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Time to increase minimum manning?

We have two accidents involving fatalities described in this issue, both involving high levels of fatigue. An enclosed space death and a collision. It is very dangerous if we do not look deeper into the causes

One of the reasons seafarer fatigue continues to be a major industry problem, says Captain Kuba Szymanski, secretary general of the International Ship Manager's Association, is that too many people are satisfied that they understand everything they need to know about the cause of an incident after reading about a mistake due to fatigue.

"As long as seafarers are blamed for fatigue nothing is going to change," he says.

Please bear this in mind as you read the two reports of two tanker accidents in this issue, the enclosed space death onboard chemical tanker *Kashima* on July 14, 2024, and a collision by oil/chemical tanker *Hafnia Nile* on July 19, 2024.

Both events involved fatalities, high levels of fatigue, and someone doing something they should not have done. Rather than blame the

seafarer for becoming so fatigued, we should ask how this was able to happen.

Why are seafarers being asked to work such long hours, such as 17 hours out of 24? Why are they working as soon as they join a ship, even immediately after an overnight flight?

Shipping is a competitive market and no-one is willing or able to pay more than they need to. Minimum manning levels are set by the flag registry. But these are calculated based on staffing needed to manage the voyage, not to do any maintenance, tank cleaning or meet additional charterer requirements, says Captain Szymanski.

This means that any charterer making additional requirements without also requiring additional crewing is indirectly increasing crew working hours, perhaps beyond a safe level.

Even the highest standard flag registries will not raise their minimum manning levels out of fear that shipowners would then move ships out of their flag, due to the higher costs involved in providing more crew, he says.

How about charterers? "Charterers don't know what they are chartering on many occasions," he says.

OCIMF is having some success in pushing up manning levels. On OCIMF LNG carriers, we often see 22 people onboard, when the flag state says 17-18 is a minimum for safe manning, Captain Szymanski says.

But the OCIMF fleet is only about 4,000 tankers, a third of the total non-shadow tanker fleet. And OCIMF does not directly require higher manning, but sets demands indirectly, such as by asking about the number of crewmembers with a certain "time in rank" as

part of a TMSA assessment.

Perhaps it would be worth the tanker industry providing clearer data to end buyers of the cargo about the manning level of the ships which carried it, such as with a star system, he suggests. In other industries, such as automotive, consumers have proven willing to pay more money than the minimum for higher safety standards, when it is clear what they are paying for.

Auditors could do more to spot fatigue. A high level of crew fatigue is rarely cited as a problem in audits. "Can all these bodies not see where the problem really is, or are they coming onboard with closed eyes, they don't want to see?" he asks.

And it is common for crew to be expected to falsify their records of hours worked onboard, Captain Szymanski says. This is seen in one of the accident reports on the following pages.

Crew do this because they are worried about losing their jobs. The crew shortage is a fiction, Captain Szymanski says. For every working seafarer, there are another three on shore waiting to go onboard. "If there was a shortage, seafarers would become bolder, and owners would say, 'I'd better listen.'"

Shipowners could also pay seafarers to spend a night in a local hotel before joining a ship if they have had an overnight flight to get to the location. Some companies now do this as routine.

Captain Szymanski points out that if a company had a team of people flying 12 hours to sign a \$400m contract, they would not normally be expected to go straight from the airport to the signing. They would probably fly



Captain Kuba Szymanski, secretary general of the International Ship Manager's Association

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business class to get a good rest. Yet we allow seafarers to control a \$300m ship straight from an overnight flight.

Shipowners could provide a team to take responsibility for vessels during port calls, so the captain can be relieved, and rest or visit the town. “The captain has never relaxed onboard, his brain waves are working all the time,” he says.

Port calls can be the most demanding time for vessel crew. For example, a visit to the Port of Antwerp involves pilots, negotiating locks in the river leading to the port, berthing, vetting

inspection, store deliveries, port state control, as well as discharge and loading of cargo.

Some shipping companies could improve the quality of their office staff handling crewing, he says. “Many people looking after seafarers have never been onboard a ship. How can we expect these people to be empathising with those they are managing?”

Companies sometimes tell seafarers they should encourage each other to be safe and follow the rules. But efforts here can be meaningless when the company is under pressure to meet a deadline and does not have

enough crew. It is like asking your taxi driver to get you to the airport quickly while also requesting a safe drive, Captain Szymanski suggests.

It might help if shipping companies trusted their crewmembers more. When a company has decided to employ a seafarer and put them in charge of managing a vessel worth hundreds of million dollars, trust does not seem much to ask.

This trust can extend to recognising that seafarers are often very proud people who want to do the best job possible, Captain Szymanski says.

TO

Winter news from OCIMF

OCIMF spent 2 weeks in Malaysia, Indonesia and Singapore; is building a learning culture; is producing a STS information paper; and noting a rise in piracy incidents. Our summary of OCIMF’s Nov, Dec and Jan newsletters

During 2025, OCIMF “made progress in strengthening governance, work prioritisation and delivery oversight,” said Karen Davis, director of OCIMF, in her introductory letter to the December newsletter.

“We continued to build a learning culture across the secretariat and the wider forum, deepening collaboration with industry partners.”

“We have been preparing for the future. The technical and geopolitical pressures facing our industry are real and growing. OCIMF has focused on where we add the most value and can deliver it efficiently.”

Meetings

Members of OCIMF secretariat met IMO Secretary General Arsenio Dominguez in January, providing him with an update on recent OCIMF activity and its plans for 2026 (see photo).

In November the OCIMF team spent over 2 weeks in Malaysia, Indonesia and Singapore.

“A particular highlight was our visit to STIP, Indonesia’s School of Maritime Sciences,” said Karen Davis, director of OCIMF. “Spending the day with the academy’s dedicated staff and capable students was energising. I returned to London with an even stronger commitment to exploring new ways OCIMF can support the next generation of seafarers and maritime leaders.”

A fourth 2025 “OCIMF Day” was held in Singapore on November 20 with over 120 attendees. The Singapore event had a focus on barging and coasting shipping in Asia Pacific.

Also during the trip, OCIMF held an Executive Committee meeting, and meetings



Abhijit Aul, IMO Representative and Adviser, OCIMF; Lambros Klaoudatos, chair, OCIMF; Arsenio Dominguez, secretary general, IMO; Capt. Karen Davis, director, OCIMF; Darron Biddle, programmes and advocacy director, OCIMF

in Kuala Lumpur with Malaysia OSV Owners’ Association and Malaysia Petroleum Management, a division of PETRONAS.

OCIMF expects to engage with Singapore Shipping Association and Malaysia Shipowners’ Association on discussions relating to barging and coastal shipping.

Inspector forums

OCIMF is restarting its inspector engagement forums, which it previously operated until 2020. The first forum for SIRE Cat-1 inspectors was held in Singapore on Nov 1, attended by over 50 inspectors from the region.

Discussions covered issues with the tablet

computer, and on how certain inspection questions should be answered.

Further forums will be organised during 2026.

User surveys

OCIMF published a summary of user surveys about the OVID and SIRE 2.0 programs over 2024/25, which can be downloaded free from its website.

Feedback was gathered from submitting companies, programme recipients, vessel operators and inspectors.

The results show strong overall satisfaction, with users rating both programmes as ‘High’ or ‘Very High’.

It included views on overall programme quality, including report accuracy, communications, and IT helpdesk support.

It also covered views on tools and services such as the questionnaire and database, programme integrity including inspectors, policies and procedures, and areas for future improvement.

Ship to Ship Expert Group

The Ship to Ship transfer Expert Group met virtually in November 2025. It reported that the Ship to Ship Transfer Guide had “received positive feedback from various industry stakeholders,” and “some have commended the guide for integrating human factors within a risk-based framework.”

The group is reviewing SIRE 2.0 questions relating to STS operations.

It is producing an information paper about handling, storage, use, maintenance and testing of STS hoses.

It noted that Dynamarine and Lloyd’s Register have developed an STS audit programme, using the OCIMF STS Transfer Guide as the benchmark for evaluating service providers.

A Person in Overall Advisory Control

(POAC) / ship to ship superintendent course and qualification is being set up by South Tyneside College, UK.

Onshore power supply group

OCIMF held an online meeting for its “Onshore Power Supply Listening and Learning Group,” discussing the latest draft of the IEC/IEEE 80005 1 standard for high voltage shore connection (HVSC) systems, Annex F for oil and chemical tankers.

There was a presentation from ABS on its publication “Powering Near Shore FLNG Installations from an External Source.”

Security

The IMB reported 137 piracy and armed robbery incidents against ships in 2025 compared to 116 in 2024 and 120 in 2023, OCIMF noted.

The 137 incidents included 121 vessels being boarded, four vessels hijacked, two fired upon, and ten attempted attacks.

46 crew members were taken hostage in 2025 compared to 126 in 2024 and 73 in 2023.

Twenty-five crew were reported kidnapped, compared to 12 in 2024 and 14 in 2023.

A further 10 crew were threatened, four

injured and three assaulted in 2025.

The number of perpetrators using guns continues to rise.

A total of 132 incidents of piracy and armed robbery against ships in Asia were reported to ReCAAP ISC from January to December 2025, a 23% increase over the 107 incidents reported in 2024. Of these, 127 were actual incidents and five were attempted incidents.

“The higher number of incidents largely corresponds to minor petty theft cases. There were no severe CAT 1 incidents in the Straits of Malacca and Singapore in 2025,” said ReCAAP ISC Executive Director, Vijay D Chafekar.

IMO

IMO has been running two emissions related correspondence groups under MEPC 84, completing January 2026, OCIMF reported.

One looked at emissions of methane and nitrous oxide from the vessel. It is looking for ways to measure these emissions and verify the measurement. The “Cslip value” is the fraction of methane which escapes un-combusted.

The other group looked at onboard carbon capture, seeking to develop a regulatory framework.

Kashima enclosed space death – our summary

An ordinary seaman died after going to aid a chief officer who had collapsed inside a tank while cleaning it, on vessel Kashima on July 14, 2024. Here is our shorter version of the Marshall Islands report

An ordinary seaman died after going into a tank in an attempt to rescue a chief officer who had collapsed in the tank, on vessel Kashima, on July 14, 2024, in the South China Sea. Here is our shortened version of the Marshall Islands investigation report.

A pumpman also entered the tank. Both the pumpman and chief officer survived.

The chief officer entered the tank to take photographs requested by the charterer, without taking a personal gas detector.

The tank was found to contain only 4 per cent oxygen and high levels of nitrogen, although no carbon monoxide, hydrocarbons or hydrogen sulphide.

Neither of the three had followed the ship’s enclosed space entry procedures or taken any required precautions.

The chief officer, pumpman and other crew had been engaged in cargo tank cleaning operations for almost 22 of the 24 hours immediately prior to the incident.

The charterer had unusual requirements. In addition to the standard water wash and degreaser, it required that each cargo tank had to also be passivated and then “Kosher washed”.

This is defined as sending photos and videos of various stages of the wash to the “Orthodox Union office” for review and certification by a rabbi.

The chief officer said it was his standard practice to enter cargo tanks after they were cleaned to take photographs. He had entered 15 cargo tanks on the day before the incident.

Other issues found in the investigation were a lack of oversight by the Master and records

of work and rest hours not being accurately maintained.

The chief officer said he felt rushed to complete the cleaning work. He did not follow the company cleaning plan, leaving tanks for 0.25 to 3 hours between passivation and Kosher washing, not 24 hours as in the plan.

He was scheduled to sign off in Singapore, the next port of call, and the vessel was due to arrive on July 16. He said he wanted to finish Kosher washing the cargo tanks on 14 July 2024 so that they could be ventilated overnight and then dried during the day on 15 July 2024.

At the time of the incident, the ship’s crewmembers had finished washing, passivating, and Kosher washing all the cargo tanks except for two, including one where the incident occurred.

Crewmembers engaged in the cargo tank

ACCIDENT INVESTIGATIONS

cleaning operations were aware that they had stop-work authority but did not use it.

Processes to prevent

The same ship management company also sadly saw the death of a chief officer in enclosed space on July 23 2022, on vessel TRF Mandal.

After this incident it implemented a number of processes designed to stop it happening again.

This included assessing the effectiveness of enclosed space entry training on board company-managed ships. Undertaking a fleet-wide safety campaign to reaffirm the authority of all crewmembers to stop unsafe acts and to raise awareness of the hazards posed by nitrogen.

Conducting a thorough review of the company's cargo tank cleaning and entry procedures to prohibit opening cargo tank access hatches until the respective cargo tank was gas free. Updating the risk assessments for cleaning and gas freeing cargo tanks. Producing a video that was provided to all ships in the company-managed fleet based on the lessons learned from this incident.

Events surrounding the incident

On July 14, either the pumpman or ordinary seafarer reported at 1646 by radio that the chief officer had collapsed inside a tank. The master sounded the general alarm and announced all crewmembers should proceed to the tank for a rescue.

By 1649, the master, the second officer, and other crewmembers had arrived at the cargo tank dome with self-contained breathing apparatus, extra air bottles, gas detectors, emergency escape breathing devices, and rescue harnesses with lines.

They found the access hatch open, with the chief officer lying on the upper platform and the pumpman lying on the second platform inside the cargo tank. The ordinary seafarer could not be seen. Both the ordinary seafarer and pumpman had entered the tank to come to the chief officer's aid and had become unconscious.

The chief officer was not wearing a personal gas detector. He later said he did not have any memory of what happened after he started climbing down the vertical ladder to the upper platform. He acknowledged either forgetting or not considering the dangers of nitrogen exposure.

Rescue teams were not able to put a rescue harness on the chief officer, pumpman, or ordinary seafarer due to the limited space on the cargo tank access ladder and platforms. However they were able to tie lines around their chests so they could be lifted through the cargo tank dome access hatch.

All three were removed from the cargo tank within 20 minutes of the initial report.

After being removed, all three were still breathing but the ordinary seafarer's pulse was weak.

Crewmembers started administering CPR and medical oxygen to the ordinary seafarer before

moving him to the ship's hospital, where this was continued. 3 hours later he was determined deceased.

The chief officer regained consciousness within a few minutes after being administered medical oxygen before being taken to the ship's hospital. The pumpman remained unconscious after being administered oxygen and was also moved to the ship's hospital for this to continue.

The master sought shoreside medical advice and then diverted the ship toward the nearest port so the seafarers could be disembarked for medical treatment.

By 1750, the pumpman had regained consciousness but was continuing to have difficulty breathing. By 1755, the chief officer was determined to be in stable condition.

A search and rescue vessel reached Kashima at 0300 on July 15 with a medical doctor and a police officer onboard.

Work hours and fatigue

The chief officer, pumpman, deck ratings, and deck cadet had been engaged in cargo tank cleaning operations for almost 22 of the 24 hours immediately prior to the incident.

The chief officer's hours of work and rest had not been recorded since 4 July 2024. He stated that he had not had any significant rest between when the ship arrived at Dong Nai shortly before 0400 on 12 July 2024 and when the incident occurred.

During this period he had been responsible for coordinating cargo operations, which was 25 hours of work. Also supervising cargo tank cleaning operations and preparing documentation required by the charterers.

The chief officer said he did not receive any significant rest during previous port calls. This was when the ship was discharging cargo at Singapore and Kuantan (Eastern coast of peninsular Malaysia), and when cargo tank cleaning operations were being conducted before and after the port call at Kuantan.

At the time the fatality occurred, the chief officer stated he felt some time pressure, since all the cargo tanks had to be clean and ready to load cargo before the vessel arrived at Singapore. This was because of the short transit to Pelintung, Indonesia where the next cargo would be loaded (approx. 200 nautical miles distance).

He had not asked any of the ship's watch officers to assist with the cargo tank cleaning operation because the charterer required photos and videos to be taken of each step of the cleaning process (see below).

"Indications that the chief officer was fatigued included leaving his personal gas detector and flashlight in the cargo control room when he went back out on deck after meeting



The Kashima – photo courtesy Marshall Islands Registry

with the master on the bridge and forgetting, or not considering, the hazards of nitrogen exposure,” Marshall Islands said.

The pumpman’s work and rest hours on 14 July 2024 were not recorded. But based on interviews the pumpman had been working for most of the 24-hour period before the incident.

Charterer’s instructions

The next cargo to be loaded in Pelintung was cooking oil. The standard cleaning process would be a water wash and circulation of degreaser as applicable. The charterer additionally required each cargo tank had to also be passivated and then “Kosher washed”.

“Kosher washing” was defined as sending photographs and videos to the Orthodox Union office for review by a rabbi.

The charterer required photographs of each cargo tank immediately after it was passivated; that each cargo tank be left empty 24 hours after being passivated; each cargo [tank?] be steamed until the condensate return reaches 90°C; and provide short videos for each cargo tank of the different steps of the steaming process

(turning on the steam, the number of the cargo tanks being steamed, and the condensate return reaching 90°C).

There was a cargo tank cleaning plan developed by the chief officer, reviewed by the master and approved by the company. But this did not make a reference to a need to enter cargo tanks to take pictures required by the charterer during the tank cleaning.

Aiding a crewmember

The investigation report noted that the pumpman and ordinary seafarer had been trained about the dangers with enclosed space and the need to follow procedures. But faced with an emergency, they went into the tank anyway.

Marshall Islands noted that this also occurred in five of the eight enclosed space entry incidents on Marshall Islands registered ships between 2020–2024. Over the 8 incidents, this led to four additional rescues and two additional fatalities.

“It also delayed the response in four of the cases because the crewmembers who entered

the enclosed space did not first raise the alarm that another crewmember had entered an enclosed space,” Marshall Islands said.

Changes to procedures

After the incident, the company made further changes to its procedures.

It determined that no enclosed space entry operations were to be conducted until the ship’s master verbally confirmed with the company that all crewmembers had been briefed regarding the company’s enclosed space entry procedures and hazards of nitrogen, and obtained permission from the company.

All



Notice that was ignored – do not enter No 6 tank without a permit. Photo courtesy Marshall Islands Registry

crewmembers, both those who were currently serving on board a company-managed ship and those who were shore side, were required to recomplete portions of the Company’s e-learning program addressing enclosed space entry and nitrogen hazards.

Company cargo tank procedures were revised to require that cargo tank cleaning plans would now include work schedules for officers and ratings who will be engaged in the operations.

This would include an assessment of the planned work schedule to ensure all involved crewmembers will be adequately rested.

It established a requirement for the company’s operations department and master to discuss with a charterer the hazards associated with any instructions that exceed industry standards. For example, taking photographs of the inside of cargo tanks, taking video, and providing narration of one or more steps in the cleaning process. Additional time must be allowed to fulfil any charterer-specific instructions.

The company updated its “Speak-Up” program to enable anonymous reporting using an app.

Marshall Islands recommends that more reminders are given. Although everyone surely knows the risks of entry into an enclosed space, “reminders can contribute to safety by reinforcing the importance of established procedures and the need to comply with them,” it said.

Prior deviations

In the investigation, Marshall Islands found a number of prior deviations from the company’s tank cleaning and tank entry procedures in previous operations.

This included the cargo tank access hatches being opened without the cargo tanks having been gas freed, using cargo tank access hatches to add the citric acid solution to the cargo tanks while they were being passivated, and not implementing the company’s cargo tank tagging system during the cargo tank cleaning operations.

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Hafnia Nile / Ceres I collision report

Hafnia Nile collided at high speed with stationary Ceres I in South China Sea, leading to a fatality and extensive damage. The company now provides navigation watchkeepers with a night of rest before joining a vessel

Oil/chemical tanker Hafnia Nile collided at high speed with a stationary tanker Ceres I in the South China Sea, east of Malaysia, on July 19, 2024. The collision led to a fire, and injuries of two shore workers onboard Ceres I, one of whom later died in hospital. There was extensive damage.

This is our summary of the report published Dec 28, 2025, by the Transport Safety Investigation Bureau of Singapore Ministry of Transport. The full report is online reference TIB/MAI/CAS.173/.

The watchkeeper on Hafnia Nile was highly fatigued, due to an overnight flight to the vessel, and the first rest onboard being interrupted by a fire alarm test. The company followed rest hour regulations, but these apply to work onboard, not rest before arrival.

Following the incident the operator has changed its procedures to avoid overnight flights to reach a vessel for navigation watchkeepers wherever practicable. Also, all top four officers and navigation watchkeepers (second and third mates, able seafarers on deck) are to be provided with one night of hotel rest at the joining port before assuming duty.

Main events

Hafnia Nile was underway on a northeast-bound passage and Ceres I was at anchor. Hafnia Nile was attempting to navigate between Ceres I and another southwest-bound ship. They were approximately 0.7 nautical miles apart.

During the approach to the collision, the second mate officer of the watch on Hafnia Nile was in the chartroom at the aft end of the wheelhouse, preparing two reports. The chartroom was separated by curtains during the hours of darkness. An able seafarer deck was alone in the wheelhouse.

While Hafnia Nile was in close proximity to other traffic, the second mate was moving between the chartroom and the wheelhouse, during which the able seafarer remained alone in the wheelhouse whenever the second mate stepped away.

The second mate had joined the ship in Singapore after overnight travel from Colombo,

Sri Lanka, with a transit in Kuala Lumpur. Upon boarding Hafnia Nile at noon, he immediately commenced taking-over second mate duties and was involved in port activities while the ship was at anchor.

When he eventually went for his rest, it was disrupted by an unannounced fire alarm test. This meant he had only about two hours of rest over a 38.5-hour period. He then commenced the 0000-0600 watch, and the collision occurred during the last hour of this watch.

Fire alarm tests were carried out as part of the Class Annual Safety Survey. These tests briefly activated the audible alarms and were conducted without the prior knowledge of the master.

Hafnia Nile's S-band radar CPA/TCPA alarms were silenced, and the X-band radar alarms were deactivated.

Ceres I's bridge team detected Hafnia Nile at a range of 6.4 nautical miles away but initially assessed the risk as low. Visual and sound signals were reportedly used to warn Hafnia Nile. No VHF communication was attempted by Ceres I's bridge to alert Hafnia Nile when the situation escalated to close quarters.

Ceres I's SMS lacked specific guidance

regarding the methods to be used to communicate with an approaching ship during a close-quarters situation at anchor.

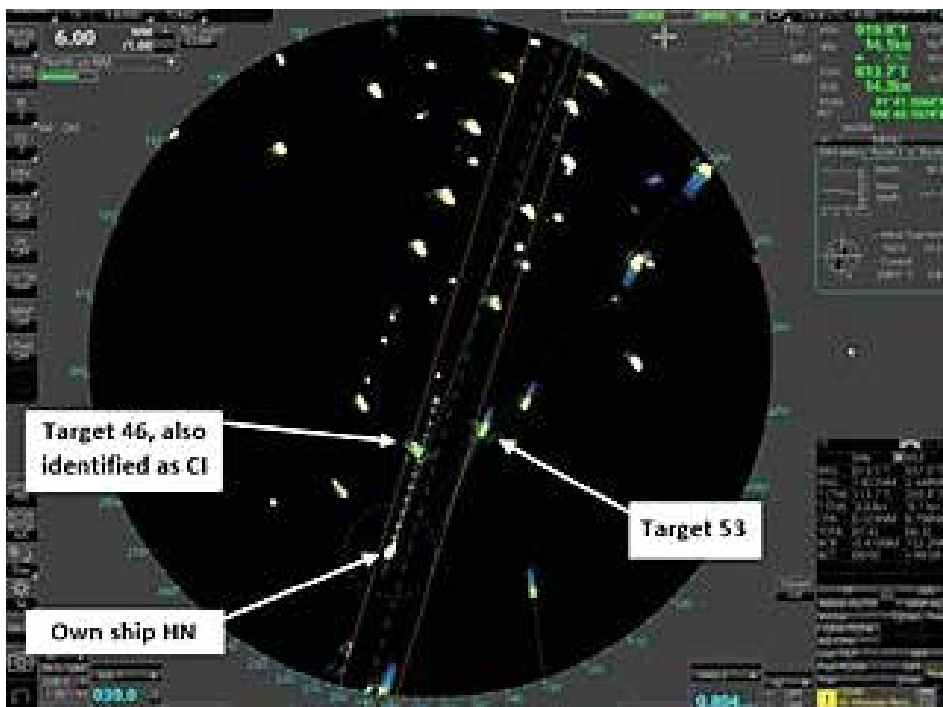
The collision caused structural damage to both ships. It resulted in the loss of bunker fuel and naphtha cargo from one of Hafnia Nile's cargo tanks, leading to a fire onboard both ships.

Two shore workers onboard Ceres I sustained serious burn injuries, and one later died in hospital.

Analysis

When the second mate went to the chartroom to prepare the reports, Hafnia Nile was in close proximity to several radar targets. "By leaving the wheelhouse to complete administrative tasks during this period, the bridge team's ability to maintain full situational awareness was reduced, with reliance placed on a single watchkeeper," the report stated.

"Leaving the able seafarer to manage the wheelhouse alone during such a close-quarters situation was not consistent with prudent bridge resource management and watchkeeping practice."



Hafnia Nile's X band radar display 4 minutes before the collision



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Photograph taken later in the day shows residual fire and smoke originating from Hafnia Nile's breached heavy fuel oil tank and cargo oil tank (Source: CI-Company and annotation by Transport Safety Investigation Bureau)

"These reports were not time-critical. The watchkeeping arrangement did not align with the SMS expectation that navigation duties must not be disrupted by non-operational tasks."

During a follow-up discussion, the second mate stated that his decision to prepare the two reports during navigational watch was influenced by having remained on duty beyond his scheduled watch period and by feeling tired at that time. He also stated that he assessed the navigational situation as manageable when he began preparing the reports.

Lead-up to incident

At about 0545H, Ceres I was acquired on X-band ARPA, showing a Closest Point of Approach (CPA) of 0.18nm in 17 minutes.

At about 0551H, the second mate returned to the wheelhouse. Ceres I was at 2.9nm away, with CPA of nearly zero in approximately 12 minutes. The second mate made a minor starboard adjustment, altering course from 018° to about 020°.

At about 0554H, after confirming that Hafnia Nile would pass ahead of Ceres I by less than 200m, the second mate observed another radar target, Target 53, about two points on the starboard bow, with CPA of eight cables in six minutes.

At that time, the second mate intended to have Hafnia Nile pass between Ceres I and Target 53, which were approximately 0.7nm apart from each other. The second mate then returned to the chartroom.

At 0558H, the able seafarer made calls to the second mate several times, but no response was received. The VDR audio suggested that the able seafarer had asked the second mate whether to alter course to starboard.

The second mate said he did not hear the calls until the curtain was pulled. During this period, a slight course alteration was observed to starboard from 020° to 023°25'.

Ceres I was now 0.8nm away, with zero CPA in three minutes. The able seafarer pulled the curtain and called the second mate urgently.

At 0601H, the second mate returned and saw a large ship close ahead with the deck lights on, estimating the distance to be less than one cable. He immediately switched to manual steering and applied hard starboard rudder. He questioned the able seafarer why the situation had not been reported earlier. He assessed that a collision was unavoidable.

Hafnia Nile's bow contacted Ceres I's port anchor chain. The anchor chain entangled with Hafnia Nile's port bilge keel, drawing Ceres I closer.

Ceres I's bulbous bow breached Hafnia Nile's shell plating near the Heavy Fuel Oil Tank and Cargo Oil Tank, rupturing the bulkhead and causing fire on both ships. Ceres I's bow flare also struck HN's port bridge wing, partially detaching it.

Post incident on Hafnia Nile

Hafnia Nile's master was woken by the collision and proceeded to the bridge. He stopped the main engine and activated the general alarm. He broadcast a Mayday distress call, issued an abandon ship order over the public address system and transmitted a distress alert.

The crew assembled at the liferaft stations on A deck, as smoke and fire obstructed the lifeboat embarkation area on C deck. Initial attempts to launch the liferafts were abandoned after fire was observed on the sea surface.

The crew relocated to the forward station, where a six-man liferaft was launched, and an embarkation ladder was rigged. All crew were accounted for.

The master reached the forecabin, he observed that the forward liferaft had already been launched and that the second mate was already inside the liferaft, with some of the crew on the embarkation ladder. He told the crew that he had not instructed the second mate or any other crew to board the liferaft.

Given the prevailing emergency condition, with oil observed spreading on the starboard side towards the liferaft, the master halted the embarkation operation and instructed the crew on the ladder to return onboard the ship. The second mate, already inside the liferaft, was instructed to remain.

After seeing the crew return to the ship, the second mate attempted to climb back up the embarkation ladder. While partway up the ladder, he became exhausted, fell into the sea, and was covered in oil, rendering him unable to reboard the ship or the liferaft. He held onto the liferaft's lifeline and waited for assistance.

The master then instructed the third mate and a third engineer to descend to the liferaft and assist the second mate. After several attempts, they pulled him back onto the liferaft.

As Hafnia Nile drifted northwest, the easterly wind cleared some of the smoke from the starboard side. The master ordered the launch of the two 16-man liferafts from A deck, aft of the rescue boat. After confirming that all personnel were safely aboard the liferafts, he abandoned the ship.

The Singapore Naval Ship RSS Supreme and the Malaysian Coast Guard were activated and responded to rescue all 22 crew members from the liferafts. Salvage tugs arrived within hours. Hafnia Nile remained on fire.

The hull breaches resulted in the loss of approximately 4065.44 MT of naphtha cargo and approximately 565 MT of Very Low Sulphur Fuel Oil (VLSFO).

The second mate's schedule

The second mate had started his journey at his home in Colombo, Sri Lanka on July 17, arriving at Bandaranaike International Airport at 2230H. This flight departed at 0235H the next day for Kuala Lumpur, arriving at 0630H. Then he took a connecting flight to Singapore, arriving at 0910H. He was taken to Marina South Pier and boarded Hafnia Nile at 1200H.

On boarding, he met the off signing second mate, had lunch, and began the handover process. At the time, the ship was engaged in multiple concurrent port operations, including bunkering, annual inspection, class survey, provisioning stores, garbage disposal, crew change, gyro and magnetic compass servicing, radio technician attendance, superintendent inspection, and other essential servicing works. Gyro servicing and class surveys were still in progress.

At 1800H he handed over duties to the third mate, had dinner, and returned to his cabin at 1900H, resting at 1930H. At 2120H a fire alarm was activated. No prior announcement had been made about this. He called the bridge but the line was engaged. He left his cabin and was informed that it was a test. The alarm continued for 20 minutes. From his cabin he could hear crew dragging luggage as they left the vessel. He was not able to sleep again. He returned to the bridge at 2300H.

Extending the shift

The master had extended the second mate's watch duty from 4 hours to 6 hours on the basis that a newly joined crew member was expected to be well rested and he had a scheduled rest from 1800H-0000H.

The master wanted to provide extended rest to the chief mate, who had said she was very tired and feeling unwell. The chief mate had been alternating six hour bridge watch duties with the master during the 22 hours prior to arriving in Singapore. She had also been supervising port activities while at anchor, including class annual

survey activities.

So the master gave the chief mate a prolonged rest period from 2000H to 1600H the next day. This led to the need to increase the watch duty of the second mate.

A six-on/six-off watch system among the junior officers meets the minimum rest-hour requirements under STCW.

Onboard Ceres I

At 0535H, the Ceres I's bridge team observed a northbound ship, later identified as Hafnia Nile, at a range of 6.4 nm, approaching from the starboard side at about 14 knots. The chief mate assessed its course and speed as normal and did not attempt to make contact.

By 0555H, the chief mate observed Hafnia Nile approximately 1nm away, appearing to be heading directly towards the vessel rather than passing ahead.

The chief mate sounded the ship's whistle and instructed an officer to flash the Aldis lamp. No response was received.

The accident investigation noted, "an early call via VHF Channel 13 would have aligned with internationally recognised practices and may have alerted Hafnia Nile that Ceres I was at anchor."

The chief mate observed Hafnia Nile initiating a starboard turn. At 0602H, Ceres I experienced a shudder and a forward surge.

Immediately following the collision, a flash fire ignited at the forward starboard bow, spreading rapidly across the main deck and igniting the sea surface on both sides of the ship.

Crew sounded the emergency alarm and made an announcement instructing all personnel to muster. The master and second mate arrived on the bridge to coordinate the emergency.

A distress alert was transmitted, and an order was made over the public address system for all personnel to muster at the Cargo Control Room (CCR). The air conditioning system was shut down to prevent smoke ingress into the accommodation.

The fire continued to burn on Ceres I's bow and Hafnia Nile's port side before both ships separated. The fire spread across the main deck of Ceres I, reaching both bridge wings and shattering the starboard bridge glass. Flames also spread over the surrounding sea surface. The vessel began to drift due to the parted port anchor chain.

By about 0608H, all crew and shore workers had mustered. Flames and smoke were visible through the windows. As smoke entered the accommodation, the master instructed all personnel to cover their mouths and noses with wet cloths.



Hafnia Nile showing collision impact and subsequent fire damage. (Source: Hafnia Nile company and annotation by TSIB)

Between 0620H and 0624H, the master instructed the crew to relocate to the No.5 starboard ballast tank on the main deck, which was free of fire and smoke. But after assembling at the location, they realised it was in close proximity to Hafnia Nile, which was on fire.

The master assessed the forecastle area on the windward side as a relatively safer location and ordered all personnel to move to the starboard bow, keeping low to minimise smoke inhalation. The master noted many of the personnel were distressed or in shock.

At around 0700H, the master organised firefighting operations. The fire in the accommodation area was brought under control and was fully extinguished by about 0800H, although isolated deck fires continued.

As the vessel drifted northerly at about 1.6 knots, attention turned to the evacuation of shore workers, particularly the two who were seriously injured.

By about 0900H, all 14 shore workers including the two seriously injured were transferred for medical care. The master then ordered all crew to withdraw to the forecastle area as a safety measure against potential flare-ups.

The bulkhead of the steering gear room was extremely hot, and smoke was observed emanating from the funnel. The engine room door was partially opened, revealing an uncontrollable fire. Due to the proximity of the fuel oil tank, the master ordered the firefighting team and crew to remain forward.

The fire onboard resulted in the injuries of two shore workers, one of whom later died in hospital.

The shore worker who survived recounted that at approximately 0600H, he and his colleague, both sleeping in the 20-foot container located on the starboard side of B deck, felt the ship shudder.

They exited the container to assess the situation. Upon stepping onto B deck, they were engulfed by a flash fire advancing from the forward starboard side. Both managed to reach the cargo control room, where crew members were mustering.

Initial assessments to Ceres I identified

extensive fire damage to the ship's hull and superstructure. The port and starboard cranes, the lifeboat, and the liferafts were damaged.

The bosun store on the starboard side was completely burned and there was partial fire damage on the port side. The port anchor and eleven shackles of chain were lost.

The steering gear room was burned, and a freshwater generator, and auxiliary engine No.2 generator were damaged. The main engine could not be turned.

Changes following the incident

Following the incident, Hafnia Nile's operator implemented a range of safety actions, including improving bridge watchkeeping practices, fatigue risk management, bridge resource management, and situational awareness.

Also, actions aimed at strengthening safety culture, leadership engagement, and compliance with applicable requirements under the ISM Code, STCW Conventions, and COLREGs.

Travel schedules are now planned to minimise fatigue, with overnight flights to be avoided for navigation watchkeepers wherever practicable. All top four officers and navigation watchkeepers (second mate, third mate, able seafarer deck) are to be provided with one night of hotel rest at the joining port before assuming duty.

Officers were reminded that the watch officer is not to carry out administrative tasks during navigation unless an effective lookout is maintained. If operational work is required on a bridge computer, an additional officer must be present.

The operator enhanced its navigation training course to increase emphasis on radar usage and early detection of developing targets. This includes simulator-based training to reinforce long-range radar scanning and timely target acquisition. A programme "Ambitious Leadership @SEA" was introduced to strengthen command presence, decision-making, and accountability among senior shipboard personnel.

A Navigational Focus Group has been established to review lessons learned, update procedures, and promote continual improvement.

Hafnia Nile's company was recommended to ensure that CPA/TCPA alarms remain active throughout navigational watches and that alarm settings are systematically reviewed and confirmed during passage planning and watch handovers, to support the timely identification of developing close-quarters situations.

Ceres I company was recommended to provide clear guidance in its SMS procedures on the use of available communication tools, such as sound signals, light signals, and VHF radio, when responding to developing or time-critical close-quarters situations.

Frontline, DHT, Teekay, TEN on the tanker market

Senior executives of Frontline, DHT, Teekay, and TEN shared perspectives on the tanker market in a Capital Link webinar on Dec 16. The market is strong now but there are uncertainties about the coming years

For sure we have a very firm market now,” said Lars Barstad, CEO, Frontline Management, speaking in a Capital Link webinar on December 16.

“We have potentially turned a corner. I didn’t expect the corner to be that quick. It is exciting as we move to 2026.” But the levels of political uncertainty are the highest in 20 years.



Lars Barstad, CEO, Frontline Management

There is a large amount of trading volume being concluded at today’s high rates, \$110k a day to \$120k a day for a VLCC, he said.

A good market means both high prices and deals being done. At the time of a previous spike in prices in June, “no ships were fixed at the peak.”

Frontline has a record amount of oil in transit, and quite a substantial amount of oil in floating storage, he said.

It helps the mainstream tanker market that sanctioned crude, such as from Russia, is struggling to find vessels, which means that the oil cannot be purchased. So this oil demand has to be satisfied by “compliant barrels,” carried in mainstream vessels, he said.

“That’s the big trend we’ve seen. It was accelerated by how India and further out China connected themselves in this market.”

And there are indications that global oil demand could be higher than the International Energy Agency is predicting, he said. Some oil

majors are starting to invest in exploration and production again.

The biggest growth in oil demand is from non-OECD countries such as in Africa. “They can’t afford to be green, they want to get warm and cook food first,” he said.

The global tanker fleet is getting very old. Charterers are still reluctant to accept vessels older than 20 years, and “that threshold is pretty firm.”

Charterers may want to trade the cargo during the voyage, and believe this can be harder if it is carried in an older vessel. Also, “insurance is astronomically more expensive for 20-year ships than a younger ship.”

DHT

“The earnings today for companies is phenomenal,” agreed Svein Moxnes Harfjeld, President and CEO of DHT Holdings. “We are up for a pretty good period.”

The company has six time charters coming up, for either spot charter or renewal “at higher rates”.

It serves the company well to have a mix of spot and time-chartered vessels. “This is something we can run with for a longer time.”

Looking further out, tankers will probably continue to be volatile, with prices changing by as much as \$20k-\$30k on daily rates.



Svein Moxnes Harfjeld, President and CEO of DHT Holdings

The global tanker fleet is getting much older, with low levels of newbuilding. By the end of 2028 we will have 50 per cent of the fleet older than 15 years, 25 per cent older than 20. “These are extraordinary numbers,” he said.

On global oil supply, Mr Moxnes Harfjeld is pleased Aramco pushed OPEC to supply more oil to the market. “It’s clear that the market needed this oil.”

DHT has commissioned energy analysts from three different companies to try to determine when oil demand will peak. It may happen in the mid 2030s, he said. But after that it will plateau, not drop off. “It is very hard to move away from fossil fuels.”

The European Union is considering removing its ban on new vehicles with combustion engines from 2035, he noted. “This is a big recognition that the ambitious policy statements that came out in the ESG frenzy, they recognise now it is not doable. It will go in reverse.”

If peace in Ukraine was achieved, much would depend on whether it was because the war was ‘won’ or negotiated, he said. Presumably a negotiated peace would include a dropping of sanctions. Then Russia would be selling oil to Europe.

Teekay

The biggest market growth may be for VLCCs, but it has pulled Aframax and Suezmaxes with it, said Mikkel Seidelin, CCO of Teekay Tankers, which mainly operates these vessels. Teekay expects the strong market to “last for a while”.

There may be an oversupply of oil in the short term in 2026, pushing down oil prices he said.

This can lead to a “contango” market emerging, where traders buy oil at the day’s prices and store it, because they know the future price is higher. It also encourages long haul voyages by VLCC, which delays the date which the oil needs to be sold.

In the past OPEC has sought to flush out



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Mikkel Seidelin, CCO of Teekay Tankers

higher cost oil producers by flooding the market. But now they may reduce production a bit earlier to keep prices higher, he said.

But the tanker market is so tight on supply that “we don’t believe we’re going to have a complete collapse.”

“For the VLCC market to balance it needs to be 40 more ships, I don’t see where that’s going to come from,” he said.

We may see China having to replace heavy sour oil previously sourced from Venezuela, if that becomes unavailable, with something in the non-sanctioned market, which will be good news for mainstream operators.

Mr Seidelin agreed that charterers seem to have a ‘hard’ age limit for a tanker to be tradeable of 20 years, up from 15 years a couple of years ago. Most of the older vessels are in the shadow fleet. “The only reason these ships are around is because they are still making money.”

The Ukraine war caused an increase in distance oil was being transported in large and medium size tankers, which could be reversed if the war finishes.

Teekay is keen to replace some of its older vessels with new ones. “We have problem these other gentleman don’t have.”

“You need a lot of cash to grow the fleet. It’s going to be a grind to get the age profile to where we want.”

Shipyards “are in a very comfortable place,” he said. “They have a fairly long order book, they are making a decent return at the price they are building at. This is one of the few times in history of shipping where all segments are firing at all cylinders. That’s keeping yards busy.”

New shipbuilding capacity is becoming available. “We were told there’s no slots anywhere [but] we see slots coming out on a regular basis. There’s things slipping out. When

slots come out they are being snatched up fairly quickly.”

Tsakos Energy Navigation

For the whole market “it’s a positive situation, I think the market has legs,” said Nikolaos P. Tsakos, Founder & CEO, Tsakos Energy Navigation (TEN). “It is good when you have the VLCCs at \$120k+.”

TEN is involved in all kinds of tankers, from VLCCs to product. The strength in the VLCC market also brings up the market for other tanker types.

“Even if the market corrects a bit we are in a very good place.”

Uncertainty about environmental legislation has deterred investment. “If it was not for the uncertainty of the net zero effect, all of us would have ordered more ships [earlier] and would not be enjoying the market we do [now].”

The shipping industry is more commonly affected by oversupply. “I hope we’re not going to shoot ourselves and go on crazy ordering of ships,” he said. Public companies like TEN have internal mechanisms to prevent over-ordering.

TEN has over 75 per cent of its business from time charters, fixed for an average of 5 years, but with a profit-sharing agreement in the contract, so the tanker operator can take advantage of high prices.

On the topic of peak oil, Mr Tsakos noted that there have previously been predictions that peak oil would occur in 2000 and 2020. “It has not come true. I think it is going to be after 2030,” he said.

TEN’s oldest vessel is older than 21 years. “Oil companies still trade her on time charter. Every time we try to sell, we get another year



Nikolaos P. Tsakos, Founder & CEO, Tsakos Energy Navigation

extension at a rate that will not allow us to sell her. For good quality ships there is still place in the trade.”

There has been a significant increase in newbuild prices over the past 5 years. “Korea [yards] are filled up with LNGs and container ships. The same in Japan. You are left with China.”

“We are building the majority of our ships still in Korea because they are mainly shuttle tankers and you need very high specifications for those ships.”

At prices of \$130m for a VLCC for delivery in 2028 or early 2029, you need a long term business of \$60k a day to make a return. “Right now, the long-term rates should not push people to build ships,” he said.

TEN’s share price has increased almost 40 per cent over the past year, but “I still believe we are very cheap,” he said.

Investors are still valuing a tanker business in terms of its assets, “like floating real estate”, rather than looking at the value of the company behind it, he said.

“We need to find a way to revalue the industry to get more respect for what we do, rather than just cold steel. We are trading at 2 x EBITA, I would say is ridiculous.”

Shadow fleet

DHT’s Mr Harfjeld noted that some shadow vessels are doing only one or two cargoes a year.

“We see these vessels are very inefficient,” added Jorgen Lian, Head of Shipping Equity Research with DNB Carnegie, moderating the event. Although they might be used more efficiently if the ‘shadow’ market was stronger.

Frontline’s Mr Barstad noted that we have seen times before when a shadow fleet has reverted to carrying mainstream cargoes, when Iranian sanctions were lifted in 2016.

If there is a peace agreement with Russia, it is likely to include a clause that sanctions are lifted, so it would no longer need to use shadow tankers, he said.

The willingness of the US to tackle shadow vessels in Venezuela is very good for the mainstream fleet, he said.

You can watch the webinar this article is based on at

<https://youtu.be/iHktvRF2fNM>

TO

Dangote refinery's expansion plans

The Dangote refinery in Nigeria, the largest single train refinery in the world, announced plans to double capacity by 2028. S&P analysts reviewed what impact this could have on world cargoes and markets

The Dangote refinery, in Lekki, Nigeria, opened in May 2023, with a refining capacity of 650,000 barrels of crude oil per day (bpd), making it the largest single train refinery in the world. Initial investment was \$19bn.

Then in Autumn 2025, Dangote announced it was planning to more than double its size by 2028, to 1.4m bpd, to make it the largest refinery in the world.

Dangote is understood to be modelled around the Jamnagar refinery in India, currently the world's largest, processing 1.36m bpd.

The first phase of the refinery "immediately dwarfed the scale of every other refinery on the continent," said Kelly Norways, Downstream Oil News Reporter, EMEA with S&P Global Energy, speaking at a webinar organised by S&P.

"It made West Africa a serious contender as a local fuel hub and put pressure on European fuel producers."

For gasoline, Dangote has produced on average 113kbpd over the past year. The company has said it is able to supply 358 kbpd from February 2026, although it is hard to assess this, she said. For now, Nigeria is still dependent on imports of gasoline, with overall gasoline demand in Nigeria is 314 kbpd.

The site has a residue fluid catalytic cracker (RFCC) which can make 172kbpd of gasoline, and a reformer which can produce gasoline when the cracker is offline, at 118 kbpd. There have been a number of recent outages to the cracker, some of a number of weeks duration. This means the refinery does not meet its full capacity to produce gasoline.

The expansion

With the expansion, a second refinery train would be built, including a second crude distillation unit (CDU). This second unit gives the overall plant more reliability, since one unit can keep refining if the other is out of action.



Changing the face of world shipping? From left to right, Devakumar Edwin, VP oil and gas, Dangote Industries; Makozi Chikote, minister of energy, Zambia; Aliko Dangote, president of Dangote Industries. A visit to Dangote refinery in February 2025. Photo courtesy Dangote

As well as increasing the overall refinery capacity from 650 kbpd to 1.4m bpd, the expansion would increase polypropylene production from 830k tonnes per year to 2.4m tonnes per year.

It will mean an improvement in fuel quality. Currently its gasoline only meets the "Euro 5" emissions standard, so its fuels cannot be used in Europe. But with the upgrade, it will comply with the "Euro 6" emissions quality standard.

The expansion will increase capacity to produce linear alkylbenzene, which is used in detergent manufacturing.

Separately, the refinery has ordered 4,000 tanker trucks running on compressed natural gas, to make deliveries to the domestic market.

The refinery has its own port and could expand the port with the second unit. There are plans for a new port for containers and dry

bulk, including fertiliser and petrochemicals.

Dangote Group has a separate project to build a 2,000km pipeline across Southern Africa, loading fuel at Walvis Bay, Namibia, on the West Coast, and running to Zimbabwe and Zambia, which do not have their own coastline.

Changing flows

S&P is building models predicting output of the refinery, using a utilisation rate of 90 per cent (of the maximum 1.3mbopd), and 45 per cent of this going to gasoline.

The remainder of the output will probably include jet fuel, likely to go to the US and Europe, and diesel, likely to go to markets in West Africa, Southern Africa and Brazil, said Tanya Stepanova, Associate Director, Oil, Midstream and Downstream with S&P Global Energy.

In Brazil there is a projected 250kbpd

deficit of diesel projected, due to lack of investment in its own refining capacity.

A year ago, S&P thought there would be more global gasoline production capacity than demand. It forecasted that demand would weaken in the US and Europe, as production capacity increases in Nigeria, Mexico and elsewhere.

But “demand proved to be not as weak as we thought,” she said.

And on the gasoline supply side, there were more [refinery] shutdowns which made additional supply much smaller,” she said.

“The market no longer looks that loose.”

Refineries around the Atlantic made bigger profit margins than expected due to stronger demand and weaker supply.

For many years West Africa and Nigeria have been “very dependent” on Europe for gasoline supply, sometimes with over 1m tonnes per month, said Matthew Tracey-Cook, Senior Price Reporter with S&P Global Energy.

Now we are seeing a decrease in flow from Europe.

Crude inputs

The refinery was built with the idea that it would process mostly Nigerian crude, and this has happened so far, with 62 per cent of its input from Nigeria, she said. Of the balance, 30 per cent is WTI Midland from the US, which is “good for maximising gasoline blends”. At times during summer 2025, US imports have been larger than Nigerian inputs.

Dangote has also been experimenting with different grades of oil, sourcing from Algeria, Ghana, Brazil, Angola, Ceiba (Equatorial Guinea), Ms Norways said.

Finance

The company found refinancing its debts last year a “major hurdle,” Ms Norways said. \$4bn was refinanced in August 2025 from a group of lenders. Now it is going back to some of its lenders for the second phase.

Afreximbank is discussing a further \$5bn loan. The company may list 5-10 per cent of it shares. It is also considering allowing outside companies to be shareholders, perhaps from the Middle East.

Nigerian National Petroleum Company (NNPC) has a 7.2 per cent stake in the

refinery, which could be expanded. Also, equipment providers could be engaged as shareholders, including Honeywell.

Africa demand growth

The expansion appears to be motivated by the belief that Africa’s demand will continue to grow for the foreseeable future, said Tanya Stepanova, Associate Director, Oil, Midstream and Downstream with S&P Global Energy.

S&P forecasts that Africa will be “one of few remaining pockets of growth” for oil consumption, along with Latin America and non-OECD Asia.

There also seems to be a belief that no-one else will invest in Africa’s downstream on this scale. Over the past 10 years, there has been more talk about closures of refineries in Africa, particularly South Africa, rather than investment, she said.

On the consumption side, Nigeria demand is likely to grow due to population growth, not growth in use per person, she said. The World Bank estimates that Nigeria’s population will grow by about 130 million people by 2050. There will be a 78 per cent increase in working age population.

Drewry perspective on crude and product tanker market

Crude tanker rates surged at the end of 2025; product tanker rates declined in 2025 from highs in 2024 due to newbuilds. Maritime consultancy Drewry shared its analysis of the market

Through talent attraction, the cruise sector tries to create a positive image of what life onboard is like, something the tanker sector does not do to the same extent. In reality, cruise ship work is hard too, but with a better image as a place to work.

2025 was a “mixed bag” for the tanker market, said Rajesh Verma, deputy director, bulk shipping research at Drewry, speaking at the Drewry Tanker Shipping webinar on December 9.

We saw crude tanker rates surging towards the end of 2025. This was because of speedy unwinding of OPEC’s production curbs (self-imposed oil production restrictions). This led to more oil production and more need for tankers. Also “relatively slower growth” in the size of the fleet.

But product tanker rates had their highs in 2024, and declined in 2025, primarily due to newbuild ships in the market, he said. The product tanker fleet grew 6 per cent in 2025.

In 2023 product tanker rates were commanding a premium in relation to crude tanker prices. That has come down significantly, he said.

Looking at the 2026 outlook for vessel supply, the crude sector appears to be a winner in terms of expected charter rates, with only a small growth in the tanker fleet predicted over 2026, of 2 per cent. This should keep prices high, he said.

Vessel newbuilding prices surged over 2021 to 2024 and have not come down.

The product tanker supply is expected to increase by another 6 per cent in 2026,

with more vessel deliveries. From a rates perspective, this “flurry of deliveries will be a bit of concern,” he said.

It suggests the crude tanker market will perform slightly better than product tankers in 2026 in terms of revenues.

There has been a rise in ordering VLCCs recently which will lead to a surge in deliveries in 2027.

The average age of tankers is still going up, which suggests that there will be an increase in scrapping at some point in the future too, he said.

Demand for tankers

Analysts expect oil demand, and the requirement for marine transport, to grow

0.7m barrels of oil per day in 2026, similar to the growth in 2025.

Three factors which may impact this are OPEC's oil production rates, Russian crude flows and Suez Canal traffic, he said.

If OPEC continues its December 2025 oil production rates, it will mean oil supply increasing by 3.3m barrels per day. This will be a significant over-supply, which may push OPEC to reduce production to keep prices high.

This would also mean a significant flooding of oil in the market. There may be an increase in demand for tankers to be used in floating storage, just as we saw during Covid 19 period.

With Russian crude flows, it is possible a peace agreement in Ukraine will lead to sanctions being dropped and a return of Russian crude shipments to Europe. This is a short haul trade, which will hurt the demand for tonne miles.

Also, if sanctions and other restrictions are dropped, the dark fleet will return to normal trade, and inflate supply, he said.

On the other hand, if the current situation continues, India could reduce its purchase of Russian oil due to sanctions, but then the oil will be sent to China, carried in dark fleet tankers over longer distances. "In that case, demand for the dark fleet will surge," he said.

Alternatively, we could see Russian exports

shrinking. This may lead to demolitions of dark fleet vessels, and a growth in Middle East crude exports to compensate, which makes particular use of VLCCs.

With Suez Canal traffic, we have seen the Houthis declare they will stop attacking ships, but traffic has not returned to the level it was before the attacks. "There is not much clarity on this," Mr Verma said.

If the Suez Canal becomes acceptable, traffic will switch to mid-size tankers, he said.

The need to take a longer route from Middle East to Europe, around the Cape of Good Hope, increased demand for VLCCs.

If crude tanker rates stay high, second hand asset prices will also stay high, he added.

Product tanker market

The transits of LR2 vessels towards the Mediterranean in the Suez Canal has recovered slightly since the Houthis declared they would stop attacking ships. But it hasn't yet reached the 5-year average, said Anshika Prajapati, senior analyst for tanker shipping with Drewry. There were 75 tankers a month in 2023, and transits in October 2025 were "significantly lower".

If the peace deal with the Houthis holds, that will be a "huge negative" in the product tanker market, with vessels travelling much

less distance to get between the Middle East and Europe.

Meanwhile, Brazil and Turkey have become large buyers of Russian diesel. Russian naphtha has been re-directed to Singapore and Taiwan, she said.

Share prices

Tanker company shares are doing well. Drewry's Crude Tanker Equity Index has "significantly outperformed the S&P 500," said Tanisha Mundhra, equity research analyst with Drewry.

Developments in the market over 2025 relating to share prices were increased sanctions in Q1, the Iran-Israel attacks in Q2 and Q3, and excess supply in the market with a need for floating storage in Q4.

In Q3, several crude and product tanker companies saw weaker results. Some of this was due to companies operating with smaller fleets which reduced the available revenue days. Some crude operators benefited from capital gains from selling vessels, and lower interest rates.

In Q4, Drewry expects earnings to strengthen, supported by higher forward bookings.

You can watch the webinar online here

<https://www.youtube.com/watch?v=aBZq4hUA-dM>

Market perspective from Scorpio Tankers

Scorpio Tankers shared its perspective on current charter rates in product tankers, its newbuilding plan, why it divested shares in DHT, and expectations for the product tanker market, in a Capital Link webinar

Scorpio Tankers of Monaco claims to be the world's largest product tanker owner, with 93 product tankers in its fleet, which are owned, leased or financed. These are 14 Handymax, 42 medium range and 37 LR2s. There are a further 8 newbuilds, said James Doyle, head of corporate development and investor relations, speaking at a Capital Link webinar on Jan 14.

There has been big fleet growth since 2012, when the company had 11 vessels.

More recently, the company has been selling its older vessels to maintain the average age of the fleet, he said. The average age is 9.8 years.

Every \$10/day increase in charter rates means the company earns an extra \$340m cash flow each year, he said. The company has repaid \$2.5bn in debt since December 2021.

The cargoes are mainly gasoline, diesel, jet fuel and naphtha.

Charter rates

Since the US intervention in Venezuela in early January, Scorpio's financial sentiment has moved from "quietly optimistic" to "very bullish," said Robert Bugbee, president of Scorpio Tankers. "Rates in the product market have moved continuously stronger."

The US intervention in Venezuela pushed up rates because it means Venezuelan exports to the US, and presumably also imports, may now switch to mainstream vessels.



Robert Bugbee, president, Scorpio Tankers

“Clean tanker prices, especially for vessels 12 years old or less continue to go upwards. Time charter demand is extremely strong. [That is] every type of charterer – national oil companies, oil companies, traders and owners,” he said.

Negotiations ongoing with charterers “already indicate stronger prices than what has been announced up to date.”

“Q1 in products is starting very strong relative to Q4 [2025] and extremely strong relative to Q1 last year.”

“We’ve chartered out a few of our older ships for 5-year charters at rates that really securitise the income and value of those vessels. That’s a strategic position,” Mr Bugbee said.

It is a very busy time in the charter market, added Lars Dencker Nielsen, chief commercial officer. There is “a lot of activity from all the major players.” There have been 3 year, and 5-year charters done “quite a few times now.”

There have been time charter rates for an Aframax for 1 year of over \$40k a day. “We have not seen those numbers since the early days of Ukraine invasion. Same thing for 3-5 year [charters].”

Some people say that ships need to be super modern for time charters, “but we are commanding very big numbers for ships built in 2015.”

“We have a strategic relationship with people we do time charters with, the top tier names in our industry,” he said.

The company has not increased the proportion of its fleet on time charter. “Ships have come off [time charter], we saw the market has moved up, we were able to recycle some of the time charters.”

For shorter term time charters, “we have a

tactical / strategic view, it reflects on a market we might want to go into or not.”

It helps that total demand for refined products is expected to increase 1.2 per cent this year to 1m bopd.

The rates are also pushed up by higher tonne mile demand for transport, driven by refinery closures in the US and Europe, so products need to be refined further away from customers, Mr Doyle added.

Cargoes between Europe and the East are still going around the Cape of Good Hope rather than the Suez Canal, apart from dark fleet vessels, he said.

And with the dark fleet vessels being very old, they would not gain much employment in the regulated market if the conflicts driving their use are resolved, he said.

Shares in DHT

In November 2025, it was reported that Scorpio had sold 2.3m shares in tanker operator DHT Holdings, at an average price of \$13.25 (total value \$30.5m).

DHT shares were trading at above net asset value, Mr Bugbee said. “we had the opportunity to take all of our money out at a great return.”

The funds could then be used to order vessels at a lower price, compared to the value of DHT’s vessels based on the asset value of the company.

“That was purely an investment.”

Newbuilds

The company ordered 8 newbuilds and sold 11 vessels in 2025. The improving newbuild market made it possible to do “a straight swap to clear out the older vessels,” Mr Bugbee



Lars Dencker Nielsen, chief commercial officer, Scorpio Tankers (screenshot from webinar)

said. “You take things one at a time. I don’t think we’re in any rush to renew the fleet.”

World tanker market

Looking at the world product tanker market, the order book for newbuilds is 19 per cent of the existing fleet, which seems high, Mr Doyle said.

But you should bear in mind that 20 per cent of the existing product tanker fleet is over 20 years old. By 2028, that rises to 31 per cent.

And 26 per cent of the current Aframax / LR2 fleet and 9 per cent of the MR fleet are sanctioned, he said. “In a more typical market much of this tonnage would have been scrapped.”

So we may see an increase in scrapping in coming years. The fleet may grow more slowly than order book suggests.

If Venezuela oil exports switch to the US, as the US government would like, they are likely to be in Aframax vessels, equivalent to LR2 chemical tankers, driving an increased demand for LR2s and Aframaxes, Mr Dencker Nielsen said.

Venezuela’s exports in 2025 were 700k barrels of oil per day, mainly to China, carried in dark fleet vessels.

Venezuela needs to import naphtha, which is mixed with its heavy crude to reduce its viscosity, to make it possible to transport.

It is clear the US government would like Venezuela to grow its oil production but there are infrastructural challenges along the way. “It will take a while to grow,” he said.

Meanwhile many of the dark fleet vessels used by Russia are over 22 years old. If there is peace in Ukraine, and these vessels are no longer sanctioned, they are unlikely to be able to re-enter the standard market.

For these vessels, “it is fair to say the scrapyard is the destination of choice,” Mr Dencker Nielsen said. “The ships are not insured by any international institutions. Standards have dropped completely. Under normal circumstances they wouldn’t be in any type of trade, they would be in the breakers already.”

This means that the standard fleet would require a “huge amount of rejuvenation” after any peace deal, to be large enough to carry Russian cargoes as well as the current cargoes.

This article reports on a webinar produced by Capital Link, which you can watch on YouTube here <https://youtu.be/Jcpcf1dX4d0>

Can the US arrest tankers outside US waters?

Many tanker operators may be concerned to read about US seizures of tankers carrying Venezuelan oil, wondering who will be next. There is a legal structure behind this. Two experts explained the issues

Over Dec 2025-Jan 2026 the US government seized a number of tankers linked to Venezuela and said that the country was under blockade. Tanker operators and their customers may be very concerned about this. Is it legal?

A lawyer and compliance consultant explained the issues, speaking in a webinar on Dec 19 organised by maritime intelligence company Pole Star Global, "Venezuela Maritime Sanctions in Focus: Legal Authority, Dark Fleet Networks and Enforcement Risks."

They also discussed how Venezuela dark fleet networks operate and the sanction evasion tactics in use.

Legal basis

US regulations allow the government to seize property connected to violation of US law, including sanction violation, said Carmella O'Hanlon, Maritime Associate, Blank Rome, based in New York.

Ms O'Hanlon specialises in litigation, focussed on shipping, logistics and commodities. She also advises clients on US sanctions.

Seizure does not need a criminal conviction, but the government must be able to prove "probable cause" that the subject is linked to criminal activity, which is "not a very high bar."

So for the seized tankers, the government needs to show the vessel is probably sanctioned or linked to sanctioned activity.

Property which has been seized can then be legally sold, and court proceedings can determine where the money goes, including to a "victims of terrorism fund," she said.

The US government would have had to get a warrant for the seizure. It went to a district court in Washington DC. "The judge who signed off on this is very well known in sanctions land," added David Tannenbaum, Director, Deep Blue Intelligence, Blackstone Compliance Services.

Owners can challenge the seizure by showing they either did not know about criminal activity or took reasonable steps to terminate the use of the asset for criminal activity.

The Venezuelan government had been designated a "foreign terrorist organisation" by the US, so any tanker linked to it could be legally seized.

There is a legal complexity here, in that the accusation against Venezuela driving the terrorism designation is that it is supporting drug sales to the US. But laws relating to fentanyl only apply where the US has jurisdiction.

Normally, vessel seizures are conducted in the territory of the state doing the seizing (such as US territorial waters). Or otherwise, it would normally be done only with the consent of the ship's flag. Or a ship could be seized by another nation while in its waters and then handed to the US.

In the case of the tanker "Skipper," seized on Dec 10, it was flying the flag of Guyana,

although Guyana had de-listed the vessel, so it was effectively flying without a flag, giving the US further ground to seize it, she said.

When vessels are put on the sanctions list by OFAC (Office of Foreign Assets Control) they are normally immediately delisted by their flag state. Not all of the Venezuelan dark fleet is under direct sanctions.

The Skipper had been additionally linked to Iran, which has been under U.S. sanctions since 2022, Mr Tannenbaum said.

There is no dark fleet specific to Venezuela. But dark fleet tankers such as Skipper had been bringing Iranian refined products to Venezuela and then taking heavy oil from Venezuela to east Asia, primarily to China.

There are "at least 150" tankers going in and out of Venezuela, although they are not all working for Venezuela at any time. "Some might be off to Russia, others to Iran, others doing something else with their lives."

Can US blockade?

On Dec 16 the Trump administration declared a blockade of Venezuela, although it was not authorised by Congress, which would normally be required.

"I don't think this administration has the patience to petition congress," Ms O'Hanlon said. "Congress is not going to authorise a war against Venezuela," Mr Tannenbaum added.

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“The OAS (Organization of American States) is not going to get onboard either.”

This means a blockade of Venezuela can only be achieved indirectly, by “implementing sanctions in a clever way.”

The US president can also invoke powers in the “Trading with the Enemy Act (TWEA)” only in the time of war.

There is also an International Emergency Economic Powers Act (IEEPA) which is “very broad, covering all sorts of national emergencies,” Ms O’Hanlon said. The president has to declare a national emergency, and Congress has the power to pass a bill to overcome it.

“The world is getting a masterclass. Maritime sanctions are very different to how OFAC has implemented sanctions with banks,” Mr Tannenbaum said.

Hiding ownership

Dark fleet vessels have complex networks of ownership. For example, in 2020, one company had 12 vessels owned by Special Purpose Vehicles in the Seychelles, all with the word Trident in their name, and all managed by a company in Turkey, Mr Tannenbaum said.

Then the fleet was split in half, and six vessels

went first to owning companies in Singapore, then were put under a Belize intermediary, still with employees in Turkey. These vessels were engaged in sanctions evasion. The other six vessels were employed carrying Russian crude.

AIS spoofing

Dark fleet vessels send out false data from their automatic identification systems (AIS), to look like they are engaged in legitimate activity, for example loading off the West coast of Africa.

Sometimes the position data transmitted in their AIS is generated by computer calculations, showing the vessels making “geometric patterns that lack economic purpose,” he said.

Some vessels appear not to have visited any port for 6 months, or are staying in the same position, he said. “This is typically associated with Venezuela related evasion.”

Vessels can also “hijack” position signals from another vessel, Ms O’Hanlon said.

At some point, the vessel’s true track will intercept the spoofed track, and the spoofing is switched off. This typically happens off Guyana, he said.

“AIS is a completely permissive and easily duped system. It doesn’t even interrogate

where the device is reporting from. There’s no attribution. There are better systems, but they are not being currently implemented.”

Knowing your tanker operator

For charterers concerned about chartering a sanctioned vessel in error, a red flag to look for could be that the tanker operator only has one vessel, Ms O’Hanlon said.

Another red flag is a vessel that has not had a port call in 3-6 months. “We recommend reviewing the vessel’s AIS data in detail for signs of obvious spoofing.”

Shipowners can be placed in a difficult position if they are asked by the US Department of Justice to help them seize a cargo, because if they comply they can be then sued by the cargo owner, Mr Tannenbaum said. Although if you get into this situation due to an error of a third party, you may be able to sue them, depending on the sanctions clause in your contract.

Shipowners can potentially have a nightmare situation, knowing they have committed a crime, getting into an agreement with prosecutors, having huge legal fees and reputational damage.



How Seaven manages crew

Seaven of Piraeus runs 20 vessels, mostly on short-sea routes, much more demanding workload for crews. Crewing manager Nikos Chanos explains how the company recruits, trains, manages, and supports its seafarers

Seaven Tanker & Dry Management of Piraeus manages 12 oil / chemical tankers and 8 cement carriers, largely on short sea trades in Europe / Mediterranean, European continent and the Black Sea, all under the Greek flag, serving oil majors and major oil traders.

Short sea trading is much more intense work for crew, since they spend a bigger proportion of their service time managing complex port calls.

The company manages around 1200 loading / discharging operations for tankers annually, and around 900 loading /discharging operations for cement carriers, so one - two for each vessel in 7 days on average.

The vessels need crew with specialist skills. Each chemical tanker may have 8 different cargoes onboard, such as different vehicle fuel grades.

The cement carriers are highly specialised vessels with strict maintenance requirements. Loading and discharge of a cement carrier

is a complex operation, using suction and compressed air.

Seaven was named “Tanker Company of the Year” in the 2025 Lloyd’s List Greek Shipping Awards, competing with companies with much larger vessels.

Lloyd’s List says that the company’s success “highlights that a smaller, non-listed company can achieve excellence alongside the industry’s largest players.”

For the past 6 years Seaven has seen “zero spills and zero contamination incidents for chemical tankers,” says Nikos Chanos, crewing manager.

In November 2018, Seaven became the first company in the world with vessels under 10,000 dwt to be certified by the Green Award Foundation.

Seaven has a comprehensive Green Transition Plan, to adopt biofuels, make retrofits and use advanced low-friction coatings to reduce carbon intensity by 40 per cent by 2030. It has been

voluntarily publishing ESG reports since 2022.

Nikos Chanos

Nikos Chanos started his maritime career as a port agent, working on crew-related matters for cruise operator Royal Caribbean Cruises, including crew changes, seafarer logistics, and medical cases.

He then moved to the offshore sector, working for drilling company Ocean Rig as a workforce supervisor.

The work gave Mr. Chanos an understanding of “human factor risk at scale,” he says. “That environment was highly regulated, safety-critical, and unforgiving for competence gaps.”

In his current role as crew manager at Seaven, he approaches crewing operations from a people-focused perspective, he says. Crewing, at its core, is “hardcore HR.”

This means applying structured HR programs, from training, coaching, and mental wellbeing



Nikos Chanos, Crewing manager of Seaven

initiatives to succession planning, within the highly operational world of maritime crewing.

Short sea challenges

With short sea shipping, there are fewer opportunities for crew to rest, particularly for people in more senior ranks, he says. This can easily lead to burn-out, he says.

Short sea shipping can have higher crew turnover than deep sea trade as the work is more hands-on, involves long periods on standby in busy waters, and requires demanding loading and unloading schedules.

There is also higher commercial pressure, with short sea trades typically running on tight margins. This limits the ability to pay higher wages.

It can be harder for crew to settle in on a vessel in the short sea trade, with so much work managing port calls, he says.

But some European seafarers prefer it, because it means they are working closer geographically to their families, Mr Chanos says. Many European seafarers make the switch to European short sea shipping after their first child is born.

Short sea shipping work can be good for career progression, because people get an opportunity to develop skills in multiple areas quickly. Later they may want to take these skills to work in deep sea operations in a higher rank, where higher wages may be available.

Crew working arrangements

Seaven's goal is for seafarers to be able to work for 4 months onboard then have 2 months at home. This schedule is considered to offer a good work-life balance. It is not always possible due to scheduling and operational needs, but "90 per cent of the time we follow it," he says.

Mr. Chanos would very much like to enter into longer-term contracts with crewmembers.

But prevailing market pressures, compounded by the expectations of a younger workforce prioritising work-life balance, make this unfeasible, he says.

Seaven seeks to arrange for crewmembers to work with the same colleagues on subsequent voyages, and with the same supervisors, as far as possible, to foster strong, well-integrated teams ready to face the demands of each voyage, while minimising handover periods.

Seaven regularly invites senior crewmembers to spend two to four weeks working in the office to better understand shore-based operations and to reinforce a sense of team integration.

The vessels are Greek flagged, which requires that five crewmembers, including a cadet, be Greek nationals, out of a typical total complement of 16 to 19 crew.

What young seafarers want

Seaven's crew have one of the lowest average age groups in its sector, the company believes.

Younger seafarers care less about the actual salary than older ones, but care more about clarity, structure and fairness, Mr Chanos says.

They value clear contract terms and a transparent plan for when they will join the vessel and when they will sign off. While they understand that some flexibility is inherent in the job, they are not willing to accept last-minute changes as readily.

Younger seafarers like to see clear promotion pathways, he says. "They want to understand how today's effort translates into tomorrow's rank."

The younger generation is ready to work hard but expects the company to comply with rest hour regulations and provide a manageable workload with realistic operational planning, he says. "They can be more sensitive to burn-out."

Younger seafarers often ask for mentoring from supervisors and want to see communicative masters and senior officers. "Poor leadership is one of the main reasons younger crew leave, even more than salary," he says.

"They want to work for a company that takes safety seriously and has a professional team on shore. A company that demonstrates consistency between procedures and reality."

A young generation "may accept demanding operations but not chaotic systems," he says. "They are not less committed but less tolerant of ambiguity."

Training

Seaven provides crew training specific to short sea trading. The training is specific to people's rank, vessel type and chemical cargoes carried. It uses e-learning tools from "Ocean Learning

Platform" (formerly VideoTel). The training pipeline is "structured, and progressive," he says.

The company "invests heavily" in cadets. All Greek flagged vessels are required to have one cadet onboard for 12 months at a time. "Cadets are selected carefully and exposed to real tanker operations," he says.

Over 60 per cent of people in senior roles, including masters, progressed from being cadets, he says. "This creates stronger loyalty and continuity."

Seaven seeks to reduce unnecessary training, which can be a distraction.

"The goal is to support the vessel, not overload the crew," he says. "We prioritise training that reduces operational and human factor risk."

There is a feedback loop with training and operations, where the training needs are assessed based on operational experience, outcomes of vetting and port state inspections. "This ensures the training pipeline remains dynamic and relevant."

The aim is to build confidence and competence over time, "rather than chasing certificates."

Decarbonisation

In its decarbonisation plan, Seaven intends to progressively increase the use of biofuels. Biofuels introduce a range of operational risks, including issues related to fuel quality, compatibility with previously used fuels, and microbial growth, he explains.

As a result, crews require additional training to operate vessels using biofuels. This training covers fuel characteristics, bunkering certification practices, fuel changeover procedures, and the monitoring of vessels for performance deviations.

"Crew vigilance is as important as technical fuel certification," he says.

Energy efficiency system upgrades similarly require dedicated crew training, even where changes may appear minor. Crews must understand what has changed and why. Such upgrades can involve modifications to alarm systems, new failure modes, and revised definitions of normal and abnormal operating conditions.

In addition, the application of new hull coatings may affect stopping distances, alter the speed-power relationship, and impose limitations on cleaning and inspection regimes, all of which crews need to fully understand.

"Technology only delivers value when crews understand how it changes risk," he says.

SeaWasp - a tanker designed for wind

Ship designers Bluetech have created a tanker design “SeaWasp” for wind assisted propulsion, with a fin beneath the water line

Bluetech Finland, an engineering / ship design company based in Helsinki, has developed a design for a medium range tanker with wind assisted propulsion, for International Seaways, called “SeaWasp”.

Wind propulsion specialist Norsepower is involved in the project.

It has an aerodynamic upper deck and superstructure, and semi-enclosed mooring stations to reduce wind disturbance. It also has a fin beneath the water line.

Wind-assisted ship propulsion (WASP) technologies have traditionally been used to add propulsion power to standard ship designs, Bluetech says. These were not originally designed to accommodate the forces associated with wind power.

These projects typically make little or no changes to the ship’s overall design beyond what is necessary to install the units and

comply with regulations, it says.

Bluetech modified its BT50 tanker design so the vessel could extract maximum thrust from two 35-metre rotor sails.

Computational Fluid Dynamics analysis found that the SeaWasp would provide 876 KW of propulsion power for a MR tanker sailing from San Francisco to Korea, equating to 597.2 MT of fuel per annum.

104 KW / 71.5 MT of these savings are achieved by the hull design modification alone. This means that the design offers performance savings on routes where wind propulsion offers limited advantage.

Sailing from South Korea to Singapore, the SeaWasp saves 185.9 MT or 275 kW per annum compared to a conventionally powered BT50 design, due to the prevailing wind direction.

“We set out to develop a ship that is entirely WASP-optimized, but maintains every

essential operational feature,” said Sam Robin, Director of Energy Savings Solutions at Bluetech. “It meets all trade-specific terminal and port restrictions.”

That meant ensuring reasonable build costs, equivalent cargo capacity, and a design fit for purpose. The design was tested in a range of scenarios commonly seen in the MR trade.

The BT50 design is itself “approximately 12 per cent more efficient than the typical tanker performance profiles in the sample fleet.”

The project compared having four x 24m rotor sails and 2 x 35m rotor sails, for both thrust and cost. It found that 2 x 35m sails were best.

“Our goal was a concept design that works in the real-world conditions of the MR trade,” said Michael LaGrassa, Director of Performance and New Construction at International Seaways.

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Digital rendering of Bluetech’s SeaWasp vessel concept equipped with four Norsepower Rotor Sails



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Kongsberg’s contract to supply shuttle tankers, KROHNE’s tank monitoring system CARGOMASTER V6, and API Marine’s new tank level radar product TGD-R97 – our review

Samsung Heavy Industries (SHI) awarded Kongsberg Maritime with a contract to provide “integrated technology packages” for nine DP shuttle tankers for Tsakos Group (July 2025). The vessels will be chartered to Transpetro of Brazil to support offshore operations in Brazil’s pre-salt oil fields.

Construction of the vessels will take place at SHI’s shipyard in South Korea, with deliveries scheduled to begin in 2027.

The technology package includes Kongsberg’s “K-Gauge” tank level gauging system for cargo monitoring.

It also includes Kongsberg’s AutoChief 600 propulsion control system, the K-Pos DP2 dynamic positioning system, the K-IMS information management system, the K-Chief integrated automation system, and a controllable pitch propeller shaft line with a 8.6m propeller.

These systems form a fully integrated solution designed to enhance safety, efficiency, and environmental performance across the fleet, Kongsberg said.

“This contract highlights the strength of our integrated technology offering and our ability

to support complex offshore operations with reliable, efficient, and future-ready solutions.”

KROHNE

KROHNE Marine launched CARGOMASTER V6, the latest version of its tank monitoring and valve control system (January 2026).

The updated system has an improved user experience, reliability, ease of maintenance, and remote support, the company says.

New features include customizable layouts on the user interface, user configurable cargo groups, remote valve and pump control, and online diagnostics. There is also enhanced remote support, so operators can troubleshoot problems with remote service engineers.

The first version of CARGOMASTER was deployed in the 1980s. It is used today on over 1,000 vessels, the company says. Krohne has been providing maritime instrumentation for 70 years.

The system provides readings from all tanks and valve control systems on a graphical interface.

It integrates with KROHNE’s OPTIWAVE

Marine radar and pressure sensors.

API Marine’s new TGD-R97



API’s new tank level radar product, TGD-R97

API Marine has launched a new tank level radar product, TGD-R97.

The TGD-R97 can measure tanks of up to 30 metre depths, with accuracy of 3mm. It operates at 80 GHz.

For narrow tanks with ladders, heating devices or other obstacles around the signal beam, an option is to put the device inside a pipe, which guides the signal. This leads to a stronger signal on the liquid surface.

As of February 2026, the company has an order backlog to supply 500 units for 10 newbuildings.

It has also been purchased as a retrofit, replacing older systems, API Marine says.

It can be used as a stand-alone unit, or connected to control and automation systems, using 4-20mA HART communications protocol.

Tanker operators can use it together with software tools to get a view of cargo, tank status and vessel dynamics.

API stands for Acoustic Precise Instruments. The company provides tank level, temperature and pressure sensors.

Tank level radar works by transmitting a microwave signal with a continuously varying frequency towards the surface of the tank. The tank level can be calculated from the reflected signal.



The KROHNE Cargomaster, and how the tank levels can be seen on a screen



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