



**Environment Management Group** 

"K" Line was recognized as a Climate A List company, the top rating on climate change from CDP\*, which is an international non-profit organization (NPO) implementing activities to achieve a sustainable economy, at the CDP 2018 Debriefing Session held in Tokyo on January 22, 2019. Companies assessed as global leaders in terms of their solutions to climate change are selected for this list.

More than 7,000 major companies worldwide respond to the questionnaire sent by the CDP, and the top 136 were certified as A List companies (as of Feb. 8, 2019) for measures taken against climate change among those that disclosed their environmental data, including energy consumption in the previous year. Of the 136 selected, 20 were Japanese companies, two of which were shipping companies, including "K" Line.



Executive Officer, Toyohisa Nakano, at the Debriefing Session

Executive Officer Toyohisa Nakano, who spoke at the Japan Debriefing Session, said, "We are extremely delighted and honored to be recognized as an A List company this year, during the centennial anniversary of our company."

In our medium-term management plan, we have set Environment, Society and Governance (ESG) initiatives as our key management issue. In the field of the environment, we have been implementing a variety of activities such as the introduction of our environmental flagship in line with "K" LINE Environmental Vision 2050 -Securing Blue Seas for Tomorrow, our long-term environmental policy formulated in 2015. It is likely that our decision last year to launch an LNG fuel supply vessel business with our partner companies and our efforts in the framework of Drive Green Network for continually promoting environmental preservation while ensuring environmental compliance throughout the entire "K" Line Group, among other activities, led to the recognition as an A List company for the third consecutive year.

We ask for your continued cooperation in our efforts to preserve the environment and biodiversity to carry out our mission to achieve a sustainable society and maintain blue, beautiful seas for the next generation, as set forth in "K" LINE Environmental Vision 2050.





\* CDP (formerly known as Carbon Disclosure Project)

CDP is an international NPO based in London, representing 650 institutional investors with total assets of 87 trillion U.S. dollars. Every year it sends out questionnaires on risks, opportunities and responses concerning climate change, water and forests worldwide to companies with high market capitalization and assesses them based on their answers. CDP rates the companies on an eightpoint scale, from A to D, and discloses the results as a global rating index for measuring corporate value, which can be used for making investment decisions.

# First Discharge of LPG from Ichthys LNG Project in Japan Carried by "K" Line's VLGC "GRACE RIVER"

Tanker Team, Tanker Group

In the Ichthys LNG Project advanced in Australia under the initiative of INPEX Corporation (headquartered in Minato-ku, Tokyo; President & CEO: Takayuki Ueda), which was reported in the Winter 2019 Issue of Ocean Breeze, both liquefied petroleum gas (LPG) and gas-condensate are produced and shipped in addition to liquefied natural gas (LNG).\* In this issue, our team reports on the introduction of "K" Line's VLGC "GRACE RIVER" into the transportation of the first shipment of LPG for Japan to be discharged from this project.

The carrier completed loading her initial shipment for discharge in Japan on January 13, 2019 in Darwin, Australia and safely delivered the cargo to the KYUSHU LPG Fukushima Terminal (Fukushima Town, Matsuura City, Nagasaki) on January 23, 2019. It is expected that "K" Line's carrier will be continuously used for transportation of LPG produced by the Ichthys LNG Project.

The total volume of LPG transported in international maritime transportation was about 100 million tons as of 2018, around 10 million tons of which were transported to Japan. In the international transportation of LPG, which has developed significantly with the rapid increase in exports from the U.S. following its shale gas boom and also given the rapid rise in import demand from China and India, five of "K" Line's carriers have been in full operation all around the world.

In the Ichthys LNG Project, it is also expected that "K" Line Group's carriers will be used for cargo produced and shipped by the project, including the transportation of LNG by "K" Line's carriers "PACIFIC BREEZE" and "OCEANIC BREEZE" as reported in the Winter 2019 issue of Ocean

Breeze; LPG transportation reported in this issue; and also the transportation of gas-condensate to be performed by an Aframax tanker owned and operated by our group company in Singapore ("K" Line Pte. Ltd.).

With the importance of our crucial role in the energy value chain in mind, "K" Line Group remains united in its commitment to safe and stable ocean transport, and will positively respond to diverse needs for transportation by providing the highest-quality services.

Note: In the Ichthys LNG Project, it is planned to produce and ship LNG (annual amount of about 8.9 million tons), LPG (annual amount of about 1.65 million tons), and gascondensate (daily volume of about 100,000 tons during peak times).



## "K" Line Receives "Commendation Award" in the "Internet IR Award 2018" by Daiwa Investor Relations Co. Ltd.

Investor Relations, IR & PR Group

Kawasaki Kisen Kaisha, Ltd. ("K' Line") has received the Commendation Award in the Internet IR Award 2018 by Daiwa Investor Relations Co. Ltd. ("Daiwa IR"), and the award ceremony was held on January 11, 2019.

Daiwa IR evaluates both the Japanese and English pages of IR websites (investor relations pages) of 3,782 public-listed companies and selects companies that have created outstanding IR websites, providing efficient information disclosure that is used effectively for communication activities. A total of 131 companies received awards this year.

Last April, "K" Line renewed all pages of its official website. The Company simplified the structure of its IR pages to increase information accessibility and enhanced the information for shareholders and investors, such as "Value Creation Story" and "K" Line Story for individual investors. It is likely that such improvements were recognized with the award received.



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The IR division will continue to enhance appropriate information disclosure and interactive communication with our stakeholders, including shareholders and investors.

### Delivery of 200,000-DWT Bulk Carrier "CAPE SAPPHIRE"

Coal & Iron Ore Team No.1, Coal & Iron Ore Carrier Business Group

On February 26, 2019, the 200,000-DWT capacity capesize bulk carrier "CAPE SAPPHIRE" was delivered at the Marugame Headquarters, Imabari Shipbuilding Co., Ltd. The ship will be operated for the transportation of coal and iron ore as a ship specializing in continuous voyages for Nippon Steel Corporation (Nippon Steel & Sumitomo Metal Corporation at the time of the delivery of the ship).

The ship is a state-of-the-art ship equipped with the world's most advanced technologies. It complies with the Common Structural Rules for Bulk Carriers (CSR-BC) and also equipped with an electronic control engine as the main engine, which incorporates improved low temperature corrosion countermeasures. In addition, it achieves energy efficiency by establishing a Weather Adapted Duct (WAD) in the front of the propeller and a hybrid fin in the rear portion for improving the propulsive efficiency.

Further, in order to comply with the SOx emission regulations that will be enforced worldwide from January 2020, the ship is equipped with an open-loop SOx scrubber made in WARTSILA, which removes sulfur oxide from the exhaust gas from the engine inside the funnel casing. The ship represents a milestone, being the first ship equipped with a SOx scrubber among the capesize bulk carriers delivered by Japanese shipyards. It is also the first capesize bulk carrier mounted SOx scrubber for Nippon Steel, Imabari Shipbuilding, and us.

"Daiichi Fuji-Maru" delivered in 1956 beginning the business between Imabari Shipbuilding and "K" Line, and actually "CAPE SAPPHIRE" is the 300th ship constructed for "K" Line and our Group companies. Therefore, it is a memorial ship number in 2019 which is our 100th anniversary of foundation,

Mr. Nakamura, Vice President of Nippon Steel and his wife attended the naming and delivery ceremony for the ship. Following the strong nam-





#### **Ship Specifications**

Main dimensions: Length: 299.95 m; Width: 50.00 m; Depth: 24.70 m; Draft: 18.32 m

Deadweight: 208,564 t Gross tonnage: 107.454 t

Main engine: MES MAN-B&W 6G70ME-C9.5

Service speed: 14.5 knots Class: Class NK Registry: Japan

Constructor: Marugame Headquarters, Imabari Shipbuilding Co., Ltd.

ing and splendid cutting of the guy rope by Mr. and Mrs. Nakamura, the ship was christened the "CAPE SAPPHIRE" and set out on her maiden voyage to support Japanese steel industry. "SAPPHIRE" means "blue" in Latin, which is a color that reminds us of the sea, the sky and the earth, and it is also the brand color of its cargo owner Nippon Steel.

Moreover, the gem language of sapphire includes the concepts of "faith," "affection" and "virtue," which we have in mind every day during exertions for our business. By being aware of the wishes that related parties holing in the course of ship's construction and delivery. We truly remembered how large the scale of the shipping industry is and how important our mission of supporting the Japanese steel industry is.

While watching the ship leave its mother dock and set off on its maiden voyage blowing a whistle, all the associated parties waved at the ship and the crew, united in their aim of continuing to support her safe voyage and operation of the ship.

BON VOYAGE!

## Delivery of 91,000-ton Capacity Coal Carrier "CORONA YOUTHFUL"

Thermal Coal Team No.1, Thermal Coal Group

On February 1, 2019, the 91,000-ton capacity coal carrier "CORONA YOUTHFUL" was delivered at Oshima Shipbuilding Co., Ltd. and joined our mighty Corona Series fleet.

The naming and delivery ceremony was held on the same day, attended by a large number of representatives, including Mr. Terasaki, Vice Director of Tohoku-Electric Power Co., Inc.; Mr. Hiraga, President of Oshima Shipbuilding Co., Ltd.; and Mr. Kamichika, Executive Director of Oshima Shipbuilding Co., Ltd. The vessel was successfully delivered following the strong naming by Mr. Harigai, Managing Executive Officer (now Senior Managing Executive Officer), and the splendid cutting of the guy rope by his wife.

Celebrated by a large number of stakeholders and with a song sung enthusiastically by the executives of Oshima Shipbuilding Co., Ltd. themselves, the vessel set out on her maiden voyage to Tanjung Bara, a coal shipment port in Indonesia.

The vessel was named "CORONA YOUTHFUL" as an icon for the power of youth that will carve out a new era, with the wish that the vessel will make a contribution to the stable and safe transportation of coal for electric power companies. The vessel features advanced flipper fins and a rudder fin to improve its propeller propulsive efficiency, which brings about further improved fuel consumption compared with conventional vessels. It also incorporates state-of-the-art technologies, including ballast water treatment equipment introduced in consideration of protecting of the marine habitat. It is also equipped with a binary power generation system that generates power using the heat of compression from the scavenging air from the main engine, which recovers part of the energy of the exhaust heat as electric power to reduce the power consumption of the on-vessel generator engine.

Following the launch of the vessel, the Corona Series includes as many as twenty vessels, and it has been popular among Japanese electric power companies for many years as a pioneer in the wide-beam/shallow draft coal carrier. During this time, we have developed a system that ensures the maximum safe operation, loading and unloading through the maintenance of the hull and our original training of the crew.

The Corona Series is one of the largest fleets in the world as a post-Panamax fleet, and we will expand the scale of the fleet and will also continue to cooperate with our customers as an expert in thermal coal transport by taking advantage of our experience and skills that have been cultivated over a long time. We appreciate the cooperation we received from everyone up to the delivery of the ship.

Please look forward to the excellent service to be offered by the "CORONA YOUTHFUL" and the Corona Series fleet.





## Congratulations on "K" Line's 100th Anniversary: Messages Linking on to the Future

"K" Line marked100th anniversary. At this occasion as our milestone, young staff in their first, fifth, and tenth year with "K" Line have contributed messages.



### Riding Out the Stormy Seas Into the Next generation

Congratulations "K" Line on the 100th anniversary of your founding! I am very happy and proud to be an employee of "K" Line at the time of this historic milestone. It has made me feel, first-hand, that it is our duty as the young generation of employees to carry on the history of the "K" Line Spirit that has been passed down over the last 100 years to ensure that it does not end.

Looking back, it has been just under a year since I joined the company. The time has flown by so fast! As I have made the major transition from student to adult member of society, I have been exposed to society's harsh realities, while at the same time living a full and stimulating day to day life. One thing that surprised me when I joined "K" Line was the large amount of discretion that each individual employee has. Another thing was the work content, which really enables you to feel "global" in the literal sense of the word. The fact that "K" Line entrusts me with so much even though this is my first year since joining the company makes me to feel that this is "K" Line's corporate atmosphere itself. Looking ahead, I want to continue to push forward towards becoming a fully-fledged shipping industry professional myself, working in the spirit of "K" Line passed down by past generations of predecessors.



Mr. Yumeki Ishiguro America Team, Car Carrier Business Group



Mr. Hideyuki Hatooka Human Resources Planning Team, Human Resources Group

### Marking "K" Line's 100th Anniversary

Since joining "K" Line I had worked on secondment, but as of January I have returned to work at Kawasaki Kisen. I am happy to be able to celebrate the company's 100th anniversary from back at the Iino Building. I also feel a renewed sense of pride to be working at such a historic company, that has been in business for a period of 100 years, which is difficult to even imagine.



- $\bullet$  What I hope to see from "K" Line 10 years from now:
- When I have been on container ship sales visits, I often hear anecdotes from customers about past sales representatives. This has made me feel first-hand that "K" Line is a company that is built on the guts and vitality of its personnel. I hope that the company will remain unchanged in that sense 10 years from now, and become capable of providing even better services. I also want to help make "K" Line a company where all employees can feel proud to be working here.
- Where I hope to see myself 10 years from now:

  I want to be a bright and cheerful person who uplifts the spirits of those around me, both at work and in my private life. I also want to have a positive influence on those around me by always working energetically, to the very best of my abilities.



#### Congratulations "K" Line on Your 100th Anniversary

- Congratulatory message and things I feel as the company marks its 100th anniversary:

  Personally, this year marks the 10th anniversary since I joined "K" Line. Checking the numbers once again, I am surprised that so much time has passed. Since this is "K" Line's 100th anniversary, it means that 10 times that amount of time has passed since the company was founded! It's a very long time, and I can really feel the weight of what that means. Congratulations!
- Where I hope to see myself 10 years from now:

  Although I cannot imagine in concrete terms, I hope that I still have my health and my strength. My dream is to take part in the parents and siblings event at my children's school Sports Day.
- What I hope to see from "K" Line 10 years from now:

  Two things that I don't want to change are the good relationships between employees, and the atmosphere within the company. One thing that I do want to change, more than anything else, is the company's profitability; although that is something that we must change by ourselves.
- What I like about the company:

  These is something that hasn't changed since I joined the company, which is how good the relationships are between employees. I think it's because there are so many people with warm personality. Even at work, people show their true selves, not excessively concerned to be careful, and form friendships with people in different generation. I think that there are also many people who are good at looking after others. When I joined the company, my trainers and other more senior colleagues taught me many things, and even now, there are many people around me who will listen to me when I have difficulties. I want to be that kind of person, too.



Mr. Toshiaki Yajima LNG Group 2, LNG Group



Ms. Arika Oku Coal & Iron Ore Operation Team No.1, Coal & Iron Ore Carrier Planning & Operation Group

#### Be the next "K" Line BRIDGE

Congratulations on "K" Line 100th anniversary!

Congratulations to "K" Line on the 100th anniversary of its founding. I am very happy to have been able to mark this memorable year as an employee of "K" Line.

I think that during this longer 100-year history, there must have been many difficult periods, both for "K" Line and for the marine transport industry as a whole. However, I believe that the company has been able to fulfil its important role as a bridge to the rest of the world for so many years because of the efforts of our wonderful predecessors. In order to take up the baton as part of the next generation to carry on after this 100-year milestone, without forgetting those efforts, I want to become the kind of "K" Line employee who can generate positive changes from day-to-day, without being content or becoming fixated upon the current way of doing things.

For this reason, I don't want to spend my days aimlessly. By attempting challenges in new and undeveloped fields and areas of work, and by overcoming difficulties and obstacles, I want to push forward every day towards becoming someone who is even better than the person but I imagine myself to be five, ten or X number of years from now!





#### **Beyond Our 100th Anniversary**

Congratulations to "K" Line on the 100th anniversary of its founding. I am very proud that the company has overcome numerous periods of social turmoil and economic ordeals, and remained a company that was needed by society for over a century. I am also truly and sincerely happy to have been able to mark this 100th year as a member of the organization.

As you all know, the "K" Line Spirit that has been passed on throughout the history of our company is comprised of "independence and autonomy," "broad-mindedness" and "enterprising spirit." I believe that the essence of what is necessary in order for our company to continue being needed by society in the future is condensed into this philosophy. We must keep hold of our pride in the fact that we play an important role in supporting global infrastructure, without relying on others; have a broad mind with regard to accepting nonconformity as we work to ride out the rough seas of change, in industrial structure as well as economic and social changes; and proactively attempt new challenges, without being constrained by precedent. In other words, it is my interpretation that in order to continue creating new value in response to changes, we must first change ourselves. In order to remain a company that is needed by society 10 years from now, I want to reflect on these words and work hard to train every day, in order to first change myself.



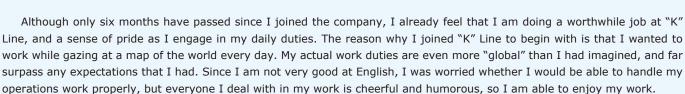
Mr. Kensuke Tanaka Human Resources Development Team, Human Resources Group



Mr. Tang TANG Tanke Team, Tanker Group

### Feeling Global Every Day

Congratulations to "K" Line on its 100th anniversary! I feel honored to be here for this milestone just one year after joining the company.



Before I realized it, chatting with an Indian captain had become my way of taking a breather when I was having a hard time with my work. I feel like I kind of understand the reasons why "K" Line has been able to survive at the cutting edge of the logistics industry for 100 years. Starting from the foundation built by our predecessors over the past 100 years, I want to make a running start towards the next 100 years in true "K" Line Spirit!



#### **Honored to Be Here for This Historic 100th Anniversary**

Congratulations to Kawasaki Kisen on the 100th anniversary of its founding. I feel very honored to be here as an employee of "K" Line to witness this momentous milestone.

It is almost a year since I became a fully-fledged member of society. In my work so far, I have gradually come to appreciate the harsh realities of our intensely competitive society. Considering that Kawasaki Kisen has woven a century-long history for itself in that kind of society, I feel that it is a really strong and powerful company.

Although it might be arrogant for me to say so when not even a year has passed since I joined the company, I think that one of "K" Line's strengths is the attraction of its people. Seeing so many senior employees interacting enjoyably with people both at work and in private, and working energetically with such wide-ranging knowledge is truly appealing.

I strongly hope that ten years from now, this corporate culture with its abundance of attractive and appealing people will remain as it is now, or become even better still. And I want to push myself hard every day so that I myself might become one of these people.



Mr. Daisuke Kawanishi General Planning Team, Corporate Planning Group

## **Special Contribution**

### **Memories from Aboard Ship**

Here we present articles contributed by former Captains, sharing memories of their time onboard ship.

### "Memories from Aboard Ship" Contributed by Mr. Shigeru Kojima, Former Captain

Congratulations to "K" Line on its 100th Anniversary.

Last December, I was contacted and asked to write a contribution article for the "Memories from Aboard Ship" column. I felt very honored to be asked, so I got out my photo albums and strained my memories.

At the initiation ceremony when I joined "K" Line on October 1, 1969, the other new recruits and I were told, "You are joining the company in a milestone year: the 50th anniversary of our founding. Take good care of your yourselves, and do your best." In this article, I will talk about the first mixed cargo ship that I boarded 50 years ago, the Oshima Maru (a 9,258-ton vessel).

### [The West Africa Route]

On December 11, I boarded a launch/ferry boat at Meriken Hatoba in the Port of Kobe, and headed for the Oshima Maru, which was anchored offshore. There was a strong wind blowing, causing water to spray up onto the boat.

The ship was bound for West Africa, with a crew of 44. At our next stop, the Port of Keelung in Taiwan, we disembarked in a group of four or five and headed into town. When I said that a scary-looking person was following us, I was admonished and told that it was the ship's No. 1 Oiler.

On December 20, we entered the Port of Hong Kong, where there were still junks (Chinese sailing ships) coming and going. A middle-aged tailor who came to the ship waited for the right timing and then began measuring me up for a suit. "You haven't got your salary yet, right? It's OK, you can pay me whenever," he said. The suit was finished by the next morning. It was made with some extra room, anticipating that I might gain weight. I borrowed some money in advance from the Chief Officer (C/O).

After passing through the Straits of Malacca, we rounded the Cape of Good Hope and called at the Port of Cape Town. Next we stopped at the Port of Lobito, Angola, and then at Matadi in the Democratic Republic of the Congo, where the period of civil unrest had now ended. We travelled up the Congo River for six hours. It was a real jungle cruise, on a river with a width of around 250m. At the Port of Lagos, in Nigeria, we had to wait offshore for a month and a half. I have forgotten the port, but there was also one occasion—during nighttime cargo watch duty—when I discovered thieves stealing transistor radios from the cardboard boxes. I chased them across the deck. The security guard pretended not to see me, and put his foot out. I tripped, fell, and hit my shoulder, which hurt. When I grabbed him by the collar and asked, "Why did you put your foot out?" I was suddenly surrounded by five or six workers armed with knives. He did his best to intercede on my behalf. Later, the C/O told me, "Don't chase too far after them. If you had carried on into somewhere dark, it would have been dangerous. You should consider yourself lucky, that the guard helped you." We passed around countries such as Ghana, The Ivory Coast, Liberia and Cameroon—the region where slave trading once took place—and returned home to Japan in June. The Expo '70 world's fair was being held in Osaka.





Top: The Oshima Maru, Bottom: Entering the Port of Hong Kong





Top: The second generation Golden Gate Bridge passes under the actual Golden Gate Bridge, Bottom: A map of the Congo

### [The Caribbean Sea Route]

On my second voyage, we stopped at San Francisco and Los Angeles enroute to the Caribbean. It was thrilling to see the red Golden Gate Bridge appear from out of the mist. We travelled around Acapulco, along the Panama Canal, past Columbia, Venezuela and the many islands of the Caribbean. I learned some Spanish, including simple greetings and numbers. Our return load was coal, bound for the Port of Amagasaki in Hyogo Prefecture. We loaded it at a port near to New Orleans. Even our living quarters were covered with course, black powder.

#### [The New York Route]

My third voyage was the New York Route. We visited New York, Baltimore and Philadelphia, then returned to New York with a new load. On both the outward and return journeys we berthed near to the Brooklyn Bridge, which I had seen in movies. For each of our four-day stays, after my duty was finished, I rode the subway and went into the city. It was nearly Christmas. At the time, the Vietnam war was still going on. The graffiti in the stations and subway caught my eye!!

At Harlem's Apollo Theatre, James Brown sang in his own intense style, dripping in sweat.

At around 1.00 am, during cargo loading, a mobile pizza van would come to the side of the quay. I ate my very first slice of large-cut pizza, and it was delicious. We had a shaky ride on the Northern Atlantic. Every day, I would go down into the hold to inspect the barrels of tobacco leaves that we had loaded at Morehead City. The sour-sweet smell of the tobacco soaked into my work clothes.

### [Mexico, The Caribbean Sea and Middle America]

My fourth voyage was to the Caribbean again. On the way, we visited the Port of Mazatlan in Mexico. In the evening, I walked the streets of Mazatlan with the deck hands (able seamen). Peering through the open window of a night school classroom, I saw a map of East Asia drawn on the blackboard. My eyes met with those of the teacher, who asked me where I was from. When I answered, "Japon," he asked me to come inside. I answered questions about Japan in English as best I could. One of the students said, "The samurai movie that I watched before was amazing. Mifune's Yojinbo..." The following day, the teacher and four or five students visited the ship, and I showed them around. The teacher looked at one of our nautical charts, and began explaining about the Spanish conquistadors and their conquest of the Caribbean and Middle and South America.

We berthed at Port of Spain in Trinidad and Tobago the day before their carnival celebration. I enjoyed watching the steel drum bands and Caribbean dance parades.

We also visited the port of Corinto in Nicaragua, where there was a problem with refugees (at the port, people came to sell us cockatoos), and at the port of Amapala in Honduras. Both of these were small harbors set against a mountain backdrop. At the Port of San Jose in Guatemala, amidst the swelling waves,

### Special Contribution

we loaded bales of raw cotton (bound for the city of Yokkaichi in Mie Prefecture) into our hold from barges. I hated being wet by the water, and the rubbing from the wire bands used to tie the cotton. I disembarked the ship at Kobe in May. Although unthinkable today, I had been onboard for a voyage of 1 year and 5 months and had experienced docking twice. The next ship that I joined was a tanker, for a voyage of six months.

#### [The Computer Office]

In March 1972, I was assigned to the computer office.

For three-and-a-half years, I worked to create the container handling system at Oi Container Terminal, which had been reclaimed from the seam back in time when it was still part of the Port of Tokyo. Every day was tough, but we eventually made it in time for the opening. After that, I switched through sea-going and land-based posts around five times.



### ["K" Line Spirit]

My message to all of you is this. The world is changing rapidly, but some things remain unchanged. Take good care of your yourselves and do your best, in the free and open spirit of "K" Line.

### "Memories from Aboard Ship" Contributed by Mr. Takatoshi Igarashi, Former Captain

I joined "K" Line in October 1982. Over a period of thirty-some years, from the time when I joined the first generation Golden Gate Bridge as 3rd officer (3/O) until the time of my retirement, I served on a total of 22 vessels. Looking back again at the "Koseki" photo album of ships on which I served as a crew member, which I received from the Senwakai organization when I retired, I have very nostalgic memories of each of those vessels.

Amongst them, the ship for which I have the most memories is a pure car carrier (PCC) named the Atlantic Highway, which I served on for a period of one year and one week. It was my debut as 3/O. Since the time aboard ship was long, I have many memories of it. In this article, I want to share some of the more memorable and impressive ones.

After filling my suitcase and canvas bag—which I had bought after ending my tour on the Golden Gate Bridge—with clothing, reference books and other belongings, and putting my uniform, license and mariner's pocket ledger into my newly-purchased garment bag, I headed for Nagoya. I arrived at Kinjo Pier at the Port of Nagoya on the evening of February 1, 1983. The Atlantic Highway had a tonnage of 13,366G/T. If I recall correctly, it could carry around 2,500 cars. Thinking about it now, it was quite small by today's standards but at that time I stood petrified for a moment at the quayside, thinking what a huge ship it was. Looking up at this massive "wall," I saw that there was an accommodation ladder hugging the hull, hanging down from the upper deck. The thrill only lasted for a few moments, before I snapped back to reality and thought that I had to climb up and down this ladder three times carrying my luggage on my shoulder. Then the quartermaster, who was on gangway duty, came

### Special Contribution

out and told me from above that he would lower a net with the crane, so I should put my luggage in there. It seems that they had just finished loading the food provisions.

After boarding the ship, the first stop was to visit the captain's quarters, where I greeted and introduced myself to the captain on my appointment. Next I went to the radio room, where I handed my pocket ledger and license to the official, and then proceeded to the office. On that day there was no cargo to be loaded, but the C/O and other officers were all there, so I greeted them and introduced myself to all of them before heading to my own cabin. Then it was time for dinner. It was a continuous string of tense moments!!

Since it was my debut, I had to work a double-shift until our next port of call (which was Tokuyama, since Nagoya was the first of three loading ports), so I would be changing over the next day. We eventually set out from the final port of loading (I think it was Yokohama) and headed for our destination, which was the East Coast of the United States. Our next stop would be Balboa, at the entrance to the Panama Canal.



On the bridge, one week after boarding the ship

My major job after we embarked on our ocean voyage was positioning at noon every day. GPS did not yet exist, and the positioning systems in use at the time were systems such as Decca, LORAN-C, Omega and NNSS.\* All of these were quite suspect, so I would usually fall back on celestial navigation. Although my work was still half-baked, I had confidence in my skills at astronavigation since I had just graduated from school. On days when the weather was bad, we would use Omega and rely on dead reckoning and the captain's intuition to determine our position at midday. Luckily, during this voyage, I was able to use celestial navigation almost every day.

I knew that around 10 days after leaving Japan, we should soon be able to detect the California Peninsula on our radar. Although we could see land on our radar at the 90-mile range, it was not sufficient to determine ship's position. When I returned to the bridge the following morning, a coastal chart was laid out on the chart table, and the chief officer (C/O) was putting in the ship's position with the radar. When I saw this I felt a little thrill inside. So we had come this far using my skills of astronavigation! Although I had been backed up by the C/O's star sighting, we had managed to cross the Pacific Ocean using my celestial navigation skills!

Although the Captain and other officers appeared to see it as extremely normal and were not particularly impressed, and I wasn't particularly praised or anything like that, for me—as someone who had just joined the company—this was quite an emotional moment. On my morning watch each day, I used the sun to navigate, then determined our position at noon by taking the last measurement by the meridian passage method directly before midday. The Captain then used this to determine our course for the next 24 hours. After that I handed off to the 2nd officer (2/0), just like on the practice ship. Although the C/O verified our position by star sighting directly before sunset and sunrise, determining the ship's position at midday is still very important and significant. I felt really happy to think that we had managed to make our crossing as planned by my repeating this process each day. I think I was able to have this moving experience only because I was a newcomer.



The Panama Canal

We dropped anchor off the coast of Balboa in the evening. Since the quartermaster was on anchorage duty, that night I attended a dinner party. Before going to sleep—since I had been told that while we were anchored I could close my cabin door but that I must not lock it, but that I should also be wary of thefts by outsiders—I placed a bat (usually for recreational use) near my pillow just in case of any intruders, and positioned something over the door so that I would be able to tell if anyone opened it.

The next morning, I slept in without eating breakfast. The C/O came in shouting, "Until what time are you sleeping?" Before he could finish, the thing that I had positioned over the door fell down with a crash on top of the C/O's head. The C/O scowled and shouted, "You bloody idiot! Get up right now!" I jumped out of bed and hurried along to the bridge, where the C/O, 2/O and the boatswain were having a meeting. (In those days, Captain did not participate in meetings

such as this.) My eyes were still unfocused, but I made my apologies and joined in with the others.

Since the decision had been made to entrust the watch to the quartermaster during anchorage, I had assumed that I had the day off. When I told that to the 2/O after the meeting, he said to me, "Idiot. You start work at 8, unless the chosser (a Japanese mariner's term, short for chief officer or C/O) tells you the day before that you have a day off."

During my time on the Atlantic Highway I experienced the US East Coast route twice (of which, once via the West Coast), and the westbound round-the-world route (unloading and loading in Europe and unloading in the US) three times. When it was decided that on this westbound route we would be unloading our cargo in Europe then loading up again and unloading in America, and also since the ship was a PCC, I did not expect that I would be able to enjoy any leisurely sightseeing. But just on the off-chance that I did, I bought sightseeing guidebooks for various parts of Europe.

During our westbound trip across the Mediterranean, the C/O told me, "Our unloading and loading in West Germany will take place at Christmas, so we will stop loading cargo and stay there for around three nights. The Captain will give permission for half the crew to take shore leave. Plan a sightseeing tour." Since it was a recreational event, everyone on leave would be required to participate. Because it was a modernization training ship it had a crew of around 30, meaning that around 15 crew members would be participating in the tour. I was told to arrange two buses via a travel agency. As if I had been just waiting for this, I planned a bus tour to the Lorelei on the River Rhine leaving at 4.00am. Since it was uncertain how long it would take I arranged for the bus to travel directly to Lorelei on the outbound trip, then included several other sightseeing spots on our return trip.

I filled two or three sheets of A4 paper with my tour plan and sightseeing information, then used a mimeograph (since there were no copy machines at that time) to duplicate enough copies for everyone. For breakfast, the cook made onigiri rice balls which we ate on the bus. After strolling around the Lorelei, the plan was to stop off at a few other sightseeing spots on the return journey. However, since it was Christmas, everywhere except the churches were closed, so we ended up sightseeing from the windows of the bus. Even so, it seemed that everyone was fairly happy with the trip.

After the Atlantic Highway I served on around 20 other ships, but as I learned the job and rose through the ranks I became busier, and then even moreso with the coming of developments such as modernization and mixed boarding. It was only on that ship that I was able to enjoy myself in in such a leisurely manner.



The ship in Drammen, Norway



At the Lorelei

\*Decca, LORAN-C, Omega, NNSS
Names of radio navigation systems.
Radio navigation is a method for determining one's own ship's current position, using the geometric principle that the set of points "for which the (absolute) difference of the distances to two fixed points is constant" forms a hyperbola.