

# ***PROCEEDINGS***

**OF THE MERCHANT MARINE COUNCIL**



**UNITED STATES COAST GUARD**

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## **FEATURES**

**INTERNATIONAL ICE PATROL, 1964**

**A REVIEW OF MARINE CASUALTIES**

# PROCEEDINGS

OF THE

## MERCHANT MARINE COUNCIL

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THE SS TEXACO GEORGIA, newest addition to the Texaco Fleet, is shown standing on the ways at Bethlehem Steel Company's Sparrows Point (Md.) Shipyard just prior to recent launching ceremonies. The 26,200-deadweight-ton vessel, third of five ships being built for Texaco by Bethlehem is about 604 feet long, has a breadth of 78 feet, a depth of about 44 feet and a loaded draft of some 34 feet. She has a liquid cargo capacity of more than 8,900,000 gallons and her dry cargo capacity is approximately 44,000 cubic feet.

THIS COPY FOR NOT LESS THAN 20 READERS—PASS IT ALONG

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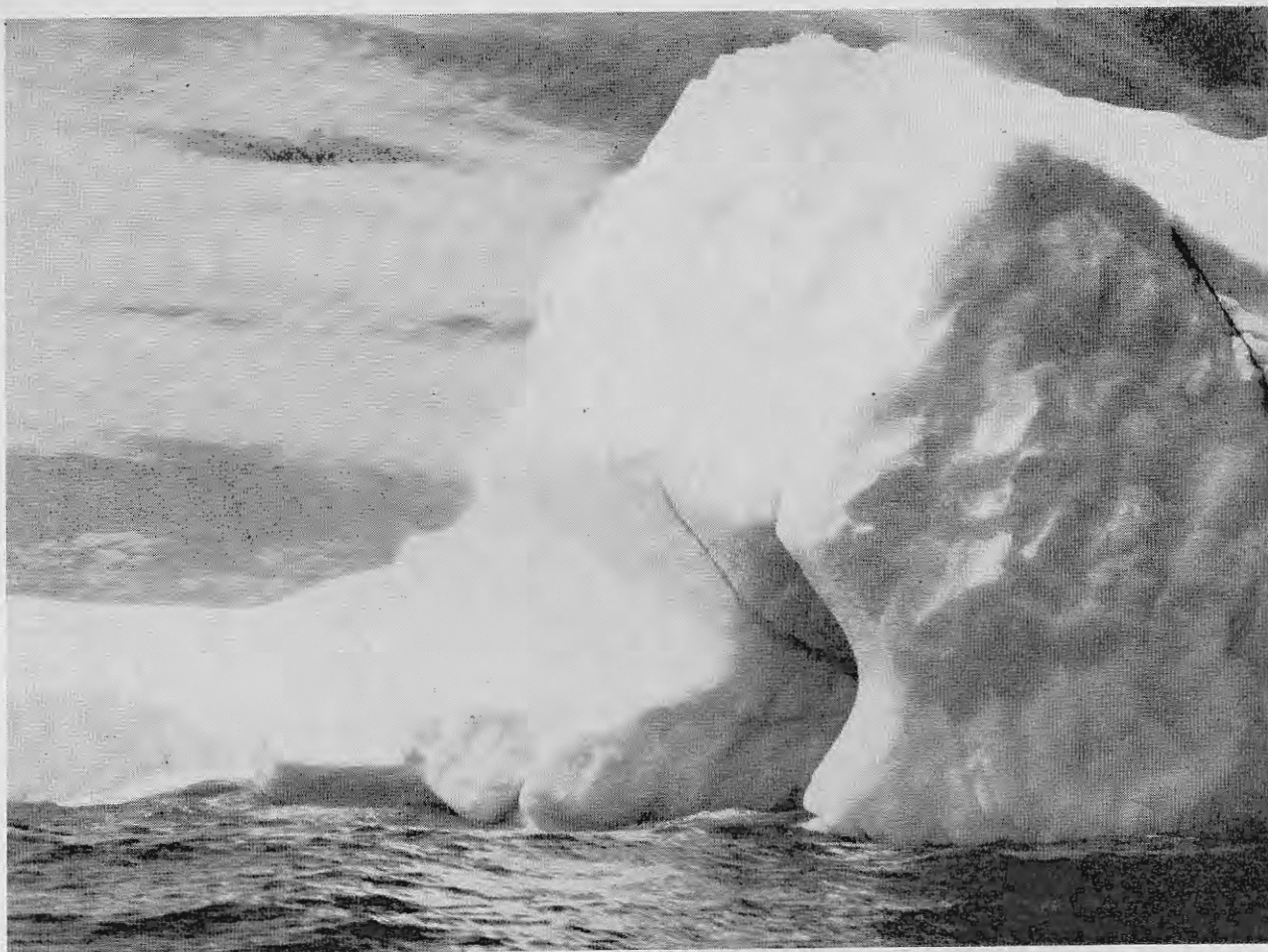
Coast Guard cutter *Westwind* off a 500 foot high pinnacle iceberg near Distro Island, Greenland.

### BACK COVER

An unexpected Peril of Maritime life by Thelwell, reproduced by permission of Esquire Magazine © 1963 by Esquire, Inc.

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## INTERNATIONAL ICE PATROL, 1964

### GENERAL INFORMATION

THE U.S. COAST GUARD will commence International Ice Patrol services to shipping for the 1964 ice season in late February or early March, depending upon ice conditions.

The primary objective of International Ice Patrol is to provide timely information and warning to shipping of the extent of the southeastern, southern, and southwestern limits of the regions of icebergs and sea ice in the vicinity of the Grand Banks.

To accomplish this objective, International Ice Patrol maintains facilities during the ice season at Argentia for:

- a. Collection of ice, weather, and sea temperature reports from shipping and aircraft traversing the Grand Banks area.
- b. Operation of aircraft from Argentia for ice reconnaissance.
- c. Operation of an oceanographic vessel for the collection of oceanographic and meteorological data.

The 1964 season will mark the 50th anniversary of the International Ice Patrol and the 51st season that the Coast Guard has conducted an ice patrol.

Additional information on the history and formation of the patrol with brief discussions on ice, icebergs, and ocean currents is contained in the pamphlet *International Ice Patrol (CG-171)* available without charge from the Commandant (CHS) U.S. Coast Guard, Washington, D.C., 20226—Ed.

d. Operation of surface patrol craft when required.

e. Evaluation of all data collected, together with weather forecasts from Naval facilities and ice information from all sources.

f. Disseminations of evaluated ice information by means of U.S. Coast Guard Radio Argentia (NIK) and by further dissemination via Naval Ra-

dio, Washington (NSS) and Radio Halifax (CFH).

### IMPORTANCE OF ICE, VISIBILITY, SEA TEMPERATURE AND WEATHER REPORTS FROM SHIPPING

a. Each ice broadcast by NIK will contain a request for all ships to report any ice sighted, and when in the area between latitudes 40° N. and 50° N. and longitudes 42° W. and 60° W. to report every four hours ships' position, course, speed, visibility, sea temperature and weather conditions. *These reports by shipping are of the utmost importance.* During periods of low visibility or low ceilings when aerial ice observation is rendered ineffective, ice reports by shipping are invaluable in aiding Ice Patrol to relocate drifting ice and to keep the position of that ice, as reported in the ice broadcasts, up-to-date. Visibility reports are of considerable value in planning ice observation flights. Visibility reports are also useful in de-

termining when special warnings on ice conditions should be broadcast. Sea temperatures reported to the Ice Patrol are used to construct isotherm charts employed in estimating ice melting rates and in detecting shifts in the branches of the Labrador Current. Wind data are useful in estimating set and drift of ice, and in forecasting weather for the purpose of planning ice observation flights.

b. In reporting ice to NIK, it is important that certain information be furnished in order that the report be evaluated correctly, especially from the standpoint of ruling out occasional erroneous reports and obviating unnecessary searches and warnings to shipping. The information desired is (1) the type of ice sighted, i.e. berg, growler or sea ice (note: if a radar target is reported which is believed to be ice but is not actually sighted visually, it should be reported as a radar target, NOT as berg, growler or sea ice), (2) the position of the ice (not the position of the reporting ship), (3) description of ice, size and shape, (4) the sea temperature at point of closest approach to the ice, and (5) weather and visibility conditions.

c. In view of the heavy reliance placed by Commander, International Ice Patrol on reports of ice, visibility, sea temperature and weather from shipping, all shipmasters are strongly urged to make these reports. It is realized that ships with but one radio operator may find it impracticable to report every 4 hours as requested. It is therefore suggested that these ships prepare four-hourly reports but delay transmitting them until the radio operator comes on watch. A late report is much better than no report.

#### COMMUNICATIONS

##### a. Twice-daily ice broadcasts

Ice broadcasts will be made twice daily, at 0048 and 1248 GMT, by U.S. Coast Guard Radio Argentina (NIK) on 155, 5320 and 8502 kc. Each broadcast will be preceded by the general call CQ on 500 kc. with instructions to shift to receive on 155, 5320 or 8502 kc. After shifting to these frequencies, NIK will transmit test signal and the International Ice Patrol radio call sign NIK for about 2 minutes to facilitate tuning. The ice broadcast will follow immediately at 15 words per minute and then be repeated at 25 words per minute. Prescribed radio silent periods will be observed.

##### b. Special broadcasts

When deemed advisable, special ice broadcasts may be made in addition to those regularly scheduled. Such special ice broadcasts will be preceded



**COAST GUARD PERSONNEL** on duty at International Ice Patrol Headquarters, Argentina, Newfoundland. The ice patrol keeps track of icebergs endangering North Atlantic shipping. Supported by 16 nations and conducted by the Coast Guard, the patrol has been in existence since the *Titanic* disaster in 1912.

by the international safety signal TTT.

##### c. Facsimile broadcasts

Ice conditions will be transmitted daily by facsimile at 1330Z on 5320 kc. at a drum speed of 60 RPM. All ships receiving these transmissions are requested to mail the facsimile chart copies, with notations of date received and ship's position, to the Commander, International Ice Patrol, Navy 103, FPO, New York, N.Y., 09597 for evaluation of effectiveness.

##### d. NIK-ship communications

Duplex operation will be used between NIK and merchant ships for general radio communications such as requests for special information, reports made by merchant ships of ice sighted, sea temperatures, visibility and weather conditions.

##### e. Calling-working

Merchant ships may call NIK on 500 kc. and 8 mc. maritime calling band at any time; also on 12 mc. band during daylight hours and 6 mc. band during nighttime hours. Ships work 425, 448, 454, 468, or 480 kc., or their assigned HF working frequency. NIK will work 427, 8734, 6477.5 or 12718.5 kc. The surface patrol vessel, radio call sign NIDK, when on station, will relay between NIK and ships when necessary. There is no charge for these services.

##### f. Broadcasts by other stations

Throughout the ice season, U.S. Navy Radio Washington (NSS) and Radio Halifax (CFH) will broadcast twice daily ice reports as furnished by Commander, International Ice Patrol at 0430 and 1630 GMT, and 0130 and 1330 GMT respectively.

Further notice will be given as to the exact date when the ice broadcasts and operations of the International Ice Patrol will commence.

Until the inauguration of International Ice Patrol services, all reports of ice sightings should be addressed to the U.S. Naval Oceanographic Office, Washington, D.C. and thereafter to Commander, International Ice Patrol (NIK).

#### GULF OF ST. LAWRENCE INFORMATION

Aerial ice reconnaissance and dissemination of ice information is also performed for shipping by the Canadian Department of Transport. Ships may obtain ice information about this area by contacting the Ice Information Officer, North Sidney Radio (VCO). This organization, during the period from mid-December 1963 to 30 June 1964, will operate mainly in the Gulf of St. Lawrence and approaches and the coastal waters of Newfoundland and Labrador to the entrance of Hudson Strait. Details of these services are available in the publication "Guidance to Merchant Ships Navigating in the Gulf of St. Lawrence in Winter", published annually by the Marine Operations Branch, Department of Transport, Canada.

#### MERCHANT VESSEL POSITION REPORTS

In accordance with the provisions of the Atlantic Merchant Vessel Reporting Program (AMVER), U.S. Coast Guard Radio Argentina (NIK or NJN) will accept Merchant Vessel Position Reports for relay to U.S. Coast Guard, New York. These reports should be separate from the ice and sea temperature reports addressed to Commander, International Ice Patrol.

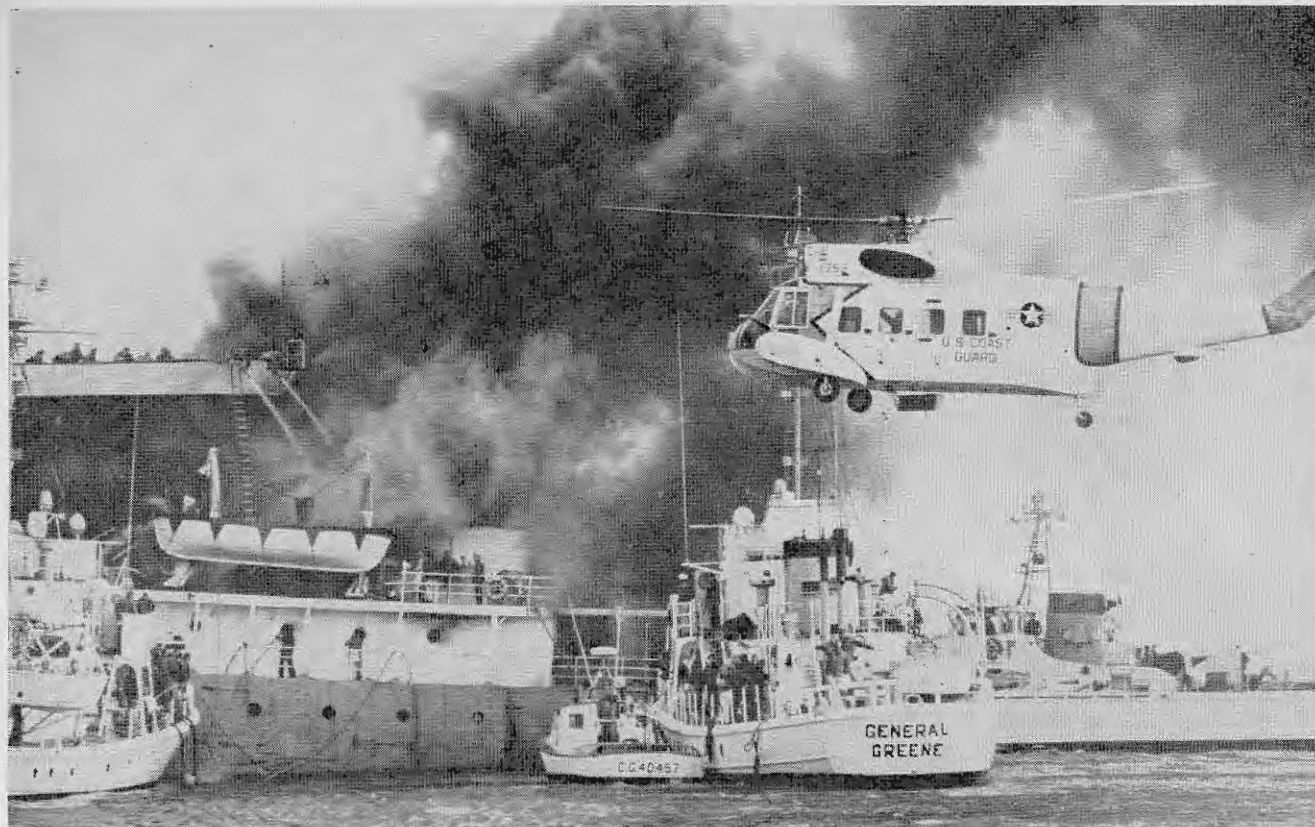
#### SEARCH AND RESCUE

International Ice Patrol has a search and rescue responsibility and assigned aircraft and vessels will render assistance to persons and property within the limits of operation when required.

#### WARNING

Carefully conducted tests by International Ice Patrol during the 1959 season showed that radar cannot provide positive assurance for iceberg detection. An iceberg is only one-sixtieth as good a radar reflector as a comparable-sized ship. Sea water is a better reflector than ice. This means that unless a berg or growler is observed on radar outside the area of sea "return" or "clutter" on the scope, it will not be detected by the radar. Furthermore, the average maximum range of radar detection of a dangerous size growler is 4 miles.

Radar is a valuable aid but its use cannot replace the traditional caution exercised in a passage across the Grand Banks during the ice season.



Courtesy New Bedford Standard Times and Ronald Rolo

## A REVIEW OF MARINE CASUALTIES

By CAPTAIN WILLIAM F. REA III, USCG

THE FOLLOWING ARTICLE is taken from a paper presented by Captain Rea at the 1963 meeting of the Marine Section of the National Safety Congress.

The primary purpose of Coast Guard investigation of a marine casualty is to determine the cause of the casualty to the extent possible so as to prevent or reduce the effects of similar casualties in the future. Major marine casualties are normally investigated by a Marine Board of Investigation appointed by the Commandant.

One means of preventing, or of reducing, the number of similar casualties is to disseminate the pertinent information as to the cause of a casualty. In this way one learns from the experiences of others. Even though there is a wide endeavor to disseminate casualty information, casualties—serious marine casualties—continue to occur on our inland waterways as well as on the high seas.

A brief review of the more recent major marine casualties will illustrate the point.

### BOHEME-BONNIE D.

The collision of the Norwegian M/V *Boheme* and the tow of the tug *Bonnie D* was one of the most serious during the past fiscal year. On the early morning of October 20, 1962, the M/V *Boheme*, a tanker with approximately 12,000 tons of combustible cargo on board, was downbound in the Mississippi River en route from Baton Rouge to sea. At this same time the diesel-propelled towing vessel *Bonnie D* was upbound from Ostrica, La., to Mayersville, Miss., pushing four tank barges ahead in tandem with a combined total of 80,500 barrels of crude oil. At 0340 on this date these vessels were in collision near St. Elmo's Light. The Western River Rules are the applicable rules of the road at this location.

As a result of this collision and the fire that occurred immediately upon collision, 20 persons died, or were missing and presumed dead. All were crewmembers of the tanker. Additionally, there was considerable structural damage in the area of the tanker's bow and extensive fire damage in way of the bow section and in crew quarters at the stern of the tanker. Interestingly enough, the tanker's cargo did not ignite and none of its cargo was lost. On the other hand, the lead barge of the tow suffered heavy damage and loss of its oil cargo.

The record shows that immediately upon collision, a fire occurred igniting a large pool of crude oil that had been released from the lead barge. This resulted in a fire at both bow and then stern of the tanker.

The Board determined that the primary cause of this casualty was the failure of the tug to reach a passing agreement. To state it in another way, the person in charge of the tug

failed to comply with the Rules of the Road which include a requirement that meeting vessels reach an agreement for passing by an exchange of whistle signals. The Rules of the Road are designed to prevent collision, and failure to comply is the most frequent cause of serious casualties. As a footnote, in reviewing the record of this casualty, it was found that neither low visibility or river current were significant factors.

#### OLYMPIC ROCK-PRINCESS

Another most serious casualty involving failure to comply with Rules of the Road occurred on February 2, 1962, in the Delaware River. This was a collision between the SS *Olympic Rock*, a Liberian tanker, and the diesel tugboat *Princess* and its tow, the tank barge *W. L. Graham*. As a result of this casualty, the tug *Princess* sank and three of its crewmembers lost their lives.

In this case the *Olympic Rock* was proceeding in ballast down the Delaware River en route from Philadelphia to sea. Periods of low visibility due to fog were encountered. Upon reaching Bellevue Range, two contacts on the radar were observed ahead at a distance of approximately 2 miles. According to the record, these contacts were sighted visually a short time later at slightly over 1 mile ahead and identified as two up-bound tugs with tows. One of these tows was dead ahead and the other slightly on the port bow of the tanker. The tow dead ahead was later identified as the tug *Princess* with tank barge *W. L. Graham*. In reviewing this case the Commandant stated that the preponderance of evidence clearly demonstrated that, when first within sight of one another, both the tanker and tow were in approximate mid-channel positions. The second up-bound tow was on its own right-hand side and, other than providing witnesses as to the events that occurred, was not involved in this casualty.

The record shows that the *Olympic Rock*, upon visually sighting the *Princess*, reduced speed, sounded one blast and altered course slightly to starboard. Receiving no response and observing no course change by the tug, the tanker sounded a second single blast and again altered course to starboard. Still receiving no reply, again a single blast was sounded and again a slight alteration of course to starboard. At this point the tanker sounded the danger signal and ordered engines full astern. Collision occurred at 1041, approximately 3 minutes after the initial whistle signal sounded by the tanker.

The person in charge of the tug *Princess*, in describing the events leading up to this casualty, contended that his vessel and tow were beyond the western extremities of the main channel at the time of collision. This was not supported by the evidence obtained during the investigation.

The tug with wheelhouse doors and windows closed was proceeding up-bound in the Delaware River at the time of the casualty. None of the single-blast passing signals from the tanker were heard by the tug.

The Commandant considered that the primary cause of this casualty was the failure of the tug to comply with Article 25, Inland Rules of the Road. Article 25 provides that "In narrow channels every steam vessel shall, when it is safe and practicable, keep to that side of the fairway or mid-channel which lies on the starboard side of such vessel."

The Commandant also concurred with the Board's conclusion that the tanker failed to comply with Article 18, Inland Rules. This rule provides that "if, when steam vessels are approaching each other either fails to understand the course or intention of the other, from any cause, the vessel so in doubt shall immediately signify the same by giving several short and rapid blasts, not less than four, of the steam whistle." In this case, the tanker on three different occasions sounded a one-blast passing signal and altered course to starboard without having received a response. The

evidence supports that the tanker was clearly in doubt as to the tug's intentions well before sounding the danger signal.

#### DIVERSITY

The most recent casualty included in this review concerns the capsizing of the M/V *Diversity* in the Gulf of Mexico on January 23, 1963, with loss of all five persons on board. The *Diversity* is an uninspected steel hull supply vessel of 132 gross tons. This vessel is typical of a number of such vessels employed, primarily in the Gulf of Mexico, to transport supplies to the offshore oil drilling structures. They are of relatively shallow draft, have a pilothouse and living quarters near the bow, and the main propulsion machinery aft under the main deck. This leaves a large expanse of deck with bulwarks at the sides for transporting deck cargoes.

Although a considerable part of the record pertains to the contractual or charter arrangements of the various parties involved, this discussion will be limited to the casualty aspects. In this case, six large steel tanks were placed on deck. Three of these measured 7 by 7 by 18 feet and three measured 8 by 8 by 16 feet. In addition, a pumping unit weighing 1.4 tons was placed on board on the main deck with these tanks. At the bottom of each tank were two 8-inch I-beams welded to the underside of the tank that served as skids. These tanks were secured to the deck plating by welding the corners of each I-beam skid to the deck plating. The purpose of these tanks was to transport drilling mud to offshore drilling structures.

After "installing" the tanks at Berwick, La., the *Diversity* proceeded to another location where approximately 565 barrels of drilling mud were transferred to 4 or possibly 5 of the deck tanks. According to the record, this caused the *Diversity*, a vessel of 120 feet in length, to trim 6 feet by the stern.

At 1730 on January 22, 1963, the *Diversity* departed Southwest Pass, Vermillion Bay, La., and arrived at a drilling platform some 60 miles distant at 0600 on January 23, 1963. Upon arrival, efforts were made to pump used mud from a tank on the platform to an empty tank on the *Diversity*. After receiving approximately 100 barrels of the used mud, the master of the *Diversity* reported to the platform that he had a loose deck tank and would have to seek shelter at Cameron, La., some 30 miles to the northwest. The weather at this time was becoming worse and the *Diversity* on departure was observed

#### ABOUT THE AUTHOR



CAPTAIN REA graduated from the Coast Guard Academy in 1941 and served on the Greenland Patrol and in marine inspection duties during World War II. Subsequently, he has served as Commanding Officer of the cutters *Koiner* and *Tamaroa* and in several marine inspection offices as an Inspector and as Senior Investigating Officer. Captain Rea recently served at Headquarters as Assistant Chief, Merchant Vessel Inspection Division.

to be laboring heavily. Later that same afternoon an overturned hull, later identified as the *Diversity*, was sighted about 8½ miles west by north of the platform from which it had departed. The body of one crewmember has been found and the remaining four persons known to have been on board are still missing and presumed lost.

The Commandant concurred with the Board in its conclusion that the *Diversity* capsized as a result of one or more deck tanks breaking loose from their fastenings and, due to the vessel's rolling in the seaway, moving athwartships and bringing about the capsizing moment.

The Merchant Marine Technical Division at Coast Guard Headquarters has been taking a close look at the stability characteristics of this type of vessel with a view toward providing certain loading and stability restrictions for those that may be inspected and certificated in the future.

#### HAZARDOUS CARGOES

The last two casualties included in this review have a common denominator in that in both cases hazardous cargoes were involved and both occurred on inland waters. Although both occurred in 1961, the review and publication of the Commandant's action was not completed until early this year.

#### UNION RELIANCE-BEREAN

On 7 November 1961 the Chinese M/V *Union Reliance*, a freighter, and the Norwegian M/V *Berean*, a tanker, collided in the Houston ship channel. The *Berean* was carrying a bulk liquid cargo of various oils and chemicals, including acrylonitrile in the No. 1 tanks. The *Union Reliance* was laden with a general freight cargo including 200 drums of citronella. The Marine Board of Investigation concluded that the casualty was caused by a steering failure on the *Union Re-*

*liance*. The bow of the *Union Reliance* penetrated the port No. 1 tank of the *Berean*. The acrylonitrile cargo of the *Berean* ignited with collision and sprayed over the forward half of the *Union Reliance*. The fire on the *Berean* was extinguished in a few hours. The fire on the *Union Reliance* burned out of control in the forward holds for 3 days. As a result of this casualty, the *Union Reliance* was a total loss and 11 crewmembers and the pilot lost their lives.

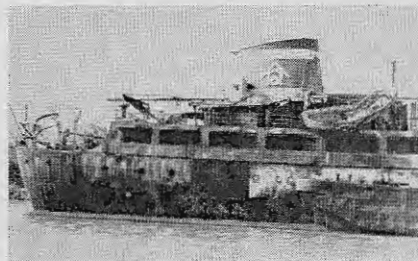
Although the cause of the casualty was apparent, the Commandant did not concur with the Board's conclusion that no toxic effects of the acrylonitrile were felt by the crew. The Commandant's remarks on the subject were as follows:

The Board's conclusion that no toxic effects were felt by the crew of either vessel is not fully concurred in. Acrylonitrile appears to act similarly to cyanide, inhibiting the utilization of oxygen. Small vapor concentrations may cause symptoms upon prolonged exposure while concentrations in greater degrees may be dangerous to life on short single exposures. If exposure to the vapors is great enough, loss of consciousness will ensue followed by cessation of respiration (asphyxia) and finally death. Therefore, considering its toxicological data, and since autopsies were not performed on those persons who lost their lives in this casualty, the part played by acrylonitrile vapors, if any, is not determinable.

#### WYCHEM 112

No doubt you are all aware of the loss of the chlorine barge *Wychem 112*. On 23 March 1961, the M/V *Eastern* was upbound in the Mississippi River pushing 17 barges. The tow was four barges long and four wide, with an additional barge on the starboard side forward. The *Wychem 112* was the lead barge on the portside. In the vicinity of Mile 352 Ahead of Passes, as the tow was approaching Natchez, Miss., it passed from an area of relatively calm water into an area of strong currents and eddies. As the *Wychem 112* entered the disturbed water, it is reported to have suddenly sunk by the bow. The securing wires to the adjacent barges parted and the barge was out of sight in about a minute.

The *Wychem 112* was a new barge on its first voyage. It had been constructed in accordance with existing Coast Guard regulations and was certificated. The barge was of the open-hopper type, fitted with 4 tanks and was carrying about 2,220,000 pounds of liquefied chlorine gas under about



100 pounds of pressure. Efforts of the owners to locate and salvage the barge were unsuccessful. Recognizing the hazards involved, the President directed the U.S. Corps of Engineers to remove the hazard. In one of the finest salvage operations ever accomplished, the tanks were removed in a minimum of time once the operations were underway.

As the result of this casualty, and a study of open-hopper-type barges sinking while being towed, it was determined that corrective action was required in three phases: (1) operation, (2) requirements for new construction, and (3) modification of existing barges. Interim regulations with regard to phase (1) are in effect; phases (2) and (3) are still being developed.

In addition, a special task group at Coast Guard Headquarters is studying the current Coast Guard regulations pertaining to the movement of dangerous cargoes to determine whether new or revised regulations are necessary.

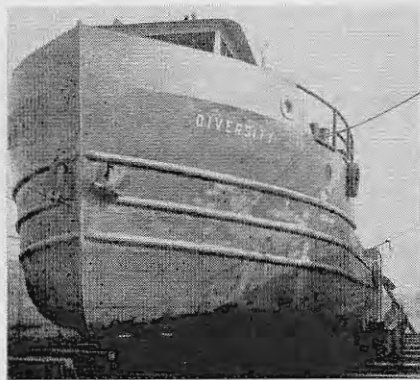
The Commandant has not completed his review of the report of the Marine Board of Investigation into the disappearance of the SS *Marine Sulphur Queen*. This ship carrying a cargo of molten sulfur disappeared on 4 February 1963 in the vicinity of the Gulf of Mexico. There were no survivors. Although the exact cause of this casualty may never be known, it appears that further study of ship design and cargo handling, particularly for elevated temperature cargoes, may be indicated.

#### TRENDS

There were a total of 2,132 vessel casualties during fiscal year 1963. This compares with 2,250 during 1962 and 2,015 during 1961.

There were no passenger's lives lost on any Coast Guard inspected passenger vessel during fiscal year 1963.

The loss of the SS *Marine Sulphur Queen*, with a crew of 39, caused a radical increase in the loss of life of crewmembers on U.S.-flag inspected vessels. Similarly, the death of twenty crewmembers of the Norwegian M/V *Boheme* as the result of a



collision with a tow in the Mississippi River caused a marked increase in the number of lives lost on Foreign vessels.

#### PERSONNEL CASUALTIES

As in the past, death due to natural causes continues to account for the greatest loss of life on inspected vessels. There were one hundred and eighty-one deaths this year compared to one hundred and fifty-six in fiscal 1962. Passenger deaths accounted for nineteen of the increase. There

was no appreciable change in this category on inspected vessels.

Falling overboard continues to take a heavy toll. On uninspected vessels it was the major cause of loss of life accounting for 66 fatalities, an increase of twenty over 1962. On inspected vessels this category is the second major cause of death claiming 21 lives this fiscal year compared to 9 last year.

There were 1835 nonfatal injuries on all commercial vessels compared to 1579 in 1962. Slips and falls on

deck or on the same level accounted for the largest number. Slips and falls on ladders or stairs was second.

In closing, while fiscal 1963 brought about fewer vessel casualties, there was a significant increase in nonfatal personnel injuries. Since slips and falls take the greatest toll, greater emphasis must be placed on eliminating hazardous or unsafe conditions and making individuals more safety conscious. It appears this can best be accomplished by a continuing safety educational program.

## "TAKE IT EASY"

By R. H. Smith and A. E. Willis

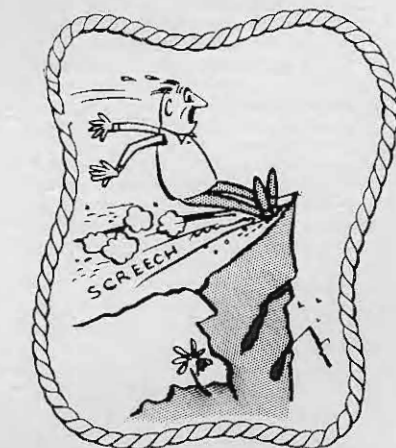
United States P. & I. Agency

American merchant ships at sea are steadily diminishing in number. Yet, obtainable statistics and the experience of our company, based on reports and safety inspections, indicate that the number of collisions involving those ships is increasing. Aids to navigation both on and off ships are improving constantly. Then what is the matter?

The Coast Guard conducted an analytical study of this situation, covering fiscal years 1957, 1958, and 1959. Of 323 collisions studied, the most frequent cause was excessive speed. Wrong side of the channel was second and failure to sound signals was third. In only 3.7 percent were wind, sea or current found to be contributing factors. Except for the 3.7 percent, all collisions seemed due to faults of personnel. Last year 351 Coast Guard-inspected American vessels were in collision—approximately 1 a day—as well as 495 uninspected vessels.

Coast Guard investigating boards find time after time that collisions are caused by "failure to navigate with caution in a restricted channel, in conditions of heavy traffic, and reduced visibility," adding that, "the greatest chance of avoiding collision still lies in careful navigation and strict adherence to the rules of the road."

The outstanding cause indicated by the figures and by our experience, excessive speed, is particularly disturbing because it seems to be getting worse. Volumes (mostly legal) have been written about excessive speed in fog or other low visibility; less about occasions in good visibility when excessive speed can create danger, not only of collision but also of wash damage to other vessels, to craft and to shore installations.



Of course, the tempo of modern shipping is being speeded up to keep pace with economic necessity. Bigger and faster ships move through waterways that seldom grow with them. Licensed Pilots, both Federal and State, seem to feel the speed urge more than ship personnel. In our experience, Pilots are involved in most ship collisions.

Automobile accidents usually are blamed on excessive speed. High speed is dangerous on the road for the same reasons as on the water. Dangerous situations develop more quickly and more often the faster you travel. The quicker they develop, the less time and the less potential you have to escape them. A ship at slow speed can back more quickly than at high speeds and can turn more quickly by speeding up its engines and then putting the rudder hard over than by putting the rudder over when already making high speed.

Sometimes Masters are reluctant to slow down for fear of criticism from the office. Also, they often complain about Pilots. More than once a Master has said "the Pilot got going too fast." That is a weak alibi. The Master is responsible for the ship's safety and navigation. The Pilot's responsibility for the ship's navigation is to the Master—the Master is in charge at all times. He can and must relieve the Pilot any time he considers that the vessel's safety is being jeopardized. Just last month we saw an instance where the Commandant of the Coast Guard approved disciplinary action against a Master for negligence in not relieving a Pilot when his vessel was in apparent danger of collision.

If a Pilot is setting improper course or speed, a Master should not wait until the vessel is in danger before acting but should speak to the Pilot right away. Although a Pilot has special knowledge of currents and hazards in his locality, the Master has special knowledge of his ship, its capabilities and its limitations. Many collisions are due to a Master's failure to intervene until too late. If a Master is down below, working on payrolls or taking a shave while a Pilot handles the ship, he is not exercising the control which is his duty. A Master belongs on the bridge whenever a Pilot is on board.

No schedule is so tight that an extra hour or 2 in pilot waters to navigate safely should cause difficulty for a Master. Collisions disarrange schedules worse than a few slowdown bells. No company condones reckless navigation by its Masters. Usually it is the first to emphasize safe navigation. Do not join the legion of those who acted too little and too late.



# MARITIME SIDELIGHTS

There were 913 vessels of 1,000 gross tons and over in the active ocean-going U.S. merchant fleet on January 1, 1964, 2 less than the number active on December 1, 1963, according to the U.S. Department of Commerce. There were 9 government-owned and 904 privately owned ships in active service. These figures did not include privately owned vessels temporarily inactive. They also exclude 26 vessels in the custody of the Departments of Defense, State, and Interior and the Panama Canal Company.

There were four more active vessels and seven fewer inactive vessels in the privately owned fleet. One freighter, *Margaret Lykes*, and the tanker *Atlantic Heritage*, were delivered from construction. Two freighters, *American Banker* and *American Farmer*, were exchanged from the government fleet to the private fleet, while the *Santa Emilia* and the *Barbara Frietchie*, were turned in to the government. One was converted to a barge; three were transferred foreign, and one was a marine casualty. This made a net loss of 3 in the total of 974, and was 11 less than the total of 985 privately owned ships on January 1, 1963. Of the 70 privately owned inactive vessels, 10 freighters and 1 tanker were being repaired or converted. The others were laid up or temporarily idle.

No new contracts were awarded. A new freighter and a tanker, and conversions of a passenger ship and a tanker were delivered. The number of large oceangoing ships under construction in U.S. shipyards decreased by 4 to 48.



The *Kenai*, perhaps the largest oceangoing railroad car barge ever constructed, was completed recently for its owner, Puget Sound-Alaska Van Lines. The barge is 342 feet long, has a 76 foot beam and a 19 foot draft, and will carry about 42 railroad cars. The original train barge in the line's service, the *Clair Engle*, carries 30 cars. Weekly sailings are scheduled between Seattle and Whittier.



PERSONNEL SAILING on vessels in the inland waterways who have outstanding personal safety records will receive a special award from American Waterways Operators, Inc. The award is part of an industry-wide safety program for the barge and towing vessel industry. There is a "Riveman Award" for those employed on the rivers, and a "Boatman Award" for personnel on tugs.



The Italian Line will employ a new concept in funnel design on the liner *Michelangelo*, scheduled to make her maiden voyage in the fall, and her sister ship the *Raffaello*. The outer shells of the stacks will be latticed and topped with tilted ailerons. A pipe in the middle will carry the smoke from the engines. The design is intended to permit the apparent wind from the vessel's forward motion to move through the stack, with the resultant mixture of wind and smoke being deflected upward by the tilted ailerons.

What may be the two largest pressure tank barges that have ever been constructed for inland waterways service have been completed recently for Alamo Chemical Transportation Co. The barges are designed to carry propane between Houston, Tex., and Calvert City, Ky. Each barge is outfitted with three tanks 15.1 feet in diameter by 322.4 feet long. Together they have a total capacity of about 9,900 tons of propane which will be carried at a pressure of approximately 250 psi.



The closing of the St. Lawrence Seaway last December for the winter season also marked the completion of the most successful year of operation in the short history of this midcontinent deep-draft outlet to the sea. The seaway handled more than 31 million tons of cargo for 1963—this is 20 percent more than the total for 1962 and over half again as much as the total carried during the first abbreviated year of operation, 1959.



More ships were lost in 1962 as a result of casualty than during any year since World War II according to Lloyd's Register of Shipping; 249 ships of 481,098 gross tons were lost compared with the previous high of 471,087 tons and 189 ships in 1961. Greek flag tonnage suffered the highest number of casualties—22 vessels.



The *Mayo Lykes*, 19th new ship in the 50-ship replacement program of Lykes Bros. Steam Ship Co., has been delivered to the company by Bethlehem Steel's Sparrows Point Yard. The 18th vessel, the *Christopher Lykes*, built by Avondale Shipyard, has also been delivered recently.

# COUNCIL ACTIVITIES

## NOTICE OF PUBLIC HEARING

The Merchant Marine Council will hold a public hearing on Monday, March 23, 1964, commencing at 9:30 a.m. in the Departmental Auditorium, between 12th and 14th Streets on Constitution Ave. NW., Washington, D.C., for the purpose of receiving comments, views, and data on the proposed changes in the navigation and vessel inspection rules and regulations. The first 14 items containing these proposals are described in detail in the Merchant Marine Council Public Hearing Agenda (CG-249). The 15th item is contained in a Federal Register document, CGFR 64-3, published in February 1964.

The complete text of proposed changes and additions to regulations is set forth in three volumes of the "Merchant Marine Council Public Hearing Agenda" (CG-249) dated March 23, 1964, and Federal Register document CGFR 64-3. Copies of this agenda are mailed to persons and organizations who have expressed a continued interest in the subjects under consideration and have requested that copies be furnished them. Copies of the agenda will be furnished, upon request, to the Commandant (CMC), U.S. Coast Guard, Washington, D.C., 20226, so long as they are available. After the supply of extra copies is exhausted copies will be available, for reading purposes only, in Room 4211, Coast Guard Headquarters or at the offices of the various Coast Guard District Commanders.

Comments on the proposed regulations are invited. Written comments containing constructive criticism, suggestions, or views are welcomed. However, acknowledgement of the comments received or reasons why the suggested changes were or were not adopted cannot be furnished since personnel are not available to handle the necessary correspondence involved. Each oral or written comment is considered and evaluated. If it is believed the comment, view or suggestion clarifies or improves a proposed regulation or amendment, such proposal is changed accordingly and, after adoption by the Commandant, the regulations as revised are published in the Federal Register.

Each person or organization who desires to submit comments, data or views in connection with the proposed regulations set forth in this agenda should submit them in duplicate so that they will be received by the Commandant (CMC), U.S. Coast Guard Headquarters, Washington, D.C., 20226, prior to March 20, 1964. Comments, data or views may be presented orally or in writing at the public hearing before the Merchant Marine Council on March 23, 1964. In order to insure consideration of written comments and to facilitate checking and recording, it is essential that each comment regarding a section or paragraph of the proposed regulations be submitted on Form CG-3287, showing the section number (if any), the name, the proposed change, the reason or basis, and the business firm or organization (if any) and the address of the submitter. A small quantity of Form CG-3287 is attached to this agenda. Additional copies may be reproduced by typewriter or otherwise, or may be obtained upon request from the Commandant (CMC).

Each item in the agenda has been given a general title, intended to encompass the specific proposals presented. It is urged that each item be read completely because the application of proposals to specific employment or types of vessels may be found in more than one item. For example, item I contains proposals regarding bulk dangerous chemicals and is applicable to tank vessels and cargo and miscellaneous vessels and manning of such vessels while item III applies to tank vessels, cargo and miscellaneous vessels and small passenger vessels. The items in the agenda are:

Item No.	Title
I	<b>BULK DANGEROUS CARGOES</b>
a.	Tank borges carrying certain bulk inflammable or combustible dangerous cargoes
b.	Barges carrying certain other bulk dangerous cargoes
c.	Vessels carrying liquid chlorine in bulk
d.	Qualifications for personnel and manning of vessels when carrying certain bulk dangerous cargoes
II	<b>QUALIFIED MEMBERS OF ENGINE DEPARTMENT RATING LIST AND TANKERMAN REQUIREMENTS</b>
a.	Merchant mariner's document endorsed as qualified member of engine department
b.	Examination subjects for pumpman
c.	Qualified pumpman and rating of tankerman
III	<b>LOAD LINES</b>
a.	Stability considerations in load line assignments
b.	Subdivision load lines for passenger vessels
IV	<b>INSPECTION AND CERTIFICATION OF VESSELS</b>
a.	Permit to proceed to another port for repairs for tank vessel
b.	Pumprooms on tank vessels
c.	Drydocking requirements for tank, cargo and miscellaneous vessels
d.	Certificate of inspection amendment for small passenger vessels
V	<b>MARINE ENGINEERING</b>
a.	Fuel oil and cargo oil systems
b.	Means of sounding oil and water tanks
c.	Steering apparatus
d.	Electrical steering and steering control systems
VI	<b>ELECTRICAL ENGINEERING</b>
a.	Electric power-operated watertight doors
b.	Power supplies for electric power-operated watertight doors
c.	Multi-speed motors, overcurrent protection for motors, direct-current exciters, ground detection, and hook-up wire
d.	Receptacle outlets
e.	Feeder and branch circuit cables
f.	Emergency electrical systems
g.	Sound-powered telephone and voice tube systems
h.	Intrinsically safe equipment and circuits
VII	<b>REQUIREMENTS AND SPECIFICATIONS FOR LIFESAVING DEVICES, EXTINGUISHERS, AND BACKFIRE FLAME ARRESTERS</b>
a.	Special purpose water safety buoyant devices
b.	Unicellular polyethylene foam buoyant vests
c.	Unicellular polyethylene foam material
d.	Pressure gauge or device on dry chemical extinguishers
e.	Backfire flame control on uninspected vessels (motorboats)
VIII	<b>DANGEROUS CARGOES</b>
a.	Hatch covers
b.	List of explosives and other dangerous articles and combustible liquids
c.	Special stowage plan for recording dangerous cargo aboard
d.	Compatibility of dangerous cargoes within vehicles, vans or portable containers
e.	Portable magazines for stowage of explosives
f.	Explosives
g.	Inflammable solids and oxidizing materials
h.	Corrosive liquids
i.	Hazardous materials
j.	Military explosives
IX	<b>SECURITY OF VESSELS AND WATERFRONT FACILITIES</b>
a.	Hot work on waterfront facility or vessel
b.	Power-operated equipment on waterfront facility
c.	Ammonium nitrate products handled and stored on waterfront facility
d.	Advance notice of arrival of vessel when laden with explosives (or certain specified dangerous cargoes) or when fire (or other hazardous conditions) exists on the vessel

Item No.	Title
X	STRUCTURES ON OUTER CONTINENTAL SHELF AND ADJACENT WATERS
a.	Lights to mark structures
b.	Fog signals on structures
c.	Lines of demarcation between primary and secondary areas in the 8th Coast Guard District (New Orleans)
XI	RULES OF THE ROAD
a.	Towing of barges—Inland Waters
b.	Towing of barges—Western Rivers
XII	IMPLEMENTING 1960 SAFETY OF LIFE AT SEA CONVENTION (SOLAS)
a.	Passenger vessels
b.	Cargo and miscellaneous vessels
c.	Tank vessels
XIII	COMBUSTIBLE GAS DETECTORS ON TANK VESSELS
XIV	RENEWAL OF OPERATORS' AND OCEAN OPERATORS' LICENSES—EXERCISE ON RULES OF THE ROAD
XV	PROPER LOOKOUT
XVI	MIDSUMMER SEASONAL LOAD LINES FOR GREAT LAKES

*S.S. Mormacfir*  
Champlain Drydock  
Quebec, Canada

Officer in Charge  
Marine Inspection  
U.S. Coast Guard  
New York, N.Y.

Dear Sir:

The *SS Mormacfir* left Quebec December 29, 1962 at 1827 after a stay of 7 very cold days (—2 F) with a cargo of 4838 tons aboard. The ice was soft and broken up but heavily congested causing the engine to lose vacuum repeatedly making us proceed through the heavy ice on North Traverse at slow speed. After we left the heavy congested ice area speed was increased. However, we slowed down to half speed every time we passed through drift ice. Most of the ice was 6-inches thick but had a layer of 1 foot of snow on top making it look heavy to the casual observer.

The vessel went through the ice with ease at half speed and at 0336 the pilot departed. We proceeded out keeping close to the south coast in order to take advantage of the strong current and to get lee from a strong southerly wind and sea. We made good speed and 1453 changed course to 117° following our company's course.

Speed was reduced at 1538 to 60 r.p.m. due to increasing sea and swell. At 1546 Fame Pt. was abeam, 5 miles off and speed was reduced again at 1632 to 50 r.p.m. in order to reduce pitching. Vessel was hove to at 1758 steering 117° and with speed reduced to 45 r.p.m. Suddenly at 1807 a loud report was heard. I turned the vessel around and running before the sea at 40 r.p.m. the decks and the deck cargo, a 55-ton locomotive standing on port deck in way of No. 3 hatch, was inspected. A 45-foot crack was found in the main deck plating forward of the midship house and extending from midships out to the port gunwale bar and down through the shell plating below the water line.

The entire crew was turned to, uncovering the lifeboats, breaking out welding equipment, wires, bull chains etc. Company and Coast Guard were notified and an SOS was sent out. It

was answered by two vessels, the *SS Louise* and the *SS Eskimo*, both 70 miles away and both proceeding into the St. Lawrence River. They promised to try to reach us, however due to the heavy seas, they were not able to make much speed. I was informed by V.C.N., Grindstone Radio, that there was no Canadian Coast Guard available for assistance, and that they had informed our own Coast Guard in Argentina. I asked the Escoumain pilot station where I could find a harbor of refuge and was informed that Gaspé was the only place. I would have broken the ship in two in trying to get to Gaspé so I decided to head for English Bay in the St. Lawrence River.

In order to ease the vessel's movements in the rough sea and to steer away from the dangerous coast a course was steered heading into the St. Lawrence with the sea on the starboard quarter. Pieces of angle iron were welded across the crack on deck, Bull Chains pulled tight by spare shroud turnbuckles were used as lashing between forward bulwark and corner of house. Also the forward and aft insurance wires were rigged across the crack and pulled tight by anchor windlass and capstan. Soundings of the holds were taken continuously and the water in No. 3 hold was found to be rising fast. During the night the sea and wind increased and at 0220 all work on deck including taking soundings was discontinued because the seas were washing over the decks with the vessel deeper in the water.

We got the *SS Eskimo* on our radar and she came up and stayed on our starboard quarter about 2 miles off and escorted us to English Bay with her Captain in Radio Phone contact with me. As we approached Des Monts Pt. the wind increased to hurricane force and the sea became large fast rollers carrying the crippled ship almost sideways. However, once we had passed the Des Monts Pt. and got in lee of the north shore I knew that we had made it. Sea and wind decreased and we made English Bay where we stopped in the lee laying snug and well protected from the weather.

The Engineers went to work re-welding angle irons next to the crack

and securing them with turnbuckles across the crack. Bilges were sounded and No. 3 L/H and No. 3 L/TD were found full of water. Next morning the Icebreaker *D'Iberville* arrived and I asked the Captain how the ice and weather was on the river and when he assured me that the wind had died down and the ice was breaking up, I decided to go to Quebec and requested that the icebreaker escort us which he agreed to do.

English Bay was in my opinion not a safe place to stay if the wind came around to the south sending in a heavy swell. Besides there would have been no danger of the vessel sinking in the river even if she broke in two. With the icebreaker close by I felt the crew would be safe. We proceeded to Quebec at half speed without any further trouble.

In Quebec divers caulked the crack below the water line, all the cargo was discharged from No. 3, the water was pumped out and the vessel was dry-docked at Champlain Drydock, Quebec where she is at present undergoing complete repairs. Lt. Commander Crowley, USCG came up from Washington at the request of the company and examined the cracked steel plates and the structural damage to the vessel. Mr. W. Jack ABS surveyor examined the hull and required that all damaged steel be replaced with ABS approved steel. The company has agreed to do all repairs here.

I did not send in this report within the required 5-days because I wanted to be able to give you a complete report of the damage, and the vessel would have to be drydocked in order to do that. I understand the ship will be in drydock here for the next month and that she will then proceed to South America with her cargo. In that case I would not be able to report to you in person before our return.

At last I would like to recommend the officers and men for their willingness and their competence in their trying to save the ship under hazardous working conditions. They lived up to the finest traditions of the American Merchant Marine.

Respectfully,

E. F. HANSEN,  
Master, *S.S. MORMACFIR*



# nautical queries

## DECK

Q. Synthetic fiber mooring lines must not be considered as a cure-all for the hazards involved in any line-handling situation.

- a. True.
- b. False.

A. a. True.

Q. What does the proposed annex recommend as to the use of information obtained from radar when determining moderate speed in restricted visibility at sea?

NOTE: This question is based upon one of the eight principles of the annex to the rules proposed by the 1960 International Convention for the Safety of Life at Sea.

A. Information obtained from radar is one of the circumstances to be taken into account when determining moderate speed. In this regard it must be recognized that small vessels, small icebergs, and similar floating objects may not be detected by radar.

Q. A vessel of 9,000 tons displacement carries two (2) slack deep tanks of palm oil (sp. gr. 0.86). The tanks are each 40 feet long and 30 feet wide. What is the reduction of metacentric height due to free surface with the vessel in sea water (sp. gr. 1.025)?

NOTE: The reduction in metacentric height due to free surface may be determined by the formula  $\frac{rIb^3}{12V}$  where—

$r$  is the ratio of the specific gravity of the liquid in the tank to the specific gravity of the liquid in which the vessel is floating.

$\frac{Ib^3}{12}$  is the moment of inertia of the tanks.

$V$  is the volume of displacement of the ship.

A.  $\frac{0.86 \times 2 \times 40 \times 30 \times 30}{1.025 \times 12 \times 9,000 \times 35} = \frac{688}{1,435}$   
= 0.48-foot reduction in metacentric height due to free surface.

Q. The sun is used to determine the index error of the sextant and the readings taken are 33'-05" on the arc and 30'-35" off the arc, the error is;

- (a) 2'-30" on the arc
- (b) 2'-30" off the arc
- (c) 1'-15" on the arc
- (d) 1'-15" off the arc
- (e) 31'-50" on the arc

A. (c) 1'-15" on the arc

## ENGINE

Q. The symbol below indicates a/an:

- (a) AC motor
- (b) Transfer relay
- (c) Dry type battery
- (d) Three pole generator
- (e) Variable resistor



A. (e) Variable resistor

Q. Describe the turning gear arrangement as used in connection with steam turbines, and what are the two main purposes for which this gear is used?

A. The turning gear is usually operated by motor and mounted on the gear casing. It has a worm drive which can be connected through a clutch to one of the high speed pinions. The turning gear may be engaged by means of a handwheel. The motor is usually of the reversible type with magnetic control panel and drum controller.

A safety device or alarm is provided which prevents turning the turbine rotor by other means while the gear is connected.

It may be used to rotate the turbine and gears while "warming up" or to place rotor or gears in position for examination or repair.

Q. What are the indications of misalignment in a steam turbine and how could correction be made?

A. Misalignment may be indicated by vibration, overheating of bearings and high oil discharge temperature. It may be corrected by raising rotor to proper position by placing shims under the bearings or installing new brasses. Also by adjustment of the thrust bearing.

Q. When in port, what attention should be given main turbines?

A. When not under steam, main turbines shall be turned at least 1 1/4 turns every day, with the forced lubrication system in operation. Care must be taken not to bring the turbine to rest in the same position. Keep drains of turbine opened to insure dryness, where casing drain

pump is fitted, operate daily. Drain water from lub oil drain tank. Operate and oil all valves and test line joints weekly. Quarterly inspect turbine interior through plates; sound bolts with hammer; clean steam strainer; examine main bearings and thrust; calibrate gages.

Q. Briefly describe a main marine turbine single reduction gear and explain the purpose and use of such gears.

A. In a single-reduction gear a high-speed pinion, driven by the turbine through a flexible coupling, engages directly with a low speed gear, or bull gear, which is mounted on the forward end of the propeller shaft. Reduction gears are used to accommodate the high speed of the turbine to the low speed of the propeller. The use of single-reduction gears is confined to comparatively slow-speed main turbines, since the usual acceptable gear reduction ratio is approximately 12 to 1.

Q. What care should be given the lubricating oil system of the reduction gear?

A. It is essential that the proper grade of oil at the designated working pressure and temperature be supplied to the gears at all times while they are being turned over, either with or without load. The lubricating oil must be free from all impurities, such as water, dirt, grit and any particles of metal. The magnetic strainers should be checked and cleaned frequently and the entire batch of oil should be centrifuged regularly. Regular inspections shall be made of the oil spray apparatus and the gear case vents to keep them open at all times. The oil level in the bottom of the gear case must not be permitted to rise above the lower level of the teeth or churning and aeration will take place. Frequent acidity tests should be made on the oil and, where salt water cooling is installed, salinity tests should be made daily.

Q. What is usually required in order to have a centrifugal pump operate properly with a negative suction head?

A. When there is a negative suction head it is usually necessary to install a check valve in the suction line below the water level and to prime the suction pipe as well as the pump before starting.

# **MERCHANT MARINE PERSONNEL STATISTICS** **MERCHANT MARINE OFFICER LICENSES ISSUED** **QUARTER ENDING DECEMBER 31, 1963** **DECK**

Grade	Original	Renewal	Grade	Original	Renewal
Master:			3d mate:		
Ocean.....	40	403	Ocean.....	22	55
Coastwise.....	14	39	Coastwise.....		
Great Lakes.....		23	Pilots:		
B.S. & L.....	9	81	Great Lakes.....		12
Rivers.....	5	39	B.S. & L.....	66	20
Radio officer licenses issued.....	10	31	Rivers.....	114	40
Chief mate:			Master: Uninspected vessels.....	20	11
Ocean.....	40	95	Mate: Uninspected vessels.....	10	1
Coastwise.....		1	Motorboat operators.....	206	383
Mate:			<b>Total.....</b>	<b>634</b>	<b>1,352</b>
Great Lakes.....			<b>Grand Total.....</b>	<b>1,986</b>	
B.S. & L.....	3	9			
Rivers.....	4	20			
2d mate:					
Ocean.....	71	89			
Coastwise.....					

## **ENGINEER**

Grade	Original	Renewal	Grade	Original	Renewal
<b>STEAM</b>			<b>MOTOR—continued</b>		
Chief engineer:			1st assistant engineer:		
Unlimited.....	41	474	Unlimited.....	1	10
Limited.....	—	69	Limited.....	11	18
1st assistant engineer:			2d assistant engineer:		
Unlimited.....	36	165	Unlimited.....	2	18
Limited.....	—	11	Limited.....	2	—
2d assistant engineer:			3d assistant engineer:		
Unlimited.....	54	209	Unlimited.....	11	84
Limited.....	—	2	Limited.....	—	—
3d assistant engineer:			Chief engineer: Uninspected vessels.....	11	10
Unlimited.....	44	178	Assistant engineer: Uninspected vessels.....	10	1
Limited.....	—	—	<b>Total.....</b>	<b>268</b>	<b>1,430</b>
<b>MOTOR</b>			<b>Grand Total.....</b>	<b>1,698</b>	
Chief engineer:					
Unlimited.....	7	78			
Limited.....	38	103			

## **WAIVER OF MANNING REQUIREMENTS**

Waivers	Atlantic coast	Gulf coast	Pacific coast	Great Lakes	Total
Deck officers substituted for higher ratings.....					
Engineer officers substituted for higher ratings.....					
Ordinary seaman for able seamen.....					
Wiper or compassers for qualified member engine dept.....					
<b>Total waivers.....</b>					
Number of vessels.....					

## **INVESTIGATING UNITS**

Coast Guard Merchant Marine Investigating Units and Merchant Marine Details investigated a total of 2,580 casualty cases and 1,876 complaint cases during the fourth quarter of 1963. During this period 813 licensed and 2,022 unlicensed seamen were subject to investigation and remedial action involving 91 licenses and 414 merchant mariner's documents were completed. In the case of licensed personnel, 3 licenses were revoked, 8 suspended outright, 11 suspended outright plus an additional suspension on probation, 17 suspended on probation, 9 cases

## **ORIGINAL SEAMEN'S DOCUMENTS ISSUED**

Type of document	Atlantic coast	Gulf coast	Pacific coast	Great Lakes and rivers	Total
Staff officer.....	35	8	13		56
Continuous discharge book.....		14			14
Merchant mariner's documents.....	1,324	572	841	585	3,322
AB any waters unlimited.....	61	59	67	21	208
AB any waters, 12 months.....	58	33	39	17	147
AB Great Lakes, 18 months.....	2		3	5	10
AB tugs and towboats, any waters.....		5	3	1	9
AB bays and sounds.....	1				1
AB seagoing barges.....	4			1	5
Lifeboatman.....	74	9	42	1	126
Q.M.E.D.....	94	41	62	36	233
Certificate of service.....	1,292	569	806	523	3,190
Tanker man.....	17	62	6	62	147
<b>Total.....</b>	<b>2,962</b>	<b>1,372</b>	<b>1,882</b>	<b>1,252</b>	<b>7,468</b>

were closed with an admonition and 39 warnings were issued. Nine cases were dismissed after a hearings. Of the unlicensed personnel, 8 merchant mariner's documents were revoked, 15 suspended outright, 40 suspended outright plus an additional suspension on probation, 65 suspended on probation, 22 cases were

closed with an admonition and 242 warnings were issued. Thirty-one cases were dismissed after a hearing. Four licenses and twenty-two documents were voluntarily surrendered in lieu of a hearing. Twelve licenses and one-hundred and twenty-eight documents were voluntarily deposited due to temporary unfitness for sea duty and 8 licenses and 89 documents returned upon a finding of fit for duty.

## **AMENDMENTS TO REGULATIONS**

[EDITOR'S NOTE.—The following regulations have been promulgated or amended since the last issue of the PROCEEDINGS. A complete text of the regulations may be found in the Federal Register indicated at the end of each article. Copies of the Federal Register containing the material referred to may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402]

## **TITLE 33—NAVIGATION AND NAVIGABLE WATERS**

### **Chapter I—Coast Guard, Department of the Treasury**

[CGFR 64-6]

#### **SUBCHAPTER K—SECURITY OF VESSELS**

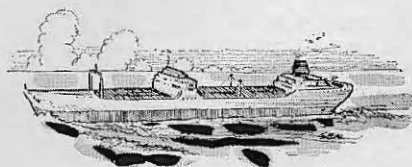
#### **PART 124—CONTROL OVER MOVEMENT OF VESSELS**

#### **SUBCHAPTER L—SECURITY OF WATERFRONT FACILITIES**

#### **PART 126—HANDLING OF EXPLOSIVES OR OTHER DANGEROUS CARGOES WITHIN OR CONTIGUOUS TO WATERFRONT FACILITIES**

#### **Vessel's Advance Notice of Time of Arrival in Commonwealth of Puerto Rico; and Handling Vehicles With Gasoline in Tanks on Waterfront Facilities**

By Executive Order 10173 the President found that the security of the United States is endangered by reason of subversive activities and prescribed certain regulations relating to the safeguarding against destruction, loss, or injury from sabotage or other causes of similar nature to vessels, ports, and waterfront facilities in the United States and all territory and



waters, continental or insular, subject to the jurisdiction of the United States exclusive of the Canal Zone.

Pursuant to the authority of 33 CFR 6.04-8 in Executive Order 10173 (15 F.R. 7007; 3 CFR, 1950 Supp.) the Captain of the Port may supervise and control the movement of any vessel and shall take full or partial possession or control of any vessel or any part thereof when within the territorial waters of the United States, under his jurisdiction whenever it appears to him that such action is necessary in order to secure such vessel from damage or injury or to prevent damage or injury to any waterfront facility on waters of the United States or to secure the observance of rights and obligations of the United States.

The provisions of 33 CFR 124.10 set forth the requirements regarding the advance notice of a vessel's estimated time of arrival at a U.S. port-of-call to the Captain of the Port. The purpose for amending § 124.10(a) (7) is to provide a means whereby the Commander, 7th Coast Guard District, may prescribe conditions under which the many small cargo vessels voyaging between the Lesser Antilles and the Commonwealth of Puerto Rico may be considered to be in constructive compliance with the advance notice of time of arrival requirement. Although the general pattern of this tramp cargo activity is well known, frequently the individual schedules are not known 24 hours in advance. Other changes in wording have been made which are editorial in nature.

The provisions of 33 CFR 126.15 set forth the conditions for a designated waterfront facility, and in § 126.15(d) are the conditions governing the handling and storage of trucks and other motor vehicles. The provisions in § 126.15(d) (4) are amended by deleting the requirement that vehicles handled and stored as cargo on a waterfront facility must have empty

gasoline tanks since the dangerous cargo regulations (46 CFR 146.27-30) now allow such vehicles to be transported with gasoline in the tanks.

(Federal Register of January 30, 1964.)

## DEPARTMENT OF DEFENSE

### Department of the Navy

#### U.S. NAVAL SUBMARINES

##### Distinctive Lights Authorized for Submarines

The Secretary of the Navy on 30 July 1963, in accordance with Rule 13 (a) International Rules and Article 13, Inland Rules, authorized the display of a distinctive light by U.S. Naval submarines in international waters and in the inland waters of the United States. The light will be exhibited in addition to the presently prescribed navigational lights for submarines.

The normal navigational lights of submarines have been found to be easily mistaken for those of small vessels when in fact submarines are large deep draft vessels with limited maneuvering characteristics while they are on the surface. The newly authorized light is expected to promote safety at sea by assisting in the identification of submarines.

U.S. submarines may therefore display an amber colored rotating light producing 90 flashes per minute visible all round the horizon at a distance of at least three miles, the light to be located approximately six feet above the masthead light.

(Sec. 1 (Art. 13), 30 Stat. 99, sec. 6 (Rule 13(a)), 65 Stat. 415; 33 U.S.C. 145k(a), 182)

[SEAL] ROBERT D. POWERS, Jr.  
Acting Judge Advocate  
General of the Navy.

AUGUST 29, 1963.

[F.R. Doc. 63-9487; Filed, Sept. 4, 1963; 8:46 a.m.]

## 161.009 CELLS, DRY (FOR FLASHLIGHTS)

Following is the current list of dry cell batteries that have been found to comply with paragraph 161.008-5(d) of U.S. Coast Guard specifications Subpart 161.008 for Flashlights, Electric, Hand, dated January 11, 1950. These batteries may be used for lifeboat and liferaft flashlights:

EVEREADY No. 950

EVEREADY No. D99

EVEREADY No. E95

RAY-O-VAC No. 2LP

MARATHON 121

BRIGHT STAR 10M

USALITE 77LP

USALITE 75LP

ACME 11L

BURGESS 2LP

Union Carbide Consumer Products Co.

Union Carbide Consumer Products Co.

Union Carbide Consumer Products Co.

Ray-O-Vac Company

Marathon Battery Co.

Bright Star Industries

Bright Star Industries

Bright Star Industries

Acme Battery Co.

Burgess Battery Co.

## ARTICLES OF SHIPS' STORES AND SUPPLIES

Articles of ships' stores and supplies certificated from January 1 to 31, 1964, inclusive, for use on board vessels in accordance with the provisions of Part 147 of the regulations governing "Explosives or Other Dangerous Articles on Board Vessels" are as follows:

### CERTIFIED

*Eastburn Marine Chemical Co., Inc.*, 53 Abbot Ave., Morristown, N.J. Certificate No. 589, dated January 6, 1964, EASTBURN 212 (ECCOT-ERJ).

Certificate No. 590, dated January 6, 1964, EASTBURN 233 (SEA MULSION).

Certificate No. 591, dated January 6, 1964, EASTBURN 225 (RUST RETARD).

Certificate No. 592, dated January 6, 1964, EASTBURN 353 (CLEAR SOL #2).

Certificate No. 593, dated January 6, 1964, EASTBURN 306 (WATTSENE #2).

*Calgon Corp.*, P.O. Box 1346, Pittsburgh 30, Pa., Certificate No. 147, dated January 21, 1964, CORROSION INHIBITOR CS.

*Fine Organics, Inc.*, 205 Main St., Lodi, N.J., Certificate No. 160, dated January 24, 1964, F.O.-300-H SOLVENT DEGREASER HEAVY DUTY.

*Octagon Process Inc.*, 596 River Road, Edgewater, N.J., Certificate No. 176, dated January 20, 1964, OCTAGON 453 LIQUID STEAM CLEANER.

### AFFIDAVITS

The following affidavits were accepted during the period from December 17, 1963 to January 15, 1964:

W-K-M Division of ACF Industries, Inc., P.O. Box 2117, Houston 1, Tex., VALVES.

Flowline Corp., P.O. Box 860, New Castle, Pa., FITTINGS & FLANGES.

Sarco Co., Inc., 635 Madison Ave., New York 22, N.Y., FITTINGS & VALVES.

Worcester Valve Co., Inc., 16 Parker St., Worcester, Mass., VALVES.

Standard Brass & Mfg. Co., P.O. Box 970, Port Arthur, Tex., VALVES, FITTINGS, FLANGES & CASTINGS.

Hackensack Bolt & Nut Co., Inc., 145 Bonhomme St., Hackensack, N.J., BOLTING.

<sup>1</sup> Delete in the Previously Approved Section of CG-190.

## MERCHANT MARINE SAFETY PUBLICATIONS

The following publications that are directly applicable to the Merchant Marine are available and may be obtained upon request from the nearest Marine Inspection Office of the United States Coast Guard. The date of each publication is indicated in parentheses following its title. The dates of the Federal Registers affecting each publication are noted after the date of each edition.

CG No.	TITLE OF PUBLICATION
101	Specimen Examination for Merchant Marine Deck Officers (7-1-63).
108	Rules and Regulations for Military Explosives and Hazardous Munitions (8-1-62).
115	Marine Engineering Regulations and Material Specifications (3-1-63), F.R. 8-20-63, 10-26-63.
123	Rules and Regulations for Tank Vessels (1-2-62). F.R. 5-2-62, 9-11-62, 2-6-63, 4-4-63, 5-30-63, 8-20-63, 9-6-63, 10-8-63, 10-26-63, 12-13-63.
129	Proceedings of the Merchant Marine Council (Monthly).
169	Rules of the Road—International—Inland (6-1-62), F.R. 1-18-63, 5-23-63, 5-29-63, 7-6-63, 10-2-63, 12-13-63.
172	Rules of the Road—Great Lakes (6-1-62). F.R. 8-31-62, 5-11-63, 5-23-63, 5-29-63, 10-2-63, 10-15-63.
174	A Manual for the Safe Handling of Inflammable and Combustible Liquids (7-2-51).
175	Manual for Lifeboatmen, Able Seamen, and Qualified Members of Engine Department (9-1-60).
176	Load Line Regulation (7-1-63).
182	Specimen Examinations for Merchant Marine Engineer Licenses (7-1-63).
184	Rules of the Road—Western Rivers (6-1-62). F.R. 1-18-63, 5-23-63, 5-29-63, 9-25-63, 10-2-63, 10-15-63.
190	Equipment Lists (4-2-62). F.R. 5-17-62, 5-25-62, 7-24-62, 8-4-62, 8-11-62, 9-11-62, 10-4-62, 10-30-62, 11-22-62, 11-24-62, 12-29-62, 1-4-63, 1-8-63, 2-7-63, 2-27-63, 3-20-63, 4-24-63, 6-11-63, 6-15-63, 6-22-63, 6-28-63, 8-10-63, 10-16-63, 11-23-63, 12-3-63.
191	Rules and Regulations for Licensing and Certifying of Merchant Marine Personnel (7-1-63). F.R. 9-18-63, 12-13-63.
200	Marine Investigation Regulations and Suspension and Revocation Proceedings (10-1-63).
220	Specimen Examination Questions for Licenses as Master, Mate, and Pilot of Central Western Rivers Vessels (4-1-57).
227	Laws Governing Marine Inspection (6-1-62).
239	Security of Vessels and Waterfront Facilities (8-1-61). F.R. 11-3-61, 12-12-61, 8-8-62, 8-31-62, 11-15-62, 1-30-63, 3-27-63, 5-29-63, 6-4-63, 10-9-63, 1-30-64.
249	Merchant Marine Council Public Hearing Agenda (Annually).
256	Rules and Regulations for Passenger Vessels (1-2-62). F.R. 5-2-62, 9-11-62, 12-28-62, 4-4-63, 5-30-63, 8-20-63, 9-6-63, 10-26-63.
257	Rules and Regulations for Cargo and Miscellaneous Vessels (11-1-62). F.R. 2-1-63, 2-6-63, 3-13-63, 4-4-63, 5-30-63, 8-20-63, 9-6-63, 10-2-63, 10-26-63.
258	Rules and Regulations for Uninspected Vessels (9-1-61). F.R. 1-20-62, 4-24-62, 5-2-62, 9-11-62, 5-14-63, 9-6-63.
259	Electrical Engineering Regulations (12-1-60). F.R. 9-23-61, 9-30-61, 5-2-62, 9-11-62, 8-20-63, 9-6-63.
266	Rules and Regulations for Bulk Grain Cargoes (5-1-62). F.R. 9-11-62, 12-24-63.
268	Rules and Regulations for Manning of Vessels (2-1-63).
269	Rules and Regulations for Nautical Schools (5-1-63). F.R. 10-2-63.
270	Rules and Regulations for Marine Engineering Installations Contracted for Prior to July 1, 1935 (11-19-52). F.R. 12-5-53, 12-28-55, 6-20-59, 3-17-60.
293	Miscellaneous Electrical Equipment List (6-1-62).
320	Rules and Regulations for Artificial Islands and Fixed Structures on the Outer Continental Shelf (10-1-59). F.R. 10-25-60, 11-3-61, 4-10-62, 4-24-63.
323	Rules and Regulations for Small Passenger Vessels (Not More Than 65 Feet in Length) (6-1-61). F.R. 9-11-62, 10-5-62, 12-28-62, 1-22-63, 9-6-63.
329	Fire Fighting Manual for Tank Vessels (4-1-58).

Official changes in rules and regulations are published in the Federal Register, which is printed daily except Sunday, Monday, and days following holidays. The Federal Register is a sales publication and may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402. It is furnished by mail to subscribers for \$1.50 per month or \$15 per year, payable in advance. Individual copies desired may be purchased as long as they are available. The charge for individual copies of the Federal Register varies in proportion to the size of the issue and will be 15 cents unless otherwise noted in the table of changes below. Regulations for Dangerous Cargoes, 46 CFR 146 and 147 (Subchapter N), dated January 1, 1964, are now available from the Superintendent of Documents, price: \$2.50.

### CHANGES PUBLISHED DURING JANUARY 1964

The following has been modified by Federal Register:  
CG-239, Federal Register, January 30, 1964.



*"Excuse us again."*