

WELCOME TO THE BEFORE THE MAST OVERNIGHT PROGRAM

Salt water produces nothing petty, nothing insignificant. The sea always has demanded from man his greatest courage, endurance, and ingenuity.

~ Author Unknown

The Ocean Institute's maritime programs began in 1980 as an attempt to make history come alive for young people. The objective was simply to recreate as nearly as possible the life of a nineteenth century sailor. Ocean Institute instructors developed the characters based upon Richard Henry Dana, Jr.'s book, Two Years Before the Mast and used these characters to immerse participants in the harsh world Dana faced as he rounded Cape Horn on his voyage to Alta California. Authenticity served as the primary guideline.

As the program grew, instructors discovered they could use their characterizations to realize a spectrum of objectives beyond teaching history. They found that as a nineteenth century "first mate," they could demand considerably more from a child than a twentieth century "instructor." They found that children restructured their viewpoint to accept greater challenges, and to demand more of themselves. The experiential aspects of the program were emphasized with a number of interesting outcomes.

Teamwork became a necessity. Crews found that they had to work together; they had to cooperate if they were going to "survive." Crews needed guidance so mates were chosen and forced to develop leadership skills. Crewmembers learned to accept the guidance of one another as well as the ship's officers. A sense of peril was injected into the program, an ever-present possibility for failure that in eighteen hours transforms into an overwhelming sense of success.

Through the roles they choose, the students relate the past to themselves. They consider how they can apply the lessons learned to the world of tomorrow. The emphasis is on experience—experience in search of understanding. As well as learning history, the program offers lessons in math, science, language arts, and much more. The curriculum is aligned with the California Content Standards.

In all, the Ocean Institute's maritime programs remain unique. We combine "living history", experiential education, hard work, discipline, and fun in an adventure many children never forget. Aboard our ships, we hope to continue to grow as a place where students can challenge their minds and bodies, where they can discover their heritage and themselves.

If you have any questions about your visit to the Ocean Institute, please do not hesitate to contact our Maritime Director, Karin Vardaman, at 949-496-2274 ext. 218.

Again, welcome to the Before the Mast program. We are looking forward to your visit.

Sincerely,

Rick Baker
Vice President, Education

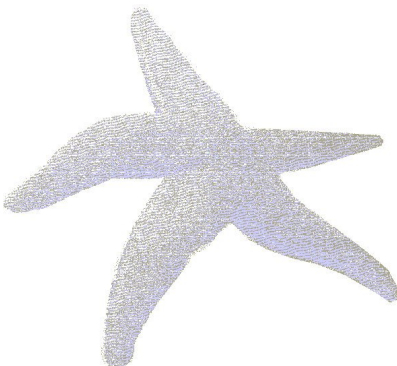
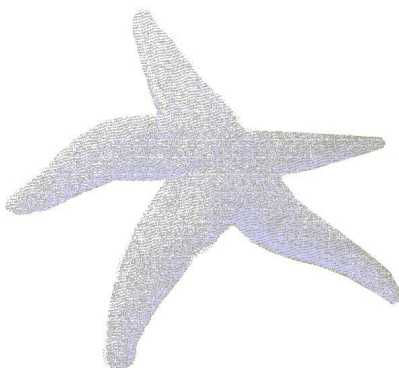


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A. ADMINISTRATIVE CHECKLIST

Immediately upon receiving this package...

- Carefully review the Teacher Preparation Package
- Arrange your transportation

Two months prior to your trip...

- Confirm student and adult numbers with the Ocean Institute

One month prior to your trip...

- Begin student preparation
- Assign students to crews
- Choose student mates
- Recruit your five safety officers
- Copy and distribute Acknowledgement of Risk and Waiver and medical forms to students and adults
- Have parents write the “letters to the sailors”

Two weeks prior to your trip...

- Mail program payment to the Ocean Institute—full payment must be received a minimum of 10 days before your program
- Collect Acknowledgement of Risk and Waiver and medical forms from each student and adult
- Contact parents to remind them to sign and return the Acknowledgement of Risk and Waiver and medical forms
- Fill out and sign the Acknowledgement of Risk and Waiver and Adult Medical Form for yourself

One week prior to your trip...

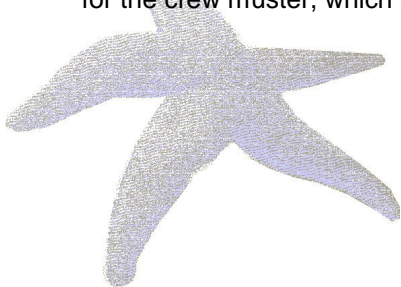
- Review behavioral expectations with students
- Meet with safety officers; go over the details of the program
- Contact the Ocean Institute with any last minute questions or changes

24 hours to go!!!...

- Be sure all forms have been collected
- Please keep the Acknowledgement of Risk and Waiver separate from the medical forms
- Prepare nametags for students and adults

When you arrive for your program...

- Keep in mind that the program begins promptly at 3:00 pm.
- Arrive by 2:15 PM and unload the bus in front of the Ocean Education Center’s Student Services Building
- Check in at the Student Services building with a final head count
- Safety officers will meet with the First Mate at 2:30 PM to review their responsibilities
- If necessary, students may use the restroom facilities. Please limit use to 7 girls and 7 boys at a time
- If you plan to shop in the *Chambers Gallery* Book and Gift Store, plan to arrive earlier. All shopping must be completed by 2:45 PM at which time the supervising safety officer will lead the students to the dock for the crew muster, which begins promptly at 3:00 PM



B. DESCRIPTION OF THE BEFORE THE MAST PROGRAM

The Before the Mast Overnight is designed to dramatically take the students back in time as they relive the life of an 1830s merchant sailor. Students explore man's relationship with the ocean, gain an appreciation for our maritime heritage, and understand the concept of 'historical perspectives' and 'interpretation'. They develop teamwork, problem solving, critical thinking, and communication skills through challenging hands on activities.

The students who come aboard will be following this scenario:

It is 1834, you come from a poor family back east and recently your farm, like many others, has suffered from a severe drought. Out of desperation you decide to look for work in the great city of Boston. Upon your arrival you notice the magnificent tallships in the harbor.

As you wander along the shipping docks, you see a notice posted for "able hands" needed to crew aboard a merchant ship headed for the California coast of Mexico to engage in the bullock hide trade. What an opportunity for a job and adventure! Though you have no experience as a sailor, you convince the first mate that you are a hard laborer and a quick study so that he may accept you as a working crewmember.

Divide your students into five crews before you arrive for the program. Each crew will have responsibilities during the program and will participate in activities in the evening. **Each student will not participate in all of the following activities—only those appropriate for their crew.**

- **Hoisting a Cargo Barrel**
Students maneuver a barrel to a desired location and understand the processes involved in the moving, loading, and unloading of ship's cargo.
- **Bell Time**
Students learn how time is kept on board ship in the 19th century. They also gain an understanding of the 'watch' system.
- **Boatswain's Chair**
Students raise a 'greenhand' up the main mast in a boatswain's chair as they learn about the responsibilities of a ship's boatswain.
- **Cargo Net**
Students work together and use the block and tackle and tag line (and the proper vocabulary) to successfully load the cargo onboard ship.
- **Rigging the Block and Tackle**
Students learn the concepts of mechanical advantage, purchase, and force. They rig a double purchase system.
- **Rowing the Long Boat**
Students learn the parts of a long boat and an oar and work together to maneuver the long boat safely and efficiently.
- **Staysail**
Students raise and lower the sail and learn the difference between the square sails and the fore and aft sails.
- **Yard – Furling Sail, Laying Out**
Students work on a yard in the cargo hold to furl, bust-up, and let fall a sail. They experience the work sailors did aloft and gain an appreciation for the labor involved in handling a square sail.

C. LINKS TO CONTENT STANDARDS

Grade Four

History - Social Science Standards

- 4.2.2. Identify the early land and sea routes to, and European settlements in, California...noting especially the importance of mountains, deserts, ocean currents, and wind patterns.
- 4.2.4 Describe the mapping of, geographic basis of, and economic factors in the placement and function of the Spanish missions; and understand how the mission system expanded the influence of Spain and Catholicism throughout New Spain and Latin America.
- 4.2.5 Describe the daily lives of the people, native and nonnative, who occupied the presidios, missions, ranchos, and pueblos.

Analysis Skills (Grade K - Grade 5)

The intellectual skills noted below are to be learned through, and applied to, the content standards for kindergarten through grade five. They are to be assessed *only in conjunction* with the content standards in kindergarten through grade five.

In addition to the standards for kindergarten through grade five, students demonstrate the following intellectual, reasoning, reflection, and research skills:

Chronological and Spatial Thinking:

1. Students explain how the present is connected to the past, identifying similarities and differences between the two, and how some things change over time and some things stay the same.
2. Students use map and globe skills to determine the absolute locations of places and interpret information available through a map's or globe's legend, scale, and symbolic representations.

Research, Evidence, and Point of View:

1. Students pose relevant questions about events they encounter in historical documents, eyewitness accounts, oral histories, letters, diaries, artifacts, photographs, maps, artworks, and architecture.
2. Students distinguish fact from fiction by comparing documentary sources on historical figures and events with fictionalized characters and events.

Historical Interpretation

1. Students summarize the key events of the era they are studying and explain the historical contexts of those events.
2. Students identify and interpret the multiple causes and effects of historical events.

English-Language Arts Standards

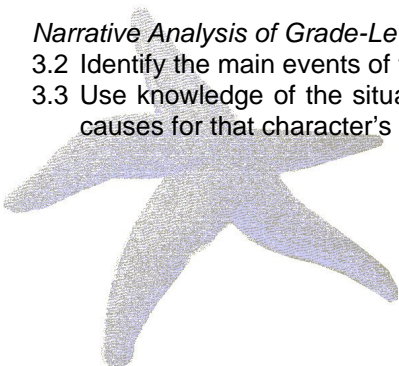
Literary Response and Analysis

Structural Features of Literature

- 3.1 Describe the structural differences of various forms of literature, including fantasies, fables, myths legends, and fairy tales.

Narrative Analysis of Grade-Level-Appropriate Text

- 3.2 Identify the main events of the plot, their causes, and the influence of each event on future actions.
- 3.3 Use knowledge of the situation and setting and of a character's traits and motivations to determine the causes for that character's actions.



Grade Five**History - Social Science Standards**

- 5.7.3 Understand the fundamental principles of American constitutional democracy, including how the government derives its power from the people and the primacy of individual liberty.
- 5.8.1 Discuss the waves of immigrants from Europe between 1789 and 1850 and their modes of transportation into the Ohio and Mississippi Valleys and through the Cumberland Gap (e.g., overland wagons, canals, flatboats, steamboats).
- 5.8.5. Describe the continued migration of Mexican settlers into Mexican territories of the West and Southwest.

Analysis Skills (Grade K - Grade 5)

The intellectual skills noted below are to be learned through, and applied to, the content standards for kindergarten through grade five. They are to be assessed *only in conjunction* with the content standards in kindergarten through grade five.

In addition to the standards for kindergarten through grade five, students demonstrate the following intellectual, reasoning, reflection, and research skills:

Chronological and Spatial Thinking:

- 3. Students explain how the present is connected to the past, identifying similarities and differences between the two, and how some things change over time and some things stay the same.
- 4. Students use map and globe skills to determine the absolute locations of places and interpret information available through a map's or globe's legend, scale, and symbolic representations.

Research, Evidence, and Point of View:

- 1. Students differentiate between primary and secondary sources.
- 2. Students pose relevant questions about events they encounter in historical documents, eyewitness accounts, oral histories, letters, diaries, artifacts, photographs, maps, artworks, and architecture.
- 3. Students distinguish fact from fiction by comparing documentary sources on historical figures and events with fictionalized characters and events.
- 5. Students judge the significance of the relative location of a place (e.g., proximity to trade routes) and analyze how relative advantages or disadvantages can change over time.

Historical Interpretation

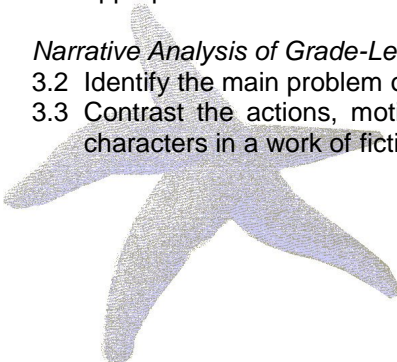
- 3. Students summarize the key events of the era they are studying and explain the historical contexts of those events.
- 4. Students identify and interpret the multiple causes and effects of historical events.

English-Language Arts Standards**Literary Response and Analysis***Structural Features of Literature*

- 3.1 Identify and analyze the characteristics of poetry, drama, fiction, and nonfiction and explain the appropriateness of the literary forms chosen by an author for a specific purpose.

Narrative Analysis of Grade-Level-Appropriate Text

- 3.2 Identify the main problem or conflict of the plot and explain how it is resolved.
- 3.3 Contrast the actions, motives (e.g., loyalty, selfishness, conscientiousness), and the appearances of characters in a work of fiction and discuss the importance of the contrasts to the plot or theme.



D. ADMINISTRATIVE INFORMATION AND PREPARATION

ADMINISTRATIVE CONTACT

For questions regarding scheduling, contracts and payment, please contact

Rachel Gomez, Program Reservation Coordinator
Telephone Number: (949) 496 – 2274, extension 211
E-mail: rgomez@ocean-institute.org

For program related questions regarding the Before the Mast Overnight, please contact

Sarah Burgart, Maritime Coordinator
Telephone Number: (949) 496-2274, extension 217
E-mail: sburgart@ocean-institute.org

INTRODUCTION

Thank you for choosing the Ocean Institute as your field trip destination. We appreciate the time and effort it takes to prepare your students for their program, and we will do everything we can to make their experience as rewarding as possible.

Please make sure that all of the participating teachers have a copy of these teacher materials. The information contained here can help you find answers to your questions, develop your preparation timeline, and prepare both your students and chaperones. This packet also contains directions to the Ocean Institute as well as contact phone numbers—please call us at any time with any questions you may have about your field trip.

TEACHER INFORMATION: BEFORE YOUR PROGRAM

You can do several things before you arrive to help make your program run as smoothly as possible:

- Review the program goals, station activities, and expected behaviors with the students before you arrive. Complete the classroom activities with your students, and make sure they have a clear understanding of the educational concepts they will explore during the program
- Spend some time choosing and preparing your safety officers. It is vital that the safety officers are prepared for the program. Review the program goals, station activities, and expected student behaviors with them before you arrive. Make sure that they have a clear understanding of their role as a safety officer.
- Have a signed Acknowledgement of Risk and Waiver and signed medical form for each student and safety officer before boarding the bus.
- Notify the Ocean Institute staff of students with any special health or behavioral considerations when you meet with the First Mate prior to the program.
- Send program payment to the Ocean Institute at least 10 days before the scheduled date of your field trip. Please mail a single check for the total amount of the program minus the deposit you have already paid. **Please make checks payable to Ocean Institute.**

TEACHER INFORMATION: DURING YOUR PROGRAM

Ocean Institute instructors are all well trained to work with students of different ages and abilities. Both you and the safety officers can help the instructor to monitor student behavior and safety. There are several things that you can do to help facilitate the smooth running of your educational program:

- Work cooperatively with Ocean Institute instructors and your safety officers to manage students during the program.

- Work cooperatively with Ocean Institute instructors and your safety officers to solve student and safety officer management problems.
- Report any problems (including facilities and management) to the Ocean Institute staff as soon as possible.

RECRUITMENT OF SAFETY OFFICERS

A minimum of five adults (maximum of seven), including the teacher, are to accompany the participants on their voyage. We cannot stress enough the extent to which the attitude of the adults influences the success of the voyage. We strongly recommend that you begin the recruitment of the safety officers early. Each adult will be assigned to a crew, and each crew must have a safety officer. The safety officers will be responsible for keeping an eye out for potential safety problems and assist in keeping discipline. No more than one adult should be taking pictures or video, since this becomes a distraction. All adults should be prepared to participate in every aspect of the program, including role-play and taking orders from the student mates.

The main responsibility of the safety officers is to assist their crew in standing night watch. The captain will give all the safety officers instructions after the evening's activities—it is their job to maintain the safety of the watch and to motivate the students during their duty.

Teachers / Group Leaders: Please note that it is vital that your safety officers also be prepared for this program. Take time to go over the resource materials (provide them with copies) and make sure they understand the nature and scenario of the program. Please make sure that your safety officers understand that they will not be permitted to leave the vessel to smoke, make telephone calls, or for any other reason. Safety officers must remain with their assigned crew unless given orders by a ship's officer. Should a safety officer need to leave the crew, they must inform a ship's officer. In addition, your safety officers need to:

- Know the scenario of the program and familiarize themselves with the resource materials included in the teacher preparation package
- Understand the basic terminology used on board: Aye, Avast, Carry-on, etc.
- Stay onboard for the entire length of the program—no late arrivals or early departures. The safety officers must be able to make the full commitment for the entire program—2:30 PM until 9:00 AM
- Absolutely no cell phones or pagers
- No smoking is allowed onboard, on the dock, or on Ocean Institute property
- They will be assigned to a different crew other than their child's.

The safety of all participants is our first priority. To assure your safety officers, you may want to inform them of the following:

- Our instructors are certified in CPR and first aid
- We do have a phone onboard to make outgoing calls should an emergency arise
- We follow all Fire Marshal, Health Department, and United States Coast Guard regulations



LETTERS TO THE SAILORS FOR THE BEFORE THE MAST PROGRAM

During the evening “Dog Watch,” the captain will take the entire crew below decks, where he will share nautical lore, sing sea shanties, and discuss the history of the times. The “letters to the sailors” are a great introduction to this activity. These letters are a very important aspect of the program and greatly enhance this “Dog Watch” time.

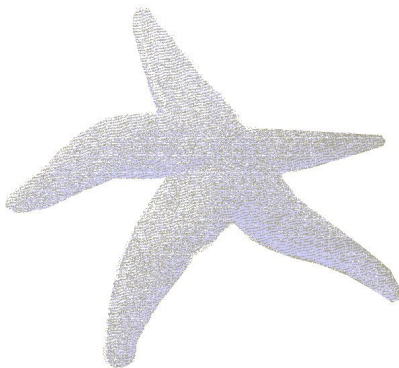
Encourage the parents to write letters to their children as if they were living in the year 1835. These should be secretly delivered to the teacher or group leader who will secretly bring them the day of the program and hand them to the first mate. Imagine the amazement of the sailors when the captain gives them their letter telling them of life back home on the farm or in Boston!

These letters should incorporate news items of the times so that the students can build upon the lessons they have learned (as well as provide some entertainment). The captain will use the letters to begin a discussion of history.

Teachers - please be sure the parents understand that the letters should not refer to or reflect modern times. The year is 1835, and the students have signed aboard a merchant ship for a job as a sailor. Remember, the sailor has been away from home for one year. Tell the parents that they are writing from back east—either from their farm or from their humble dwelling in the city. They can write about how life on the farm has been or the difficult times in the city, what is happening in the world, or exciting new inventions. The letters can be from the “parents,” “children,” “wife,” “suitor,” “friend,” or whomever, but should attempt to recreate the atmosphere of the times.

Remind the parents:

- President Andrew Jackson is in his second term of office
- The Boston Academy of Music recently opened
- Colt has patented the revolver
- The Texas War of Independence has begun
- The Wabash and Erie Canal are under construction
- Slavery is being abolished in the British Colonies, but still exists in parts of the United States
- Women do not have the right to vote
- Gas lighting has recently been invented
- There are no women aboard sailing ships
- A sailor’s life is arduous, and captains are often cruel



PAYMENT

Payment must be received 10 days before your program date. Please mail a single check for the total amount of the program minus the deposit you have already paid. **Please make checks payable to Ocean Institute.**

FINAL COUNT

Call the Ocean Institute at (949) 496-2274, extension 211 two days before your program if the number of students or adults changes. When you arrive at the Ocean Institute for your program, you must have an accurate count of total students and adults participating in the program. If the number of participants listed on your Confirmation Form is not accurate, call the Ocean Institute immediately.

STUDENT AID

The Ocean Institute maintains a student aid fund for students who are unable to obtain sufficient funding to attend the program. Please call (949) 496-2274, extension 211 for more information and to receive the necessary forms for student aid.

TRANSPORTATION

Student transportation should be arranged well in advance. It is important that you arrive on time. Please schedule yourself to arrive at least 45 minutes before your scheduled program start time. If you arrive late, your program time may need to be shortened.

Buses can unload in front of the Student Services building.

NO LATE ARRIVAL / EARLY DEPARTURE

Please note that neither students nor adults will be allowed on board the *Pilgrim* or the *Spirit of Dana Point* after the start of the program. All participants must be in attendance from the initial muster at 3:00 p.m. To ensure the safety and integrity of the program there will be NO EXCEPTIONS to this rule. Also Group leaders, please make sure all of your participants understand that they are committed to stay for the entire program. If any adult or child cannot stay for the whole program they will not be able to participate.

NAMETAGS

Each student needs to wear a sturdy nametag throughout the voyage. The tag should have only the student's last name and the crew to which he/she belongs. If he/she is a mate, remember to put a "Mr." before his/her name. Adults should have a nametag that reads "S.O."(safety officer) and the last name.

For the student's safety, the nametag should attach to the clothing and not hang around the student's neck, as the tag could become entangled with a line the student is using.

DITTY BOX FOR THE BEFORE THE MAST PROGRAM

For more extensive assistance in preparing your crew, an optional "ditty box" is available for \$35.00 for two weeks or \$60.00 for four weeks. The ditty box contains additional material and equipment to help familiarize participants with program concepts and activities. The ditty box includes lesson plans, 30 copies of Two Years Before the Mast, a CD of sailor sea shanties, a bell and stand, mini block & tackle set, sailing CD, knot board, and knot tying lines. We can mail boxes to your school for an additional cost of \$25.00 shipping/handling. The box must be returned when you check in for your program.

Reservations are accepted via fax or e-mail only. Please use the form provided in the Teacher Information Packet. Availability is limited, so please reserve your ditty box well in advance.



FORMS

Please make sure to have all the completed forms with you upon arrival for your program.

Medical Forms

You must have a completed and signed medical form for each student and adult (including the teacher) participating. In order for a child to receive any prescription or non-prescription medication during program, the Administration of Medication forms must be completed and signed by the parent or guardian and the child's physician.

Acknowledgement of Risk and Waiver

Each student must have this form signed by a parent or guardian to participate in the program. Please make sure that you have one signed form for each student, adult safety officer, and teacher when you check in with the Ocean Institute staff. Please keep these forms separate from the medical forms when you give them to the Ocean Institute staff. **Participants without a signed form will not be permitted to participate.**

Crew Forms

Your class must be divided into five crews before your arrival. We have provided a Crew Form to help you. Please bring the form with you and hand it over to the First Mate before the program begins.

STUDENT PREPARATION

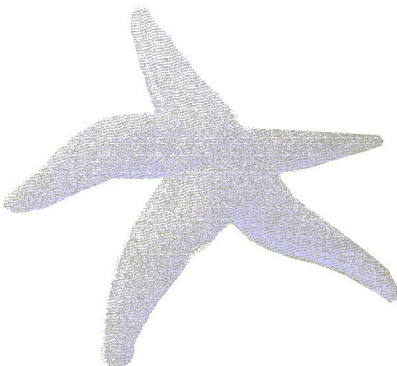
We have found that the more familiar the students are with program concepts and content before they arrive, the more they will benefit from and enjoy their experience. We have included background information and classroom activities to introduce important concepts to your students before they arrive for their program.

SNACK

The students will not eat until 7:30 PM. Due to the nature of the program, which requires a lot of energy from the "crew," we strongly recommend that they be served a simple but hearty snack upon arrival at the Ocean Institute before the start of the program. Please arrive at the Ocean Institute no later than 2:15 PM.

Some ideas for the snack are:

- granola bars
- sandwich
- cheese and crackers
- fruit and beef jerky ("salt beef")
- boxed juice
- water



LAURENA G. CHAMBERS GALLERY BOOK AND GIFT STORE

Chambers Gallery Book and Gift Store is a fun and unique non-profit museum store open daily from 9:00 AM to 5:00 PM and definitely worth the visit. The revenue is directed toward lowering tuition for schools that participate in Ocean Institute programs.

To help accommodate all of the schools that would like to shop each day, please have one teacher from your school check-in with a store staff member before your students begin shopping.

There will be a limit on the number of students allowed to shop at one time and we encourage you to organize them so that they all have time to enjoy the shop. Please have one or two adults in the store to help supervise your students. We ask that all food, drink, and backpacks be left outside with a friend while they are shopping. Teachers receive a 15% discount in the shop if members of the Teachers Club and 10% normally.

Please remind your students that sales tax will be added to their items.

In order to ensure a positive experience, we recommend the following:

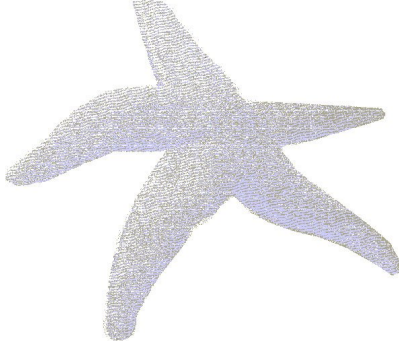
1. Plan to arrive early so that the students have sufficient time to shop. All shopping must be completed by 2:45 p.m., at which time the supervising safety officer will lead the students to the dock for the crew muster, which begins at 3:00 p.m.
2. All purchases should be stowed safely away in the participants' gear and must not be taken out or seen for the entirety of the program or they will instantly become the First Mate's property!
3. Please allow only one crew in *Chambers Gallery* Book and Gift Store at a time. Remaining crews should be finishing their snack outside in a manner that does not interfere with traffic in and out of the building.
4. Please fax a group order form to the *Chambers Gallery* Manager for any large orders, such as 30 T-shirts, 30 patches or books, etc. Please make sure to include your phone number so we can contact you about your order. Orders are required at least 6 weeks in advance to assure availability. Group order forms are included in the Required Forms packet. The fax number for the store is (949) 496-4296.

MARITIME OVERNIGHT SOUVENIR T-SHIRT

Your students can take home more than just knowledge and memories from their Ocean Institute adventure! Both *Pilgrim* and *Spirit of Dana Point* t-shirts are available for both students and adults. This comfortable t-shirt features the ship logo and is *only* available to participants who have completed the program.

Group and individual order forms are included in the Required Forms packet, available on the Ocean Institute website. If you would like to place an order for your school, please combine all individual orders onto one Group Order Form (individual checks are okay!) and fax it to (949) 496-4296. All orders must be received at least six weeks in advance of your program date.

If you have any questions, please contact the *Laurena G. Chambers Gallery* Book and Gift store at (949) 496-2274.



DIRECTIONS TO THE OCEAN INSTITUTE

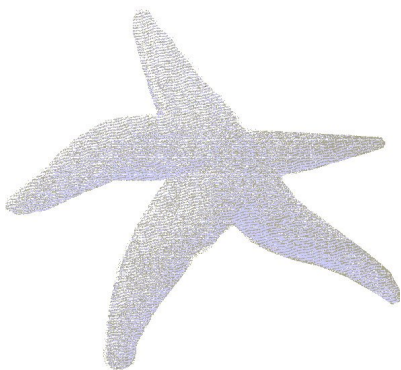
The address of Ocean Institute:
24200 Dana Point Harbor Drive
Dana Point, CA 92629
(949) 496-2274

Directions from Los Angeles:

- Travel south on Interstate 5
- Exit on the Pacific Coast Highway Exit
- Stay in the right lane of the exit ramp and go north on P.C.H.
- Turn left onto Dana Point Harbor Drive
- The road ends in the Ocean Institute parking lot

Directions from San Diego:

- Travel north on Interstate 5
- Exit on the Beach Cities Exit
- Stay in the left lane of the ramp and go north on P.C.H.
- Turn left onto Dana Point Harbor Drive
- The road ends in the Ocean Institute parking lot



E. STUDENT PREPARATION FOR THE BEFORE THE MAST OVERNIGHT

Preparing your students for this program is extremely important. We want the students to have fun as they learn, but they must understand that their tasks are not always easy. They need to know that they will be expected to work hard, work together, and listen to and follow orders. They must understand that the success of their voyage depends on them—their attitude, their willingness to take this adventure seriously, and most of all, their willingness to learn. You, as the leader, must take the time to prepare them using the following materials. The better the students are prepared, the more they—and you—will gain from the program. Please take advantage of the instructions, resource materials, and information provided in this package.

ACADEMIC PREPARATION

The students must know why they are coming on this voyage. Be sure they have a solid understanding of the scenario of the program and the experiences of Richard Henry Dana, Jr. The students should spend some time studying California history, the missions, and the hide trade. We strongly recommend that your students at least read the abridged version of Two Years Before the Mast.

CREWS

Divide your class/group into five “crews.” Many of the activities aboard the tallship are designed as group problem-solving exercises. Each of the groups, or crews, has a specific purpose on board. The five crews’ names are the *Galley crew*, *Hidegatherers*, *Boatswains*, *Linehandlers* and *Riggers* (see crew descriptions in this section). Each crew needs to have a student mate who is in charge of that particular crew. Choose a mate any way you wish, but try to select a child who is capable of withstanding the added demands of leadership. Each mate is responsible for relaying orders and making certain that his/her crew is safe and working hard at all times. Guiding these mates will be the ship’s officers. Each one of the crews will have a safety officer. The Mate is also responsible for his/her adult safety officer.

ROLE-PLAY

The students need to thoroughly understand the concept of role-playing. The students should know that they will be pretending to be sailors in the year 1834.

From the moment the first mate musters the crew on shore, the students will be expected to participate in the role-play for the entirety of the voyage. Our staff will also be pretending, and they will take their characterizations very seriously!

SAFETY CONSIDERATIONS

We will teach you all you need to know upon your arrival. Wear rubber-soled shoes long pants. Stay out of the rigging, follow orders, stay away from the rails, walk, and stay onboard the ship. Most dangers aboard will become readily apparent once the program has begun. For anyone who does not see them, the officers will enthusiastically identify them.

Should an emergency arise, please remain calm. All of our staff members are certified in First Aid and CPR and have been trained to handle emergencies. Additionally, the ship has excellent communication equipment and help is only a few minutes away.

SPECIAL HEALTH CONSIDERATIONS

As a courtesy to program participants and to ensure health safety aboard, please do not bring any students or adults who may be suffering from illness, e.g. cold or flu. We never like to leave any students behind, however, *Pilgrim* is a relatively small vessel and the participants are working in tight quarters, thus more susceptible to catching an undesirable “bug.”

To comply with California Health Code Regulations for food safety, participants in the galley crew may not wear any sort of nail polish, false nails (including acrylic), nail adornment or hand jewelry of any kind. Galley crewmembers must have “clean, neatly trimmed natural nails.”

PROGRAM SCENARIO

It is 1834, you come from a poor family back east and recently your farm, like many others, has suffered from a severe drought. Out of desperation, you decide to look for work in the great city of Boston. Upon your arrival, you notice the magnificent tallships in the harbor.

As you wander along the shipping docks, you see a notice posted for “able hands” needed to crew aboard a merchant ship headed for the California coast of Mexico to engage in the bullock hide trade. What an opportunity for a job and adventure! Though you have no experience as a sailor, you convince the first mate that you are a hard laborer and quick learner so that he may accept you as a working crewmember.

THE CAST OF CHARACTERS

- **The Captain**

The Captain is master and lord paramount on the ship. As commander and rule on board, he stands no watch, comes and goes when he pleases, is accountable to no one, and is obeyed in everything without question, even from his chief officer.

- **The Doctor**

The ship’s cook. An old time sailor who is in charge of all the meals on board. His is an endless labor, as he must prepare separate meals for the captain, officers, and crew. He is uneducated, extremely superstitious and full of sea lore and song.

- **The First Mate**

He is in charge of the ship’s operation and is the ranking officer under the captain. He is the chief disciplinarian and expects nothing less than perfection in the work of the crew. The captain tells the first mate what he wishes to have done and leaves it to him to see that his orders are fully carried out. The First Mate is frequently found by the crew to be demanding, loud, and not as socially approachable as the second mate or cook. Devoid of mirth or cheer, his management methods are often based more on intimidation than on diplomacy.

- **The Second Mate**

The Second Mate is an experienced sailor who has recently risen from the ranks of a common seaman. However, the second mate is not always the finest example of a sailor, as he is known to be a bit of a scoundrel. He is invaluable because of his ability to sniff out the best deals on bullock hides due to his contacts and personal connections.

VOCABULARY

The students should know the following nautical vocabulary before they arrive:

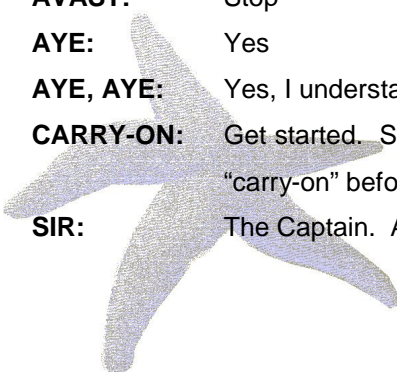
AVAST: Stop

AYE: Yes

AYE, AYE: Yes, I understand and yes, I will carry out your orders

CARRY-ON: Get started. Students will often be given a series of orders; they must wait for the command “carry-on” before they begin

SIR: The Captain. Always call the Captain *Sir* (and nobody else)



CREW DESCRIPTIONS

Galley Crew: Responsible for the preparation of meals and the running of the galley. Activities include: Cooking, cleaning, serving, attending to the captain, going up the mast in the bosun's chair, and possibly some sail handling and/or rowing

Hidegatherers: Responsible for collecting the bullock hides. Activities include: Rowing the long boat, going ashore, handling the cargo net with a block and tackle system, and possibly some sail raising

Boatswains: Responsible for ship's maintenance. Activities include: Keeping ship's bell time, raising and lowering of colors (flags), raising sail, and going up the mast in a bosun's chair

Linehandlers: Responsible for the handling of all line. Activities include: Rigging block and tackle systems, furling a square sail, and cargo handling

Riggers: Responsible for the ship's "rigging" (the setting up of sails and equipment). Activities include: Rigging of block and tackle systems, cargo handling, and furling a square sail

Please note that the Captain reserves the right to change any crew's jobs as he sees fit.

F. RESOURCE MATERIALS

PROGRAM BACKGROUND

Born in Cambridgeport, Massachusetts in 1815, Richard Henry Dana Jr. was the product of a prestigious New England family including a signer of the Declaration of Independence, and a member of the Continental Congress. In 1833, during his junior year at Harvard College, Dana contracted a case of the measles. The regime of leeches, and bleedings left him so weak and incapacitated that study became impossible. His weakened eyesight prevented him from reading or writing for nine months. Without any improvement, he decided to go to sea partly to escape the boredom of his confinement. Soon after turning nineteen years old, he signed aboard the brig *Pilgrim* on August 14, 1834 as an ordinary seaman.

Owned by Bryant and Sturgis Company, *Pilgrim* took part in the lucrative hide trade and was bound for the coast of Alta California, Mexico. Laden with manufactured goods including lumber, shoes made from California hides, and "everything that can be imagined from Chinese Fireworks to English cartwheels," *Pilgrim* arrived at the port of Monterey. Placing the cargo on sale in Monterey, Californios boarded the ship and purchased goods as though it were a floating variety store. Resident agents were in charge of the remaining cargo and peddled the goods out for an enormous profit to the Rancheros, against future deliveries of tallow and hides. Bullock hides, often referred to as the "California Banknote," had a trade value of between one to two dollars, and were worth more than twice that much in Boston.

The missions and ranchos in California played an integral part in supplying the California to Boston hide trade. Agents employed hide-brokers to retrieve the hides from the Rancheros and convey them on bullock-carts to the coast. *Pilgrim* hide-droghers collected hides at designated ports eventually transporting them for curing in San Diego by Kanakas (Hawaiians) and sailors including Richard Henry Dana, Jr. New England's leather goods industry was dependent upon the tens of thousands of raw hides hauled around Cape Horn each year. Over one million of these twenty-five pound, mite infested skins, and sixty million pounds of tallow were exported from Alta California from 1826 to 1848. San Juan Capistrano was one of the ports for *Pilgrim*, and she anchored in San Juan Bay several times in 1834.

The period of 1830-40 represents the Golden Age of American Merchant Marines, and the two years that Dana spent on *Pilgrim* characterizes the hide trade at its height. A Yankee shipmaster at this time was

considered the world standard in ability and conduct, and with the exception of Captain Frank Thompson, were generally men of good character and education.

At the end of Dana's two-year voyage, he returned to Harvard to resume his studies and while attending law school decided to write a book about his sea adventures. Although his motives were varied, he most assuredly felt a responsibility to enlighten the public to the real situation of the common seaman. Dana's book, Two Years Before the Mast was one of the first of its kind; a true life adventure story described by a young man, transformed into an able-bodied seaman with "knowledge of the world and of good and evil." Hugely successful from the day of its release in 1840, it has never been out of print up to the present time. The book started somewhat of a rage for realistic tales of the sea and was immensely popular with young readers who were able to experience the voyage vicariously through Dana's straightforward prose. His vivid descriptions of Alta California appealed to readers fascinated with stories of exotic lands and politicians interested in expanding to the Pacific Coast.

The publication of Two Years Before the Mast was both unique and significant. It was the first piece of literature that realistically described California and fairly well documents the daily lives of the people, the rancheros, the plight of the Native Americans, as well as details of the hide industry. In addition, the book provoked interest in the westward movement, it served as additional justification for Manifest Destiny, and it sparked a demand for more adventure novels, especially about the sea. Lastly, it exposed the public to the harshness and brutality at sea for the common sailor.

PROGRAM SCENARIO

Dana's experience at sea on the brig *Pilgrim* shaped his character for the rest of his life. Raised in a stuffy New England family, with an almost impossible legacy to uphold, it was, "the first time in his life he had a chance to live anonymously, to win acceptance for himself because he could reef or furl a sail and not because he was the grandson of Judge Dana." He seemed to have truly enjoyed his two years and always looked back upon those times in California with nostalgia.

The students attending our overnight programs are much like Dana himself, young people from comfortable backgrounds experiencing the harsh realities of shipboard life. During the program, one of our goals is to create a delicate yet dynamic balance using the characters and activities of the program to present both the beauty of the ocean and adventures at sea compared in contrast to life at sea in the 1830's. We want the students to experience the same duality of emotions that Dana depicts in his book. Our goal is to create an atmosphere, which enables the students to compare and contrast their encounters on board with their own life, while learning and growing from those experiences.

The men who sailed these merchant vessels came from all over the world and often did not speak the same language. On board *Pilgrim*, the students will be presented with many of the same challenges faced by Dana. Through these shipboard activities, the students will gain important skills in problem solving, responsibility, communication, and teamwork. Students will learn as Dana did, that they must pull together in order to accomplish a common goal.

Each character that the students encounter represents a different outlook or perspective of life at sea – from the educated captain, to the superstitious cook, the militant first mate, to the common seamen. Consequently, each of the students will develop their own perspective of the voyage based on their own personal experiences aboard.



HISTORY OF *PILGRIM* AND *SPIRIT of DANA POINT*

It is important to note that both vessels are used for our maritime programs, and each vessel lends a unique perspective to the sailors. *Spirit of Dana Point* and *Pilgrim* are rigged differently and because of this, they are used differently.

History of the Brig *Pilgrim*

One by one the few remaining sailing ships are disappearing. They drop away, and are heard of no more. With them goes much that is worthy and incalculable. It passes like a high squall sinking beyond the horizon, wind and sea, motion and color, romance and inspiration, a whole range of human endeavor, all vanishing to leeward with the tall ships in their midst. . . The sailing ship stood for a means whereby men were brought to their fullest development. She stood for a profession in which only merit could endure. She stood for things the world cannot afford to lose.

~ Master Mariner, Lincoln Colcord

Pilgrim is a full size replica of the hide brig immortalized by Richard Henry Dana, Jr. in his American seafaring classic novel Two Years Before the Mast. Dana said of the *Pilgrim*, "The vessel I am going on is small, but strong and a remarkably fast sailor having been built for the smuggling trade."

The original *Pilgrim* was built in 1825 at a cost of \$50,000. Her length was a mere 90 feet compared to the average 110 feet for other vessels of the same class. The purpose of its 1834 voyage was to participate in the California cattle hide trade for her Boston owners, Bryant and Sturgis. It is not known in what other trades the *Pilgrim* engaged after her voyage to Alta California, Mexico. However, it is recorded that she was lost in a fire at sea in 1856. By this time the hide trade had also suffered its demise.

Length of Deck:	98'
Beam:	24.6'
Mainmast Height:	98'
Net Tonnage:	64
Built:	1945, Denmark

History of the schooner *Spirit Of Dana Point*

Spirit of Dana Point is a full size replica of a Baltimore Clipper schooner once used as a patrol vessel against smugglers, pirates and the British navy. The Baltimore Clipper was a hull design that developed over several hundred years of Dutch and English history and culminated around the 1760's in and around the waters of Virginia. The marriage of a bow-shaped hull, a heart-shaped midsection, short keel, and a raking stern, with the large schooner-style fore and aft sail rig and one or two square top-sails, provided for one of the fastest ships of the era.

Due to the narrowness of the hull, cargo space was limited, yet as a Letter of Marquee, naval support craft, fleet supply ship, coast-guard cutter, or exploratory vessel, the Baltimore Clipper was prime. The first vessels ordered by George Washington at the outbreak of hostilities with England were clipper schooners, and privateer schooners of this design were easily found and commissioned into the Continental Navy when extra vessels were needed.

Between the Revolutionary War and the War of 1812, there were a number of small conflicts that required U.S. naval presence. These conflicts centered around the suppression of pirates along the Gulf of Mexico, the removal of the threat on merchant shipping from the Barbary pirates in the West Indies, and the protection of U.S. merchants from the French and British, who were unreliable allies at best. In all of these conflicts, Baltimore schooners were employed for service to supplement the few frigates capable for action.

After the conflicts were resolved, the navy typically sold the schooners to merchants where they carried nearly 9/10th of all American foreign borne trade. Most trade was with China and the Indies for products such as spices, rare cloths, slaves, and opium. These exotic, and sometimes illegal goods, were suited for the small cargo capacity of the clipper schooner, since they resulted in a high payoff. When it was time for the US government to enforce laws against the slave and opium trade, it was the Baltimore Clippers that were employed by the Revenue Service, since it took a fast ship to catch a fast ship.

Although the Baltimore Clipper schooner design was replaced by larger clipper ships, brigs, and barques for their larger cargo capacities, the navy, smugglers, and coast guard retained the famous design well into the 19th century.

Length Overall:	118'
Beam:	24'
Draft:	9'6"
Design by:	Howard Chapelle
Built by:	Dennis Holland, Costa Mesa, CA
launched:	Nov. 19 th , 1983

SHIPBOARD LIFE

The labor of the sailor was endless. If work aloft did not occupy him, holystoning the deck might. Once a long and arduous passage had been concluded, the more brutal work of unloading cargo awaited him. The handling of cargo was considered more dangerous than climbing up to the royal yard in a gale. When the ship was finally unloaded, the First Mate would immediately set the men to work again, painting, scraping rust, and beautifying the ship. Great pride was always taken in the condition of the vessel, especially coming into port.

The able seaman was the most experienced sailor under an officer. He generally had no formal education and could not read or write, but his skills onboard were phenomenal. He knew everything there was to know about sailing a tallship. He was ready to risk life and limb in a moment's notice, to climb aloft in a storm in the middle of the night. He knew, without thinking, what to do with each line in every situation. He was agile, swift, and quick thinking. The safety of the ship, the officers, the cargo, and passengers depended on the able-bodied seaman. The ordinary seaman was a man with little experience who had a lot to learn in a harsh environment. His pay was less than that of an able seaman, and the less interesting and most laborious work was left to this man. Under the ordinary seaman came the greenhand, or apprentice seaman. Working up the ranks took years of hard labor and endless life-risking experiences.

The captain and the officers ranked above the able, the ordinary, and the apprentice seamen.

The second mate occupied a peculiar position. Socially, he was the lowest of the ship's officers. Although he was regarded as an officer, he was required to work alongside the crew.

The first mate was second in command, the captain's right arm, and the most visible officer onboard the vessel. It normally fell to the first mate to enforce discipline in the crew and, if necessary, among the passengers. He supervised the crew directly in their work and saw to it that the captain's orders were followed.

There is no equivalent to command under sail. This sort of leadership called for the ability to make split second decisions combined with the accumulated wisdom of the centuries.

Along with the captain, the officers, and the sailors were the "idlers," named because they did not stand a normal watch. The idlers were kept at work all day and slept through the night. The idlers included the sailmaker, the carpenter, and the cook.

The cooks were often chastised for their meals but, in the cook's defense, the rations they had to work with were not of their own choosing. Traditionally, the cooks had two purposes: to prepare meals and to act as

the doctor on merchant vessels, where no passengers were accommodated. The cook was often nicknamed "doctor" since no real medical personnel were ever provided for sailors. It fell to the cook to act as the doctor because he was the one with most of the knives. Serious injury to a limb usually led to immediate amputation. Upon amputation, the remaining limb was generally cauterized, as more advanced medical practices were not known by men who had little (if any) formal medical training. The cooks also had their own special concoctions for treating illness: spices and herbs believed either to have medicinal or spiritual power were administered by the cook to the ailing sailor.

The food prepared for the sailors typically consisted of salt meat (preserved meat) and hard tack (old, hard biscuit). Any fresh meat or produce was reserved for the Captain. The crew would be allotted one cup of water bewitched (weak hot tea) a day. If, however, the ship had recently been in port the crew may have experienced some fresh provisions—fish, pork, vegetables, potatoes, oats, and rice.

HISTORY OF SAN JUAN BAY AND EARLY CALIFORNIA

The Captain told us to begin and throw the hides down. This, then was the way they were to be got down - thrown down, one at a time, a distance of four hundred feet. Down this height we pitched the hides, throwing them as far out into the air as we could; and as they were all large, stiff, and doubled, like the cover of a book, the wind took them, and they swayed and eddied about, plunging and rising in the air, like a kite when it has broken its string. It was really a picturesque sight: The great height, the scaling of the hides, and the continual walking to and fro of the men, who looked like mites, on the beach. This was the romance of hide-droghing!

~ Two Years Before the Mast, Richard Henry Dana, Jr.

The first inhabitants of the area now called California arrived around 6000 BC. These "Native Californians" subsisted on what they hunted and gathered, and they flourished until the arrival of Europeans in the 16th century. After this, the indigenous cultures were dominated first by Spain, then by Mexico, and finally by the United States. These later three groups relied on agriculture, domesticated livestock, and foreign trade for their livelihood.

In 1542, a Spaniard named Cabrillo became the first European to set foot on California soil. The first missions were established during the 1700's by the Jesuits and later by Franciscans under Father Serra. Mission San Juan Capistrano was founded in 1776, with the first major buildings being erected in 1797. Mexico gained independence from Spain in 1821 eventually followed by *An Act for the Secularization of the Missions of California* in 1833. The Mission San Juan Capistrano was secularized in 1834 but was still maintained as a location for the hide and tallow industry. The Mexican-American War began in 1846, and ended in 1848 with the signing of the Treaty of Guadalupe Hidalgo ceding the California territory to the United States. A United States Territory during the boisterous times of the Gold Rush, Californian received statehood in 1850.

During this turbulent first half of the 19th century, large ranchos were established. Along with the missions, these ranchos played an integral part in supplying the California to Boston hide trade. San Juan Capistrano was one of several common ports for the **Pilgrim**. New England's leather goods industry was totally dependent upon the tens of thousands of raw hides hauled around Cape Horn each year.

When Richard Henry Dana returned to California twenty four years after his voyage on the **Pilgrim**, he could not believe the drastic changes. Even the hide trade, once the only reason ships called on California ports, had all but disappeared. There was little to remind him of the quiet, romantic coastline he wrote about so fondly. Instead, calm harbors were hectic bustling ports and sleepy villages had become thriving metropolises.

San Juan Bay is the only romantic spot on the coast. The country here for several miles is high tableland, running boldly to the shore, and breaking off in a steep cliff, at the foot of which the waters of the Pacific are constantly dashing. For several miles the water washes the very base of the hill, or breaks upon ledges and fragments of rocks which run out into the sea. Just where we landed was a small cove, or bight which gave us, at high tide a few square feet of sand-beach between the sea and the bottom of the hill. Directly before us rose the perpendicular height of four or five hundred feet. How

we were to get hides down, or goods up, upon the tableland on which the mission was situated, was more than we could tell.

~ Two Years Before the Mast, Richard Henry Dana, Jr.

BEFORE THE MAST: UNITED STATES HISTORIC REVIEW 1820 – 1836

During the evening dog watch, the Captain will reveal that he has received a satchel of letters from another American ship. Because letters from home could take as much as six months to a year to find their intended recipient, the receiving of a letter was an exciting event. The captain will inform the Greenhands that he finds it useful to read these letters in order to garner information about current events back home. This of course presents an excellent historical learning opportunity and adds to the illusion of the voyage actually taking place between 1834 and 1836.

1821

- James Monroe begins second term as President of the United States.
- Mexico gains independence from Spain.

1823

- Mexico becomes a Republic.
- Monroe Doctrine closes American continent to colonial settlement by European powers.

1828

- Andrew Jackson, Democratic Republican, defeats John Quincy Adams to become the seventh President of the United States.
- Baltimore & Ohio, the first railroad built in U.S. for transportation of passengers and freight, is constructed.

1831

- Charles Darwin sails as naturalist on a surveying expedition aboard the ***H.M.S. Beagle***.
- Michael Faraday carries out a series of experiments demonstrating the discovery of electromagnetic induction.

1832

- Andrew Jackson, nominated by the newly styled "Democratic Party," is re-elected President of the United States.
- Jackson's opposition to a National Bank leads to the extending of credit and issuing of paper money by state banks. This touches off a round of western land speculation and inflation.
- New England Anti-Slavery Society founded in Boston.

1833

- First horse-drawn trolleys in the city of New York.
- Beginning of Whig Party (eventually the Republican Party).
- Abolition of slavery in the British Empire.

THE STUDENTS SET SAIL FROM BOSTON HARBOR IN 1834

1834

- President Jackson is censured by the Senate for removing deposits from the Bank of the United States.
- Abraham Lincoln (age 25) enters politics as assemblyman in Illinois Legislature.
- Robin Carver's "Book of Sports" (Boston, Mass.) is the first American book on baseball.
- Walter Hunt of New York constructs one of the first sewing machines.
- Congress establishes the Department of Indian Affairs, which is responsible for regulating trade with the tribes and administering the Indian lands of the West.

1835

- President Jackson is attacked by a mentally disturbed man who attempts to shoot Jackson with a single-shot derringer. Although fired, the gunpowder fails to ignite. The would-be assassin attempts

to fire again with another derringer, but this gun fails too. The derringers are later examined, but strangely found to be in working order. The odds of two malfunctions in succession are put at 1 in 125,000.

- Texas declares right to secede from Mexico.
- Showman Phineas Taylor Barnum begins career.
- Samuel Colt takes out an English patent for his single-barreled pistol and rifle
- The Cherokee tribe sign a treaty of removal, giving up their lands in Georgia for territory in present-day Oklahoma.

1836

- On March 6, Mexicans overwhelm 187 Texans at the Alamo. Colonels Travis, James Bowie and Davie Crockett perish in the massacre, which costs as many as 1,600 Mexican lives.
- Texas wins independence from Mexico and becomes a republic with Gen. Sam Houston as first president.
- Arkansas is admitted as a state.
- A contentious Presidential campaign between Martin Van Buren and William Harrison takes place with Van Buren winning the presidency with 51% of the votes. The topic of slavery becomes a divisive issue within the campaign.

MARITIME GLOSSARY

Unintelligible orders were so rapidly given, and so immediately executed...that I was completely bewildered.

~ Two Years Before the Mast, Richard Henry Dana Jr.

I wish you could hear Mr. Peters' language. It's perfectly elegant. He will give an order to the men just filled with the loveliest nautical terms all run together. I can't make out a word of it. Every mast has about a thousand ropes, the mainmast has sixty that I counted and each rope has a different name. The men all say, when he gives an order, 'Aye, aye, sir,' and run to the top of the rigging where they hang in mid-air by their feet.

~ By Square-Rigger, the log of Shirley Hyatt

Shipboard Directions

Aft - (Afterward or abaft) In rear to, or towards the stern.

Fore - (Foreword) In front of, or towards the bow, as in before the mast.

Port - The left side of a vessel, as one stands facing the forward.

Starboard - The right side of a vessel, as one stands facing forward.

Bow - The whole forward end of a ship or boat.

Stern - The backward end of a ship or boat.

General Terminology

Aloft - Above the deck, in the rigging.

Amidships - In the middle of the ship (main deck).

Avast - Stop, quit what you are doing, hold your work and await further instructions.

Aye - Yes.

Aye, Aye - "Yes, I understand your orders and yes, I will carry out your orders."

Bight - A bend or loop in a rope.

Bilge - The lowest internal part of the hull where ballast is kept and bilge water collects.

Bitter End - The very end of a piece of rope.

Block - A pulley. A wood or metal case for one sheave (wheel) or more.

"Carry On" - Indication that an order is finished being given and must be carried out.

Chantey (Chanty, Shanty, Shantie) - Song sung by sailors to coordinate work.

"Doctor" - Nickname for the ship's cook because he has the knives.

Forecastle - The crew's quarters in the bow, also called fo'c'sle.

Furl - To raise or roll up a sail.

Galley - The ship's kitchen.

Greenhand - Inexperienced hand on a vessel.

Hatch - An opening in the deck, provided with a hatch cover and a box trim built around it.

Halyard - Any line used for hoisting (raising) sails, cargo, flags, etc. Short for haul to the yard.

Hold - Cargo storage area of the ship.

Kanaka - Hawaiian word for man.

Leeward - Downwind. Pronounced "lou-ward."

Line - A sailor's word for rope that has a purpose.

Mast - A vertical spar for supporting sails and rigging.

Quarter Deck – Raised aft deck on ship; place from where the Captain commands.

Reeve - To pass a line through a hole, as in a block and tackle system.

"Salt" - An experienced seaman on a vessel.

Sheave - The grooved pulley wheel in a block.

"Slack away" - To let out line, hand over hand, without losing control of the line.

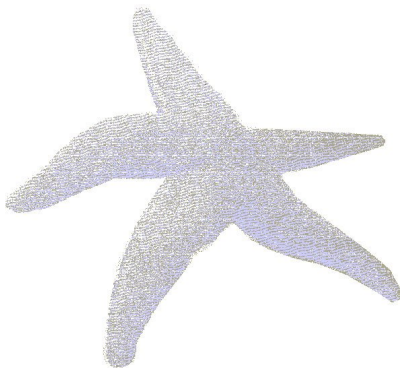
Spar - Any support for sails or rigging - a mast, yard, boom, or gaff.

Stow - To put away in its proper place; applied to anything loose.

Tackle - Line rigged through and around pulleys (blocks) to increase the effect of pull applied.

Windward - Towards or into the wind. Synonymous with "to weather."

Yard - Horizontal spar that holds the sails.



G. CLASSROOM ACTIVITIES

Activity #1: Seeing With Different Eyes

Description

The novel, *Two Years Before the Mast*, by Richard Henry Dana, tells the story of life at sea from the perspective of a common sailor. There were, however, other people onboard the *Pilgrim* who might tell the same story very differently.

The Challenge

Gather in your crew, and read the Character Sketches and the list of Seaward Situations listed below. Choose one of the Seaward Situations and discuss how each of the characters might react to it. Choose one of the situations and role-play how two of the characters might react to it. How did your interpretation differ from that of the other crews?

The Captain

The Captain is a strict businessman. His job is to trade goods for cow hides. He demands that his sailors work hard to make him as much money as possible. He does not want to ever give them anything that will cost him. He is always in a hurry and always thinks that the sailors can do more.

The First Mate

The First Mate is the best sailor on the ship. It is his job to make sure everything works exactly right. It is also his job to make sure the common sailors follow orders, behave perfectly, work hard, and show respect for their captain. The most effective first mates are very strict.

The Doctor

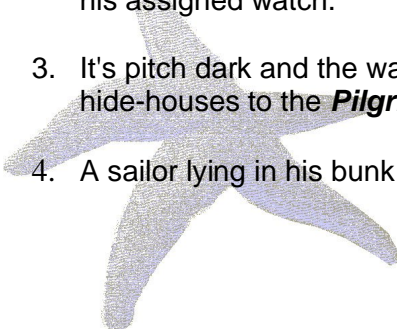
The Doctor on the *Pilgrim* is really just the cook. He is superstitious and believes many strange things, but he knows everything about the galley. The Doctor carefully watches the Captain's supplies and always cooks good meals for him.

The Second Mate

The Second Mate is the sailor's friend. He tries to make the Captain happy, but he often gets into trouble. The Second Mate may sometimes seem lazy, but he still knows more than greenhands and common sailors, which is why the Captain has made him an officer.

SEAWARD SITUATIONS

1. A local ranchero offers to trade the *Pilgrim* enough fresh eggs for the whole crew to have a delicious breakfast.
2. As the moon lights the open ocean, you walk toward the bow and see a sailor sleeping during his assigned watch.
3. It's pitch dark and the waves are big. There are still many more hides to be rowed from the hide-houses to the *Pilgrim*.
4. A sailor lying in his bunk complains that he is too sick to go up on deck to work.



Activity #2: Dana's Soggy Long Lost Log

Description

During his voyage on the *Pilgrim*, Dana kept a careful record of everything he experienced. His log contained information on the ports they visited, the goods they traded, nautical terminology, and personality sketches of his fellow seamen.

The Challenge

Dana lost his log during his return voyage to Boston. You have found five pages from this lost log; they are below in the boxes. Put the correct dates on the pages to help Dana write *Two Years before the Mast*. Pay attention in clues contained in the entries—they will help you determine the order in which they happened.

a. "Being now to the northward of the Falkland Islands, the ship was kept off, north east, for the equator; and with her head for the equator, and Cape Horn over her taff rail, she went gloriously on; every heave of the sea leaving the Cape astern, and every hour bringing us nearer to home and to warm weather."

1. August 15, 1834

b. "Down from this height we pitched the hides, throwing them as far out into the air as they were all large, stiff, and doubled, like the cover of a book, the wind took them, and they swayed and eddied about, plunging and rising in the air like a kite when it has broken its string."

2. November 5, 1834

c. "In a few minutes a heavier sea was raised than I had ever seen...The little brig plunged into it, and all the forward part of her was under water; the sea pouring in through the bow ports and hawse holes."

3. May 7, 1835

d. "Then, having been salted, scraped, cleaned, dried, and beaten, they are stowed away in the (hide) house."

4. July 17, 1835

e. "In a short time everyone was in motion, the sails loosed, the yards braced, and we began to heave up the anchor, which was our last hold upon Yankee land."

5. July 24, 1834

Activity #3: The Ship's Bell

Description

The Ship's Bell is rung every half-hour throughout each four-hour watch. The time is described as "one bell" for the first half hour, "two bells" for the second half hour, and so on, up to eight bells. Bells are always rung in pairs.

The Challenge

Find a bell (or make one from an empty can) and ring it the correct number of times each half-hour. The following charts will help you determine how many times to ring the bell. Do this for an entire day. Remember that the bell is struck in pairs.

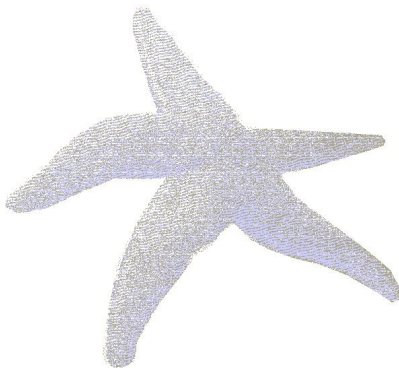
1 bell	12:30
2 bells	1:00
3 bells	1:30
4 bells	2:00
5 bells	2:30
6 bells	3:00
7 bells	3:30
8 bells	4:00

1 bell	4:30
2 bells	5:00
3 bells	5:30
4 bells	6:00
5 bells	6:30
6 bells	7:00
7 bells	7:30
8 bells	8:00

1 bell	8:30
2 bells	9:00
3 bells	9:30
4 bells	10:00
5 bells	10:30
6 bells	11:00
7 bells	11:30
8 bells	12:00

An Extension

Once the students are familiar with bell time, write some of the day's activities on the board next to the time (in bell time) they should be completed. Make sure that the classroom clock is covered and that students are not wearing watches. Have the students keep bell time throughout the day so that they can determine when they complete different school activities.



Activity #4: SailorSpeak

Description

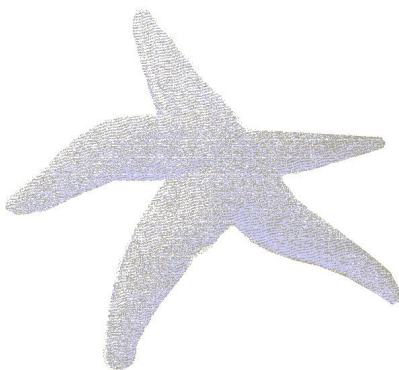
A sailor's first day can be full of confusion, as life on board is a world of its own. Even the language of the sea has its very own vocabulary. To work as a sailor, you have to speak like one.

The Challenge

Since you are going to play the character of a sailor, you must learn to talk like one. Aboard the *Pilgrim* we say:

Aye	to mean, "yes"
Aye, Aye	to mean "yes, I understood your orders and yes, I will carry them out"
Avast	to mean, "stop"
Sir	every time we speak to the Captain
Carry on	when an officer or mate wants you to begin an order you have been given
Mr.	before the last name of a mate or officer

To practice, gather into your crews. Select someone to be the "mate." This person should always be called Mr. (his/her last name). Select someone else to be the Captain (the teacher might be a good choice) and remember that when you speak to him the last word you say must always be "Sir." Now, for a period of time (an hour, a day, a week) all crews should speak like sailors. They should always say "aye" instead of yes, "avast" instead of stop, and so forth.



Activity #5: Sea Chanteys (also spelled Shantie, Shanty and Chanty)

Description

When sailing ships such as *Pilgrim* and *Spirit of Dana Point* traveled the oceans, shipboard work relied on the human back, unassisted by mechanical power. Chanteys were used to coordinate the necessary muscle power into single pulses of concentrated energy that could raise and lower the many tons of canvas and wood necessary to propel a sailing ship through the oceans.

Work shanties can be found in most cultures and time periods. They tend to reflect the nature of both the work and culture. Whether on land or at sea, their primary use was for work that tended to be laborious and repetitive. The sea shanty, reflecting the cosmopolitan nature of the sailor, revealed a magnificent array of human endeavor. On a single vessel, one could hear songs that reflected opinions concerning Hong Kong, New Orleans, cotton plantations, railroads, Irish emigration, wars, national heroes, and political trends. The most popular of all topics was, naturally, the plight of the maltreated sailor. The shanty, being part of the folk tradition, was ever evolving. One can find vulgarity and crudeness mixed side by side with literacy, sophistication, and compassion—all due to the various types of sailors (Harvard student, farm boy, blacksmith apprentice, and emigrant) who found their way to the seas.

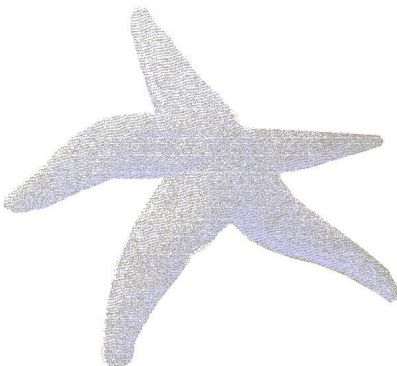
Improvisation was a hallmark of the shanty, since the verses always ran out before the work was complete. It is this necessity that imbues shanties with their richness of cultural heritage. Cargo handling, weighing anchor, pumping bilges, line handling, setting sail and working the capstan are some of the jobs sailors do that require the use of a sea shanty.

The Challenge

Learn the verses to the attached sea shanties, and practice them for your voyage aboard the *Pilgrim* or the *Spirit of Dana Point*.

- John Kanaka: Halyard Chantey (used to haul on line)
- Gloucester Girls: Capstan Chantey (cadence chantey used to march around the capstan)
- Leave Her Johnny: Pumping and Windless Chantey (used to work the windless and deck pumps)

Please note that other chantey resources are available in the Institute's gift shop, including the book with sheet music [Songs of a Sailor](#). A web search for "sea shanties" will provide with more lyrics, many with midi files to play the tune for you!



John Kanaka: Halyard Chantey

*"Windship sailors lived with music...a rough kind they made themselves, more often than not."
Christmas at Sea, Captain Fred K. Klebingat*

C **F** **C**

I thought I heard the Old Man say,

G7 **C**

Johnm Ka - na - ka - na - ka, tu-lai - e! We'll work to -

F **C**

mor - row but no work to - day John Ka - na - ka - na - ka,

G7 **C** **F**

tu - lai - e! Tu - lai - e Oh Tu - lai -

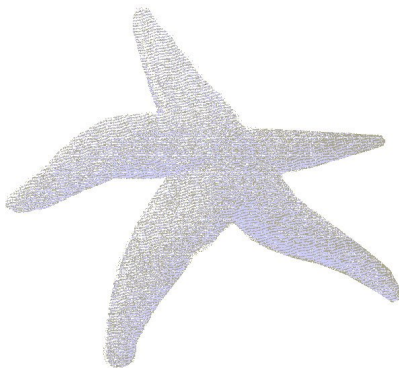
C **G7** **C**

e! John Ka - na - ka - na - ka tu - lai - e!

A Yankee ship with a Yankee crew
And we're the buckos to push her through

Oh, haul away, oh haul away
Oh, haul away and make your pay

A Yankee ship with a Yankee mate
If you stop to walk, he'll change your gait



Gloucester Girls: Capstan Chantey

C **G7** **C** **Am** **G7**

Gloucester girls, they have no combs. Heave a - way! Heave a - way! They

C **G7** **C**

comb their hair with cod-fish bones. We're bound for Cal - i -

G7 **C** **F** **C**

for - ni - a! Heave a - way, my bul - ly, bul - ly boys! Heave a -

Am **G7** **F** **C** **F**

way! Heave a - way! Heave a - way and don't you make a noise, we're

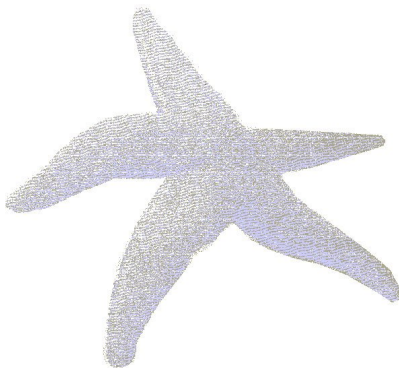
C **G7** **C**

bound for Cal - i - for - ni - a!

Gloucester boys, they don't have sleds
They slide down hills on codfish heads

Gloucester doctors don't use pills
They prescribe their patients codfish gills

Gloucester cats, they don't have tails
They got blown off in southeast gales



Leave Her Johnny: Pumping and Windlass Chantey

C
I thought I heard the Old Man say,

G7 C F C
"Leave her, John - ny, leave her!" You can go a - shore and

F C G7 C *LAST TIME*
draw your pay, It's time for us to leave her!

G7 C F
Leave her, John - ny, leave her, Oh leave her John - ny,

C F C F
leave her. The voyage was long and the winds don't blow and it's

C G7 G
time for us to leave her.

Oh, our ship is old and she's sinking fast
Our ship is old and she will not last

Aye the work was hard and the wages low
The grub was bad and the ship was slow

Yes, it's rotten meat and weevily bread
If you moan too hard, they break your head

The Mate was a bucko and the old
Man a Turk

And the bosun was a devil with the
Middle name o' work

Now the mates have gone and we the crew
It's time we lads that we went too

