Boatswain’s Pipe
This book was created by the efforts of many Maritime College Cadets, past and present, and is dedicated to help incoming MUGs make their transition to Maritime College and the Regiment of Cadets.

"One Hand"
Introduction

President’s Welcome

As the 10th President of the State of New York Maritime College, it is my privilege to welcome you to our nation’s First and Foremost such institution. Steeped in more than 125 years of tradition and a proud history that runs deep and strong, the Maritime College remains a premier institution and a global leader in the field of maritime education and training. We intend to maintain such leadership through a continuing process of strategic improvement of our programs and facilities as well as key engagements and focused outreach to leading industries and academic institutions across a variety of fronts, both nationally and internationally.

I can state without reservation that few colleges offer you the combination of such a highly respected academic degree with a strong, hands-on practical component (including Summer Sea Terms onboard our training ship Empire State VI), the opportunity to obtain a Merchant Marine officer’s license, a commission in the armed services if you choose, and the unsurpassed leadership opportunities available in the Regiment of Cadets. Indeed few such opportunities in life allow you to grow so rapidly and develop both leadership and technical competencies, which are in high demand in today’s globally integrated and complex environment.

As a new cadet entering the regiment at SUNY Maritime College, you join a highly distinguished group of men and women who have lived and carried forward the ideals, strong character and sense of purpose and traditions of this great institution.

You are now a brand new “MUG” and it may appear that the path to graduation is a long and difficult one. However, when you can envision the end result and what you will ultimately be able to achieve by overcoming the challenges that lie ahead, you will appreciate that the effort and energy required to successfully complete this program is well worth it.

Successful completion of the program is a daunting task, which demands inner character and mental toughness. You will be tested fully and not everyone will meet the demands of that test. It is incumbent upon you to take full responsibility now for your success and understand the path upon which you are embarking, as well as the commitment to the Regimental life and core values with integrity being the bedrock.

I urge you to take full advantage of all the opportunities available here at Maritime. Work actively to mature socially, develop physically and excel in the academics and team experiences that are woven into the life of the Regiment and the Maritime College environment. You will be sharing experiences and overcoming challenges that will result in relationships that will span your lifetime and pay dividends you cannot imagine.

Congratulations on choosing New York Maritime and the Regiment of Cadets for your college experience. Life is about choices and making the most of opportunities. You have made a choice that will open many doors of opportunity to you both now and in the future, and equip you to succeed in an ever-changing world. It will not be easy, but when you graduate from New York maritime College, your opportunities will be unlimited!

Welcome Aboard!

WENDI B. CARPENTER
Rear Admiral, USN (Ret.)
President
To: Fourth Class Cadets  
From: Chief Indoctrination Officer  
Subject: Boatswain's Pipe

The Boatswain’s Pipe provides general information for the orientation of fourth-class cadets. This publication, in conjunction with the Rules and Regulations and information provided by Indoctrination Officers, should direct the daily routine of a fourth class cadet.

The Rules and Regulations Manual for the Regiment of Cadets is the final reference for all policies governing cadet conduct. The Boatswain’s Pipe is only a supplement to these Rules. All cadets are required to be aware of their responsibilities and will adhere to all regulations.

Questions concerning the specific meaning of anything found in this publication are to be directed to your Indoctrination Officers or Squad leaders.
The Mission of the Maritime College

**Mission:**
- Maritime College educates leaders to excel in the global maritime environment through an interdisciplinary approach to undergraduate and graduate studies in engineering, maritime studies, global maritime business, security and supply chain management, and environmental science; specialized programs are offered as pathways to US Coast Guard licensing or military accession and training.

**Vision:**
- Be “First and Foremost”: SUNY Maritime College is a premier institution recognized internationally for its expertise in global maritime research, development, education, and training. Towards that end, the College delivers exceptional quality learning worldwide to meet the “*any time, any place*” needs of the maritime community.

**Guiding Principles:**
- Inspire the pursuit of excellence in all things, developing the SUNY Maritime nation to seek the highest standards of intellectual inquiry, scholarly achievement, ethics and integrity, built on the foundation of strong character and a philosophy of service before self.
- Equip all students with the necessary function to reach their fullest potential, whether through participation in the Regiment of Cadets or the Civilian student experience.
- Challenge our students to develop analytical and communication skills that will enable them to dissect complex patterns in emerging issues render reasoned judgments and make wise decisions.
- Develop a community characterized by outstanding leadership, responsible citizenship and self-discipline.
- Foster an innovative, hands-on learning environment directed by a faculty empowered and devoted to creatively seeking new discoveries.
- Promote the development of an internationally recognized resource of maritime expertise that spans all the disciplines associated with the maritime industry and environment.
- Remain grounded in proven traditions and a unique heritage while embracing the opportunities and transformation required by an evolving and increasingly complex global maritime environment.

**Professional Development**
Throughout history, the professions of law, theology, medicine, engineering, education, etc. have been distinguished from other vocations or occupational pursuits by their requirement for specialized education and skills, particularly intellectual skills, and their high standards of performance and conduct. The confidence that the public has placed in these professionals has risen or fallen depending on the ability, or willingness, of these professionals to maintain their distinguishing characteristics. Certainly, the decline in illiteracy throughout the modern world has diminished the exalted position of teachers, and scholars who once were distinguished by their rare ability to read and write. Scandals have undermined the public’s support in some professions.

The academic records and past achievements of Maritime College applicants underwent close and rigorous scrutiny during the selection process. As you read these paragraphs and pursue your career in the years ahead, it will do you well to remember those things that have set the professional apart from all the others. The specialized skills and high professional standards you will gain over the next four years will be the keys to your future success as a “Domer”, enabling you to overcome the many challenges which lay ahead.

**Leadership**
Why lead? As a ship's officer, a foreman, a manager, or a Naval or Marine Corps officer, subordinates will naturally turn to you for decisions, advice, solutions, and leadership. The responsibility for providing leadership is yours. It goes hand-in-hand with the position so be prepared to assume responsibility when it comes.
At other times you may find yourself as one of the many faces in the crowd: an employee, a student, or a citizen. Why lead? If you are like most people, you will have your own opinions about the right and wrong way of doing things. You will believe your methods offer the way to success. Only if you can influence, persuade, and lead others to your way of thinking will your plans be implemented. Even from a follower position you can still exercise leadership ability.
Douglas Southall Freeman, biographer of Robert E. Lee and author of Lee's Lieutenants, said that leadership essentially boils down to three fundamentals, "knowing your job, being a strong, capable person, and looking out for the welfare of
your subordinates." Peers and subordinates alike will follow you willingly and confidently as long as they believe you know what you are doing, you are known for your honesty and moral courage, and you care about their welfare. Violate any of these three precepts and you will have difficulty in getting the job done. Although organizations and institutional styles differ, your ability to harness the talents and efforts of your subordinates and wield them effectively in achieving your goals will rest on how well you can develop your leadership ability. There are no "born leaders." Although some leaders have "natural" physical and mental attributes, leadership ability is mainly acquired by observation, emulation, and practice. The following are important leadership traits. Study them, evaluate yourself, and work to improve your gaps.

1. INTEGRITY: Be truthful in word and deed. Maintain high moral standards. It is a way of life. When you give your word, all that know you as possessing integrity will take it at face value.

2. KNOWLEDGE: Know your job. The more you know, the more faith others will put in you. When you know your job, you can also educate your subordinates so that they will learn their jobs as well.

3. COURAGE: Say what you mean and mean what you say. Admit mistakes! Stand up for what you believe in at all times and learn to say, "no, that is not right" to improper behavior. Real courage is moral courage.

4. ENDURANCE: Develop your ability to withstand physical and mental stress. Force yourself to work and study even when you are tired. Push yourself to the limit. Remember that what you get out of something is equal to what you put into it.

5. UNSELFISHNESS: Give credit to those who deserve it. Share hardships equally with subordinates. If your subordinates are cold, wet, and hungry, then you also should be that way.

6. LOYALTY: Loyalty is a two way street. Back-up your superiors. Avoid criticism. Back your subordinates as well. If they are right, then say so.

7. JUDGMENT: Judgment comes with experience. Seek advice from others when you need it, but keep the responsibility for your decisions to yourself. Lean hard on those who continually flaunt the law, but be compassionate and forgiving of a good person who has erred.

**Traditions and Duties**

The SUNY Maritime College has long maintained a military standard which the Regiment, Staff, and Faculty can be proud of. Accordingly, Fourth Class Cadets must observe the deepest respect for the traditions of this institution. These standards and traditions are maintained not only to instill self-discipline, provide leadership, experience, and training, but also to continue the tradition of the Merchant Marine, as it was when the Maritime College was founded in 1874.
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History of Fort Schuyler

Fort Schuyler, constructed between 1833 and 1845, was named in honor of the Revolutionary War hero, Major General Philip John Schuyler. Schuyler commanded the Northern Army in 1777, and later served as a United States Senator. Built of Connecticut granite in the shape of an irregular pentagon, Fort Schuyler is considered the finest example of French-type fortification in the United States.

Fort Schuyler, along with Fort Totten at Willet’s Point, was intended to protect New York City from a naval attack from the east. Fort Schuyler’s five-sided design, coupled with three full bastions to the east and two demi-bastions to the west, allowed its defenders to fire from any angle. The fort could accommodate a garrison of 1250 men and support an armament of 452 guns.

Conversion to a land-based home for the New York State Merchant Marine Maritime College began in 1934. The Works Project Administration (WPA) was responsible for restorations. Millions of pounds of earth and sod were removed from the original roof and a new concrete roof and mezzanine deck were constructed. The fort’s interior was equipped with classrooms, laboratories, and living spaces. Cadets continued to occupy the fort until the completion of Vander Clute Hall in 1961. Today the Fort is listed as both a New York City and National Historic Landmark.

History of New York Maritime College

The history of the State University of New York Maritime College is a chronicle of progressive development in answer to the changing needs of the maritime industry. During America’s first period of growth, between the Revolutionary and Civil Wars, the wealth of the nation depended greatly on its shipping and commerce. American ships, crewed by American seamen, slowly began to challenge England’s traditional supremacy on the sea. However, the Civil War (1861-1865) reversed this commercial and maritime growth such that by the end of the war, America’s merchant fleet, including coastal shipping, was approximately six percent of its prewar size.

In 1875, only twenty-eight percent of America’s imports and exports were carried in American bottoms. As another period of growth began in the post-Civil War period, it became clear that the United States maritime industry needed improvement. American crews generally worked considerably harder, were subject to harsher discipline, and were often in greater physical danger than their foreign counterparts. Such conditions caused many seamen or potential seamen to leave the maritime industry and choose other careers. For the young man who still did want to pursue a life at sea, there was no way to prepare for a seafaring career except by gaining experience on board a ship as a cabin boy, cargo worker, or seaman.

A number of people saw this way of training seamen as far too haphazard and inefficient, and they pointed to European school ships and to the United States Naval Maritime College as far better means of creating a group of competent sailors. One of the groups particularly interested in establishing a nautical school was the New York State Chamber of Commerce. Unable to raise funds from private donors, the Chamber of Commerce petitioned the New York City Board of Education and the State Legislature to pass a bill authorizing the establishment of a maritime school.

On April 24, 1873, the Legislature passed an act empowering New York City, the nation’s great seaport, to “provide and maintain a nautical school in said city, for education and training of pupils in the science and practice of navigation.” With the advice of Captain (later Rear Admiral) Stephen B. Luce, USN, the foremost expert in the United States on maritime education and training, a curriculum was developed, and the New York Nautical School was thus established in 1874.

The United States Congress approved “An Act to Encourage the Establishment of Public Marine Schools” in June 1874, and shortly thereafter, the 985 ton sloop-of-war St. Mary’s was assigned to the New York City Board of Education as the Nautical School’s first school ship. The first entering class was received on the St. Mary’s on January 11, 1875, and fifty-eight cadets graduated on November 20, 1876. In 1913, responsibility for the school’s operation was transferred from New York City to New York State.

The College has continually responded to the needs of both the maritime industry and the nation. Since the school’s inception, Fort Schuyler graduates have served in the Navy and Merchant Marine during every war that saw American involvement. During World War II the academic program was suspended and the curriculum reduced to an eighteen-month program; approximately 2,000 Naval Reserve Officers and 500 Merchant Marine Cadets were then training at Fort Schuyler.

In 1948, the New York State legislature passed a series of acts creating the State University of New York, and the
Maritime College became one of the thirty-two original colleges to join the University System. Today, cadets receive baccalaureate degrees in a number of fields including Naval Architecture, Marine Engineering, Mechanical Engineering, Facilities Engineering, Marine Environmental Science, Marine Transportation, and the Humanities.


**Administrative Officers**

- **President**
  - RADM Wendi Carpenter USN (Ret.)

- **Master TSES & Commandant of Cadets**
  - CAPT Richard Smith

- **Vice President for Operations**
  - Elizabeth Praetorius

- **Provost & Vice President for Academic Affairs**
  - Dr. Michael Cappeto

- **Dean of Students**
  - Dr. Irene Delgado

- **Associate Provost & Academic Dean**
  - Dr. Gilbert Traub

- **Dean of Admissions**
  - Yamiley Saintvil

- **Director of Waterfront**
  - Rob Crafa

- **Director of Campus Ministries**
  - Peter Pomposello

- **Director of Student Activities**
  - Arianne Romeo

- **Director of Health Services**
  - Cortney Worrell

- **Director of Housing and Residential Life**
  - Travis Killian

- **Athletic Director**
  - Heather MacCollugh

- **Chief of University Police**
  - Myron Pryjmak

- **Registrar**
  - Sarah Grady

**Commandant’s Staff**

- **Deputy Commandant of Cadets**
  - CAPT Catie Hanft USN (Ret.)

- **Regimental Assistant**
  - Joann Sprague

- **First Battalion Officer**
  - LT Charlie Belmonte

- **Second Battalion Officer**
  - LT COL Mike Stroud

- **Third Battalion Officer**
  - LT Kyle Cridland

- **Regimental Duty Officer**
  - LT Andria Thornton

- **Regimental Command Master Chief**
  - Master Chief Jim Testor

- **Regimental Operations Chief**
  - Chief Jason Rodriguez

- **Regimental Training**
  - MSGT Dave Giddens

**Department Chairs / Directors**

- **Marine Transportation**
  - CAPT Walt Nadolny

- **Engineering**
  - Dr. Richard Burke

- **Science**
  - Dr. Kathy Olszewski

- **Humanities**
  - Dr. Karen Markoe

- **Global Business and Transportation**
  - James Drogan

- **Professional Education and Training**
  - CAPT Ernie Fink

- **Naval Science NROTC CO**
  - CAPT Matthew Loughlin

- **Library**
  - Constantia Constantinou
Organization of Cadet Officers

In order to provide practical training in the command and staff functions of a military organization and to provide leadership and administrative experience during the academic year, the Regiment of Cadets is organized to consist of the Regimental Executive Staff, Specialty Rates, Ship Rates, and three Battalions. Cadet Officers’ rank is indicated by sleeve, shoulder board, and collar insignia (shown in parentheses).

Regimental Executive Staff

Regimental Commander (6 Stripes/Bars)
Regimental Chief of Staff & Training Officer (5)
Regimental Executive (4)
Regimental Operations Officer (4)

Specialty Rates

Regimental Logistics & Liaison Officer (4)
Regimental Assistant Logistics Officer (3)
Regimental Admissions Liaison Officer (3)
Regimental Assistant Admissions Liaison Officer (2)
Regimental Security Officer (3)
Cadet Chief Hospital Corpsman (3)
Assistant Chief Hospital Corpsman (2)
Cadet Regimental Band Leader (3)
Honor Guard Commander (3)
Honor Guard Executive Officer (2)

Ship Rates

Cadet Chief Officer (4)
Cadet Second Officer (3)
Cadet Third Officer (3)
Cadet Chief Engineer (4)
Cadet First Assistant Engineer (3)
Cadet Second Assistant Engineer (3)

First Battalion

Battalion Commander (5)
Company Commander (4)

Alpha Company
Bravo Company
Co. Executive Officer (3)
Co. Operations Officer (3)
1st Platoon Commander (2)
2nd Platoon Commander (2)
3rd Platoon Commander (2)

**Second Battalion**

Battalion Commander (5)

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<td>1st Platoon Commander (2)</td>
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<td>2nd Platoon Commander (2)</td>
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**Third Battalion**

Battalion Commander (5)

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<td>1st Platoon Commander (2)</td>
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**Indoctrination Officers and Squad leaders**

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<th>Chief IDOs</th>
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Chief PT Squad Leader
Chief Academic Squad Leader

Section | Name | Rm. No.
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Chain of Command

The Chain of Command defines the authority, responsibility and accountability delegated to each organizational element. It extends from the President of the College to the individual forth class cadet. It is the formal path for information flow in both directions, top down and bottom up. The Chain of Command should be followed as best as possible in the Regiment.

Problems of a personal nature may be taken to any person with whom the cadet feels comfortable. This could be a Squad leader, an IDO, a Chief IDO, a Regimental Duty Officer, Student Life staff, the chaplain, etc.
Military Courtesy

Position of Attention

The position of attention is the basic military position from which most other drill movements are executed. There are no counts, however, there are seven steps in describing the position:

1. Smartly bring your left heel against the right.
2. Turn your feet out equally to form an angle of 45 degrees. Keep your heels on the same line and touching.
3. Your legs should be straight, but not stiff at the knees.
4. Keep your hips and shoulders level and your chest lifted.
5. Your arms should be straight, but not stiff at the elbows; thumbs along the trouser seams, palms facing inward toward your legs, and fingers joined in their natural curl.
7. Stand still and do not talk.

Hand Salute

The purpose of the hand salute is to demonstrate mutual respect and courtesy between members of military organizations and to show respect to national colors. A military organization is marked by its efficiency, smartness, bearing, and adherence to honors and ceremonies. Visiting officers and guests of all categories take away an impression formed by the collective total of these various marks of military competency. One mark of importance, which always impresses the visitor, is the hand salute. If the hand salute is rendered properly with respect and deference to the senior individual, then a favorable impression is made. The opposite is achieved by rendering a sloppy salute or no salute at all.

The hand salute is the long established form of greeting and recognition between persons in the Services. It is one of the main aspects of military courtesy and the traditions regulating it are founded on military etiquette and are deeply rooted in the traditions of the Naval and Merchant Services and the Regiment of Cadets. It is emphasized that the salute to a person in uniform is not rendered to the person, but to the uniform the individual wears and the authority represented.

The initiation of the hand salute comes from the junior.

Fourth Class Cadets are required to salute all Officers and Cadet Officers of 5-bar rank and higher. All other cadets shall salute all Officers.

A senior Officer passing in an automobile is entitled to a salute, which will be returned when conditions permit. If driving, he will not return a salute when safety is involved. The salute is rendered only once if the senior remains in the immediate vicinity, and no conversation except the greeting takes place. If a conversation does take place, the junior again salutes the senior on departing, or when the senior leaves.

If you are in conversation with an Officer, do not interrupt the conversation to salute another Officer. If the Officer to whom you are talking salutes a senior, then salute.

If in an overtaking situation, the junior shall slow to a walk and salute as he comes abreast of the senior and say, "By your leave, Sir/Ma’am?" The senior shall return the salute and acknowledge the request.

The hand salute is executed in one count when halted at attention, marching at quick time, or seated in a vehicle. The command is “Hand, SALUTE.” To return to the position of attention the command is “Ready, TWO.”

When “SALUTE” is given, raise your right hand smartly in the most direct manner until the tip of your forefinger touches the lower part of the headdress above and slightly right of your right eye. Your fingers should be extended straight and joined with the thumb along the forefinger. You should be able to see your entire palm when looking straight ahead. Your upper arm should be parallel with the deck with the elbow in line with the body and your forearm at a 45-degree angle. Your wrist and hand should be straight, a continuation of the line made by your forearm. At the same time, if not in ranks, turn your head and eyes toward the person or colors you are saluting.

At the command “TWO,” return to attention. Move your hand smartly in the most direct manner back to its normal position by your side. To ensure simultaneous execution of the second movement of the hand salute when troops are in formation, the preparatory command “Ready,” will be used prior to the command of execution “TWO.”

You may salute without command from attention, while walking, or while seated in a vehicle. When walking, it is not necessary to halt to salute. Keep walking, but at attention. If the need arises to salute while double timing, come to a
walking pace before saluting. The salute is rendered when the person or colors to be saluted is at a 6-pace distance, or at the nearest point of approach if it is apparent that the person or color is not going to approach within 6 paces. The salute will not be rendered if the person (color) to be saluted does not approach within 30 paces. Hold the first position of the salute until the person (color) saluted has passed, the salute is returned, or a verbal acknowledgment of the salute is given, then execute the second movement of the hand salute.

If a junior approaches a group (two or more) of Officers, the junior will salute and give the proper greeting. When the command “Present, ARMS” is given, if not armed, you execute the hand salute on the command “ARMS.” Stay at that position until the command “Ready, TWO” or “Order, ARMS” is given.

When in doubt, salute. Saluting can never be wrong, whereas not saluting can be construed as disrespectful, slovenly, and unprofessional.

Greetings

Salutes are usually accompanied by an exchange of greetings, depending upon the time of day. When passing an upper-class cadet that does not warrant a salute, a greeting should be given. The following are standard greetings used throughout the day:

- From morning until 1159: "Good Morning, Sir/Ma’am"
- From 1200 until 1759: "Good Afternoon, Sir/Ma’am"
- From 1800 until turning in: "Good Evening, Sir/Ma'am"

During the Indoctrination period, when time is unknown, the following rules will be used for greetings:

- From morning until before lunch: "Good Morning, Sir/Ma'am"
- From eating lunch until before dinner: "Good Afternoon, Sir/Ma'am"
- From eating dinner until turning in: "Good Evening, Sir/Ma'am"

When greeting a group of officers or cadets, the following greetings are used:

- "Good Morning, Gentlemen"
- "Good Morning, Ladies"
- "Good Morning, Ladies and Gentlemen" or any other necessary combination of Sir, Ma’am, gentlemen, and ladies.
Honors to the National Anthem

Whenever the National Anthem is played, all cadets not in formation shall stand at attention and face the national ensign. In the event that the national ensign is not displayed, they shall face the source of the music. When covered, they shall come to attention and salute at the first note of the anthem, and shall remain at the salute until the last note of the anthem. Cadets in formation are brought to order arms or called to attention as appropriate.

Morning and Evening Colors

Morning and Evening Colors (the raising and lowering of the national ensign) are conducted by the Regimental Honor Guard.

Morning Colors are conducted during morning formation. Eight bells are rung on the bell to signify that all is well, and the flag is hoisted up the flag pole at the first sounding of “To the Colors”. Cadets not in formation shall come to attention, face the flag, and if in uniform and covered, salute at the ringing of the first bell, holding the salute until the last note of “To the Colors” is sounded. Cadets in formation are brought to order arms or called to attention as appropriate.

Evening Colors are conducted at sunset, typically between 1700 and 2000. The colors detail may command “Attention to colors” or may play “Retreat”. Upon hearing the command “Attention to colors” or the first note of “Retreat”, all cadets shall come to attention, face the flag, and if in uniform and covered, salute, holding the salute until the last note of “Retreat” is sounded (which should be when the flag is lowered completely) or until the order “Carry on” is given.

Personal Honors

When personal honors are rendered, military personnel present a salute at the first note of the music and hold the salute until the completion of the ruffles and flourishes march. When a gun salute is rendered, military personnel being saluted and other persons in the ceremonial party will render the hand salute throughout the firing of the gun salute.

War Memorial

The War Memorial, located in the center of the Fort, honors the Cadets and graduates of the SUNY Maritime College who made the supreme sacrifice in the service of their country during war. In honor of them, a salute is rendered to the War Memorial.

When entering and leaving the flagstone square upon which the War Memorial is located, Cadets and uniformed guests will come to attention and salute the War Memorial.

Cadets will request that their guests, both civilian and military, render the appropriate honors when approaching and leaving the War Memorial.

Boats, Cars and Aircraft

The procedures for getting in and out of a boat, car and aircraft are similar. Normally, the Senior Officer will enter last and the junior will enter first. This procedure may be reversed in entering a car at a left-hand curb. Then the senior may enter first in order that he or she may sit to the right of the Junior Officer. In a boat, the Junior Officer sits forward and the senior sits aft. In getting out of the boat, car or aircraft, the Senior Officer disembarks first, and the Junior last. However, if a car draws up to a left-hand curb, it may be more appropriate for the Junior to step out first.

“Attention on Deck”

The first person to notice an officer or senior cadet enter the room will command “Attention on deck! Billet and/or Rank, Name” (Example: “Attention on deck! Commandant of Cadets, Captain Smith” or “Attention on deck! Chief IDO, Mr. Jones”) in a sufficiently loud and clear tone. At the command of “attention on deck”, all persons in the room or area will come to the position of attention and wait for another command, such as “seats”, “carry on”, “at ease”, etc., or for the officer to leave the room. When the officer leaves the room, the command “Attention on deck” (no billet, rank, or name is given when departing) will again be given, and all persons in the room will come to the position of attention until the officer exits.
When more than one person rating an “attention on deck” enters a room, “attention on deck” is only given for the most senior Officer or Cadet.

“Attention on deck” is to be called for the following people:
- All Officers
- Cadet Officers
- Chief IDOs

**Sounding Off**

When identifying oneself or when ordered to sound off, a fourth class cadet will reply: “Sir/Ma’am, Cadet __________ (last name only), Fourth Class, Sir/Ma’am.”

**General Responses**

During the Indoctrination Period or unless otherwise directed, fourth-class cadets will give the following general responses as appropriate.

"Sir, yes, Sir" or "Ma’am, yes, Ma’am”*
"Sir, no, Sir" or "Ma’am, no, Ma’am"
"Sir, no excuse, Sir" or "Ma’am, no excuse, Ma’am"
"Sir, I will find out, Sir" or "Ma’am, I will find out, Ma’am"
"Sir, I do not understand, Sir" or "Ma’am, I do not understand, Ma’am"

*For a saltier affirmative response, one may reply "Sir, aye, Sir" or "Ma’am, aye, Ma’am" this means that the person being ordered understands and will obey that order.
Military and Social Etiquette

The rules of military and social etiquette are founded on customs and tradition, and their strict observance forms an important factor in the maintenance of discipline. It must be thoroughly understood that respect and courtesy are to be shown equally by all Officers, Cadets and staff of the Maritime College. The junior is the one who should take the initiative. Cadets shall use the information and instructions contained in the book Service Etiquette as a guide for behavior and conduct at all social affairs.

General

The place of honor is always on the right when two people in uniform are walking together; the junior always walks to the left of the senior.

A Junior Officer opens a door for his senior. Junior Officers stand aside for seniors to pass through doors, and then follow.

A man should offer a woman his arm only to give assistance when needed, or as an escort at a formal function. You never grasp or take hold of a woman's arm unless an accident is to be avoided. When you offer your right arm at a formal function, bend your arm slightly at the elbow with your forearm parallel to the floor. Your partner will hold your arm lightly.

At The Maritime College, it must be remembered that Class Rank has precedence, and as such, the customary gender related courtesies are suspended except at formal occasions.

Relations With Seniors

On all occasions, a Cadet shall display toward his senior a spirit of deference and courtesy. It is not practical to define all occasions on which courtesy should be extended. However, every Cadet should be governed by a desire to pay that respect to age and seniority, which pertains to official and social interaction among officers, gentlemen, and ladies. Showing an officer-like and self-respecting demeanor while extending respect and courtesy is invariably noticed and commended such actions are characteristic of good manners and proper training.

Relations with Subordinates

Cadets shall exercise proper professional courtesy and justice in their relations with subordinate Cadets. Gaining, or giving the appearance of gaining, unfair benefits, by the junior from the senior, or vice versa is the definition of fraternization and will not be tolerated.

Telephone

You should always be courteous when talking on the telephone. When answering or placing a call, identify yourself. "Hello" may be used in answering at home, but in an office or on an official occasion, Cadets should answer the telephone saying: "SUNY Maritime College, Location, Cadet Last Name, Class" (example: “SUNY Maritime College, Quarter deck, Cadet Smith, fourth class”). You must always be courteous when making phone calls. Unless necessary, do not call a private residence before nine in the morning or after ten o'clock in the evening. Avoid calling at meal hour. When abused, the telephone is a nuisance. Cadets particularly should remember that it is inconsiderate to engage in lengthy chitchat when others may urgently need to call in. Therefore, conduct your business quickly, and allow others to use the telephone.

Email

Email is an efficient and heavily used way of communication at Maritime College. All cadets are issued an email address upon entering the college.

To access your email account, go to the college home-page, under the “Current Students” tab, go to “Email”, and then “OWA.” At the login page, enter your username and password.
Example: Name: John Doe
Social Security Number: 123-45-6789
Username: johndoe.11
First Name First 3 Letters of Last Name . 11
Password: JD-6789
Initials – Last 4 Numbers of SSN

Maritime College Email is used as an official method of communication, therefore, cadets should be mindful of the emails that they send to officers, professors, and other cadets and keep the email professional and courteous in nature. The proper format for an email is as follows: A proper subject should also be included in the “Subject” field of the email. Subjects should give the person receiving the email an idea of what the email is going to be about, but should be kept short.

```
Dear Addresser, 

Body of the email goes in this area.

Very Respectfully, 

Cadet First Name Last Name, 4/c
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The “addresser” is the person you are sending the email to. If you do not know the name of the person the email is being sent to, replace “Dear Addresser” with “To Whom it May Concern”.

**Courtesy at Lectures**

Lecturers invited to speak to Cadets are generally experts in their field and are highly respected among their colleagues. Inattention by Cadets, as evidenced by sleeping, carrying on a conversation, reading, using a cell phone, or causing any other form of distraction is inconsiderate, and evidence of a lack of self-discipline. Each Cadet is responsible not only for his own conduct, but also for the decorum and attentiveness of the Cadets in the immediate vicinity.

If a Cadet is unable to keep their eyes open during a lecture, it is appropriate to quietly get up, move to the back or side of the room, and remain standing until the conclusion of the lecture. It is more respectful to get up and stand to the side than to fall asleep.

**Good Grooming**

A good first impression depends to a great extent upon your personal grooming and may be one of the most valuable assets of your life. It is impossible to foresee which day, what hour, may be that most important event, or what casual meeting may lead to your being accepted or rejected by a person solely based on the first impression you create.
Uniforms

The uniforms worn at Maritime College are similar to those worn by the United States Navy, the only difference typically being the insignia on the collar or on the sleeve, and the buttons on the Pea Coat and Service Dress Blue Jacket, which say “USMS” (standing for United States Maritime Service). As MUGs, you will be in uniform at all times while on campus, except on the weekends.

The Plan of the Day (POD) or Plan of the Week will dictate which uniform is to be worn. On most days, the uniform of the day will be “standard issue” (Poly-Wool) Khakis. On some days (Admissions Open Houses, Career Fairs, etc.) the uniform of the day will be the in season dress uniform.

Poly-Wool Khakis

This uniform consists of the following items:

1. Poly-Wool Short Sleeve Khaki Shirt
2. Poly-Wool Khaki Dress Pants
3. Poly-Wool Garrison Cap
4. Khaki Poly-Wool Belt
5. Brass Belt Buckle
6. Plain White Undershirt
7. Black Dress Socks
8. Black Leather Shoes
9. Black Shirt-Stays

Optional items authorized for wear with the Poly-Wool Khakis include:

1. Black “Relaxed Fit” Jacket
2. Pea Coat
3. Black Wool Sweater
4. Black Leather Gloves (only to be worn when wearing a jacket)
5. Plain Black Scarf (only to be worn when wearing a jacket, scarf not issued by school)
6. Black Wool Watch Cap (only to be worn when wearing the pea coat)

Care of the Poly-Wool Kahkis:

Although the tag on the shirt and pants directs to wash using the “Permanent Press” cycle, over time this will shrink the uniform. Therefore, it is best to wash the poly-wool khaki uniform using the “Cold Water” cycle and drying on the “Low Heat” setting. The poly-wool garrison cap may also be washed using the “Cold Water” cycle and dried on the “Low Heat” setting. After washing and drying, the shirt, pants, and cap should be ironed using the “Polyester” setting on the iron. It is best to test a small, inconspicuous area of the uniform with the iron first, as too hot of an iron will burn the uniform. Spray starch may be used to retain a crisp appearance between ironings. Alternatively, the shirt, pants, and cap may be dry-cleaned.

Service Dress Blues (SDB)

This uniform consists of the following items:

1. Combination Cover
2. Service Dress Blue Jacket
3. Service Dress Blue Pants
4. Long-Sleeve White Dress Shirt
5. Black Poly-Wool Belt
6. Brass Belt Buckle
7. Plain White Undershirt
8. Black Dress Socks
9. Black Leather Shoes
10. Tie, Black (Males only, tied using a Double Windsor knot)
11. Tie Clip (Males only)
12. Tie, Black, Crossover Type (Females only)
Optional items authorized for wear with the Service Dress Blues include:

1. Pea Coat
2. Black Leather Gloves (can be worn with or without the pea coat)

Care of the Service Dress Blues:

The SDB Jacket and SDB Pants should only be dry-cleaned. The Long-Sleeve White Dress Shirt may be washed and dried as per the instructions on the tag. The white cover of the Combination Cover may be removed and washed. Instructions for taking apart the cover are included when it is issued, read and save the instructions.

**Dress Whites**

This uniform consists of the following items:

1. Combination Cover
2. Certified Naval Twill (CNT) Short-Sleeve White Shirt
3. CNT White Dress Pants
4. CNT White Belt
5. Brass Belt Buckle
6. Plain White Undershirt
7. White Dress Socks
8. White Leather Shoes
9. White Shirt-Stays
10. Soft Shoulder Boards

Optional items authorized for wear with the Dress Whites include:

1. Black “Relaxed Fit” Jacket

Care of the Dress Whites:

The CNT Shirt and CNT Pants may be washed and dried as per the instructions on the label. Alternatively, they may be dry-cleaned. The White Leather Shoes will become discolored with use, in order to restore the white color, a leather shoe whitener should be used on the sole and the leather. The white cover of the Combination Cover may be removed and washed. Instructions for taking apart the cover are included when it is issued, read and save the instructions.

**Boiler Suit**

This uniform consists of the following items:

1. Blue Bump Cover
2. Boiler Suit
3. Plain White Undershirt
4. Black Steel Toe Boots

Optional items authorized for wear with the Boiler Suit include:

1. Black Zip-Up Work Jacket
2. Black Wool Watch Cap

Care of the Boiler Suit:

The Boiler Suit will shrink significantly the first few times it is washed, make sure that it is slightly larger than required before washing. Each additional wash will shrink the boiler suit slightly, which should stretch again during wear. Washing using the “Cold Water” cycle and drying using the “Low Heat” setting will help reduce shrinkage of the boiler suit.
PT Uniform

This uniform consists of the following items:

1. Blue-Collar Maritime Shirt
2. Blue Maritime Shorts
3. Blue Maritime Ball Cap
4. White Socks
5. Sneakers

Optional items authorized for wear with the PT Uniform include:

1. Black Wool Watch Cap
2. Grey Maritime Hooded Sweatshirt
3. Grey Maritime Sweatpants
4. Stenciled White-Collar PT Shirt

Care of the PT Uniform:

All uniform components should be washed and dried as per the instructions on the tag.

Salt and Peppers

The “Salt and Peppers” uniform is typically the dress uniform authorized for wear during Summer Sea Term. This uniform consists of the following items:

1. Combination Cover
2. CNT Short-Sleeve White Shirt
3. Service Dress Blue Pants
4. Black Poly-Wool Belt
5. Brass Belt Buckle
6. Plain White Undershirt
7. Black Dress Socks
8. Black Leather Shoes
9. Black Shirt-Stays
10. Soft Shoulder Boards

Optional items authorized for wear with Salt and Peppers include:

Black “Relaxed Fit” Jacket

Poly-Cotton Kahkis

The Poly-Cotton Khaki uniform is the working uniform authorized for wear during Summer Sea Term and is similar to the Poly-Wool Khaki uniform. This uniform consists of the following items:

1. Poly-Cotton Short-Sleeve Khaki Shirt
2. Poly-Cotton Khaki Dress Pants
3. Blue Maritime Ball Cap
4. Nylon Khaki Belt
5. Brass Belt Buckle
6. Plain White Undershirt
7. Black Dress Socks
8. Black Leather Shoes

Optional items authorized for wear with the Poly-Cotton Khakis include:

Black “Relaxed Fit” Jacket
Miscellaneous Uniform Notes

**Brass Belt Buckles:** The issued belt buckle has a lacquer coating that protects the belt buckle from tarnish. The lacquer is to be removed by soaking the belt buckle in ammonia. Once the lacquer is removed, the buckle can be polished using Brasso or a similar metal polish. The buckle will need periodic re-polishing and should not be worn with the uniform if it is tarnished. Fourth Class Cadets are not authorized to wear the 24k Gold (“anodized”) brass belt buckles.

**Belts:** Belts should be cut to size such that the cut end does not extend beyond the underside of the buckle. The cut end of the belt should then be sealed to prevent fraying. This can be done a number of ways, either by burning the end of the belt, coating the end with clear nail polish, or by sewing the end of the belt together using a thread that matches the belt. Belts shall be adjusted in a manner such that only the metal tab is visible from the end of the buckle.

**Boiler Suit Sewing:** Patches are to be secured to the boiler suit according to the diagram provided. Stitching is to be done neatly in thread that matches the patch being sewn. Machine stitching is the preferred method, although neat hand-stitching is acceptable.

**Black Leather Shoes:** Leather shoes are to be highly polished at all times while in uniform. There are a number of different methods to polish shoes which can be found on the internet. One of the easiest ways is to use a soft cloth with Kiwi Black “Parade Gloss” Polish and a few drops of water in a buffing motion to obtain a shine. Applying multiple layers of polish will create a mirror-like shine. “Instant Shine” liquids or similar products will deteriorate the leather over time and should not be used to shine your shoes.

**Dress Whites Undergarments:** Undergarments must be solid white when worn with the Dress Whites, any other colors or patterns will show through the uniform.

**Combination Cover:** The brim of male covers should be kept dust and fingerprint free, use a soft cloth to buff out any fingerprints. Buttons securing the gold strap shall be rotated to face upwards. The cap device shall be mounted as per the provided diagram, use a marlin spike to make a hole in the mounting band.

**Jewelry:** Cadets in uniform may not wear conspicuous or garish items of jewelry or adornments, which detract from the uniform. Religious medals may be worn on a neck chain long enough such that the medal is not shown. Other authorized items include watches and Maritime College rings. Only Female cadets may wear earrings. Earrings are limited to a single gold post .25" or less in diameter.

**Manner of Wearing Uniforms**

The following is a list of general guidelines to wearing uniforms, more detailed information will come from your IDOs and Squad Leaders in time:

- The prescribed uniform shall be worn at all times in a strictly military manner; jackets and overcoats shall be fully buttoned, and covers shall be worn squarely on the head at all times, under no conditions may uniform shirt sleeves be rolled up.
- Cadets will dress neatly and smartly at all times. Uniforms shall be scrupulously clean.
- All buttons, snaps, zippers, etc. shall be fastened at all times. This includes the "neck button" on all jackets and the boiler suit and pocket buttons.
- Nothing shall be protruding from shirt pockets; all pens and pencils should be stowed completely within. Pants pockets are for stowing necessary items only they should never be overstuffed. The only time a Cadet should put their hands in their pockets is to retrieve an item; if your hands are cold, wear gloves.
- Covers shall be worn squarely on the head with absolutely no backward tilt.
- Articles of clothing shall be legibly marked with the owner's last name, first initial, and class year. Black permanent marker shall be used for light colored clothing and white ink for dark colored clothing. Markings shall be applied neatly with small capital print, preferably on the lower seam of shirts (inside or out) and in the waistband of trousers. Blue-collar PT shirts, white-collar shirts, and boiler suits are to be stenciled with the issued kit ONLY. Freehand labeling of these items looks sloppy and is not uniform.
Uniforms shall be worn according to the following guidelines:

- The uniform of the day: During morning formation; during the academic day; while on watch (except ship watch); when on the Mess deck; when attending MUG Meetings; when attending other official meetings which do not involve work or physical activity.
- Boiler suit: As required while attending lab classes that meet aboard the ship or on the pier area; when on ship watch; when performing Saturday ship work; when on extra duty.
- Maritime issued PT gear: This is optional after 1600. Only issued PT gear is authorized for wear. PT gear may be worn during the day only to a physical education class, the gym, or to the barber.

Uniform Diagrams

Khakis (Poly-Wool and Poly-Cotton) and Dress Whites (sans collar insignia)

Device is centered on shoulder board

Should Board (point of device towards outboard side of shoulder)
Device is centered with anchor tips touching the mounting band.

Combination Cover
Pocket Rates

While wearing the uniform of the day or the boiler suit, fourth-class cadets shall carry pocket rates on their person at all times. Except as noted, rates are to be carried in a ziploc type plastic bag.

Pocket rates consist of the following items:

- Four quarters
- One pin backing
- Black ink pen
- Mug knife
- Maritime College ID card

While wearing the boiler suit, in addition to the normal pocket rates, the following are also required:

- Dormitory room key (on issued lanyard, around neck during Indoc.)
- The **Boatswain’s Pipe** (Back right trouser pocket)

- Blue Bump Cover
- Flashlight
- Eye Protection
- Ear Protection
- Gloves
- TWIC Card (only required if the cadet has a TWIC card and if he/she is going on the training ship)
Pocket rates are not required while wearing a dress uniform, PT uniform, or civilian clothing. Monday through Thursday, when outside during the hours of darkness, and when on watch, a fourth class will carry the issued flashlight.

**MUG Path**

The MUG Path is the route taken by MUGs while transiting between buildings on campus and while indoor Regimental Buildings.

The following are the basic "Rules of the Road":

- Square all corners, except when in academic buildings, Reisenberg Hall (Gym), sickbay, and while on the second deck of the Mess deck. Squaring corners will be suspended if there is snow or ice on the deck; this is done as a safety precaution, so do not abuse it.
- Double time in the vicinity of the dormitories, i.e., west of McGowen Street, north of Shepard Avenue, and east of Crowninshield Street. The dotted line outlines this area in the diagram below. Double timing will be suspended if sidewalks are wet, icy, or snowy; again, do not abuse this. To prevent ruining a dress uniform, never double time while wearing one.
- Travel in single file on the inboard side of each sidewalk and walk on the cobblestones between the gym entrance and Marvin-Tode Hall (S&E).
- Do not stop, converse, eat, drink, or use a cell phone along any of these walks.
- Use only the center inboard entrances to the First and Second Battalions of Vander Clute Hall. While in the Battalion Buildings, use only the outboard ladder wells (Furthest from the Quad). Walk on the inboard side of all passageways and square all corners.
- Use only the front entrances to the Mess deck.
- Follow only that route which crosses under the overhang of the Mess deck. Cutting across any part of the Quad is prohibited.
- Enter the Fort only through the Sallyport. After saluting the War Memorial, proceed to the left along the underclass walk. Inside the Fort, use only the spiral ladder wells and the straight ladder just inside the Sallyport leading up to the Humanities Department, classrooms, Personnel Office, and Bursar’s Office.
- Gangway and brace near, but not in contact with, the inboard bulkhead whenever an officer or upper-class cadet passes in the dormitory passageway. Although upperclassmen may request fourth-class cadets not to gangway, all fourth classmen are still required to gangway.
Cadet Quarters

Fourth-Class rooms will be prepared and maintained for inspection in accordance with all policies and procedures listed in the *Boatswain’s Pipe* and in the *Rules and Regulations*. Rooms shall be kept in inspection-ready status from 0700 to 2300, Monday through Thursday, and from 0700 to 1600 on Friday. Additionally, rooms shall be prepared for random Health and Safety inspections performed by the Office of Student Housing. Rooms and all furnishings and equipment therein shall be neat, orderly, and thoroughly clean.

If there is a discrepancy between the Office of Student Housing rules ("Guide to Campus Housing"), and those outlined in the *Boatswain's Pipe*, the Office of Student Housing rule supersedes those found in this publication.

Arrangement of Room Furnishings

Double occupancy rooms are to be arranged according to the diagram and guidelines below:

- Racks and dressers must be pushed as close to the bulkhead as possible without causing damage to paint or electrical plugs.
- Desks will have one side against the bulkhead and chairs will be fully pushed in.
- Dressers will be positioned on opposite sides of the room, against the bulkhead and adjacent to the closets.

If in a triple occupancy room, the room is to be arranged as per the Section Chief IDO.
Racks

Beds are called racks. Racks shall be made in the manner described below, and shall be so maintained from 0700 to 2300 Monday through Thursday and from 0700 to 1600 on Friday. Fourth-class cadets are permitted to sleep above the khaki bedspread during the day. Racks must be immediately returned to inspection-ready status when not in use.

The following guidelines apply to racks:

- The foot locker is stowed under the rack towards the aft end.
- Only plain, unadorned, white sheets and pillowcases are authorized. Sheets must be flat, fitted sheets are not authorized.
- All corners of the bedding shall be arranged in 45-degree angles (hospital corners).
- The top sheet is to be folded over the khaki bedspread so as to form a collar, the width of which shall be six inches. This collar shall be arranged so that twelve inches of the bottom sheet are exposed at the head of the rack. See diagram.
- When not in use, the issued blanket (Spank Blanket) shall be neatly folded at the foot of the rack.
- If required, additional comforters, blankets, or sleeping bags may be used. When not in use, additional bedding is to be folded and stowed neatly on the top shelf of the closet.
- Space underneath the racks is not to be used for storage of personal effects unless directed to do so by your Section Chief IDO.
- The top of the rack is not to be used as a storage place for clothes, or laundry waiting to be folded, the tops of racks shall be clean at all times.

**M.U.G Ideal Bunk**

![Diagram of ideal bunk]

Clothing and Gear Stowage

The following guidelines cover the stowage of clothing and gear in your room:

- All garments shall be fully buttoned, snapped, tied, fastened, zippered, etc.
- Uniforms not being worn shall immediately be hung on a hanger and put in the closest.
- Uniform articles shall never be hung from the back of your desk chair, thrown on your rack, thrown on the deck, or stuffed into a drawer.
- All shoes and boots shall “toe a line” in the closet, with toes facing outward and with laces fully tied.
- Hangers shall be two finger-widths apart. The space between the inner side of the closet and the first hanger shall be one fist-width.
- The front side of all garments hung in closets shall face in the direction of the door. Closets will thus be symmetrical about the entrance to the room.
• Drawers in desks and dressers shall be tiered for inspection, i.e., the top drawer opened two finger-width; second drawer opened two finger-width beyond the top drawer, continuing for all drawers.
• All clothing stowed in the third and fourth drawers of the dresser shall be rolled.
• Boiler suits and blue work jackets shall be stenciled on the outside, in two-inch tall white block lettering. The top edge of the letters shall be five inches below the bottom edge of the neckband; letters will be centered horizontally. See boiler suit diagram. When soiled, boiler suits must be washed before being returned to the dresser.
• Towels will be folded neatly and hung from the towel racks (if authorized).
• All linens shall be washed regularly and kept white. Laundry shall accumulate for no longer than one week.

**Closet Stowage**

As you face your closet, the following items are to be hung in succession, starting from the side closest to the door:

1. Poly-Wool Khaki Uniform
2. In-Season Dress Uniform
3. Poly-Cotton Khaki Uniform
4. Summer (Whites) Dress Uniform
5. Out-of-Season Dress Uniform
6. Winter (SDB) Dress Uniform
7. Black “Relaxed Fit” Jacket
8. Pea Coat
9. Black Work Jacket
10. Issued Sweat Suit
11. Black Sweater
12. Long-sleeve white shirt
13. Civilian Clothing (pushed off to outboard side)

Items to be stowed on the lower closet shelf, starting with side closest to the door:

1. Combination Cover, kept in plastic bag
2. Black Leather Gloves, under dress cover
3. Garrison Cap
4. Blue Bump Cover
5. Work Gloves, under bump cover
6. Shower Kit
7. Additional Toiletries, organized neatly

Items on the upper closet shelf:

1. Telephone connections (if applicable)
2. Stencil kit and shoe shine items
3. Issued Maritime College ball cap
4. Extra sheets, pillow cases, towels
5. Extra blankets, sleeping bag
6. Extra books
7. Miscellaneous items not specified above

Items in the front row of the closet deck:

1. In-Season Dress Shoes
2. Out-Of-Season Dress Shoes
3. Black Leather Dress Shoes
4. Sneakers
5. Casual and shower shoes
6. Laundry bag, in corner

Items in the back row of the closet deck:

1. Work boots
2. Bucket, with cleaning supplies, rags, and sponges inside
3. Brass polish
4. Brooms, swabs, dustpans, etc.
5. Sports equipment, in corner
Dresser Stowage

Items in top dresser drawer:

1. Small personal items
2. Belts and tie
3. Shoulder Boards
4. Uniform Insignia
5. Scarf

Items in second dresser drawer:

1. Boiler suit
2. Black watch cap
3. Other work clothes and items ( tools, MUG light, etc.)

Items in third dresser drawer: (rolled)

1. White T-shirts
2. Underwear
3. Socks

Items in fourth dresser drawer: (rolled)

1. Issued PT shorts
2. Issued PT shirt
3. Issued swimsuit
4. Thermal underwear
5. Non-issued athletic clothing

Items in fifth dresser drawer:

1. Civilian clothing, other than that covered above

All complete uniforms should be hung on the same hanger, for example, khaki shirt and trousers, SDB Jacket and SDB trousers, sweatshirt and sweatpants, etc.

Any articles not identified in this section shall be stowed in accordance with each deck’s established policies. These policies may vary slightly from deck to deck, but rooms on the same deck shall be uniform.

Computers

Personal computers are authorized after the Indoctrination Period. Requirements for computer set-up may vary. The IDO’s on deck will approve your particular set-up. Whatever the installation, power cords will be neatly arranged and the equipment shall be kept clean. Cadets will not use computer programs such as audio-stations, television cards, DVD players, video games, etc., which replicate equipment not otherwise authorized for their respective class.

Posters and Wall Hangings

No wall hangings are authorized during the Indoctrination Period. Following completion of the Indoctrination Period and upon authorization, each room will be allowed two posters/wall hangings not to exceed 3 x 4 feet each. Each room may then also affix one official school calendar to the wooden frame around the window.

All posters/wall hangings shall be in good taste. No nudity, vulgarity, explicit sexuality, or offensive material of any type will be tolerated. No decorations depicting or promoting alcohol are permitted. Any flags or items that may be offensive to others will not be permitted.
Stereo and Sound Equipment

Until authorized, the used of stereo or sound equipment (iPods, computer speakers, etc.) is prohibited. Any such equipment found in a cadet's room is considered contraband.

The Regimental Commander in association with the Chief Indoctrination Officer will grant the use of stereo/sound equipment privileges. Stereo/sound equipment must conform to applicable housing or regimental policies and regulations.

Music playing, regardless of the above statement, is prohibited during study hours and after taps. Stereo/sound equipment will be played only at a reasonable level so that the sound remains within the room. Be considerate if your roommate is studying, sleeping, or otherwise occupied.

Room Visitation

Fourth class shall enter upper-class rooms for official reasons only. If studying with an upper-class cadet, do so in a study lounge or in the Library. Loitering in upper-class rooms at any time is a violation of fourth-class privileges.

Except for official purposes, i.e., room inspections, upper-class cadets will not loiter in fourth-class rooms.

Bulletin Boards

The information posted on bulletin boards concerns all hands. You will be responsible for reading all information posted thereon daily. The most important bulletin boards are the “T-Boards” at the “T” intersection of each deck in the company buildings. These bulletin boards will contain information such as watch bills, the plan of the week, and any other special pertinent information. Make it a habit of checking the board as you walk by.

Shower

Mugs will proceed to and from the showers in the prescribed PT gear. Mugs will NOT travel to or from the showers with just a “towel wrap” or bathrobe.

Laundry

When using the company’s laundry facilities, consideration should be shown for other Cadets. If the washer to be used is full, advance the load therein to a dryer. If the dryer to be used is full, the load therein (if completely dry) should be removed and neatly placed on top of the dryer. Everyone is responsible for his or her own laundry. Never throw someone else’s clean laundry on the floor or into dirt or water.

Make it a habit of cleaning the lint trap after you have used the dryer and throwing it in a trash can. The number one source of shipboard fires is dirty lint traps.
MUG Responsibilities

Regimental Watch Standing

The seagoing profession, which operates on a continuous basis, is organized on the “watch” system to ensure the safety and proper operation of the ship; thus, the Regiment of Cadets is likewise organized on a structured watch system that operates on a continuous basis. Proper watch standing is an essential element of the maritime profession.

In order to develop the proper sense of watch responsibilities, and to ensure the safety of the campus facilities and the training ship, all cadets participate in the watch system according to their level of experience and professional development.

Fourth class cadets will report to the watch station thirty minutes before the top of the hour. (e.g., arrive prior to 2330 for the 0000-0400 watch) While going to and from watch, all fourth class rules are to be followed. After reporting to, and while standing watch, fourth classmen are not required to double time or square corners and may use the most direct route. Cadets shall wear a cover and carry a flashlight when on a round.

Cadets reporting for watch shall first read the Standing Orders for that particular watch station. Being familiar with the Standing Orders is the first step towards understanding how to stand a proper and vigilant watch.

A round is the visual inspection of a place or area in the Regiment.

Rounds are made at the direction of the Cadet Watch Officer (CWO) ashore, and the Cadet Quartermaster (QM) aboard the ship. The following guidelines apply to rounds:

- Rounds are to be conducted three (3) or four (4) times throughout a watch or at the discretion of the upperclass on watch to insure that quiet/study hours are being observed and to note/report any property damage, fires, floods, etc.
- Inspect all firefighting equipment, including extinguishers, hoses, pull boxes and fire bells during rounds and report all deficiencies.
- Aboard ship it will consist of a “Detex” round and is covered in more detail in other publications.

Log Procedures

The College follows the Navy's guidelines for properly keeping a ship's log for all watchstations, whether on ship or on land. This guideline is OPNAVINST 3100.7B, but is modified for appropriate application to the regiment and a merchant vessel. Some of the key aspects of this instruction that apply are:

- Record all events of the day. Use succeeding lines when necessary to describe events. This includes (but is not limited to) rounds taken and results of the round, drafts read, accidents of any type or kind, unusual events, and special orders passed down from higher authorities or from previous watches.
- All logs will be filled out in CAPITAL letters in neat, block-letter style handwriting.
- When a correction is considered necessary, draw a single line through the original entry so that the entry remains legible. Insert the correct entry to ensure clarity and legibility. Once a correction has been made, the person making the correction will put their initials in the lefthand margin of the page.
- Occasionally, information may be received after events have already been recorded. In this case, make a "late entry" as follows: In the left-hand margin corresponding to where the entry should have been recorded, place an asterisk "**". Enter the "late entry" on the next available line and put another asterisk in the left-hand margin. Example:

<table>
<thead>
<tr>
<th>Time</th>
<th>Entry</th>
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<tbody>
<tr>
<td>0745</td>
<td>4/C RETURNS FROM ROUND, ALL IS IN APPARENT GOOD ORDER*</td>
</tr>
<tr>
<td>0801</td>
<td>AMBULANCE ARRIVES ON CAMPUS TRYING TO FIND CADET DOE, 4/C</td>
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<tr>
<td>*0750</td>
<td>CADET DOE, 4/C FALLS DOWN STAIRS IN B COMPANY, BREAKS LEG</td>
</tr>
<tr>
<td>0820</td>
<td>AMBULANCE LEAVES WITH CADET DOE TO CALVARY HOSPITAL FOR TREATMENT</td>
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</tbody>
</table>
Reporting a Fire

All cadets should take prompt action when a fire is detected. Anyone discovering a fire should immediately activate the nearest fire alarm pull box. If the fire is in an area not equipped with a pull box, that person should inform Public Safety at extension 7310.

Fire Alarms

If the dormitory fire alarm sounds, evacuate the building via the most direct route. Follow the procedure as established by the IDOs on deck.

The deliberate setting of false alarms will not be tolerated. Fire pull boxes are furnished as lifesaving devices. Intentional misuse is a criminal offense.

Typical Day for the Fourth Class

0630  Reveille
0615 – 0720  Breakfast
0720 – 0740  Morning Formation
0740 – 0750  Morning Room Inspection
0800 – 1615  Classes
1115 – 1300  Lunch
1615 – 1900  Sports or Free Time
1700 – 2000  Dinner
1900 – 2200  MUG Meetings or Deck/Engine Training; not held every night
1900 – 2200  Mandatory Study Hours.
2200 – 2230  Cleaning Stations
2230 – 2300  Taps
2300   Lights Out

Note: Exact times can change from year to year, pay attention to updated times from your IDOs and Squad Leaders.

Dormitory Study Hours and Accountability

To provide a quiet atmosphere for studying, mandatory study hours are enforced on all decks from 1900 to 2200 Monday through Thursday. During study hours, fourth class are to be studying in their rooms, in company study rooms, the library, or the learning center. Doors to your room are to be open during this time. In the interest of accountability, fourth class cadets must sign out using the sign out sheet before leaving the deck. It is imperative that you develop good study habits and learn to manage your time wisely.

Deck or Engine Training

Typically once per week throughout the academic year, deck and engine license cadets are required to attend Deck or Engine Training. During this time, you will be given training and information that helps you prepare for your first Summer Sea Term.

The CDIDO and CEIDO are in charge of the training programs with help from the CDSL and CESL.

It is essential that you be present at every training session. More information will be given at the end of Indoc or within the first few weeks of class.

Cleaning Stations and Taps

At 2200 every Monday through Thursday, “Cleaning Stations” commences with the deck captain calling "Cleaning Stations". Fourth-class cadets on watch will not be present. Those scheduled for 0000-0400 and 0400-0800 watches the following morning will be granted sleep-in through cleaning stations and taps. A note posted on the cadet’s door shall make these situations known.
Fourth class will be assigned cleaning stations and be designated responsibilities in keeping their passageways, heads, and showers clean and free of litter. These “deck chores” also include keeping the deck bright work (brass) polished. It is particularly important to maintain clean living quarters on weekends. Treat college property as if it were your own.

One fourth-class cadet on each deck will be designated a deck captain, on a rotating basis. This is a chance to gain some valuable leadership experience and tactfully manage deck activities such as directing deck chores. Cleaning stations inspections will occur periodically throughout the semester to assess the level of cleanliness and can be random; inspectors are typically Chief IDOs or rates.

After cleaning station, taps are held in which the Section Chief IDO and his staff may do numerous activities with your deck; typically this includes going over tomorrow's POD or holding a discussion on pertinent campus events. Taps typically does not run later than 2300.

**Physical Training**

Physical fitness is a crucial element of life at sea and should be a part of every sailor's life. Sailors who choose not to maintain a state of good physical fitness place themselves and their shipmates at risk, especially in emergency situations.

The principal goal of the Fourth Class Physical Training (PT) Program is to create a culture of fitness and promote good lifelong physical fitness habits. PT is integrated into a number of evolutions each Fourth Class Cadet participates in to further these objectives.

During Indocritination, Fourth Class Cadets will be required to PT daily. This daily PT is designed to assist in preparing the class for the Physical Readiness Test (PRT), which is held at the end of the indoctrination period. The PRT determines a Fourth Class Cadet's level of participation in weekly PT throughout their MUG year. Participation in PT during the academic year will range from one (1) to three (3) times per week, depending on your individual PRT score. "Remedial PT” is the term used to describe the two (2) extra PT sessions per week held on Monday and Wednesday mornings. Remedial is assigned to cadets who do not achieve the minimum standards of the PRT. PRTs will be held throughout the year to ensure each Fourth Class Cadet is maintaining an acceptable level of physical fitness and to allow Cadets to test out of Remedial PT.

The PRT consist of three scored events: push-ups, sit-ups (also known as curl-ups), and a 1.5 mile timed run. The events are given in one session, a cadet must complete all three events in order to pass. The traditional standard for the PRT for men and women in the age group 17-19 is a "Good Low". The scoring will be calculated and a final score will be given as per the Chief PT IDO. This standard will be subject to change upon class performance and to enhance physical fitness objectives.

Male:

Curl-Ups: 62 Push-Ups: 51 1.5 Mile Run: 11:00

Female:

Curl-Ups: 62 Push-Ups: 24 1.5 Mile Run: 13:30

The Commandant of Cadets has the ability to appoint a Regimental PT Rate whose responsibility is to organize and execute Regimental Physical Training exercises. This position, as well as the responsibilities, are also subject to the needs of the school at the beginning of a new semester.

**Extracurricular Activities**

There are numerous extracurricular activities offered at the Maritime College. Information about these activities are typically provided during the first or second week of classes. Club announcements and meeting times are usually posted on dormitory bulletin boards. Cadets are encouraged to join clubs and sports teams of interest to them. However, the fourth classmen are cautioned to not overly commit themselves, as free time is limited during the freshman year. Pursuit of academic success should be the highest priority.
The Commercial Maritime Industry-“Our Business”

U.S. Maritime Policy

- Admiralty is the body of laws which govern the business of carrying cargo and passengers over water.
- The Merchant Marine Act of 1936 allowed government provision for, among other things:
  - Provided for government support of a U.S. Flagged Merchant Marine.
  - Subsidized the U.S. construction of merchant ships. The Liberty ships of World War II, built under this act, were turned out at a rate of one per week.
- The Jones Act supports the U.S. Merchant Marine domestic water-borne commerce by mandating domestic trade to be done by U.S. flagged, built, and operated ships.
- A strong U.S. Merchant Marine supports the economic security, defense security, and environmental concerns of the United States.
- Cargo Preference Laws are laws which give government cargo preference over commercial cargo on those vessels which receive ODS subsidies.
- MARPOL of 1970 outlaws discharge of oily waste within 50 miles of any land or specified zones, such as the Mediterranean Sea.
- The Oil Pollution Act of 1990 was brought about by the Exxon Valdez marine casualty. The super tanker Exxon Valdez ran aground on Bligh Reef in Prince William Sound, Alaska. The accident was the largest to ever occur in U.S. waters before the Deepwater Horizon incident of 2010. OPA 90 now requires tankers to be double hulled, seamen to have 6 hours of rest for every 12 hours aboard, spill contingency plans, and prohibits the consumption of alcohol within 12 hours of a cargo watch or ship sailing.
- TEZ (Tanker Exclusion Zones) are areas where transiting tank ships are not permitted to cross unless the port of destination lies within that zone.
- The U.S. ranks 26th in the world’s merchant fleet in number of ships under registry. The 2010 figures list the U.S. with 418 ships in its registry.
- The majority of the U.S. flagged merchant fleet is made up of container ships
- Foreign flagged ships carry 80% of U.S. waterborne imports and exports.
- The U.S. Merchant Marine and Maritime College Cadets have been involved in every U.S. armed conflict since World War II. Operation Desert Shield and Desert Storm, involving over 150 cadets, 95% of all U.S. equipment for Operation Desert Storm was carried on U.S. flagged commercial ships.
- The Panamanian Flag is the most common flag of registry for the world's commercial fleet.
- The cost of operating under U.S. registry is 6 times greater than operating under a foreign registry.
- In 1960 the United States had 100,000 active seafarers, since then that number has dropped to 77,500 in 2008.

Types of Vessels

There are a large number of different types of merchant vessels plying the seas today. During your first cruise, you will come in contact with most, if not all, of these types. For your familiarization, the major categories are listed below.

Break Bulk

The general day cargo carrier, or break bulk, is the "classic" cargo carrying ship. Virtually any, nonliquid cargo, whether packaged or in bulk, can be carried in the main cargo holds of this type of ship. In addition, most also have deep tanks for carrying small amounts of liquid cargo. Some also have special holds designed to carry refrigerated cargo. There are even some "heavy lift" ships, fitted with such equipment as extra ballast spaces and heavy lift cargo gear, designed for carrying such extremely heavy equipment as railway locomotives, tanks, and power plant generators. Break bulk is by far the most versatile breed of ship in use. They also use their own cargo gear to load and discharge cargo, and need no special equipment ashore. Their chief disadvantage is their slow and inefficient cargo handling; because of this, the break bulk is slowly losing ground to more efficient ships.
Container Ships

The container ship is the answer to the problems of slow cargo handling and long turnaround times common with the break bulk ship. Standard shipping containers, either 8’x8’x40’ or 8’x8’x20’, are used to encase parcels of cargo. These containers (or just plain “boxes”) are designed to fit directly on the back of a truck trailer. Huge shore side cranes are used to transfer the containers from the ship to the waiting trucks below. These ships are ideally designed for high volume, high-speed transport. They are without question the most efficient cargo ships in use today.

LASH Vessel

The LASH, or Lighter Aboard Ship, was an attempt to take the container concept one step further. This ship was designed to be able to lighter, or take on cargo without docking. Tugboats would transport barges filled with cargo to the anchored ship.

Bulk Carriers

A bulk carrier, as contrasted with a break bulk ship, is designed exclusively for carrying bulk commodities such as grain or ore. An example of this type of ship would be the Great Lakes iron ore carrier. A subclass of this type of ship is the Oil-Bulk-Ore carrier (OBO carrier). This ship is designed to carry a bulk commodity on one leg of a voyage, and to carry oil (or other bulk commodity) on the return trip.

Tankers

There are many types of tank vessels. The “supertankers”, Very Large Crude Carriers (VLCCs) and Ultra-Large Crude Carriers (ULCCs), are the most popularly known. Smaller, but no less important, are the coastal "handy" size tankers which are designed to carry refined products. There are also the heavily subdivided "drugstore" tankers, designed for a large number of different petrochemical types. A major sub-type of tanker is the Liquefied Natural Gas (LNG) tanker. This type of vessel uses specially insulated storage tanks to keep the liquid at a cryogenic temperature. The ship is powered by the gas vapors evaporating off of the LNG.

RO-RO

The Roll-On Roll-Off (RO-RO) is a ship specially designed for carrying vehicles. A stem ramp and/or side ramps are used to provide a direct drive into the cargo holds of the ship. Once in the hold, lashings are used to secure the vehicles in place for the voyage. RO-RO’s can be either dedicated totally to vehicle transportation, or can also have facilities to handle containers or other cargo.

Integrated Tug and Barge

This recent innovation allows tugboats to be actively used for coastal cargo transportation. The barge is designed with a notch on the centerline large enough to fit the bow of the tug. When needed, the tug will fit into the notch, and then extend a locking bar into sockets in the barge frame. The tug and barge are then locked into one single, composite unit. Fast turn around time is an advantage to this system. They are not as seaworthy as normal ships however, and are therefore mostly used in the coastwise trade.

Sailing Vessels

Sloop: A single masted, fore-and-aft rigged vessel that usually carries a forward staysail and one or more jibs. May be “cutter-rigged” with more than one staysail and is commonly used for yachting and racing.
Cutter: A single masted, fore-and-aft rigged vessel with two or three headsails and a gaff-topsail. Has a deeper draft than a sloop. The term is also used for US Coast Guard vessels.
Schooner: A vessel with tow or more masts where the after mast is not shorter than the foremast(s). It is principally fore-and-aft rigged, but may have a gaff-topsail, a square topsail and/or a topgallant sail. Originating in Gloucester, it was a principal workhorse in the fishing and coastal cargo trades of the United States.
Brig: A two-masted, square rigged vessel having a fore-and-aft mainsail on the mainmast.
Brigantine: A two-masted vessel square rigged on the foremast and fore-and-aft rigged (schooner rigged) on the mainmast.
Ship: A vessel with three or more masts, all square rigged.
Bark: A vessel with three or more masts, square rigged, with the aftermost fore-and-aft rigged
Barkentine: A vessel with three or more masts, the foremost square rigged and all other masts fore-and-aft rigged

Notable American Merchant Ships

Clermont

_Clermont_ being a misnomer, the North River Steam Boat was built in New York for service on the Hudson River between New York City and Albany. She was 130 feet long and was propelled by a 24 horsepower Boulton and Watt steam engine connected to two paddle wheels.

The first voyage from New York City to Albany (150 miles) took two days, including a 20 hour stopover at Robert Livingston's estate. The average speed for the voyage was 5 miles per hour. Robert Fulton and his partner Robert Livingston began regular steamboat service in 1807 and eventually expanded to three boats.

Although not the first steamboat built or successfully tested, the _Clermont_ is the first commercially successful steamboat.

SS United States

Keel laid on 08 February 1950, launched and named on 23 February 1951 at Newport News Shipbuilding and Dry-dock Company (the same shipyard which built the _TS Empire State_). The ship was built to Navy standards in order to be converted to a troop ship capable of carrying 14,000 troops during times of war. Owned by the United States Lines, she is 990 feet in length, 53,000 gross tons, and was the Blue Ribband Trophy holder for eastbound and westbound trans-Atlantic crossings. The westbound record is still unbroken.

Eastbound Passage 03 July 1952:
Ambrose Lightship (NY) to Bishop Rock (England): 2,942 nautical miles in 3 days, 10 hours, and 40 minutes. Average speed: 35.59 knots.

The ship enjoyed a successful 17-year career before declining revenue (due to the introduction of jet airplane service between the United States and Europe) forced the ship into Reserve Fleet in 1969.

Every permanent Master of the SS United States was an alumnus of the Maritime College. Her last Master was Commodore Leroy J. Alexanderson, Class of ‘30. The ship is currently berthed at a pier in Philadelphia, PA with an uncertain future.

NS Savanah

The first and only nuclear powered merchant vessel under US Flag. It was launched in 1959 as a joint project of the former Atomic Energy Commission (AEC) and the Maritime Administration (then part of the U.S. Department of Commerce). Among its primary purposes were to demonstrate the peaceful uses of atomic power; to demonstrate the feasibility of nuclear-powered merchant ships; and to develop the maritime infrastructure (e.g., liability and insurance, port security and emergency response, shipyard maintenance and repair, etc.) necessary for subsequent nuclear-powered merchant ships. It accomplished these objectives, and all others that were laid out for it, very satisfactorily.

The ship remained in experimental cargo service until 1970, when its nuclear fuel was removed. Currently, the ship is docked under a long-term laybirth contract in Baltimore, MD.

Ship’s Measurement Using Tonnage

Thirteenth century merchant vessels carried wine in 250 gallon wooden barrels called _tuns_ which when full, occupied 57 cubic feet of space and weighed 2,240 pounds. This capacity and weight for a _tun_ was established British law in the fifteenth century. Port taxes at the time were paid in actual barrels or _tuns_ and this payment came to be known as _tonnage_.

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Gross Tonnage/Gross Registered Tonnage (GRT)

The total internal cubic volume of a vessel divided by 100; e.g. 150,000 cubic feet / 100 = 15,000 Gross Tons. It is important to remember Gross Tonnage is a measurement of cubic capacity, not weight.

Net Tonnage (NT)

The gross tonnage of a vessel, minus exempted non-revenue earning spaces. This is a measure of a ship’s earning capacity and is also used as a basis for taxes, lighthouse dues, wharfage, pilotage, and canal / lock fees.

Deadweight Tonnage (DWT)

The total amount of weight a ship can carry including cargo, bunkers, stores, spare parts, passengers, crew, and their effects.

Displacement

The total weight of a ship afloat is equal to the weight of the water displaced. This is expressed in cubic feet of water or long tons

1 cubic foot of seawater: 64 lbs.
1 cubic foot of fresh water: 62.5 lbs.
1 long ton: 2,240 lbs. 35 cubic ft of seawater 35.9 cubic feet of fresh water

Diesel Engines

Diesel Engines are the most common main propulsion engine found on modern merchant ships and can be broken down into two (2) major categories, four stroke and two stroke. In a four stroke engine, four (4) strokes of the piston are required to complete one cycle; this consists of the intake, compression, expansion, and exhaust strokes. A two stroke engine completes a cycle every two (2) strokes with every down stroke being a power stroke. Intake, combustion, and exhaust are combined in a single stroke, the remaining stroke is compression.

The following are terms that apply to diesel engine:

Bore: The diameter of an engine cylinder
Piston: Cylindrical part connected to the connecting rod by the piston pin. The force of the exploding fuel against the closed end of the piston forces the piston down in the cylinder causing the connecting rod to rotate the crankshaft
Cylinder: A round hole in which the piston reciprocates. Also known as the engine bore
Cylinder Head: A detachable portion of an engine which covers the upper end of the cylinder bores and includes the combustion chamber and, in the case of overhead valve engines, also includes the valves
Crankshaft: The main shaft of an engine, which, together with the connecting rods, changes the reciprocating motion of the pistons to a rotary motion
Fuel Injector: A device used for injecting fuel oil into the combustion chamber of an engine against the pressure of air within the chamber
Top Dead Center: The position of a vertical reciprocating piston at its uppermost point of travel
Bottom Dead Center: The position of a vertical reciprocating piston at its lowest point of travel.
Governor: A device designed to control the speed of an engine within specified limits.
Turbocharger: Takes the exhaust gas from the engine to run a turbine and impeller on a common shaft to increase the flow of scavenging air.
Crosshead: Located between the piston rod and the connecting rod, the crosshead transmits the motion from the piston rod to the connecting rod, this is in turn connected to the crankshaft. The crosshead takes the side thrust usually taken by the piston
Piston Rod: In a crosshead engine, connects the piston itself with the crosshead bearing and has a straight reciprocating motion.

Connecting Rod: The connecting link between the piston and the crankshaft

Camshaft: Shaft containing lobes or cams, which operate engine valves.

Slow Speed Diesel: Engines whose crankshaft speeds are a suitable match for direct connection to a ship's propeller without reduction gearing, and so tend to have crankshaft speeds below 300 RPM.

Medium Speed Diesel: Engines whose speeds range from 300 RPM to 1200 RPM and require reduction gearing to drive the ship's propeller at a suitable speed.

High Speed Diesel: Engines whose speeds are in excess of 1200 RPM and require reduction gearing to drive the ship's propeller at a suitable speed.

"V" Type Engine: The pistons are tilted at an angle to alternating sides of the engine

In-Line Type Engine: All of the pistons are in a straight line with each other

Port Scavenging: Exhaust gas and scavenging air enter and exit through ports in the cylinder lining opened when the piston is near BDC

Valve Scavenging: A type of engine where the exhaust gases are expelled through valves in the cylinder head

Heavy Fuel Oil (HFO): Also called Bunker C, the crude fuel oil used in most marine diesel propulsion plants because of its low cost

Marine Diesel Oil (MDO): It has a lower ignition point, burns cleaner, and is lighter than HFO. It is also interchangeable with HFO in marine diesel plants

British Thermal Unit (BTU): The quantity of heat needed to raise the temperature of one pound of water 1°F

**Steam Engines**

Boiler Types:

Drum or Bent Tube: This boiler has a steam drum and mud/water drum connected by bent tubes. Also called a D-Type, it is an accelerated type, natural circulation boiler. The advantage of this type of boiler is the reduction in weight and space requirements. The drum-type is the better-suited boiler for the high-powered Merchant Marine and Navy applications.

Sectional Header: A horizontal boiler in which tubes are assembled in sections into front and rear headers; the latter, in turn, are connected to the boiler drum by vertical tubes. Advantages of the *sectional* header type of boiler is that there are only a few straight tubes, which means fewer parts, so it is less expensive to maintain. It is also easy to make adequate checks on these types of boiler.

Superheater Types:

Convection: Heated by convection from the furnace gases passing over them

Separately Fired: Heated by a separate furnace, used for that sole purpose

Desuperheater: Cool water absorbs heat from superheated steam as it passes through the coils of the desuperheater. Used when saturated or only slightly superheated steam is required for auxiliaries.

Radiant: Heated by flame, hot brickwork, or the fuel bed.

Condenser Types:

Jet or Barometric: Steam and cooling water are directly mixed

Surface: Cooling water passes through, tubes around which exhaust steam is directed. The transfer of heat from the steam to the water, taking place through the tube wall, condenses the steam. As the exhaust steam condenses to water, it is collected and drained off by a condensate pump.
Phonetic Alphabet

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<td>Y</td>
<td>–●●</td>
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<td>Z</td>
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</tr>
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</table>

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1       | –●–●–– |
2       | –●●●–– |
3       | –●●●●– |
4       | –●●●●– |
5       | –●●●●– |
6       | –●●●●– |
7       | –●●●●– |
8       | –●●●●– |
9       | –●●●●– |

Distress Signals

When a vessel is in distress and requires assistance, she shall use or exhibit any of the following signals (Ref. Pub. No. 102 International Code of Signals):

Red Star Shells/Rockets
- A gun or other explosive signal fired at intervals of about one minute
- Continuous sounding of any fog-signal apparatus
- Signal made by radiotelegraphy or by any other signaling method consisting of the group: –●●●––●●●(SOS) in Morse Code
- A signal sent by radiotelephony consisting of the spoken word "Mayday" or "Pan Pan." The format for sending a distress call is as follows:
  "Mayday, Mayday, Mayday" or "Pan Pan, Pan Pan, Pan Pan;"
  Vessel's Name and Call Sign, repeated three times; Distress Message.
- A "Mayday" distress call is given when the vessel is threatened by grave and imminent danger.
- A "Pan Pan" distress call is given when the safety of a person on board or man overboard is urgent, but not immediately dangerous.
- A signal consisting of a square flag having above or below it a ball or anything resembling a ball.
- Flames on board the vessel
- Rocket parachute flare or hand flare showing a red light
- Smoke signal giving off orange-colored smoke
- Slowly and repeatedly raising and lowering arms outstretched to each side
- The radiotelegraph alarm signal
- The radiotelephone alarm signal, transmitted on 2182 kHz and 156.8 MHz.
- Signals transmitted by Emergency Position Indicating Radio Beacons (EPIRB); there are five types (A, B, C, S, and Category 1), transmitting on 121.5 Hz, 243 Hz, or to a satellite.
- Other approved signals transmitted by radio communication systems

**Nautical and Maritime College Terminology**

**Hull Terminology**

Aft: Toward, at or near the stem
Abaft: Behind; towards the stern or back end of the vessel
Abeam: On the side of the vessel, perpendicular to centerline; 90 degrees from dead ahead
Aboard: To be on a ship
Adrift: Afloat but neither made fast to moorings nor at anchor; anything that is not secure or stowed in its proper place
Amidships: The middle part of the ship, halfway between bow and stern
Ballast: The seawater or any other substance carried in the deepest holds/tanks to keep positive stability.
Base Line: A fore and aft datum line from which vertical heights are measured
Beam: An athwart ship horizontal member supporting a deck or flat; the extreme width of the ship
Binnacle: The stand that holds the ship's compass.
Bow: The forward end of a ship
Bridge: The elevated platform above the main deck from which the ship is navigated.
Bulkheads: Walls that divide the ship into compartments.
Bulwarks: Low metal walls built around the main and upper decks, they prevent waves from breaking over the decks; and people or objects from being washed overboard.
Camber: The rise or crown of a deck, measured athwart ship in inches per foot of breadth
Centerline: The fore and aft middle line of the ship from stem to stem
Companionway: The steps which lead from one deck to another.
Dead rise: The rise or slant up athwart ship of the bottom of a ship from the keel to the bilge
Depth: The distance from the keel to the freeboard deck at the side
Draft: The depth of the lowest point of the ship below the surface of the water when she is afloat
Forecastle: (foc'sle): A raised deck near the bow.
Forward: Means toward the front of the ship.
Forward Perpendicular: A line perpendicular to the baseline, intersecting the forward edge of the stem at the designed water line
Freeboard: Distance between the waterline and the uppermost continuous deck (main deck).
Funnel: The smokestack.
Hatch: Opening in the deck through which cargo is lowered into or hoisted out of a hold; or a salty name for a conventional door.
Helm: The ship's steering wheel.
Holds: Areas below deck in which cargo is stored.
Hull: The body of a ship, indicating shell plating, framing decks and bulkheads
Inboard: Inside the ship; toward the centerline
Keel: The principle fore and aft member of a ship's frame, running along the bottom and connecting the stem and the stern; to which the frames of the ship are attached
Length on the Water Line: Line of the surface of the water on a ship when loaded to maximum allowance in salt water in the summertime
Length Overall: The length of a ship measured from the forward-most point of the stem to the after-most point of the stem.

Keel: The backbone of a ship. It is a ridge that runs along the lowest part of the hull from stem to stem.

Leeward Side: The side of a ship away from the wind.

Moor: To keep a ship in place with lines tied to a pier, to a buoy attached to an anchor, or to another ship.

Poop Deck: A short raised deck at the rear of a ship.

Outboard: Away from the centerline, toward the side of a ship.

Propeller: A revolving device that drives the ship through the water, consisting of three or more blades.

Rudder: A large heavy fitting, hinged to the stern frame, used for steering the ship.

Shaft: A long, round, heavy forging, connecting the engine and propeller or other rotating machinery to its parts.

Sheer: Fore and aft curvature of a deck.

Stem: A forged, casted or rounded plate forming the extreme bow of the ship, extending from the keel to the forecastle deck; also, the foremost part of a ship where the bow cleaves the water.

Superstructure: All the structures on a ship that rise above the main deck, a.k.a. the house.

Tween Decks: Spaces above the holds of general cargo ships in which additional cargo may be stored.

Waterline: The point on the hull that the surface of the water reaches.

**Some Older Maritime College Terminology**

Bagged: Being written up for a Class I or Class II offense.

Bug Juice: The nectar served at mess during the warm months.

Care Package: A welcome change from mess hall chow.

Century Club: A group composed of present or future leaders who have "earned" 100 demerits.

Channel Fever: The feeling of anxiety one gets toward voyage's end.

Chow: Food.

Chronometer: An extremely accurate timepiece used in celestial navigation.

Class System: Just like a caste system, only with different reasons.

Fudge Factor: That mysterious consideration, which seems to make something always come out your way.

Glory Bars: Service ribbons.

Gross: Extremely poor; especially in reference to the appearance of something.

Happy Hour: Extracurricular courses in physical training.

Holiday: An area missed, as when painting.

License Jitters: That uneasy feeling among the first class when they realize that license exams are so very, very close.

Mess: A self-explanatory term joyously applied to the thrice daily gathering of the undernourished in Vander Clute Hall.

Mixer: An informal Maritime College dance attended by imported girls with the nicest personalities around.

Over the Wall: Unauthorized liberty.

MUG Bible: Boatswain's Pipe.

Pony: Old test or homework used as a study aid (pass on next year).

Probation: Academic term used to denote a cadet who had better hit the books.

Red Lead: Catsup; special paint used at sea back in the old days as a primer.

Reg Head: Someone who’s tiny bit of power has gone to his or her head.

Reveille: "Rise and shine for the maritime sailor".

Review: A regimental stroll; good for breaking in liberty shoes.

Room Captain: A synonym for "it's your turn to clean the room and get stuck"
Scrambled Eggs: Accumulation of gold on the hat of commanders and above
Sea Lawyer: One that prefers to question rather than to obey orders
Sharp: Being on the ball; good personal appearance
Shot Down: To be completely demoralized, as after a test
Shove Off: Exodus; get lost
Skivvies: Under shorts, regulation of course
Skylarking: Nautical daydreaming
Smoking Lamp is Lit: Permission to smoke
Square Away: "Straighten up", like a room
Statement: A written reply to a Gold
Stuck: To be placed on report
Tool: Easily used cadet
Two-Block: Hoist something all the way
Up the Hawespipe: Obtaining a position of rank the hard way, by coming up through the ranks.
Wife: Roommate (used mostly at Kings Point…go figure)

Today’s Maritime College Terminology and Some Industry Terminology

AB: Able-Bodied Seaman; an unlicensed deck department rating
All hands: A call that is made to the entire crew
Aloft: In the upper rigging, masts, etc.
Amidships: In the middle portion of the ship; having no angle on the rudder
ASAP: As soon as possible
Ashore: To be off a ship
Athwartships: From side to side; across the ship; transversely
Aye: To say "yes" or to reply in the affirmative
Ballast: Dead weight material carried aboard ship to improve stability
Batten Down: To cover up and fix down, especially to prepare for sea
Belay: To make a rope or line fast or secure; to stop or cancel an action ("Belay my last")
Bilge: The curved area of a ship where the sides and bottom join
Binnacle: The stand enclosing the ship's magnetic compass
Blue Nose: A sailor who has crossed the Arctic or Antarctic Circles
Boatswain: "Bosun"; chief unlicensed rating in the deck department
Boatswain's Chair: A seat or swing hung from a single line used for working aloft or over the side
Bow: The front or forward part of a vessel
Box the Compass: To repeat the 32 points of the compass rose in order (N, NxE, NNE, etc.)
Boxing Corners: To square left, go right instead; to square right, go left instead
Bulkhead: A vertical partition between compartments or spaces
Carry on: To continue what you were doing
CAIDO: Chief Academic Indoctriination Officer
CDIDO: Chief Deck Indoctriination Officer
CEIDO: Chief Engine Indoctriination Officer
CIDO: Chief Indoctriination Officer
CPTIDO: Chief Physical Training Indoctriination Officer
Deck: The horizontal surface at the bottom of a space
Detail: A special task; the number of people who perform this task
Dog: To secure; as in “Dog a hatch”
Double time: To move at 180 paces per minute, with 36-inch steps
Domer: A Maritime College cadet or Alumnus. Refers to the white dome on top of the Fort.
ED: Extra Duty; additional work as a result of receiving demerits
Eight Bells: Eight rings of the ship’s bell, signaling the end of the watch or signifying that all is well; also the Maritime College Yearbook.
Ensign: The flag indicating a ship’s nationality
Fantail: The after-most part of the main deck; that section of deck which overhangs the sternpost
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Day</td>
<td>Clean up of an assigned area of the ship or dormitories</td>
</tr>
<tr>
<td>Fore and aft</td>
<td>Along the length of the ship; longitudinally</td>
</tr>
<tr>
<td>Forward</td>
<td>Towards the bow; at the forepart or front of a vessel</td>
</tr>
<tr>
<td>Fouled</td>
<td>Entangled, jammed, not running clean</td>
</tr>
<tr>
<td>FWE</td>
<td>Finished With Engines; a command on the Engine Order Telegraph, which indicates that maneuvering, is complete; a sign for cadets who have successfully passed their license exams</td>
</tr>
<tr>
<td>Galley</td>
<td>The kitchen aboard ship</td>
</tr>
<tr>
<td>Gangway</td>
<td>An order to make way or clear a path; a plank or ladder connecting the ship with the shore</td>
</tr>
<tr>
<td>Gold</td>
<td>Cadet’s copy of a Class I mast report</td>
</tr>
<tr>
<td>Hatch</td>
<td>Horizontal covering of an access between decks</td>
</tr>
<tr>
<td>Hawseepiper</td>
<td>One who has achieved officer rank by advancing through unlicensed ratings</td>
</tr>
<tr>
<td>Head</td>
<td>Latrine aboard a ship</td>
</tr>
<tr>
<td>House</td>
<td>A ship’s superstructure, enclosing living quarters, offices, the wheelhouse, etc.</td>
</tr>
<tr>
<td>IDO</td>
<td>Indoctrination (Duty) Officer</td>
</tr>
<tr>
<td>Inboard</td>
<td>Toward the centerline of a ship; toward the Quad side of the dorms</td>
</tr>
<tr>
<td>Irish Pennants</td>
<td>Loose yarns or old rope ends hanging about that give a sloppy appearance; loose threads hanging from uniforms or uniform articles</td>
</tr>
<tr>
<td>Jack</td>
<td>The national flag flown from the jack staff by a ship in port or at anchor</td>
</tr>
<tr>
<td>Jury rig</td>
<td>A temporary fix or substitute solution</td>
</tr>
<tr>
<td>Keel</td>
<td>The primary longitudinal strength member running along the bottom of a vessel; it is the foundation for a ship’s frame;</td>
</tr>
<tr>
<td>Knock Off</td>
<td>To end work for the day or to take a break</td>
</tr>
<tr>
<td>Ladder</td>
<td>Access way between decks; shipboard stairs</td>
</tr>
<tr>
<td>Lanyard</td>
<td>A short length of line used to secure gear or to attach a piece of equipment</td>
</tr>
<tr>
<td>Leeward</td>
<td>The side of the ship opposite to that upon which the wind is blowing</td>
</tr>
<tr>
<td>Liberty</td>
<td>Authorized leave to go ashore</td>
</tr>
<tr>
<td>Logbook</td>
<td>A ship’s journal into which is recorded all official activities and conditions</td>
</tr>
<tr>
<td>Mast</td>
<td>A brief hearing to resolve disciplinary charges</td>
</tr>
<tr>
<td>MUG</td>
<td>Cadet Under Guidance; slang for a fourth class cadet</td>
</tr>
<tr>
<td>Muster</td>
<td>To assemble the crew for a role call prior to resuming work</td>
</tr>
<tr>
<td>MO FO</td>
<td>Morning formation</td>
</tr>
<tr>
<td>OS</td>
<td>Ordinary Seaman; entry level rating in the deck department</td>
</tr>
<tr>
<td>Outboard</td>
<td>Toward or outside the hull; away from centerline; the side of the dorms not facing the Quad</td>
</tr>
<tr>
<td>Overhead</td>
<td>The horizontal surface above a space</td>
</tr>
<tr>
<td>Pink</td>
<td>Cadet’s copy of a Class II mast report</td>
</tr>
<tr>
<td>Pipe</td>
<td>To summon or pass word via public address system</td>
</tr>
<tr>
<td>Police</td>
<td>To tour an area for the purpose of cleaning up trash and debris</td>
</tr>
<tr>
<td>Pollywog</td>
<td>One who has not sailed across the Equator</td>
</tr>
<tr>
<td>Port</td>
<td>The left hand side of a ship when facing forward</td>
</tr>
<tr>
<td>QMED</td>
<td>Qualified Member of the Engine Department; unlicensed seaman competent in the practical aspects of engine room operation</td>
</tr>
<tr>
<td>Rack</td>
<td>The piece of furniture you rest your bones on</td>
</tr>
<tr>
<td>Rate</td>
<td>A first class cadet who is a cadet officer; what is required of each class of cadet and what he/she is allowed</td>
</tr>
<tr>
<td>Restriction</td>
<td>Requirement to remain on ship or on campus as a result of disciplinary infractions</td>
</tr>
<tr>
<td>Scuttlebutt</td>
<td>Water fountains aboard ship; ship’s gossip or rumors</td>
</tr>
<tr>
<td>Screw</td>
<td>The propeller of a ship; something you figure out at Maritime.</td>
</tr>
<tr>
<td>Shellback</td>
<td>A sailor who has crossed the Equator</td>
</tr>
<tr>
<td>Shipshape</td>
<td>Seamanlike in appearance; organized and ready for service</td>
</tr>
<tr>
<td>Sickbay</td>
<td>Space aboard a ship for the treatment of sick and injured</td>
</tr>
<tr>
<td>Square Away</td>
<td>To make something neat and orderly</td>
</tr>
</tbody>
</table>
**Starboard:** The right hand side of a ship when facing forward

**STCW:** Standards of Training and Certification of Watchkeepers – the international standards to which every seafarer, both licensed and unlicensed, must comply. Based on your rating, it consists of a series of check offs which must be completed to achieve proficiency.

**Stern:** The back end or after part of the vessel

**Stow:** To put something in a secure place for future use

**Squad Leader:** A third class cadet selected to assist IDOs in training the fourth class

**Swab:** A mop; Coast Guard Academy 4/c

**SWL:** Safe Working Load; a measurement of the tension a line can safely withstand

**Tool:** A Cadet who excessively resorts to writing up cadets to solve his or her own problems.

**Topside:** On or about the weather deck

**Thwart:** Transverse seats in a lifeboat

**Trooper:** A non-rated first class cadet

**Windward:** The side of the ship upon which the wind is blowing

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**MUG Knowledge**

The fourth class shall commit to memory:

- Names and Titles of Administrative Heads
- Cadet Officers with 4 Stripes/Bars and Above
- Resident Company Rates
- The Maritime College Oath
- The Reisenberg Saying
- The Sally Port Saying
- “The Bells of St. Mary’s” *(Alma Mater of the Maritime College)*
- “Anchors Aweigh”
- “How Long Have You Been a Sailor?”
- Location of the Center of St. Mary’s Pentagon
- Nautical and Maritime College Terminology
- Ship’s Officers, *TSES VI*
- Ship’s Particulars
- Additional material as provided by IDOs

**The Maritime College Oath**

I will conduct my personal and professional behavior, both on and off campus, in a manner which will bring credit to the Maritime College, myself, and the profession for which I am preparing.

I will observe those standards of honesty, integrity, moral courage, and personal honor which are expected of all professionals associated with the Merchant Marine.

I agree to abide by the Rules and Regulations for the Regiment of Cadets of the Maritime College.

**The Reisenberg Saying**

“The sea is selective, slow at recognition of effort and aptitude, but fast in sinking the unfit.”

Felix Reisenberg, Jr.

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40
The Sally Port Saying

“...but men and officers must obey, no matter at what cost to their feelings, for obedience to orders, instant and unhesitating, is not only the life blood of armies, but the security of states, and the doctrine that under any conditions whatever, deliberate disobedience can be justified, is treason to the commonwealth.”

From the biography of Stonewall Jackson and the American Civil War, by Colonel G. Henderson.

“The Bells of St. Mary’s”

Alma Mater of the Maritime College

The bells of St. Mary’s Ah! Hear! They are calling
The old lads, the new lads who’ve gone to the sea;
Our dear Alma Mater, we hear your voice calling,
The ship’s bells shall ring out, ring out for you and me.

The bells of St. Mary’s at sweet even’ tide
Shall call her beloved to come to her side;
And dear Alma Mater in the sound of the sea,
I know you have been waiting, yes, waiting for me.

The bells of St. Mary’s, Ah! Hear! They are calling
The old lads, the new lads goin’down to the sea;
And so, my Beloved, when blue seas are calling,
The ship’s bells shall ring out; ring out for you and me.

“Anchors Aweigh”

Anchors aweigh my boys, anchors aweigh,
Farewell to college joys, we sail at the break of day, day, day, day,
On our last night ashore, drink to the dome,
Until we meet once more, here’s wishing you a happy voyage home.

“How Long Have You Been a Sailor?”

“All me bloomin’ life, Sir/Ma’am,
Me father was King Neptune, me mother was a mermaid,
I was born on ’de crest of a wave, and rocked in ’de cradle of ’de deep,
Me eyes is stars, me teeth is spars, me hair is hemp and seaweed,
And when I spits (pretending to spit), I spits tar,
I’s tough, I is, I am, I are, Sir/Ma’am.”
The Heave Ho Song

Heave-Ho! My Lads, Heave-Ho!
It’s a long, long way to go
It’s a long, long pull
With the hatches full
Braving the wind
Braving the sea
Fighting the treacherous foe
Heave-Ho! My lads, Heave-Ho!
Let the waves roll high or low
We can cross any ocean
Sail any river
Give us the goods and we’ll deliver
Damn the submarine!
We’re the men of the Merchant Marine!

Fourteen Leadership Traits (JJ-DID-TIE-BUCKLE)

| Judgment      | Endurance |
| Justicce     | Bearing  |
| Decisiveness | Unselfishness |
| Integrity    | Courage  |
| Dependability| Knowledge |
| Tact         | Loyalty  |
| Initiative   | Enthusiasm |

College Motto

LOYALTY and VALOR

Location of the Center of St. Mary’s Pentagon

Latitude: 40° 48.3’ North
Longitude: 073° 47.5’ West
US Navy and US Coast Guard Enlisted and Officer Rates and Ranks

The following tables show the rate/rank and insignia of enlisted and officers in the US Navy and US Coast Guard. You are expected to know enlisted and officer pay grades, rate/rank, and insignia. Note that the Ensign collar insignia is very close to that of a 1st Class Trooper. Also note the O-11 rank of Fleet Admiral; this rank is used only during times of a Congressionally Declared War.

<table>
<thead>
<tr>
<th>Pay Grade</th>
<th>Rate</th>
<th>Abbreviation</th>
<th>Upper Sleeve</th>
<th>Collar and Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-1</td>
<td>Seaman Recruit</td>
<td>SR</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>E-2</td>
<td>Seaman Apprentice</td>
<td>SA</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>E-3</td>
<td>Seaman</td>
<td>SN</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>E-4</td>
<td>Petty Officer Third Class</td>
<td>PO3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-5</td>
<td>Petty Officer Second Class</td>
<td>PO2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-6</td>
<td>Petty Officer First Class</td>
<td>PO1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-7</td>
<td>Chief Petty Officer</td>
<td>CPO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-8</td>
<td>Senior Chief Petty Officer</td>
<td>SCPO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-9</td>
<td>Master Chief Petty Officer</td>
<td>MCPO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay Grade</td>
<td>Rank</td>
<td>Abbreviation</td>
<td>Collar</td>
<td>Shoulder</td>
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<td>-----------</td>
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</tr>
<tr>
<td>O-1</td>
<td>Ensign</td>
<td>ENS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-2</td>
<td>Lieutenant Junior Grade</td>
<td>LTG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-3</td>
<td>Lieutenant</td>
<td>LT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-4</td>
<td>Lieutenant Commander</td>
<td>LCDR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-5</td>
<td>Commander</td>
<td>CDR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-6</td>
<td>Captain</td>
<td>CAPT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-7</td>
<td>Rear Admiral (lower half)</td>
<td>RDML</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-8</td>
<td>Rear Admiral (upper half)</td>
<td>RADM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-9</td>
<td>Vice Admiral</td>
<td>VADM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-10</td>
<td>Admiral</td>
<td>ADM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-11</td>
<td>Fleet Admiral*</td>
<td>FADM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Training Ship

Training Ships of the Maritime College

1874 - 1908 USS St. Mary’s
1908 - 1931 USS Newport
1931 - 1946 Empire State I
1946 - 1956 Empire State II
1956 - 1959 Empire State III
1959 - 1973 Empire State IV
1973 - 1990 Empire State V
1990 - Present Empire State VI

TS Empire State VI

The College’s current training vessel was laid down as Hull #552 at the Newport News Shipbuilding and Dry-dock Co., of Newport News, Virginia.

Designed by the George C. Sharp Co. as a Mariner Class C4-S-IU break-bulk freighter, she was launched on September 16, 1961, and was commissioned in 1962 as the SS Oregon of the States Steamship Lines. She served in the Pacific trades through the 1960s.

The Oregon was purchased by Moore-McCormack Lines in the early 1970s and was renamed SS Mormactide. Moore-McCormack operated her on the South American run. Briefly under the ownership of United States Lines, the vessel was laid up at the James River Ready Reserve Fleet in December 1982.

In November 1988, the idle Mormactide was towed to Bay shipbuilding Corporation of Sturgeon Bay, Wisconsin, to begin training ship conversion. She was delivered to the College pier on December 31, 1989 and was recommissioned TS Empire State VI on May 5, 1990.

Ship’s Officers

Master: Richard Smith
Chief Mate: Matt Mahanna
Second Mate: Peter Vecchio
Third Mate: John Flannigan
Chief Engineer: Ed Robinson
First Assistant Engineer: William McCaney
Second Assistant Engineer: Dominick Valvo

Ship’s Particulars

Official Hull Number: 287875
Maritime Administration Classification: Public Nautical School ship s5-5-MAlua
Call Sign: KKFW (Kilo Kilo Foxtrot Whiskey)
Length, Overall: 565 feet or 172.2 meters
Length Between Perpendiculars: 528 feet
Beam: 76 feet or 23.16 meters
Depth: 44 feet 6 inches
Designer’s Draft: 25 feet
Height of Radar Mast above Keel: 137 feet 11½ inches
Light Ship Tonnage: 12,116 Long Tons (LT)
Total Displacement: Normal: 17,160 LT
Maximum: 19,350 LT
Total Compliment: 791
Cadets: 684
Crew: 107
Anchors: Baldt Stockless; 1 port, 1 starboard; 12,945 lbs each
Anchor Cable: 11 shots on each anchor
Cargo Gear:
Hatch 1: Two 52 ft. booms, 5 ton SWL at 31° from vertical
Hatch 2: Two 60 ft. booms, 5 ton SWL at 31° from vertical
Hatch 6: Crane, 22,000 lbs. SWL
Hatches 1 and 2: Hydraulic
Hatch 6: Manual
Propulsion:
Main Engine:
High-pressure turbine: Newport News geared turbine, cross-compounded
Low pressure turbine: impulse type blading.
Boilers:
Reduction Gears:
Generators:
1 Caterpillar Diesel, Auxiliary, 1200 kW
1 Caterpillar Diesel, Emergency, 250 kW
Sustained Sea Speed: 20 knots
Cruising Range at 20 knots: 16,000 nautical miles
Horsepower:
Normal: 17,250
Maximum: 19,250
Total Potable Water Capacity: 959 LT
Total Distilled Water Capacity: 238 LT
Total IFO 180 Fuel Oil Capacity: 2404 LT
Total Diesel Oil Capacity: 234 LT
Fresh Water Production:
1 Nirex Distilling unit, 25,000 GPD
1 Reverse Osmosis unit,
Propeller: One 4-bladed, right-handed; nickel-aluminum-bronze alloy
Propeller Diameter: 22 feet
Propeller Pitch: 22 feet 6 inches

**Basic Steam Water Cycle**

The Basic Steam Water Cycle gives a very basic idea of the different pieces of equipment involved in steam generation on the *Empire State* and how they fit together. One of the key points to note is that it is a cycle, number one (1) and twelve (12) is the same piece of equipment.

1. Boiler
2. Throttle Box
3. High Pressure Turbine
4. Low Pressure Turbine
5. Condenser
6. Condensate Pump
7. Air Ejector
8. First Stage Heater
9. DC Heater
10. Feed Pump
11. Economizer
12. Boiler
Point System

The "Point System" is commonly used by lookouts and other watch standers for referencing the direction or bearing objects are in relation to the ship.

Relative Bearings from a Ship

The bearings on the Port Side are designated the same way.
Emergency Signals

The following signals are used on the *TS Empire State* and commercial vessels to inform the crew of an emergency or other situation on the ship. It is essential that all cadets memorize and be able to recognize these signals, it may save your life one day!

- **Fire and Emergency**: A continuous sounding of the ship's whistle and general alarm for more than ten (10) seconds

- **Man Overboard**: Three (3) prolonged blasts on the ship's whistle and general alarm

- **Abandon Ship**: More than six (6) short blasts followed by one (1) prolonged blast on the ship's whistle and general alarm

- **Lifeboat Orders**:
  - **Lower Boats**: One (1) short blast on the ship's whistle
  - **Stop Lowering Boats**: Two (2) short blasts on the ship's whistle
  - **Dismiss from Boat Stations/Drill**: Three (3) short blasts on the ship's whistle

Nautical Conversions

1 fathom = 6 feet
1 shot = 15 fathoms = 90 feet
1 cable = 120 fathoms
1 nautical mile = 6076 feet = 1 minute of Latitude
1 knot = 1 nautical mile per hour
1 nautical mile = 1.151 statute miles
1 degree = 60 minutes
1 long ton (LT) = 2240 lbs = 35 cubic feet of seawater
1 short ton = 2000 lbs
Navigating the Ship

Accurately knowing where you are while onboard the training ship and knowing how to get to where you need to be is essential. The *Empire State* is divided into nine (9) decks from top to bottom, and six (6) holds from bow to stern.

- Flying Bridge
- Bridge Deck
- Cabin Deck
- Boat Deck
- Main Deck
- 2nd Deck
- 3rd Deck
- Tank Top

The six holds are simply numbered from bow to stern, one through six, with one being closest to the bow and six closest to the stern. The "House", labeled above, contains the machinery space.
Life Boats

<table>
<thead>
<tr>
<th>Life Boat</th>
<th>Capacity</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifeboat #1: Open</td>
<td>145 persons</td>
<td>Foredock, Stbd</td>
</tr>
<tr>
<td>Lifeboat #2: Open</td>
<td>145 persons</td>
<td>Foredock, Port</td>
</tr>
<tr>
<td>Lifeboat #3: Enclosed</td>
<td>76 persons</td>
<td>Boat Deck, Stbd, outside C/M's office</td>
</tr>
<tr>
<td>Lifeboat #4: Enclosed</td>
<td>76 persons</td>
<td>Boat Deck, Port, outside C/E's office</td>
</tr>
<tr>
<td>Lifeboat #5: Enclosed</td>
<td>76 persons</td>
<td>Sun Deck, Stbd</td>
</tr>
<tr>
<td>Lifeboat #6: Enclosed</td>
<td>76 persons</td>
<td>Sun Deck, Port</td>
</tr>
</tbody>
</table>

Life Rafts

<table>
<thead>
<tr>
<th>Life Raft</th>
<th>Capacity</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Rafts: 7, 9, 11, 13</td>
<td>25 persons each</td>
<td>Upper Deck, Stbd Side, Aft</td>
</tr>
<tr>
<td>Life Rafts: 8, 10, 12, 14</td>
<td>25 persons each</td>
<td>Upper Deck, Port Side, Aft</td>
</tr>
<tr>
<td>Additional Life Rafts (2)</td>
<td>25 persons each</td>
<td>Cabin Deck, Port/Stbd Side</td>
</tr>
</tbody>
</table>

Survival Craft (Lifeboat/Life Raft) Equipment - 46 CFR 199.175

<table>
<thead>
<tr>
<th>Item</th>
<th>First Aid Kit</th>
<th>Oars/Paddles</th>
<th>Signal (Smoke, Hand, Parachute Flare)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bailers</td>
<td>Fishing Kit</td>
<td>Painter</td>
<td>Sponge</td>
</tr>
<tr>
<td>Bilge Pump</td>
<td>Flashlight</td>
<td>Provisions (Food)</td>
<td>Survival Instructions</td>
</tr>
<tr>
<td>Boathook</td>
<td>Hatchet</td>
<td>Radar Reflector</td>
<td>Table of Lifesaving Signals</td>
</tr>
<tr>
<td>Bucket</td>
<td>Heaving Line</td>
<td>Rainwater Collection Device</td>
<td>Thermal Protective Aids</td>
</tr>
<tr>
<td>Can Opener</td>
<td>Jackknife</td>
<td>Repair Kit</td>
<td>Tool Kit</td>
</tr>
<tr>
<td>Compass</td>
<td>Knife</td>
<td>Sea Anchor</td>
<td>Towline</td>
</tr>
<tr>
<td>Dipper</td>
<td>Ladder</td>
<td>Searchlight</td>
<td>Water</td>
</tr>
<tr>
<td>Drinking Cup</td>
<td>Mirror, Signaling</td>
<td>Seasickness Kit</td>
<td>Whistle</td>
</tr>
</tbody>
</table>

Fire Extinguisher

Emergency Gear Lockers (EGL)/Damage Control Lockers (DC Lockers)

| EGL #1         | Foredeck, After Doghouse, Port (Bow) |
| EGL #2         | Second Deck, Athwartship Passageway (Side Ports) |
| EGL #3         | Second Deck, 6-Hold, Stbd, Aft (6-Hold) |
| EGL #4         | Third Deck, 5-Hold, Stbd, Aft (Classrooms) |
| EGL #5         | Auxiliary Machinery Space (AMS) |

Sample EGL/DC Locker Equipment:
Classes of Fire

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>Combated With</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Common Combustibles (paper, rubbish, cloth);</td>
<td>water or soda acid</td>
</tr>
<tr>
<td>B</td>
<td>Flammable liquids and gases (oil, grease, gasoline);</td>
<td>foam or carbon dioxide</td>
</tr>
<tr>
<td>C</td>
<td>Electrically Induced (lighting, motors, circuitry);</td>
<td>carbon dioxide or dry chemical</td>
</tr>
<tr>
<td>D</td>
<td>Burning Metals (sodium, aluminum, pyrotechnics);</td>
<td>dry powder</td>
</tr>
</tbody>
</table>

Basic Ship Safety Information

"Safety is the business of all hands. The consequences of neglect of safety can be tragic. More than 50% of all accidents aboard ship are caused by not following safety practices."

-American Merchant Seaman's Manual

Doors/Hatches:
- Secured Properly; "Dogged"
- Maintain control of heavy doors or hatches until they are secured or controlled by another person

Tools:
- Ensure they are in good condition prior to use (no rust or corrosion on the tool, working end, or power cord)
- Tie off or secure if used aloft or over the side
- Ensure you are familiar with or qualified in the operation of each tool or piece of equipment you plan to use, depending on the task or project.

Electrical:
- Ensure power is secured prior to working on equipment or opening panels
- Ensure you are wearing rubber gloves, rubber-soled shoes or boots, and goggles or a face shield
- You should not be wearing any metal objects, such as rings, watches, or necklaces
- Ensure you are familiar with or qualified to repair the equipment you plan to work on
- Do not operate or attempt repairs to any equipment which is tagged out without prior permission from the appropriate Engineering Officer
- Do not touch bare wire, damaged wires, or panels- assume all circuits are live unless tested otherwise

Working Aloft or Over the Side:
- Ensure you are using a proper harness that is not corroded, frayed, worn, or has excessive paint, oil, or other substances on it which might affect the functionality of the harness.
- Ensure any equipment which is in the vicinity of where you will be working (such as radars on the radar mast) is secured or will not affect your ability to safely work in the area specified
- Attach all loose tools or items with lanyards or safety line/cord to fixed parts of the vessel
- Ensure you are wearing appropriate PPE for the job at hand, including safety goggles, gloves, a respirator, etc.
Summer Sea Term

The Summer Sea Term (SST) is an integral part of the Maritime College curriculum. Except for those with prior experience, every cadet is required to complete three summers sea terms. Cadets are the crew of the Empire State VI. Under the close supervision of licensed officers, cadets operate and maintain the vessel. This successful blend of operational training and leadership development has been the hallmark of the Maritime College for over 120 years.

During your first summer sea term, you will be in an entry-level position. You will be exposed to the basic skills necessary to become a good leader and officer. You will become familiarized with the vessel and will be trained in the basic practices of the seagoing profession. Your days will include watch standing, attending classes and labs, and performing vessel sanitation and maintenance.

As your second summer sea term begins, you will be ready to assume a more skilled position aboard the ship. Responsibilities are increased: you begin to assist in the supervision of personnel and professional tasks.

Finally, with your third summer sea term come the responsibilities and privileges of a cadet officer. First class cadets run the ship. This is one of the most meaningful experiences in the career of a Maritime College cadet.

During the course of each summer sea term, you will have the opportunity to visit a variety of countries with diverse cultures. You are urged to take advantage of organized tours to see the sights when ashore. Use common sense as a guide to conduct in foreign ports. Respect the laws of each country and act responsibly. Your conduct will reflect upon both the Maritime College and the United States.

The summer cruises are memorable experiences that will be with you for a lifetime. You will learn the practical aspects of sea-going life, and you will gain valuable experience for a future position in the maritime industry. Nothing reinforces education and training better than the practical application of that which you are taught. This is what summer sea term is all about.

Telephone Numbers

Maritime College phone extensions are located in the (718) area code. When dialing any extensions, dial (718)409-Campus Extension.

Campus Extensions
Cadet Watch Office 7454 Office of Student Housing 5567
University Police 7311 Registrar 7266
IDO / SQL Program Office 7450 Office of the Commandant 7352
Sickbay 7347 (Anderson Smith)

Ground Travel
Amtrak 800-USA-RAIL
Greyhound 800-231-2222
Blue Bird Cab 632-0909
Zero Cab Co. 822-2222

Airlines
American 800-433-7300
Delta 800-221-1212
US Air 800-428-4322
United 800-631-1500