



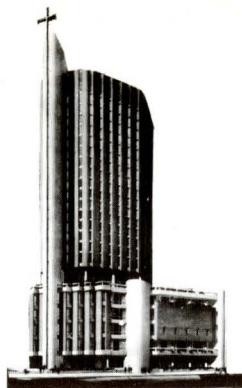
# the LOOKOUT

SEAMEN'S CHURCH INSTITUTE OF NEW YORK

SEPTEMBER 1977



## The Program of the Institute



Seamen's Church Institute  
15 State Street, N.Y.C.

The Seamen's Church Institute of New York, an agency of the Episcopal Church in the Diocese of New York, is a unique organization devoted to the well-being and special interests of active merchant seamen.

More than 350,000 such seamen of all nationalities, races and creeds come into the Port of New York every year. To many of them the Institute is their shore center in port and remains their polestar while they transit the distant oceans of the earth.

First established in 1834 as a floating chapel in New York harbor, the Institute offers a wide range of recreational and educational services for the mariner, including counseling and the help of five chaplains in emergency situations.

More than 2,300 ships with over

90,000 men aboard put in at Port Newark annually, where time ashore is extremely limited.

Here in the very middle of huge, sprawling Port Newark pulsing with activity of container-shipping, SCI has provided an oasis known as the Mariners International Center which offers seamen a recreational center especially constructed, designed and operated in a special way for the

very special needs of the men. An outstanding feature is a soccer field (lighted by night) for games between ship teams.

Although 60% of the overall Institute

budget is met by income from seamen and the public, the cost of special services comes from endowments and contributions. Contributions are tax-deductible.



Mariners International Center (SCI)  
Port Newark/Elizabeth, N.J.

### the LOOKOUT

Vol. 68 No. 7

September 1977

#### SEAMEN'S CHURCH INSTITUTE OF NEW YORK

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Published monthly with exception of July-August and February-March when bi-monthly. Contributions to the Seamen's Church Institute of New York of \$5.00 or more include a year's subscription to The Lookout. Single copies 50¢. Additional postage for Canada, Latin America, Spain, \$1.00; other foreign, \$3.00. Second class postage paid at New York, N.Y.

Cover photo: Macrame from the SCI Collection.

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US ISSN 0024-6425

## An Ecumenical "Welcome Aboard"



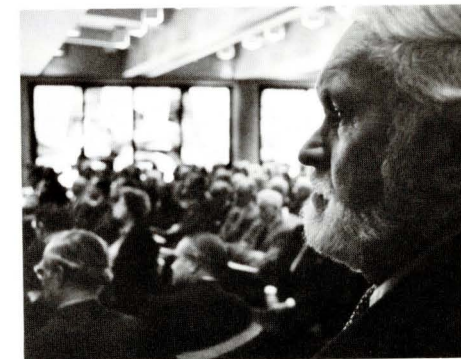
Father George N. Economou (*shown above center*) joins Greek crewmembers following his weekly Greek Orthodox service held at SCI's Mariners International Center in Port Newark/Elizabeth, N.J.

Father Economou has recently been appointed port chaplain by the Greek Orthodox Archdiocese of North and South America. His appointment was in response to a request submitted by the Center for a Greek Orthodox priest to serve the pastoral and sacramental needs of Greek seamen who arrive in the port.

In similar manner, so has Deacon Garrett (Gary) Hogan been assigned responsibilities as Port Chaplain by Archbishop Peter L. Gerety of the Roman Catholic Archdiocese of Newark.

His work with seamen will continue the Apostleship of the Sea office (Father Salvatore T. Malanga, archdiocesan director) established at SCI's Mariners International Center as part of a joint ministry with the Episcopal Church.

Deacon Hogan was in the Merchant Marine during the World War II, serving aboard liberty ships, and his working career has always been maritime related. He is currently employed as a claims investigator with the Commercial Union Insurance Company and specializes in workmen's compensation cases. He was ordained a Permanent Deacon in 1976.



At right, Deacon Garrett (Gary) Hogan

### Editor's Note:

This is the eighth of 16 articles in the series "Oceans: Our Continuing Frontier." In this first of three articles on marine resources, Don E. Kash considers the mineral wealth of the oceans and the economic, technological, and political problems involved in exploiting these resources.

These articles, which explore the whole range of human involvement with the sea, were written for COURSES BY NEWSPAPER, a program developed by University Extension, University of California, San Diego, and funded by a grant from the National Endowment for the Humanities.

Through special permission we are offering this course to our readers in monthly installments.

The views expressed in this series are those of the authors only and do not necessarily reflect those of the University of California, the National Endowment for the Humanities, the distributing agency or this publication.

# OCEANS: OUR CONTINUING FRONTIER

## Lecture 8.

# MINERAL RESOURCES OF THE OCEAN

by Don E. Kash

### About the Author:

DON E. KASH has been Professor of Political Science and Director of the Science and Public Policy Program at the University of Oklahoma since 1970. A former consultant to the Congressional Commission on Government Procurement, he is currently a member of the advisory council to the Office of Technology Assessment of the U.S. Congress, which is studying the impact of gas and oil development in the waters off the New Jersey-Delaware coast. He is the author of "The Politics of Space Cooperation," "Politics and Research," and co-author of "Energy Under the Oceans: A Technology Assessment of Outer Continental Shelf Oil," and "Gas Operations and North Sea Oil and Gas: Implications for Future United States Development."



All but hidden by the clamor over the energy crisis is what some believe to be an approaching minerals crisis.

Both crises share two interrelated problems — the growing shortage of domestic resources and thus our increasing reliance on potentially unfriendly nations for minerals as well as energy supplies. Aluminum, copper, manganese, tin, nickel, cobalt — all crucial to the modern technology that supports our economy and life-style — must be imported in ever increasing amounts to meet needs not covered by domestic production.

But will these dwindling supplies automatically mean that the U.S. and other developed countries must pay any political or economic price asked by the exporting countries in the future? A vocal and growing group answers, "No, not if we are willing to expend the effort and money to tap resources beneath the ocean."

With more than 70 percent of the earth's surface covered by the sea, the ocean floor is thought to be a bountiful source of energy and mineral resources. Current estimates are that the ocean floor contains more than 30 percent of the world's remaining oil and gas and 50 percent of its hard minerals. Also, many of the ocean's resources should be high grade, as compared to the increasingly lower grade of terrestrial resources.

Recent technological advances have made deep-water resources available for the first time. With off-shore oil and gas technology leading the way, a new marine resources industry is now opening all the world's oceans to development.

Undersea energy and mineral resources differ greatly in physical character, location, state of industrial development, and associated political issues.

Oil and gas technologies are well developed; operations take place near coastlines and involve primarily domestic issues. Hard mineral technologies are not commercial; mining will initially take place in deep water and will involve international issues. For these reasons, the two major resource categories are discussed separately.

### OFFSHORE OIL

Large-scale development of undersea petroleum resources began off the coast of Louisiana in 1947. The gradually sloping ocean floor in that area allowed industry to develop exploration and production technology step by step into greater water depths. The experience gained off Louisiana contributed directly to exploration and production technologies used in such diverse areas as the North Sea and offshore Indonesia.

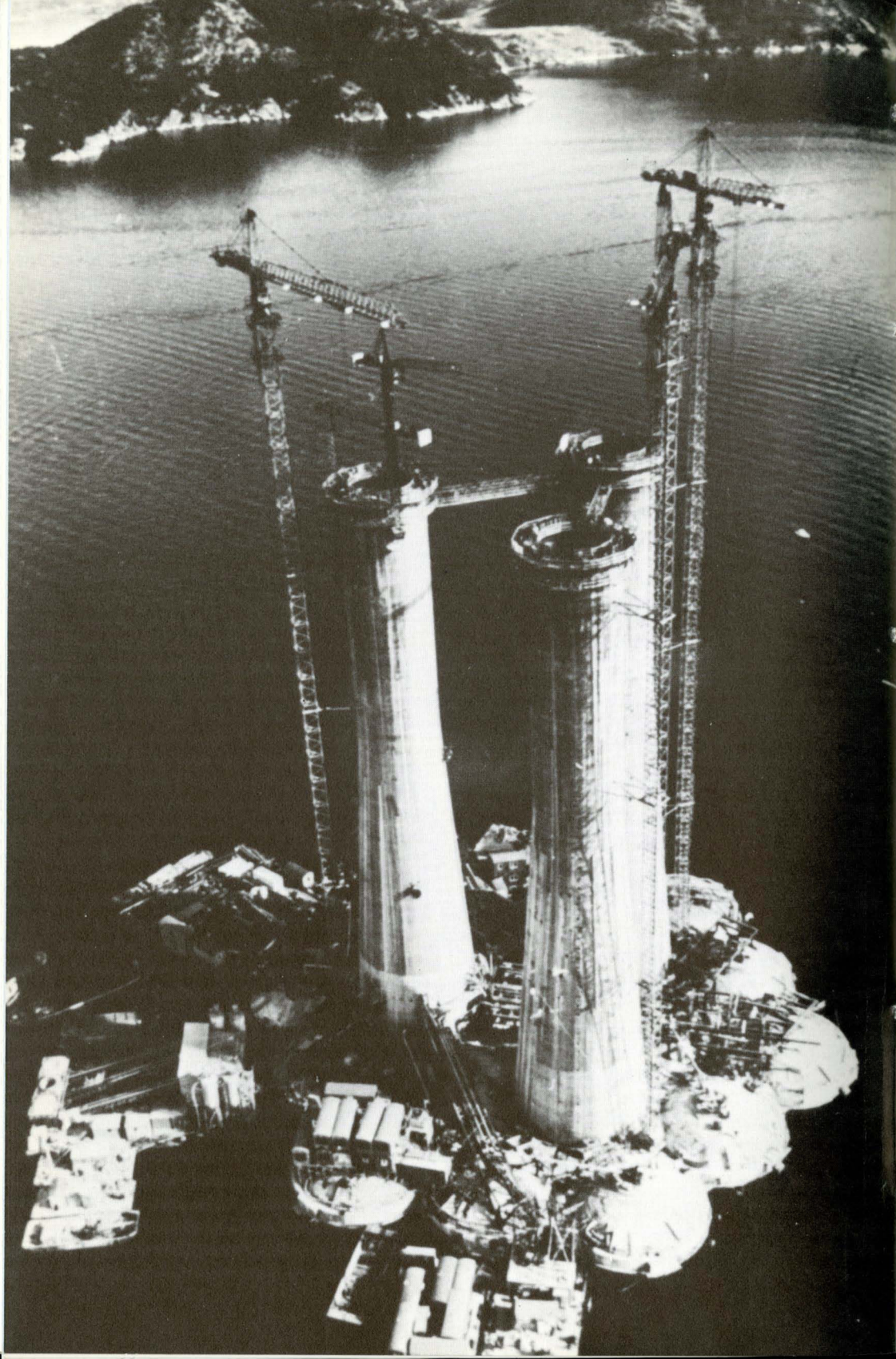
Present technologies should be adequate to recover most of the estimated 55 to 70 percent of undersea petroleum resources located in water depths of 650 feet or less.

In 1975, offshore sources accounted for nearly 20 percent of the daily world petroleum production, or approximately 10 million barrels. With constantly decreasing terrestrial supplies, the offshore production percentages appear certain to increase in the near future.

The major constraints on offshore petroleum development in the U.S. have been political and social, particularly in areas such as the Atlantic and Alaskan coasts with no history of petroleum production. In these areas, political and environmental conflicts are heightened by uncertainty whether petroleum deposits actually exist.

Generally, the individual states own all undersea resources within three miles of their shores. Beyond that point, the federal government is the owner. Most of the nation's offshore petroleum is in federally owned areas. As a result, states contend that they suffer the major disadvantages of offshore development while the federal government enjoys the benefits. The states want a portion of the revenues, a role in managing the development, and sufficient information and lead time to plan for development.

The uncertainty over the existence of petroleum in offshore areas can only be resolved by exploratory drilling. To gain the rights to drill on federal lands, companies must bid on lease tracts, in effect paying thousands of dollars for a hunting



North Sea Giant. Concrete supporting shafts, or pylons, of "Beryl A," the world's first concrete oil drilling and production platform, rise 310 feet above Gants Fjord near Stavenger, Norway. It was built in 1975.

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license. In one case, EXXON paid \$632 million for six tracts, totaling approximately 31,000 acres, on which they found no commercially producible oil. In other cases, low bids have won leases on tracts that became major producers.

As a result of these leasing arrangements, some portions of industry believe that they are forced to take unreasonable economic risks for the public good. Conversely, some industry critics contend that the practices allow private companies to exploit publicly-owned resources for unjustified company profits. Added to the state-federal conflicts, these disputes further confuse orderly development of offshore energy resources.

#### MINING OF THE DEEP SEA

The location of undersea ores and the technology for recovering them differ greatly from those for offshore oil and gas. At present, there is no large-scale marine mining.

Initial mining activities will likely attempt to recover large deposits of ferromanganese nodules under the 12,000 to 18,000 feet of water in the mid-Pacific. These nodules have a sufficiently high content of manganese, nickel, copper, and cobalt to persuade experts that they can be commercially recovered from these great depths.

Two mining methods are proposed. One uses a bucket line dredge, which basically consists of a revolving loop of steel cable from the ship to the sea floor. Buckets attached to the cable collect the nodules and carry them to the surface. The other mining method pumps water with the nodules suspended in it through a pipe from the sea floor to a surface ship, something like a giant vacuum cleaner.

As will be discussed in a later article by William T. Burke, undersea mining has threatened existing international law and created a new arena of political con-

flict. Only advanced countries have the technological know-how and capital necessary to mine deep-water mineral resources. A single mining system may require an investment of \$750 million.

Many of the less developed countries argue that such resources are the common heritage of mankind and thus the profits from the minerals should be used to pay for their economic development. Conversely, major mineral producers, such as Zaire and Chile, oppose essentially all marine mining as a threat to their economies. The controversy is so complex that no resolution seems near. However, some of the developed countries appear inclined to claim that these are free minerals owned by whoever recovers them first.

The history of petroleum and hard minerals development on land has always involved high risk and great controversy. As such activities move into the marine environment, those characteristics are likely to be magnified, not reduced.

**NEXT ISSUE:** C.P. Idyll, Study Director of the National Ocean Policy Study of the National Oceanographic and Atmospheric Administration, asks the crucial question, "Can the Sea Feed the Land?"



# Harbor Festival '77 & 4<sup>th</sup> July in Old New York

## makes Lower Manhattan Weekend Holiday Celebration



Fourth of July in Lower Manhattan is always something special and this year was no exception.

Throughout the weekend, the City's Harbor Festival '77 filled Manhattan's waterways with countless hundreds of vessels ranging from giant ocean liners and character vessels to single-manned Sunfish.

On Independence Day, "4th of July in Old New York" once again turned Lower Manhattan into New York City's (and the nation's) largest landbased holiday festival. South Street to the Battery was filled with bands, performance sites, historic tours, patriotic events, ethnic plazas and specialty attractions such as hot air balloons and antique cars.

Location alone, placed the Institute right in the middle of this giant July 4th party, but more importantly, the Institute as a member of the Lower Manhattan community has always participated in this event since it started six years ago.

This year's festival headquarters were located in the building, two of its staff were committee officers and Father James Whittmore served as master of



ceremonies for the afternoon's parade review and patriotic ceremonies at Federal Hall.

The Institute was visited by thousands of people during the long weekend, and volunteers and employees alike put in extra-long hours to see that the crowds would be properly accommodated.

July 4th alone drew more than 100,000 people to "Old New York"; and, indeed, the conviviality and festive spirit made Lower Manhattan one big neighborhood. That's how fine a day it was!





# FIRST NATIONAL MARITIME HERITAGE CONFERENCE

## A NOTABLE SUCCESS



Early photo of *Star of India*, now owned by Maritime Museum Association, San Diego, CA.

"I never realized our nation's maritime heritage was so vast and diverse." That was the reaction of many among the 400 persons who gathered in Baltimore, MD, on June 24 for a national Maritime Heritage Conference, the first of its kind.

Sponsored by the National Trust for Historic Preservation, the day-long event provided an overview of maritime preservation needs and opportunities nationwide.

Following a welcome by Mr. James Biddle, National Trust President, and a brief introduction by Captain Harry Alendorfer, more than two dozen speakers addressed questions of ship and small craft preservation, maritime museums and sites, ship reproductions and adaptive use of restored ships. Representatives of foundations, corporations and federal government later discussed sources of funding for maritime preservation projects.

The conference coincided with the Baltimore Maritime Heritage Festival, during which the *Pride of Baltimore* was welcomed home from her maiden voyage. This newly constructed Baltimore clipper was built by hand from original plans using shipbuilding techniques of the early 1800's.

About 60 other historic, classic and modern East Coast sailing ships also were in Baltimore harbor for open houses, movies, concerts, maritime displays, fireworks and social affairs. The ships arrived from Norfolk, VA, on June 23 at the conclusion of an American Sail Training Association race and departed June 26 in a Parade of Sail.

Keynote speaker for the preservation conference was Rogers C.B. Morton, former Secretary of the Interior and of Commerce and now a partner in a custom boat building firm in Easton, MD.

The Honorable Rogers C.B. Morton warned that if the United States does not revitalize its shipbuilding industry, American goods will be shut out of the world market.

"If we rely on someone else to carry our goods, we will find that someone else will start making those goods and the world will pass us by," he said.

"Our standard of living was brought by the products we shipped overseas. We'll lose it if we lose our delivery system."

Mr. Morton joined with other conference speakers in calling for a new interest in America's maritime heritage. He noted that the nation's proud maritime heritage could serve as a



400 passenger, *Mississippi Queen*, owned and operated by Delta Queen Steamboat Co.

The Apprentice Shop, Bath Marine Museum



springboard to stimulate young people seeking careers at sea and maintain the country's maritime traditions.

"The tendency to move West during the last century dominated the press and the literature of the time," he said. "The sea was forgotten."

"Maritime enterprise has been developed in wartime, then anesthetized in peace."

Other speakers told of their efforts to restore ships and to create and operate maritime museums. The projects they spoke of ranged from the City of Detroit's efforts to restore a sidewheel ferry, the *Landsdowne*, as a restaurant, to restoration of the 114-year-old bark *Star of India* in San Diego, California.

The conference sponsor, the National Trust for Historic Preservation, began a national maritime preservation program about a year ago. Currently the National Trust is conducting a survey of ships that have been restored or adapted to new uses, and is drawing up a second list of ships that are worthy of preservation. The National Trust also offers advice to groups interested in preserving maritime property. It has given a \$1,000 grant to help restore the sloop *Great Republic* in Gloucester, MA, and it hopes to provide

other grants in the future.

Also part of the program are publications, including *Wooden Shipbuilding & Small Craft Preservation*, and plans for an internship program for young people interested in learning more about the field.

*The Institute commends the National Trust for its efforts to encourage and foster a broader recognition of this nation's great maritime heritage. In so doing, it not only helps to preserve the past, but it also encourages a greater awareness of the importance and vital necessity of today's American merchant marine.*

A  
heritage  
of  
Maritime  
words

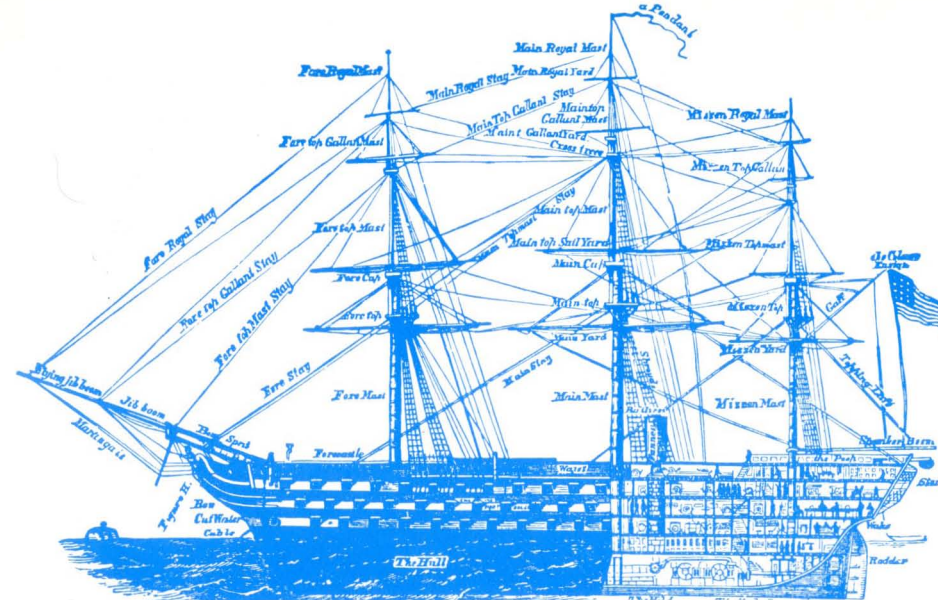
For some years now, in off moments, I have been speculating on how rich our English language is in old-time, seagoing terms and how little we are aware of, or appreciate this heritage. Not that it makes much difference to our work-a-day, everyday lives. We go on using the words whether or not we know of their origins. But if we pause to ponder these everyday expressions, we might want to give a bow or a word of thanks, at least, to our nautical ancestors who bestowed them upon us ... sometimes through hardship, sometimes through humor, always through imagination.

First-off at random, let us take the expression "**by and large**." Brendan Gill in his book, *Here At The New Yorker*, says that he has always avoided using it because his father told him that nobody knew what it meant. I protest that everyone knows what it means; he just doesn't know why. It is common coin. People will use it in a courtroom or cocktail party. We all understand what is being said, but few of us know it's actual meaning or where it comes from. "By" what, and how "large"? By and large is the (was the) term a sailing captain used when he told his helmsman, going into a harbor in good weather, to sail the ship *by* the wind (close hauled) and at *large* (before the wind on any convenient course) to attain his objective, an anchorage or a

mooring at a wharf. Yes, it is a lovely, meaningful phrase and it came to us from the sailing ships of old, making harbor after stormy seas. The captain, relieved of his three-or-four week or three-or-four year responsibilities, could go below, content to have a tot of rum before he went ashore to join his long-companionless wife.

So much for "*by and large*" or better ("*bye*" and "*large*"). There are many more to come. Everyone knows, for instance, a crude fellow who, though he will abstain from obscenity, will readily call someone a "**son of a gun**". Why a gun? Of course it is an old seaman's term. When ships of the line (square-rigged ships of war) were berthed in Londontown, the guns were hauled back and their ports closed. The secluded spaces between the cannons were convenient for sailors to consort with their ladies from port. A "son of a gun" was of course an issue thereof.

Now take "*the Devil and the deep*," but perhaps firstly, the "**Devil to pay**." Well the devil, of course, is the seam on every planked vessel, between the garboard strake (the bottom-most plank) and the keel. It has nothing to do with his Satanic majesty except, perhaps because it was the very last seam above the rising tide in any careening extremity, it was the most devilish. At any rate, the "*devil to pay*" has nothing to do with money or



the cloven Mephistopheles. The full quotation is "*the devil to pay and no pitch hot*." In other words, you are in a bad fix when your ship is careened on the beach for caulking and paying (pouring) the seams and you have run out of hot pitch to pay the very last one.

Likewise the origin of "**The Devil and the deep**." Here again, nothing to do with Lucifer, only the plight of a sailor being keel-hauled. They all knew it only too well: "*between the devil and the deep*" was that critical and dangerous (we might add fiendish) turning point when a buccaneer, tied by the hands with one rope, by the feet with another, was hauled down under the keel and up again; sometimes to survive, sometimes not. Unless you use the "*devil*" in this literal, nautical way, the expression makes no sense.

Off and on you will hear some discouraged person say he or she has reached "**the bitter end**." Why bitter? The bitter end of the anchor chain was (and is) the ultimate termination of that vital piece of a ship's equipment and it was (is) always made fast at the base of the main bitt (or more often the twin bitts) where they are morticed into the keel at the bottom of the forehold where the anchor tackle is stowed and its nether end secured. When all chain is out, you have reached the bitter end and there is no way to let out

any more in an emergency. The term is also used when the end of any important rope is reached, a mooring line, a sheet rope, a halliard.

"**Off and on**"? Off what and on what? The shore, of course. Let me quote from Captain Cook when he was about to "discover" Raiatea, the sacred island of ancient Polynesia.

*"Thursday 20th (1769). Moderate breezes at East and ENE fair weather. At half-past 2 PM weigh'd and made sail for the Island of Ulietea which lies SWBW distant 7 or 8 leagues ... shortened sail and Stood off and on all night, and at day light made sail in shore ..."*

Do all these maritime ancestries of familiar terms square away\* with you? Or are you taken aback\*\* by so much coincidence? Well, let's belay\*\*\* not belabor.

\* Set the sails square to the wind to take off on a fair course.

\*\* A ship is taken aback when a sudden reverse wind hits the sails from the front or when the yards are deliberately swung around 180 degrees to back the sails and stop the ship 'dead in her tracks.'

\*\*\* To stop, to make a line (usually a halliard) fast to a belaying pin.

Here are two random lists for anyone who wishes to pursue the subject further. The first is of terms that may need explanation (below); the second, of terms that are self-explanatory, or too familiar to need elucidation (facing page).

**Backing and filling:** Keeping a ship moving to and fro, back and forth, by backing the sails, then filling them, thus gaining time when you don't know just where or when to go.

**Backlash:** When a sail is backed against the wind suddenly or unexpectedly (as it usually is) a brace, or sheet, or boom will whip or lash dangerously. If you are unaware, it lashes you on the back.

**Ballast:** The weight added to the bottom of a boat to keep her steady.

**Booby Hatch:** A small square opening in the deck fore or aft of the main hatches; a place where you can put away a stupid or crazy person.

**Brace, brace yourself:** The braces (long whips of rope) keep the yards in place, steadying the ship.

**Brought up sharp or sudden:** To come to an abrupt stop, to back sails or come up into the wind.

**Caboose:** The cookhouse on deck and well aft to keep the food on the stove as far as possible from the danger of getting wet. An old term, long in use before railroads were dreamt of.

**Cat; let the cat out of the bag:** The "cat-o'-nine-tails," the multi-lashed whip that punished sailors by flogging, was always kept in a bag and when the bag was opened, it was an omen of dire trouble for someone. No relation to felines, except it was probably dubbed the "Cat" because it had nine tails as a cat has nine lives.

**Chock-a-block:** When two blocks (pulleys) have come together and you can go on no further.

**Even Keel:** To become steady; the trim of a vessel when its keel is parallel with the surface of the water.

**Fagged, fagged out:** To be ragged or untwisted as the frayed end of a rope.

**Fair and Square:** A fair line is one leading straight and running free. When you are square, your (square) sails are set right before the wind and all's well.

**Fly-by-night:** A jib used as a stun'sail.

**F.O.B.:** Fallen on board.

**Gangway:** A passageway aboard or ladder up a ship's side. An order demanding a passageway among the crew.

**Gangway boards** are ornamental heavy pieces of mahogany set athwartships in the rail at each side of the gangway of old men-of-war.

**Leeway:** The amount a vessel is carried off course by the force of the wind; the limits of maneuvering ability.

**Hard up:** A hard-a-weather helm, tough going.

**Poop, pooped:** The poop is the deck abaft the mizzen; pooped is a term applied when a wave breaks over the stern and you are in bad trouble.

**Scuttlebutt:** A cask for drinking water, where the crew gathers to gossip, the granddaddy of the office water cooler.

**Slack:** The condition of a line or rope when tension is eased and it dangles or hangs loosely.

**Slush Fund:** Small sums of money derived from various sources such as the sale of galley grease; it is usually used for the good of the ship or crew in meeting small expenses for athletics, music or prizes.

**Stranded:** Left high and dry on the strand or shore, no place to go and no way to get there.

**Thwart:** Crosswise of the decks, the seats in a small boat. Tranverse, perverse, contrary to the course or progress.

Most of these words are of maritime origin, all of them in good, seagoing use. Some, however, may have coincidental lubberly ancestral strains.

Adrift	Fairway	Mae West (spinnaker)
Afloat	Far reach	Nadir
Annie Oakley	Fathom	Oar, pulling your weight
A, 1	Fetch	or pulling an oar
Ballahou (ballyhoo -	Fiddler's Green	On the beam
a West Indian schooner)	Figure Head	Off the beam
Batten down	Fix	Pipe down
Beamy	Flottilla	Rakish
Bilge	Flotsam & jetsam	Rise and shine
Bone in your teeth	Fluke	Salvage
Bull's eye	Flying Dutchman	Sea room
Capsize	Founder	Shake down
Chafe	Free Booter	Shanghaied
Clamp down	Furl	Sheer
Clean breach	Gadget	Shore up
Cut of his jib	Give way	Shove off
Davy Jones Locker	Gob	Spread eagle
Dead eye	Grog	Stand by
Dead horse	Handicap	Stowaway
Deep six	Headroom	Streamline
Derelict	Heave ho	Sundowner
Doldrums	High & dry	Tabernacle
Dowse	Hoist	Three sheets in the wind
Dungarees	Jettison	Under weigh, under way
Ebb	Know the ropes	Veer
Eddy	Life line	Wake, in the
Even Keel	Linch pin	
Eye of the Storm	Loggerhead	

Have any old salts any more suggestions?

**P.S.** After this was typed up I came upon another one — "**posh.**" Webster defines it as "*luxurious: British slang,*" but doesn't say where it came from. It's an acronym; P.O.S.H. derived from Portside Outwardbound; Starboardside Homewardbound, the deluxe cabin situation on a ship to and from India to take advantage of the cool monsoons!



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AT NEW YORK, N. Y.

## *Her Restless Eyes*

*by Steve Clement*

Atop the Widow's Walk she waits;  
gripping the sea-warped rail in her hands  
Her restless eyes search longingly  
and grow wrinkled waiting for her man  
She says: "My name is Helen"  
"And today my husband returns"  
"from the coasts of foreign lands."

Children in the street are laughing;  
they think the Old Crone's gone insane  
But I was born in the town of Freeport  
it's how I know Helen's name  
Like I know her daily habit  
of waiting there on Widow's Walk  
I've watched her now for twenty years  
growing old with people's talk  
But it grieves me to see her restless eyes  
grown cold with lonely tears  
You see, I watched her cry every day ...  
for these past twenty years ...

The above poem was written by Mr. Clement after he saw some marine paintings and prints while on a business trip to Boston.

