

**TOW LINE**  
*Spring 1969*



## ON THE COVER—



NE OF THE MOST dramatic views, we believe, of the spires of Lower Manhattan is this selection by our Tow Line cover artist Albert Bronet.

The strikingly beautiful HOEGH ELITE

is ideal foreground as she rides at her former East River dock just below Brooklyn Heights. Leif Hoegh & Company has since moved its facilities to Pier 6, Bush Terminal, further down the Brooklyn shore. The great Norwegian shipping company has also added three new high-speed freightships to its world-wide fleet of cargo liners, tankers and bulk carriers: HOEGH OPAL, HOEGH ORCHID and HOEGH ORRIS. The Hoegh Line was 40 years old in 1968. Congratulations!



## IN THIS ISSUE —

On the Cover .....	2
Moran at Night .....	3, 4, 10 & 11
Congratulations—Italian Line .....	5
Aquatic Farming .....	6
Ships In the News .....	8
Old Tugs .....	9
The Compass Rose .....	12, 13
Recommended Reading .....	14
Great Liners of the Port of New York .....	15
Ashore & Aboard .....	17, 18
Ice Scene .....	19

### Moran's European Agents:

ENGLAND: James A. McLaren & Co., Ltd., 87 Bishopsgate, London, E. C. 2; SCOTLAND: Henry Abram, Ltd., 163 Hope Street, Glasgow, C. 2; NORWAY: Henning Astrup A/S, Fridtjof Nansenplass 4, Oslo; Birger Rostgaard A/S Kong Oscars Gate 62, Bergen; DENMARK: Jørgen A. Rosmussen, 33 Amaliegade, Copenhagen K.; SWEDEN: Gösta Sandström A. B., Postgatan 2, 411 13 Gøttenburg; FINLAND: O. Y. Ison Krogius A. B., Box 18, Helsingfors; BELGIUM: Wm. H. Muller & Co., S. A. 21, Rue de la Bourse, Antwerp; GERMANY: Ernst Glaszel, GmbH, Altenwall 21, P.O. Box 305, Bremen; SPAIN: Rafael Navajas, Alameda de Recoide 30, Bilbao; ITALY: Paolo Scerri, Piazza Portello 10 (P.O. Box 1857), Genoa; GREECE: National Hellenic American Line, Venzelou Street No. 10, Athens.

# TOW LINE

Vol. XXII, No. 1 *Published by* Spring, 1969

MORAN TOWING & TRANSPORTATION CO., INC.

17 Battery Place, New York, N. Y. 10004

*Cable Address:* MORANTOW

Frank O. Braynard, Editor

Jeff Blinn, Associate Editor

*(Unless otherwise noted, material published herein, if originated  
by this magazine, may be reprinted with the usual credit line)*



**MORAN  
AT NIGHT**

## MORAN AT NIGHT

by Jeff Blinn

**D**ARKNESS HOLDS NO MYSTERY for the hard working Moran tug. The setting sun has no influence on the kind of work she is assigned in the port of New York. As one Moran tugman put it, "We turn on our running lights at dusk and get on with the next job."

The tide, not the hour determines when a tanker moves to berth or when a dump barge goes to sea. And neither tide nor hour governs the docking or sailing of most other ships. The great ocean liners are still ladies whatever time they choose to come and go.

But night does add a dramatic cloak to what in daylight seems commonplace—the dark bulk of an oil barge slowly moving to refuel a ship; the looming bow of a liner caught in silhouette against the city's glow; the big, black shadow of a tanker erasing the shoreside lights along her silent course.

Always exciting is the departure of a luxurious passenger liner with the bustle, the sparkling sounds and the air of expectation. Add a curtain of darkness and thousands of glittering lights dancing on a stage of swirling water, the deep basso of the ship's horn and the shrill toots of the tug whistle over the roar of engines and you have grand opera of an outsized scale.

A recent series of dockings and sailings of three of Italian Line's great North Atlantic passenger liners at Pier 90, North River in the space of a night was a unique performance, possibly never to be repeated.

On the south side of the pier the *Raffaello's* two latticework-covered smokestacks stood spotlighted stark white against the dark sky. The *Michelangelo* glowed incandescently on the north side, her brightness meeting the

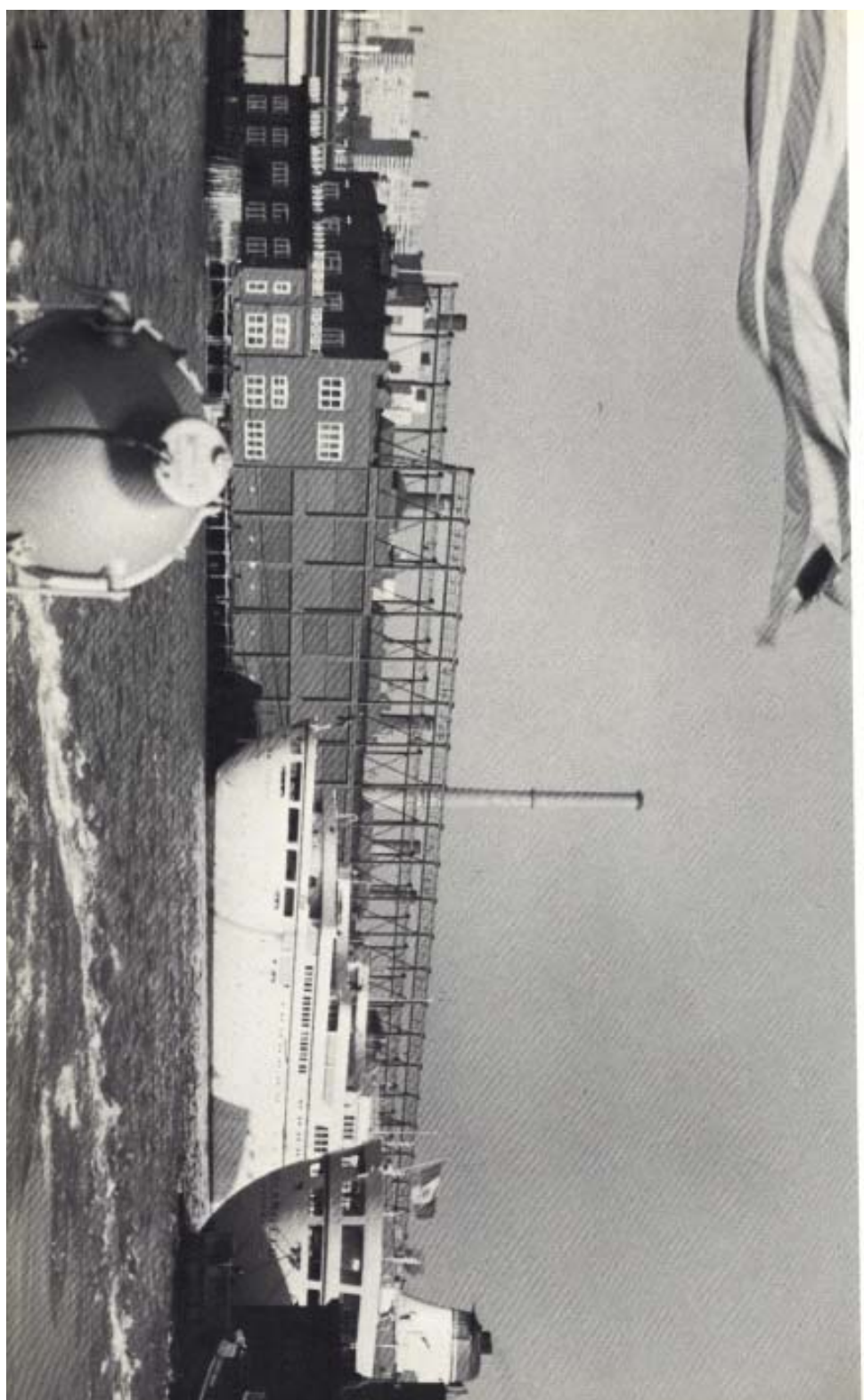
*chael Moran* and *Joan Moran*, docked

the *Raffaello* on the south side of Pier 90 under an adverse tide at 0820 hours. Coming in, he held her sharp bow close to the pier scooping the ice away from the stringpiece. At one point, he related, he could touch the pier's superstructure with his arm extended from the liner's bridge wing. In her final position all of the *Raffaello's* many gangways were operable, a condition not always possible with heavy ice in the slip.

The *Michelangelo* was next. By now the tide had turned to the strength of the ebb and a stiff wind blew from north northeast. Again Captain Biagi called for three of Moran's powerful tugs: *Elizabeth Moran*, *Teresa Moran* and *Julia C. Moran*.

Most of the heavy ice had been pushed across the slip by the *Leonardo da Vinci*, clearing the berth but preventing her snug fit against Pier 92. With less space in which to maneuver, the *Michelangelo* was landed on the corner of Pier 90 well forward of the normal pivoting point. This called for extreme caution in applying tug and ship power to ease her forward in the slip. The pressure was tremendous both on the ship and on the pier corner but by alternately applying and reducing the push of the

(Continued on page 16)



## CONGRATULATIONS — ITALIAN LINE

by Frank O. Braynard

**O**UR MORAN AT NIGHT story, carried on the preceding page, is built around a unique operating problem that was met and conquered by the Italian Line. Three of their four North Atlantic passenger liners had to load and sail within 24 hours from the same pier. Jeff Blinn describes how our tugs assisted in this immensely difficult operation. This article gives the story from the standpoint of the Italian Line.

The whole operation was likened to a giant chess game by well-known former columnist, Allan Keller, who issued a press statement about it for the Italian Line's public relations agency, Infoplan International. It was a pleasure to work with Allan on this story. For years he covered ships for the now-defunct *World Telegram*.

"The Italian Line plays a giant variation of a chess game tomorrow," his story began, "with huge superliners as the chess-pieces. Tugboats will shuttle the *Raffaello*, *Michelangelo* and *Leonardo da Vinci* around like children playing hopscotch but there will be no guesswork. A minute-by-minute timetable has been drawn up by the line and the towing company. . . ."

Supervising the entire operation was Dr. Ottone Empoldi, General Manager of the Italian Line in North America. He arrived at Pier 90, Hudson River, at 5:30 A.M. on the morning of January 31 well before the first move was scheduled.

The Italian Line's Operations Manager, Dr. Guido Steidler, was another key man on the scene. It was his responsibility to arrange the many details between main office and pier. Dr. Empoldi's right hand man on

configuration of great liners. As originally laid out in the Italian Line home office there was no jam-up of sailings. A series of labor difficulties in Italy, however, forced the schedule to be juggled until it was necessary to sail all three great liners from the same pier within one 24-hour period.

As if this were not enough of a problem, the fates worked things out so that this feat would have to be accomplished in the face of New York's worst longshore strike. This meant that all the baggage and all the stores for the three ships would have to be hand carried by Italian Line supervisory personnel. Had three ordinary trans-Atlantic voyages been involved this would have been difficult enough, but it was doubly hard because all three ships were sailing on cruises. The *Raffaello* was going on a short cruise, a seven-day to St. Thomas and St. Maarten. The *Leonardo da Vinci*, however, was heading out for an 18½-day cruise to seven Caribbean ports, meaning much more than the ordinary baggage and provisions. To climax the series, the *Michelangelo* was to make her classic cruise to Rio de Janeiro, with seven stops en route. This outstanding cruise, a highlight of the line's

(Continued on page 7)

Pier 90 was husky Captain Enrico Tettamanzi, Port Captain of the Italian Line. A surprisingly young-looking veteran of sea service under sail, Captain Tettamanzi brought a full measure of enthusiasm and experience to his task, and a Herculean one it was. Captain Tettamanzi, we note with pride, was quick to give credit to our head dispatcher, Nick Bodlovic, and to our tug captains and the pilots—but this is another story.

A combination of circumstances brought to pass this extraordinary



## AQUATIC FARMING

*(Editor's Note: The growing interest in oceanography and underwater sciences has made our company eager to investigate all areas of this vast new field of study. One interesting newsletter that comes into our office is called "Littoral Lines." It is published by the Battelle Memorial Institute, Ohio; the We-Columbia Laboratories, of Columbia, Ohio; the We-Corpus Laboratories, of Corpus Christi, Texas; and the We-Corpus Laboratories, of Corpus Christi, Texas. This is a reprint below a major portion of an article by Dr. John W. Blake on undersea agriculture.)*

**I**N RECENT years, much research and development effort has been dedicated to fulfilling critical protein food needs of the world's population. One portion of this effort has been in aquaculture, the rearing of aquatic plants and animals under controlled conditions using techniques of agriculture and animal husbandry.

In various parts of the world, including both developed and underdeveloped countries, specific requirements of the population and characteristics of the local climate have encouraged utilization of a great variety of marine organisms including shrimp, crabs, abalone, oysters, cockles, mussels, carp, mullet, catfish, Tilapia, milkfish, trout, plaice, sole, and several varieties of seaweed. Places in which active cultivation is now underway include some African countries, Australia, China, Denmark, France, Great Britain, Israel, Japan, Java, Malaysia, Philippines, Singapore, Spain, Taiwan, and the United States.

Further experiments and development are required before one can properly judge the maximum benefits to be derived from the use of the aquatic environment for food production as opposed to the more familiar land-based activities. The quantity of protein that can be produced in a pond may be significantly larger than that which can be produced on a similar acreage of pasture. However, comparisons of these yields may be risky unless only the common factors are taken into consideration. Meaningful comparisons must specify such things as source, type, cost, and quantity of feed input; environmental control conditions; and percent of produce that is actually protein.

The capability of the aquatic environment to produce significantly larger amounts of high-grade animal protein per unit of surface area than can the fertile, dry-land habitat may be explained by some basic biological

and ecological factors. Perhaps the most important of these factors is that fish, on one acre of sea bottom or in a one-acre tidal pond or river section, have access to the food in thousands of acres of water flowing past them. At the same time, the flow of water provides oxygen to the fish and carries waste products away. This means that fish need expend little energy to acquire the necessities.

Another factor advantageous to aquatic organisms is that their body densities are very similar to that of the medium in which they live. This lessens the need for heavy-duty skeletal structures.

As a consequence, a greater percentage of the food intake and metabolic energy of aquatic organisms is devoted to the production of edible tissue.

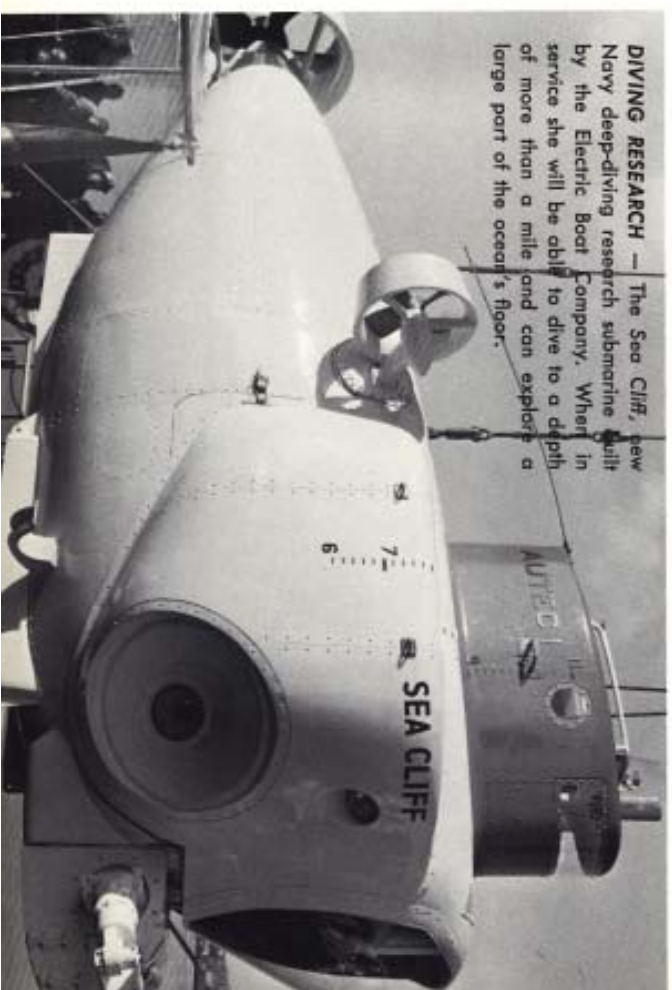
Most aquatic animals are "cold blooded," which means that their body temperatures will be the same as the temperature of their marine environment. The advantage of this is that the organisms do not need to expend energy to maintain a constant body temperature. Also, some marine and estuarine organisms may be raised in water of the same salt concentration as that of their own body fluids. If organisms can tolerate changes in internal salt concentration, as can many of the species which live in estuarine areas, they do not need to divert any energy to overcome such stresses . . . and less energy diversion means more edible tissue.

Obviously, the advantages of fish cultivation are many, and one may well wonder why this field has not

been developed more extensively. It is only fair to say that there are certain inherent difficulties. The largest problem involves matching species requirements for optimum growth with the environmental factors found in different areas of the world. Another problem is that even though many appropriate experiments have been conducted, results are often unpublished or scattered throughout the scientific literature in many fields of endeavor in many countries and languages.

These and other problems are being remedied on an experimental scale. Trained biologists are now correlating available data. Laboratory experiments and pilot-plant evaluations of biological, engineering, and economic factors are also under way. Investigators at Battelle's William F. Clapp Laboratories, Duxbury, Massachusetts, are working in several areas which impinge directly on aquaculture. Experiments are now being conducted on breeding, larva-culture, and adult growth of oysters; the production of pharmacologically active substances by Quahogs; evaluation of bacteria isolated from "sick" starfish as a biological control measure against this oyster enemy and its close relative, the sea urchin, which feeds on commercial seaweeds; genetic and/or adaptive differences between populations of oyster-boring snails; growth, abundance, and physiological characteristics of shellfish and seaweeds at sites of power plants; and reactions of oyster larvae to various abnormal environmental factors such as dredging.

**DIVING RESEARCH** — The Sea Cliff, new Navy deep-diving research submarine built by the Electric Boat Company. When in service she will be able to dive to a depth of more than a mile and can explore a large part of the ocean's floor.



## ITALIAN LINE . . .

(Continued from page 5)

cruising schedule for the whole year, encompassed twenty-seven days.

Thirty tons of stores had to be loaded aboard the *Raffaello* for her one-week cruise. Every ounce had to be hand carried by Captain Tetamanzani and his staff.

For the Rio cruise there was a list of stores that would stagger even the largest shoreside hotel. Thirty-two tons of fresh vegetables and fruit alone had to be put aboard the *Michelangelo*. She needed eight tons of meat, four tons of dairy products, three of fish, one of poultry and another of milk. A vast assortment of liquors, beers and soda had to go aboard, not to mention party favors, prizes for children's games, pre-release movies and so on down the line.

In all, 115 tons of provisions and supplies were loaded aboard the *Michelangelo* by Captain Tetamanzani's well-organized group of office supervisors in fourteen hours. Under the original schedule this would have been done by longshoremen over a leisurely two-day turn-around period.

However, we are getting ahead of our story.

Hours of careful planning and scheduling preceded action. Captain Tetamanzani's six years' experience on Pier 90 stood him in good stead.

Knowing that muscle as well as gray matter would be desperately needed to do what had to be done, Captain Tetamanzani organized a group of sixteen fellow Italian Line supervisors. These he called his "assault team." He also had about ten others, older men and men with less push, on whom he would call for help during peak day-time loading or unloading activity.

He worked out his schedule to the minute, taking into account such things as tides, unusually bad ice conditions, problems of debarking passengers and the frightening prospect of hordes of visitors who would naturally wish to see their friends and relatives off on the three sailings.

Captain Tetamanzani and his assault

team knew they would have to be up very early Friday morning. Deciding to take no chances on reaching the pier the following morning because of traffic or adverse weather, they slept overnight aboard the *Leonardo da Vinci*.

### The Camels Are Coming

The hull lines of the *Leonardo da Vinci* are quite different from those of the longer and sleeker *Michelangelo*. When the tugs arrived and moved the former away from the north side of Pier 90 to the south side of Pier 92, Captain Tetamanzani's problem was to move the two camels, or fenders the *Leonardo* had used, to a different spot to fit the hull contours of the larger *Michelangelo*.

Ocean liner camels are huge things. They are used to keep the liner's hull from coming too close to the pier. Each weighs 25 tons and floats with about a foot showing above water and six feet below the surface. With the *Leonardo* they were widely spaced. But, since the *Michelangelo* has only 110 feet of straight hull between the tapering bow and stern portions, they had to be moved closer together. Done by manpower, this was no easy job, and it had to be accomplished again after the *Michelangelo* went out into the stream, and again after the *Leonardo* sailed. Each move was made more difficult by the jagged masses of ice that had packed tightly up against the pier and were continually being supplemented by additional ice floes from the river. Of course, before the *Leonardo* had begun her move to 92, Captain Tetamanzani's team had to let go her lines. She was a dead ship for this move, being without her own power.

The sun rose at 7:01 that morning and moments later the superbly sleek clipper stem of the white-hulled *Raffaello* jutted out past the dark outline of the outer end of Pier 88, home of the French Line's proud *France*. Hundreds of early bird visitors crowded the waiting room at the West Street end of Pier 90 as the beautiful liner slipped silently into her south side berth. Piles of stores waited the dropping of service gangways. Oil barges arrived alongside to refuel the great ship. Passengers tramped reluctantly off, their voyage at an end.

Already a few passengers for her Caribbean cruise were parking their cars at garages on 50th Street and watching the docking operation. They would not be permitted to board until 3:30 p.m. for their midnight sailing.

Although the day before had been rainy, with heavy winds and dark skies, Friday turned out to be a bright mid-winter day. The sun shone and the ice glistened. It was a wonderful day for photography and Jeff Blinn was ready and waiting.

Noon came and, for the second time within six hours, the Upper Bay played host to a sleek white superliner with two cage-mast type smokestacks that marked her as one of the Italian Line's twin flagships. The *Michelangelo* arrived right on schedule and was promptly berthed on the north side of Pier 90. An aerial photographer would have been able to catch 123,000 gross tons of gleaming, white Italian passenger ships in a row, including the third and fourth largest active liners in the world. Passengers debarked and a portion of her Caribbean cruise supplies were taken aboard, but not all, for she had to be moved out into the Hudson to make way for the *Leonardo*.

This happened on schedule twelve hours after "Operation Chessboard" began. It was already dark as the 800-foot liner was edged out into the stream and maneuvered sternfirst up to her anchorage five blocks north of the last big Hudson River pier. This area used to be known as "BattleShip Row," and in 1964 it was used to anchor the splendid fleet of all masted sail training ships that visited New York under the auspices of the Operation Sail project.

Despite strong west northwest winds that had come up at sundown, and despite increasingly difficult ice conditions, the *Leonardo da Vinci* was moved across the slip to her previous berth on the north side of Pier 90. Thirty minutes after her lines were secured, the first of her happy passengers trouped aboard. Captain Tetamanzani's men lugged their bags aboard after them. This group of hardy staffers were well into their second 12 hours of manual labor. Half the team had been permitted four hours of sleep from 1 P.M. to

(Continued on page 16)



# SHIPS in the NEWS

**NEWSWORTHY** — Moran tugs assisted (without charge) the Biafra Christmas relief ship Forra, shown at the left, a project directed by Senator Charles E. Goodell, United States Senator from New York. The Kerr Steamship Co. donated its services as agents for the mercy mission ship taking food and medical supplies to beleaguered Biafra. Below is the old carrier Tarawa being towed to the scrap yard by two of our tugs, the Elizabeth Moran and the Joan Moran. This photo came to us through the courtesy of Luther M. Goff, of the Providence Steamboat Company.







A



B



C



F



E



D

**OLD TUGS** — This page is devoted to six old friends — old tugs — all shown on the New York State Barge Canal. All of them were either owned or operated by our company at one time or another.

**A** — The *Christine Olsen*, shown with her stalwart crew on deck, was used by Morron as a shifting tug.

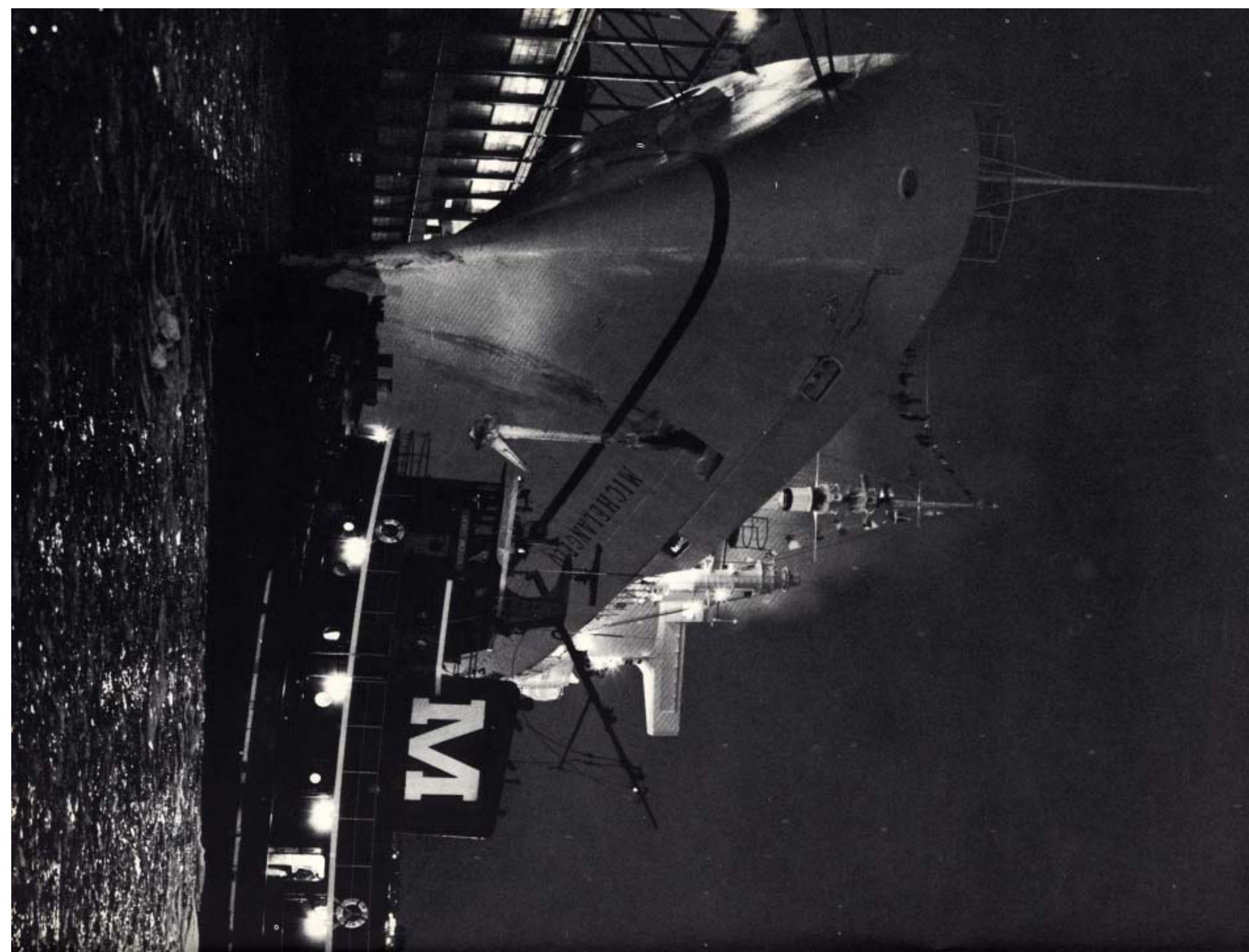
**B** — The *James F. Dwyer*, near lock Number 4, owned by the famous Dwyer Lighterage Company.

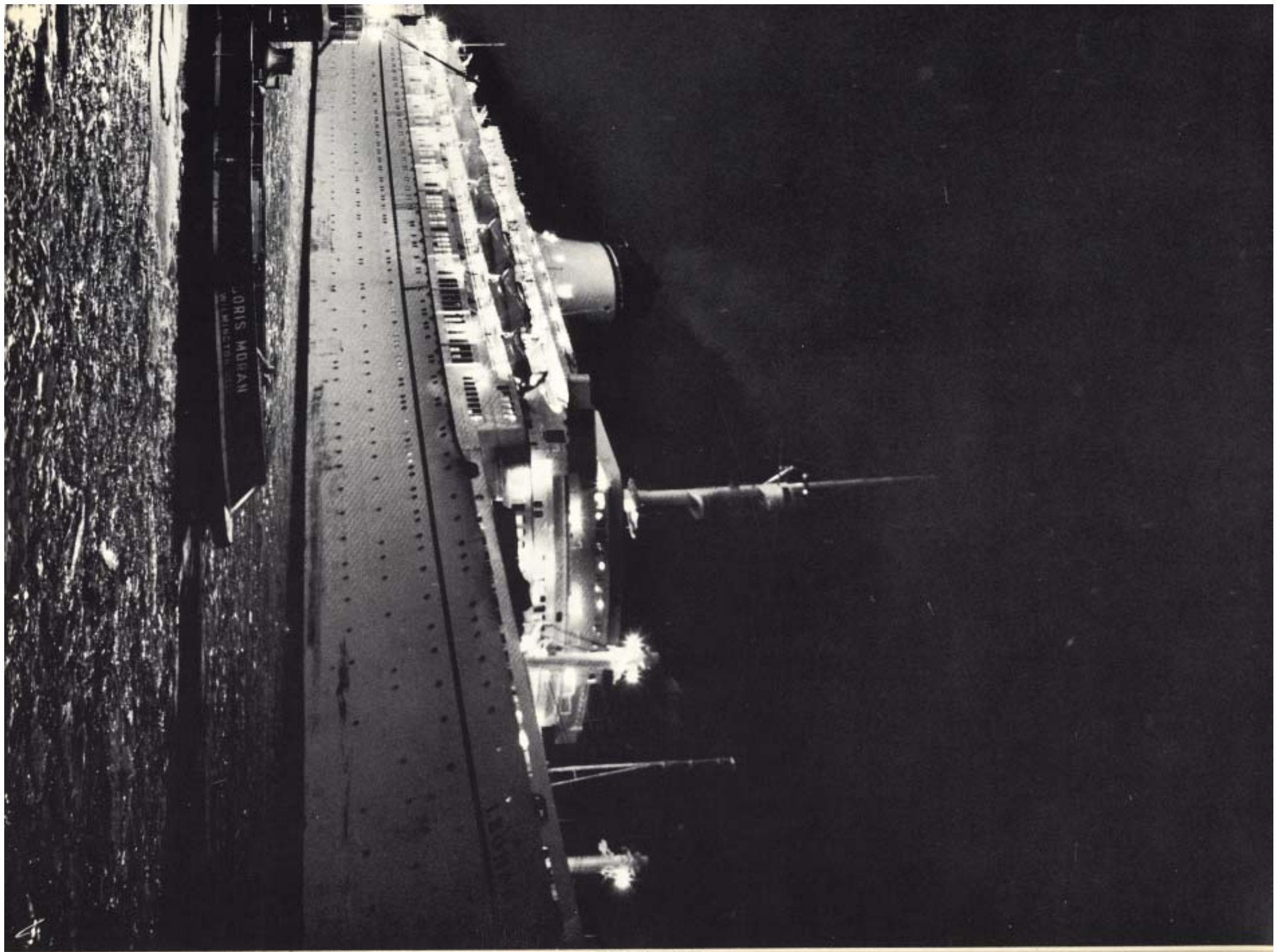
**C** — The *Lewis Pulver*, a John A. Moore Towing Company tug, with extra coal stowed on deck.

**D** — The *Winfield S. Cahill*, of the Shamrock Towing Company, also with coal on deck.

**E** — The *K. Whittelsey*, of the Oil Transfer Corp.

**F** — The *Mary O'Riorden*, of the Wilson Towing Line.





## THE COMPASS ROSE

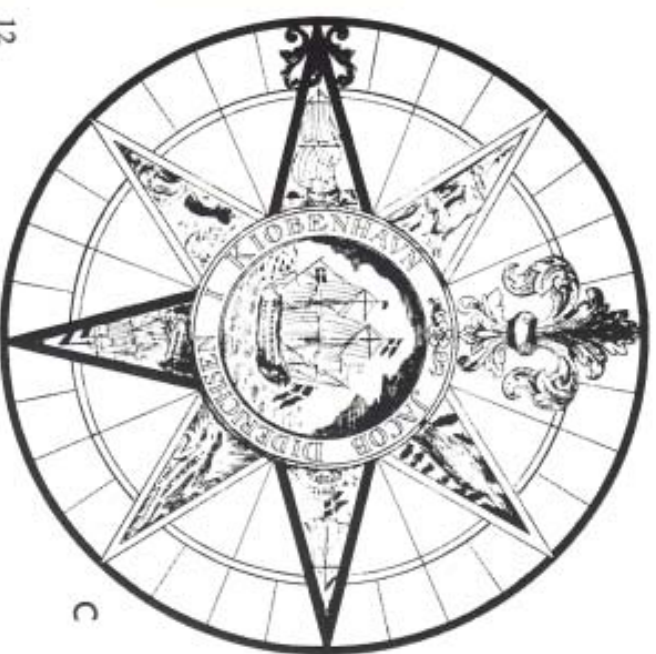
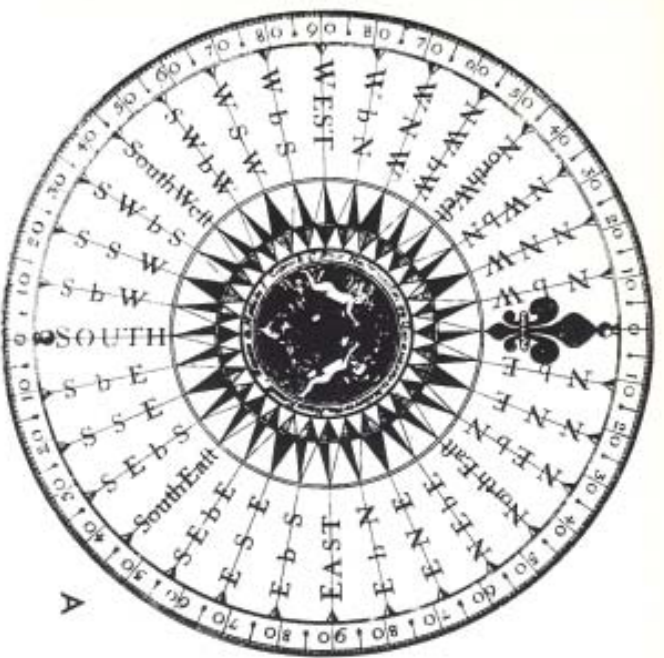
*Editor's Note: We are indebted to Editor John Gordon of OCEAN, an impressive publication of The Ocean Steam Ship Group of England, and the National Maritime Museum at Greenwich for permission to use the material and illustrations published in the July 1968 issue of OCEAN for the following article.)*

**P**RIOR TO THE DEVELOPMENT of the compass the early Mediterranean navigators were guided by the *rosa venturum* or wind rose. The rose marked off on their charts the eight principal winds upon which they were dependent. Probably named in the Temple of the Winds in Athens they were: *tramontana*, *greco*, *levanter*, *sirocco*, *ostro*, *africo* (or *libeccio*), *ponente* and *maestro*.

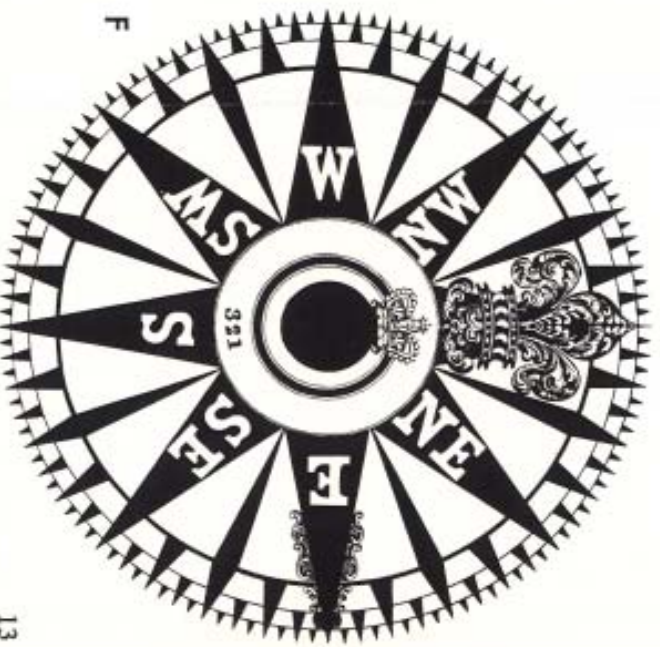
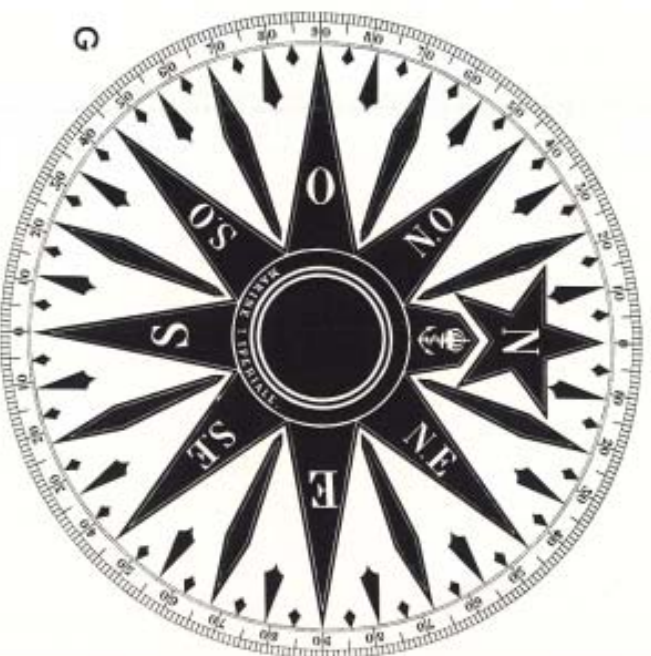
The north point on some of the oldest wind roses was marked with a T (for *tramontana*), a broad arrowhead or a spear which eventually developed into a fleur-de-lis by 1492—still almost universal on the compass rose. To mark the east the L (of *levanter*) became a cross and continued as an elaborate ornamentation on British compass cards well into the 19th century.

The earliest recorded reference to the compass was made by Francesco da Buti, the Dante commentator. In 1380 he wrote that 'sailors use a compass at the middle of which is pivoted a wheel of light paper, on which wheel the needle is fixed and the star (wind rose) painted.' The naming of the intermediate subdivisions of 32 points or rhumbs is probably the work of Flemish navigators and was recognized as early as 1391, in the time of Geoffrey Chaucer. Some roses were divided into degrees for more accurate reading in the 17th century but the division into 360 degrees, from north clockwise, waited until the 19th century.

Early in the 20th century the first gyro-compass was fitted aboard ship and the design of the rose used on magnetic compass cards was adapted to the new navigational instrument.



- A.** Azimuth compass card by Seller & Price, circa 1710. With fleur-de-lis at north the cardinal and half cardinal points are spelled out and the remaining rhumbs abbreviated.
- B.** Danish overhead compass card of the 18th century. Cardinal points contain figures of Faith, Hope and Charity while half cardinal points contain sailing ships and the center a historical scene.
- C.** Overhead compass card of the 18th century by J. Diderichsen. In color this decorated card has its points represented by sailing ships and figures of a bird, a reptile, a fish and a bull.
- D.** Card for Dr. Gowin Knight's steering compass made by George Adams, circa 1790. On a black background this card has fleur-de-lis at each half-point, a decorated east point and an elaborate fleur-de-lis at north.
- E.** Captain Charles Phillips' compass card, 1825. North is decorated with a small leaf but the remaining points and half-points are simple white triangles on black background.
- F.** Royal Navy compass card, circa 1830. North is indicated with an unusually ornamental fleur-de-lis with a crown directly below. East is also decorated.
- G.** French Navy card of about 1869 with star and letter at north and crown over anchor directly below. Note the absence of fleur-de-lis and the rose divided into degrees for more accurate reading.
- H.** Constellation compass card of the 20th century supplied by New York Nautical Instrument & Service Corp. of 140 West Broadway. North is still ornamented but the rose is divided into 360 degrees from north clockwise. White figures on black background have been found to be most visible. This type of card enjoys wide acceptance and is used on all gyro and magnetic compasses of Morron tugs.



## RECOMMENDED READING

**VHF-FM MARINE RADIO** by Leo G. Sands and G. Geoffrey Teller. Published by Chilton Book Company, 401 Walnut St., Philadelphia, Pa. 19106. Price: \$6.50 (paper) and \$7.95 (cloth).

**THIS WORK** is described in its preface as "a handy guide for users, sellers, manufacturers, and maintainers of VHF/FM marine radio telephones, as well as operators of limited and public coast stations." It is that, and more. Attractively illustrated, with a good index and a vast appendix, it is a thorough and well-documented work on a new and important field of communications. It was our company's pleasure to co-operate with the authors during the book's preparation, and Jack Richards is pictured on p. 120 as a typical tugboat dispatcher using VHF marine equipment. If you look closely, you can also see Diana Lembo, Captain Goodwin's secretary, in the picture. Chapters on the VHF Marine Band, on VHF marine radio-telephones, on transmitters, receivers, power supplies and sources open the study. Other sections on antenna systems, walkie-talkies, boat installation and maintenance, coast stations and operations are included.

**OFFICIAL U.S. COAST GUARD RECREATIONAL BOATING GUIDE, CG-340**, Published June 1966. Price: 45 cents from Superintendent of Documents, Washington, D.C.

**THIS IS ANOTHER** government document that all mariners should know about and all recreational boat users should have. It is 94 pages long and contains countless diagrams, drawings and photographs. The introduction by Commandant Willard J. Smith sets the tone of the work: "This second revision is intended to provide boatmen with a handy booklet setting forth the basic principles of safe boating."

**TRANSATLANTIC PADDLE STEAMERS**, second edition, by H. Philip Spratt. Published by Brown, Son & Ferguson, Ltd., Glasgow, 1967. Price: 21 shillings.

**THE CONCEPT** of using steam on the oceans of the world was almost completely alien to the earliest inventors of steam engines for marine propulsion. Their idea was that steam would be used for river and canal power. However, within 12 years of Fulton's *Clermont* a steam-powered vessel had been built specifically to cross the Atlantic—the *Savannah*. Between 1819, when the *Savannah* made her historic voyage, and 1861, steam power on the oceans of the world gained tremendous strides. It was almost entirely steam power as applied through paddle wheels. The story of paddle-wheeled At-

lantic liners is told with high scholarship in this new edition of H. Philip Spratt's internationally known work, first published in 1951. Mr. Spratt is associated with the noted Science Museum in London. Some 37 famous vessels are described in detail in this volume. There are nine

plates reproducing contemporary prints and models. A set of six tables of historical and technical data on the vessels covered, their machinery and service is carried as an appendix. There is a fine bibliography and an outstanding index. The work is based almost entirely on original sources.

**INTERNATIONAL SHIPPING & SHIPBUILDING DIRECTORY, 1968**. Published in America by John de Graff, Inc., 34 Oak Avenue, Tuckahoe, N.Y., 10707, 1968. Price: \$20.00.

**AN ENGLISH** oriented publication, this 831-page, oversize volume is the 18th edition of a work issued by the noted "Shipping World & Shipbuilder" magazine. Large sections are included on shipowners, on shipbuilders and ship repair companies, on engine builders and on towage and salvage contractors. The book reflects the "upsurge of new undertakings, especially in the developing countries, as well as the changing face of many established organizations." Some remarkable compendiums and index features are in the latter portion of the book.

**QUESTIONS ABOUT THE OCEAN**, by Harold W. Dubach and Robert W. Taber. Published by the U.S. Navy Oceanographic Office, Washington, D.C. 20390 (National Oceanographic Data Center—General Series), publication G-31, 1967. Price: 55 cents.

**THIS WELL-ILLUSTRATED** 121-page booklet, paper-covered, is a delightful change from the run-of-the-mill government document. It is designed to answer questions about the world's oceans, and it does just that, even listing 100 typical queries in the form of a four-page opening table of contents. Many diagrams and snappy line drawings, a bibliography at the end of each chapter and light, sprightly writing make this work a worthy contribution to the maritime bookshelf.

**SAILING SMALL BOATS** by Harvey Weiss. Published by William R. Scott, Inc., N.Y., 1967. Price: \$3.95.

**WE NEVER REALLY KNEW** why boats floated before reading this fascinating new book about boats and sailing. Did you ever really try to understand exactly why wood really does float. You will find the answer on page 9 of this beautifully-illustrated and entertaining little book. There are tug pictures in it too, and photographs of barges and even one tanker picture. There are also fine sketches of an ancient Greek warship and all sorts of other illustrative drawings. There is a fine section on the vocabulary of boats. You will enjoy this book.

**NEW YORK BAY STEAM VESSELS—** Drawings by Samuel Ward Stanton, published in 1968 by his daughter Elizabeth Stanton Anderson. Sold by H. Kneeland Whiting, 63 Nevery Rd., Upper Montclair, N.J. Price: \$2.25.

**AN OUTSTANDING** publication, this little book of drawings and paintings by the renowned Samuel Ward Stanton is the seventh in a series of booklets issued by Mrs. Anderson. Another on tugs is being prepared. Professor Robert G. Albion contributes an introduction. The water colors and the pen and ink sketches by Stanton are outstanding and represent one of the most useful pictorial sources in America's maritime history. Mrs. Anderson also published a revised edition of her booklet entitled LONG ISLAND SOUND AND NARRAGANSETT BAY STEAM VESSELS, which contains many Stanton pen drawings of ships that were well known in New York. The artist Stanton died on the *Titanic*.

**EXPEDITIONS AND EXPLORATIONS**, A Series of Facsimile Reprints, Edited by Douglas R. McManis. Published by Greenwood Press, Inc., 211 East 43rd St., N.Y., N.Y. 10017, 1968. Prices range from \$7.75 to \$150.00.

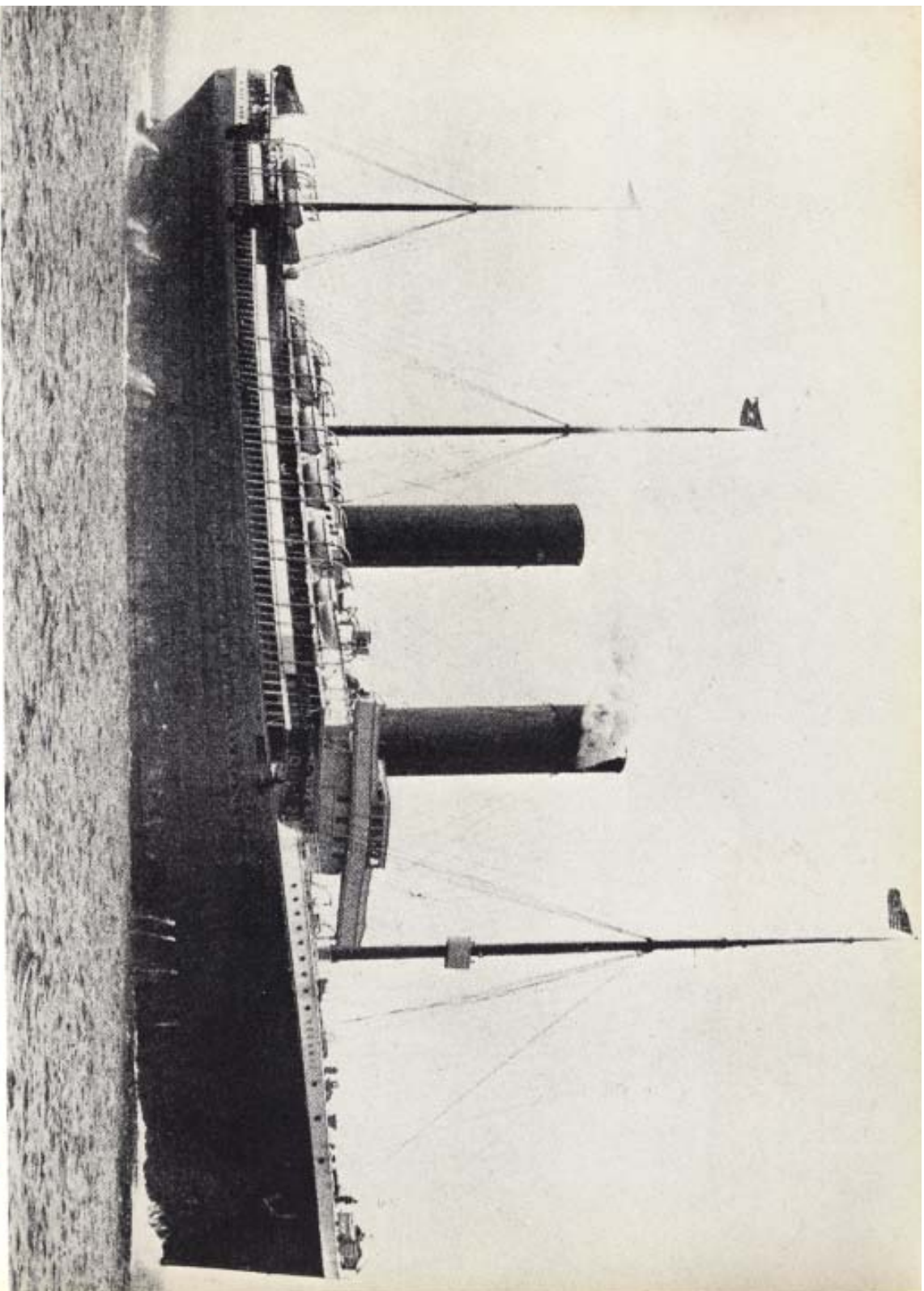
**IT IS NOT** often that a book review page will review a pamphlet that is essentially an advertisement. We do this because the notice in question describes a series of newly-published reprints of some outstanding source material writings. The editor, Mr. McManis, of Teachers College, Columbia University, presents fifty-seven reports by explorers in all areas of the world. Published originally in the 19th and 20th Centuries, these one and two volume sets are reprinted with plates, maps and illustrations and bound in cloth.

**NAVAL & MARITIME HISTORY**, An Annotated Bibliography, 3rd edition; second supplement, 1966-1968, by Robert Greenhough Albion. Published by the Maritime Historical Association, Inc., Mystic, Conn., 1968.

**THIS LIST OF** new maritime publications is evidence of the great interest in ships and shipping in the world of writing. Professor Albion is doing much to document the written record of our merchant marine through this bibliography, which can be obtained for a modest fee by writing to Mystic Seaport.

**THE FLEET OF LEIF HOEGH & CO.**, A.S., Oslo 1928-1968, by Michael Crowley, F.R.S.A., published by the World Ship Society, Romney Ave., Kendal, England, 1968.

**WRITTEN BY** the founder of the World Ship Society, this 64-page, well-illustrated little booklet is a splendid study of a great shipping enterprise. It has an index, and contains outstanding photographs of Höegh Line ships. It can be obtained at a modest price by applying to the World Ship Society headquarters.



### Great Liners of the Port of New York — No. 9

**MAIDEN ARRIVAL** — The Oceanic, White Star line flagship and largest ocean liner in the world, arrives on her maiden voyage in September, 1899. She is shown saluting the pilotboat off Sandy Hook, a wisp of steam showing that her booming whistle will soon be heard. This vessel, like Home Line's flagship of today, was carrying on a great tradition. White Star's first Oceanic, of 1870, was the first liner to have best accommodations amidships instead of at the stern. Today's Oceanic, one of the most successful cruise liners ever built, uses the port of New York regularly and was the first major vessel to have her stack aft. The 1899 Oceanic was the first ship to exceed the Great Eastern in length. As shown above, her most prominent features were her tremendously tall smokestacks. They were widely separated so that the dining saloon could be placed between them without being broken into by stack uptakes. Built by Harland & Wolff, Belfast, she was 685 feet long, with a beam of 68 feet, and is said to have been the last large liner built to the full 10 to 1 ratio of beam to length. She was lost in 1914, being stranded on Foula in the Shetland Islands. While small compared to today's luxury liners, no passenger ship has exceeded her in dignity and distinguished silhouette.

**THE NIGHT BOAT** by George W. Hilton, published by Howell-North, Berkeley, Cal., 1968. Price: \$12.50.

**THIS IS A STUDY** of the American over-night steamboat. It contains outstanding photographs and other illustrated material, including page decorations and ship sketches by Samuel Ward Stanton. The work covers steamboats up and down America's Atlantic and Pacific coasts, on the Great Lakes and includes a small section on boats of the Western Rivers. The author is a Professor of Economics at UCLA and in 1964 headed President Johnson's task force on transportation policy.

**ARCTIC ROVINGS** by Daniel Weston Hall; edited by Jerome Beatty, Jr., illustrated by William Hogarth. Published in 1968 by Young Scott Books, 333 Ave. of the Americas, New York. Price: \$3.95.

**THIS IS A GRAND LITTLE BOOK**, relating the adventures of a New Bedford boy both on a whaler and in the Siberian wilderness in the days just before the Civil War. Most attractively illustrated by Bill Hogarth, designer of your editor's book called *A TUGMAN'S SKETCHBOOK*, the 144-page volume presents an intimate look at the lot of the American merchant sailor of a century ago.

**BALEIA! BALEIA!**—Whale Hunters of the Azores, by Bernard Venables. Published by Alfred A. Knopf, New York, 1969. Price: \$6.95.

**THE NOTED ENGLISH** artist, Bernard Venables, has always been interested in the unusual and the out-of-the way. He selected small boat whaling out of the Azores as his subject, went there and lived, and recorded his experiences in a lively text and with more than 40 fine line drawings. It's a good book, and one that will open many eyes. The writing has a strong touch of philosophy in it. The local comes alive. The people are real.

---

## MORAN AT NIGHT...

(Continued from page 4)

two tugs on her starboard quarter, the *Michelangelo* was safely nosed to her berth at 1315 hours.

Pier 90 was a beehive. Taxis, trucks, private cars and pedestrians moved in and out. Hundreds of passengers had debarked from the *Raffaello*, hundreds more were coming ashore from the *Michelangelo* and more hundreds were arriving to sail as soon as the three ships were made ready.

Between dawn and midnight the three great liners were moved eight times by Moran tugs by team work, an essential ingredient in this meticulous tapestry.

Moran's Chief Dispatcher Nick Bodlovic, in almost constant touch with Captain Tettamanzi, the Italian Line's Port Captain, made sure no pilot or tug captain missed a cue as the liners were docked, shifted and undocked precisely on schedule.

The *Leonardo da Vinci* was scheduled the first to sail. At dusk, Captain Biagi again boarded the *Michelangelo*, this time to move her to a Hudson River anchorage. The *Leonardo da Vinci* must have room to embark passengers on the north side of Pier 90. By now the tide had turned to flood.

Captain Biagi conferred with Captain Carlo Kirm, Master of the *Michelangelo*. They decided to back the 905-foot liner the mile upriver to the anchorage. With the *Doris Moran* on her bow as rudder and with the *Elizabeth Moran* on her port quarter to counteract the northwest wind, the *Michelangelo* dropped her port anchor at 1800 hours.

Captain Nielson again boarded the *Leonardo da Vinci* and, with tugs *Joan Moran* and *Teresa Moran*, breasted the liner back to the north side of Pier 90, finishing at 1945 hours.

Under floodlights Pier 90 continued humming with activity. As the longshoremen were on strike, Italian Line personnel handled all baggage, stores and mooring lines throughout the day

and night. (The details of this outstanding achievement are described in a separate story in this issue of Tow Line.) The hours of planning each step of the operation were bearing fruit. Captain Tettamanzi and his crew moved with clockwork precision.

By 2245 hours, another veteran pilot, Moran Captain Ole Eriksen, had the *Leonardo da Vinci* shaped-up in the river to begin her cruise to the Caribbean. The tugs *Joan Moran* and *Teresa Moran* had returned from other assignments to assist.

After allowing Captain Tettamanzi's men time to readjust the heavy camels—floating fenders against which a ship rests at dockside—the *Michelangelo* was ordered to return.

The invincible tide had again ebbed, turned the *Michelangelo* at anchorage stern downriver. Reversing the previous move, Captain Biagi used the *Joan Moran* as rudder on the bow and the *Elizabeth Moran* to offset the wind, backing the *Michelangelo* downriver and docking her for the second time in less than eleven hours. The time was 0005—just after midnight.

On the opposite side of Pier 90 men were holding one remaining gangway on the *Raffaello*; she was ready for sea. With no loss of time Captain Biagi walked off the *Michelangelo*, greeted Captain Tettamanzi on crossing the pier and boarded and sailed the *Raffaello*. The two tugs he had just used on docking the *Michelangelo* assisted.

The *Michelangelo*, scheduled for a long cruise to Rio de Janeiro, took on provisions and supplies the remainder of the night and sailed later that day with Pilot Captain John Jorgensen in charge of tugs *Marie Moran* and *Cathleen E. Moran*.

Other passenger liners and tankers as well as a host of other vessels and miscellaneous craft had to be moved about the harbor that night by Moran. But, from the vantage point of an orchestra seat at the foot of 50th Street on Manhattan's West Side, no other activity could hold a candle to the spectacle of three great Italian ladies upstaging one another.

---

## ITALIAN LINE...

(Continued from page 7)

5 P.M. and the others would turn in from 5 P.M. to 2 A.M., but Captain Tettamanzi never slept.

Virtually on the button of 10 P.M., the *Leonardo da Vinci* sailed.

Simultaneously the brilliantly-illuminated *Michelangelo* was majestically moved down river and into the slip between 90 and 92. She tied up at midnight and all through the night was loaded for her long cruise. These were the hardest hours of all for Captain Tettamanzi's weary assault team. The *Leonardo da Vinci* was gone, and at 12:40 the *Raffaello* sailed, but handloading over 100 tons aboard the *Michelangelo* in the early hours of Saturday morning was a backbreaking task. Nevertheless, it was accomplished—and on schedule!

At 9 A.M. passengers began boarding the last of the three white Italian giantesses. Shortly after 1 P.M. all was ready and the "Carnival at Rio" cruise began with gay streamers and thousands of visitors lining the pier openings to wave a last goodbye.

Dr. Empoldi finally left Pier 90 at 2 P.M.

Captain Tettamanzi and his gallant teams of shoreside office personnel, turned longshoremen, still had work to do. There were six containers of refuse that had to be cleaned up after the three gala sailings. But inwardly they all knew their big job was done. They had successfully accomplished, on schedule, one of the most difficult and complicated turnaround maneuvers in the history of the Port of New York.

### OLD FRIEND

ONE of the port's old friends, the former *Ocean Monarch*, is now a white-hulled cruising liner serving Mediterranean ports. Named *Varna*, she is owned and operated by the Bulgarian government.



**ASHORE**



**AND AFLOAT**

**I**T IS OUR EXPERIENCE that tugmen have an uncommon resistance to public recognition, especially in print. The greater their skill, the stronger their effort to remain anonymous.

Of that taciturn nature is our Captain John Jorgensen, Master of tug *Marie Moran* and one of the top docking pilots in the Port of New York. He has successfully avoided more than casual mention in our 9/10 Times Roman type of Tow Line—up to this point.

Captain Jorgensen has long enjoyed the highest respect of Moran's men afloat and ashore and has merited the confidence of scores of shipmasters served over decades. His reputation is built upon solid experience.

It may have been his Norwegian blood that called him to sea from his birthplace in the Bay Ridge section of Brooklyn. The famous old Bull Line, then operating from a pier on the Brooklyn shore, signed-on the cager 16-year-old youngster. Assigned to a ship trading in the Caribbean, John Jorgensen soon became an able-bodied seaman and sought to extend his horizons.

With the globe-circling Wilhelmssen Line and on Standard Oil Company's great tankers John satisfied a hunger for exotic ports, gaining valuable deep-water experience all the while.

The first day of 1936 he joined Moran as a deckhand on the steam-tug *Joseph N. Moran* under the able off-shore Master, Captain Hugo Kroll, now deceased. At that time this tug was busy with coastal assignments.

To learn more about New York harbor John found a valuable teacher in Captain Roy Allen on the steam tug *M. Moran* for about a year. (Captain Earl Allen, our present Marine Superintendent, took John's place as deckhand on his father's tug.)

In 1939 it was Captain John Jorgensen who began steering under Captain Jimmy Wheeler on the *Helen*

multiply in horsepower and great areas of the port improved. With a constant inflow of new ships to the Port of New York, he almost daily adds to his storehouse of experience and holds no dim view of the future.



**CAPT. JOHN JORGENSEN**

*B. Moran*. By 1942 it was Pilot Captain John Jorgensen who was busy docking and undocking army transports and other ships which crowded New York's anchorages.

In the ensuing years Captain Jorgensen has seen cargoships and tankers grow tremendously in size, tugs

**STILL SHOWING** — Of the great fleet of V4 type tugs built during World War II, comparatively few are still in operation. Many are laid up, as are the three shown here. They are in the James River, Virginia, National Defense Reserve Fleet. We are indebted to the noted steamship author, Alexander Crosby Brown, for this fine shot. He was attracted to the *Moose Peak*, shown at the end of a row of laid up tugs because he saw, still on her large stock, the familiar block "M" of Moran. Our company operated virtually the entire V4 fleet during World War II.





Wm Ewen, Jr.

**GOOD WORK** — A fine pen and ink sketch of our sturdy Barbara Moran by William H. Ewen, Jr., marine artist. Here is a drawing by a man who really looks at what he is sketching. So often tug paintings and drawings are simply reflections of what the artist thinks a tug looks like and such impressions are made without patience or knowledge. Bill sent this "rather rough sketch" in to us by way of saying thanks for Tow Line. Our thanks to you, Bill.

In 1940 he returned to the harbor and has remained here.

He started piloting in 1944 and learned to enjoy this challenge of greater responsibility.

A quiet and serious man, Captain Thorsen has by no means led a quiet life. His harbor career has been highlighted by two outstanding rescue achievements.

The first took place on June 25, 1958. The Swedish dry cargo vessel *Nebraska* collided with the oil tanker *Empress Bay* in the East River. The tanker sank and the *Nebraska* started to burn. Captain Thorsen boarded the blazing ship and piloted her down around the Battery to an emergency landing at Pier 26, North River. Here the City's firemen were able to reach her and the conflagration was quickly brought under control.

For this heroic deed, Captain Thorsen received, a plaque from the City's Department of Marine and Aviation.

Fire again brought this quiet and unassuming man to the public's attention. It was December 19, 1960 and he was again on the East River. A tragic explosion rocked the monster aircraft carrier *Constellation* at her fitting out berth in the New York Naval Shipyard, at Brooklyn. (See *Tow Line* for March 1961, p. 6)

Raging flames forced some 250 shipyard workers to the very after portion of the flight deck of the carrier and many might have perished had it not been for the *Carol Moran* and Captain Thorsen. He brought his tug up to the square stern of the *Constellation*. His valiant crew hoisted several ladders to the trapped men and they all piled aboard. How the tug accommodated them all is hard to imagine, but she did.

Although Captain Thorsen and his crew were hailed by many different commendations, letters and verbal bouquets the one he remembered best was a simple telephone call of heartfelt thanks and best wishes from one of those rescued. The call came on Christmas Eve.

**ANOTHER VETERAN** Moran tug master and pilot is Captain Lars Olav Thorsen. Now with the *Doris Moran*, he started 40 years ago aboard Captain Roy Allen's *Marion Moran*. The year was 1929, and Captain Thorsen was then a boy of 20 only one year separated from his home in Arendal, Norway. He had come over aboard the famous old *Bergensfjord* with 1,100 other Norwegian immigrants. After a few months as a deck hand on a Dauntless tug, he came to Moran and has been with us ever since. His uncle, Peter Thorsen, was then a mate with our company.

**MYSTERY PICTURE** — About 40 years ago this shot was made on the New York State Waterway barge canal. Can any of our readers tell us who that young stowaway is? We will give only one hint: he is still with the Moran organization.



CAPT. L. O. THORSEN

The *Marion Moran*, a coal burner, was typical of the tugs of those days. She was of only 700 horsepower, but she did her job and for six years young Thorsen decked aboard her. In 1935 he won his license and moved up to mate on the New York State Waterways system.

"I know every lock and every turn by heart," he said with a smile. His first canaler was the *John Nichols*, one of the old John A. Moore fleet acquired by Moran. He served aboard dozens of tugs during his five seasons on the historic old waterway route.



