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| JANUARY | 2010 |
| FEBRUARY | 2011 |
| MARCH | 2012 |
| APRIL | 2013 |
| MAY | 2014 |
| JUNE | 2015 |
| JULY | 2016 |
| AUGUST | 2017 |
| SEPTEMBER | 2018 |
| OCTOBER | 2019 |
| NOVEMBER | 2020 |
| DECEMBER | 2021 |



FLEET MAGAZINE

CHEMIKALIEN SEETRANSPORT GMBH

Rescue at sea LNG supply system for cruise liners
Gastech 2017 Future of maritime communications
Trans Africa Health watch Zero incidents

Editorial



**Welcome to the new edition of our Fleet Magazine,
the news magazine of Chemikalien Seetransport.**

*Dear Captains, Chief Engineers,
Dear colleagues on board and ashore,*

Let me first take the opportunity to reflect on the year 2017: During the year 2017 the shipping markets continued to be stressed on low level. All tanker segments were less active as predicted which resulted in lower earnings across the fleet and thus, the freight income was far below the budgeted projections. We all hope for a better year 2018 and this seems to be a reasonable expectation.

The crude tanker demand growth is forecasted at 4.9% in 2018 and the product tanker demand at 3.7%. This sounds promising, but it may take until the second half of the year before we reap the benefits. That is because the oil market is still challenging and should continue like this in 2018 and 2019 with the extension of the Opec/Russia 1.8m-bpd output cuts. At some point this will flip back to restocking.

We are experiencing a steady global demand growth in the dry bulk sector which is good for shipping. The special challenge here is to avoid to over supply this fragmented shipping market sector but presently the supply side looks unusually benign in all three main sectors.

The delivery schedule indicates that the dry bulk fleet will grow by 3.4% in 2018 prior accounting for scrapping and losses. We have not seen this situation for a very long time and hence we are quite confident that 2018 and 2019 respectively will generate better earnings and rising asset values in the bulk carrier sector.

Despite the continuing unpleasant economic circumstances, we have to cope with and adopt new industry requirements. The new TMSA3 requirements challenge us to be adopted and the EU MRV Regulation which entered into force on 1st January 2018 requires us to provide emission reports for our fleet on an annual

basis. By 2019 additional emission reporting requirements by the IMO will come into force. A good example that our industry is in a continuous changing process which clearly expresses that since we have to cope with new requirements and serve our customers and clients with best services we have to prepare and adjust our organization continuously in order not to lose track.

Coping with the very challenging markets we were able to improve our overall performance and results to meet today's industry benchmark standards and the major oil companies' expectations.

We concentrated our group's technical ship management activities in Hamburg and Singapore. Our discussions with new business partners are progressing and we are confident that these will result in future business for our company. We are equally working hard on generating and identifying new common business projects with Marine Service.

One major aim on our road to success is to continue to improve our overall performance and efficiency footprint in order to meet today's industry requirements and expectations. The demands regarding environmental and energy awareness, health, safety and security in the day to day operation will remain the key elements to follow up for 2018. The key to success lies in the overall performance of our organization on board and ashore.

We would like to thank you all on board our vessels and ashore for your continuous support and the excellent job you made during the last years and we are looking forward to jointly steering our organisation into the future.

We hope that you enjoy reading this magazine.

*Yours sincerely,
Oliver Hennes*

Christian Krämer,
Chairman



Dear Captains, Chief Engineers, dear colleagues,

On 21st August, 2017 I announced to our business partners and stakeholders that the shareholders of our group have agreed on my appointment as Chairman of our group after the sad and unexpected passing of my late father and our former Chairman Peter Krämer.

My father had steered our Group since 1982. His guidance and merit for our group were outstanding, his legacy will be honoured and he is sincerely missed.

Please rest assured that I will do my utmost to steer our group into a successful future while honouring my father's legacy.

We look forward to extending our fruitful relationships with all of our partners and hope that we can count on their trust and confidence in the same manner as they have given us up to now.

*Yours sincerely,
Christian Krämer*



OBITUARY

The Dr. Karl-Heinz Krämer GmbH with its companies Marine Service GmbH and Chemikalien Seetransport GmbH mourns along with their shareholders and employees the sudden death of Peter Krämer.

The shipowner and patron Peter Krämer died unexpectedly on the night of Tuesday, 20.06.2017.

With the death of Peter Krämer Hamburg loses an extraordinary shipping personality and his group of companies a courageous, highly valued and honored person.

In 1982, the lawyer Peter Krämer took over responsibility for the companies Marine Service GmbH and Chemikalien Seetransport GmbH which were founded by his father Dr. Karl-Heinz Krämer in 1958 and 1969. Under his leadership, the shipping company Chemikalien Seetransport GmbH became an internationally recognized tanker shipping company and the engineering and consultancy company Marine Service GmbH has grown into a market leader in LNG technology.

In 2002, Peter Krämer was convinced that, in addition to his economic success, humanitarian aid was to play an important role in fulfilling his life.

Based on his experience as an international shipowner, he wanted to tackle the problems of the Third World and to improve the life situation of the population of Africa through education.

In 2004, he met the former President of South Africa and Nobel Peace Prize winner Nelson Mandela, whom he later became friends with and suggested to initiate the "Schools for Africa" project together with Unicef International. The project which he himself regarded as his lifetime achievement and for which he was later honored by the Federal Cross of Merit of the Federal Republic of Germany and the Pro Humanitate Award, has now become the most successful private education initiative in the world.

Through the commitment of Peter Krämer more than 2,400 schools were built and the educational situation of over 30 million children in Africa has improved significantly.

We are mourning for the loss of an exceptional human being, who has achieved great success for a better world with his visions and the realisation of them.

Christian Krämer



OBITUARY

Chemikalien Seetransport, CST Belchem Singapore, all colleagues ashore and on board mourn the sad passing of Mr. Steven Tan.

Steven died on 19th October, 2017 in a hospital in Singapore after long illness for almost one year.

Steven had been with CST Belchem since the start of the company in 2004 and successfully served as Managing Director since 2013. His commitment has been incremental for the success of CST Belchem.

With Steven our group has lost an extraordinarily committed, ambitious and highly valued Managing Director and colleague with a great personality. He is deeply missed.

Our thoughts are with Steven's wife and daughter.

Christian Krämer

Taking delivery of the 82,000 Dwt Kamsarmax bulk carrier “TRANS AFRICA”



After a long period without any newbuilding activities a good opportunity resulted in a joint investment in a bulk carrier project under construction.

By completion of the due diligence process, company representatives already joined the shipyard sea trial in the 2nd quarter 2017 as observers to be able to follow best the remaining newbuilding construction and outfitting progress and of course to ensure best quality delivery from shipyard.

The 82,000 Dwt Kamsarmax bulk carrier named “TRANS AFRICA” designed by SDARI is a newbuilding from Shanghai Shipyard which is located on the Chongming Island close to Shanghai. She is the last vessel out of a series of seven sister vessels with the Hull No. S1235.

Looking at the design characteristics the vessel is equipped with various features to improve the energy efficiency. A modern MAN B&W 6S60ME main engine optimized on continuous service rating of 73% and a propulsion energy saving device Mewes duct is fitted. The cooling sea water pumps are frequency controlled and the auxiliary generators are equipped with waste heat econom-



izers which are integrated into the composite boiler. Mass flow meters, the electronic engine indication and diagnostic system as well as a propeller shaft torque meter fitted ensure that precise operational parameters are captured and monitored to be able to operate the vessel most efficiently.

The “TRANS AFRICA” is the first vessel in our group which is fitted with a ballast water treatment system of type Oceanguard. The principle technology is based on Advanced Electro Catalysis Oxidation Process (AEOP). The maker Headway passed and obtained all IMO related certifications and expects to finalize the USCG approval within the 1st quarter of 2018.



Apart of the technology features the cargo hold bottom plates are reinforced to allow and withstand 20t grabbers and the vessel has been built according class requirements to receive the “Green Passport” certification. Further, an Inmarsat VSAT express communication system which will provide a fast internet connection to the ship and crew is fitted.

The available time window prior to the expected delivery of the vessel was very ambitious. Thus, a lot of efforts and action were necessary to arrange the initial owner’s supply and administration task to ensure everything is completed prior the date of delivery.

The entire ship’s complement arrived on site for familiarization and training between 13th and 18th August, 2017. All initial stores, spares, provision, consumables were taken over and preparation to sail the vessel from the shipyard was done timely. The ship’s crew did an excellent job in receiving all stores and spares deliveries, completing audits and safety drills and all training requirements within a short time frame while taking care to follow all safety precautions.

On 25th August, 2017 the delivery of the vessel from the shipyard took place with a ceremony in the main shipyard building. A great job was done from all our CST Belchem Singapore colleagues, instrumental in making all the formalities and documentation, such as arranging initial stores, provisions, equipment etc.

Their proactive efforts together with the newbuilding site office ensured that all the arrangements were well in place.

CSTB marine superintendent, Captain Vijay Bhasker Ganisan, trained the ship’s staff to prepare the vessel for audits and familiarized all ship’s staff with the on-board safety requirements and specific rank requirements.

We like to address special thanks to the site office members; Captain Huang Han Bin in charge of supervision for our organization, coordination and support of all the officers and crew, under



the leadership of technical superintendent Ong Theng Lek and Captain Tan Kim Soon who efficiently prepared the vessel to carry out her maiden voyage.

The vessel departed from Shanghai Shipyard on 26th August, 2017 and was directly signed up into a two years’ time charter and instructed to cross the Pacific for her maiden voyage to take cargo in the US Gulf.

We are more than glad to note that the vessel’s operation since the delivery has met the new building specifications. Everything works satisfactorily.

We wish the crews and officers of the “TRANS AFRICA” always calm seas and favourable winds.

RESCUE AT SEA

In the early morning of 26th February, 2017 our vessel M/T "Chemtrans Sky" had been called to a sailing vessel in distress at a position about 90 nm north of Isla Margarita.

Three sailors (one French citizen and two Venezuelan) were taken onboard, while the sailing vessel was having water ingress.

M/T "Chemtrans Sky" was on route from Trinidad, Pointe-à-Pierre to Cristobal, Panama.

The three rescued sailors were disembarked ashore at Curacao on 27th February, 2017 and returned safely to their families at home.

The response of both Capt. Nugzar Dolidze and his crew in getting the stranded sailors safe is highly commendable and the exemplary skills he and his crew showed to rescue the stranded sailors is an indication of true professionalism.



Chemikalien Seetransport and Chemtrans Crewmanagement would like to express their appreciation to Captain Nugzar Dolidze and his crew for their professionalism and excellent seamanship.

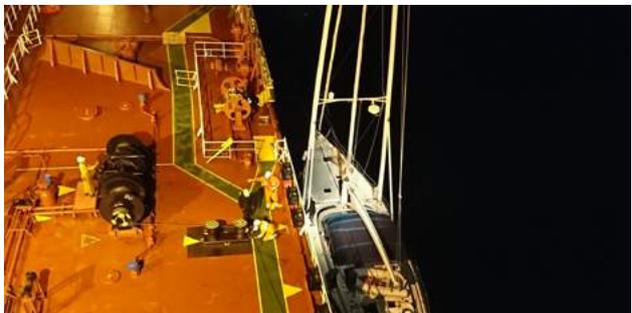
On 21st November, 2017 our M/T "MS Simon" rescued a small boat with twelve adults and one child refugee. The small boat was rescued within the Alboran Sea. The child and the twelve adults were taken safely ashore by the Spanish coast guard the same day.



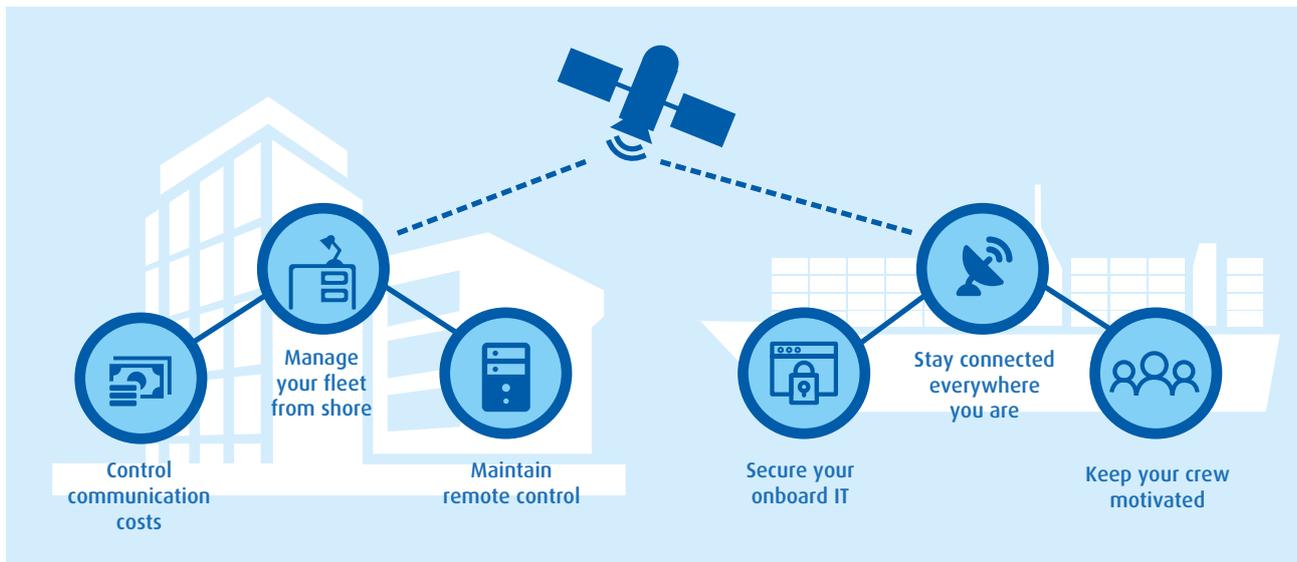
The response of both Capt. Robert Perica and his crew in getting the stranded child and adults safe is highly commendable and the exemplary skills he and his crew showed to res-

cue the stranded people is an indication of true professionalism.

Chemikalien Seetransport and Chemtrans Crewmanagement would like to express their appreciation to Captain Robert Perica and his crew for their professionalism and excellent seamanship.



On the way into the future of maritime communication



After an almost two years pilot phase we have gained good feedback and experience with the VSat installation on the MT London Star. A respective fleet contract was signed in the middle of last year with the provider Marlink to upgrade the communication system on board our vessels with the Sealink VSAT system combined with a backup iridium system to manage on board network and also to economise communication costs.

We have chosen a 10GB data allowance per month per ship on Marlink's Sealink VSAT to ensure that sufficient capacity is available across the fleet for all crew welfare and business operational use.

By means of this retrofit project all ships will experience a significant data speed and capacity boost with Sealink VSAT services. The chosen service provider Marlink will also provide voice calling services in addition to back-up communication. We have chosen the Iridium System to replace the aged Inmarsat Fleet Broadband in place.

With the roll-out of Sealink VSAT across the fleet already in progress all crew members on board our vessels will experience a step-change in communication facilities enabling them to stay in

touch with family and friends more regularly, make use of Social Media and browse the Internet for entertainment while off shift. The communication solution provides controlled access to on board devices for remote maintenance and troubleshooting and brings significant functionality to complement the improved Internet connectivity for our fleet. Furthermore, it enables easy management of the VSAT link and crew accounts whilst giving us much better access to IP enabled equipment on board which will in turn help us to achieve increased vessel uptime through remote maintenance of equipment on board.

The characteristics of the internet speed will be technically up to 3Mbps. Thus the increase of the speed will support to use more applications to increase vessel and fleet efficiency while providing a smoother connection for crew when browsing the internet or using social media.

By having rolled out this retrofit project we are confident to continue to improve and strengthen the communication capabilities between ship and shore as well as to improve the crew welfare and connectivity for all our crews on board.

Let's stay connected!

Moving online into an integrated future working environment



Recent technological developments in cloud and mobile computing have offered a unique opportunity to the ship management industry. The inherent difficulty in managing or supervising a fleet of vessels from the office creates processes that are highly reliant on all employees regardless if at sea or ashore. The availability of cloud computing has opened an exciting route to use vast amounts of data which are collected in the day-to-day operations of all ships and to leverage such data to allow faster and better decisions, streamlined processes, pleasant work environments and a significant reduction in costs, reduce administrative workload and strengthen managerial control of risk and cost.

After an extensive evaluation process throughout last year we have identified **JiBE** as the provider of a full cloud based integrated fleet management solution with which we like to roll out the transition from the existing system into the new technology.

The **ERP** (Enterprise Resource Planning) product provides tailored solutions to lighten work now in each department of the ship management organization on board and in the office. The value expected from implementing can be seen in a more efficient, better risk managed organization, significant reduced email volume as well as in an efficient research of data.

Starting with the **Captain's Dashboard** where the master will receive notifications on upcoming crew changes, supply deliveries, forms and drills due, etc. The crew will produce delivery confirmations, form submissions, reporting of incidents, schedule changes, all through the on board module (OBM) and as part of a process audit trail between office and vessel. The OBM also contains electronic logbooks, voyage reporting and port reports.

The **Crew Module** enables full seamless synchronization between ship and shore. Documents are synchronized and kept under control.

Travel planning and processing is full web-based including the

booking of tickets and the issuance of same to the crew, eliminating the need to send multiple reminders and emails and removing miss-out risk.

The **Inspection Module** enables real time voice and image recording while on board, in connection with a specific location from the PMS tree, or as general inspection notes. The time spent on creating the report reduces by about 90% from any other existing method.

The strength of the **Accounting Module** is in fact that it is seamlessly integrated into all other modules enabling automatic entries into the books from various decision points in the operational systems. This enables the accounting team to reduce its manual workload significantly and to focus more on control and analysis, electronic invoices and payments, consolidation as well as cash-flow management.

The **PMS Module**, surveys and certificates, work list, inventories, and electronic logbooks are all synchronized in real time with the office and enable the operators to get warnings and alerts of upcoming issues. All communication with the ship is done in the system including job specific issues, creating an audit trail for every job, as well as a link to NCR or PO or any risk assessment or incident relating to this job.

The **Operation Module** provides electronic logbooks, position map, voyage reports, port and terminal database. The integrated electronic logbooks enable auto alerts to the operations on shore, on any change in performance within minutes. In addition, a live port and terminal system will be available. This system enables the master to receive a hazard report prior to arrival, based on both company history in that location, as well as input from any other clients. Warnings about draft, fenders, risky pilots or tugs, are location based and assist the master in managing risk in each location. Chartering and voyage calculators for bulk and tanker are both highly detailed and fully integrated with the accounting, schedule and PO system.

The **Purchase Module** provides a central Approved Supplier List (“ASL”). The ASL is linked to all modules and enables an easy approval matrix. The module enables dispatching RFQ to multiple approved suppliers while seeing their transaction history statistics along with fully documented audit trail and electronic approvals by manager or Supt. All PO are logged automatically into the accounting system for reporting and cashflow forecasting purposes. The unique advantage of the system is that data is entered into a single database from both shore and vessel modules. Applications such as logbooks, noon reports, all ISM forms, all this exists as raw data in the database.

The **Quality Assurance Module** provides the QA and the senior management team with a remarkably high level of control on the quality and vetting processes in the company. Those applications enable inspection using a pre-generated checklist, risk assessment, forms manager, electronic manuals. The form manager handles the scheduling and follow-up of all ISM forms that have to be submitted on board. Each form can be as excel/pdf or embedded electronic form. Each form can be put on submission date or interval, with alerts prior to due date both in once and

on board, and alerts on overdue as well as an escalation pyramid all the way to DPA or senior management. The RA module has the ability to extract statistics from the MscAT. Vetting taken from the root cause analysis in the company’s NCR and incident reports. This enables the RA to be done in context specifically to the performance and issues that the client company has rather a theoretical industry average. The quality module has an elaborate TMSA module for collection and factoring of various KPIs collected from all modules within the single database.

We are confident that all listed features within one unique working environment will result in significant reduction in administrative workload and an injection of more time to the hands-on onboard and ashore, leads to more focus on risk management in all processes and areas. One less incident, casualty or injury, yields in our business significant returns. The transition into a unique database is a good investment and particularly in a time where returns are not exciting in an ongoing low shipping market.

Therefore everybody is invited to put HANDS-ON!

Crew seminars held by Chemikalien Seetransport Teamwork is the key to success



Chemikalien Seetransport (CST) held several crewing seminars last year:

1. At the Bayleaf Hotel, Manila, on 4th April, 2017;
2. At the Londonskaya Hotel, Odessa, on 15th/16th May, 2017;
3. At the Hotel Sanapiro, Batumi, on 18th/19th May, 2017;
4. At the Rixos Hotel, Dubrovnik, on 22nd/23rd Nov., 2017;
5. At the Hotel Lotus, Anapa, on 5th/6th Dec., 2017;
6. At the Londonskaya Hotel, Odessa, on 11th/12th Dec., 2017.



Following main topics were discussed during the seminars:

- Team spirit
- Leadership
- OPEX benchmarking
- Vetting meets crewing
- ISO standards
- Vessels performance
- Energy efficiency
- Technical support and communication
- Reflective learning
- Resilience
- Learning engagement tools
- Media and cyber-attack awareness
- KPI including incidents review and preventions, near miss reporting, port state control and third party inspections/audits

The origins of CST go back almost 50 years when the company's headquarter was established in Hamburg, Germany. Key areas of the company's business are the shipment of petroleum products, liquefied natural gas, chemicals and bulk cargo.

From the first day the company has adhered to an ethos of maximum safety and efficiency of cargo shipments as a priority. The management of the company assumes a clear attitude and puts a primary concern for the people, environmental friendliness and team moral support.



During those intense days the participants had the opportunity to discuss areas of concern within CST and the entire shipping industry.

The seminars were arranged to share the company's future plans with our seafarers, to talk about progress and prospects, showing full commitment by top management and to reinforce the key objectives and tasks set by CST for its crews.



Such events contribute to strengthening the teamwork spirit and the morale within CST.

We are facing a number of requirements and expectations from our seafarers – In addition to qualifications meeting international standards, our colleagues must perform their duties on board and adhere to the company policies.



They must also be environment-conscious and are involved to the maximum in commercial processes, doing their best to make all processes as efficient as possible.

Teamwork was one of the most often raised topics during these seminar days.

We are proud that we received a positive feedback from the seminar participants which proves to us that it is of utmost importance to continue the strength of teamwork amongst all CST colleagues and the management.



Christian Krämer (left), Oliver Hennes (right)

Zero incidents

Do you believe in this?

We do.

By achieving and maintaining this we all go home, enjoy the company of loved ones and remain motivated in our employment.

Can you imagine joining a vessel where the only PPE (Personal Protective Equipment) was that which you packed in your suitcase when leaving home for 7 months, the only procedures were in your head, generally referred to as common sense, instructions were given verbally or you were shown how to do the job, the only safety drills were the lifeboat and firefighting drills. Where climbing a crane to grease the sheaves and wires wearing a safety harness was seen as a sign of weakness. These were the "Good Old Days" where it was recognised and accepted that people were hurt or killed working on ships. I saw several people killed in accidents in my first three years as a cadet on cargo ships, I was the victim of an incident where I had a bone in my leg chipped when hit with a 5 tonne steel beam, I had to comfort and stop the bleeding of a man who had fallen through an open hatch, falling 12 metres, in darkness hitting and landing between re-bars resulting in open fractures of both legs and other serious injuries. Or being ordered to go into secured cargo holds, walking over the top of raw sugar and obtaining temperatures, no consideration was given to testing of the atmosphere or that there may be air pockets to sink in to and suffocate, the job was done!!

Safety wise there was nothing "Good" about these old days.

It is with pride that I can say the safety standards have improved dramatically since the 1970's. All figures show a huge reduction in deaths and serious injuries to seafarers. Figures obtained from the IMO publication "International Shipping Facts and Figures – Information Resources on Trade, Safety, Security, Environment "

published in 2012 show a dramatic reduction of lives lost at sea from 1825 in 2006 to 250 in 2010. This achievement is to be appreciated considering that there has been an increase in the number of vessels and number of seafarers.

This reduction is the result of the introduction of various legislation such as:

- The requirement for companies to provide PPE
- Better training
- The requirement to have and implement safety management systems, procedures, drills, contingency plans etc.
- More focussed audits/inspections, external and internal

In spite of these major enhancements there are still incidents which are unacceptable. The improvement trend has almost stopped. This includes our own within CST. Looking at the LTIF (Lost Time Injury Frequency) for the last four years we see it is virtually constant:

| | 2017 (Q3) | 2016 | 2015 | 2014 |
|------|-----------|------|------|------|
| LTIF | 0.9 | 0.92 | 0.88 | 0.9 |

The few incidents are generally recognised as being caused by human behaviour. Why do humans do what they do? This is not easy to answer and is therefore difficult to absorb the different knowledge, behaviours, attitudes, egos and characters into the safety ethos and systems used in companies. How can we make "Zero Incidents" the norm and not the exception?

Why does the person use an unsecured ladder when the ship is rolling? Why do the other people observing this accept it and not challenge the person?

Why do people step over mooring lines when they are being tightened? Why do people observe and accept this dangerous practice?

These are the type of actions and behaviours we now have to focus on; understanding, changing, not accepting but challenging the unsafe behaviours and actions of ourselves and others.

To help us achieve our aspiration of zero incidents we have become involved in the Shell Maritime Partners in Safety Programme, a programme which focusses on a "Zero Incident Industry".

This is a focus group led by Shell with the aim to achieving a step-change in the industry safety performance through sharing of best practice material. These materials are designed to be used and shared in order to drive and encourage the desired behaviours which will help achieve zero incidents.

The material is available on the website and used within the office and supplied to vessels to be used initially by visiting superintendents or senior officers who have received instructions during the shore based seminars. The material is high quality and very easy to use and understand.

The Maritime Partners in Safety Programme focusses on several areas all designed to encourage behavioural change from top management down. These areas are:

- Visible and Felt Leadership, where senior management are encouraged to visit vessels on a regular basis, tour the vessel and meet all on board. Not go to the master's cabin and leave several hours later.
- Reflective learning: These are themes that provide an opportunity to reflect on the causes of incidents in order to gain a deeper behavioural understanding on learning using the structured reflective learning concept. There are several themes in the library which can be integrated into safety training and drills.
- Learning Engagement Tool: A library of Learning Engagement Tool (LET) themes to be facilitated on board in small groups of about five people. Encouraging engagement and conversation to discuss the dangers associated with the topic of the theme.
- Resilience: A programme made up of five core modules with each module focusing on a different area that makes up our natural capacity to deal with life's challenges. Being able to maintain focus on the task in hand under duress. It is important to note that we can all learn to improve our resilience.

These tools are being introduced to vessels and personnel within the office to create an understanding as to why it is necessary to change our behaviours and also to provide the ways as to how we can change our behaviours leading to a positive improvement of our safety and that of the industry.

This has to be embraced as a team, no individual can achieve this on their own.

Gastech 2017



From left to right: Dr.-Ing. Jochen Schmidt-Lüssmann (Senior Cryogenic Engineer), Dipl.-Ing. Rainer Olbricht (Head of Sales), Dipl.-Ing. Michael Kraack (Managing Director) and Christian Krämer (Chairman)

Dear readers,

Last year it was once again time for the largest trade fair in the field of LNG, the Gastech exhibition, which took place in Tokyo in April 2017. Marine Service GmbH was again represented with their own booth. Marine Service's focus lays on the topics LNG as fuel for cruise liners, FSRUs and LNG bunker vessels & barges. As the topic of LNG in shipping is worldwide coming more and more to the fore, our booth was well frequented. We had several interesting discussions with engine manufacturers, shipping companies, shipyards, LNG terminal operators and representatives of various countries that are planning to operate their own LNG

terminals. In particular, Japan and India are expecting an extremely rising market with an increasing demand of LNG, but also China and Singapore are focusing more and more on LNG carriers and FSRUs for mobile supply of energy by LNG.

With Japan being the host country, a fantastic opportunity was offered to get to know the Japanese business environment, particularly in LNG, its culture and the exciting landscape which certainly is unique in the world. The culinary highlight during our stay in the land of the rising sun was of course the incredible variety of sushi that Japan is offering.

Cyber security at sea



Why do we need to take care and what does cyber security mean?

The increased use of computer network systems on board enables modern work processes. At the same time the more we leverage on the internet for these activities, the more vulnerable we become. Vessels are at least as vulnerable to cyber-attacks as office IT or private IT is. Cyber security is the header for physical, software and behavioural means to prevent unwanted loss, corruption or theft of data. While people mostly assume such incidents involve a third party “hacker” hacking into corporate IT systems and do not relate to their daily work with IT systems, many incidents do also happen from internal sources by clicking on mails, using third party’s USB sticks or external hard drives. We strive to do our utmost to prevent any of the above mentioned incidents by different means.

What can YOU do to mitigate risks?

Think twice when working with emails

- Do not open emails and attachments from unknown or irritating senders
- Do not forward business emails to your personal email account
- Double check that your email is only being sent to the intended recipients
- Corporate infrastructure should not be used for private purposes

Protect removable media like i.e. USB sticks, external hard drives, SD cards, DVDs

- Before you open removable media, scan it for malicious software
- Use removable media only as a temporary data store, preferably for the minimum possible duration
- Securely store removable media or keep it in your possession
- Do not share any device containing corporate and/or confidential information with unauthorized individuals
- If possible, use a dedicated machine to exchange removable media with 3rd parties (i.e. agents, inspectors)

Beware of social engineering:

- Social engineering is a technique used to trick you into disclosing valuable company information. Social engineering usually occurs through personal interaction, such as telephone call or with computer systems. For example, persons approach you by reference to LinkedIn, facebook or pretend to be a colleague of somebody
- Be certain of a person’s identity and its right to ask for information before providing it. Be suspicious of unsolicited requests for personal or corporate information
- Do not provide personal details or financial information about yourself, your colleagues or clients to someone you don’t know, especially over the telephone or via email
- Beware of any email that claims to activate or suspend a financial account, change a password or payment technique, or that prompts for personal or banking details
- If in doubt, consult with your manager
- Report the incident immediately to the IT department

Social media:

- When using social media, it is important that you protect confidentiality of corporate information
- Carefully review and select privacy settings on the devices you use
- Don’t make posts or comments that may be considered defamatory, obscene, threatening, harassing or embarrassing to others
- Do not exchange or store work documents or messages in this context
- Do not discuss details of your work activities
- Be cautious when downloading applications from social networking sites
- NOTE: Everything you post is at risk of disclosure
- NOTE: Everything you post stays!

Marine Service delivering LNG supply system for cruise liners



Section of AIDAnova at Meyer Werft in Papenburg (Source: Meyer Werft Website; Pressefotos)

AIDAnova is the world's first cruise ship that will be operated both at sea and in port on liquefied natural gas (LNG), the most environmentally friendly and lowest-emission fossil fuel available today. The ship is currently being built at Meyer Werft in Papenburg for the cruise operator AIDA Cruises of Carnival Corporation. Marine Service GmbH delivers the LNG storage and supply system in cooperation with engine manufacturer Caterpillar Motoren GmbH & Co. KG, Kiel.

It is the first of seven next-generation LNG-powered cruise ships ordered by leisure travel operator Carnival Corporation. What makes this concept so special is that the vessels will be powered entirely by LNG. It is expected that the decision to build these ships will lay the ground for a strong boost in the development of an LNG bunkering infrastructure. AIDAnova will have a length of 337 meters, a width of 42 meters and offers 2,600 cabins in 21 different stateroom varieties. In less than a year, on December 2, 2018 AIDAnova will start its first season and set sail for the Canary Islands from Hamburg.

The system

The innovative propulsion system of the Caterpillar MaK dual fuel engines includes four 16-cylinder MaK engines with a total rated power of more than 60 MW. Compared to conventional diesel or heavy fuel oil combustion, the engines emit 20 percent less CO₂, 80 percent less nitrogen oxides and the emission of sooty particles and sulfur oxides is completely avoided. This positive effect of less emissions is also a benefit for harbors and their residents. The -163°C cold LNG is stored in 3 tanks whereat 2 of them are 35 meters long with a volume of 1,550m³ and a smaller tank of 28 meters with a volume of 520m³, making it the largest LNG fuel tank capacity ever installed on a ship. In order to supply the engines with fuel, the cryogenic natural gas has to be processed, i.e. evaporated, heated and pressurized. To implement this reliably, Marine Service GmbH was entrusted with the design and delivery of the gas supply system. The main components of the system are LNG-pumps, gas compressors, cryogenic valves, vaporizers and superheaters as well as glycol water modules, which use the waste heat from the main engines and supply



Cryogenic Test of Superheater with Liquid Nitrogen (Source: Marine Service GmbH)

it to the vaporizers and superheaters to evaporate and heat up the fuel gas. Furthermore, all electrical components including the pneumatic interfaces and the PLC controlled automation system are in the scope of supply of Marine Service GmbH. The system is designed in a way that if one component fails, the level of redundancy is high enough that a gas operation is still possible and safe.

Marine Service's area of responsibility

In order to make sure that the system is working a lot of engineering has to be done in the background. The dimensioning and simulation of the fuel gas system including its components is the basis of the whole implementation process. The special fuel medium requires cryogenic calculations of the pipes and all site elements. Another part is the layout of the electric and pneumatic automation system and in context the programming of the automation-software including control algorithms. To ensure a high level of safety Marine Service and Meyer Werft decided to implement pneumatically actuated valves throughout the entire

explosion proofed gas area. Further the safety was increased by applying three different risk analyses. Additionally, Marine Service is in charge of the preparation of the operation and maintenance manuals. Prior to delivery, each component is subject to a factory acceptance test where all technical parameters are verified to ensure that it meets the highest quality and reliability standards. Besides all these engineering activities a building supervision of the delivered components is carried out as well and ends with the commissioning in 2018.

Forecast

In 2018 it is planned to start the main engines by Caterpillar already at the port of Papenburg. To do this, vaporized and heated natural gas provided by a truck is used. In the last quarter of 2018 the final commissioning of the LNG fuel gas system is planned and the first bunkering of LNG in Eemshaven will be carried out.

Health Watch

Mental Health

Long periods of time away from home can leave many seafarers feeling stressed, lonely and even depressed. Check your colleagues for indicators and symptoms of stress or depression.

It may be that you feel just a little low but depression can be a serious problem and it is important that you seek help quickly. As well as feeling continuously low or sad, hopeless and helpless, it can have physical effects on your body.

Symptoms include:

- Moving or speaking more slowly than usual
- Change in appetite or weight (usually decreased but sometimes increased)
- Unexplained aches and pains
- Constipation
- Loss of Libido
- Disturbed sleep

Beating stress and depression

- Seek medical help
- Interact socially with crew mates, whether watching TV or playing cards
- Talk to someone you trust
- Eat well
- Try to keep in touch with friends and family via the phone or internet
- Get enough sleep
- Keep active
- Seek help

People and organisations who can help:

Port chaplains – are trained to offer support and comfort, whether you simply feel homesick or are experiencing a personal crisis.

SeafarerHelp – a confidential service, where staff speak 27 different languages.
Call: 00 44 20 7323 2737 email: help@seafarerhelp.org www.seafarerhelp.org

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Lifestyle changes can improve your well-being. Our aim is to provide our colleagues onboard and ashore with a reminder of some of the more common conditions, together with some simple ways to stay healthy and to feel well.

Weight & BMI

To determine what your ideal body weight should be, several factors should be considered including your age, muscle-fat ratio, height, sex and bone density. It is worth remembering that one person's ideal body weight may be completely different to another's.

Some health professionals suggest that calculating your Body Mass Index (BMI) is the best way to decide whether your body weight is ideal.

Your BMI is worked out by dividing your weight (kg) by your height (metres) and by then dividing this answer by your height again.

For example, if you weigh 90kg and you are 1.80m tall, divide 90 by 1.80. The answer is 50. Then divide this answer by 1.80 again – the answer is 27.7.

Weight categories:

- BELOW 18.5 UNDERWEIGHT
- 18.5 - 25 HEALTHY WEIGHT
- 25 - 30 OVERWEIGHT
- ABOVE 30 OBESE

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We shall focus on our mental health issue, weight and body mass index (BMI), diet, exercise and back pain. As well as giving some basic facts about what symptoms to watch out for, we also offer guidance (see also www.britanniapandi.com/publications/health-watch) on some simple steps that you can take – such as adopting a balanced and healthy diet and making sure that you exercise regularly – that can help to reduce the risk of suffering from these conditions.

Safe Lifting

Learning and following the correct method for lifting and handling heavy loads can help to prevent injury and back pain. Lifting when a ship is rolling can put additional stress on backs so take extra care and ask for assistance if required.



Know your limits
Don't lift or handle more than you can easily manage.



Think before you lift
Plan the lift.



Keep the load close to the waist
Adopt a stable position.



Ensure a good hold on the load



Don't bend or flex your back



Don't twist when you lift



Keep your head up



Move smoothly



Lower down, then adjust

© Britannia Health Watch

Exercise

Exercise is important not only for keeping fit and preventing health problems, but also in helping to stay mentally healthy and avoiding fatigue.

Adults should do at least 150 minutes of moderate-intensity aerobic activity each week, such as fast walking or cycling. This can be divided up into 30-minute sections five days a week and you can even split those 30-minute sessions into smaller sessions of at least 10 minutes.

You might feel too tired to exercise, but regular exercise will make you feel less tired in the long run, and you'll have more energy.

Staying fit can be accomplished by push-ups or sit-ups in your cabin, using improvised weights made out of tin cans, exercising with a colleague and taking aerobic exercise like walking briskly.









Salt

Salt raises blood pressure – most of our salt intake comes from processed foods such as bread, cheese, bottled sauces, cured meats and ready-made meals.

You should have no more than a day – the same as a small teaspoonful.

5g




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Diet & Exercise

Obesity has become a big problem for many seafarers with poor diet and lack of exercise being the main causes.

Many are eating more than they need to and it is often the wrong type of food and not being able to burn off the calories leads to them piling on the weight.

Eating and drinking more calories than we need to can cause many different health problems including increased risk of diabetes, heart disease, stroke, back problems and even some cancers.

How much should you eat?

As a general rule the average man needs around 2,500 calories a day and a woman 2,000 calories a day to maintain a healthy body weight.

2,500
calories



2,000
calories





Cut down on caffeine
No more than 4 cups of coffee a day.



Don't skip meals, particularly breakfast



Drink 8 glasses of water a day



Try to avoid high fat food (especially saturated fat) and sugar



Reduce fried foods



Eat fruit on nuts as a snack and avoid high fat snacks



Eat sensible portions



Eat at least 5 portions of fruit and vegetables a day



Eat 30-40g fibre per day

What you should eat

A healthy diet is not just about **what** you eat but also **how** you eat it.



(Number of servings per day)

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We hope you find this summary issue of Health Watch interesting and informative.

Kindly contact us if you have any questions or suggestions on other topics that you would like to see included in future editions.

ISO standards update

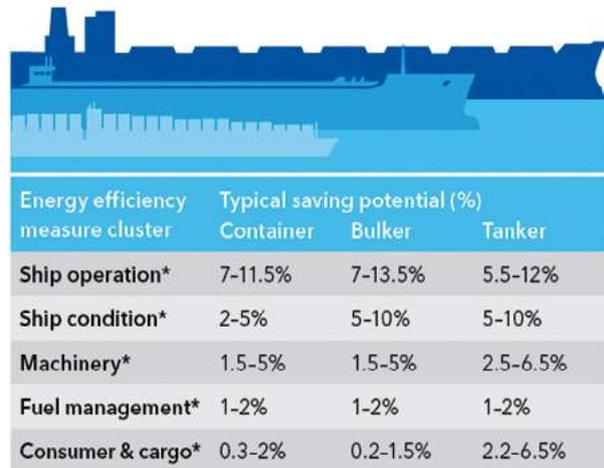
Environmental awareness is a key factor in the achievement of the Company's Mission Statement for the protection of the environment and commercial success

In the last edition of the magazine I wrote an article about the company's commitment towards protecting the environment through the adoption of ISO 14001:2015. Time has passed and the primary goal of environmental protection remains a focus and has been further strengthened through the decision to, not only obtain 14001:2015 but 50001:2011 Energy Management Systems.

ISO 50001:2011 enables businesses to establish systems and processes necessary to improve energy performance, including energy efficiency, use and consumption of energy. By reducing our energy consumption ashore and afloat we will reduce not only greenhouse gas emissions but other related environmental impacts (less unnecessary running hours on machinery can increase the time between maintenance periods reducing the cost of spares and transportation of same. Reduced transportation also has a positive impact on the environment). An achievement in the reduction of energy costs is also achieved through systematic management of energy.

There are significant energy saving areas both ashore and on board. Ashore we will identify areas of energy consumption. To do this we must be able to measure specifics and obtain a baseline; such as electricity consumption through using computers, lights, heating systems, printers etc. and ensure that there is a focus on energy reduction, for example through the use of auto-stand by on electrical equipment, energy efficient light bulbs, motion detectors and timers on lights, flat screen monitors. How the heating system is used, temperature settings of hot water etc.

On board vessels there are also numerous areas where significant improvements can be made. The following graphic shows the potential cost reductions in various areas on board different vessel types when effective energy management systems are fully implemented.



* Savings cannot be added

Source <http://www.shipoffer.com>

Taking into account the typical saving potential illustrated in the various segments and taking into account to achieve a further 5% saving of fuel consumption for an conventional LR1 73K tanker up to 350 tons and for a handy 40K tanker up to 250 tons could be saved. This would consequently result in a reduction of up to 780,000 kg – 1,090,000 kg CO² emitted per vessel per year.

Therefore, in addition to the environmental protection cost savings in the amount of USD 100,000 per vessel per year can be achieved.

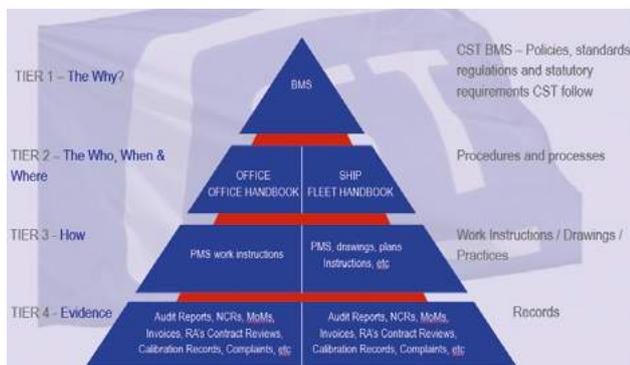
In November 2017 we had a successful external audit and achieved ISO 9001:2015 standard, previously was 9001:2008. This required a revision of several procedures and the publication of a new manual in our SMS a manual known as the Business Management System which we refer to as a tier 1 document. This is an overview document developed to:

- Describe the company strategy, vision, leadership team, interface between management documents, abbreviations
- Includes sections on environmental and energy management
- Define business risk, TECOP methodology (Technical, Economic, Commercial, Organisational, and Political risks). Here we also identify positive and negative risks in a commercial sense.

- Capture CST stakeholders and look at dependencies
- Planning
- Assurance – Business assurance

The documentation is a tiered structure which we feel gives the most effective and clear documentation process.

The tiered structure is as follows:



While ISO 9001:2015 has been achieved both ISO 14001 and 50001 remain outstanding at this point in time, however, excellent progress has been made and it is anticipated that achievement will be completed by mid-March 2018 at the earliest.

The following are the outstanding milestones on our path to achieving these two outstanding standards:

- Document review (both energy management and environmental plans are at final draft stage and required to be reviewed by Lloyds)
- Internal audits and training to be carried out in house and on board all vessels
- External audits to be carried out on board the vessels
- External audit of the office

While there is still much work to be done to achieve and maintain these systems the benefits to the environment, stakeholders, company and personnel by far outweigh the efforts of gaining and maintaining these systems.

Recent training in these systems was given at crew events in Dubrovnik, Anapa and Odessa where all attendees appreciate the importance of these systems.

The success of such systems is only achieved with full support from management and every individual within the company being fully aware of the requirements and working with the systems.

Jubilee 2018

Dear Jubilees,

“The art of the sailor is to leave nothing to chance.”

Annie Van de Viele (Belge Yachtswoman, 1922-2009)

We, the CST family, would like to wish a happy ten-year anniversary to all Jubilees. Thank you for sailing around the world for us, thank you for working so hard, thank you for your

trustworthiness, thank you for your efforts, thank you for your patience, thank you for your dedication and thank you for making the most complex projects possible.

We wish you all a safe and prosperous voyage.

10 Years

Chief Engineer **Breykin, Andrey**

Chief Engineer **Garanin, Maxim**

Chief Engineer **Kruchinin, Victor**

Chief Officer **Nomerovsky, Dmytro**

Chief Officer **Khrystenko, Oleksandr**

Chief Officer **Nikitenko, Victor**

Chief Officer **Surmanidze, Enver**

2nd Officer **Khashchevatsky, Sergiy**

2nd Officer **Brezhnev, Kirill**

2nd Engineer **Bagapov, Sergiy**

2nd Engineer **Basyuk, Yevgen**

2nd Engineer **Dolgov, Volodymyr**

2nd Engineer **Azarenko, Ruslan**

2nd Engineer **Kekhaev, Alexey**

2nd Engineer **Burnus, Vladimir**

10 Years

3rd Engineer **Kosharinsky, Valeriy**

3rd Engineer **Abuladze, Zauri**

Fitter **Romashov, Vasyl**

Fitter **Anpilogov, Igor**

Fitter **Pasko, Aleksandr**

Wiper **Uzun, Oleg**

Oiler **Voytenko, Denys**

Crew List – Our Men on Board



Athens Star Valloeb



Chemtrans Elbe

| | |
|------------------------------|----------------|
| Kudin, Sergei | Master |
| Nomerovsky, Dmytro | Chief Officer |
| Puzankov, Volodymyr | 2nd Officer |
| Ivanov, Yevgen | 3rd Officer |
| Alakozov, Semen | Chief Engineer |
| Lyashko, Evgeniy | 2nd Engineer |
| Otrokh, Oleksandr | 3rd Engineer |
| Romanik, Ivan | Electrician |
| Vinnikov, Nikolay | Pumpman |
| Roseles, Lastra Lorenzo Jr. | Bosun |
| Eulogio, Dindo Pederito | AB |
| De Villa, Noel Lopez | AB |
| Taytay, Wewen Tiana | AB |
| Luna, Laurence Olivier Amoyo | OS |
| Bachoco, Elre Rosal | OS |
| Tribaco, Lemuel Jarina | Fitter |
| Dela Cruz Jr, Mariano Quilla | Motorman |
| Bronio, Melzar Napoles | Wiper |
| Quiambao, Naguit Jorge | Chief Cook |
| Parcia, Marniel Cabarles | Messman |

| | |
|-----------------------------|----------------|
| Kubitsa, Grygorii | Master |
| Surayev, Volodymyr | Chief Officer |
| Myroniuk, Oleksandr | 2nd Officer |
| Savgira, Volodymyr | 3rd Officer |
| Teslins, Mihails | Chief Engineer |
| Marchenko, Evgen | 2nd Engineer |
| Korniychuk, Igor | 4th Engineer |
| Guzanov, Yuriy | Electrician |
| Mendoza, Eduardo Z. Jr. | Pumpman |
| Sevcivs, Pjotrs | Bosun |
| Ramos, Janry | AB |
| Lamaton, Edgar Allan | AB |
| Villaranda Von, Aris | OS |
| Maranan, Mark Jerome Casino | OS |
| Perido, Jay Darille | Fitter |
| Lauta, Alex Taleon | Oiler |
| Kochetkov, Vladimir | Chief Cook |
| Yee, Arthur Torio | Messman |
| Hubskiy, Denys | Deck Cadet |

Crew List – Our Men on Board



Chemtrans Moon

| | |
|-----------------------------|----------------|
| Davitadze, Oleksii | Master |
| Kopaleishvili, Merab | Chief Officer |
| Mamrenko, Vyacheslav | 2nd Officer |
| Voronin, Maksym | 3rd Officer |
| Slyusar, Vyacheslav | Chief Engineer |
| Erzhakov, Alexey | 2nd Engineer |
| Mararenko, Vyacheslav | 3rd Engineer |
| Kyaw Kyaw, Oo | Electrician |
| Antonio, Lawrence | Pumpman |
| Maxino, George | Bosun |
| Baldonado, Ryan Gallardo | AB |
| Toledo, Ian Loutonn Vista | AB |
| Alagon, Joebert Parrenas | AB |
| Demafitez, Troy | OS |
| Fallesgon, Eric Ferranco | OS |
| Syrytsia, Mykola | OS |
| Talorete, Jose Aldy Remollo | Fitter |
| Capobres, Roy Jr. Basaysay | Oiler |
| Castillano, Joselito | Wiper |
| Maglinte, Sammy Cadungog | Chief cook |
| Tarun, Ricky Paguirigan | Messman |
| Tsaryuk, Oleksandr | Deck Cadet |
| Rotar, Oleksii | Engine Cadet |
| Stogniienko, Maksym | Deck Cadet |



Chemtrans Sea

| | |
|---------------------------------|----------------|
| Lavrinenko, Oleg | Master |
| Semenov, Yuriy | Chief Officer |
| Sliusar, Yuriy | 2nd Officer |
| Davitadze, Vissarion | 3rd Officer |
| Breykin, Andrey | Chief Engineer |
| Zaviryukha, Volodymyr | 2nd Engineer |
| Galia, Domingo Jr. | 3rd Engineer |
| Si, Thu Aung | Electrician |
| Odarchenko, Yuriy | Pumpman |
| Larino, Emelito Bacasmas | Bosun |
| Tan, Reynaldo Jr. Capapas | AB |
| Sustiguer, Francis Cesar Qidato | AB |
| Charcos, Charlito | AB |
| Canta, Romulo Jr. Laguisma | OS |
| Graida, Christian | OS |
| Merene, Ernesto | Fitter |
| Sususco, Andro Cole | Oiler |
| Visaya, Jayson Evangelista | Wiper |
| Unlayao, Erickson Coronel | Chief Cook |
| Pillone, Jevie Casaria | Messman |
| Krupenko, Oleg | Deck Cadet |
| Vorobiov, Andrii | Deck Cadet |
| Tsylyuryk, Andrii | Deck Cadet |
| Khlivniuk, Mykola | Deck Cadet |



Chemtrans Riga



Chemtrans Rouen

| | |
|-------------------------|----------------|
| Gorbunovs, Olegs | Master |
| Khrystenko, Oleksandr | Chief Officer |
| Kasarjian, Ervand | 2nd Officer |
| Gurman, Mykhaylo | 3rd Officer |
| Kondrashov, Pavel | Chief Engineer |
| Ferents, Vadym | 2nd Engineer |
| Zharov, Pavel | 3rd Engineer |
| Stratiyevsky, Oleksandr | Electrician |
| Kovalovs, Nikolajs | Pumpman |
| Anpilogov, Igor | Bosun |
| Pruidze, Davit | AB |
| Malaman, Ivan | AB |
| Arutunyan, Grant | OS |
| Diasamidze, Aleksandre | OS |
| Bondarenko, Mykola | Oiler |
| Pasychnyk, Yuriy | Fitter |
| Davitadze, Ramaz | Wiper |
| Obrashchenko, Vitaliy | Chief Cook |
| Palamarchuk, Sergiy | Messman |
| Voitov, Vladyslav | Engine Cadet |

| | |
|-----------------------|-----------------------|
| Oleg, Starodub | Master |
| Oleksiy, Mozgovyy | Chief Officer |
| Ivan, Yushkevych | Trainee Chief Officer |
| Anton, Kovalevsky | 3rd Officer |
| Andrii, Sokolov | Chief Engineer |
| Maxim, Garanin | 2nd Engineer |
| Artem, Leleka | 3rd Engineer |
| Veniamin, Kolchin | Electrician |
| Volodymyr, Vitkivsky | Pumpman |
| Ruslan, Pavlenko | Bosun |
| Andrei, Devadze | AB |
| Irakli, Glonti | AB |
| Temur, Bedunkevich | OS |
| Dzambulat, Surmanidze | OS |
| Edgars, Puce | Fitter |
| Artem, Gordiyenko | Oiler |
| Yevhenii, Haida | Wiper |
| Ivan, Skliar | Engine Cadet |
| Kostyantyn, Dubovy | Chief Cook |
| Vladislav, Stanchev | Messman |

Crew List – Our Men on Board



| | |
|----------------------|------------------------|
| Kumar, Ajay | Master |
| Kubitsa, Artem | Chief Officer |
| Makhno, Dmytro | 2nd Officer |
| Zhbankov, Maksym | 3rd Officer |
| Tsurkan, Andrii | Chief Engineer |
| Gomanyuk, Oleksiy | Trainee Chief Engineer |
| Stoyanov, Segiy | 3rd Engineer |
| Sklifasovskyi, Oleg | Junior Engineer |
| Panasenko, Oleh | Electrician |
| Melnyk, Mykola | Pumpman |
| Aseev, Sergey | Bosun |
| Byelograd, Andriy | AB |
| Jikidze, Tornike | AB |
| Lukianov, Vladyslav | OS |
| Tetemadze, Aslan | OS |
| Rybalchenko, Sergiy | Fitter |
| Ilchenko, Yuriy | Oiler |
| Topalo, Viacheslav | Wiper |
| Nezhylviasov, Sergii | Chief Cook |
| Kiriev, Oleksandr | Messman |
| Gavrylov, Mykola | Engine Cadet |



| | |
|------------------------------|----------------|
| Dukko, Aleksandr | Master |
| Yarikov, Vasilij | Chief Officer |
| Varshanidze, Vakhtang | 2nd Officer |
| Dolgov, Alexander | 3rd Officer |
| Turovtsev, Sergey | Chief Engineer |
| Kubrakov, Nikolay | 2nd Engineer |
| Zavgorodniy, Vadym | 3rd Engineer |
| Romanov, Oleg | Electrician |
| Ielogvenko, Leonid | Pumpman |
| Ciriaco, Raul Canillas | Bosun |
| Omila, Joemar Villa | AB |
| Gayatgay, Elmo Garde | AB |
| Cornejo, Nino Japlos | AB |
| Sedigo, Marcial Sardon | OS |
| Dionio, Arji Shalom Madalag | OS |
| Cadavos, Ronald Alboleras | Fitter |
| Mazuryk, Volodymyr | Fitter |
| Morales, Archie Ozaraga | Motorman |
| Carbonera, Joeven Arada | Wiper |
| Alborote, Jeppy De La Rama | Chief Cook |
| Batoon, Joshua Mari Dacuycuy | Messman |



Chemtrans Sky



Hamburg Star

| | |
|-----------------------------|----------------|
| Trefilov, Viktor | Master |
| Kondratyuk, Stepan | Chief Officer |
| Brezhnev, Kirill | 2nd Officer |
| Soloviov, Vitalii | 3rd Officer |
| Zayarchenko, Vasyl | Chief Engineer |
| Nastasyuk, Andriy | 2nd Engineer |
| Zhurbenko, Denys | 3rd Engineer |
| Win, Khaing | Electrician |
| Andrieiev, Leonid | Pumpman |
| Dioquino, Renato Manzano | Bosun |
| Torrechante, Genie Terania | AB |
| Pantaleon, Romeo Jr. Jose | AB |
| Conde, Elmer Apao | OS |
| Daruca, Don Diestro | OS |
| Siendo, Delfin Jr. Teriales | Fitter |
| Galvez, Esmín Mentay | Motorman |
| Paulines, Jesthony H. | Wiper |
| Tabora, Marcelito Orbello | Chief Cook |
| Robles, Sammy Laquindanum | Messman |

| | |
|-----------------------------|----------------|
| Dodic, Ivan | Master |
| Nesterenko, Oleksiy | Chief Officer |
| Yakhmyuk, Maksym | 2nd Officer |
| Kakhadze, Demur | 3rd Officer |
| Lunegov, Sergiy | Chief Engineer |
| Lotvin, Dmytro | 2nd Engineer |
| De Lima, Erickson Guarin | 3rd Engineer |
| Moe Hlaing, Soe | Electrician |
| Loboda, Vitaliy | Pumpman |
| Regatcho, Juvín Alviór | Bosun |
| Nares, Venecio Jr. Tandugon | AB |
| Davila, Joselito De Leon | AB |
| Patino, Ipy Vicente Galay | AB |
| Zonio, Bernabe Rabal | OS |
| Bershadskyi, Oleksandr | OS |
| Smirnov, Sergiy | Fitter |
| Aragon, Shemruck Montano | Motorman |
| Villa, Razel Umahag | Wiper |
| Chaikovskiy, Oleksandr | Engine Cadet |
| Paalisbo, Wilbur Ponce | Chief Cook |
| Pagayonan, Joemie Escalona | Messman |

Crew List – Our Men on Board



Green Point

| | |
|------------------------------------|----------------|
| Barbanov, Anatoliy | Master |
| Kozhukhovskiy, Oleg | Chief Officer |
| Chernysh, Andrii | 2nd Officer |
| Ziatkovskiy, Anatolii | 3rd Officer |
| Stepockins, Sergejs | Chief Engineer |
| Burnus, Vladimir | 2nd Engineer |
| Shopin, Sergiy | 3rd Engineer |
| Rusiaev, Viacheslav | 4th Engineer |
| Gur, Oleksandr | Electrician |
| Blinov, Sergiy | Pumpman |
| Bitco, Ronnel Arroyo | Bosun |
| Talana, Lynan Jeat Sinangote | AB |
| Matulac, Ernesto Erwin Jr. Dequina | AB |
| Mandate, Michelle Jaen | AB |
| Capellan, Prospero Jr. Azares | OS |
| Naungayan, Oscar Jr. Guinaban | OS |
| Sukhoparov, Gennadiy | Fitter |
| Aninon, Bryan Julius | Oiler |
| Estrella, Zoren Daquiado | Wiper |
| Bagaporo, Ariel Borja | Chief Cook |
| Molina, Gilbert Onting | Messman |



Hans Scholl

| | |
|-----------------------------------|----------------|
| Yevtushevsky, Oleksandr | Master |
| Zoidze, Vitali | Chief Officer |
| Koposov, Dmytro | 2nd Officer |
| Krupin, Kostiantyn | 3rd Officer |
| Prokopenko, Oleksandr | Chief Engineer |
| Bagapov, Sergii | 2nd Engineer |
| Troyan, Viktor | 3rd Engineer |
| Dudok, Oleksandr | Electrician |
| Keshelava, Mamuka | Pumpman |
| David, Jessmar Baltazar | Bosun |
| Santiago, Ezrael Verino | AB |
| Gever, Johnry Nemenzo | AB |
| Pesquera, Rubymar JR.Cabras | OS |
| Racho, Voltaire Dwight Garcia | OS |
| Villaverde, Andre Awit | Motorman |
| Fidarov, Aslan | Fitter |
| Arriessgado, John Michael Labitad | Wiper |
| Gallen, Alexander Inigo | Chief Cook |
| Vale, Hermes Tungolh | Messman |



JM Sutera I



JM Sutera II

| | |
|--|----------------|
| Shahrir, Bin Kamaruddin | Master |
| Yuliyanto, Amad | Chief Officer |
| Tiviyan G, Bala | 3rd Officer |
| Bruno Anak, Caleb | 3rd Officer |
| Uchender Jit Singh, Jasvinder Singh | Deck Cadet |
| Rahman, Harjanta | Chief Engineer |
| Yansyah, Bin Amran | 2nd Engineer |
| Megat Anas Hafizuddin, Bin Abdul Jalil | 3rd Engineer |
| Ahmad Safrie, Bin Ahmad Kamal | 4th Engineer |
| Ardiansyah, Halim | Electrician |
| Arvinraj, Aurumugam | Engine Cadet |
| Abdul Madjid | Pumpman |
| Mohamad Riduan, Bin Aziz | AB |
| Ridwan | AB |
| Sabarudin, Bin Dahlan | AB |
| Mohamad Faiz, Bin Zakaria | OS |
| Ahmad Hafiz, Bin Romle | OS |
| Sayitno | Fitter |
| Mohamad Shakir, Bin Mohd Shukor | Greaser |
| Muhammad Fuad, Bin Saidon | Greaser |
| Sayed Saifuddin, Bin Sayed Alwi | Chief Cook |

| | |
|----------------------------------|----------------|
| Brian De Gray Anak Magges | Master |
| Kadarusman | Chief Officer |
| Vicherme Espellogo, Ogatis jr. | 2nd Officer |
| Keshav Sheshrao, Shinde | 3rd Officer |
| Pratama Sandita, Ramadhany | 3rd Officer |
| Rahmat, Hidayat | Chief Engineer |
| Mohd Nazri Bin, Razali | 2nd Engineer |
| Nelson, Sitompul | 3rd Engineer |
| Edinbaro, Grandy | 4th Engineer |
| Harizon Darna Darumi | Electrician |
| Sawidi | Bosun |
| Dunstan Anak Salih | AB |
| Tajab, Arista | AB |
| Winoto | AB |
| Muhammad Nur Syafiq Bin Shamsul | OS |
| Muhamad Luqifi Bin Mohamad Ansor | OS |
| Muhammad Rozi | Fitter |
| Muhammad Nur Haziq Bin Mazlan | Greaser |
| Agus Darwanto | Greaser |
| Mohd Hadani Bin Muhammad Azman | Chief Cook |
| Muhammad Nazran Bin Ahmad Nizar | Engine Cadet |
| Mohaana Daarisan Chandara Segar | Deck Cadet |

Crew List – Our Men on Board



JM Sutera III

| | |
|------------------------------------|-----------------|
| Abd Jalil, Bin Mansor | Master |
| Bali, Sahil | Chief Officer |
| Mugilaan, Nadarajan | 2nd Officer |
| Muhammad Aiman, Bin Abdul Aziz | 3rd Officer |
| Hii Yeou Wie | 3rd Officer |
| Wan Muhammad Faisal, Bin Wan Murni | Deck Cadet |
| Tevaanenth, Gunabalam | Deck Cadet |
| Ernesto Orosco, Viray jr. | Chief Engineer |
| Eko, Supriyanto | 2nd Engineer |
| Muhamad, Muklis | 3rd Engineer |
| Amal Maaruf, Bin Mat Izaham | 4th Engineer |
| Pavithiran, Suresh | Engine Cadet |
| Eko, Susanto | Electrician |
| Azis, Hanapi | Pumpman - Bosun |
| Yusardimen | AB |
| Tri Abdul Rohmat | AB |
| Devalindo, Bin Jaripusnardi | AB |
| Mohd Anuar Shafiq, Bin Ishak | OS |
| Asyraf, Bin Azzuddin | OS |
| Edy | Fitter |
| Suhaipi | Greaser |
| Balachandran, Muniandy | Greaser |
| Askari | Chief Cook |



London Star

| | |
|--------------------------------|----------------|
| Radcenko, Viktors | Master |
| Kyselyov, Borys | Chief Officer |
| Karpenko, Mykhailo | 2nd Officer |
| Basiladze, Mindia | 3rd Officer |
| Topalov, Ivan | Chief Engineer |
| Matviyenko, Denys | 2nd Engineer |
| Khoroshevskiy, Ievgen | 3rd Engineer |
| Myint Kyaw Thu Moe | Electrician |
| Moncano, Prolito Jabines | Bosun |
| Grechukha, Viktor | Pumpman |
| De La Cruz, Jay Daprosa | AB |
| Pagkaliwangan, Jessie De Villa | AB |
| Rubio, Salvador Jr. Sumaya | AB |
| Danico, Ivan Drexen Aperocho | OS |
| Vergara, Gerald Sosito | OS |
| Diacono, Ronnie Sarahina | Fitter |
| Vilog, Almar Macayan | Oiler |
| Belga, Walter John Surmaco | Wiper |
| Quirante, Jonathan Bigornia | Chief Cook |
| Gueco, Jonald Joseph Espiritu | Messman |
| Semenov, Kostiantyn | Deck Cadet |



MS Simon



MS Sophie

| | |
|---------------------------------|----------------|
| Perica, Robert | Master |
| Haicaman, Maro | Chief Officer |
| Tanurdzic, Dusko | 2nd Officer |
| Alekseev, Zhan | 3rd Officer |
| Giljanovic, Ante | Chief Engineer |
| Niksic, Tonci | 2nd Engineer |
| Stopchansky, Volodymyr | 3rd Engineer |
| Bolgov, Danil | Electrician |
| Cetra, Noel Ocbina | Pumpman |
| Mendoza, Reuel Vargas | Bosun |
| Bahia, Rosauo Jr. Del Rosario | AB |
| Matulac, Alexis Gumana | AB |
| Villabrille, Adin Pasuquin | AB |
| Fajardo, Norway Sabalones | OS |
| Llorente, Jhufel Mingki | OS |
| Berena, Neil Caranay | Fitter |
| Redelicia, Aidelbert Valente | Oiler |
| Flordelis, Rodulfo III Domasico | Wiper |
| Kochadze, Rezo | Chief Cook |
| Moraga, Gabriel Buena | Messman |

| | |
|----------------------------------|----------------|
| Kogut, Oleg | Master |
| Kolomeyets, Viktor | Chief Officer |
| Stepanov, Yevgen | 2nd Officer |
| Abashvili, Robert | 3rd Officer |
| Toneryan, Amayak | Chief Engineer |
| Trotsan, Ihor | 2nd Engineer |
| Fomin, Yevgeniy | 3rd Engineer |
| Tin Aung, Myint | Electrician |
| Lastakanidze, Omar | Pumpman |
| Punta, William Moreno | Bosun |
| Suller, Alando Cayabyab | AB |
| Sanchez, Manuel Jr. Nazareno | AB |
| De La Pena, Robert Sanipa | OS |
| Lagamon, Kenneth John Gello-Agan | OS |
| Gelyukh, Oleksandr | Fitter |
| Planas, Vicente Samia | Oiler |
| Alindogan, Ronie Mark Tomo | Wiper |
| Abashidze, Nugzar | Chief Cook |
| Alferez, Michael Joquino | Messman |
| Osadchyi, Stanislav | Deck Cadet |

Crew List – Our Men on Board



Voge Dignity

| | |
|-----------------------------|----------------|
| Agnic, Roberto | Master |
| Nikitenko, Victor | Chief Officer |
| Khalvashi, Ramaz | 2nd Officer |
| Franciskovic, Nikola | 3rd Officer |
| Raguz, Ivan | Deck Cadet |
| Stepanenko, Aleksandr | Chief Engineer |
| Basyuk, Yevgeniy | 2nd Engineer |
| Nikolenko, Oleksandr | 3rd Engineer |
| Saw Daniel | Electrician |
| Kryuchkov, Oleksandr | Pumpman |
| Verba, Rez Vasquez | Bosun |
| Agsaluna, Charlie Espin | AB |
| Sombilon, Frederick Sorallo | AB |
| Camayudo, Daryl Catedrilla | AB |
| Cabero, Ralph Victor John | OS |
| Abad, Mark Joseph Negosa | OS |
| Annenko, Yuriy | Fitter |
| Gamuzaran, Zariel Talayre | Oiler |
| Galia, Chris Ian | Wiper |
| Garcia, Virgilio | Chief Cook |
| Cesar, Froilan Adonis Digal | Messman |



MV Trans Africa

| | |
|--------------------|----------------|
| Kim Soon, Tan | Master |
| Jiang, Lou | Chief Officer |
| Jian Bo, Wu | 2nd Officer |
| Jia Hao, Liu | 3rd Officer |
| Zhen Bao, Zhang | Chief Engineer |
| Zi Long, Liu | 2nd Engineer |
| Guo Zheng, Zhang | 3rd Engineer |
| Ming Ming, Jiang | 4th Engineer |
| Ra Sun, Thu | Electrician |
| Qiu De, Tang | Bosun |
| Ming Hui, Tao | AB |
| Ji Lei, Liu | AB |
| Yong Yin, Zhu | AB |
| Bao Shan, Zhang | OS |
| Sapala, John Louie | OS |
| Tong Liang, He | Fitter |
| Ying Jie, Du | Oiler |
| Hong Wei, Lu | Chief Cook |
| Qiang, Niu | Messman |



MV Trans Shanghai

| | |
|-------------------|----------------|
| Qiao, Dong Sheng | Master |
| Dong, Yong | Chief Officer |
| Jing, Gang | 2nd Officer |
| Dong, Jing Peng | 3rd Officer |
| Shi, Li De | Chief Engineer |
| Jiao, Xue Jie | 2nd Engineer |
| Hu, Tian Xi | 3rd Engineer |
| Wang, Yan Hua | 4th Engineer |
| Xu, Ya Yu | Electrician |
| Su, Jing Chao | Bosun |
| Liu, Bing | AB |
| Zhu, Zheng Ming | AB |
| Qu, Pan Long | AB |
| Zhang, Zhi Hang | OS |
| Aung, Naing Nyein | OS |
| Wang, Zhong Cun | Fitter |
| Gao, Min Jun | Oiler |
| Lin, Bao De | Chief Cook |
| Gu, Bo | Messman |

