, and why

**“THE SMARTEST PEOPLE – AND THAT’S PERHAPS A PROVOCATIVE QUOTE – ARE SAILING IN THE TANKER TRADES OR LIQUID CARGO SEGMENTS.”**

**– SIMON FRANK, VICE PRESIDENT AND HEAD OF GLOBAL MARINE HR IN TORM A/S**

future years might not be. Capacity utilization, where supply and demand intersect; drives market strength. Quite simply, tanker demand (with the surge in oil being purchased for both consumption and storage) nearly exceeded the available supply of vessels.

### **Tanker Firms Train for the Future**

Ongoing training is a big part of the story at Euronav, a large Antwerp-based owner of 55 vessels comprised of VLCC’s and Suezmaxes. Mr. Nikos Kolouris, Fleet Personnel Manager, when asked about training practices, told *MarPro*: “Roughly 50% of crew is recruited directly by company’s crewing departments and 50% indirectly through company’s appointed manning agents. The company also recruits cadets directly from maritime schools.” Once aboard, “There is a close cooperation with selected third parties accredited training centers and a number of training seminars are offered in-house,” he continued, adding, “The company offers specific training depending



**PADDY RODGERS,**  
CMA AT EURONAV

Credit: Chris Prevolos

on specific type of engine and or equipment.”

Mr. Kim Ullman, President at Concordia Maritime, another large tanker owner (13 vessels, mainly Panamax sized product carriers) also elaborated on recruitment of talent for the tanker sector, saying that an important objective of Concordia’s ongoing training is to “...ensure they are competent to operate the advanced equipment now found on board our vessels....” Mr. Ullman, a long-time executive with Stena Group companies, augments Concordia’s internal and externally contracted training with several manufacturers of the equipment they use for specific training on plant, machinery, and automation systems.

Tanker companies are thinking about technology, though many are reluctant to discuss its impact on hiring practices. A spokesperson from Euronav, when asked about whether the company’s recruiting practices have responded to changing technologies, told MarPro, “Euronav is strongly investing in this area. But as this is still in the initial phase, it is too soon to take a position on this matter.” When asked about how interconnections between in-house systems with those of charterers are impacting staffing practices, the company firm replied, “It is indeed a fact that the linkages among systems from charterers to the ship owners (at least to a considerable level)

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**EDDIE VALENTIS,**  
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appeared in shipping life almost concurrently with the booming of information and technology systems as well as communications in the marine industry. The direct contact with charterers (both ashore and on board) tends to become a standard practice on various levels in the company and in some cases through data exchange.”

Euronav also noted the need for competencies beyond the “data engineers” that ABS had highlighted; the spokesperson explained, “Adding to that the amount of data exchanged as well as the need for data validation and production of several performance or key performance indicators Euronav couldn’t do anything but exercise its ‘reflective evolution.’”

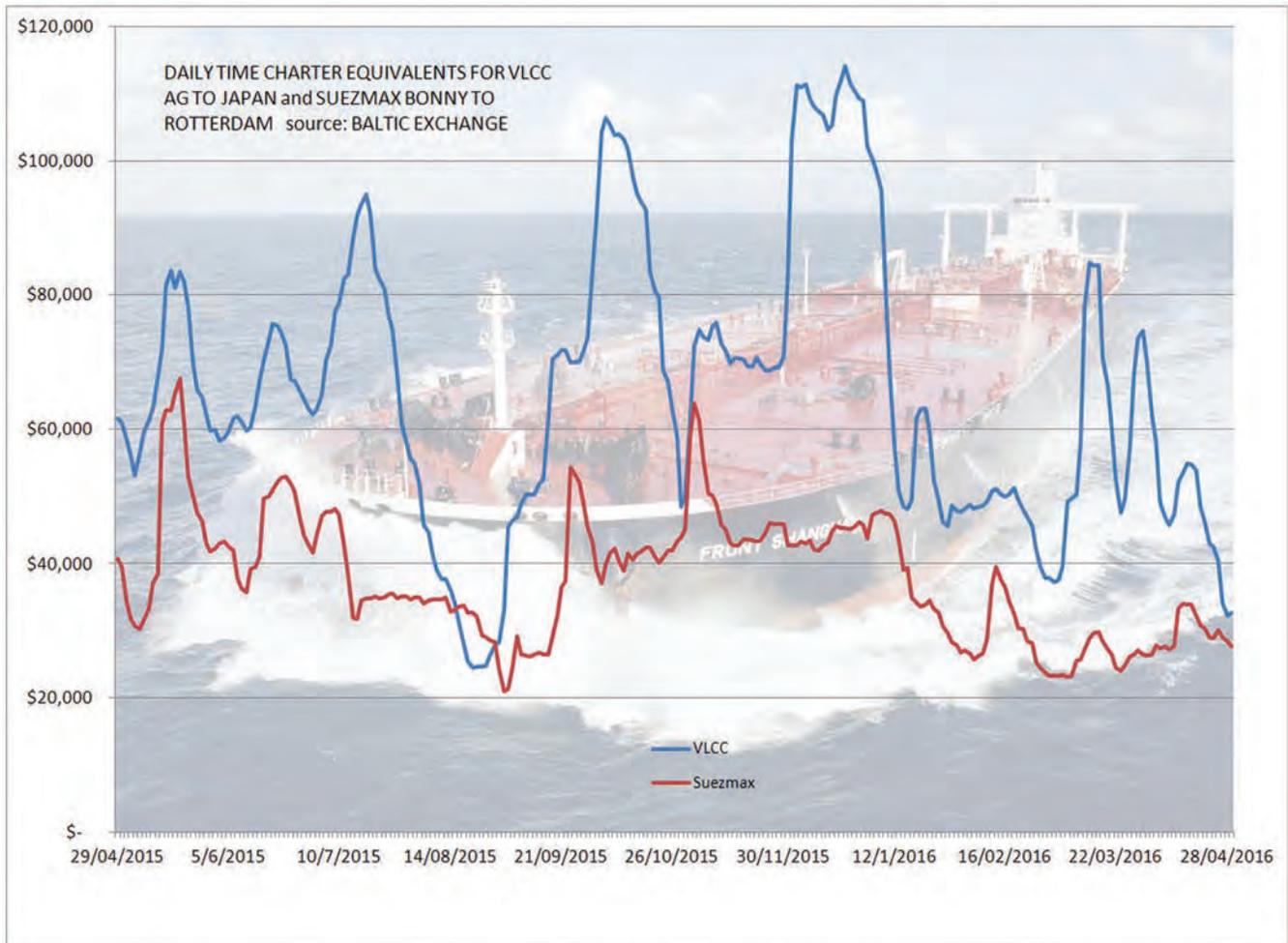
Eddie Valentis, the Chairman & CEO of Pyxis Tankers (Nasdaq: PXS) – a

recently listed specialist in the product tanker sector – told *MarPro*, “Our hiring and training of crewing is handled by a leading technical manager, International Tanker Management, but we review all personnel decisions and monitor performance of all seafarers. We continuously discuss HR matters, policies and procedures with the manager. In addition, it is our desire that vessel officers be technology savvy so that Pyxis can remain at the forefront of regulatory and commercial initiatives.”

**New Technology –  
 New Normal in HR**

For Euronav, whose VLCCs trade in the Tankers International pool, the bottom line is that new technologies have indeed shifted recruiting paradigms. The company tells *MarPro*, “In this

**GRAPH 2**



respect, apart from the so called 'traditional' competencies that were previously evaluated, new competencies (not necessarily standalone) are brought into the picture for the most appropriate hires and or promotions."

The McKinsey team offers suggestions that transcend all types of business, including the tanker sector. "In addition to all the traditional people-management levers (competitive compensation, rewards for success, effective coaching, and so on), we found that leading organizations employ a range of other approaches to develop and retain technology talent." Specific strategies include rotating high performers, making training less technical, ensuring exposure at senior levels in-house while also allowing external exposure, and nurturing technical passions.

Top maritime communications executives are thinking about mechanisms for implementing these suggestions from McKinsey, and those of other Human Resources thought leaders. As that happens, for example, Transas CEO Frank Coles wants to create a platform that provides a community for key stakeholders to enable a change in attitude to ship operations, navigation and thereby improve safety and safe operations. "The vision is for all sectors to share data, and enable one another to make better decisions, better operations and better training. Ship operations would be a coordinated evolution, with ship and shore based operations centers working together, on shared information platforms, the ship and office would also work in a community where the ship traffic control would enable better coordination of traffic movements, with decision based tools to enable direction of traffic."

The vision is just one part of that company's THESIS, or *Transas Harmonized Eco System of Integrated Solutions*. Coles explains, "We are talking about training to enable the master/ chief to come ashore and have the skills

to be the operator ashore. We are not talking about cross discipline between engine and navigation but between ship and shore." That vision predicts a future ship's officer with many skills, interchangeable with his or her counterpart

ashore, as well as being fully conversant with technology. And that might just describe tomorrow's tanker officer: technology driven, properly trained, and appropriately talented. Actually, tomorrow may be just around the corner.

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