Maine Maritime Academy & University of Maine NROTC Midshipmen Handbook 2022/2023



Table of Contents

Chain of Command Biographies	3
Honor Concept	9
CNO Initiatives - Design of the Navy 2.0	10
History of the US Navy	12
Mission Statement of the US Navy	12
USN Core Values	12
History of the United States Marine Corps	13
Mission Statement of the United States Marine Corps	13
USMC Core Values	13
Military Customs and Courtesies	15
Academics	19
Physical Training	24
Professional Knowledge	29
Financial Literacy	32
Military Programs and Policies	37
Military Structure	40
Military Standards	48
Military History	64
Global Challenges	69
Warfare Communities	90
Colors	106
Additional Information	110
Notes	118
Important Points of Contact	122
In Event of On-Campus Emergency	123

Chain of Command Biographies

CARLOS DEL TORO Secretary of The Navy (SECNAV)



The Honorable Carlos Del Toro assumed office as the 78th Secretary of the Navy on August 9th, 2021. The Cuban-American graduated from the U.S. Naval Academy in 1983 with a bachelor's degree in electrical engineering. He later earned a master's in national security from the Naval War College, a master's in legislative affairs from George Washington University, and a master's in space systems engineering from the Naval Postgraduate School.

With 22 years as a Surface Warfare Officer, Del Toro served aboard a frigate, a cruiser, an aircraft carrier, and two destroyers. His deployments brought him through the Pacific, the Mediterranean and Black Seas during the Cold War, and the Persian Gulf during Operations Desert Shield and Desert Storm. Some of Del Toro's most notable appointments include the First Commanding Officer aboard the destroyer USS Bulkeley in 1998, Senior Executive Assistant to the Director for Program Analysis and Evaluation in the Office of the Secretary of Defense, Director of Training for the Aegis Training and Readiness Center, and Special Assistant to the Director and Deputy Director of the Office of Management and Budget. He retired from the Navy in 2004 at the rank of Commander.

Carlos Del Toro founded SBG Technology Solutions Inc at the start of his civilian career, and took over as it's CEO and President. SBG started as a contractor servicing the U.S. Government, but also offers engineering expertise and technical solutions to customers of all fields. This includes many long-term Navy issues, to include artificial intelligence, cybersecurity, space systems, and more. Outside of his business's many awards and superior customer support, Del Toro has held leadership positions in many other associations.

Carlos Del Toro has a wife, Betty Del Toro, and they have four children together, and one grandchild.

ADMIRAL MICHAEL GILDAY Chief of Naval Operations (CNO)



Adm. Mike Gilday is the son of a Navy Sailor. A surface warfare officer, he is a native of Lowell, Massachusetts and a graduate of the U.S. Naval Academy. He holds master's degrees from the Harvard Kennedy School and the National War College.

At sea, he deployed with USS Chandler (DDG 996), USS Princeton (CG 59), and USS Gettysburg (CG 64). He commanded destroyers USS Higgins (DDG 76) and USS Benfold (DDG 65) and subsequently, commanded Destroyer Squadron 7, serving as sea combat commander for the Ronald Reagan Carrier Strike Group.

As a flag officer, he served as commander Carrier Strike Group 8 embarked aboard USS Dwight D. Eisenhower (CVN 69), and as commander, U.S. Fleet Cyber Command and U.S 10th Fleet. His staff assignments include the Bureau of Naval Personnel; staff of the Chief of Naval Operations, and staff of the Vice Chief of Naval Operations. Joint assignments include executive assistant to the Chairman of the Joint Chiefs of Staff and naval aide to the President.

As a flag officer, he served in joint positions as director of operations for NATO's Joint Force Command Lisbon; as chief of staff for Naval Striking and Support Forces NATO; director of operations, J3, for U.S. Cyber Command; and as director of operations, J3, for the Joint Staff. He recently served as director, Joint Staff.

He has served on teams that have been recognized with numerous awards and is the recipient of the Defense Distinguished Service Medal, Distinguished Service Medal, Defense Superior Service Medal (four awards), Legion of Merit (three awards), Bronze Star, Navy and Marine Corps Commendation Medal with Combat "V," and the Combat Action Ribbon.

Gilday began serving as the 32nd Chief of Naval Operations August 22, 2019.

Gen David H. Berger 38th Commandant of the Marine Corps



General David H. Berger assumed the duties of Commandant of the Marine Corps on July 11, 2019. A native of Woodbine, Maryland, General Berger graduated from Tulane University and was commissioned in 1981. He commanded at every level – including a Reconnaissance Company; 3d Battalion, 8th Marines in Haiti during Operation SECURE TOMORROW; Regimental Combat Team 8 in Fallujah, Iraq during Operation IRAQI FREEDOM.

As a General Officer, he commanded 1st Marine Division (Forward) in Afghanistan during Operation ENDURING FREEDOM; I Marine Expeditionary Force; U.S. Marine Corps Forces Pacific/Fleet Marine Forces Pacific; and Marine Corps Combat Development Command.

General Berger's staff and joint assignments include serving as Assistant Division Commander of 2d Marine Division; policy planner in the Strategic Plans and Policy Directorate, J-5; Chief of Staff for Kosovo Force (KFOR) Headquarters in Pristina, Kosovo; and Director of Operations in Plans, Policies, and Operations, Headquarters, U.S. Marine Corps; Deputy Commandant for Combat Development and Integration.

General Berger's formal military education includes the U.S. Army Infantry Officer Advanced Course, U.S. Marine Corps Command and Staff College, and U.S. Marine Corps School of Advanced Warfighting. He holds multiple advanced degrees including a Master of International Public Policy from Johns Hopkins University School of Advanced International Studies.

Rear Admiral JOSEPH F. CAHILL Deputy Director Resources and Acquisition, J-8, Joint Staff



A native of St. Albans, Vermont, RDML Joe Cahill graduated from the University of Maine in 1992 with a Bachelors Degree in Political Science.

His first at sea assignment was aboard USS CONSTELLATION (CV 64) where he served as a Propulsion Division Officer, Fuels Officer, and Surface Warfare Module officer. Completing his Surface Warfare, Engineering Officer of the Watch, and Tactical Action Officer qualifications Cahill was then assigned to the USS FITZGERALD (DDG 62) as Combat Information Center Officer. CAPT Cahill's next at sea assignment was aboard USS PAUL HAMILTON (DDG 60) where he served as Operations Officer. From 2002-2005 CAPT Cahill commanded USS MONSOON (PC 4) deploying in support of Operations Noble Eagle, Iraqi Freedom, and Enduring Freedom. Cahill's next at sea assignment was as the executive officer aboard USS RUSSELL (DDG 59). From 2010-2012 he commanded USS PREBLE (DDG 88). His last at sea assignment was as Commanding Officer USS BUNKER HILL (CG 52) where he served as the Integrated Air and Missile Warfare Commander for CSG-9. During these operational tours, he completed eight deployments to the Arabian Gulf, Red Sea, Gulf of Oman and Pacific/Indian Oceans.

Ashore RDML Cahill has served on the Joint Staff as an Action Officer; as the Executive Assistant to the Director of Strategy and Policy on the staff of the Chief of Naval Operations (CNO); Executive Assistant to the Director for Operations U.S. Pacific Command; Branch Head, Future Warships and new construction Destroyers, OPNAV N96; Director of Advanced Tactics N5, Naval Surface & Mine Warfighting Development Center, and Director of Warfighting, Assessments and Requirements (N9 WAR) for COMNAVSURFOR. Director of Sea Combat Division, Surface and Mine Warfighting Development Center; and the Executive Assistant to Deputy CNO for Warfighting Requirements and Capabilities (N9).

His awards include the Legion of Merit, Defense Meritorious Service Medal, the Meritorious Service Medal, the Joint Service Commendation Medal, the Navy Commendation Medal, the Navy Achievement Medal and a variety of unit and campaign awards.

RADM JENNIFER S. COUTURE Commander, Naval Service Training Command



Rear Admiral Couture grew up in Vineland, New Jersey, and was commissioned through the George Washington University NROTC Unit in 1995 with a Bachelor of Arts in International Relations. She also holds a master's degree from Old Dominion University, with additional training in the U.S. Naval War College and Joint Forces Staff College. RADM Couture has sea time aboard the USS Wasp (LHD 1), USS Saipan (LHA 2), USS Elrod (FFG 55), USS Leyte Gulf (CG 55), and USS Porter (DDG 78), and commanded the USS Kauffman (FFG 59) and Destroyer Squadron 28 while deployed with the Harry S. Truman Strike Group. She has played her part in Operations Joint Endeavor, Active Endeavor, Iraqi Freedom, Enduring Freedom and Inherent Resolve.

Couture's Shore duties include surface operations officer for Commander, U.S. Atlantic Fleet; flag secretary to Commander, Naval Surface Force Atlantic; contingency plans officer, U.S. Joint Forces Command; and, assistant chief of staff for Manning, Manpower, and Personnel (N1) for Commander, Naval Surface Force Atlantic, federal executive fellow at the Center for a New American Security, and as special assistant for legislative matters to the Chief of Naval Personnel.

RADM Couture relieved RADM Milton Sands at RTC Great Lakes on May 27th, 2021. Her prior billet was as director for the Commander's Action Group, for Commander, Naval Surface Force Atlantic. She has numerous unit and personal awards including the Legion of Merit (second award).

CAPT SEAN KEARNS Commanding officer, Maine Maritime Academy University of Maine NROTC



CAPT Kearns is a Maine native who enlisted in the Navy in 1987 and some years later attended Boston University as part of the NROTC program. He graduated BU in 1994 with a Bachelor of Science in Mechanical Engineering and shortly thereafter reported for his first assignment aboard USS THOMAS S. GATES (CG 51) as Communications Officer and later Assistant Operations Officer.

CAPT Kearns' other operational assignments include: Reactor Training Assistant in USS SOUTH CAROLINA (CGN 37); First Lieutenant in USS CARTER HALL (LSD 50); Reactor Electrical Assistant in USS GEORGE WASHINGTON (CVN 73), and Executive Officer in USS SAN ANTONIO (LPD 17). These assignments involved numerous deployments in support of overseas operations.

Following two years in command of USS CONSTITUTION as the ship's 73rd commanding officer, CAPT Kearns reported to PCU MICHAEL MONSOOR (DDG 1001) in Bath, ME as the executive officer, seeing the ship and crew through to acceptance in early 2018.

CAPT Kearns' shore assignments include: Naval Reactors HeadQuarters (NRHQ) in Washington, DC as Action Officer for Surface Nuclear Propulsion matters; U.S. SECOND Fleet in the Policy, Requirements, and Experimentation branch; and Surface Warfare Officers School Command as the Director of Fleet Enlisted Engineering Training.

CAPT Kearns attended post-graduate education at Massachusetts Institute of Technology as well as Naval War College (Senior Officer Course). He holds Master of Science degrees in Naval Architecture and Marine Engineering, Mechanical Engineering, and National Security and Strategic Studies.

CAPT Kearns' personal awards include the Meritorious Service Medal (6 awards), the Navy-Marine Corps Commendation Medal (2 awards), the Navy and Marine Corps Achievement Medal (2 awards) and numerous campaign and unit awards.

CAPT Kearns and his wife Julia, also a Maine native, are thrilled to be back in their home state where they both work in education; CAPT Kearns as Professor of Naval Science and Commanding Officer of

NROTC Unit, Maine Maritime Academy and University of Maine, and Julia as a 7th-grade humanities teacher.

Honor Concept

Midshipmen are persons of integrity: They stand for that which is right.

They tell the truth and ensure that the truth is known.

They do not lie or tolerate those who do.

They embrace fairness in all actions. They ensure that work submitted as their own is their own, and that assistance received from any source is authorized and properly documented.

They do not cheat or tolerate those who do.

They respect the property of others and ensure that others are able to benefit from the use of their own property.

They do not steal or tolerate those who do.

2022 CNO Professional Reading Program

- 1. "To Rule the Waves" by Bruce Jones
- 2. "A Brief Guide to Maritime Strategy" by James Holmes
- 3. "China as a 21st Century Naval Power" by Michael. A. McDevitt
- 4. "Not One Inch" by Mary E. Sarotte
- 5. The Sailor's Bookshelf: Fifty Books to Know the Sea" by Admiral James G. Stavridis
- 6. "Army of None: Autonomous Weapons and the Future of War" by Paul Scharre
- 7. "Fortune Favors Boldness" by Barry Costello
- 8. "The Last Stand of the Tin Can Sailors: The Extraordinary World War II Story of the U.S. Navy's Finest Hour" by James Hornfischer
- 9. "World War II at Sea: A Global History" by Craig Symonds
- 10. "Ashley's War: The Untold Story of a Team of Women Soldiers on the Special Ops Battlefield" by Gayle T. Lemmon
- 11. "Dare to Lead" by Brene Brown
- 12. "Mindset: The New Psychology of Success" by Carol Dweck

CNO Initiatives - Design of the Navy 2.0

Mission: The United States Navy will be ready to conduct prompt and sustained combat incident to operations at sea. Our Navy will protect America from attack, promote American prosperity, and preserve America's strategic influence. U.S. naval operations—from the seafloor to space, from the blue water to the littorals, and in the information domain—will deter aggression and enable resolution of crises on terms acceptable to the United States and our allies and partners. If deterrence fails, the Navy will conduct decisive combat operations to defeat any enemy.

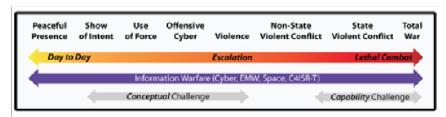


Figure 1: <u>The Competition-Conflict Spectrum for the Military Dimension of Power</u>. Navy concepts and capabilities should improve our ability to respond to an adversary across the spectrum from day to day operations, to escalation, to lethal combat.

There are three forever-changing factors that continue to alter and influence the security environment of today. Those three factors are the increased use of the maritime domain, the rise of global information systems, and the increasing rate of technological creation and adoption. The Navy's response to this challenge is in the following initiatives.

1. The Navy will become more agile

The Navy will develop concepts and technology to "expand the competitive space." With the Joint Force, we will restore agility—conceptual, geographic, and technological—to impose cost on our adversaries across the competition-conflict spectrum. Our efforts will be prioritized to exploit our strengths against our competitors' weaknesses. We will leverage the creativity and expertise of the Fleet.

2. The Navy will compete in ways that are sustainable

Overextension in the short- and long-term—the pursuit of ends that are beyond the ways and means of the force—is self-defeating. Over the long timelines that characterize the current competition, the Navy will be ready to fire first, but also be able to defend and return fire. We will aim to act as early as possible to de-escalate any crisis on our terms and be ready for the next move. This will require that we sustain the fight with the logistics capabilities needed to refuel, rearm, resupply, and repair our operational forces.

3. The Navy, fighting with the Joint Force and with our allies and partners, will control the high end of maritime conflict.

The Navy is a key enabler of the Joint Force's ability to prevent China and Russia from controlling the Eurasian rimland and its adjacent seas. We will protect the sea lines of communication between the United States and its allies and partners.

CHIEF OF NAVAL OPERATIONS NAVIGATION PLAN 2022

THE U.S. NAVY IS UNIQUELY POSITIONED TO STRENGTHEN INTEGRATED DETERRENCE, CAMPAIGN FORWARD, AND BUILD ENDURING WARFIGHTING ADVANTAGES. WE WILL BUILD, MAINTAIN, TRAIN, AND EQUIP A COMBAT CREDIBLE, DOMINANT NAVAL FORCE TO STRENGTHEN OUR STRATEGIC PARTNERSHIPS, DETER CONFLICT, AND, IF CALLED UPON, WIN OUR NATION'S WARS.

OUR PRIORITIES

- SAILORS
- READINESS
- CAPABILITIES
- CAPACITY

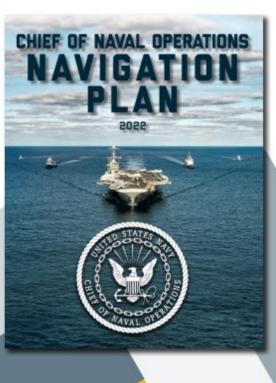
WE WILL DELIVER COMBAT CREDIBILITY IN CONTESTED SEAS THROUGH OUR FORCE DESIGN IMPERATIVES:

- I. EXPAND DISTANCE
- 2. LEVERAGE DECEPTION
- 3. HARDEN DEFENSE
- 4. INCREASE DISTRIBUTION
- 5. ENSURE DELIVERY
- 6. GENERATE DECISION ADVANTAGE

BOTTOM LINE

TRAINED, EDUCATED, AND RESILIENT SAILORS REMAIN OUR ASYMMETRIC ADVANTAGE. WE WILL EMPOWER OUR PEOPLE BY BUILDING A WARFIGHTING CULTURE BASED ON SELF-ASSESSMENT, SELF-CORRECTION, AND CONTINUOUS LEARNING.









History of the US Navy

The U.S. Navy traces its origins to the Continental Navy, which was established on October 13, 1775 during the American Revolutionary War. The U.S. Navy played a major role in the American Civil War by blockading the Confederacy and seizing control of its rivers. It played the central role in the World War II defeat of Imperial Japan.

The US Navy emerged from World War II as the most powerful navy in the world, a title it still holds to this day. The 21st century U.S. Navy maintains a sizable global presence, deploying in strength in such areas as the Western Pacific, the Mediterranean, and the Indian Ocean. It is a blue-water navy with the ability to project force onto the littoral regions of the world, engage in forward deployments during peacetime and rapidly respond to regional crises, making it a frequent actor in U.S. foreign and military policy.

Mission Statement of the US Navy

To maintain, train and equip combat-ready naval forces capable of winning wars, deterring aggression and maintaining freedom of the seas.

USN Core Values

Honor: I am accountable for my professional and personal behavior. I will be mindful of the privilege I have to serve my fellow Americans.

<u>Courage</u>: Courage is the value that gives me moral and mental strength to do what is right, with confidence and resolution, even in the face of temptation or adversity.

<u>Commitment</u>: The day-to-day duty of every man and woman in the Department of the Navy is to join together as a team to improve the quality of our work, our people, and ourselves.





History of the United States Marine Corps

The historic birth of the Marine Corps occurred in 1775 during the Revolutionary War when two battalions of Marines were commissioned to serve as landing forces for the Continental Navy. Their first amphibious landing was a success in 1776 when marine forces led by Captain Samuel Nicholas defeated the British at Fort Nassau and captured New Province Island in the Bahamas.

Later, in 1798 the U.S. Marine Corps was made a permanent military force by a bill signed by President John Adams. In the years following the Marine Corps would establish their reputation for their relentless fighting spirit and resolve in battles like The Battle of Derna (1805), The Battle of the Chapultepec (1847), and the Battle of Belleau Wood (1918) where they received the nickname Teufelhunden, or "devil dogs," from German soldiers. Today the Marine Corps is the United States' premier expeditionary force, ready to launch operations anywhere in the world.

Mission Statement of the United States Marine Corps

As America's expeditionary force in readiness since 1775, the Marines are forward deployed to win our nation's battles swiftly and aggressively in times of crisis. We fight on land, sea and air, as well as provide forces and detachments to naval ships and ground operations. National Security Act of 1947 directed the Marine Corps to conduct: (1) the seizure or defense of advanced naval bases and other land operations to support naval campaigns; (2) the development of tactics, techniques and equipment used by amphibious landing forces; and (3) such other duties as the President may direct.

USMC Core Values

Honor: This is the bedrock of our character. It is the quality that empowers Marines to exemplify the ultimate in ethical and moral behavior: to never lie, cheat, or steal; to abide by an uncompromising code of integrity; to respect human dignity; and to have respect and concern for each other. It represents the maturity, dedication, trust, and dependability that commit Marines to act responsibly, be accountable for their actions, fulfill their obligations, and hold others accountable for their actions.

Courage: The heart of our Core Values, courage is the mental, moral, and physical strength ingrained in Marines that sees them through the challenges of combat and the mastery of fear, and to do what is right, to adhere to a higher standard of personal conduct, to lead by example, and to make tough decisions under stress and pressure. It is the inner strength that enables a Marine to take that extra step.

Commitment: This is the spirit of determination and dedication within members of a force of arms that leads to professionalism and mastery of the art of war. It promotes the highest order of discipline for unit and self and is the ingredient that instills dedication to Corps and country 24 hours a day, pride, concern

for others, and an unrelenting determination to achieve a standard of excellence in every endeavor. Commitment is the value that establishes the Marine as the warrior and citizen others strive to emulate.

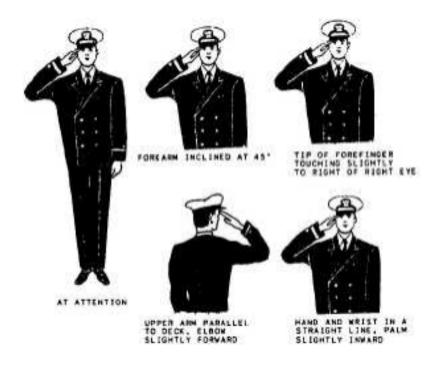
Paths to Commission

- Naval Reserve Officer Training Corps Units
- United States Naval Academy
- Officer Candidate School (USN)
- Chief Warrant Officer Program
- Limited Duty Officer Program
- Seaman to Admiral Program
- Platoon Leaders Course (USMC)
- Officer Candidate Course (USMC)
- Marine Enlisted Commissioning Education Program (USMC)

Military Customs and Courtesies

Fleet Admiral Chester Nimitz, one of the key figures in the U.S. Navy's victory at sea in the Pacific during World War II, once said, "A naval ceremony should follow the long established rules for its execution carefully and exactly. Such attention to detail honors those who, long before us, established the ritual, and all those who, past, present, and future, take part in that ceremony."

Saluting:



How to Salute:

- Salute from a position of attention if you are standing still.
- If you are walking, salute from an erect position.
- Your upper arm should be parallel to the deck or ground, forearm inclined at a 45-degree angle, hand and wrist straight, palm slightly inward, thumb and fingers extended and joined, with the tip of the forefinger touching the lower edge of your cap, slightly to the right of the eye.
- Face the person saluted, or if you are walking, turn your head and eyes toward the person. If possible, look directly into the eyes of those you salute.
- Allow time for the person being saluted to see and return the salute; if both of you are walking, a distance of about six steps is about right.
- Hold the salute until the officer has returned or acknowledged it, and then bring your hand smartly to your side.
- In most cases, a salute is accompanied by a verbal greeting. For example, when you meet an officer you know, you should accompany your salute with "Good morning, Lieutenant Jones". If you do not know the officer's name, "Good morning ma'am", or "Good morning sir" is appropriate.
- If on a double, slow to a walk when saluting.
- If you are carrying something in both hands and cannot render the hand salute, look at the officer as though you were saluting and render a verbal greeting as described above.
- If using a cell phone, pause, drop the phone to your side, stand at attention, and render the salute.

Salutes are customarily given with the right hand, but there are exceptions. If your right arm is injured in such a way as to prevent you from saluting, or if you are using your right hand for some

military purpose, such as a Sailor holding and blowing a boatswain's pipe, then it is considered appropriate for you to salute with your left hand.

<u>Sailors and Marines must be covered if they are going to salute</u>. Soldiers and Airman may salute uncovered. Be aware that these differences in custom among the services should be modified if the circumstances warrant.

If you encounter a senior officer who is not covered, and you are covered, you would still render a salute, even if the senior cannot return the salute.

Whom to Salute:

- Salute senior officers of all U.S. services and all allied foreign services. Officers in the U.S. Merchant Marine and Public Health Service wear uniforms that closely resemble Navy uniforms, and they too rate a salute
- Salute senior officers who are close enough to be recognized whether they are wearing a uniform or civilian clothes.
- •Personnel wearing the Medal of Honor are saluted no matter what their rate or rank.
- Salute the person standing an Officer of the Deck (OOD) watch no matter what their rank or rate. The same applies to anyone taking a division/detail muster.
- Salute senior officers even if they are uncovered or their hands are occupied. Your salute will be acknowledged by a verbal greeting.
- Salute all officers riding in vehicles, while those in the vehicle both render and return salutes, as required. The vehicle's driver salutes if the vehicle is stopped; to do so while the vehicle is in motion endangers the safety of the occupants and may be omitted.
- If you are walking with or standing by a senior officer, do so on his/her left side. If the occasion for a salute arises, salute when the officer salutes, not before. This is the case whether he/she is saluting a junior or a senior officer.
- If you are standing in a group and a senior officer approaches, the first to see the senior should call "Attention", and all face the officer and salute.
- If you are overtaking a senior officer and it becomes necessary to pass, you should do so to the left, salute when abreast of the officer, and ask, "By your leave, sir/ma'am?" The officer should reply "Very well", and return the salute.
- If you are at a crowded gathering or in a congested area, you normally salute only when addressing or being addressed by senior officers.
- Because you are in uniform, young children or military retirees may salute you. Return the salute.
- When in doubt, salute. If you salute someone who does not rate a salute, you may cause yourself some slight embarrassment by appearing less informed than you should be. However, if you fail to salute someone who does rate one, you appear to be unmilitary, discourteous, and a shirker. No one ever got into trouble for saluting when it was not expected.

When not to Salute:

- In formation. The person in charge will salute for you or, in some cases, will give the order for you and others in the formation to salute. You are relieved of any responsibility to salute on your own when in formation.
- When engaged in work and saluting would interfere with what you are doing. If you are part of a work detail, the person in charge of the detail will salute for the entire group.
- When carrying something with both hands and saluting would require you to put all or part of your load down. A verbal greeting is still appropriate in this case.
- In public places where saluting is obviously inappropriate (such as on a bus or while standing in line at a theater). A verbal greeting is appropriate.

• At mess. If you are addressed by an officer while eating, you should stop eating and sit at attention until the officer has departed. Courtesy dictates that the officer will keep the interruption brief.

The Address:

Officers:

- Officers are always addressed and referred to by their title or rank, such as admiral, captain, or commander.
- By tradition, the commanding officer of any ship or station, no matter what his/her rank, is addressed and referred to as "Captain".
- An officer in the medical or dental corps is addressed and referred to by rank or as "Doctor".
- A chaplain may be called "Chaplain" no matter what the rank.

Enlisted Personnel:

- A chief petty officer is addressed as "Chief Petty Officer Smith", or more informally as "Chief Smith" or "Chief" if you do not know his or her name.
- Master and senior chief petty officers are customarily addressed and referred to as "Master Chief Smith," "Senior Chief Smith," "Master Chief," or "Senior Chief" if you do not know their names.
- Other petty officers are addressed and referred to by their specific rates. For example, you would address GM2 Johnson as "Gunner's Mate Second Class Johnson", "Petty Officer Second Class Johnson", or "Petty Officer Johnson".
- Nonrated personnel those in pay grades E-1 through E-3 are introduced as "Seaman Wells" or "Fireman Apprentice Johnson" and referred to in the same manner or by their last names only in informal situations.
- Enlisted Marines are addressed using their full rank such as "Staff Sergeant Smith" or "Master Sergeant Jones" their rank is never shortened to just "Sergeant Smith" if they are an E-6 or above.

Reporting Procedures:

When Entering:

- *Knock three times*
- "Good (morning/afternoon/evening), (Sir/Ma'am/Rank). Candidate requests permission to enter."
- "Enter"
- "Enter, aye-aye, (Sir/Ma'am/Rank)."
- *Knock on hatch as entering*
- "Candidate on deck."
- *Stop, at attention, three paces in front of desk/officer in charge*
- *Salute if covered*
- "Good (morning/afternoon/evening), (Sir/Ma'am/Rank). Candidate reporting as ordered. Good (morning/afternoon/evening), (Sir/Ma'am/Rank)."
- "Good (morning/afternoon/evening)."
- *Cut salute*
- *If told to relax, stand at parade rest. If not, stand at attention.*

When Exiting:

- "Dismissed"
- *Snap to attention*
- "Dismissed, aye-aye, (Sir/Ma'am/ Rank)."
- *Salute if covered*
- "Good (morning/afternoon/evening), (Sir/Ma'am/Rank)."
- "Good (morning/ afternoon/ evening)."
- *Cut salute*

- *About-face*
- *Knock on hatch as exiting*
- "Candidate off deck."

Remember to:

- Always keep bearing
- When in doubt, assume position of attention
- Maintain eye contact

Academics

Sound academic foundations are necessary to ensure that NROTC graduates can satisfactorily complete Navy post-accession training and be professionally competitive in the various warfare communities.

Academic Standards of MIDN Performance:

- 1) Have no failing grade in any subject required for completion of degree or commissioning requirements.
- 2) Maintain a cumulative GPA on a 4.0 scale of 2.5
- 3) A term GPA of 2.5
- 4) Maintain satisfactory overall progress toward completion of degree requirements within established program time limits while maintaining full-time student status per institution regulations
- 5) Keep their NROTC class advisors fully informed about all matters pertaining to performance, degree progress, and changes to their degree completion program.

To maximize the opportunity to achieve these important standards, the unit may direct mandatory study, not to exceed 15 hours per week.

What is the minimum GPA you need to maintain for a semester in the NROTC program?

A minimum of 2.5 is required but the unit's goal is that all students stay above a 2.75

What is the minimum GPA you need to maintain for a cumulative time in the NROTC program?

A minimum of 2.5 is required but the unit's goal is that all students stay above a 2.75

In addition to their required coursework for completion of their academic major, midshipmen will take one Naval Science class every semester. These classes explore fields of study which are essential to becoming a successful naval officer. Course catalog numbers and credit hours will vary by college or university, but students should expect to take 15-18 credits per semester, including Naval Science class.

Scholarship or

Typical		Advan Standi		_			
Timing		Navy	USMC	Nurse	MECEP	STA- 21	SSMP
4/C	Introduction to Naval Science	•	•	•		NSI	•
4/0	Sea Power and Maritime Affairs	•	•	•		NSI	
3/C	Leadership and Management	•	•	•		•	
3/C	Navigation	•				NSI	
	Strategic Sealift Officer Course						•
2/C	Naval Ship Systems I (Engineering)	•				NSI	
2/C	Naval Ship Systems II (Weapons)	•				NSI	
	Evolution of Warfare		•		•¹		
	Naval Operations and Seamanship	•				NSI	
1/C	Fundamentals of Maneuver Warfare		•		•1		
	Leadership and Ethics	•	•	•	•	•	•
All terms	Naval Science Laboratory	•	•	•	•	•	•

·: Required

Complete			Scho	larship		ed Standing			
By End of		Sem Hrs	Navy	USMC	Navy	USMC	Nurse	STA-21 ²	SSMP
3/C	Calculus	6	•	+	+	+		•	
3/0	English	6	•	•	•	•	•	•	*
2/C	Physics (calculus based)	6	•	+	+	+		•	
2/0	College Algebra or higher	6			•				*•
1/C	American History or National Security Policy	3	•	•	•	•		2	
	World Culture and Regional Studies ³	3	•	+	•	+	•	2	
	Physical Science	6			•				

- •: Required
- +: Advised to make student competitive for USN scholarship
- *: Only required for SSMP enrolled at a State Maritime Academy

Midshipmen are required to seek academic help for each calculus and calculus-based physics course they are taking. Midshipmen taking these courses must receive two hours of tutoring each week per course they are enrolled in, and are responsible for keeping a log of their tutoring hours to be verified by the Academics Officer.

Tutoring Resources MMA

Center for Student Success/Buoy House

Includes: Math/physics, Writing, and Testing Center

207.326.2511 or tutoring@mma.edu

https://mainemaritime.edu/support-services/academic-support/

Tutoring Resources UMaine

Tutor Program,104, Dunn Hall, 207.581.2351 https://umaine.edu/tutorprogram/smallgrouptutoring/

Academic Deficiencies:

An academic deficiency exists when any of the following apply:

- 1) Failed or incomplete courses. (Passing grades which do not permit enrollment in a required follow on course may still represent a deficiency for failure to maintain satisfactory progress)
- 2) Failure to maintain good academic standing with the academic institution.
- 3) Failure to meet standards listed above
- 4) Term credit less than 12 credits (excluding Naval Science credits) without CO approval
- 5) Calculus or physics requirement not met as scheduled without a time-of-completion waiver
- 6) For a repeat failure of a program required calculus or physics course the unit must place the student on leave of absence (LOA).

Summer Training:

A summer training period is held annually to furnish NROTC midshipmen the opportunity to gain experience in the practical application of their studies in Naval Science. These training periods range from two to six weeks in length with embedded cruise experiences three to four weeks in length. NROTC Scholarship midshipmen are required to participate in summer training during each of the three summers between freshman and senior years. The first class cruise shall not be waived.

Fourth Class Summer Training: New Student Indoctrination (NSI) at Naval Station Great Lakes is a key component in the training cycle of a Midshipman and is a program requirement for participation in the NROTC program. The training event is normally conducted the summer prior to a midshipman candidate reporting to their respective NROTC unit. Midshipman candidates who were unable to participate the summer leading up to their fourth class year will be required to complete NSI the following year or be disenrolled from the NROTC program at that time.

Third Class Summer Training: Normally conducted between the freshman and sophomore academic years for all scholarship students who have completed NSI, Career Orientation and Training for Midshipmen (CORTRAMID) is warfare community indoctrination.

Second Class Summer Training: Second Class Summer Training is conducted between the sophomore and junior academic years for all scholarship students who have completed NSI. This at-sea training on surface ships and submarines furnishes midshipmen with basic shipboard orientation, an introduction to senior enlisted life, the Chief and division officer relationship and the roles of the work center supervisor. Sea Trials events fulfill the summer cruise requirement, but midshipmen may request a second class cruise in addition to Sea Trials. Second class midshipmen who completed NSI but did not participate in CORTRAMID as third class midshipmen may do so in lieu of second class cruise if billets are available. Second Class Midshipmen who did not complete NSI shall participate in Sea Trials in lieu of NSI and CORTRAMID. Marine Option midshipmen shall attend an amphibious cruise or embed with USMC units.

First Class Summer Training: First Class Summer Training is conducted between the junior and senior academic years for all first class NROTC midshipmen. First class cruise provides exposure to the officer and wardroom environment and is executed in an at-sea training environment aboard a ship. First class Navy Option midshipmen may also opt for aviation, submarine, or Foreign Exchange Training for Midshipmen (FOREXTRAMID). When practicable the type of cruise should be aligned with anticipated designator. Marine Option first class midshipmen attend Officer Candidate School (OCS) in Quantico, VA.

Eligibility for Summer Training:

To be eligible for Third, Second, and First Class Summer Training, midshipmen must be on scholarship or Advanced Standing, meet the physical fitness and body composition standards of Section 3-20, and cannot be on LOA. Due to the physically demanding nature, OCS carries a minimum PFT score recommendation of 265.

Scholarship Midshipmen: For Scholarship Program students, the timing of the appointment to Scholarship status determines the requirement for participation in summer training. All 4-year NROTC Scholarship students should participate each summer. Those appointed to 3-year scholarships are eligible to cruise following completion of NSI and at least one semester on scholarship. Three-year scholarship recipients, following completion of NSI, may participate in CORTRAMID or Second Class cruise and First Class summer training periods, or OCS for Marine Option midshipmen. One-year and two-year scholarship recipients shall participate in first class summer training only upon completion of NSI or Sea Trials.

College Program Midshipmen: Each NROTC College Program Advanced Standing student is required to participate in the first class cruise following completion of NSI or Sea Trials. College

Program students shall not participate in Third or Second Class summer training.

Strategic Sealift Midshipmen: SSM expressing a strong interest in active Naval Service following graduation are eligible to participate in at-sea cruises similar to those of NROTC midshipmen. However, as they are not NROTC midshipmen, they are ineligible for NROTC Program funding and generally pay all expenses out-of-pocket, including transportation, lodging, and meals.

Summer Training Opportunities:

New Student Indoctrination (NSI): Basic militarization and training program REQUIRED for all midshipman entering programs.

CORTRAMID: Navy ROTC second and third class scholarship midshipmen assigned to this training. Training consists of surface, submarine, aviation, and Marine Corps Orientation

MIDN training officer at NROTC Indoctrination (Great Lakes): Selected midshipmen during their 1/C or 2/C cruise will be an assistant instructor for New Student Indoctrination. officers and enlisted to get a better sense of the surface warfare community.

MAGTF: Selected Marine midshipmen in their second class year, will train with a Marine Air-Ground Task Force.

Sea Trials: Professional military training and evaluation prior to Junior year.

Marine Corps Officer Candidate's School (Senior's POI): First class Marine Option Midshipmen are assigned to OCS at Brown Field, MCB Quantico, for the Senior's POI (6-week course).

Surface Cruise: Selected Midshipmen during their 1/C or 2/C cruise s aboard a USN Ship, working with

Nuclear Power: Midshipmen can be assigned to nuclear submarine or nuclear surface vessels

Afloat Aviation Option: Selected midshipmen train aboard a carrier; training includes flight time on navy aircraft if feasible

Ashore Aviation Option: Selected midshipmen train with a Navy aviation squadron, including flight time if feasible

Yard Patrol Cruise: Selected Midshipmen during their 1/C or 2/C cruise will spend 3-4 weeks in the classroom and underway in a realistic seagoing environment, enhancing the key maritime skills of Seamanship, Navigation and Leadership on the USNA's yard patrol craft.

Foreign Exchange Training of Midshipmen (FOREXTRAMID) and Japanese Maritime Self-Defense Force (JMSDF) Exchanges: Selected midshipmen train with Navies of other countries. Seal Officer Assessment Screening (SOAS): Selected Midshipmen train in their first-class year to be selected to go to NAB Coronado with BUD/S instructors. Two weeks long, requires preliminary application and selection.

EOD Selection Cruise: Selected Midshipmen train in their first-class year to be selected as a member of the Explosive Ordnance Disposal community in their first-class year. Four weeks long, requires preliminary application and selection.

Major Tier System:

Tier 1: Engineering (including Aerospace, Chemical, Electrical, Mechanical Engineering, Naval, Nuclear Engineering, Ocean Engineering, and Systems)

Tier 2: Engineering (Including Agricultural, Biological, Architectural, Medical, Civil, Computer, Construction, Industrial, Manufacturing, Materials, Metallurgical, Petroleum, Polymer/Plastics), Astrophysics, Biochemistry, Biophysics & Molecular Biology, Biomathematics & Bioinformatics, Cellular Biology & Anatomical Sciences, Chemistry, Computer Programming, Computer Science/Information Technology, Engineering Physics, Engineering Science, General Engineering, General Science, Mathematics, Microbiological Sciences and Immunology, Mining & Mineral Engineering, Nuclear & Industrial Radiologic Technology, Oceanography, Pharmacology & Toxicology, Physics, Physiology, Pathology & Related Sciences, Quantitative Economics, Statistics, and Textile Sciences

Tier 3: Non-technical academic majors (All other academic majors)

Physical Training

Physical Readiness Test (PRT) Standards:

The Minimum score for participation in NROTC is a "Good-Low"; however, the unit expects all MIDN to maintain an "Excellent-Low" or better.

The PRT is scored by averaging the "Points" earned from each of the three events (Push-ups, Forearm Planks, and 1.5-mile run).

Perform			Males: Age 20 - 24 years									
Perform	ance	Points	Push- ups	Forearm	1.5 - mile	2-km	500 - yd	450 - m				
Category	Level	Fusii- ups		Planks	run	row	swim	swim				
Outstanding	High	100	87	3:20	8:30	7:05	6:30	6:20				
Outstanding	Medium	95	86	3:15	9:00	7:15	7:00	6:50				
Outstanding	Low	90	81	3:10	9:15	7:25	7:30	7:20				
Excellent	High	85	77	3:00	9:45	7:35	8:00	7:50				
Excellent	Medium	80	74	2:50	10:00	7:45	8:15	8:05				
Excellent	Low	75	71	2:40	10:30	7:55	8:45	8:35				
Good	High	70	64	2:20	10:45	8:15	9:30	9:20				
Good	Medium	65	55	2:00	11:30	8:35	10:30	10:20				
Good	Low	60	47	1:40	12:00	8:55	11:30	11:20				
Satisfactory	High	55	45	1:30	12:45	9:05	12:00	11:50				
Satisfactory	Satisfactory Medium		42	1:20	13:15	9:15	12:15	12:05				
Probatio	nary	45	37	1:10	13:30	9:25	13:00	12:50				

Perform	ance	1		Fe	males: Age	20 - 24 yea	irs	
Fellollii	ance	Points	Durch	Forearm	1.5 - mile	2-km	500 - yd	450 - m
Category	Level		Push- ups	Planks	run	row	swim	swim
Outstanding	High	100	48	3:10	9:47	8:05	7:15	7:05
Outstanding	Medium	95	47	3:05	11:15	8:15	8:00	7:50
Outstanding	Low	90	44	3:00	11:30	8:25	8:45	8:35
Excellent	High	85	43	2:50	12:15	8:35	9:15	9:05
Excellent	Medium	80	40	2:40	12:45	8:45	9:45	9:35
Excellent	Low	75	39	2:30	13:15	8:55	10:00	9:50
Good	High	70	33	2:10	13:30	9:15	11:00	10:50
Good	Medium	65	28	1:50	13:45	9:45	12:15	12:05
Good	Low	60	21	1:30	14:15	10:15	13:15	13:05
Satisfactory	High	55	20	1:20	15:00	10:25	13:45	13:35
Satisfactory			17	1:10	15:15	10:35	14:00	13:50
Probatio	nary	45	16	1:00	15:30	10:45	14:30	14:20

Physical Fitness Test (PFT) Standards:

MCO 6100.13 - The goal is a perfect score, the expectation is 285 or better.

- *Max Plank Score adjusted to 3:45 starting 1 January 2022
- **Planks become mandatory over crunches in 2023 Pull-Ups-

	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+					
Max	20	23	23	23	21	20	19	18					
Min	4	5	5	5	5	5	4	3					
Max	100	100	100	100	100	100	100	100					
Min Pts	40	40	40	40	40	40	40	40					
				Male P	ull-ups								
Reps	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+					
23		100	100	100									
22		97	97	97									
21		93	93	93	100								
20	100	90	90	90	96	100							
19	96	87	87	87	93	96	100						
18	93	83	83	83	89	92	96	100					
17	89	80	80	80	85	88	92	96					
16	85	77	77	77	81	84	88	92					
15	81	73	73	73	78	80	84	88					
14	78	70	70	70	74	76	80	84					
13	74	67	67	67	70	72	76	80					
12	70	63	63	63	66	68	72	76					
11	66	60	60	60	63	64	68	72					
10	63	57	57	57	59	60	64	68					
9	59	53	53	53	55	56	60	64					
8	55	50	50	50	51	52	56	60					
7	51	47	47	47	48	48	52	56					
6	48	43	43	43	44	44	48	52					
5	44	40	40	40	40	40	44	48					
4	40						40	44					
3								40					

					- "										
					Pullups										
	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+							
Max	7	11	12	11	10	8	6	4							
Min	1	3	4	3	3	2	2	2							
Max	100	100	100	100	100	100	100	100							
Min Pts	60	60	60	60	60	60	60	60							
		Female Pull-ups -20 21-25 26-30 31-35 36-40 41-45 46-50 51+													
Reps	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+							
12			100												
11		100	95	100											
10		95	90	95	100										
9		90	85	90	94										
8		85	80	85	89	100									
7	100	80	75	80	83	93									
6	93	75	70	75	77	87	100								
5	87	70	65	70	71	80	90								
4	80	65	60	65	66	73	80	100							
3	73	60		60	60	67	70	80							
2	67					60	60	60							
1	60														

Time	Score	Time	Score
4:20	100	2:42	70
4:17	99	2:39	69
4:14	98	2:35	68
4:11	97	2:32	67
4:07	96	2:29	66
4:04	95	2:26	65
4:01	94	2:22	64
3:58	93	2:19	63
3:54	92	2:16	62
3:51	91	2:12	61
3:48	90	2:09	60
3:44	89	2:06	59
3:41	88	2:03	58
3:38	87	1:59	57
3:35	86	1:56	56
3:31	85	1:53	55
3:28	84	1:49	54
3:25	83	1:46	53
3:21	82	1:43	52
3:18	81	1:40	51
3:15	80	1:36	50
3:12	79	1:33	49
3:08	78	1:30	48
3:05	77	1:26	47
3:02	76	1:23	46
2:58	75	1:20	45
2:55	74	1:17	44
2:52	73	1:13	43
2:49	72	1:10	42
2:45	71	1:07	41
2:42	70	1:03	40

			M	ale 3 N	∕lile R	un		
	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+
Max	18:00	18:00	18:00	18:00	18:00	18:30	19:00	19:30
Min	27:40	27:40	28:00	28:20	28:40	29:20	30:00	33:00
Min Pts	40	40	40	40	40	40	40	40
			N	lale 3 N	∕lile Ru	ın		
Time	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+
18:00	100	100	100	100	100			
18:10	99	99	99	99	99			
18:20	98	98	98	98	98			
18:30	97	97	97	97	97	100		
18:40	96	96	96	96	96	99		
18:50	95	95	95	95	95	98		
19:00	94	94	94	94	94	97	100	
19:10	93	93	93	93	93	96	99	
19:20	92	92	92	92	93	95	98	
19:30	91	91	91	91	92	94	97	100
19:40	90	90	90	90	91	94	96	99
19:50	89	89	89	89	90	93	95	99
20:00	88	88	88	88	89	92	95	98
20:10	87	87	87	87	88	91	94	97
20:20	86	86	86	86	87	90	93	96
20:30	84	84	85	85	86	89	92	96
20:40	83	83	84	85	85	88	91	95
20:50	82	82	83	84	84	87	90	94
21:00	81	81	82	83	83	86	89	93
21:10	80	80	81	82	82	85	88	93
21:20	79	79	80	81	81	84	87	92
21:30	78	78	79	80	80	83	86	91
21:40	77	77	78	79	79	82	85	90
21:50	76	76	77	78	78	82	85	90
22:00	75	75	76	77	78	81	84	89
22:10	74	74	75	76	77	80	83	88
22:20	73	73	74	75	76	79	82	87
22:30	72	72	73	74	75	78	81	87
22:40	71	71	72	73	74	77	80	86
22:50	70	70	71	72	73	76	79	85
23:00	69	69	70	71	72	75	78	84
23:10	68	68	69	70	71	74	77	84
23:20	67	67	68	69	70	73	76	83
23:30	66	66	67	68	69	72	75	82
23:40	65	65	66	67	68	71	75	81
23:50	64	64	65	66	67	70	74	81
24:00	63	63	64	65	66	70	73	80
24:10	62	62	63	64	65	69	72	79
24:20	61	61	62	63	64	68	71	79
24:30	60	60	61	62	63	67	70	78
24:40	59	59	60	61	63	66	69	77
24:50	58	58	59	60	62	65	68	76

	Male 3 Mile Run											Fen	nale 3	Mile I	Run		
	17-20	21-25		31-35			46-50	51+		17-20	21-25					46-50	51+
Max	_	18:00	18:00	18:00	18:00	18:30	19:00	19:30	Max	21:00	21:00	21:00	21:00	21:00	21:30	22:00	22:30
Min	27:40	27:40	28:00	28:20	28:40	29:20	30:00	33:00	Min	30:50	30:50	31:10	31:30	31:50	32:30		36:00
Min Pts	40	40	40	40	40	40	40	40	Min Pts	40	40	40	40	40	40	40	40
141111111111111111111111111111111111111	70	-10		Tale 3 N			-10	-10	Will T C	-10	-10		male 3			-10	-10
Time	17.20	21.25		31-35			146 EN	51+	Time	17.20	21.25					46-50	51+
18:00	100	100	100	100	100	41-43	40-30	JIT	21:00	100	100	100	100	100	41-43	40-30	JIT
18:10	99	99	99	99	99				21:10	99	99	99	99	99			
18:20	98	98	98	98	98				21:20	98	98	98	98	98			
18:30	97	97	97	97	97	100			21:30	97	97	97	97	97	100		
18:40	96	96	96	96	96	99			21:40	96	96	96	96	96	99		
18:50	95	95	95	95	95	98			21:50	95	95	95	95	95	98		-
19:00	94	94	94	94	94	97	100		22:00	94	94	94	94	94	97	100	
19:10	93	93	93	93	93	96	99		22:10	93	93	93	93	94	96	99	-
19:20	92	92	92	92	93	95	98		22:20	92	92	92	92	93	95	98	-
19:30	91	91	91	91	92	94	97	100	22:30	91	91	91	91	92	95	97	100
19:40	90	90	90	90	91	94	96	99	22:40	90	90	90	90	91	94	97	99
19:50	89	89	89	89	90	93	95	99	22:50	89	89	89	90	90	93	96	99
20:00	88	88	88	88	89	92	95	98	23:00	88	88	88	89	89	92	95	98
20:10	87	87	87	87	88	91	94	97	23:10	87	87	87	88	88	91	94	97
20:20	86	86	86	86	87	90	93	96	23:20	86	86	86	87	87	90	93	96
20:30	84	84	85	85	86	89	92	96	23:30	85	85	85	86	86	89	92	96
20:40	83	83	84	85	85	88	91	95	23:40	84	84	84	85	85	88	91	95
20:50	82	82	83	84	84	87	90	94	23:50	83	83	83	84	84	87	90	94
21:00	81	81	82	83	83	86	89	93	24:00	82	82	82	83	83	86	90	93
21:10	80	80	81	82	82	85	88	93	24:10	81	81	81	82	82	85	89	93
21:20	79	79	80	81	81	84	87	92	24:20	80	80	80	81	82	85	88	92
21:30	78	78	79	80	80	83	86	91	24:30	79	79	79	80	81	84	87	91
21:40	77	77	78	79	79	82	85	90	24:40	78	78	78	79	80	83	86	90
21:50	76	76	77	78	78	82	85	90	24:50	77	77	77	78	79	82	85	90
22:00	75	75	76	77	78	81	84	89	25:00	76	76	76	77	78	81	84	89
22:10	74	74	75	76	77	80	83	88	25:10	75	75	75	76	77	80	83	88
22:20	73	73	74	75	76	79	82	87	25:20	74	74	74	75	76	79	83	87
22:30	72	72	73	74	75	78	81	87	25:30	73	73	73	74	75	78	82	87
22:40	71	71	72	73	74	77	80	86	25:40	72	72	72	73	74	77	81	86
22:50	70	70	71	72	73	76	79	85	25:50	71	71	71	72	73	76	80	85
23:00	69	69	70	71	72	75	78	84	26:00	69	69	70	71	72	75	79	84
23:10	68	68	69	70	71	74	77	84	26:10	68	68	70	70	71	75	78	84
23:20	67	67	68	69	70	73	76	83	26:20	67	67	69	70	70	74	77	83
23:30	66	66	67	68	69	72	75	82	26:30	66	66	68	69	70	73	77	82
23:40	65	65	66	67	68	71	75	81	26:40	65	65	67	68	69	72	76	81
23:50	64	64	65	66	67	70	74	81	26:50	64	64	66	67	68	71	75	81
24:00	63	63	64	65	66	70	73	80	27:00	63	63	65	66	67	70	74	80
24:10	62	62	63	64	65	69	72	79	27:10	62	62	64	65	66	69	73	79
24:20	61	61	62	63	64	68	71	79	27:20	61	61	63	64	65	68	72	79
24:30	60	60	61	62	63	67	70	78	27:30	60	60	62	63	64	67	71	78
24:40	59	59	60	61	63	66	69	77	27:40	59	59	61	62	63	66	70	77
24:50	58	58	59	60	62	65	68	76	27:50	58	58	60	61	62	65	70	76
25:00	57	57	58	59	61	64	67	76	28:00	57	57	59	60	61	65	69	76

	Male MTC										
Male	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+			
Max	2:40	2:38	2:39	2:42	2:45	2:52	3:01	3:05			
Min	3:45	3:45	3:48	3:51	3:58	4:11	4:28	5:07			
Min Pts	40	40	40	40	40	40	40	40			
2:38		100									
2:39		99	100								
2:40	100	98	99								
2:41	99	97	98								
2:42	98	96	97	100							
2:43	97	96	97	99							
2:44	96	95	96	98							
2:45	95	94	95	97	100						
2:46	94	93	94	97	99						
2:47	94	92	93	96	98						
2:48	93	91	92	95	98						
2:49	92	90	91	94	97						
2:50	91	89	90	93	96						
2:51	90	88	90	92	95						
2:52	89	87	89	91	94	100					
2:53	88	87	88	90	93	99					
2:54	87	86	87	90	93	98					
2:55	86	85	86	89	92	98					
2:56	85	84	85	88	91	97					
2:57	84	83	84	87	90	96					
2:58	83	82	83	86	89	95					
2:59	82	81	83	85	88	95					
3:00	82	80	82	84	88	94					
3:01	81	79	81	83	87	93	100				
3:02	80	79	80	83	86	92	99				
3:03	79	78	79	82	85	92	99				
3:04	78	77	78	81	84	91	98				
3:05	77	76	77	80	84	90	97	100			
3:06	76	75	77	79	83	89	97	99			
3:07	75	74	76	78	82	89	96	99			
3:08	74	73	75	77	81	88	95	98			
3:09	73	72	74	77	80	87	94	98			
3:10	72	71	73	76	79	86	94	97			
3:11	71	70	72	75	79	86	93	97			
3:12	70	70	71	74	78	85	92	96			
3:13	70	69	70	73	77	84	92	96			
3:14	69	68	70	72	76	83	91	95			
3:15	68	67	69	71	75	83	90	95			
3:16	67	66	68	70	75	82	90	94			
3:17	66	65	67	70	74	81	89	94			
3:18	65	64	66	69	73	80	88	93			
3:19	64	63	65	68	72	79	88	93			
3:20	63	62	64	67	71	79	87	92			
3:21	62	61	63	66	70	78	86	92			
3.22	61	61	63	65	70	77	86	91			

				Male									Female				.
Male	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+	Female	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+
Max	2:40	2:38	2:39	2:42	2:45	2:52	3:01	3:05	Max	3:19	3:13	3:10	3:12	3:18	3:25	3:39	3:55
Min	3:45	3:45	3:48	3:51	3:58	4:11	4:28	5:07	Min	4:36	4:41	4:45	4:46	4:55	4:58	5:26	5:52
Min Pts	40	40	40	40	40	40	40	40	Min Pts	40	40	40	40	40	40	40	40
2:38		100							3:10			100					
2:39		99	100						3:11			99					
2:40	100	98	99						3:12			99	100				П
2:41	99	97	98						3:13		100	98	99				
2:42	98	96	97	100					3:14		99	97	99				
2:43	97	96	97	99					3:15		99	97	98				
2:44	96	95	96	98					3:16		98	96	97				
2:45	95	94	95	97	100				3:17		97	96	97				
2:46	94	93	94	97	99				3:18		97	95	96	100			
2:47	94	92	93	96	98				3:19	100	96	94	96	99			
2:48	93	91	92	95	98				3:20	99	95	94	95	99			
2:49	92	90	91	94	97				3:21	98	95	93	94	98			П
2:50	91	89	90	93	96				3:22	98	94	92	94	98			П
2:51	90	88	90	92	95				3:23	97	93	92	93	97			П
2:52	89	87	89	91	94	100			3:24	96	93	91	92	96			П
2:53	88	87	88	90	93	99			3:25	95	92	91	92	96	100		
2:54	87	86	87	90	93	98			3:26	95	91	90	91	95	99		П
2:55	86	85	86	89	92	98			3:27	94	90	89	90	94	99		П
2:56	85	84	85	88	91	97			3:28	93	90	89	90	94	98		П
2:57	84	83	84	87	90	96			3:29	92	89	88	89	93	97		\blacksquare
2:58	83	82	83	86	89	95			3:30	91	88	87	89	93	97		
2:59	82	81	83	85	88	95			3:31	91	88	87	88	92	96		
3:00	82	80	82	84	88	94			3:32	90	87	86	87	91	95		П
3:01	81	79	81	83	87	93	100		3:33	89	86	85	87	91	95		П
3:02	80	79	80	83	86	92	99		3:34	88	86	85	86	90	94		П
3:03	79	78	79	82	85	92	99		3:35	88	85	84	85	89	94		
3:04	78	77	78	81	84	91	98		3:36	87	84	84	85	89	93		
3:05	77	76	77	80	84	90	97	100	3:37	86	84	83	84	88	92		Н
3:06	76	75	77	79	83	89	97	99	3:38	85	83	82	83	88	92		Н
3:07	75	74	76	78	82	89	96	99	3:39	84	82	82	83	87	91	100	Н
3:08	74	73	75	77	81	88	95	98	3:40	84	82	81	82	86	90	99	Н
3:09	73	72	74	77	80	87	94	98	3:41	83	81	80	81	86	90	99	Н
3:10	72	71	73	76	79	86	94	97	3:42	82	80	80	81	85	89	98	Н
3:11	71	70	72	75	79	86	93	97	3:43	81	80	79	80	85	88	98	Н
3:12	70	70	71	74	78	85	92	96	3:44	81	79	79	80	84	88	97	Н
3:13	70	69	70	73	77	84	92	96	3:45	80	78	78	79	83	87	97	Н
3:14	69	68	70	72	76	83	91	95	3:46	79	78	77	78	83	86	96	Н
3:15	68	67	69	71	75	83	90	95	3:40	78	77	77	78	82	86	96	Н
3:16	67	66	68	70	75	82	90	94	3:48	77	76	76	77	81	85	95	Н
3:16	66	65	67	70	74	81	89	94	3:48	77	75	75	76	81	85	95	Н
3:17	_	64	66	69	73	80		93	3:49	76	75	75	76	_	84	94	Н
3:18	65	63	65	68	72	79	88	93	3:50 3:51	75	74	74	-	80	83	93	Н
	_		64		_	-		93		_	73	73	75			93	Н
3:20 3:21	63	62	_	67 66	71 70	79 78	87 86	92	3:52 3:53	74 74	73	73	74 74	79 78	83 82	93	Н
	_	61	63	-	_	_	-	_			_	_	-	_	_	92	Н
3:22	61	61	63	65	70	77	86	91	3:54	73	72	72	73	78	81	92	Ш

	Male ACL								l	Female ACL							
Male	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+	Female	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+
Max	106	115	116	120	110	106	100	95	Max	66	74	75	72	70	62	53	44
Min	62	67	67	67	67	66	65	16	Min	30	30	30	30	30	28	26	6
Min Pts	40	40	40	40	40	40	40	40	Min Pts	40	40	40	40	40	40	40	40
120				100					75			100					_
119				99					74		100	99					
118				98					73		99	97					
117				97					72		97	96	100				
116			100	95					71		96	95	99				
115		100	99	94					70		95	93	97	100			
114		99	98	93					69		93	92	96	99			
113		98	96	92					68		92	91	94	97			
112		96	95	91					67		90	89	93	96			
111		95	94	90					66	100	89	88	91	94			
110		94	93	89	100				65	98	88	87	90	93			
109		93	91	88	99				64	97	86	85	89	91			
108		91	90	86	97				63	95	85	84	87	90			
107		90	89	85	96				62	93	84	83	86	88	100		
106	100	89	88	84	94	100			61	92	82	81	84	87	98		
105	99	88	87	83	93	99			60	90	81	80	83	85	96		
104	97	86	85	82	92	97			59	88	80	79	81	84	95		
103	96	85	84	81	90	96			58	87	78	77	80	82	93		
102	95	84	83	80	89	94			57	85	77	76	79	81	91		
101	93	83	82	78	87	93			56	83	75	75	77	79	89		
100	92	81	80	77	86	91	100		55	82	74	73	76	78	88		
99	90	80	79	76	85	90	98		54	80	73	72	74	76	86		
98	89	79	78	75	83	88	97		53	78	71	71	73	75	84	100	
97	88	78	77	74	82	87	95		52	77	70	69	71	73	82	98	
96	86	76	76	73	80	85	93		51	75	69	68	70	72	81	96	
95	85	75	74	72	79	84	91	100	50	73	67	67	69	70	79	93	
94	84	74	73	71	78	82	90	99	49	72	66	65	67	69	77	91	
93	82	73	72	69	76	81	88	98	48	70	65	64	66	67	75	89	
92	81	71	71	68	75	79	86	98	47	68	63	63	64	66	74	87	
91	80	70	69	67	73	78	85	97	46	67	62	61	63	64	72	84	
90	78	69	68	66	72	76	83	96	45	65	60	60	61	63	70	82	
89	77	68	67	65	71	75	81	95	44	63	59	59	60	61	68	80	100
88	75	66	66	64	69	73	79	95	43	62	58	57	59	60	66	78	98
87	74	65	64	63	68	72	78	94	42	60	56	56	57	58	65	76	97
86	73	64	63	62	67	70	76	93	41	58	55	55	56	57	63	73	95
85	71	63	62	60	65	69	74	92	40	57	54	53	54	55	61	71	94
84	70	61	61	59	64	67	73	92	39	55	52	52	53	54	59	69	92
83	69	60	60	58	62	66	71	91	38	53	51	51	51	52	58	67	91
82	67	59	58	57	61	64	69	90	37	52	50	49	50	51	56	64	89
81	66	58	57	56	60	63	67	89	36	50	48	48	49	49	54	62	87
80	65	56	56	55	58	61	66	89	35	48	47	47	47	48	52	60	86
79	63	55	55	54	57	60	64	88	34	47	45	45	46	46	51	58	84
78	62	54	53	52	55	58	62	87	33	45	44	44	44	45	49	56	83
77	60	53	52	51	54	57	61	86	32	43	43	43	43	43	47	53	81

Maneuver Under Fire-

	Male MANUF								I		Female MANUF						
Male	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+	Female	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+
Max	2:07	2:04	2:05	2:10	2:16	2:23	2:40	2:52	Max	2:55	2:45	2:42	2:49	2:53	2:57	3:35	3:44
Min	3:17	3:18	3:22	3:30	3:42	3:59	4:14	6:09	Min	4:53	4:34	4:40	4:44	4:56	5:01	5:06	6:33
Vin Pts	40	40	40	40	40	40	40	40	Min Pts	40	40	40	40	40	40	40	40
				Male N	IANUF				1 —	Female MANUF							
	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+	l	17-20	21-25	26-30	31-35	36-40	41-45	46-50	51+
2:04		100							2:42			100					$\overline{}$
2:05		99	100						2:43			99					
2:06		98	99						2:44			99					
2:07	100	98	98						2:45		100	98					
2:08	99	97	98						2:46		99	98					
2:09	98	96	97						2:47		99	97					
2:10	97	95	96	100					2:48		98	97					П
2:11	97	94	95	99					2:49		98	96	100				П
2:12	96	94	95	99					2:50		97	96	99				
2:13	95	93	94	98					2:51		97	95	99				
2:14	94	92	93	97					2:52		96	95	98				
2:15	93	91	92	96					2:53		96	94	98	100			
2:16	92	90	91	96	100				2:54		95	94	97	100			
2:17	91	89	91	95	99				2:55	100	94	93	97	99			
2:18	91	89	90	94	99				2:56	99	94	93	96	99			
2:19	90	88	89	93	98				2:57	99	93	92	96	98	100		
2:20	89	87	88	93	97				2:58	98	93	92	95	98	100		
2:21	88	86	88	92	97				2:59	98	92	91	95	97	99		
2:22	87	85	87	91	96				3:00	97	92	91	94	97	99		
2:23	86	85	86	90	95	100			3:01	97	91	90	94	96	98		
2:24	85	84	85	90	94	99			3:02	96	91	90	93	96	98		
2:25	85	83	84	89	94	99			3:03	96	90	89	93	95	97		
2:26	84	82	84	88	93	98			3:04	95	90	89	92	95	97		
2:27	83	81	83	87	92	98			3:05	95	89	88	92	94	96		
2:28	82	81	82	87	92	97			3:06	94	88	88	91	94	96		
2:29	81	80	81	86	91	96			3:07	94	88	87	91	93	95		
2:30	80	79	81	85	90	96			3:08	93	87	87	90	93	95		
2:31	79	78	80	84	90	95			3:09	93	87	86	90	92	94		
2:32	79	77	79	84	89	94			3:10	92	86	86	89	92	94		
2:33	78	76	78	83	88	94			3:11	92	86	85	89	91	93		
2:34	77	76	77	82	87	93			3:12	91	85	85	88	91	93		
2:35	76	75	77	81	87	93			3:13	91	85	84	87	90	92		
2:36	75	74	76	81	86	92			3:14	90	84	84	87	90	92		
2:37	74	73	75	80	85	91			3:15	90	83	83	86	89	91		
2:38	73	72	74	79	85	91			3:16	89	83	83	86	89	91		
2:39	73	72	74	78	84	90			3:17	89	82	82	85	88	90		
2:40	72	71	73	78	83	89	100		3:18	88	82	82	85	88	90		\sqcup
2:41	71	70	72	77	83	89	99		3:19	88	81	81	84	87	89		
2:42	70	69	71	76	82	88	99		3:20	87	81	81	84	87	89		
2:43	69	68	70	75	81	88	98		3:21	87	80	80	83	86	88		\sqcup
2:44	68	68	70	75	80	87	97		3:22	86	80	80	83	86	88		\sqcup
2:45	67	67	69	74	80	86	97		3:23	86	79	79	82	85	87		\sqcup
2:46	67	66	68	73	79	86	96		3:24	85	79	79	82	85	87		\sqcup
2:47	66	65	67	72	78	85	96		3:25	85	78	78	81	84	86		

3rd Class Swim Qualification:

The Third Class Swim Test is composed of two modules.

Module One is composed of three separate events, a deep water jump, a 50-yard swim, and a 5-minute prone float. These events can be conducted separately and in any order. Swimmers who successfully pass an event in Module One, do not have to repeat that particular event.

Module Two consists of a shirt and trousers or coverall inflation. Module One must be conducted before Module Two.

Modules One and Two do not have to be conducted on the same day. The prone float and the Shirt and Trouser inflation must occur in deep water (deep water is defined as water too deep to stand with mouth and nose above the surface).

FEP (Fitness Enhancement Program):

The FEP program is run by the active-duty staff, and Midshipmen CFL designed to help struggling Midshipmen improve his or her pt score. Midshipmen who fall below the pt scoring requirement (Good-Low) will be required to attend FEP. Other Midshipmen are advised to attend FEP if they have not reached an Excellent High per Navy standards or above a 270 per Marine Corps standards.

Professional Knowledge

Mission of the Navy:

The Department of the Navy will recruit, train, equip, and organize to deliver combat ready Naval forces to win conflicts and wars while maintaining security and deterrence through sustained forward presence.

Mission of NROTC:

To develop young men and women morally, mentally, and physically, and to instill in them the highest ideals of honor, courage, and commitment.

Sailor's Creed:

I am a United States Sailor.

I will support and defend the Constitution of the United States of America and I will obey the orders of those appointed over me.

I represent the fighting spirit of the Navy and those who have gone before me to defend freedom and democracy around the world.

I proudly serve my country's Navy combat team with Honor, Courage, and Commitment. I am committed to excellence and the fair treatment of all.

Navy Core Values:

Honor

"I will bear true faith and allegiance ..." Accordingly, we will: Conduct ourselves in the highest ethical manner in all relationships with peers, superiors and subordinates; Be honest and truthful in our dealings with each other, and with those outside the Navy; Be willing to make honest recommendations and accept those of junior personnel; Encourage new ideas and deliver the bad news, even when it is unpopular; Abide by an uncompromising code of integrity, taking responsibility for our actions and keeping our word; Fulfill or exceed our legal and ethical responsibilities in our public and personal lives twenty-four hours a day. Illegal or improper behavior or even the appearance of such behavior will not be tolerated. We are accountable for our professional and personal behavior. We will be mindful of the privilege to serve our fellow Americans.

Courage

"I will support and defend ..." Accordingly, we will have: courage to meet the demands of our profession and the mission when it is hazardous, demanding, or otherwise difficult; Make decisions in the best interest of the navy and the nation, without regard to personal consequences; Meet these challenges while adhering to a higher standard of personal conduct and decency; Be loyal to our nation, ensuring the resources entrusted to us are used in an honest, careful, and efficient way. Courage is the value that gives us the moral and mental strength to do what is right, even in the face of personal or professional adversity.

Commitment

"I will obey the orders ..." Accordingly, we will: Demand respect up and down the chain of command; Care for the safety, professional, personal and spiritual well-being of our people; Show respect toward all people without regard to race, religion, or gender; Treat each individual with human dignity; Be committed to positive change and constant improvement; Exhibit the highest degree of moral character, technical excellence, quality and competence in what we have been trained to do. The day-to-day duty of every Navy man and woman is to work together as a team to improve the quality of our work, our people and ourselves.

Leadership Traits (JJDIDTIEBUCKLE):

An acronym that stands for the Marine Corps 14 leadership traits: Justice, Judgment, Dependability, Integrity, Decisiveness, Tact, Initiative, Endurance, Bearing, Unselfishness, Courage, Knowledge, Loyalty, and Enthusiasm.

The 11 Marine Corps Leadership Principles:

- 1. Know yourself and seek self-improvement
- 2. Be technically and tactically proficient
- 3. Know your Marines and look out for their welfare
- 4. Keep your Marines informed
- 5. Set the example
- 6. Ensure the task is understood, supervised, and accomplished
- 7. Train your Marines as a team
- 8. Make sound and timely decisions
- 9. Develop a sense of responsibility among your subordinates
- 10. Employ your command in accordance with its capabilities
- 11. Seek responsibility and take responsibility for your actions

General Orders of a Sentry:

- 1. To take charge of this post and all government property in view.
- 2. To walk my post in a military manner, keeping always on the alert, and observing everything that takes place within sight or hearing.
- 3. To report all violations of orders I am instructed to enforce.
- 4. To repeat all calls from posts more distant from the guardhouse than my own.
- 5. To quit my post only when properly relieved.
- 6. To receive, obey, and pass on to the sentry who relieves me all orders from the Commanding Officer, Command Duty Officer, Officer of the Deck, and Officers and Petty Officers of the Watch only.
- 7. To talk to no one except in the line of duty.
- 8. To give the alarm in case of fire or disorder.
- 9. To call the Officer of the Deck in any case not covered by instructions.
- 10. To salute all officers and colors and standards not cased.
- 11. To be especially watchful at night and during the time for challenging, to challenge all persons on or near my post, and to allow no one to pass without proper authority.

Weapons Safety Rules:

- 1) Treat every weapon as if it were loaded.
- 2) Never point a weapon at anything you do not intend to shoot.
- 3) Keep your finger straight and off the trigger until you are ready to fire.
- 4) Keep the weapon on safe until you intend to fire.
- 5) Know your target and what lies beyond.

Weapons Conditions:

- Condition 1: Magazine inserted, bolt forward, round in chamber, weapon on safe, ejection port cover closed
- Condition 2: Does not apply to the service rifle
- Condition 3: Magazine inserted, bolt forward on an empty chamber, weapon on safe, ejection port cover closed
- Condition 4: Magazine removed, bolt forward on an empty chamber, weapon on safe, ejection port cover closed

Midshipman Oath:

Having been appointed a midshipman in the United States Navy, I solemnly swear (or affirm) that I will support and defend the constitution of the United States against all enemies, foreign and domestic; that I

will bear true faith and allegiance to the same; that I take this obligation freely, without any mental reservation or purpose of evasion; and that I will well and faithfully discharge the duties of the office on which I am about to enter, so help me God.

Oath of Office:

I, (state your name), do solemnly swear that I will support and defend the constitution of the United States against all enemies, foreign and domestic; that I will bear true faith and allegiance to the same; that I take this obligation freely, without any mental reservation or purpose of evasion; and that I will well and faithfully discharge the duties of the office upon which I am about to enter. So help me God.

Financial Literacy

Financial literacy provides the necessary knowledge in personal finance and the midshipmen pay system to make educated financial decisions. It is wise to make financial literacy one of your focuses to gain control and understand your finances. As future leaders, financial literacy is not only essential for you to make smart financial decisions, but to guide those Sailors/Marines who may need financial guidance.

MyPay (https://mypay.dfas.mil)

An online pay account management system that was created and maintained by the Defense Finance and Accounting Service (DFAS). It provides pay and tax information for military members, retirees, and numerous federal civilian employees. This is where you will be able to view your LES. Make it a habit of viewing your LES once per month.

Leave and Earnings Statement (LES)

The LES is a monthly pay stub and the statement showing your entitlements, deductions, leave information, and tax withholding information. You may access your LES via the MyPay website. Your LES is available 1 week prior to payday.

Travel Reimbursement

Midshipmen are reimbursed for travel performed under official orders, including travel to/from summer training.

Personal Finance

In order to achieve financial goals and success, you must understand your own personal finance. Just as it is important to understand your pay, you must also learn how to manage it. Money management is achieved by understanding topics such as financial tools, budgeting, and money habits. By gaining knowledge from these topics, you will be able to practice personal finance and become financially responsible.

The only one responsible for your financial status is you.

Financial Tools

A 'Financial Tool' is a metaphor that can help you achieve your financial goals. Just like any other tool, it is important to learn how to use it. The following are the most common financial tools available through banks (USAA, Navy Federal Credit Union, etc.), brokerages (Vanguard, Fidelity, etc.), and other sources.

Basics:

- Checking account. A transactional deposit account held at a financial institution that allows for withdrawals and deposits. Money held in a checking account is liquid and can be withdrawn using checks, ATMs, debit cards, and other methods. This is your 'everyday use account' that is linked to your debit account.
- Savings account. A deposit account held at a bank or other financial institution that provides principal security and a modest interest rate. It typically pays out better interest than a checking account. Most people set aside funds in these accounts as an emergency fund and for short-term goals like saving for holiday leave, summer leave, your class ring, or buying a car.
- High Yield Savings Accounts. A savings account with a higher interest than other savings accounts, typically because they are offered by online only banks.
- Money Market account. An account that typically pays a higher interest than a savings account. Similar to the interest earned on checking and savings accounts, the interest earned on a money market account is taxable. Individuals typically use money market accounts for short-term savings and emergency funds. Less reliable than HYS.

- Certificates of Deposit (CD). CDs are funds borrowed by the bank from their customers. A CD entitles the customer to receive interest over a set term that generally ranges from one month to 5 years. The longer the terms of the CD are, the better the interest paid out will be. CDs generally pay better interest than savings accounts and money market accounts but incur penalties for early withdrawals. CDs are primarily used for short-term financial goals ranging up to 5 years.
- Bonds. A debt investment in which an individual loans money to an entity (corporate or government) that borrows the funds for a defined period of time at a fixed interest rate. Bonds are used by corporations and governments to finance projects or to purchase assets. They are generally purchased by individuals looking to achieve better returns than those offered by bank-related services.

Investing:

- Mutual Funds. An investment vehicle that is made up of a pool of funds contributed by many investors for the purpose of investing in securities such as stocks, bonds, money market instruments, and similar assets. Mutual funds are created by brokerages and financial institutions and are operated by their fund managers. The fund managers oversee the fund's capital and attempt to produce gains and income for the investors. When investors contribute to mutual funds, they are in essence purchasing shares of a portfolio composed of different securities. Mutual Funds are a great way to create a diversified portfolio of investments as it is considered less of a risk.
- Exchange Traded Funds (ETFs). A security that tracks a specific market sector, a commodity, or a basket of assets. ETFs are exactly like Mutual Funds but are not actively managed by the fund managers. ETFs can be purchased through the stock exchanges (i.e. New York Stock Exchange) as they trade like regular stocks. In order for investors to purchase investments through exchanges, they must open a brokerage account via a Financial Institution.
- Stocks. A type of security that signifies ownership in a corporation. There are two main types of stock: common and preferred. Common stock usually entitles the owner to vote at shareholders' meetings and to receive dividends. Preferred stock generally does not have voting rights but has a higher claim on assets and earnings than the common shares. Shares of stock can also be purchased through brokerage accounts.
- Individual Retirement Accounts (IRA). IRAs are an investing tool used by individuals to save specifically for retirement. There are two types of IRAs: Traditional and Roth. Contributions to the Traditional IRA may be tax deducted each year, which lowers your taxable income, but withdrawals are taxed. Roth IRAs do not provide a tax deduction immediately, but withdrawals are tax free. At your age, Roth IRAs typically return significantly more money! Most IRAs can be obtained through Financial Institutions and/or Banks to begin your retirement planning.

Other:

- Credit Cards. A card issued by a Financial Institution giving the holder an option to borrow funds, usually at the point of sale. Credit cards charge monthly interest and are primarily used for short-term financing. Credit cards are a great tool for building your credit rating (discussed below) and earn points or rewards. Since credit cards can be useful financial tools, it is important to learn how not to 'abuse' them by piling debt. The best way to manage your credit cards is to charge what you can afford to pay off that month, and pay the balance in full each month. The average college student carries a \$500 balance.
- Charge Card. A credit card for use with an account that must be paid when a statement is issued. EG American Express Platinum.
- Career Starter Loan. An optional loan offered by Navy Federal and USAA. Depending on which bank you choose, it may range up to \$36,000. The purpose of the Career Loan is to "jump-start" your Navy or Marine Corps career, as there are significant costs when you first graduate and report. There are many midshipmen who graduate without any money left and therefore start their careers with debt. To avoid that, you should seek financial guidance to better plan and manage the Career Loan. For more information on the Career Loan, please visit: https://intranet.usna.edu/FinancialAdvisor/Guides/starterloan.php

Interest:

Interest is expressed as the charge for the privilege of borrowing or lending money, typically expressed as an Annual Percentage Rate (APR). If you are borrowing from a credit card, you need to understand how much interest you are paying. Likewise, if you are lending, understand how much interest you are making. The higher the interest, the more money you pay or make. There are two types of Interests:

- Compound Interest. Compound interest is charged on the amount borrowed or lent plus the interest it has accrued. Therefore, compound interest can be thought of as 'interest on interest/amount', and will make your debt or investment grow at a faster rate than simple interest would. For example, Annual Percentage Yield (APY)
- Simple Interest. Simple interest does not compound, it is only charged on the amount borrowed or lent. For example, Annual Percentage Rate (APR)

When you obtain debt through credit card use or loans, most financial institutions use compound interest in order to make more money off you. However, there are financial predators such as 'payday loans.' Avoid them at all costs due to their outrageous terms/conditions and high interest rates of up to 400%. It is best to stay away from payday loans at all times!

Money Habits

The definition of a habit is an acquired behavior pattern regularly followed until it has become almost involuntary. Therefore, when it comes to finances, you can develop either Good Money Habits or Bad Money Habits. Carrying debt on a credit card, for example, is a Bad Money Habit where you are 'abusing' the financial tool by not paying it back. As a student, it is much easier to steer towards the Bad Money Habits. You may get complacent when you do not have significant money worries like paying a mortgage or having dependents (spouse, children, etc.). In addition, by having a limited income, if you do not track your money habits carefully, it is easy to waste money. Below you will find some of the most common money habits you should work to acquire or avoid:

Good Money Habits (Acquire)

- Pay yourself first. A good 'Rule of Thumb' is to save at least 10% of your monthly income. Setting up a monthly automatic transfer on the first of every month to your savings account can be the easiest way to "set it and forget it." Following this concept, you will not be spending money first and saving what is left over or nothing at all. This also means determining what your priorities are. Not everyone wants the same things; once you stop letting others tell you what to spend on, you can spend on what you actually care about. This means asking yourself what you really want to put money into versus what you can buy the generic brand for. For example, buying generic soap so you can buy high quality conditioners in the same month or saving for a ski trip instead of hitting the bars for the fourth time this month. Write down what you really want and then pursue it within your means.
- Budgeting. A budget is an estimation of the revenue and expenses over a specified future period. It allows you to analyze your spending and identify where you are overspending on one or multiple expenses (cell phone, shopping, food, entertainment, etc.). Remember, overspending on unnecessary personal expenses will prevent you from saving money. One of the easiest ways to budget as a midshipman is to do so on a weekly basis. For example, if you make \$100 per month and choose to save \$20 each month, you can break up the \$80 of spending money into \$20 per week. If you happen to spend less than \$20 in a week, you can carry the difference over to the next week or, better yet, save it! You can find a midshipman budget spreadsheet on the Financial Advisor website: http://intranet.usna.edu/FinancialAdvisor/Guides/budgeting.php
- Live below your means. Do not spend more than you make. Ensure that your spending does not exceed your budget to avoid borrowing money. This habit will help you avoid a pile of debt that may take years to pay back. o Pay with cash. Paying with cash provides a physical connection between the exchange of

money and goods/services. The habit is especially effective when you are trying to avoid debt. In addition, paying with cash helps you budget better as you can physically see your money disappear from your wallet, as opposed to swiping your debit/credit cards.

• Save for retirement now. One of the best financial decisions you can make at a young age is to save for your retirement. For example, MIDN X starts saving \$50 per month at age 18, while MIDN Y starts \$50 per month at age 28. Both midshipmen invested in the same Mutual Fund with an annual return of 7%. If both withdraw their funds at age 60, MIDN X would have a total of \$142,765 while MIDN Y would only have \$68,227. In order for MIDN Y to have the same amount as MIDN X at age 60, his/her starting contribution would have to be \$104 per month instead of \$50. Remember, the sooner, the better as you want compounding interest to do the work for you.

Bad Money Habits (Avoid):

- Living paycheck to paycheck. This term refers to an individual who devotes their entire month's pay to expenses without saving any of it. Most individuals who live 'paycheck to paycheck' typically do not have any savings or budget and tend to live above their means.
- Maxed out Credit Cards. Refers to when a credit card balance amount has reached the line of credit available. To avoid reaching the limit, you must budget the amount each month that can be charged and not exceed it. Pay off the full credit card balance every month. This way, you avoid paying interest each month and carrying outstanding debt. Carrying debt from month to month, specifically 30% or more of your credit card limit, counts against you on your Credit Report/Score.
- Not reviewing your Credit Report/Scores. Being unaware of your Credit Report/Score should be avoided at all times. If a predator steals your identity and takes out a loan on your behalf, you may never know unless you check your Credit Reports. Make it a habit to check this information at least three times per year.
- Paying the minimum payment on Credit Cards. Credit cards will often allow you to pay a "minimum payment" on credit balances. This often gives credit card holders a false sense of security. Credit cards typically have very high interest rates, sometimes upwards of 20%. If you only pay the minimum each month, interest will add up over time and can snowball into an unmanageable level of debt. If you have an outstanding balance, create a reasonable payoff plan and include it in your monthly budget.

Credit Reports

Your Credit Report is a detailed report of your credit history prepared by a credit bureau and used by a lender to determine your creditworthiness. Your Credit Report is composed of credit history such as credit cards, loans, previous or current home addresses, number of late payments, bankruptcy, accounts in default, etc. Here are important facts you need to understand about Credit Reports:

- How to obtain it. You can either pay for the Credit Report through well-trusted websites like www.myfico.com or receive a free Credit Report through www.annualcreditreport.com (it includes the report but does not show you a score).
- Three different Credit Agencies. The three different credit agencies are Experian, Equifax, and Transunion. They should all correlate with each other in terms of information/history on your Credit Report. However, it is your job to ensure they all have the same information, as you are your only auditor when it comes to your Credit Report.
- Credit Score. A three-digit number (ranges from 300-850) that tells creditors how likely you are to pay back the money you want to borrow. Here is a breakdown of how creditors view you based on your Credit Score range:
 - <630: Bad credit
 - 630-689: Fair credit
 - 690-719: Good credit
 - 720-850: Excellent credit

Remember, the lower your credit score, the riskier you appear to lenders. Hence, a lower credit score will qualify you for a higher interest (meaning you will be charged more to borrow money) or possibly disqualify you entirely. Credit scores are also used more and more by potential employers, landlords, utility companies, and others. The U.S. Navy may use your Credit Score and Report to determine the type of Security Clearance you may obtain. Remember, if your credit score looks bad, you look bad.

- Fraud on your Credit Report. If you notice suspicious information that does not pertain to you, contact one of the credit reporting agencies immediately:
 - Equifax: www.equifax.com, 1-888-766-0008
 - Experian: www.experian.com, 1-888-397-3742
 - TransUnion: www.transunion.com, 1-800-680-7289

Once you contact them, explain with details the situation and ask that a "fraud alert" be placed in your file. If after the investigation they determine that you were a victim of fraud, the information will be disputed on your Credit Report.

Servicemembers Civil Relief Act (SCRA)

The SCRA is an Act passed by Congress in 1940 to protect the rights of servicemembers. The primary purpose of the SCRA is to ease legal and financial burdens on military personnel and their families. The SCRA can protect servicemembers from evictions, leases, default judgments, outrageous interest rates, and much more. For example, under the SCRA you can reduce or cap interest rates on any credit card or other loans you acquired before you entered the military to 6% per year for the period you remain on active duty. A Judge Advocate General (JAG) can assist any military personnel with legal issues or advice pertaining to the SCRA.

Other Resources:

www.Investor.gov – A site managed by the SEC to educate and inform investors of all skill levels. www.personalfinanceformilitarylife.org – A non-profit dedicated to the financial education of America's Service Members.

www.calculator.net – A site with very simple investing formulas to help you estimate your returns.

Military Programs and Policies

SAPR (Sexual Assault Prevention and Response):

Sexual Assault Prevention and Response (SAPR) is a US military training program designated to educate service members and to provide support and treatment for their families who have experienced any form of sexual assault. The SAPR program provides treatment and support including medical, counseling, and direct guidance in navigating through the Uniform Code of Military Justice (UCMJ).

SAPR Mission - Prevent and respond to sexual assault, eliminating it from our ranks through a balance of focused education, comprehensive response, compassionate advocacy, and just adjudication in order to promote professionalism, respect, and trust, while preserving Navy mission readiness.

SAPR Vision - Promote and foster a culturally aware and informed Navy respectful of all, intolerant of sexual assault, and supported by a synergistic program of prevention, advocacy, and accountability.`





CMEO (Command Management Equal Opportunity) Program:

All MIDN are expected to promote camaraderie among individuals, regardless of color, gender, race, religion, national origin, or sexual orientation. Every MIDN is afforded the same opportunity to participate in training that they are qualified for.

EO reporting: Established to give MIDN a means to seek redress.

Informal: less than criminal in nature, direct intervention with the responsible party.

Formal: Chain of Command, Article 138- UCMJ Complaint, Article 1150- redress of wrong committed by a superior, communication with the inspector general.

Fraternization Policy:

The Navy defines fraternization as "an unduly familiar personal relationship between an officer member and an enlisted member that does not respect the difference in rank or grade. Relationships between officer members and between enlisted members that are <u>prejudicial to good order and discipline or of a nature to bring discredit on the Naval service</u> are unduly familiar and also constitute fraternization."

The Marine Corps Manual defines fraternization as professional and personal relationships between officer and enlisted, between officer and officer, or between enlisted and enlisted members that are unduly familiar and that do not respect differences in grade or rank. When <u>prejudicial to good order and discipline</u>, or of a nature that brings discredit on the <u>Marine Corps</u>, these relationships are prohibited.

Members of NROTC MMA/UMO fall under the NSTC Fraternization Policy, which is slightly different due to the nature of upper class midshipmen being in a position of power over fourth class midshipmen. Given this, "Relationships that are sexual, intimate, or romantic between midshipmen of different classes may also be prejudicial to good order and discipline or of a nature to bring discredit to the U.S. Navy and, therefore, may also be prohibited."

"Relationships or behavior between midshipmen are inappropriate if the relationship or behavior takes advantage or gives the impression that advantage is being taken of a vulnerability, weakness or status, or results in harassment of another midshipman."

Circumstances or conduct which:

- (1) Call into question the senior's objectivity;
- (2) Results in actual or apparent preferential treatment;
- (3) Undermines the authority of the senior; or
- (4) Compromises the chain of command.

Are deemed to be prejudicial to good order and discipline and/or discredit the Naval service.

A midshipman may maintain pre-existing personal relationships provided they were established before both members reported to the unit.

USN Policy:

 $\underline{https://www.socom.mil/navsoc/Documents/Inspector\%20General\%20Library\%20Documents/Fraternization.pdf}$

USMC Policy: Marine Corps Manual para. 1100.4, ALMAR 185/96, & MCM-2012, Article 134

(Fraternization), pp. IV-118/pp. A23-23

NSTC Policy: https://www.netc.navy.mil/Portals/46/NSTC/cmd-

docs/instructions/NSTCINST%205370.1B%20-%20NSTC%20Fraternization.pdf

Hazing Policy:

Hazine is defined by NSTC as any conduct whereby a military member or members, regardless of service or rank, without proper authority causes another military member or members, regardless of service or rank, to suffer or be exposed to any activity which is cruel, abusive, humiliating, oppressive, demeaning, or harmful. Soliciting or coercing another to perpetrate any such activity is also considered hazing.

Hazing need not involve physical contact among or between military members; it can be verbal or psychological in nature.

Hazing has never been condoned in our Navy, although many of our traditions over time have been altered from their original intent. We take care of each other and those under our charge, as that is the Navy way. We must ensure human dignity for everyone and that the highest professional standards are upheld. Hazing of any type will not be tolerated; it is not who we are. It is a military and moral obligation for all of us to stop any hazing immediately and report it up the chain of command.

Alcohol and Drug Policy:

Per NSTC, alcohol and drug abuse is incompatible with high standards of performance and discipline and is a severe detriment to the command's overall mission readiness. Alcohol and drug abuse by Navy members degrades our ability to execute the mission, can seriously damage physical and mental health, jeopardizes the safety of the individual and the safety of others, and can lead to criminal prosecution and separation from the service.

Alcohol:

0-0-1-3

0 Drinks if underage

0 Drinks if driving

1 Drink per hour

3 Drinks per night

Zero tolerance for underage drinking and DUI.

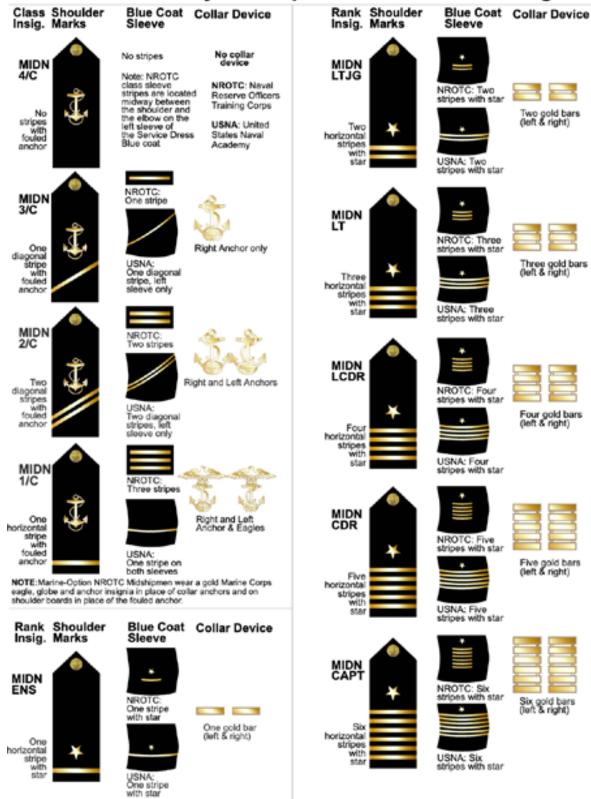
Drugs:

Zero tolerance for illegal substances and illegal use of substances. This includes the introduction of all hemp and CBD containing products to the body.

Military Structure

Rank and Insignia:

United States Navy Midshipman Class & Rank Insignia

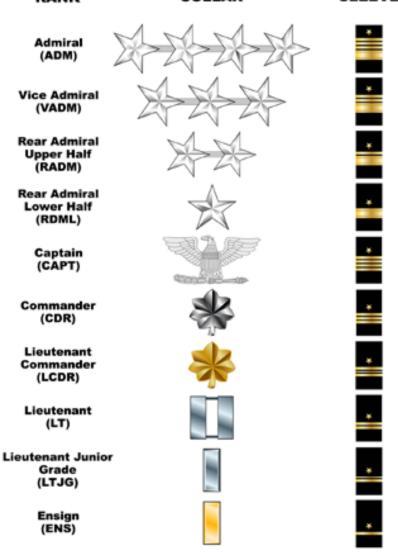




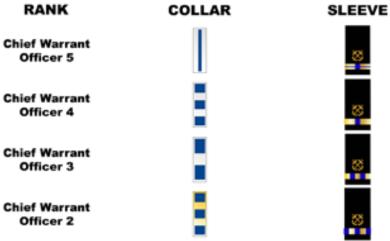
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US NAVY RANK AND RECOGNITION

COMMISSIONED OFFICERS COLLAR SLEEVE RANK



WARRANT OFFICERS COLLAR



RANK

ENLISTED COLLAR

SLEEVE

Master Chief Petty Officer of the Navy

Fleet / Force Master Chief Petty Officer

Command Master Chief Petty Officer

> Master Chief Petty Officer

Senior Chief Petty Officer

Chief Petty Officer

First Class Petty Officer

Second Class Petty Officer

Third Class Petty Officer

Seaman

Seaman Apprentice

> Seaman Recruit























None























None

U.S. MARINE CORPS RANK AND RECOGNITION

COMMISSIONED OFFICERS SLEEVE COLLAR RANK General (GEN) Lieutenant General (LTGEN) Major General (MAJGEN) Brigadier General (BGEN) Colonel (COL) Lieutenant Colonel (LTCOL) Major (MAJ) Captain (CAPT) First Lieutenant (1STLT) Second Lieutenant (2NDLT)

WARRANT OFFICERS RANK COLLAR **Chief Warrant** Officer 5 (CWO5) **Chief Warrant** Officer 4 (CWO4) **Chief Warrant** Officer 3 (CWO3) **Chief Warrant** Officer 2 (CW02) **Warrant Officer** (WO)

COLLAR

SLEEVE

Sergeant Major of the Marine Corps

RANK

Sergeant Major

Master Gunnery Sergeant

> First Sergeant

Master Sergeant

Gunnery Sergeant

Staff Sergeant

Sergeant

Corporal

Lance Corporal

Private First Class

Private



















None





















None

Describing a rank insignia:

When given a rank you should be able to properly describe it from memory. Terms that may be helpful to do this include:

- "Fouled Anchor", describes an anchor, usually gold, that is entwined in the anchor chain
- "Oak Leaf", the type of leaf that denotes an O-4/O-5 in the Navy and Marine Corps
- "Crow", a nickname for the eagle that denotes a Petty officer in the Navy.

Academic Advisors MMA

- "Eagle, Globe, and Anchor", EGA for short, is the United States Marine Corps emblem
- "Chevron", a pointed arch, a single chevron denotes a Private First Class in the Marine Corps.
- "Rocker", a curved line underneath a rank, added to Marine Corps rank insignia for each rank past Sergeant.
- "Bursting Bomb", describes the emblem in the middle of a Master Gunnery Sergeant's Insignia

Reference class notes from NV101 for further description of rank insignias and descriptions.

Chain of Command (Active Duty):

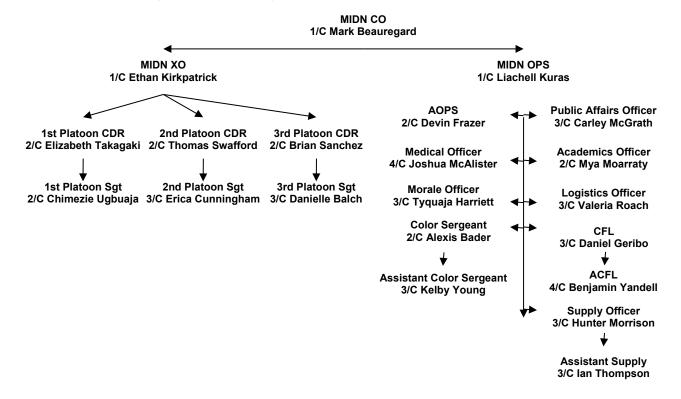
,					
	Commander in Chief				
	Commander in Chief Hon. Joseph Biden				
ļ					
	Vice President				
	Hon. Kamala Harris				
l					
	Secretary of Defense Hon. Lloyd Austin III				
	Hon. Lioya Austin III				
ŀ	Secretary of the Navy				
Hon. Carlos Del Toro					
Ì	Chairman of the Joint Chiefs				
	Gen. Mark Milley, USA				
	Chief of Naval Operations ADM Michael Gilday, USN				
	ADM Michael Gliday, USN				
	Vice Chief of Naval Operations				
	ADM William Lescher, USN				
	(ADM Lisa Franchetti, USN)				
ŀ	Commandant of the Marine Corps				
	Gen. David Berger, USMC				
l	Master Chief Petty Officer of the Navy				
	MCPO Russell Smith, USN				
	SEP 8 2022 (MCPO James Honea, USN)				
l	Sergeant Major of the Marine Corps				
	SgtMaj Troy Black, USMC				
	ommander Naval Education Training Comman RADM Peter Garvin, USN				
	KADIN I etel Galvill, GON				
	Commander Naval Science Training Command				
	RADM Jennifer Couture, USN				
I	<u> </u>				
	Commanding Officer MMA/UMaine NROTC				
	CAPT Sean Kearns, USN				
I					
I	Executive Officer MMA/UMaine NROTC				
	CDR Michael Short, USN				
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Academic Advisors UMaine

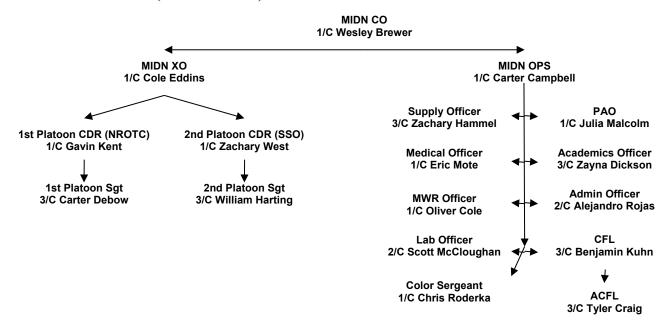
MMA/UMAINE NROTC Active Duty STAFF:

Commanding Officer- CAPT Sean Kearns
Executive Officer- CDR Michael Short
OIC MMA / SWO Advisor- LT Timothy Grant
OIC UMO / MOI- Capt Kenneth Motsay
SUB Advisor- LT Adam Dymit
SSO Advisor- LT Ryan Armstrong
AMOI- GySgt Patrick Armstrong
Navigation Instructors- QM1 Marissa Espinosa, QM1 Chadwick King

Chain of Command (MIDN UMaine)



Chain of Command (MIDN MMA)



Military Standards

USN Grooming Standards (Male):

https://www.public.navy.mil/bupers-

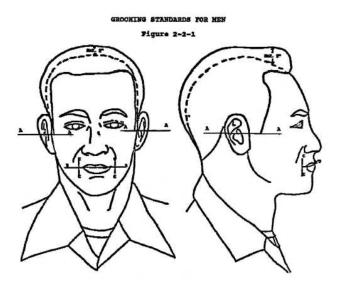
npc/support/uniforms/uniformregulations/chapter2/pages/2201personalappearance.aspx#shaving

The above link can be used to reference all grooming/jewelry standards for USN men and women. Grooming standards stated in this guide are an abbreviated version of USN regulations. Use additional resources if questions arise.

Hair:

The hair above the ears and around the neck shall be tapered from the lower natural hairline upwards at least 3/4 inch and outward not greater than 3/4 inch to blend with hair style.

The bulk of the hair shall not exceed approximately two inches. Bulk is defined as the distance that the mass of hair protrudes from the scalp. Hair coloring must look natural and complement the individual.



Sideburns shall not extend below a point level with the middle of the ear, as indicated by line "A". When a mustache is worn it shall not:

- -- Go below a horizontal line extending across the corner of the mouth as indicated by line "B".
- -- Extend more than 1/4 inch beyond a vertical line drawn upward from the corners of the mouth as indicated by line "C".
- -- Protrude below the lip line of the upper lip as indicated by line "D".

Shaving & Mustaches:

The face shall be clean-shaven unless a shaving waiver is authorized by the Commanding Officer per <<u>BUPERSINST 1000.22</u>>. Mustaches are authorized but shall be kept neatly and closely trimmed. No portion of the mustache shall extend below the lip line of the upper lip. It shall not go beyond a horizontal line extending across the corners of the mouth and no more than 1/4 inch beyond a vertical line drawn from the corner of the mouth. The length of an individual mustache hair fully extended shall not exceed approximately ½ inch.

Fingernails:

Fingernails shall not extend past fingertips. They shall be kept clean. The tips of the nails may be round to align with the contour of the fingertip. Buffed nails or clear coat nail polish is authorized. Colored nail polish is not authorized for men.

Jewelry:

Rings

• While in uniform, rings shall be conservative and in good taste. Eccentric or faddish rings are not authorized. Rings may consist of natural metals or fabricated materials (i.e. plastic, wood, silicone) and maybe gold, silver, copper, grey, tan, brown, black, white, or light pink in color. Only one ring per hand is authorized, plus a wedding/engagement ring set. Double stacking wedding rings with military academy/educational institution rings is authorized on one hand. Rings shall not present a safety or foreign object damage (FOD) hazard. Rings are not permitted to be worn on the thumb.

Earrings

• Not authorized while in uniform. Additionally, earrings are not authorized in civilian attire when in a duty status or while in/aboard any ship, craft, aircraft, or in any military vehicle or within any base or other place under military jurisdiction, or while participating in any organized military recreational activities. May be worn in civilian clothing when on leave or liberty.

Body Piercings

• Not authorized in uniform

Necklace

• While in uniform, only one necklace may be worn and it shall not be visible.

Bracelets

• While in uniform, bracelets shall be conservative and in good taste. Eccentric or faddish bracelets are not authorized. Bracelets may consist of natural metals or fabricated materials (i.e., plastic, wood, silicone) and maybe gold, silver, copper, grey, tan, brown, black, white, or light pink in color. Only one bracelet may be worn while in uniform. Ankle bracelets in uniform are not authorized. Bracelets shall not present a safety or FOD hazard.

Wristwatch

• While in uniform, wristwatches shall be conservative and in good taste. Eccentric or faddish watches are not authorized. Only one watch and one bracelet may be worn simultaneously (one on each wrist) while in uniform.

USN Grooming Standards (Female):

https://www.public.navy.mil/bupers-

npc/support/uniforms/uniformregulations/chapter2/pages/2201personalappearance.aspx#shaving

The above link can be used to reference all grooming/jewelry standards for USN men and women. Grooming standards stated in this guide are an abbreviated version of USN regulations. Use additional resources if questions arise.

Hair:

Hair length.

When in uniform, hair may touch, but not fall below a horizontal line level with the lower edge of the back of the collar. With jumper uniforms, hair may extend a maximum of 1-1/2 inches below the top of the jumper collar. Long hair, including braids, shall be neatly fastened, pinned, or secured to the head. When bangs are worn, they shall not extend below the eyebrows.

The bulk of the bun shall not exceed 3 inches when measured from the scalp and the diameter of the bun will not exceed or extend beyond the width of the back of the head. Loose ends must be tucked in and secured.

Hair, wigs, or hair extensions/pieces must be of natural hair color (i.e. blonde, brunette, brown, red, gray, or black). Hair extensions/pieces must match the current color of hair. Wigs, hairpieces, and extensions shall be of such quality and fit so as to present a natural appearance and conform to the grooming guidelines listed herein.

Multiple braids.

Multiple braids consist of more than 2 braids and encompass the whole head. When a hairstyle of multiple braids is worn, each braid shall be of uniform dimension, small in diameter (no more than 1/4 inch), and tightly interwoven to present a neat, professional, well-groomed appearance.

Two individual braids. One braid is worn on each side of the head, uniform in dimension and no more than one inch in diameter.

Cornrows. Must be in symmetrical fore and aft rows, and must be close to the head, leaving no hair unbraided. They must be no larger than 1/4 inch in diameter and show no more than approximately 1/8 inch of scalp between rows. Cornrows may end in a bun conforming to the guidelines listed herein if hair length permits.

Haircuts and styles shall present a balanced appearance. Lopsided and extremely asymmetrical styles are not authorized. Pigtails widely spaced individual hanging locks, and braids that protrude from the head are not authorized.

Cosmetics:

Cosmetics may be applied in good taste so that colors blend with natural skin tone and enhance natural features. Exaggerated or faddish cosmetic styles are not authorized with the uniform and shall not be worn.

Fingernails:

Fingernails shall not exceed 1/4 inch measured from the fingertip. They shall be kept clean. The tips of the nails may be round, almond/oval, or square in shape. Nail polish may be worn, but colors shall be conservative and inconspicuous. White, black, red, yellow, orange, green, purple, blue, hot pink, grey, glitter, striped, or any sort of pattern/decorative nail polish are examples of unauthorized nail polish colors. French and American manicures (white and off-white tips with neutral base color ONLY) are authorized.

Jewelry:

Rings

While in uniform, rings shall be conservative and in good taste. Eccentric or faddish rings are not authorized. Rings may consist of natural metals or fabricated materials (i.e. plastic, wood, silicone) and maybe gold, silver, copper, gray, tan, brown, black, white, or light pink in color. Only one ring per hand is authorized, plus a wedding/engagement ring set. Double stacking wedding rings with military academy/educational institution rings is authorized on one hand. Rings shall not present a safety or foreign object damage (FOD) hazard. Rings are not permitted to be worn on the thumb.

• Earrings

One earring per ear (centered on earlobe) may be worn while in uniform. Earrings shall be 4mm - 6mm ball (approximately 1/8 - 1/4 inch), plain with a shiny or brushed matte finish, screw-on, or with posts. When wearing Working and Service Uniforms, officers and CPOs will wear gold earrings and E6 and below females shall wear silver earrings. When wearing Dress Uniforms White Pearl earrings are optional. White Pearl and Diamond earrings are authorized for optional wear with the Dinner Dress White or Blue Jacket uniform. Synthetic variants of pearl or diamond earrings are acceptable if they meet color and size requirements.

• Body Piercings

Not authorized in uniform.

Necklaces

While in uniform, only one necklace may be worn and it shall not be visible.

Bracelets

While in uniform, bracelets shall be conservative and in good taste. Eccentric or faddish bracelets are not authorized. Bracelets may consist of natural metals or fabricated materials (i.e., plastic, wood, silicone) and maybe gold, silver, copper, gray, tan, brown, black, white, or light pink in color. Only one bracelet may be worn while in uniform. Ankle bracelets in uniform are not authorized. Bracelets shall not present a safety or FOD hazard.

• Wristwatch

While in uniform, wristwatches shall be conservative and in good taste. Eccentric or faddish watches are not authorized. Only one watch and one bracelet may be worn simultaneously (one on each wrist) while in uniform.

Tattoo Policy USN (Male & Female):

Content: Tattoos/body art/brands located anywhere on the body that are prejudicial to good order, discipline, and morale or are of a nature to bring discredit upon the naval service are prohibited. For example, tattoos/body art/brands that are obscene, sexually explicit, and or advocate discrimination based on sex, race, religion, ethnic, sexual orientation, or national origin are prohibited. In addition, tattoos/body art/brands that symbolize affiliation with gangs, supremacist or extremist groups, or advocate illegal drug use are prohibited.

Location: No tattoos/body art/brands on the head, face (to include ear), and scalp.

One tattoo is authorized on the neck and should not exceed one inch in measurement in any direction. Tattoos/body art/brands meeting these requirements are acceptable behind the ear. Permissible tattoos/body art/brands on the torso area of the body shall not be visible through white uniform clothing. Size: The size restriction for visible tattoos/body art/brands is limited to the area of the neck and behind the ear only. As a result of this change leg and arm tattoos can be of any size. Tattoos/body art/brands on the neck or behind the ear will not exceed one inch in measurement in any dimension (height/width). Cosmetic: Cosmetic tattoo is authorized to correct medical conditions requiring such treatment. For the purpose of this regulation, cosmetic tattooing refers to medical or surgical procedures conducted by licensed, qualified medical personnel.

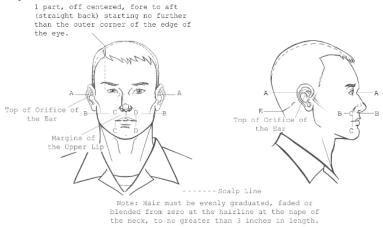
USMC Grooming Standards (Male):

The following link may also be used to view additional detailed regulations:

https://www.marines.mil/portals/1/Publications/MCO%201020.34H%20v2.pdf?ver=2018-06-26-094038-137

Hair:

Hair will be neat and closely trimmed. The hair may be clipped at the edges of the side and back and will be evenly graduated all the way around the head (blended or faded and not edged as an outline) from zero-length(skin)at the hairline to at least the top orifice of the year circling around the back of the head, where it may then extend to the maximum hair length. Hair will not be over 3 inches in length fully extended(an extended hair, not the style, determines proper length) on the upper portion of the head. The bulk of the hair shall not exceed approximately 2 inches. Bulk is defined as the distance that the mass of hair protrudes from the scalp when styled. The back and sides of the head below the hairline may be shaved to remove body hair.



Shaving & Mustaches:

The face shall be clean-shaven unless a shaving waiver is authorized by the Commanding Officer per <<u>BUPERSINST 1000.22</u>>. Mustaches are authorized but shall be kept neatly and closely trimmed. No portion of the mustache shall extend below the lip line of the upper lip. It shall not go beyond a horizontal line extending across the corners of the mouth and no more than 1/4 inch beyond a vertical line drawn from the corner of the mouth. The length of an individual mustache hair fully extended shall not exceed approximately ½ inch.

Fingernails:

Fingernails shall not extend past fingertips. They shall be kept clean. The tips of the nails may be round to align with the contour of the fingertip. Buffed nails or clear coat nail polish is authorized. Colored nail polish is not authorized for men.

Jewelry:

Jewelry is authorized for wear with all uniforms, as detailed below. Commanders may require the removal of all jewelry for safety/tactical reasons.

• Rings.

Inconspicuous rings are authorized for wear in uniform. When worn, only one ring is authorized per hand, except for wedding and engagement rings (when worn on the same finger they will count as one ring) and will be worn on the base of the finger close to the palm. Rings will not be worn on the thumbs.

• Watches.

Inconspicuous watches are authorized for wear in uniform.

• Necklaces.

Except as detailed in paragraph 1004.6, necklaces if worn will not be visible in uniform (including the chain around the neck).

• Earrings.

This policy applies when in civilian attire, as well as in uniform: Male Marines are not authorized to wear earrings.

USMC Grooming Standards (Female):

The following link may also be used to view additional detailed regulations: https://www.marines.mil/portals/1/Publications/MCO%201020.34H%20v2.pdf?ver=2018-06-26-094038-137

Hair:

Short Hair Length.

Short hair is defined as hair length that extends no more than 1 inch from the scalp (excluding bangs). Overall hair bulk may be cut no shorter than 1/4 inch from the scalp; except that it may be evenly graduated from zero at the hairline at the nape of the neck to the maximum length of 1 inch within two inches of the hairline/neckline(creating a fade). Bangs, if worn, may not fall into the line of sight, may not interfere with the wear of all headgear, and when worn with headgear must lie neatly against the head. The width of the bangs may not extend beyond the hairline at the temples.

Medium Hair Length.

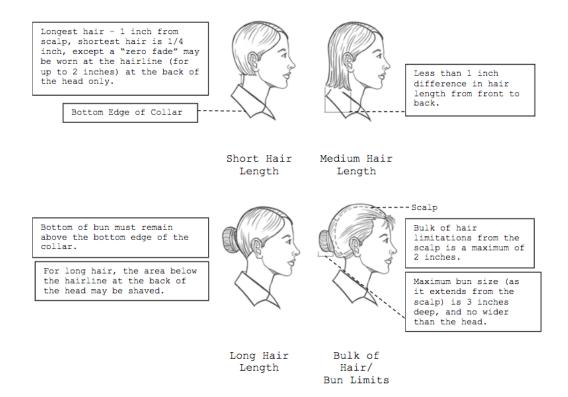
Medium hair is defined as hair that does not extend beyond the collar's lower edge (in all uniforms), and extends more than 1 inch from the scalp. Medium hair may fall naturally in uniform and is not required to be secured. When worn loose, graduated hairstyles are acceptable, but the change in length, from the front to the back, may not exceed a one-inch difference in length (see Figure 1-4). The regulations for the wear of bangs detailed in the short hair length section apply to medium length hair as well. No portion of the bulk of the hair as measured from the scalp will exceed 2 inches (see Figure 1-3).

Long Hair.

Long hair is defined as hair that extends beyond the collar's lower edge. When styled, long hair will be secured up so that it does not extend beyond the collar's lower edge, except in the physical training uniform. Long hair will be neatly and inconspicuously fastened or pinned, except that bangs may be worn. The regulations for the wear of bangs detailed in the short hair length section are relevant. No portion of the bulk of the hair, as measured from the scalp, will exceed 2 inches (except a bun, which may extend to a maximum of 3 inches from the scalp and maybe no wider than the width of the head).

Braids. Twists. Locks

Braids may only be worn with medium and long length hair. One and two braids (e.g. French braid) hairstyles are authorized, as long as the braid(s) provides a neat and professional military appearance and does not interfere with the proper wear of all headgear. Twists may only be worn with medium and long length hair. One and two twists (e.g. French twist) hairstyles are authorized, as long as the twist(s) provides a neat and professional military appearance, does not interfere with the proper wear of all headgear and does not exceed the "bulk of hair" limitations. Locks may be worn with short, medium and long length hair and require partings to be square or rectangular in shape in order to achieve a neat and professional military appearance. When worn secured, individual braids and twists will be small in diameter (no more than 3/8 inch), and will be tightly interlaced/twisted to present a neat, professional military appearance.



Cosmetics:

Cosmetics, if worn, will be applied conservatively and will complement the individual's complexion tone. Exaggerated or faddish cosmetic styles are inappropriate with the uniform and will not be worn.

Fingernails:

They shall be kept clean. The tips of the nails may be round to align with the contour of the fingertip. Nail length will be no longer than 1/4 inch from the tip of the finger. Manicures that imitate the natural nail are authorized for wear with all uniforms (i.e. French manicures), to include utilities, but must have the "natural nail" appearance, to include the clearly defined white/beige nail tip. Press-on and acrylic nails are authorized for wear as long as they are maintained within the length and style regulations as per regulations detailed above.

Jewelry:

Jewelry is authorized for wear with all uniforms, as detailed below. Commanders may require the removal of all jewelry for safety/tactical reasons.

Rings.

Inconspicuous rings are authorized for wear in uniform. When worn, only one ring is authorized per hand, except for wedding and engagement rings (when worn on the same finger they will count as one ring) and will be worn on the base of the finger close to the palm. Rings will not be worn on the thumbs.

Watches.

Inconspicuous watches are authorized for wear in uniform.

Necklaces.

Except as detailed in paragraph 1004.6, necklaces if worn will not be visible in uniform (including the chain around the neck).

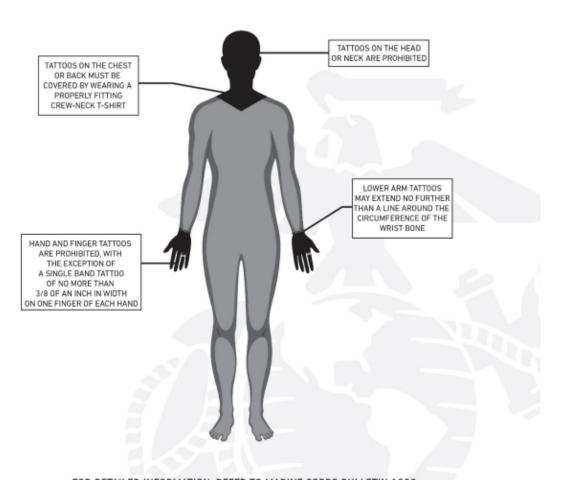
• Earrings.

This policy applies when in civilian attire, as well as in uniform: Male Marines are not authorized to wear earrings.

USMC Tattoo Policy (Male & Female):

The following policy only applies to Marines, and does not apply to Marine Candidates. All tattoos must be reported to and waived by Marine Corps Recruiting Command (MCRC), regardless of location and size.

UPDATED TATTOO POLICY

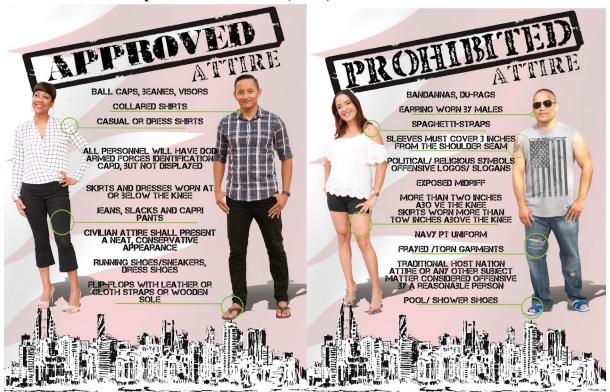


FOR DETAILED INFORMATION, REFER TO MARINE CORPS BULLETIN 1020

*MARINES MAY HAVE TATTOOS ON ANY AREA OF THE BODY, EXCLUDING THE HEAD, NECK, AND HANDS IN ACCORDANCE WITH THIS POLICY. PROHIBITED TATTOOS ARE DRUG-RELATED, GANG-RELATED, EXTREMIST, OBSCENE OR INDECENT, SEXIST, OR RACIST.

Due to the length and detail of the USMC policy the following link can be used to view the full tattoo policy: https://www.marines.mil/portals/1/Docs/TattooPolicy_Booklet.pdf https://www.marines.mil/Portals/1/Publications/MCBUL%201020%20DTD%2029OCT21%20(TATTO O%20POLICY).pdf?ver=bPNiDV5I4 3d9l39tJSMOg%3d%3d

USN & USMC Proper Civilian Attire (PCA) Male & Female:



*Various resources can be found online which explain a detailed version of PCA. The figure displayed above presents common violations of PCA but may not demonstrate all.

Uniforms:

Service Khaki (SSK)





- a. Midshipmen, First Class of other then Officer Rank.
 Wear the eagle-anchor insignia on both collar points.
- b. **Midshipmen, Second Class.**Wear the anchor insignia on both collar points.
- c. Midshipmen, Third Class.
 Wear the anchor insignia on the right collar point only.
- d. Midshipmen, Fourth Class.
 Wear no insignia on collar.



Required:

Shirt, Service, Khaki
Trousers, Service, Khaki
Cap, Garrison, Khaki
Shoes, Service, Black
Socks, Dress, Black
Brassiere (Female Only)
Undershirt, V-Neck, White
Underwear
Belt, Khaki w/Gold Clip
Buckle, Gold
Collar Insignia
Name Tag
Large Breast Insignia
Ribbons

Prescribable:

Coat, Parka, Black
Coat, All-Weather, Blue (AKA Trench Coat)
*no longer issuable
Jacket, Relaxed Fit, Black (AKA Eisenhower)
*no longer issuable
Cap, Combination, Khaki
Gloves, Leather, Black
Sword

Optional:

Sweater, V-Neck, Black (w/ velcro name tag) Earrings, Ball, Gold (Female Only)

USN: Navy Working Uniform (NWU Type III) USMC: Marine Pattern (MARPAT)



Required:

Blouse, NWU Type III
Trousers, NWU Type III
Cap, Eight Point, NWU Type III
Boot, Desert Tan or Brown
Sock, Boot, Black
Straps, Blousing
Undershirt, Crewneck, Brown
Undershorts
Belt, Riggers, 1 ¾", Brown
Buckle, Open Face, Black
Collar Insignia



Name Tape U.S. NAVY Tape

Large Breast Insignia (Embroidered)

Prescribable:

Coat, Parka (Tan Fleece Liner)

Cap, Knit, Black

Optional:

Mock neck, Black

Earmuffs

Sock, Boot, Green or Brown

Earrings (Female Only)

Gloves, Leather, Black

NWUs are worn with the trousers bloused between the 3rd and 4th eyelet of the boot. Sleeves are rolled to be below the pockets, 2-3 inches (a hand width) from the elbow. The rolled fabric should not cover the Ensign or Jack patches. Any fabric that is showing beyond the cuff should be tucked in and not visible. A good method is to first roll the sleeve inside out, then make two even folds. After the cuff is rolled back over, the sleeve should be examined for fit and uniformity. Certain commands, as authorized, wear Coyote Brown boots. Only black boots are authorized aboard ships. MIDN bar-rank is worn horizontally so as to not appear like officer rank.

MARPATs are worn with the trousers bloused to the top lace of the boot. Marines roll their sleeves up to the pocket and it must be four fingers across in length.

When "boots and utes" or the debloused version of the working uniform is worn, unit sweatshirts are authorized.

Summer Whites (For use by NROTC MIDN on summer cruise)



a. Class Shoulder Boards.

The insignia for shoulder boards consists of a metal fouled anchor alone or in combination with stripes, indicating the wearer's class.

1. Midshipmen, First Class.

Center a gold metal fouled anchor, 1-1/16 inches in length, with other dimensions proportionate, on the shoulder board with the crown 2 inches from the squared end and the unfouled arm of the stock to the front. Place one yellow stripe, 1/8 inch wide, with the outer edge 5/8 inch from and parallel to the squared end of the shoulder board (right and left).



2. Midshipmen, Second Class.

Same as prescribed for Midshipman, First Class, except that there are two yellow stripes, 1/8 inch wide, placed diagonally across the shoulder board. The front edge of the bottom stripe is 5/8 inch and the rear edge of the bottom stripe is 1-5/8 inches from the squared end of the board. The stripes are parallel and spaced 1/8 inch apart; lower end to the front (right and left).



3. Midshipmen, Third Class.

Same as prescribed for midshipmen, Second Class, but the upper stripe is omitted (right and left).



4. Midshipmen, Fourth Class.

Same as midshipmen, First Class, but the stripe is omitted (right and left). For women the anchor crown is 1-1/4 inches from the squared end.



Required:

Shirt, Sumer, White
Trouser/Slacks, Summer, White
Cap, Combination, White
Shoes, Service, White
Socks, Dress, White
Undershirt, V-Neck, White
Underwear, White
Belt, Summer, White w/Gold Clip
Buckle, Gold
Shoulder Boards (Hard)
Name Tag
Large Breast Insignia
Ribbons

Prescribable:

Coat, All-Weather, Blue (AKA Trench Coat)

*no longer issuable

Jacket, Relaxed Fit, Black (AKA Eisenhower)

*no longer issuable

Brassard

Optional:

Umbrella, Black

Earrings, Ball, Gold (Female Only)

Skirt, Belted, White (Female Only)

Shoes, Dress, White (Pump) (Female Only)

Hosiery, Flesh Tone (Female Only)

Slip (Female Only)

Physical Training Gear (PT Gear)



Required:

Shirt, PTU (Short Sleeve), Gold Shorts, PTU, Blue Shoes, (Sneakers), Athletic Socks, Athletic

Optional:

Cap, Ball (Gold N)
Cap, Knit (Watch)
Shirt, Optional PTU, Blue wicking



Shirt, PTU (Long Sleeve), Gold Shorts, Compression, Blue/Black Shorts, Optional PTU, Blue zipper pocket Shirt, Sweat, Navy Pants, Sweat, Navy Fitness Suit, Navy Jacket, Fitness Suit, Navy Pants, Fitness Suit, Navy

Ankle or crew socks are authorized. White PT socks required, black socks authorized based on a high enough PRT score.

SSO midshipmen are required to wear their regimental physical training uniform, with the option for regimental sweatshirt and sweatpants, instead of the Navy PTU.

Service Dress Blue (SDB)



1. Lapel Anchors.

A plain gold anchor 17/16 inch long, the stock 3/4 inch wide, and the flukes 1-1/17 inches wide. The stock inclines at an angle of 8 degrees from the horizontal (right and left). Pin it on each collar tip of the coat so the anchor's crown is 1/2 inch above the notch of the lapel and the center line of the shank is parallel to and approximately 3/4 inch from the collar's outer edge. The lower end of the stock is outboard and the stock is approximately horizontal.







Required:

Coat, Service Dress, Blue Shirt, Dress, White Trousers/Slacks, Dress, Blue Cap, Combination, White Shoes, Service, Black Socks, Dress, Black Brassiere (Female Only) Undershirt, Crew Neck, White Underwear Belt, Nylon, Black, Gold Clip Buckle, Gold Necktie, Windsor, Black (Men Only) Tie Clasp/Tack (Men Only) Necktab, Cross Over, Black (Female Only) Shoulder Boards (Soft) Lapel Anchors/EGAs Name Tag

Large Breast Insignia

Ribbons

Prescribable:

Coat, All-Weather, Blue (AKA Trench Coat) *no longer issuable

Overcoat, Blue Scarf (with Overcoat only)

Gloves, Leather, Black Gloves, Stretch, White

Brassard

Optional:

Reefer, Blue

Cufflinks, Gold (Men Only)

Earrings, Ball, Gold; Pearl (Female Only)

Umbrella, Black

Skirt, Unbelted, Black (Female Only)

Shoes, Dress, Black (Pump) (Female Only)

Hosiery, Flesh Tone (Female Only)

Slip (Female Only)

MMA/UMO NROTC Midshipmen will wear Dinner Dress Blue, a modified version of the above uniform to official functions deemed "black tie" such as the annual Navy & Marine Corps Birthday Ball. Instead of ribbons, men and women will wear miniature medals and no breast insignia. Men will wear a black bow tie instead of the necktie.

Ribbons:

1. Ribbons

Ribbons are worn on uniforms as designated in Chapter 2 of these Regulations. Ribbons are not authorized on formal dress, dinner dress or winter and summer working uniforms.

a. Manner of Wearing.

Wear up to three ribbons in a single row. When more than three ribbons are authorized, wear them in horizontal rows of three each. If ribbons are not in multiples of three, the top row contains the lesser number, and the center of this row sits over the center of the one below it. Wear ribbons without spaces between ribbons or rows of ribbons. Wear ribbons with the lower edge of the bottom row centered 1/4 inch above the left breast pocket and parallel to the deck. To prevent coat lapels from covering ribbons, ribbons may be aligned so the border to wearer's left is aligned with left side of pocket. Rows of ribbons where more than 50% of the ribbon is covered by the coat lapel may contain two ribbons each and be aligned with left border.

1. Placement on Ribbon Bar.

Ribbons shall be arranged on a bar(s) and attached to uniforms. Ribbons shall not be impregnated with preservatives which change their appearance, or have any transparent covering.

2. Arrangement.

Arrange ribbons in order of precedence in rows from top down, inboard to outboard. Wear all ribbons if you have earned three or more.

3. Ribbons with Breast Insignia.

When you wear ribbons with breast insignia, comply with Section 2 and Table 3-1 of this Chapter.

Covers:

1. Combination Cap

a. Insignia.

On the combination cap shall be a gold pin-on fouled anchor 1-13/16 inches in length attached to the mount of the cap band, unfouled arm of the stock shall be to the wearer's right.

b. Chin Strap.

Shall be 3/8 inch wide faced with gold lace and secured at each end by Navy eagle gilt buttons.

c. Manner of Wear.

Worn squarely on the head, bottom edge horizontal approximately 1 and 1/2 inches above the eyebrows.

2. Garrison Cap

a. Insignia.

Shall be a gold metal fouled anchor 1 1/16 inches in length pinned to the left side of the cap in an upright position centered 2 inches from the front seam.

b. Manner of Wear.

Worn squarely on the head with the fore and aft crease centered vertically between the eyebrows with the lowest point 1 inch above the eyebrows.

Miscellaneous:

Sunglasses: Conservative sunglasses are permitted, except in military formations. Retainer straps are authorized for FOD prevention and safety only. If retainer straps are required, they shall be plain, black, and worn snugly against the back of the head.

NO ARTICLES SHALL PROTRUDE FROM OR BE VISIBLE ON THE UNIFORM, including such items as, pencils, pens, watch chains, key chain fobs, pins, jewelry, combs, large wallets, cigars, cigarettes, pipes, or similar items (Jewelry, tie clasps, cufflinks, shirt studs, and earrings shall be worn as prescribed elsewhere in these regulations).

Additional Uniform Items:

Further information on required/optional components, as well as occasions for wear, for each uniform described can be found by the following 2 links:

https://www.usna.edu/UniformRegs/Chapter2-DescriptionOfUniforms/index.php

 $\frac{https://www.public.navy.mil/bupers-}{npc/support/uniforms/uniformregulations/chapter3/Pages/default.aspx}$

Military History

USN and USMC Birthdays:

USN: 13 OCTOBER 1775 USMC: 10 NOVEMBER 1775

Original Six Frigates of the Navy:

USS United States

USS Constellation

USS Constitution

USS Chesapeake

USS Congress

USS President

Anchors Aweigh:

Stand Navy out to sea,

Fight our battle cry;

We'll never change our course,

So vicious foe steer shy-y-y-y.

Roll out the TNT,

Anchors Aweigh.

Sail on to victory

And sink their bones to Davy Jones, hooray!

Anchors Aweigh, my boys,

Anchors Aweigh.

Farewell to foreign shores,

We sail at break of day-ay-ay-ay.

Through our last night ashore,

Drink to the foam,

Until we meet once more.

Here's wishing you a happy voyage home.

Blue of the mighty deep:

Gold of God's great sun.

Let these our colors be

Till all of time be done, done, done, done.

On seven seas we learn

Navy's stern call:

Faith, courage, service true,

With honor, over honor, over all.

The Marines' Hymn:

From the Halls of Montezuma
To the shores of Tripoli;
We fight our country's battles
In the air, on land, and sea.
First to fight for right and freedom
And to keep our honor clean;
We are proud to claim the title
Of United States Marine.

Our flag's unfurled to every breeze
From dawn to setting sun;
We have fought in ev'ry clime and place
Where we could take a gun;
In the snow of far-off Northern lands
And in sunny tropic scenes;
You will find us always on the job
The United States Marines

Here's health to you and to our Corps Which we are proud to serve; In many a strife we've fought for life And never lost our nerve; If the Army and the Navy Ever look on Heaven's scenes; They will find the streets are guarded By United States Marines.

Significant Navy and Marine Corps Battles and Engagements:

The engagement between the *USS Bonhomme Richard and HMS Serapis*, (*Sept. 23, 1779*), in the American Revolution, notable American naval victory, won off the east coast of England by Captain John Paul Jones. Challenged by a large combined French and Spanish fleet, the British Navy was too preoccupied to prevent American interference with its merchant marine in the Atlantic. Operating from French bases, Jones led a small fleet around the British Isles from August to October 1779. The American commander answered a challenge to surrender early in the battle with the famous quotation, "I have not yet begun to fight!" Despite the fact that his ship was sinking (later Jones moved his command to the *Serapis*), Jones outlasted his adversary and forced a surrender.

The *Battle of Lake Erie*, (*Sept. 10, 1813*), major U.S. naval victory in the War of 1812, ensuring U.S. control over Lake Erie and precluding any territorial cession in the Northwest to Great Britain in the peace settlement. On Sept. 10, 1813, Master Commandant Oliver Hazard Perry's fleet of nine ships engaged six British warships. After Perry's flagship, "*Lawrence*," had suffered heavy casualties and had been reduced to a defenseless wreck, he transferred to a sister ship, the "*Niagara*," and sailed directly into the British line, firing broadsides and forcing its surrender. The destruction of the British squadron on Lake Erie reversed the course of the northwest campaign and forced the British to abandon Detroit. After the battle, Perry sent his famous dispatch to Major General William Henry Harrison: "We have met the enemy and they are ours."

The *Battle of Belleau Wood*, (1–26 June 1918), Allied victory, and the first major engagement of the U.S. army in World War I, greatly boosted morale amid the German's Spring Offensive. The struggle for Belleau Wood announced to the Germans that the U.S. armed forces had arrived on the Western Front in strength and were eager to fight. It was a tough baptism of fire for the Americans but persistence and resolution secured them their first important victory in France. The bravery of the U.S. Army's 2nd Division, comprising the 4th Marine Brigade (the "Fighting Fifth" and 6th Marine Regiments) was especially noteworthy. In recognition of their service and sacrifice, the French renamed Belleau Wood the "Bois de la Brigade de Marine"—Wood of the Marine Brigade—and awarded the 4th Marine Brigade the coveted Croix de Guerre.

The First Battle of Fallujah, (April 4–May 1, 2004), also called "Operation Valiant Resolve," U.S. military campaign during the Iraq War to pacify the Iraq city of Fallujah, rid it of extremists and insurgents, and find those responsible for the March 31 ambush and killing of four American military contractors. The public display of the beaten and burned bodies of the four killed men provoked worldwide outrage as well as the American response to retake control of the city beginning on April 4. A third of the city had been retaken within a week, but due to the considerable destruction of the city and heavy civilian deaths by U.S. airstrikes, the interim Iraqi government pressured the American forces to withdraw from the city on May 1. The U.S. then turned over military operations to a 1100-man Fallujah Brigade, but by September, the brigade had dissolved and turned over all of their American weapons and equipment to the insurgents.

The Second Battle of Fallujah, (November 7–December 23, 2004), also called Operation Al-Fajr ("Dawn") and Operation Phantom Fury, joint American, Iraqi, and British military campaign during the Iraq War that crushed the Islamic insurgents in Fallujah, Iraq, in the Sunni Muslim province of Al-Anbar. After the First Battle left resistance fighters and foreign Muslim extremists in control of the city, the U.S.-led coalition decided to mount in November a follow-up campaign to retake the city to prevent a further spreading of the armed opposition to the U.S. occupation of Iraq. The insurgents in Fallujah were largely destroyed, and the resistance never again challenged the coalition in open combat, but small-scale attacks across Iraq multiplied.

The Attack on Pearl Harbor, (December 7, 1941), was a surprise aerial attack on the U.S. naval base at Pearl Harbor on Oahu Island, Hawaii, by the Japanese which precipitated the entry of the United States into World War II. In total, more than 180 aircraft were destroyed. Most of the damage to the battleships was inflicted in the first 30 minutes of the assault. The USS Oklahoma, hit by four torpedoes within five minutes, rolled completely over, and the battleship USS Arizona blew up with a tremendous explosion. The Pearl Harbor attack severely crippled U.S. naval and air strength in the Pacific. However, of the eight battleships, all but the Arizona and Oklahoma were eventually repaired and returned to service, and the Japanese failed to destroy the important oil storage facilities on the island. The "date which will live in infamy," as U.S. Pres. Franklin D. Roosevelt termed it, unified the U.S. public and swept away any earlier support for neutrality. On December 8 Congress declared war on Japan

The Battle of Iwo Jima, (February 19–March 16, 1945), World War II conflict between the United States and the Empire of Japan. The United States mounted an amphibious invasion of the island of Iwo Jima as part of its Pacific campaign against Japan. A costly victory for the United States, the battle was one of the bloodiest in the history of the U.S. Marine Corps. The island of Iwo Jima lies about seven-hundred miles from the Japanese islands. Mt. Suribachi, the island's most prominent feature, was the site of the famed U.S. Marine Corps flag raising on February 23, 1945. Due to the first raised flag being too small, a second more visible flag was ordered. On the flag raising, Secretary of the Navy James V. Forrestal said

to General Holland M. Smith, USN, "Holland, the raising of the flag on Suribachi means a Marine Corps for the next 500 years."

In 1982, the Marines began a peacekeeping mission as part of a multinational force in Lebanon. The Marines were to maintain a visible presence in the capital of Beirut, in the hopes that it would deter further bloodshed among the various warring factions and militias fighting for control of the country. The United States government intended to provide a neutral, stabilizing force in Lebanon. On the morning of 23 October 1983, a stake-bed truck laden with 2,000 pounds of explosives sped past a Marine post, through a fence, and crashed into the lobby of the Battalion Landing Team Headquarters Building and detonated. The BLT building completely collapsed into a pile of rubble almost instantaneously. The blast killed 3 soldiers, 18 sailors and 220 Marines. The compressed-gas-enhanced bomb detonated by the suicide truck bomber was the largest nonnuclear explosion ever recorded. Later, a 2003 U.S. court case revealed that Islamic terrorists from the extremist group, Hezbollah, carried out the attack. This attack was one of the first of its kind and began to change US military doctrine as terror groups emerged around the world.

The USS *Cole* was attacked by Muslim militants, (October 12, 2000), associated with the al-Qaeda. Suicide bombers in a small boat steered their craft into the side of the USS Cole, which was preparing to refuel in the harbour in the Yemeni port of Aden; the blast ripped a 1,600-square-foot (150-square-metre) hole in its hull and left 17 sailors dead and 39 wounded. Drawing upon their Navy training and discipline, the crew heroically conducted more than 96 hours of sustained damage control in conditions of extreme heat and stress. The attack demonstrated that bin Laden and al-Qaeda were not intimidated by the United States' reprisal for their terrorist acts. In response to the incident, the United States Navy reconsidered its rules of engagement and increased global force protection training.

Important Navy and Marine Corps Leaders:

John Paul Jones, (born July 6, 1747-died July 18, 1792), American naval hero in the American Revolution, renowned for his victory over British ships of war off the east coast of England. For his victory, Jones was awarded a Congressional Gold Medal in 1787. He is regarded by many as the "Father of the American Navy", a title he earned for his work on the Naval Committee of the Continental Congress during the Navy's inception. The USS John Paul Jones (DDG-53) is an Arleigh Burke-class guided missile destroyer and the second ship to be named in his honor.

Oliver Hazard Perry, (born August 23, 1785-died August 23, 1819), U.S. naval officer who became a national hero when he defeated a British squadron in the Battle of Lake Erie in the War of 1812. Perry's successful action at Lake Erie helped ensure U.S. control of the Northwest; it also raised him to a position of national eminence and earned him promotion to the rank of captain. Six United States Ships have been named in his honor, the last of which was a guided-missile frigate.

Smedley D. Butler, (July 30, 1881 – June 21, 1940) was one of the two Marines who received two Medals of Honor for separate acts of outstanding heroism. His first Medal of Honor was presented following action at Vera Cruz, Mexico, 21-22 April 1914, where he commanded the Marines who landed and occupied the city. Maj Butler "was eminent and conspicuous in command of his Battalion. He exhibited courage and skill in leading his men through the action of the 22nd and in the final occupation of the city." The following year, he was awarded the second Medal of Honor for bravery and forceful leadership as Commanding Officer of detachments of Marines and seamen of the USS Connecticut in repulsing Caco resistance on Fort Riviere, Haiti, 17 November 1915. The USS Butler, a destroyer, later converted

to a high speed minesweeper, was named for MajGen Butler in 1942. This vessel participated in the European and Pacific theaters of operations during the second World War.

Chester W. Nimitz, (born Feb. 24, 1885-died Feb. 20, 1966), commander of the U.S. Pacific Fleet during World War II. One of the navy's foremost administrators and strategists, he commanded all land and sea forces in the central Pacific area. After the Japanese attack on Pearl Harbor (December 1941), Nimitz was elevated to commander in chief of the Pacific Fleet, a command that brought both land and sea forces under his authority. By June 1942 he had proudly announced the decisive victory at the Battle of Midway and the Coral Sea, where enemy losses were 10 times greater than those of the United States at Pearl Harbor. After the war, Nimitz served as chief of naval operations (1945–47). The aircraft carried the USS Nimitz is named in his honor, and is the lead ship of the Nimitz class nuclear powered aircraft carriers, which continue to be the centerpiece of the US Navy forces necessary for operating forward.

Lewis "Chesty" Puller, (born June 26, 1898-died October 11, 1971), was a United States Marine Corps officer who was the most decorated and venerated Marine in the history of the Corps. Across three wars and two counterinsurgency campaigns, Puller won five Navy Crosses, the Army Distinguished Service Cross, the Army Silver Star Medal, the Legion of Merit with Combat "V" and Gold Star in lieu of a second award, the Bronze Star Medal with Combat "V", and the Air Medal with Gold Stars in lieu of second and third awards. In 1957 the Corps' official bulldog mascot was dubbed Chesty, and in 2017 the U.S. Navy commissioned the USS Lewis B. Puller, a forward-operating mobile sea base to be used for naval support and littoral special operations missions.

John Basilone (1916-1945) was awarded the Medal of Honor for extraordinary heroism in combat at Guadalcanal, Solomon Islands, in October 1942. In his medal of honor citations, he is lauded for "Moving an extra gun into position, he placed it in action, then, under continual fire, repaired another and personally manned it, gallantly holding his line until replacements arrived. A little later, with ammunition critically low and the supply lines cut off, Sgt. Basilone, at great risk of his life and in the face of continued enemy attack, battled his way through hostile lines with urgently needed shells for his gunners, thereby contributing in large measure to the virtual annihilation of a Japanese regiment." He returned home to a hero's welcome, including a parade featured in "Life" magazine. But he requested to return to combat, stating that he was just "a plain soldier" who belonged with his unit. On February 19, 1945, Basilone was killed in action leading an assault off the beaches of Iwo Jima. He was posthumously awarded the Navy Cross, the only enlisted Marine to be honored with both the Navy Cross and the Medal of Honor. The USS Basilone (DD-824), a Gearing-class destroyer and the USS John Basilone (DDG-122) a Flight IIA Arleigh Burke-class guided missile destroyer are both named in honor of him.

Global Challenges

Cyber:

The U.S. Intelligence Community expects global cyber threats to the United States and our Allies to increase and emanate from a wide array of both state and non-state actors. Our networks, systems, and information are at risk from a myriad of malicious cyberspace activities. The most important emerging cyber threats to our national security will come from the exploitation of our weakest technological components: mobile devices and the Internet of Things (IoT). Our social media, web applications, cloud services, and critical infrastructure is also vulnerable to targeted attacks, influence operations, information leaks, and intellectual property loss. Adversarial cyber operations attempt to compromise critical infrastructure and expose U.S. military technology in fields such as precision guidance, stealth, and autonomous systems. Our adversaries also target U.S. military personnel on social media to gain insight into the disposition and movement of our forces and develop follow on cyber-attacks. Our top adversaries are developing and using cyberspace to increase their operational reach into our military and civilian systems, exploiting our vulnerabilities, and compromising our national defense. Their capabilities will continue to challenge our current cyber defenses and cybersecurity investments.

Space:

The space domain is the area above the altitude where atmospheric effects on airborne objects become negligible. United States Space Command (USSPACECOM) area of responsibility (AOR) is the area surrounding the Earth at altitudes equal to, or greater than, 100 kilometers (54 nautical miles) above mean sea level. Like the air, land, and maritime domains, space is a physical domain within which military, civil, and commercial activities are conducted. The relationship between space and cyberspace is unique in that many space operations depend on cyberspace, and a critical portion of cyberspace can only be provided via space operations.

Benefits From Access To Space

Space capabilities provide combatant commanders (CCDRs) with near-worldwide coverage and access to otherwise denied areas.

Advantages to using space for operational purposes include:

- Freedom of action.
- Overflight.
- Global perspective.
- Responsiveness.
- Multi-user capacity.
- Speed, reach, and persistence.

Threat to Space Operations

Space is a naturally hazardous environment and is increasingly congested, contested, and competitive. Space assets face many threats, both natural and manmade. Natural threats to satellites include solar activity, radiation, and natural orbital debris. Man-made threats can be both unintentional (e.g., satellite debris or electromagnetic interference [EMI]) or intentional (e.g., jamming, lasing, cyberspace attacks, and anti-satellite weapons).

Space Missions

1. Space domain awareness (SDA) is the requisite foundational, current, and predictive knowledge and characterization of space objects and the operational environment (OE) upon which space operations depend—including physical, virtual, information, and human dimensions—as well as all factors, activities, and events of all entities conducting, or preparing to conduct, space operations. Space surveillance capabilities include a mix of space-based and round-based sensors. SSA is dependent on integrating space surveillance, collection, and processing; environmental monitoring; status of US and

cooperative satellite systems; understanding of US and multinational space readiness; and analysis of the space domain.

2. Space Control Space control includes offensive space control and defensive space control operations to ensure freedom of action in space and, when directed, defeat efforts to interfere with or attack US or allied space systems. Space control uses a broad range of response options to provide continued, sustainable use of space. Space control contributes to space deterrence by employing a variety of measures to assure the use of space; attributing enemy attacks; and being consistent with the right to self-defense, target-threat space capabilities.

3. Positioning, Navigation, and Timing

Military users depend on assured positioning, navigation, and timing (PNT) systems for precise and accurate geo-location, navigation, and time reference services. PNT information, whether from space-based global navigation satellite systems (GNSSs), such as Global Positioning System, or non-GNSS sources, is considered mission-essential for virtually every modern weapons system.

4. Intelligence, Surveillance, Reconnaissance

Space-based intelligence collection synchronizes and integrates sensors, assets, and systems for gathering data and information on an object or in an area of interest on a persistent, event-driven, or scheduled basis. Space based intelligence, surveillance, and reconnaissance, which includes overhead persistent infrared (OPIR), is conducted by an organization's intelligence collection manager to ensure integrated, synchronized, and deconflicted operations of high-demand assets.

5. Satellite Communications

Satellite communications (SATCOM) systems inherently facilitate beyond line-of-sight connectivity. Depending on its configuration, a robust SATCOM architecture provides either equatorial coverage (nonpolar) or high-latitude coverage (includes poles). This provides national and strategic leadership with a means to maintain situational awareness and convey their intent to the operational commanders responsible for conducting joint operations.

6. Environmental Monitoring

Terrestrial environmental monitoring provides information on meteorological and oceanographic factors that affect military operations. Space environmental monitoring provides data that supports forecasts, alerts, and warnings for the space environment that may affect space capabilities, space operations, and their terrestrial users. Environmental monitoring support to joint operations gives the JFC awareness of the OE.

7. Missile Warning

The missile warning mission uses a mix of OPIR and ground-based radars. Missile warning supports the warning mission executed by North American Aerospace Defense Command to notify national leaders of a missile attack against North America, as well as attacks against multinational partners (via shared early warning) in other geographic regions. It also includes notification to combatant commands (CCMDs), multinational partners, and forward-deployed personnel of missile attack and the assessment of a missile attack if the applicable CCMD or multinational partner is unable to do so.

8. Nuclear Detonation Detection

Nuclear detonation detection capabilities provide persistent, global, and integrated sensors to provide surveillance coverage of critical regions of the globe and provide warning and assessment recommendations to the President, Secretary of Defense (SecDef), and CCDRs, indicating place, height of burst, and yield of nuclear detonations.

9. Spacelift

Spacelift is the ability to deliver payloads (satellites or other materials) into space. Satellite Operations Satellite operations maneuver, configure, operate, and sustain on-orbit spacecraft. In a conflict, satellite operations are critical to the command and control (C2), movement and maneuver, protection, and sustainment of space capabilities.

10. Satellite Operations (SATOPS)

Satellite operations involve the maneuver, configuration, operations and sustainment of on-orbit assets. In a conflict, satellite operations are critical to the C2, movement and maneuver, protection and sustainment of space assets.

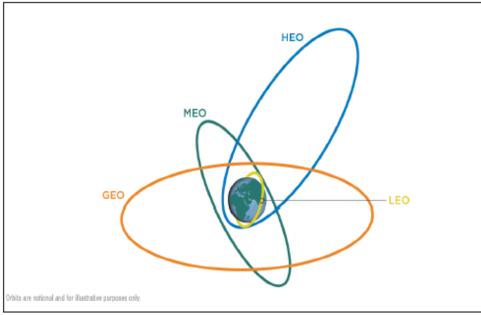


Figure #: Orbit Types

Orbit Type and Characteristics						
Type	Description	Advantages	Disadvantages	Applications		
Geosynchronous Earth Orbit	Roughly circular ~23,000 miles above Earth's surface	Continuous coverage over specific area Coverage nearly Hemispheric	Far from Earth - resolution and signal limitations Easier to jam signal latency	Communication, surveillance, reconnaissance, weather collection, missile warning		
Highly Elliptical Orbit	Long ellipse ~600 miles at perigee (closest to Earth) ~25,000 miles at Apogee (farthest from Earth)	Long dwell time over a large area Coverage of high North or South latitudes	Continuous coverage requires multiple satellites	Communication over high North or South latitudes, scientific, surveillance, reconnaissance, missile warning		
Medium Earth Orbit	Roughly circular Between ~1,000- 22,000 miles above Earth's surface	Stable orbit Less signal latency	Highest radiation level environment	Positioning, navigation, and timing Communication		
Low Earth Orbit	Roughly circular Up to ~1,000 miles above Earth's surface	Near Earth – high resolution and signal strength	Small coverage area over Earth surface Limited coverage windows for any specific geographic region	Surveillance, reconnaissance, weather, collection Manned space flight, communications		

Table #: Orbit Type and Characteristics

Terrorism:

ISIS suffered significant setbacks in 2017 and 2018, but has attempted to maintain relevance by increasing its emphasis on ideology-inspired attacks and shifting its media efforts. Territorial losses in Iraq and Syria and persistent counterterrorism operations against ISIS's global network have degraded the

group's strength and impeded its ability to exploit instability and societal discontent in the regions where it operates. ISIS members are dispersing and prioritizing clandestine terrorist operations to preserve their core capabilities. Counterterrorism operations have eliminated numerous key senior leaders, operatives, and facilitators, significantly reducing the group's ability to achieve its self-declared caliphate's territorial objectives. ISIS's capabilities have been degraded in numerous countries, including Libya, Afghanistan, and the Philippines; however, ISIS continues to inspire more attacks in major cities throughout the West than any other terrorist organization and to conduct high-profile operations in other countries, demonstrating that it remains a significant terrorist threat to the United States and other Western nations. The ISIS brand and global network remain strong, with eight formal branches and an increasing number of affiliated networks in Africa, Asia, Europe, and the Middle East. In September 2017, ISIS leader Abu Bakr al-Baghdadi assured supporters that ISIS remains committed to its long-term strategy of establishing a global caliphate, asserting that territorial and personnel losses are temporary setbacks from predestined victory. This rhetoric and ISIS's anti-Western propaganda resonate with sympathetic attackers, who often lack any direct ties to the group but who carried out some of the most lethal attacks in Europe and the United States in 2017 on behalf of ISIS.

Personnel, infrastructure, and resource losses in recent years have forced the group to reduce the output of its multi-lingual flagship media publications, including its monthly magazine, Rumiyah. ISIS's remaining media apparatus is focused on inspiring actors to conduct low-budget attacks that do not require substantial resources or outside training. These include attacks on cultural monuments, transportation hubs, shopping malls, restaurants, and other civilian infrastructure that the group hopes will garner a high media profile and sow fear and division among citizens. We assess ISIS will maintain an expansive online presence, which may assume even greater significance as the group exhorts its followers to carry out attacks in its name.

ISIS's use of unmanned aerial systems (drones) for surveillance and delivery of explosives has increased, posing a new threat to civilian infrastructure and military installations. ISIS could also seek to use the chemical and biological capabilities it has honed on the battlefield in areas outside Iraq and Syria. The return of some foreign fighters, with battlefield training and experience, to their home countries probably will increase the capabilities of local cells and networks.

Al-Qa'ida remains a serious and persistent threat to U.S. interests worldwide. In particular, the group's exploitation of conflicts in Syria and Yemen offers opportunities for reconstituted external attack capabilities. Al-Qa'ida leader Ayman al-Zawahiri's 2013 guidelines for jihad, intended to "exhaust America and bleed her to death," still resonate with the group, but al-Qa'ida leaders are struggling to reconcile the regional focus of some affiliated groups, especially in Syria, against al-Qa'ida's traditional focus on targeting the United States and its close allies.

Al-Qa'ida leaders in Iran have taken on key decision making and dissemination roles, compensating for Zawahiri's self-imposed seclusion. Al-Qa'ida's affiliates in Somalia, North Africa, the Sahel (where al-Qa'ida–affiliated groups consolidated into a unified organization in 2017), Yemen, and South Asia threaten local and regional stability and have the potential to support or sponsor attacks against U.S. interests. Al-Qa'ida appears to be preparing for the next generation of leadership by elevating the public profile of Usama bin Ladin's son, Hamza bin Ladin, and his call to attack the United States in retaliation for his father's death.

In coming years, it is likely that ISIS will attempt to direct, enable, and inspire attacks in the United States and against U.S. interests across the globe unilaterally and with the assistance of its branches, networks, and cells. ISIS possibly will shift some of its resources to bolster its external branches in Afghanistan, Libya, the Sinai, and Yemen as the group increasingly relies on its global network to conduct attacks in its name. In addition, ISIS probably will seek to establish a foothold in other ungoverned or undergoverned spaces with populations that are sympathetic to the Salafi jihadist ideology.

International focus on ISIS probably is alleviating some counterterrorism pressure on al-Qa'ida, enabling the group to recover from leadership losses. Al-Qa'ida and ISIS share the same underlying ideology, but it is important to note that ISIS advocates the immediate creation of a caliphate and implementation of its ideology, while al-Qa'ida is more willing to compromise with local groups over ideology and the implementation of its version of Islamic law. Both groups have found ideological traction with subsets of populations alienated by deep-rooted socioeconomic issues, as well as real and perceived grievances.

Displacement:

Conflicts are driving record population displacement, resource shortages, demographic shifts, and unplanned expenditures of economic and military assets in countries of strategic interest to the United States. As of October 2017, protracted conflicts and ethno-sectarian violence have increased global displacement to the highest levels on record, according to the United Nations. More than 5 million refugees have fled Syria since 2011 to neighboring host nations, including Lebanon, Jordan, and Turkey. Our European allies are also coping with the influx of migrants and refugees, most of whom have arrived during the past 4 years.

Many Middle Eastern countries with large Syrian and Iraqi refugee populations are closing their borders because public service provisions and government finances are being overtaxed, living standards are declining, labor markets are narrowing, and they perceive a lack of burden sharing by countries outside the region. The longer that conflicts continue, the more likely regional ethno-sectarian grievances will become entrenched, leading to additional instability and sowing the seeds of new military and security challenges.

China:

I. China's One Belt, One Road

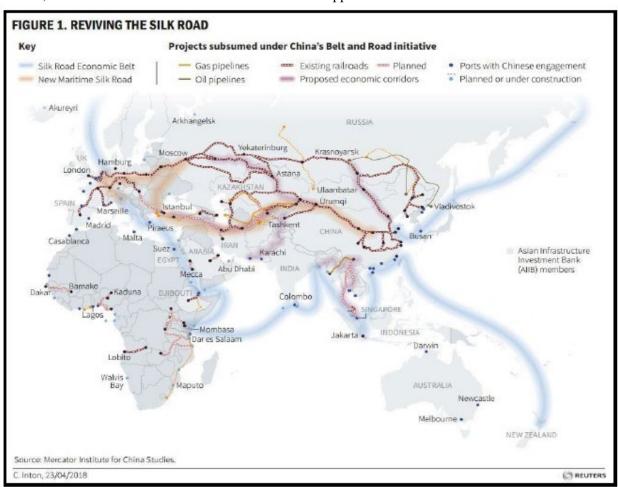
Over the past two decades, China's People's Liberation Army (PLA) has transformed itself from a large but antiquated force into a capable, modern military. Its technology and operational proficiency still lag behind those of the United States, but it has rapidly narrowed the gap. Moreover, China enjoys the advantage of proximity in most plausible conflict scenarios, and geographical advantage would likely neutralize many U.S. military strengths.

A sound understanding of regional military issues — including forces, geography, and the evolving balance of power — will be essential for establishing appropriate U.S. political and military policies in Asia. Research and studies by groups such as RAND show that China is not close to catching up to the United States in terms of aggregate capabilities, but also that it does not need to catch up to challenge the United States on its immediate periphery. Furthermore, although China's ability to project power to more distant locations remains limited, its reach is growing, and in the future U.S. military dominance is likely to be challenged at greater distances from China's coast. To maintain robust defense and deterrence capabilities in an era of fiscal constraints, the United States will need to ensure that its own operational concepts, procurement, and diplomacy anticipate future developments in Chinese military capabilities. The Chinese Communist Party's (CCP) foreign policy reflects its strategic objectives. China seeks to displace the United States in the Indo-Pacific region, expand the reaches of its state-driven economic model, and reorder the region in its favor as the preeminent power. China's most substantial expansion of its military access in recent years has occurred in its near-abroad, where territorial disputes in the East and South China Seas persist, but China has also expanded its military operations further from the Chinese mainland. China seeks this presence based on its changing military focus and expanding international economic interests, which are increasing demands for the PLA to operate in more distant maritime environments to protect Chinese citizens, investments, and critical sea lines of communication. China in 2018 indicated interest in establishing bases in Cambodia and Vanuatu. Although both governments have publicly stated they are not willing to host a Chinese military base, Phnom Penh in the

last two years has agreed to receive new military aid from Beijing and participate in bilateral exercises with the PLA.

China's leaders in 2013 announced the Belt and Road Initiative (BRI), also known as One Belt, One Road or OBOR. This initiative aims to strengthen China's connectivity with the world. In a basic sense, it is a term for an umbrella initiative which covers a multitude of investment projects designed to promote the flow of goods, investment, and people. This includes high-speed rail, highways, pipelines, energy projects like power plants, and investments in port infrastructure to create a "21st Century Maritime Road". The new connections fostered by the BRI/OBOR could reconfigure relationships, reroute economic activity, and shift power within and between states. It combines new and old projects, covers an expansive geographic scope, and includes efforts to strengthen hard infrastructure, soft infrastructure, and cultural ties. The current plan extends to 65 countries with a combined Gross Domestic Product (GDP) of \$23 trillion and includes over 4 billion people. President Xi of China has said: "In pursuing the Belt and Road Initiative, we should focus on the fundamental issue of development, release the growth potential of various countries and achieve economic integration and interconnected development and deliver benefits to all."

In 2017, China's leaders stated that the OBOR, which at first included economic initiatives in Asia, South Asia, Africa, and Europe, now encompasses all regions of the world, including the Arctic and Latin America, demonstrating the scope and reach of Beijing's ambition. While some OBOR projects appear to be motivated by economic considerations, OBOR also serves a greater strategic purpose. China intends to use OBOR to develop strong economic ties with other countries, shape their interests to align with China's, and deter confrontation or criticism of China's approach to or stance on sensitive issues.



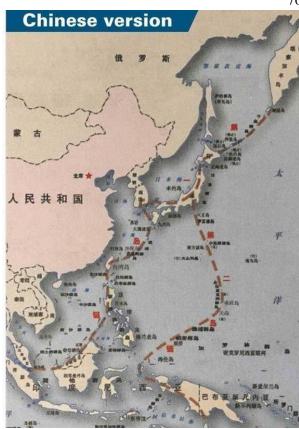
President Xi has promoted the "21st Century Digital Silk Road" alongside OBOR. Chinese state-owned or state-affiliated enterprises, including China Telecom, China Unicom, China Mobile, Huawei, and ZTE,

have invested or submitted bids globally in areas such as 5G mobile technology, fiber optic links, undersea cables, remote sensing infrastructure connected to China's Beidou satellite navigation system, and other information and communications technology infrastructure. While providing benefits to host countries, these projects will also facilitate China's efforts to expand science and technology cooperation, promote its unique national technical standards, further its objectives for technology transfer, and potentially enable politically-motivated censorship. Data legally acquired via some of these projects may also contribute to China's own technological development in areas such as artificial intelligence. China is also pursuing global leadership in strategic industries through state-backed investment, as outlined in its Five-Year Plans, "Made in China 2025" industrial strategy, and other national documents. China seeks to be the world leader in artificial intelligence by 2030, for example. Many of the key technologies China is targeting are integral to the rapid technological change occurring in multiple industries. These capabilities are key not only to economic growth, but to the United States' ability to maintain its military advantage. The report identifies a wide range of efforts China has undertaken to achieve its national technology goals.

II. First and Second Island Chains

When discussing the Indo-Pacific region and geopolitical strategy, policy makers, strategists, and academics often refer to the "First and Second Island Chains". The extensive chains of Pacific islands ringing China have been described as a type of wall, a barrier to be breached by an attacker or strengthened by a defender. They are seen as springboards, potential bases for operations to attack or invade others in the region. In a territorial sense, they are benchmarks marking the extent of a country's influence. Senior officials and analysts in the West frequently refer to the first and second island chains ringing China to describe both the region's geography and predict China's intentions. In comparison, strategists and academics in China often assert that the United States uses its military forces and relies on the first and second island chain to encircle or contain China and prevent the PLA Navy from operating freely in the Western Pacific. As China's regional maritime power expands, they have become benchmarks that in many ways define the field of play, both from a defensive and offensive operational standpoint. The range and development of Chinese missiles, as well as the operating patterns of China's military, all seem to be linked to this geography and viewpoint.





In 2020 in the South China Sea, China employed coercive approaches—such as using law enforcement vessels and maritime militias to enforce claims and advance interests—to deal with disputes in ways calculated to remain below the threshold of provoking armed conflict. In April, Beijing named 80 geographic features and announced two new administrative subdistricts covering disputed territory and maritime areas in the South China Sea. China also conducted a coercive survey operation, using a government research vessel and multiple Chinese Coast Guard vessels, to follow a Malaysian hydrocarbon exploration vessel within Malaysia's exclusive economic zone. In August 2020, China test-fired multiple ballistic missiles that landed near Hainan and the Paracel Islands in the South China Sea. Further, China's Spratly Islands outposts are equipped with advanced anti-ship and antiaircraft missile systems and jamming equipment, comprising the most capable land-based weapons systems deployed by any claimant in the South China Sea.

In the East China Sea, China named 50 geographic features and continued using maritime law enforcement ships and aircraft to patrol near the Senkaku Islands and challenge Japan's territorial claim to and administration of the islands.

III. Chinese Military Modernization

China poses a major security challenge and remains a long-term strategic competitor to the United States. Beijing views the international environment and China's relationship with Washington as increasingly adversarial and perceives a number of threats to its sovereignty and security. China continues its decadeslong military modernization campaign and ultimately aims to achieve its goal, first articulated in 2017, of establishing a "world-class military"—essentially a military as strong as that of the United States. Looking forward, an increasingly capable and lethal Chinese joint force will almost certainly be able to hold U.S. and allied forces at risk at greater distances from the Chinese mainland. At the same time, the People's Liberation Army (PLA) probably will extend its operational reach worldwide to support China's global interests.

Chinese leaders characterize China's long-term military modernization program as essential to achieving great-power status. The party's new milestone to "basically" achieve military modernization by 2027,

which was unveiled at the plenum, probably signals an intent to accelerate some modernization efforts to ensure that the PLA achieves its previously stated goals of completing military modernization by 2035 and transforming into a dominant military by 2049. A fully modern military likely means that by 2027, Beijing seeks to develop key capabilities and better posture for a conflict with any country it views as a threat, including the United States. The PLA frames its 2027 goal as necessary not only to safeguard China's national security and development but also to promote global stability and prosperity, assuaging concerns about its intentions and to present China as a global leader. However, the PLA clearly states that it needs to modernize to close gaps with stronger military powers and to deter and subdue separatist forces (primarily Taiwan), while protecting China's sovereignty and territorial integrity.

China is pressing ahead with an ambitious military modernization agenda. The PLA modernization agenda focuses on developing and fielding advanced military capabilities in all warfighting domains—emphasizing long-range precision strike, air and maritime capabilities, cyberspace, electronic warfare, space and counterspace capabilities, and enhanced strategic nuclear forces —while also restructuring the PLA into a combat-capable global joint force. The PLA seeks a force capable of winning a number of high-end regional conflicts, including the forcible unification of Taiwan, while dissuading, deterring, or defeating third-party military intervention. At the same time, we expect the PLA to expand its capability to carry out smaller operations globally to support China's interests.

China continued funding its military modernization programs despite COVID-19's economic impact. Beijing announced in March that its official annual defense budget would grow 6.8 percent in 2021 to \$210 billion, which is about 1.4 percent of GDP.

The PLA Rocket Force continues bolstering its ballistic long-range land-attack and anti-ship missile capabilities, which gives it the ability to conduct precision strikes in the Western Pacific, the Indian Ocean, and the South China Sea from mainland China. China continued emphasizing hypersonic glide vehicles(HGVs) to counter ballistic missile defense systems, including the claim they deployed their DF-17 missile system with a conventionally armed HGV.

China is expanding and diversifying its nuclear arsenal. The Fifth Plenum communique in October 2020, specifically called for strengthening strategic forces and creating high-level strategic deterrence. Last year, we assessed that China had a nuclear warhead stockpile in the low-200s and projected it to at least double over the next decade. Since then, Beijing has accelerated its nuclear expansion and is on track to exceed our previous projection. PLA nuclear forces are expected to continue to grow with their nuclear stockpile likely to at least double in size over this decade and increase the threat to the U.S. homeland. China probably seeks to narrow, match, or in some areas exceed U.S. qualitative equivalency with new nuclear warheads and delivery platforms that at least equal the effectiveness, reliability, and/or survivability of some U.S. and Russian warheads and delivery platforms under development. The PLA continues to improve its pursuit of a nuclear triad, and increasing evidence indicates that Beijing seeks to keep a portion of its nuclear forces on a "launch-on-warning" posture. 8

China probably has the technical expertise to weaponize chemical and biological agents and numerous conventional weapons systems that could be adapted to deliver these agents. China has consistently claimed that it has never researched, produced, or possessed biological weapons. However, China has engaged in potential dual-use biological activities and maintains sufficient biotechnology infrastructure to produce some biological agents or toxins on a large scale. China has declared it once operated a small offensive chemical weapons program but maintains the program was dismantled. China's chemical infrastructure is sufficient to research, develop, and procure some chemical agents on a large scale. China's space program—managed by the PLA—continues to mature rapidly and invest in improving space-based ISR, satellite communication, satellite navigation, and meteorological capabilities as well as human spaceflight and robotic space exploration. China has built an expansive ground support infrastructure to support its growing on-orbit fleet and related functions. China continues to develop

multiple counter-space capabilities designed to degrade and deny an adversary's use of space-based assets during a crisis or conflict.

The PLA Air Force (PLAAF) continues fielding modern fighters, including the deployment of J-20 stealth fighters in September to China's border with India during their military standoff. The PLAAF is also extending the range and capabilities of its bomber force. The PLA Navy (PLAN) continues a robust shipbuilding program by constructing new submarines, cruisers, a range of other surface warships and a new class aircraft carrier, which features a flat top, in contrast to the current ramp style. The PLAN is developing into a global force, gradually extending its ability to sustain operations beyond East Asia. Military reforms in 2020 focused on enhancing the PLA's ability to conduct joint operations, fighting high-intensity conflicts at greater distances from the Chinese mainland and strengthening the party's control over the military. In a probable sign of the PLA's confidence in the progress of reforms, the Central Military Commission (CMC) issued a trial update to the PLA's joint doctrine in November that appears to codify warfighting reforms and will almost certainly improve the PLA's ability to conduct joint operations.

China recognizes the synergy between high-tech development and defense and seeks to lead the shift toward "intelligentized" warfare through a national strategy of "military-civil fusion" by reforming its organizations for research and development as well as those for developing strategy and doctrine. China continues investing heavily in new capabilities, particularly in AI, which could increase China's military and comprehensive national power. As of late 2020, Beijing is drafting new long-term goals for boosting scientific, technological, and economic strengths.

PLA exercises throughout 2020 likely focused on improving the PLA's capacity to fight and win wars through joint operations under realistic combat scenarios. The CMC's first order of 2020 was a training directive that emphasized the implementation of Xi Jinping's ideological framework and focused on preparing for conflict with "strong enemy opponents"—a euphemism for the United States—under combat-realistic conditions across all warfighting domains. This training order almost certainly codifies the PLA's benchmark for success as defeating the U.S. military. The PLA will likely continue these training and exercise themes through 2021.

For the third consecutive year, the PLA participated in Russia's annual strategic exercise, although likely on a smaller scale than in the past because of probable pandemic-related travel restrictions. China and Russia also conducted their second combined bomber patrol in December 2020, the first since the inaugural patrol in July 2019, and both countries probably view the patrol as messaging the West that their strategic relationship is deepening. China also signaled its continuing reluctance to participate in meaningful arms control and risk reduction discussions with the United States most recently rejecting multiple U.S. invitations throughout 2020 to join nuclear discussions between the United States and Russia.

IV. U.S. Response

The Department of Defense has responded to these implications in line with the U.S. National Defense Strategy (NDS) and in support of whole-of-government action. The NDS identifies long-term strategic competitions with China and Russia as the principal priorities for the Department of Defense. The Department of Defense is implementing four strategic ways:

- (1) building a more lethal force to gain military advantage;
- (2) strengthening allies and partners to generate robust networks that can advance shared interests;
- (3) reforming the Department of Defense to realize greater performance and affordability;
- (4) and expanding the competitive space to create U.S. advantages and impose dilemmas on competitors.

Importantly, competition does not mean conflict is inevitable, or preclude cooperation with China on areas of mutual interest. The NDS sets the U.S. military relationship with China on a path of transparency and non-aggression.

The Department of Defense also supports a whole-of-government response as China's expanding global activities are not primarily or exclusively a military issue. The Department of Defense will continue to assess the military implications of China's expanding global access in support of these actions, and ensure the Department provides combat-credible military forces needed to fight a war and win, should deterrence fail.

V. CHINA'S MILITARY & GEOSTRATEGIC ENVIRONMENT

China's military is broken down into the following services: People's Liberation Army (PLA), Navy (PLAN), Air Force (PLAAF), Rocket Force (PLARF), and Strategic Support Force.

The PLA Navy (PLAN) is Asia's largest navy, with an inventory of more than 300 surface combatants, submarines, amphibious ships, patrol craft, and specialized units. The PLAN is rapidly replacing obsolescent, generally single-purpose ships in favor of larger, multirole combatants with advanced antiship, anti-air, and anti-submarine weapons and sensors. This modernization aligns with China's growing emphasis on the maritime domain, with increasing demands on the PLAN to conduct operational tasks at increasing distances from the Chinese mainland using multi-mission, long-range, sustainable naval platforms with robust self-defense capabilities.

The PLAN is organized into three fleets:

- North Sea Fleet based in the Yellow Sea and headquartered at Qingdao Naval Base.
- East Sea Fleet based in the East China Sea and headquartered at Ningbo Fleet Headquarters.
- South Sea Fleet based in the South China Sea and headquartered at Yulin Naval Base.

VI. CHINESE CYBER ACTIVITIES

China outlines its cyber strategy in the Five-Year Plan, the Belt and Road Initiative, and the 'Made in China 2025.' As part of the Belt and Road Initiative, which includes the development of the Digital Silk Road, and the 'Made in China 2025' program, China leverages cyber-espionage operations to gather information in support of gaining economic and political advantages over Western countries. In addition to creating foreign economic dependency to benefit China, the Digital Silk Road will provide China with long-term access to global Information Technology (IT) networks as the infrastructure for future cyber operations.

China's cyber elements are divided into two forces: The People's Liberation Army Strategic Support Forces (PLASSF) and the Ministry of State Security (MSS). In 2015, after two PLA cyber elements were publicly identified, the People's Liberation Army cyber elements from the General Staff Third (Technical Reconnaissance and Fourth (Electronic Countermeasures and Radar) Departments were reorganized into the Strategic Support Forces, combining cyber, space, and electronic warfare units into a single organization. Since the reorganization, the PLASSF forces have increased operational security and sophistication of their attacks. China's MSS operates a global campaign of cyber espionage for economic, political and strategic purposes. In 2018, the United States Department of Justice indicted two MSS actors for their involvement in Operation Cloud Hopper, targeted at IT service providers in order to gain access to their clients in order to gain sensitive data from foreign governments and economic competitors throughout multiple industries.

Russia and China will remain the U.S.'s main adversaries in cyberspace and will increasingly integrate cyberattack capabilities into their militaries, seeking to deny or disrupt our networked forces and infrastructure. Iran and North Korea, although less capable, can launch disruptive cyberattacks and use cyberspace as a means to asymmetrically respond to perceived challenges in political, military, or economic domains. Non-state actors and cyber criminals continue to use malicious cyberattacks to generate revenue, increase notoriety, and disrupt international communication and trade. The U.S. can strengthen partnerships and share best practices to counter malicious cyberattacks by partnering with our

Allies to improve their cyberspace defenses. The U.S. will require a combination of next-generation technologies, capable of detecting and stopping the latest wave of elusive cyber threats, and a sound policy framework that balances the public interest with national defense in order to establish an effective cyberspace defense.

VII. CHINESE SPACE ACTIVITIES

The People's Republic of China (PRC) is working to match or exceed US capabilities in space to gain the military, economic, and prestige benefits that Washington has accrued from space leadership. The PRC's space enterprise continues to mature rapidly. Beijing has devoted significant resources to growing all aspects of its space program, from military space applications to civil applications such as profit-generating launches, scientific endeavors, and space exploration.

The PLA Strategic Support Force (SSF) is a theater command-level organization established to centralize the PLA's strategic space, cyber, electronic, and psychological warfare missions and capabilities.

Network Systems Department. The SSF Network Systems Department is responsible for cyberwarfare, technical reconnaissance, electronic warfare, and psychological warfare. Its current major target is the United States.

Space Systems Department. The SSF Space Systems Department is responsible for nearly all PLA space operations, including space launch and support; space surveillance; space information support; space telemetry, tracking, and control; and space warfare.

Chinese Space Station

VIII. CHINESE MILITARY INCIDENTS

2001: Hainan Island Incident

April - A Chinese air force plane collides in mid-air with an EP-3 Aries U.S. surveillance plane near the southern Chinese island of Hainan, leading the Chinese plane to crash into the sea and forcing the U.S. aircraft to land on Hainan. An 11-day standoff over China's holding of the plane and 24 crew members raises tensions with the new administration of President George W. Bush.

2005: Peace Mission

August - China and Russia hold their first joint military exercises. The exercise consisted of combined land, sea, and air elements simulating an intervention in a state besieged by terrorists or political turmoil. The force practiced air and naval blockades, an amphibious assault, and occupying a region.

2007: Missile Test

January - Reports say China has carried out a missile test in space, shooting down an old weather satellite. The US, Japan and others express concern at China's military build-up.

2012: South China Sea

May - Philippines and Chinese naval vessels confront one another off the Scarborough Shoal reef in the South China Sea. Both countries claim the reef, which may have significant reserves of oil and gas.

2012: Loaning 16

September - China launches its first aircraft carrier, the Liaoning - a converted former Soviet Kuznetsovclass aircraft vessel.

2015: Spratly Islands

October - China expresses anger at US naval ship sailing by artificial reefs Beijing is building among disputed Spratly Islands in South China Sea.

2017: Sandong 17

A first-generation Chinese aircraft carrier was launched on 26 April 2017 for the People's Liberation Army Navy (PLAN). It is the country's second aircraft carrier after the completion of Liaoning, and the first built domestically.

2018: Largest PLAN flotilla at sea

48 ships, dozens of fighter jets, and more than 10,000 military personnel deploy to South China Sea in largest ever PLAN flotilla to date.

2020: PLAN triples in size since 2000

As of the end of 2020, the PLAN had 360 ships, over 60 more than the U.S. Navy, with intentions of building to 400 by 2025, according to an ONI forecast

Russia:

I. RUSSIA'S GLOBAL ENGAGEMENT

Since returning to power in 2012, Russian President Putin has sought to reassert Russia as a great power on the global stage and to restructure an international order that the Kremlin believes is tilted too heavily in favor of the United States at Russia's expense. With the exception of its recent Syria intervention, Russia's foreign policy priorities traditionally have focused primarily on the post Soviet region and the West. However, Russia (like the Soviet Union before it) actively pursues foreign relations on a global

Russia is one of five permanent members of the U.N. Security Council, where it plays a significant role. Until 2014, Russia was a member of the Group of Eight (G8), together with the West's seven leading economies (including Japan). It is also a member of BRICS, an alternative group of states with large economies that also includes Brazil, India, China, and South Africa. In these and other international fora, Russia has engaged on global issues such as nonproliferation (including combatting the nuclear weapons programs of Iran and North Korea), counterterrorism, counterpiracy, and global health. Russia is a leading oil and gas exporter and the second largest major weapons exporter in the world (its top clients are India, China, and Vietnam). Russia has constructed nuclear power plants in Europe, Iran, India, and China, with more under construction or planned. In addition, Russia has cultivated a variety of bilateral partnerships around the globe. In Asia, Russia's main partner is China, with which it has close security, economic, and political relations, although Russia has concerns about China's inexorable rise. In addition, Russia has cultivated good relations with Japan, with which it still has a territorial dispute over islands Russia annexed at the end of World War II. It also has developed good relations with India, Pakistan (more recently), Afghanistan, Vietnam, and across Southeast Asia. In the Middle East, Russia's Syria intervention is exceptional in scope but reflects a long-standing policy of fruitful relations with regional governments including Algeria, Egypt, Iraq, Libya, and Sudan. In Latin America, Russia has sought to reengage with Soviet-era partners Cuba and Nicaragua, as well as Venezuela, Brazil, and others. II. U.S.-RUSSIAN RELATIONS

For more than 25 years, the U.S.-Russian relationship has gone through positive and negative periods. The spirit of U.S.-Russian "strategic partnership" forged by Presidents Bill Clinton and Boris Yeltsin in the early 1990s was gradually overtaken by increasing tension and mutual recrimination, in large part as a consequence of disagreements over Russian efforts to reestablish a sphere of influence in the post-Soviet region and over U.S. promotion of NATO enlargement to Central and Eastern Europe and military intervention in the former Yugoslavia.

Presidents George W. Bush and Vladimir Putin believed they could restore U.S.-Russian relations, particularly in the aftermath of the terrorist attacks of September 11, 2001. The two countries reshaped their relationship on the basis of cooperation against terrorism and the economic integration of Russia with the West. However, tensions arose again around a number of issues, including the Iraq War; the socalled color revolutions in Ukraine, Georgia, and Kyrgyzstan involving protests against electoral fraud that unseated corrupt regimes; Russian energy and security pressure on its neighbors; and U.S. and NATO plans for missile defense. Cooperation continued in some areas, but the August 2008 Russian-Georgian conflict caused bilateral ties to deteriorate to their lowest point since the Cold War.

Upon entering office, the Obama Administration believed it could prompt yet another "reset" of relations with Russia's new president, Dmitry Medvedev, a relatively liberal Russian political figure who nonetheless remained informally subordinate to Prime Minister Putin. During a July 2009 meeting in Moscow, Presidents Medvedev and Obama established the U.S.-Russia Bilateral Presidential Commission consisting of 21 working groups to address a broad spectrum of issues. The commission's working groups met regularly for more than four years, until their activities were suspended as a result of Russian actions in Ukraine.

U.S.-Russian relations worsened with Russia's disputed December 2011 parliamentary elections and Putin's March 2012 return to the presidency. In 2014, U.S. relations with Russia deteriorated further in reaction to Russia's invasion and annexation of Ukraine's Crimea region and Russia's sponsorship and support of separatist militants in the Donetsk and Luhansk regions (the Donbas). The United States, in coordination with the EU and a number of other states, promised to impose increasing costs on Russia until it "abides by its international obligations and returns its military forces to their original bases and respects Ukraine's sovereignty and territorial integrity." The United States suspended discussions on trade and investment and military--to--military contacts, as well as certain kinds of nonproliferation and energy research cooperation. Russia also was removed from the G8, and the United States, EU, and other allies introduced sanctions on Russia for its actions. Since 2014, the United States has imposed sanctions on more than 520 individuals and entities in response to Russia's aggressive actions in and toward Ukraine. Former President Barack Obama, in issuing decisions to curtail economic relations, declared Russia's activities in Ukraine as threatening the peace, security, stability, sovereignty, and territorial integrity of Russia's neighbor and, in turn, as constituting a threat to U.S. national security. On January 6, 2017, the Office of the Director of National Intelligence (ODNI) released a declassified report on Russian activities and intentions related to the 2016 U.S. presidential election. The report states that the Central Intelligence Agency, the Federal Bureau of Investigation (FBI), and the National Security Agency have "high confidence" that President Putin "ordered an influence campaign in 2016 aimed at the US presidential election" in order to "undermine public faith in the US democratic process." Like the Administrations before it, the Trump Administration says it seeks to rebuild constructive relations with Russia. Many observers, including from the previous Administration, concur that improved U.S.- Russian relations would be welcome. A key debate, however, revolves around whether the United States can succeed in building improved relations with Russia while maintaining strong commitments to its allies and standing firm on fundamental principles. Some observers believe that at least incremental progress is possible. Others have expressed doubt that the United States can successfully cooperate with Russia, even on an issue as central to the Administration as the fight against the Islamic State. Because of conflicting interests between Russia and the West and because Russia's future intentions are uncertain, how Russia develops its military presents real challenges to the United States and its allies. Russia's military appears to have improved significantly since the war in Georgia in 2008. Uncertainty 117 about the future strength of the Russian military poses challenges for Western defense planners. Russia could seek to strengthen its numerous ground forces to achieve greater parity with the West, or its economy and demographics may force it to constrain the size and quality of its forces. Russia may also focus its military investment across competing priorities, including preparing for war with NATO, military dominance against former Soviet republics, or global power projection.

III. RUSSIA'S MILITARY

Russia's armed forces surprised most U.S. and European observers with their actions in Ukraine starting in March 2014 and in Syria starting in September 2015. Since the end of the Cold War, conventional wisdom about the Russian military has tended to indicate a force in relative decline, with aging Sovietera equipment and with technology and a philosophy of warfare lagging well behind that of the United States and many NATO allies. Analysts noted that the shortcomings of Russia's military appeared to be confirmed by its relatively lackluster performance in the 2008 conflict with Georgia. Over the past several years in particular, many analysts have been struck by the improved capabilities exhibited by the Russian military, as well as the unexpected ways in which Russia has used its military:

• Russian special forces, elite airborne troops, and naval infantry effected a swift and bloodless seizure of Crimea in March 2014.

- The subsequent Russian involvement in the conflict in eastern Ukraine highlighted the practice of "hybrid warfare," centered on the use of irregular "separatist" forces covertly backed by the regular military, along with an information and propaganda campaign orchestrated to create misdirection and spread an alternate international narrative.
- The campaign in Syria, in addition to serving a number of broader Russian interests and diplomatic objectives, has allowed Russia to test and display how various components of its military work together in an expeditionary setting.
- The Syria operation has demonstrated noteworthy capabilities, such as the launch of long-range cruise missiles from naval vessels in the Caspian Sea and the deployment of Russia's most modern combat aircraft. It also has highlighted the Russian military's ability to effect "area denial" with an air defense "bubble" of overlapping advanced missile systems.
- At the same time, Russia has been upgrading or constructing new facilities in the Arctic and reactivating Soviet bases in the Arctic that fell into disuse with the end of the Cold War. In December 2014, Russia launched a new Arctic Joint Strategic Command. In addition, Russia has been forming two new brigades specializing in Arctic warfare.
- Over the past several years, Russia also has adopted an increasingly aggressive posture with its air and sea patrols and military exercises.

Russia pursued an ambitious modernization program as it steadily increased defense spending, at least until 2016, when the defense budget declined for the first time in years. In 2010, Russia announced a new 10- year State Armaments Program (SAP) for 2011-2020, calling for approximately 20 trillion rubles in new weapons procurement over that period (approximately \$328 billion as of December 2016). The procurement goals of the SAP include:

- In the coming decade, Russian armed forces will be provided with over 400 modern land and sea based inter-continental ballistic missiles:
- 8 strategic ballistic missile submarines and about 20 multi-purpose submarines;
- Over 50 surface warships;
- Around 100 military spacecraft;
- Over 600 modern aircraft including fifth generation fighter jets, as well as more than 1,000 helicopters;
- 28 regimental kits of S-400 air defense systems, 38 battalion kits of Vityaz missile systems, and 10 brigade kits of Iskander-M missile systems;
- Over 2,300 modern tanks, about 2,000 self-propelled artillery systems and vehicles, and more than 17,000 military vehicles.

Since 2014, the Russian economy has been negatively affected by falling oil prices and international sanctions, with a prolonged recession accompanied by severe currency depreciation, high inflation, and increased capital flight. The downturn has strained public finances and complicated long-term budgetary and planning efforts. Accompanying an overall decline in defense spending from 2016, the approval of a new 30-trillion ruble (approximately \$492 billion) SAP for the period 2016-2025 was postponed until 2018 due to the instability of economic conditions. Additionally, some analysts doubt that the Russian defense industry can produce and deliver the full complement of equipment at the pace and scale envisioned by the SAP.

IV. RUSSIAN CYBER ACTIVITIES

Russia leverages their cyberspace capabilities to re-establish dominance in its near-abroad, damage Western and pro-democracy influence, and expand global influence. It's important to note that although there is a strong presence of cybercriminal actors operating out of Russia, there are not clear ties to their operations being state-sponsored or state-directed.

Russia organizes their state-sponsored cyber elements into three organizations: Federal Security Service (FSB), Foreign Intelligence Service (SVR), and the Main Directorate of the General Staff of the Armed Forces of the Russian Federation (GRU). The FSB is responsible for counterintelligence operations, the

SVR is responsible for human intelligence, and the GRU encompasses all other intelligence services. Developed in the 1990's, the FSB developed Russia's first state-sponsored cyber capability and has continued to grow their forces throughout the 2000's. With the majority of Russia's Advanced Persistent Threat (APT) groups, the FSB globally targets in the government, defense, aerospace, and energy sectors. The GRU is assessed to be the best resourced organization for cyber operations. Associated with attacking government and defense industries, the GRU is responsible for breaching the Pentagon's network in 2015 and the Democratic National Convention's network in 2016. The GRU is also responsible for disabling power grids in multiple Eastern European countries, as demonstrated in Georgia in 2008 and in Ukraine in 2015. The SVR, the organization assessed to practice the highest operational security, is believed to work in conjunction with the FSB and GRU for cyberspace attacks. In 2020, the United States publicly acknowledged that the SVR was the lead element behind the SolarWinds attack, an attack focused on gaining long-term access to United States Government entities.

V. RUSSIAN SPACE ACTIVITIES

Russia is a key space competitor, maintaining a large network of reconnaissance, communications, and navigation satellites. It will focus on integrating space services—such as communications; positioning, navigation, and timing (PNT); geolocation; and intelligence, surveillance, and reconnaissance—into its weapons and command-and-control systems.

Russia continues to train its military space elements and field new antisatellite (ASAT) weapons to disrupt and degrade US and allied space capabilities, and it is developing, testing, and fielding an array of nondestructive and destructive counter space weapons—including jamming and cyberspace capabilities, directed energy weapons, on-orbit capabilities, and ground-based ASAT capabilities—to target US and allied satellites.

VI. NOTABLE U.S. AND RUSSIA MILITARY INCIDENTS

At the height of the Cold War in the 1960s, there were several incidents between forces of the U.S. Navy and the Soviet Navy. Incidents included planes of the two nations passing extremely close to one another at high speeds, ships bumping one another, and both ships and aircraft making threatening movements against those of the other side. In 1968, the U.S. proposed talks on preventing such incidents from becoming more serious. These talks eventually led to a formal agreement signed by both sides in Moscow on May 25, 1972 ("Agreement on the Prevention of Incidents on and Over the High Seas"). The Russian military intervention in the Syrian Civil War began in September 2015, after an official request by the Syrian government for military aid against rebel groups. The intervention initially consisted of air strikes fired by Russian aircraft stationed in the Khmeimim base at targets primarily in north-western Syria, against Syrian opposition militant groups opposed to the Syrian government, including the Syrian National Coalition, the Islamic State of Iraq and the Levant (ISIL), al-Nusra Front (al-Qaeda in Syria) and the Army of Conquest. In addition, Russian special operations forces and military advisors were stationed in Syria. Prior to the intervention, Russian involvement in the Syrian Civil War had mainly consisted of supplying the Syrian Army with arms and equipment. At the end of December 2017, the Russian government said its troops would be based in Syria permanently.

The relevance of this agreement remains today. The importance of understanding the challenge presented by Russia and its military forces is highlighted by many recent incidents at sea that include the following examples (not all inclusive):

139

April 2016 – A pair of Russian Su-24 fighter jets performed several low-altitude passes on the USS DONALD COOK Arleigh Burke class guided missile destroyer while the ship was conducting exercises with a Polish helicopter in international waters in the Baltic Sea 70 nautical miles (130 km; 81 mi) off Kaliningrad.

February 2017 – Multiple Russian SU-24 "Fencer" fighter jets and an II-38 sub-hunting quad-engine aircraft buzzed the U.S. Navy destroyer USS PORTER (DDG 78) in the Black Sea.

January 2018 – A Russian Sukhoi SU-27 "Flanker" fighter jet came within five feet of an EP-3 Aries before crossing through the U.S. aircraft's flight path, forcing the EP-3 to fly through the SU-27's flight wash.

November 2018 – A Russian fighter jet flies dangerously close to a U.S. Navy reconnaissance plane on Monday over the Black Sea. A Navy EP-3E Aries II reconnaissance aircraft was flying in international airspace when it was intercepted by a Russian Su-27 fighter in an interaction that lasted about 25 minutes. *June 2019* – A Russian Sukhoi SU-35 fighter jet harassed a U.S. Navy P-8A Poseidon patrol plane over the Mediterranean Sea.

June 2019 – On 7 June 2019 the USS CHANCELLORSVILLE (CG 62) came close to a collision with the Russian destroyer Admiral Vinogradov. United States Seventh Fleet stated the Russian destroyer came within 50 to 100 feet of USS CHANCELLORSVILLE and did not adhere to proper "rules of the road".

North Korea

I. NORTH KOREA SECURITY CHALLENGES

For almost 70 years, the United States has been committed to security on the Korean Peninsula. It has used a range of military and diplomatic tools to underscore its commitments to its treaty ally South Korea and to deter North Korean aggression. Apart from occasional crises and provocations, deterrence appears to have been robust. The risk of large-scale conflict, while ever present, has remained relatively low. However, because of a combination of developments on the peninsula—the most important of which is North Korea's burgeoning nuclear program—this situation may be changing. Under leader Kim Jong Un, North Korea has dramatically hastened the pace of nuclear weapon development—especially delivery vehicles, such as long-range missiles. At the same time, the rhetoric out of the North has become even more confrontational. Kim Jong-un's regime appears stable, but a long series of arrests and killings of apparent rivals and the North Korean people's growing awareness of outside events and increasing involvement in trade point to the potential for sudden volatility.

In addition, South Korea's doctrine of disproportionate response to provocations and emphasis on preemption exacerbate escalatory dangers. The recent rapprochement between the two Koreas and the bilateral and multilateral summits now under way may ease these tensions. Should those talks fail to resolve key issues, however, the military situation in Korea could remain very dangerous.

As of early 2019, North Korea has not conducted any nuclear-capable missile or nuclear tests in more than a year, has declared its support for the denuclearization of the Korean Peninsula, and has reversibly dismantled portions of its WMD infrastructure. However, the Intelligence Community in the United States continues to assess that North Korea is unlikely to give up all of its nuclear weapons and production capabilities, even as it seeks to negotiate partial denuclearization steps to obtain key US and international concessions.

North Korean leaders view nuclear arms as critical to regime survival, according to official statements and regime-controlled media.

- In his 2019 New Year's address, North Korean President Kim Jong Un pledged that North Korea would "go toward" complete denuclearization and promised not to make, test, use, or proliferate nuclear weapons. However, he conditioned progress on U.S. "practical actions." The regime tied the idea of denuclearization in the past to changes in diplomatic ties, economic sanctions, and military activities.
- In Singapore in June 2018, Kim said he sought the "complete denuclearization of the Korean Peninsula"—a formulation linked to past demands that include an end to U.S. military deployments and exercises involving advanced U.S. capabilities.
- The United States continues to observe activity inconsistent with full denuclearization. North Korea has underscored its commitment to nuclear arms for years, including through an order to mass-produce

weapons in 2018 and an earlier law—and constitutional change—that affirmed the country's nuclear status.

II. FOREIGN ENGAGEMENT

North Korea continues its efforts to mitigate the effects of the U.S.-led pressure campaign, most notably through diplomatic engagement, counter-pressure against the sanctions on the regime, and direct sanctions evasion.

- Kim Jong Un has sought sanctions relief through a campaign of diplomatic engagement that included his first summits with foreign leaders since taking power in 2011. He met with South Korean President Moon Jae-in three times in 2018, leading to agreements to reconnect roads and rail lines, establish new military parameters, promote reforestation, and facilitate cultural exchanges.
- Kim has also sought to align the region against the U.S.-led pressure campaign in order to gain incremental sanctions relief, and North Korean statements have repeatedly indicated that some sanctions relief is necessary for additional diplomacy to occur.
- By late 2018, the enforcement of new UN sanctions had led to a precipitous decline in North Korea's monthly export revenue compared with 2017, a change that also reduced imports.
- North Korea generates revenue through overseas labor, cyber-theft operations, and illicit commercial exports of UN Security Council-prohibited goods.
- Throughout 2018, the United States and its allies observed North Korean maritime vessels using at-sea, ship-to-ship transfers of petroleum from third-country tankers to acquire additional refined petroleum as a way to mitigate the effects of UN sanctions.

III. NORTH KOREA'S MILITARY

North Korea's conventional capabilities continue to pose a threat to South Korea, Japan, and U.S. forces in the region. As a way to offset adversary military advantages, Kim Jong Un continues to pursue advanced conventional weapon programs and capabilities, including more accurate artillery and ballistic missile strike capabilities and UAVs.

Given the continued and growing threat from North Korea, its nuclear and missile programs, and its proliferation of related technology, the U.S. Department of Defense continues to manage the North Korean security challenge through close coordination and consultation with the international community, particularly South Korea and Japan. The United States remains vigilant in the face of North Korea's continued provocations and steadfast in its commitments to allies in the region, including the extended deterrence commitments provided through both the nuclear umbrella and conventional forces.

IV. NORTH KOREAN NOTABLE AND RECENT INCIDENTS

1968 January – North Korea captures the USS Pueblo, an unarmed U.S. Navy intelligence vessel, in international waters. North Koreans held the 83 man crew hostage for 11 torturous months and maintains possession of the ship to this day.

1969 April – North Korean Mig-21 fighters shoot down a U.S. Navy EC-121 reconnaissance aircraft over the Sea of Japan as it flew a regular surveillance mission in international airspace. All 31 sailors perished. 2006 July - North Korea test fires seven missiles including a long-range Taepodong-2 missile, which crashes shortly after take-off despite it reportedly having the capability to hit the US.

2006 October - North Korea conducts its first nuclear weapons test at an underground facility. The UN imposes economic and commercial sanctions on North Korea.

2009 April - North Korea launches a long-range rocket, carrying what it says is a communications satellite; its neighbors accuse it of testing long-range missile technology. Condemnation from the UN Security Council prompts North Korea to walk out of six-party talks and restart its nuclear facilities. 2009 May - North Korea carries out its second underground nuclear test. The UN Security Council condemns move in June.

2012 October - North Korea claims it has missiles that can hit the US mainland after South Korea and Washington announce a deal to extend the range of South Korea's ballistic missiles.

2013 February - UN approves fresh sanctions after North Korea stages its third nuclear test, said to be more powerful than the 2009 test.

2014 March - North Korea test-fires two medium-range Rodong ballistic missiles for the first time since 2009, in violation of UN resolutions.

2017 July - Pyongyang test fires a long-range missile into the Sea of Japan, with some experts stating the missile could potentially reach Alaska.

Iran

I. IRAN STRATEGIC CHALLENGES

For decades, Iran has vexed the international community. It introduced Islam as a form of governance in 1979 and has supported militants abroad and defied international norms. In May 2018, the Trump administration withdrew from the 2015 nuclear agreement negotiated by six world powers and Iran. The administration argued that the deal did not adequately curb Tehran's nuclear program or address its missile program, human rights abuses, and support for terror. Washington re-imposed sanctions as part of a "maximum pressure" campaign to change Tehran's behavior. Tensions between Iran and the United States escalated over attacks on tankers in 2019 in the Gulf of Oman.

Iran's regional ambitions and improved military capabilities almost certainly will threaten U.S. interests in the near future, driven by Tehran's perception of increasing US, Saudi, and Israeli hostility, as well as continuing border insecurity, and the influence of hardliners. The U.S. Intelligence Community assesses that Iran will attempt to translate battlefield gains in Iraq and Syria into long-term political, security, social, and economic influence while continuing to press Saudi Arabia and the UAE by supporting the Houthis in Yemen.

In Iraq, Iran-supported Popular Mobilization Committee-affiliated Shia militias remain the primary threat to U.S. personnel, and we expect that threat to increase as the threat ISIS poses to the militias recedes, Iraqi Government formation concludes, some Iran-backed groups call for the United States to withdraw, and tension between Iran and the United States grows. The United States continues to watch for signs that the Iranian regime might direct its proxies and partners in Iraq to attack U.S. interests.

Iran's efforts to consolidate its influence in Syria and arm Hezbollah have prompted Israeli airstrikes as recently as January 2019 against Iranian positions within Syria and underscore the growing concern about the long-term trajectory of Iranian influence in the region and the risk that conflict will escalate. Iran's retaliatory missile and UAV strikes on ISIS targets in Syria following the attack on an Iranian military parade in Ahvaz in September 2018 were most likely intended to send a message to potential adversaries, showing Tehran's resolve to retaliate when attacked and demonstrating Iran's improving military capabilities and ability to project force.

Iran continues to pursue permanent military bases and economic deals in Syria and probably wants to maintain a network of Shia foreign fighters there despite Israeli attacks on Iranian positions in Syria. The United States assesses that Iran seeks to avoid a major armed conflict with Israel. However, Israeli strikes that result in Iranian casualties increase the likelihood of Iranian conventional retaliation against Israel, judging from Syrian-based Iranian forces' firing of rockets into the Golan Heights in May 2018 following an Israeli attack the previous month on Iranians at Tiyas Airbase in Syria.

In Yemen, Iran's support to the Huthis, including supplying ballistic missiles, risks escalating the conflict and poses a serious threat to U.S. partners and interests in the region. Iran continues to provide support that enables Houthi attacks against shipping near the Bab el Mandeb Strait and land-based targets deep inside Saudi Arabia and the UAE, using ballistic missiles and UAVs. More than 3.4 million barrels of oil pass through the 20 km wide Bab al-Mandab Strait each day. In 2016, the Navy destroyer USS MASON (DDG 87) successfully defended three other U.S. warships and multiple U.S.-flagged merchant vessels during missile attacks in the Red Sea from Houthi rebels in Yemen. MASON fired SM-2 defensive

missiles and became the only warship in U.S. naval history to successfully employ the Evolved SeaSparrow Missile (ESSM) while under attack. MASON's actions protected 1,000 U.S. Sailors.

II. IRAN'S DOMESTIC POLITICS

Regime hardliners are more emboldened to challenge rival centrists by undermining their domestic reform efforts and pushing a more confrontational posture toward the United States and its allies. Centrist President Hasan Ruhani has garnered praise from hardliners with his more hostile posture towards the U.S., but still struggles to address ongoing popular discontent.

Nationwide protests, mostly focused on economic grievances, have continued to draw attention to the need for major economic reforms and unmet expectations for most Iranians. The United States assesses that Tehran is prepared to take more aggressive security measures in response to renewed unrest while preferring to use nonlethal force. President Ruhani's ability to reform the economy remains limited, given pervasive corruption, a weak banking sector, and a business climate that discourages foreign investment and trade.

III. IRAN'S MILITARY

Iran continues to develop military capabilities that threaten U.S. forces and U.S. allies in the Middle East region. Increased harassment of U.S. and allied warships and merchant vessels in the Persian Gulf, Strait of Hormuz, and Gulf of Oman is a consistent concern.

Iran continues to develop, improve, and field a range of military capabilities that enable it to target U.S. and allied military assets in the region and disrupt traffic through the Strait of Hormuz. These systems include ballistic missiles, unmanned explosive boats, naval mines, submarines and advanced torpedoes, armed and attack UAVs, anti-ship and land-attack cruise missiles, anti-ship ballistic missiles, and air defenses. Iran has the largest ballistic missile force in the Middle East and can strike targets as far as 2,000 kilometers from Iran's borders. Russia's delivery of the SA-20c SAM system in 2016 provided Iran with its most advanced long-range air defense system. Iran is also domestically producing medium-range SAM systems and developing a long-range SAM.

In September 2018, Iran struck Kurdish groups in Iraq and ISIS in Syria with ballistic missiles in response to attacks inside Iran, demonstrating the increasing precision of Iran's missiles, as well as Iran's ability to use UAVs in conjunction with ballistic missiles.

In recent years, the Iranian Islamic Revolutionary Guards Corps (IRGC) Navy has challenged US ships in the Persian Gulf and flown UAVs close to US aircraft carriers during flight operations. Moreover, Iranian leaders since July 2018 have threatened to close the Strait of Hormuz in response to US sanctions targeting Iranian oil exports.

IV. IRAN'S "TWO NAVIES"

Iran in essence has two navies that are distinct organizations with independent strategies, doctrines and missions. It is, in fact, a tale of two navies. The Islamic Revolutionary Guard Corps Navy (IRGCN) emphasizes an asymmetric doctrine to ensure national security in the Persian Gulf against regional neighbors and foreign presence. The Islamic Republic of Iran Navy (IRIN), dubbed by the Supreme Leader of Iran as a strategic force, employs a more conventional doctrine and focuses on forward presence and naval diplomacy. Its mission areas include the Caspian Sea, the Gulf of Oman and out-of-area operations. Both navies have considerable equities and are well positioned to influence and leverage the Strait of Hormuz; a vital chokepoint for the flow of resources and international commerce. Since undergoing a naval reorganization in 2007, both navies have engaged in dynamic acquisition programs. The IRGCN has continued to pursue smaller, faster platforms equipped with sophisticated weaponry, ideally suited for its asymmetric doctrine. The IRIN, largely neglected since the end of the Iran-Iraq War in the 1980s (with the exception of submarines), has undertaken a major recapitalization program to replace its aging surface fleet and augment its submarine force. Additionally, Iran's navies have been supplemented by its other military branches through acquisition of air-launched cruise missiles

and anti-ship ballistic missiles. These developments are a clear indication that Iran understands the growing importance of controlling the maritime environment in its security calculus.

V. IRAN'S MINING THREAT AND STRAIT OF HORMUZ

The Strait of Hormuz is one of the most critical chokepoints in the world. Nearly one-third of all seaborne crude oil (18+ million barrels per day) passes through the 21-mile-wide opening between Oman and Iran, as well as approximately 30% of all natural gas shipped on tankers. The strait is even narrower than it looks, since the deep-water shipping channel used by oil tankers is only two miles wide. Iran, with military presence on a number of islands near the strait and along the northern coastline, dominates this critical body of water. This theoretically gives Iran the opportunity to choke off one of the world's vital economic arteries, potentially inflicting economic losses on regional rivals like Saudi Arabia and even the United States.

Nearly every time Iran feels cornered by pressure from the United States or U.S. regional allies, it brings up the issue of closing the Strait of Hormuz. Iran's navy has hundreds of small ships and fast attack craft armed with machine guns, rockets, and mine-laying capabilities. Iran has thousands of mines, both simpler, old-fashioned contact mines and newer, more sophisticated smart mines. Mine warfare, however, presents challenges for Iran as well. Deploying mines from submarines would be stealthier and harder for the United States to detect, but the shallow waters around the Strait of Hormuz make that a tricky operation. Deploying from small surface ships is easier, but it is also much easier to detect in the early stages. And mines that come unmoored and drift can present a hazard to all ships, including Iranian military ships and tankers. Iran previously laid mines in the Persian Gulf during the Iran-Iraq War in the 1980s. During the "Tanker War" phase of this conflict, multiple U.S. ships struck mines and suffered severe damage. To counter this potential threat, the U.S. has deployed four active minesweepers to Bahrain for many years.

VI. IRAN NOTABLE AND RECENT INCIDENTS

2008 January - Five Iranian patrol boats crewed by the Revolutionary Guard approached three United States Navy warships in the Strait of Hormuz: the cruiser USS PORT ROYAL, the destroyer USS HOPPER and the frigate USS INGRAHAM.

2009 September - Iran admits that it is building a uranium enrichment plant near Qom, but insists it is for peaceful purposes. The country test-fires a series of medium- and longer-range missiles that put Israel and US bases in the Gulf within potential striking range.

2011 December – Present Day - The Strait of Hormuz dispute is an ongoing dispute between a coalition of countries and Iran. The dispute arose on 27 December 2011, when Iranian Vice President Mohammad-Reza Rahimi threatened to close the Strait of Hormuz. In late April 2019 Iran said that it will block any shipping if it was barred from using the strategic waterway and in face of US sanctions. Subsequently, a number of naval drills and missile tests were carried out by Iran. A coalition of countries responded by sending a flotilla of warships to deter any Iranian attempt to close the Strait of Hormuz and warned Iran publicly and through letters not to close the Strait.

2015 July - After years of negotiations, world powers reach a deal with Iran on limiting Iranian nuclear activity in return for lifting of international economic sanctions.

2016 January - Two United States Navy riverine command boats cruising from Kuwait to Bahrain with a combined crew of nine men and one woman on board strayed into Iranian territorial waters which extend three nautical miles around Farsi Island in Persian Gulf. Patrol craft of Iran's Islamic Revolutionary Guard Corps (IRGC) Navy seized the craft and detained the crew at a military base on Farsi Island for 15 hours.

Warfare Communities

Surface:



Mission:

To provide combat ready ships to the fleet; and to supply those ships and supporting commands with the leadership, manpower, equipment, training, and material needed to achieve operational excellence and conduct prompt, sustained combat operations at sea to ensure victory.

Operations:

- 1. Anti-Air Warfare (AAW)
- 2. Surface Warfare (SUW)
- 3. Undersea Warfare (USW)
- 4. Anti-Submarine Warfare (ASW)
- 5. Ballistic Missile Defense (BMD)
- 6. Strike Warfare (STW)
- 7. Maritime Interdiction Operations (MIO)
- 8. Naval Surface Fire Support (NSFS)
- 9. Electronic Warfare (EW)
- 10. Expeditionary Warfare (EXW)
- 11. Amphibious Warfare (AMW)
- 12. Mine Warfare (MIW)
- 13. Mobility (MOB)

Capabilities:

With over 275 warships and more than 110 Military Sealift Command ships around the world, the Navy's surface fleet is a dynamic force enhanced by advancements in technology and strategy. Ship classes are no longer built around a single mission area; they are built to specialize in one warfare area but must be able to operate in several additional roles. Modern surface ships possess many unique capabilities

Surface Platforms:

CVN (Carrier, Volplane, Nuclear)

Classes: Nimitz, Gerald R. Ford

Mission: With their embarked air wing, aircraft carriers are the centerpiece of America's naval forces. On any given day, aircraft carriers exercise the Navy's core capabilities of power projection, forward presence, humanitarian assistance, deterrence, sea control, and maritime security.

CG (Guided Missile Cruiser)

Class: Ticonderoga Class

Mission: Modern U.S. Navy guided missile cruisers perform primarily in a Battle Force role. These ships are multi-mission Air Warfare (AW), Undersea Warfare (USW), Strike Warfare (STW), and Surface Warfare (SUW) surface combatants capable of supporting carrier strike groups and amphibious forces or operating independently and as commanders of Surface Action Groups (SAG). Some Cruisers have been outfitted with a Ballistic Missile Defense

(BMD) capability.

DDG (Destroyer, Guided Missile)

Classes: Arleigh Burke, Zumwalt

Mission: (Arliegh Burke) DDG 51 warships provide multi-mission offensive and defensive capabilities. Destroyers can operate independently or as part of carrier strike groups, surface action groups, amphibious ready groups, and underway replenishment groups. Guided missile destroyers are multimission Air Warfare (AAW), Undersea Warfare (USW), and Surface Warfare (SUW) surface combatants. Some DDGs have been outfitted with a Ballistic Missile Defense (BMD) capability. (Zumwalt) The multi-mission DDG 1000 is tailored for sustained operations in the littorals and land attack, and will provide independent forward presence and deterrence, support special operations forces, and operate as an integral part of joint and combined expeditionary forces. Its multi-mission design and littoral capabilities make it a 100 percent globally deployable asset to the Fleet.

LSD (Landing Ship, Docks)

Class: Whidbey Island

Mission: These ships transport and launch amphibious craft and vehicles with Marines in amphibious assault operations. Their ability to ballast down and flood a well deck makes possible the loading at sea of amphibious warfare craft and their cargo. LSD 41 was designed specifically to operate Landing Craft Air Cushioned (LCAC). It has the largest capacity for these landing craft (four) of any U.S. Navy amphibious platform.

LPD (Landing Platform, Dock)

Class: San Antonio

Mission: LPDs are used to transport and land Marines, their equipment, and supplies by embarked air cushion (LCAC) or conventional landing craft, augmented by helicopters or vertical take-off and landing aircraft (MV-22). These ships support amphibious operations, special operations, or expeditionary warfare missions and can serve as secondary aviation platforms for amphibious ready groups. The SAN ANTONIO class offers many improvements over previous LPDs, including the ability to interface with other surface combatants via the

LHD (Landing Helicopter Deck) / LHA (Landing Helicopter, Assault)

Class: Wasp / America

Mission: The largest of all amphibious warfare ships; resembles a small aircraft carrier; capable of Vertical/Short Take-Off and Landing (V/STOL), Short Take-Off Vertical Landing (STOVL), Vertical Take-Off and Landing (VTOL) tilt-rotor and Rotary Wing (RW) aircraft operations; contains a well deck to support use of Landing Craft, Air Cushion (LCAC) and other watercraft (with exception of the first two AMERICA Class ships, LHA 6 and LHA 7, which have no well deck).

Aviation:



Operations:

The primary function of naval aviation is to closely coordinate with other naval forces in maintaining command of the seas while also establishing dominance in the airspace surrounding vital interests. Naval Aviation supports the following operations:

- 1. AIR WARFARE (AW)
- 2. SURFACE WARFARE (SUW)
- 3. UNDERSEA WARFARE (USW)
- 4. CLOSE AIR SUPPORT (CAS)
- 5. COMBAT SEARCH AND RESCUE (CSAR) / SEARCH AND RESCUE (SAR)
- 6. COMMAND, CONTROL, COMMUNICATION, COMPUTERS, COMBAT SYSTEMS, AND INTELLIGENCE (C5I)
- 7. LOGISTICS SUPPORT OPERATIONS (LOG)
- 8. INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE (ISR)
- 9. MINE WARFARE (MIW)
- 10. STRIKE WARFARE (STW)

The numerous naval aviation operations are carried out by multiple aviation platforms. In general, there are three categories of aircraft: Fixed Wing, Rotary Wing, and Tiltrotor. Within these categories, aircraft are developed with specific missions in mind. Fixed wing naval aviation assets can be further classified into one of two groups: Carrier Aviation or Maritime Aviation

Organization:

Naval aircraft are grouped together in squadrons – military units composed of a number of similar aircraft. Each squadron is composed of officers and enlisted tasked with planning, flying, and maintaining all of their aircraft in support of the mission at hand. Every squadron is designated with a two or three letter abbreviation describing the missions they accomplish.

Squadron Type Decoder				
1st Letter	Meaning	2 nd Letter	Meaning	
V	Fixed Wing	Q	Electronic or Reconnaissance	
H	Rotary Wing	R	Logistics	
		W	Warning	
		P	Patrol	
		A	Attack	
		F	Fighter	

Squadron Designations		
Squadron Type	Meaning	
VAW	Airborne Early Warning	
VP	Maritime Patrol	
VFA	Fighter/Attack	
VAQ	Electronic Attack	
VQ	Fleet Air Reconnaissance	
VR/VRC	Fleet Logistics Support (Carrier)	
HSM	Helicopter Maritime Strike	
HSC	Helicopter Sea Combat	
HM	Helicopter Mine Countermeasures	

Carrier Air Wing:

A Carrier Air Wing (CVW) is composed of squadrons from different Type Wings and is embarked onboard an aircraft carrier. Until 1963, Carrier Air Wings were known as Carrier Air Groups (CAG); thus, the commander of each air wing came to be known as, and is still called, the CAG. The CAG holds the rank of Captain and reports directly to the Carrier Strike Group (CSG) Commander.

A typical modern CVW is composed of the following squadrons, putting the wing at approximately 70 aircraft:

- 4 VFA Squadrons (F/A-18E/F Super Hornet)
- 1 VAQ Squadron (EA-18G Growler)
- 1 VAW Squadron (E-2C/D Hawkeye)
- 1 VRC Detachment (C-2 Greyhound)
- 1 HSC Squadron (MH-60S Knighthawk)

- 1 HSM Squadron (MH-60R Seahawk)

Detachments:

Oftentimes, helicopter, logistics, and patrol squadrons do not deploy as a whole squadron. When this is the case, the deploying aircraft are called a detachment. For example, VRC detachments are assigned to a CVW; HSC or HSM detachments each may be assigned to amphibious ships or small combatant ships (CG, DDG, LCS).

Aviation Designators and Platforms:

All Navy aircraft, like all U.S. military aircraft, are designated with a scheme of letters and numbers that identify each aircraft's particular type, model, and series (T/M/S). Prefix letter(s), placed before the hyphen, identify an aircraft's primary mission(s). The number(s) following the hyphen define the particular model number. The letters following the model number indicate the series of that model (in successive alphabetic increments). The following prefixes (mission designators) are common to U.S. Navy aircraft:

Aircraft Type Decoder		
Α	Attack	
C	Cargo/Transport	
E	Electronic	
F	Fighter	
Н	Helicopter	
K	Tanker	
M	Mine-Countermeasures & Multi-Mission	
P	Patrol	
Q	Unmanned	
R	Reconnaissance	
S	Antisubmarine	
T	Trainer	
U	Utility	
V	VTOL/STOL	

Platforms:

F/A-18E/F Super Hornet





F/A-18E/F Super Hornet			
Role: Fighter/Attack	Carrier-based all-weather fighter and attack aircraft. All F/A-18s can be configured quickly to perform either fighter or attack roles or both, through selected use of external equipment to accomplish specific missions. This 'force multiplier' capability gives the operational commander more flexibility in employing tactical aircraft in a rapidly changing battle scenario. The fighter missions are primarily fighter escort and fleet air defense; while the attack missions are force projection, interdiction, and close and deep air support. The F/A-18E/F Super Hornet replaced the F/A-18C Hornet and has the same capabilities. However, the Super Hornet has a greater range, higher service ceiling, larger payload, increased reliability, and an improved electronics suite. The Super		
	Hornet also serves as the carrier air wing's only air refueling asset.		
Distinguishing	Twin V-oriented vertical stabilizers		
Features:	Rectangle shaped air intakes		
	Single seat (E model) or Two seat (F model) cockpit		
Crew:	E: 1 Pilot F: 1 Pilot/1 NFO as a Weapons System Officer (WSO)		
Responsibilities:	E: Pilot is responsible for aviation, navigation, communication, and tactical employment		
	that includes air-to-air and air-to-ground missions.		
	F: The crew is optimized through sharing the responsibilities above which makes them		
	particularly suited for high task load missions such as close air support and forward air		
	control.		

EA-18G Growler





Role: Electronic Attack	Carrier based and expeditionary (ground based) all-weather electronic attack aircraft. A modified version of the F/A-18F, the EA-18G has replaced the Navy's EA-6B Prowler. The EA-18G Growler integrates the latest electronic attack technology, including the ALQ-218 receiver, ALQ-99 jamming pods, communication	
	countermeasures, and satellite communications. Along with the electronic attack suite,	
	the Growler also features the same APG-79 Active Electronically Scanned Array	
	(AESA) radar found in the Super Hornet.	
	Twin V-oriented vertical stabilizers	
Distinguishing	Rectangle shaped air intakes	
Distinguishing Features:	35% larger fuselage and wing surface area compared to the Hornet	
	Two seat cockpit	
	Jamming pods mounted on the wing tips	
Crew:	1 Pilot/1 NFO as Electronic Warfare Officer (EWO)	
Responsibilities:	The crew is optimized by sharing the responsibilities of aviation, navigation,	
	communication, and tactical employment that includes electronic attack, electronic	
	surveillance, and High-speed Anti-Radiation Missiles (HARM).	

MH-60R 'Romeo' Seahawk





Role: Maritime Strike	The primary missions of the Romeo are USW and SUW. Other missions include intelligence, surveillance, and reconnaissance, search and rescue, vertical replenishment, counter-narcotics operations, and command and control operations. The Romeo has updated radar and sonar systems, electronic signal collection capabilities, a glass-cockpit configuration, and a 'dipping' sonar for active acoustic tracking of submarines.	
Distinguishing Features:	Rear-wheel is further forward, closer to the middle of the aircraft Radar dome under nose Door on starboard side only Low pylon mounts When equipped with a FLIR, the turret faces up	
Crew:	2 Pilots/1-2 enlisted Aircrew	
Responsibilities:	Pilot: Operate the aircraft Co-Pilot: Airborne Tactical Officer (ATO) supervises the tactical situation/directs the Pilot and sensor operators Aircrew: Sensor operators for all onboard systems, rescue swimmers, crew-served weapons operators	

MH-60S 'Sierra' Knighthawk





Role: Sea Combat	The MH-60S 'Sierra' is a jack of all trades helicopter. Primary missions include SUW, Special Operations Forces support, and Combat Search and Rescue. Other mission areas include Humanitarian Assistance / Disaster Relief, Search and Rescue, and Logistics.	
	The tail wheel is in the very back of the aircraft	
Distinguishing	Large cargo doors are on both sides of the cabin	
Features:	Gunner's windows are behind the cockpit	
	When equipped with a FLIR the turret faces down	
Crew:	2 Pilots/1-5 enlisted Aircrew	
Responsibilities:	Pilot: Operates the aircraft	
	Co-Pilot: Navigation/tactical mission control	
	Aircrew: Crew chief, aerial gunner/rescue swimmer	

Submarine:



Mission:

The mission of the U.S. Submarine Force is to execute the mission of the U.S. Navy in and from the undersea domain. In addition to lending added capacity to Naval forces, the Submarine Force in particular is expected to leverage those special advantages that come with undersea concealment to permit operational, deterrent, and combat effects that the Navy and the Nation could not otherwise achieve. These effects may be delivered within the undersea domain or across domain boundaries; they may be delivered from submarines far-forward or in broad ocean areas; they may be the result of carefully coordinated operations with other forces or achieved by independent operations; and they may be accomplished in peacetime, a time of tension, or during conflict.

Submarine Force History:

Revolutionary War:

The first military submarine was the American-built Turtle (1775). Designed and built by the patriot David Bushnell, the hand-powered, egg-shaped device accommodated a single man. It is thought to be the first submarine capable of independent underwater operation, and the first to use a screw for propulsion. During the American Revolutionary War, Turtle attempted to sink a British warship, HMS Eagle (the flagship of British blockaders), moored in New York harbor. However, Turtle's attack failed.

Civil War:

During the American Civil War, Confederate forces revived the submarine concept. On February 18, 1864, the Confederate States Submersible, the H.L. Hunley, performed the first successful military submarine mission when she sank the USS Housatonic off Charleston Harbor. Hunley performed her submerged attack using a spar torpedo (an explosive charge mounted on a long pole sticking out of her bow). Though her attack was successful, Hunley sank following the engagement and her entire eight-man crew perished. Finally located in 1995, Hunley was raised in 2000 and is on display in North Charleston, South Carolina.

Pre-World Wars:

USS Holland (SS-1) was the United States Navy's first modern commissioned submarine. The boat was originally laid down in the shipyard in Elizabeth, New Jersey and launched in 1897. She was acquired by the USN on 11 April 1900 and commissioned six months later with Lieutenant H. H. Caldwell commanding. The Submarine Community celebrates 11 April as the birthday of the modern-day Submarine Force.

World War I:

Submarines first made a significant military impact in World War I. German submarines (U-boats) were central to the German naval strategy. A torpedo fired from a German U-boat sank the ocean liner RMS Lusitania (May 7, 1915), which directly precipitated entry of the U.S. into WWI because American leaders would not tolerate the threat of unrestricted submarine warfare against civilian shipping traffic. The fleet of American diesel submarines was used primarily for coastal defense. However, after 1917, some American boats drew assignments to European waters.

World War II:

World War II produced significant improvements in the design and operation of submarines worldwide. Sidestepping the requirements of the Treaty of Versailles, Germany built a large submarine fleet prior to the war. Their 'wolfpack' tactics proved devastating to Allied military and civilian ships in the European

theater. The U.S. submarine fleet employed the Gato, Balao, and Tench classes to operate in every naval theater and score the most complete victory of any force in any theater of the war. In spite of a hesitant beginning due to the attack on Pearl Harbor and difficulties with defective torpedoes, the submarine force destroyed 1,314 enemy ships totaling 5.3 million tons (including 8 aircraft carriers and more than 200 warships). Translated - 55% of all enemy ships sunk were by approximately 6% of the Naval force. Out of 16,000 submariners, the force lost 375 officers and 3,131 enlisted men in fifty-two submarines, the highest casualty rate of any U.S. service branch in WWII.

Cold War:

The Cold War redefined the mission of submarines. Against the rising threat of nuclear war with the Soviet Union, several critical design improvements transformed the U.S. submarine fleet. These improvements included: (1) The tear-dropped hull shape, which allowed much greater submerged operating speeds and higher propulsion efficiency. (2) Nuclear powered propulsion. Due in large part to the efforts of ADM Hyman Rickover (USNA '22), the 'Father of the Nuclear Navy,' the Naval Nuclear Power Program was born. On January 17, 1955, Commanding Officer Eugene Wilkinson spoke the famous words "underway on nuclear power" to launch the first nuclear powered submarine, USS Nautilus (SSN-571), on her maiden voyage. Within three years, Nautilus sailed to the North Pole and shattered virtually every submarine distance, speed, and endurance record. Nuclear power continues to afford U.S. submarines nearly unlimited operational endurance because they can remain submerged nearly indefinitely—limited only by their capacity to store food.

During the 1960s, strategic planners divided the submarine force into two distinct components, ballistic missile (SSBN) submarines and fast attack (SSN) submarines. For SSBNs, the United States and the Soviet Union both developed submarine-launched nuclear weapons. American SSBNs continue to uphold the nuclear deterrence role, forming the most survivable element of the U.S.'s nuclear triad (the other two elements being land-based ballistic missiles and airdropped nuclear ordinance). SSNs assumed the role of protecting SSBNs to ensure successful execution of the nuclear deterrence mission. Equally important, 51 SSNs assumed the offensive role of detecting and monitoring any foreign ballistic missile submarines. Through the height of the Cold War, brave SSN crews tracked, photographed (underwater), and collected acoustic data on Soviet submarines. The crews rewrote the playbook on submarine tactics and conducted highly specialized and sensitive missions for national security. Submarine development and operation during the Cold War formed the majority of the bedrock of the submarine force today.

Submarine Platforms:

SSN (Fast attack Submarine)

Classes: Los Angeles, Seawolf, Virginia

Mission: Fast Attack submarines are designed to: (1) seek and destroy enemy submarines (ASW) and surface ships (ASUW); (2) conduct precision strikes with Tomahawk cruise missiles (STRIKE); (3) deliver and support Special Operation Forces (SOF); (4) carry out Intelligence, Surveillance, and Reconnaissance (ISR) missions; (5) support Carrier Strike Groups; and (6) engage in mine warfare. Additionally, the Virginia Class design allows emphasis on littoral operations. West Coast SSNs are home-ported in Pearl Harbor, HI; San Diego, CA; Bremerton, WA; and Guam. East Coast SSNs are home-ported in Groton, CT, and Norfolk, VA

SSBN (Ballistic Missile Submarines)

Class: Ohio

Mission: Since the 1960s, strategic deterrence has been the SSBN's primary mission, providing the United States with its most survivable and enduring nuclear strike capability. There is only one type of 'Boomer' in service, the Ohio Class submarine which has the capability to carry up to 24 submarine-launched ballistic missiles (SLBMs). As of February 2018, the new Strategic Arms Treaty (START) is in effect, making the SSBN force responsible for 70% of the United States strategic weapons inventory. West Coast Boomers are home-ported in Bangor, WA, and East Coast Boomers are home-ported in King's Bay, GA. SSBNs use two crews ('Blue' and 'Gold' crews) which alternate on-patrol.

SSGN (Guided Missile Submarine)

Class: Ohio

Mission: The first four of the Ohio Class SSBNs were converted into guided missile submarines (SSGN). Ohio Class SSGNs provide the Navy with a combination of precision strike and Special Operation mission capability within a stealthy, clandestine platform. If the maximum number of TLAMs were loaded, one Ohio Class SSGN would carry an entire Carrier Strike Group's equivalent of cruise missiles. Two remaining missile tubes act as lockout chambers to be used by Special Forces personnel. The missile tubes can also be used to carry and launch Unmanned Aerial Vehicles (UAVs) or Unmanned Underwater Vehicles (UUVs). SSGNs can also carry the Dry Deck Shelter/SEAL Delivery Vehicle (DDS/SDV) in support of SOF. Like SSBNs, SSGNs also use two crews, which alternate to increase the platform's operational tempo. West Coast SSGNs are home-ported in Bangor, WA and typically swap crews in Guam. East Coast SSGNs are home-ported in King's Bay, GA and typically swap crews in Diego Garcia.

Special Warfare (SEAL):



Mission (SEAL):

The Naval Special Warfare (NSW) mission is to man, train, equip, 72 deploy, and sustain NSW forces for operations and activities abroad in support of combatant commanders and U.S. national interests.

Operations (SEAL):

Direct Action: Short-duration strikes and other small-scale offensive actions taken to seize, destroy, capture, or recover in denied areas. Direct Action involves ambush, combat swimmer ship attacks, combat search and rescue; close quarters combat (CQC), and visit board search and seizure (VBSS).

Special Reconnaissance: Acquiring information concerning the capabilities, intentions, and activities of an enemy. Special Reconnaissance involves counter-sniper operations, hydrographic reconnaissance, and listening and observation posts. Example: Prior to an amphibious assault by Marines during the Second World War, Underwater Demolition Teams (UDTs) would conduct hydrographic reconnaissance and destroy beach obstacles.

Unconventional Warfare: Operations conducted through surrogate forces that are organized, trained, equipped, supported, and directed by external forces. Unconventional Warfare involves training foreign guerrilla forces or other clandestine operations to operate in denied areas.

Counterterrorism: Counter Terrorism involves the prevention, deterrence, and response to terrorism. **Foreign Internal Defense:** NSW offers training and other assistance to foreign governments and their militaries to enable the foreign government to provide for its country's national security. Foreign Internal Defense involves training the security forces of other nations in areas such as internal peacekeeping/law enforcement, border defense, counter-drug operations, and military strategy. These operations are continuously ongoing around the world.

Counterinsurgency: Counterinsurgency (COIN) is defined as "those military, paramilitary, political, economic, psychological, and civic actions taken by a government to defeat an insurgency". A key aspect of COIN is the development of host nation security forces. NSW COIN operations are based on the ability to teach combat skills, regional expertise, language skills, and the ability to work among indigenous populations.

Seabasing: Given the freedom of navigation laws for surface ships and the stealth of submarines, sea based NSW forces are able to operate throughout the oceans and along the littorals of the world with few restrictions. These seabases have lower profiles and a less intrusive presence with no requirements for host nation support or diplomatic clearance, to enable persistent, unobtrusive, mobile SOF presence in remote littoral areas. Seabasing support can be provided by conventional naval forces (carrier strike group, expeditionary strike group, surface strike group, surface action group, or submarines) as well as Military Sealift ships and commercial vessel

Organization and Structure of SEAL Teams:

Commander, Naval Special Warfare Command (NAVSPECWARCOM), a two-star rear admiral headquartered in Coronado, CA, exercises operational and administrative control of all active and reserve NSW forces stationed in the United States. The NAVSPECWARCOM mission is to man, train, equip, deploy, and sustain NSW forces for operations and activities abroad in support of combatant commanders and U.S. national interests.

NAVSPECWARCOM is an echelon II command under the combatant command of USSOCOM. Deployable NSW forces are assigned to one of the six NSW Groups. NSWGs 1 and 2 command the eight active duty SEAL teams.

Naval Special Warfare Group ONE, based in Coronado, CA, with SEAL Teams ONE, THREE, FIVE, and SEVEN as its subordinate commands.

Naval Special Warfare Group TWO, based in Little Creek, VA, with SEAL Teams TWO, FOUR, EIGHT, and TEN as its subordinate commands.

Naval Special Warfare Group THREE, based in Pearl Harbor, HI, is responsible for NSW forces conducting undersea special operations worldwide. Subordinate commands include SEAL Delivery Vehicle Team ONE (SDVT-1), Training Detachment THREE (TRADET-3), and Logistics Support Unit THREE (LOGSU-3).

Naval Special Warfare Group FOUR, based in Little Creek, VA, organizes personnel to deploy combat ready forces and maritime mobility systems with craft capabilities and capacities in accordance with

USSOCOM priorities. Subordinate commands include Special Boat Teams TWELVE, TWENTY, and TWENTY TWO.

Naval Special Warfare Group TEN, based in Little Creek, VA, is responsible for intelligence, surveillance, reconnaissance, and preparation of the environment capabilities, with NSW Special Reconnaissance Teams ONE and TWO, and the Mission Support Center as its subordinate commands.

Naval Special Warfare Group ELEVEN is responsible for NSW Reserve Components and personnel in support of NSW and joint special operations.

Naval Special Warfare Units provide support and forward deployed bases around the globe. NSW Unit1 is located in Guam and responsible for INDOPACOM. NSW Unit-2 is located in Germany and is responsible for EUCOM.

NSW Unit-3 is located in Bahrain and responsible for CENTCOM. NSW Unit10 is located in Germany and responsible for AFRICOM.

SEAL Team Structure:

SEAL Teams are composed of three Troops with three platoons each (nine platoons/Team), a Command and Control Element, and a mobile support element that is deployable overseas for extended periods. The SEAL officer's first leadership assignment is as a Squad Leader (LTJG/LT) to a SEAL platoon, and then progresses to a Platoon Commander (LT), and eventually Troop Commander (LCDR) of three SEAL platoons.

Explosive Ordnance Disposal (EOD):



Mission (EOD):

The Naval Special Warfare (NSW) mission is to man, train, equip, 72 deploy, and sustain NSW forces for operations and activities abroad in support of combatant commanders and U.S. national interests.

Operations (EOD):

Expeditionary Mine Countermeasures (MCM): Historically mine countermeasures (MCM) has been made up of three components: EOD personnel (Underwater MCM), surface ships (Surface MCM), and aviation units (Air MCM). Today, EOD units are able to deploy as an Expeditionary MCM package composed of unmanned underwater vehicles (UUVs) and EOD technicians. Without requiring the services of certain surface and aviation platforms, the Expeditionary MCM package is able to provide additional options for Fleet Commanders around the world. EOD personnel are specifically tasked with

diving, detecting, rendering safe, and disposal of armed underwater ordnance. Additionally, EOD personnel render safe dud-fired mines, torpedoes, limpet mines, and depth charges.

Special Operations Forces (SOF) Support: As the chosen EOD force for Naval Special Warfare and Army Special Forces, Navy EOD Technicians lend their expertise to SOF units to ensure they achieve mission success. The skills learned in the EOD training pipeline lend themselves to participation in these types of operations. Navy EOD Technicians will participate in advanced training with the SOF unit to include Close Quarters Combat (CQC), advanced Freefall parachuting, and other specialized techniques in order to support the entire spectrum of operations with which that unit may be tasked.

Expeditionary Diving and Salvage: Expertise in diving is a vital skill needed for the disposal of underwater ordnance. All Navy EOD Technicians are Navy Divers and are trained in open-circuit SCUBA and the Mk-16 Mod 1, a computerized mixed-gas rebreather with low magnetic properties that allows EOD Technicians to operate on ordnance at up to 300 feet beneath the surface. Navy EOD Officers also serve at Mobile Diving and Salvage Units (MDSU) with Navy Divers in order to conduct salvage, recovery, ship's husbandry, deep submergence, and saturation operations.

EOD Organization:

The Type Commander (TYCOM) for Navy EOD is the Commander, Naval Expeditionary Combat Command (NECC). Under NECC, Navy EOD forces are divided into two Groups: EODGRU ONE in Coronado, CA and EODGRU TWO in Little Creek, VA. Each group contains EOD Mobile Units (EODMU) which are companies and platoons. Each EOD platoon consists of one officer and three to eleven enlisted EOD Technicians, depending on the platoon's mission. Each Group also contains an EOD Training & Evaluation Unit (EODTEU) and a Mobile Diving & Salvage Unit (MDSU).

Marine Corps:



Fundamentals of the Marine Corps:

To understand the Marine Corps' philosophy of warfighting, you first need an appreciation for how we view the unchanging nature of war itself – its moral, mental, and physical characteristics and demands. A common view of war among Marines is a necessary base for the development of a cohesive doctrine because our approach to the conduct of war, through maneuver warfare, derives from our understanding of the nature of war.

War is a violent clash of interests between or among organized groups characterized by the use of military force. The essence of war is a violent struggle between two hostile, independent, and irreconcilable wills. It follows that the object in war is to impose our will upon the enemy.

The Marine Corps concept for winning under these conditions is a warfighting doctrine based on rapid, flexible, and opportunistic maneuver. In order to fully appreciate what we mean by maneuver, we need to clarify the term.

The traditional understanding of maneuver is a spatial one; that is, we maneuver in space to gain a positional advantage.

However, in order to maximize the usefulness of maneuver, we must consider maneuver in other dimensions as well. The essence of maneuver is taking action to generate and exploit some kind of advantage over the enemy as a means of accomplishing our objectives as effectively as possible. That advantage may be psychological, technological, or temporal as well as spatial. Especially important is maneuver in time—we generate a faster operating tempo than the enemy to gain a temporal advantage. It is through maneuver in all dimensions that an inferior force can achieve decisive superiority at the necessary time and place.

Maneuver warfare is a warfighting philosophy that seeks to shatter the enemy's cohesion through a variety of rapid, focused, and unexpected actions which create a turbulent and rapidly deteriorating situation with which the enemy cannot cope.

Every Marine is a Rifleman. Every Marine - regardless of military occupational specialty - is first and foremost a disciplined warrior.

Every Marine Officer is a Provisional Rifle Platoon Commander. Every officer – regardless of occupational specialty - is first and foremost a capable and disciplined platoon commander.

Expeditionary Naval Force. Marines are 'soldiers of the sea,' an integral part of the Naval Services — lean, versatile, flexible, and ready. We are organized, trained, and equipped to conduct naval campaigns and operate on and from naval platforms, or to fight in protracted campaigns ashore.

Combined Arms Organization. In 1952, Congress directed the Marine Corps' composition as an airground combined arms force. This integrated force, known as the MAGTF, has unique and incomparable warfighting capabilities. Our MAGTF contains organic air, ground, and logistics elements under a single command element, making it an effective and integrated combined arms force.

Ready and Forward Deployed. Congress' intent that the Marine Corps serve as the 'force in readiness' was founded on a recognized national need for a force capable of rapid response to emerging crises. This requirement mandates high standards of readiness across the force. We are routinely forward deployed around the globe and stand prepared to respond quickly in times of crisis.

Agile and Adaptable. The Marine Corps' agility is based on its expeditionary mindset and flexible structure, able to operate either from the sea or in sustained operations ashore. We can adapt quickly with unparalleled speed across an extraordinary range of military operations. Our organizational design and training facilitate a seamless transition between these operations, providing the necessary capability to operate effectively.

Organization of the Marine Corps:

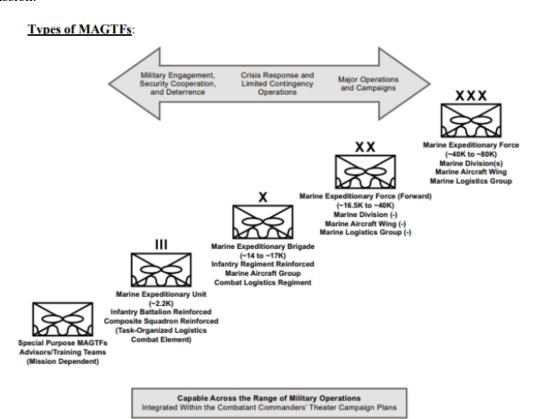
The Marine Corps is a task-organized, multi-capable military organization. It is a middleweight force that lies between our Special Operations Forces and our nation's heavier forces in the Army with a force that complements both. It is scalable and adaptive. The way the Marine Corps scales its force is through task-organized Marine Air-Ground Task Forces (MAGTFs). The MAGTF is the Marine Corps' principal organization. It provides combatant commanders with a scalable, versatile expeditionary force able to respond to a broad range of contingency, crisis and conflict situations. MAGTF (regardless of size) is composed of the following four elements:

1. Ground Combat Element (GCE): Infantry (battalion, regiment, or division) augmented with tank, artillery, Light Armored Reconnaissance (LAR), Amphibious Assault Vehicles (AAV), combat engineers, and reconnaissance assets.

- **2. Aviation Combat Element (ACE):** Contains aircraft to support the tactical situation. Tactical helicopters with fixed wing assets for close air support.
- **3. Logistics Combat Element (LCE):** Provides all necessary logistical support to the MAGTF including Transportation, Engineering, Embarkation, Medical/Dental, and Headquarters and Service.
- **4. Command Element (CE):** Administration, intelligence, operations, logistics, communications, medical, legal, chaplain, etc.

Types of MAGTFs:

- 1. **Marine Expeditionary Force (MEF)** The MEF is the largest principal warfighting element in the active force structure of the Marine Corps and is usually commanded by a Lieutenant General. The size and composition of a deployed MEF varies depending on the needs of the mission. Each MEF has one to three Marine Expeditionary Units (MEU) assigned to it that deploy throughout the globe.
- 2. **Marine Expeditionary Brigade (MEB)** The MEB is the next largest MAGTF structure the Marine Corps employs. Unlike the MEF, which has permanent structure, the MEB is typically stood up for specific theaters and engagements, such as MEB Afghanistan (MEB A), or deployed as a smaller, forward deployed element of the MEF. The MEB is typically commanded by a Brigadier or Major General.
- 3. **Marine Expeditionary Unit (MEU)** In combat and non-combat situations alike, the Marine Expeditionary Unit (MEU) is our nation's self-contained, forward-deployed response force. Embarked aboard amphibious assault ships, the MEU maintains a constant state of readiness, able to plan and launch a mission within six hours.
- 4. **Special Purpose MAGTF (SPMAGTF)** A special purpose MAGTF (SPMAGTF) may be formed to conduct a specific mission that is limited in scope and focus and often in duration. A special purpose MAGTF may be any Expeditionary Operations size, but normally it is a relatively small force—the size of a Marine Expeditionary Unit or smaller—with narrowly focused capabilities chosen to accomplish a limited mission.



Marine Corp Weapons Platforms:

M4 Carbine



Primary Function: Infantry Weapon-less weight and shorter barrel than the M16 making it

more appropriate weapon for shorter distances and confined spaces.

Caliber: 5.56x45mm NATO

Weight: 7.5 lbs (with 30 round magazine)

Effective Range: Area TGT - 600 meters, Point TGT - 500 meters

M27 Infantry Automatic Rifle (IAR)



Primary Function: The M27 is the automatic weapon that delivers accurate suppressive fires in support of the Fire Team. It is a lightweight, magazine-fed 5.56mm weapon. The M27 is intended to enhance an automatic rifleman's maneuverability and displacement speed.

Caliber: 5.56mmx45mm NATO Weight: 7.9 lb (3.6 kg) empty

Effective Range: Area TGT 800m, Point TGT 550m

Strategic Sealift:



Mission:

The Strategic Sealift Officer Program provides warfare qualified Navy Reserve Officers with civilian mariner credentials and military training to activate, operate, and sustain strategic sealift to support Joint Force and Fleet requirements in contested environments.

Operations:

Fleet support: Provides the Navy with towing, rescue and salvage, submarine support, cable laying and repair services, a command and control platform, floating medical facilities, expeditionary sea bases, and fast transport vessels.

Prepositioning: Provides ships loaded with military stores for forward, at-sea staging around the world. Prepositioning ships carry cargo owned by the U.S. Army, Air Force, Navy and Marine Corps.

Special Mission: Supports specialized scientific and technical missions for DOD sponsors. Missions include ocean surveillance, oceanographic survey, cable laying, missile telemetry collection, submarine support and navigation test support.

Combat Logistics Force: The ships of MSC's Combat Logistics Force (CLF) are the supply lines to U.S. Navy ships at sea. These ships provide virtually everything that Navy ships need including fuel, food, fleet ordnance and dry cargo, spare parts, mail and other supplies. CLF ships enable the Navy fleet to remain at sea and combat ready for extended periods of time. All CLF ships are government-owned and operated by U.S. government civil service mariners.

Colors

The American flag is a symbol of the democracy we hold so dear, and the men and women who have died protecting that democracy. The first official salute of the American flag by a foreign government took place 14 February 1778 when a Navy ship, the sloop-of-war *Ranger* under the command of Captain John Paul Jones, exchanged salutes with the French ship *Robuste*, in Quiberon Bay on the Atlantic coast of France. Many customs and ceremonies are associated with the national ensign. The ceremonies of hoisting (raising) it at 0800 in the morning and lowering it at sunset are called morning colors and evening colors, respectively. These ceremonies take place every day on every Navy and Marine Corps shore station in the world. Ships at sea do not observe either of these formal ceremonies, but ships in port – whether moored to a pier or anchored offshore – do observe both.

Confidence and Bearing:

During colors the leader giving the commands will project their voice in a military manner to ensure the commands are executed properly. When raising and lowering the National Ensign the command "ATTENTION TO COLORS" will be spoken so that all in the vicinity are aware and render proper respect to the National Ensign.

MMA: Performing Morning and Evening Colors

On the weekdays three Midshipmen will be selected to perform morning and evening colors for the day, ensuring the colors are put up by 0800 and taken down at sunset. The names of these Midshipmen will be posted in the plan of the week (POTW) prior to the start of the academic week. The Midshipman in the middle will carry all colors between their arms and chest with their arms crossed, hands flat, and fingers together. The Ensign shall be the flag visible to others. This Midshipman is responsible for raising the ensign and the other two will be responsible for the USMC and Navy flag. The USMC midshipman shall be on the left of the Ensign and the USN midshipman shall be on the right. The Midshipman carrying the ensign will conduct the following commands that are stated below.

Posting the Colors:

- 1. Arrive at the NROTC per the order on the POW, retrieve the colors from the NROTC house.
- 2. Muster in the parking lot in line with the walkway up to the flagpole and face Richie Field.
- 3. Command "Detail Fall in"
- 4. Command "Left Face"
- 5. Command "Forward march"
- 6. Command "Detail halt" Ensign should be in line with the flag pole.
- 7. Command "Right Face"
- 8. Command "Detail Post" all Midshipmen step forward with their left foot to move toward respective halyard lines.
- 9. Command "ATTENTION TO COLORS" This command should be loud enough for all in the immediate area to hear. All Midshipmen in the area must snap to attention and salute the Ensign until commanded to do otherwise. The Midshipman carrying the Ensign will put up the flag in a quick manner.
- 10. Command "CARRY ON" This command should be loud enough for all in the immediate area to hear.
- 11. The remaining Midshipmen will then simultaneously raise the USN and USMC colors at a reasonable pace.
- 12. Command "Recover" to return all Midshipmen to spots prior to raising colors.
- 13. Command "Hand Salute"
- 14. Command "Ready, Tu"
- 15. Command "Right face"
- 16. Command "Forward march"
- 17. Command "Detail halt" once a few steps off of stone walkway
- 18. Command "Left Face"

- 19. Command "Fallout"
- 20. Midshipmen will now check to see that the USMC flag is to the left, Ensign is in the middle, the Navy flag is to the right, and all are upright before they leave.

Retiring the Colors:

- 1. Muster at the NROTC per the order on the POW.
- 2. Muster in the parking lot in line with the walkway up to the flagpole and face Richie Field.
- 3. Command "Detail Fall in"
- 4. Command "Left Face"
- 5. Command "Forward march"
- 6. Command "Detail halt" Middle Midshipman should be in line with the flag pole.
- 7. Command "Right Face"
- 8. Command "Hand Salute"
- 9. Command "Ready, Tu"
- 10. Command "Detail Post" all MIDN step forward with left foot to move toward respective halyard lines.
- 11. The USN and USMC Midshipmen will simultaneously lower the USN and USMC colors at a reasonable pace.
- 12. Command "ATTENTION TO COLORS" This command should be loud enough for all in the immediate area to hear. All Midshipmen in the area must snap to attention and salute the Ensign until commanded to do otherwise. The Midshipman carrying the ensign will lower the Ensign slowly.
- 13. Command "CARRY ON" This command should be loud enough for all in the immediate area to hear
- 14. The other two midshipmen will give the USN and USMC flags to the Midshipmen holding the ensign. That Midshipman will carry all colors between their arms and chest with their arms crossed, hands flat, and fingers together.
- 15. Command "Recover" to return all Midshipmen to spots prior to raising colors.
- 16. Command "Right face"
- 17. Command "Forward march"
- 18. Command "Detail halt" once a few steps off of stone walkway
- 19. Command "Left Face"
- 20. Command "Fallout"
- 21. Midshipmen will proceed to fold the colors properly and return them to the NROTC house. If colors are wet, they will be returned to the house and draped over chairs in the conference room to preserve the integrity of the material.

UMaine: Performing Morning and Evening Colors:

On the weekdays two Midshipmen will be selected to perform morning and evening colors for the day. These Midshipmen will arrive at the NROTC house no later than 0800 to put the colors up in the morning and take them down at sunset. One Midshipman will carry the ensign and the other will carry the USMC and Navy flag. The Midshipman that is carrying the ensign will be to the left and conduct the following commands that are stated below.

Posting the Colors:

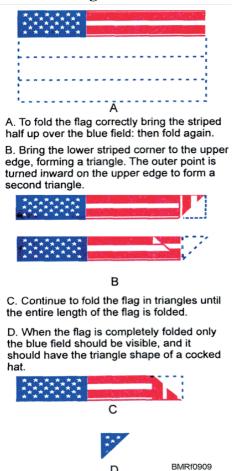
- 1. Arrive at the NROTC at 0800 with all three flags holding them at their chest
- 2. Muster at the top of the walkway
- 3. Command "Fall in"
- 4. Command "Forward march"
- 5. Command "Detail halt" about two paces before flag post
- 6. Command "Post" and side shuffle two paces diagonal from each other
- 7. The Midshipman that is carrying the ensign will put of the flag in a quick manner
- 8. The Midshipman carrying the two flags will then give the other Midshipman the USMC flag and put the two flags up together simultaneously
- 9. Command "Recover" taking two shuffle steps back towards the house
- 10. Command "About face"
- 11. Command "Forward march"

- 12. Command "Detail halt" right before the end of the walkway
- 13. Command "Fallout"
- 14. Midshipmen will now check to see that the USMC flag is to the left, American flag is in the middle, and the Navy flag is to the right before they leave

Hauling Down Colors:

- 1. Arrive at the NROTC house at sunset
- 2. Muster at the top of the walkway
- 3. Command "Fall in"
- 4. Command "Forward march"
- 5. Command "Detail halt"
- 6. Command "Post"
- 7. Slowly take down the USMC and USN flag and hand them to the Midshipman not giving the commands
- 8. Slowly take down the United States Flag and hold it to your chest folded
- 9. Command "Recover"
- 10. Command "About face"
- 11. Command "Forward march"
- 12. Common "Detail halt" right before you get to the end of walkway"
- 13. Command "Fallout"
- 14. Walk into the house and properly fold flags and put them away

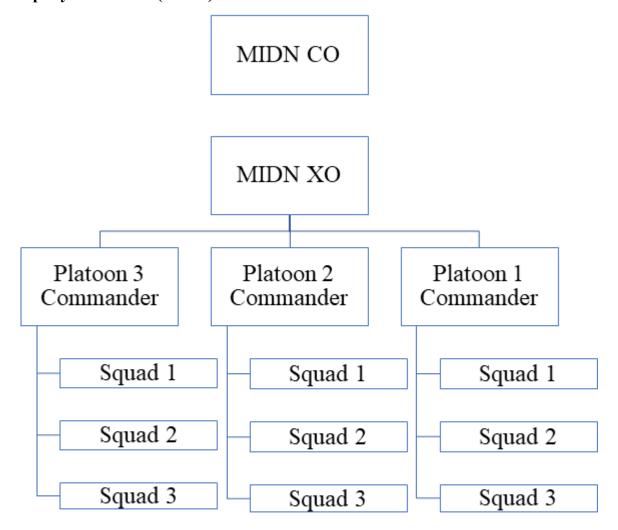
How to properly fold the National Ensign:



Half Mast: When the Ensign is at "Half Mast" the lower grommet of the ensign will be level with the yardarm of the flagpole. The other flags flown at the yardarm will be raised fully.

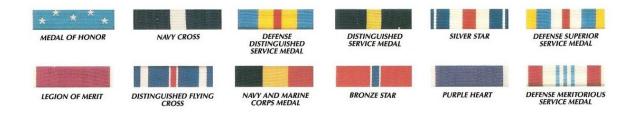
Additional Information

Company Formation (MMA):



When forming up, as well as any time military formations or events are occuring, it is important to follow the proper chain of command. If one is in 1st Platoon and has a question, for example, ask the Platoon Sergeant. Platoon Sergeants refer to the Platoon Commanders, who then go to the Operations Officer, and so on. No individual should go to any member of the triad unless they have asked their platoon leadership, or are in a collateral billet dealing directly with OPS. This is important to maintaining military formation and proper chain of command. The MIDN CO should not be telling you what to do, your platoon leadership does. Therefore, if everyone takes more initiative, everything will go much smoother. We are here to all be leaders. Be a leader and not go above your chain of command unless authorized or directed to do so.

Important USN and USMC Awards:



Code Of Conduct For Members of the Armed Forces:

- 1. I am American, fighting in the forces which guard my country and our way of life. I am prepared to give my life in their defense.
- 2. I will never surrender of my own free will. If in command I will never surrender the members of my command while they still have the means to resist.
- 3. If I am captured I will continue to resist by all means available. I will make every effort to escape and aid others to escape. I will accept neither parole nor special favors from the enemy.
- 4. If I become a prisoner of war, I will keep faith with my fellow prisoners. I will give no information or take part in any action which might be harmful to my comrades. If I am senior, I will take command. If not, I will obey the lawful orders of those appointed over me and will back them up in every way.
- 5. When questioned, should I become a prisoner of war, I am required to give name, rank, service number, and date of birth. I will evade answering further questions to the utmost of my ability. I will make no oral or written statements disloyal to my country and its allies or harmful to their cause.
- 6. I will never forget that I am an American, fighting for freedom, responsible for my actions, and dedicated to the principles which made my country free. I will trust in my God and in the United States of America.

Decentralized Command:

The idea of decentralized command is to have the lowest level of leadership (squad leaders and platoon sergeants) take the role of leadership for everyday tasks. To accomplish this, leadership must explain how to understand and execute these tasks to lower echelons. An example would be for a morning muster or taking accountability. The CO and XO would explain to the company commanders how to properly take accountability and report the status of each platoon correctly, to which the platoon commanders would explain to the squad leaders how to take accountability and report the status of their individual squads.

Watchstanding Principles:

- 1. **Formality-** Standing a formal watch means that there is a proper turnover, knowing who is on watch and what their role is, knowing what systems are online and what the plan is. It is the small but critical components that make an effective watch.
- 2. **Procedural Compliance-** You and your team must fully understand and execute every step in the procedure. Technology and equipment are constantly changing, therefore the procedure may be updated. Always be aware of any changes and do not skip steps due to complacency or laziness.
- 3. **Level of Knowledge-** The reason training and qualification programs are in place is to ensure watchstanders have the proper level of knowledge for their task. Watchstanders must know what questions to ask, how to apply forceful backup and how to react.
- 4. **Questioning Attitude-** It is important to always stay alert and pay attention to what is happening around you. Having a questioning attitude will help eliminate complacency that may lead to accidents.
- 5. **Forceful Backup-** Going along the lines of a questioning attitude, having multiple officers on watch will create a more effective team. Do not be afraid to question those above or below you. There is usually a lot going on and to keep track of and by having forceful backup, it will help ensure mistakes aren't made.

6. **Integrity-** Doing the right thing even if no one is watching. It also means admitting you made a mistake. On the other side, it means fostering an environment where people feel comfortable admitting that they made a mistake in order to resolve it and learn, rather than be reprimanded.

Shipboard Customs:

Bridge:

The Officer Of the Deck ((OOD) is the Captain's direct representative who leads the watch team, and is responsible for safe navigation and maintaining the ship's routine. All non-watch personnel must ask permission (with a salute) of the OOD to enter the bridge. The first person to see the Commanding Officer enter the bridge shall call out "Captain is on the Bridge", which alerts the navigation team/OOD as the Captain's orders supersede those of the OOD, and the OOD shall update the Captain with any important news.

Quarterdeck:

Replaces the bridge as the control point when the ship is not underway and maintains a watch team/OOD. Is a point of entry/exit for the ship. It is marked off by some means and is kept in clean conditions. Watchstanders must be in the uniform of the day, and those not on watch shall not loiter around the quarterdeck. Larger ships sometimes have two access points, but only one is labeled the quarterdeck,

Boarding/Departing Ship:

OOD or JOOD will meet all persons leaving/boarding the ship. You shall always show your ID when boarding the vessel whether you are part of the crew or not. Will use a "brow" to board when along a pier, or an "accommodation ladder" when at anchor. Once you make it to the gangway (entrance between deck railing), you turn aft to where the national ensign may be flying, come to attention and salute if the ensign is flying. You then turn back to face the OOD and salute, and say "I request permission to come aboard, Ma'am/Sir." If you are not a member of the crew, you also state your reason for your visit. The OOD will return the salute and say "Very Well." If you are not in uniform when boarding, you do the same procedure just without saluting. The procedure for departing a ship is the same but in reverse, with the phrase "I request permission to go ashore, Ma'am/Sir."

Daal- Hand Hat Calana.

PERSONNEL	HELMET ¹	JERSEY	SYMBOLS ²
Aircraft Handling Crew and Chockmen	Blue	Blue	Crew Number
Aircraft Handling Officers, CPO, LPO	Yellow	Yellow	Billet Title
Elevator Operators	White	Blue	E
LSE (Crew Directors)	Yellow	Yellow	Crew Number
Maintenance Crews	Green	Green	Black Stripe and Squadron Designator
Medical	White	White	Red Cross
Messengers and Telephone Talkers	White	Blue	T
Photographers	Green	Green	P
Plane Captains	Brown	Brown	Squadron Designator
Ordnance	Red	Red	Black Stripe and Squadron Designator/ ship's billet title
Crash and Salvage Crews	Red	Red	Crash/Salvage
Tractor Driver	Blue	Blue	Tractor
Maintenance Crews	Green	Green	Black Stripe broken by abbreviation of specialty (ie P/P (Power Plants))
Aviation Fuel Crew	Purple	Purple	F
Aviation Fuel Officer	Purple	Purple	Fuel Officer
Combat Cargo	White	White	Combat Cargo
Safety Observer	White	White	Green Cross

Standard Commands From The Conning Officer to the Helm:

The Conning Officer, or "Conn", gives commands to the Helmsman, who operates the ship's rudder in order to control the course, speed, and depth at which the ship travels.

- "Right/left rudder" The amount the rudder is changed can be specified (i.e. "right 10-degree rudder").
- "Standard rudder" 15 degrees.
- "Full rudder" 30 degrees.
- "Hard right/left rudder" the maximum rudder angle change
- "Steady on course XXX" maintain current speed and direction, the course is given in three digits and spoken as individual numbers
- "Rudder amidships" to reduce the angle of the rudder to zero degrees
- "Shift your rudder" to invert the direction of the rudder while maintaining the same angle

Naval Terms:

Deck - Floor

Porthole - Window

Hatch - Door

Bulkhead - Wall

Colors - The act of ceremoniously hoisting or lowering the national ensign in the morning and evening

Port - Left

Starboard - Right

Aft - Rear

Stern - Front

Head - Restroom

Square Away - To correct, mentor, adjust the uniform appearance

Aye, Aye - Responding to an order, meaning "I understand and will obey."

As You Were - Correct a preceding order

Belay my last - Disregard my last order

Blouse - Digital camouflage shirt

Brass - Officers

CFT - Combat Fitness Test (USMC)

PRT - Physical Readiness Test (USN)

Chow Hall/Mess Deck - Cafeteria

Civvies - Civilian attire

Cover - Hat

Field Day/Police Your Area - To clean up, secure for sea

Geedunk - Canteen, snack/junk food, vending machines

Gig Line - The alignment of the seam of shirt, belt buckle, and fly-seam.

Go-Fasters - Running shoes

Good to Go - Ready to move, I agree, situation OK

Ink Stick - Pen

Leave - Vacation Time

Liberty - End of the day/rest and relax

MOS (Military Occupation Specialty) - Job (USMC)

Rate - Job (USN)

Moonbeam - Flashlight

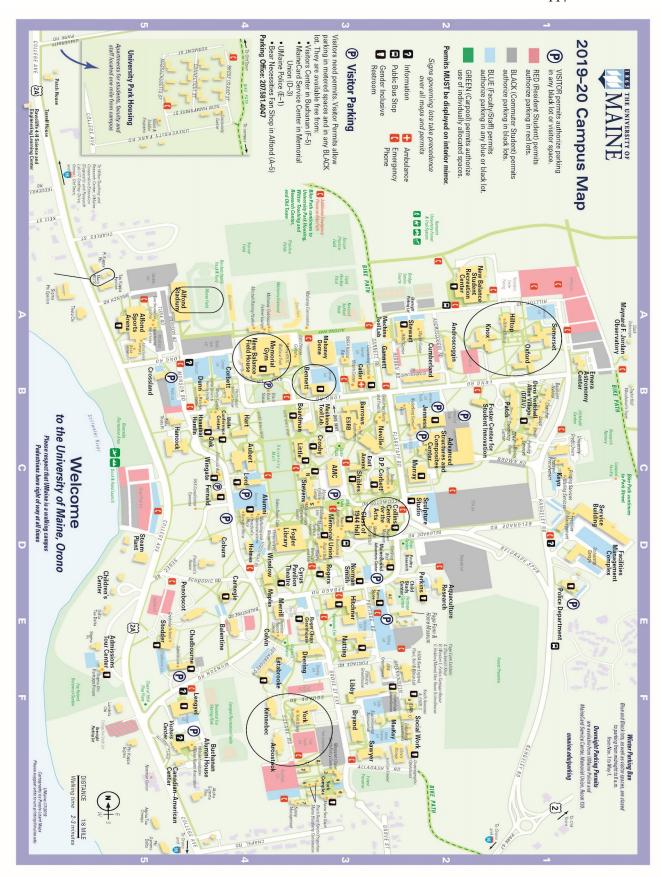
PFT - Physical Fitness Test

PT - Physical Training Pogey

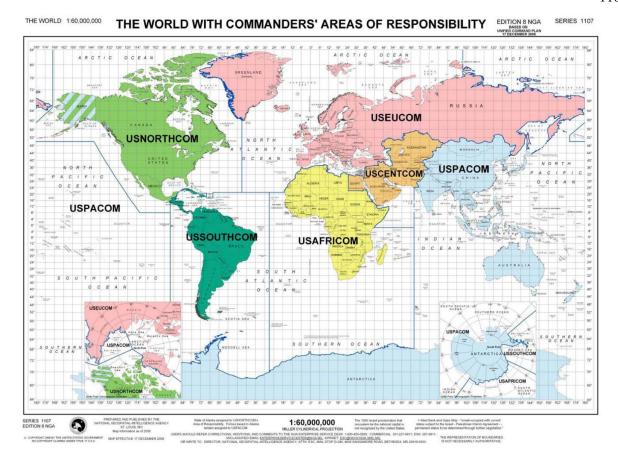
Rack - Bed

Campus Maps and Important Locations:





Map of DOD Area of Responsibility:



US Navy Ethos:

<u>We are the United States Navy</u>, our Nation's sea power - ready guardians of peace, victorious in war. We are professional Sailors and Civilians - a diverse and agile force exemplifying the highest standards of service to our Nation, at home and abroad, at sea and ashore.

Integrity is the foundation of our conduct; respect for others is fundamental to our character; decisive leadership is crucial to our success.

We are a team, disciplined and well-prepared, committed to mission accomplishment. We do not waver in our dedication and accountability to our shipmates and families.

We are patriots, forged by the Navy's core values of Honor, Courage and Commitment. In times of war and peace, our actions reflect our proud heritage and tradition.

We defend our Nation and prevail in the face of adversity with strength, determination, and dignity. We are the United States Navy.

Important Points of Contact

LT Adam Dymit (SUBS)	w: 207-326-2320	c:267-227-8032
Capt Kenneth Motsay (MOI)	w: 207-581-1551	c:410-790-1580
LT Timothy Grant (SWO)	w: 207-326-2320	c:631-896-2180
LT Ryan Armstrong (SSO)	w: 207-326-2320	c:207-949-9800
GySgt Patrick Armstrong (AMOI)	w: 207-581-1551	c:626-627-1574
QM1 Marissa Espinosa	w: 207-326-2322	c:270-321-2882
QM1 Chadwick King (NAV)	w: 207-326-2322	
Supply Ms. Kathy Libby	w: 207-326-2321	c:207-307-4006
UMaine Admin Ms. Sheri	w: 207-581-1551	

Important Points of Contact MIDN (MMA Company)

MIDN CO 1/C Wesley Brewer	c: 540-267-6834
MIDN XO 1/C Cole Eddins	c: 443-695-8075
MIDN OPS 1/C Carter Campbell	c: 740-853-3007
Platoon 1 CDR (NROTC) 1/C Gavin Kent	c: 571-552-7009
Platoon 2 CDR (SSMP) 1/C Zachary West	c: 407-712-0451

Important Points of Contact MIDN (UMaine Company)

MIDN CO 1/C Mark Beauregard	c: 860-967-8456
MIDN XO 1/C Ethan Kirkpatrick	c:860-800-4409
MIDN OPS 1/C Liachell Kuras	c: 808-354-3035
Platoon 1 CDR 2/C Elizabeth Takagaki	c: 254-285-7053
Platoon 2 CDR 2/C Erica Cunningham	c: 908-839-3818
Platoon 3 CDR 2/C Brian Sanchez	c: 831-223-8558

 $[*]Emails for MMA individuals: \underline{\textit{firstname.lastname@mma.edu}}$

^{*}Emails for UMaine individuals generally: <u>firstname.lastname@maine.edu</u>

^{*}Staff members will have an email account from both institutions

In Event of On-Campus Emergency

MMA:

- -Maine Maritime Emergency Response Plan: https://mainemaritime.edu/campus-safety/emergency/
- -Maine Maritime Campus Safety Department: (207)-326-2479, ext. 2479 Windlass House, 58 Pleasant Street, Castine, ME 04420, Sign up for MMA Alert/e2 campus https://mainemaritime.edu/campus-safety/
- -Maine Maritime Counseling Center: (207)-326-2419, located on the first floor of Curtis Hall (by elevator) and most easily accessed through Door B from the courtyard, Castine, ME 04420 https://mainemaritime.edu/student-life/health-and-counseling-services/
- -Maine Maritime Health Services: (207)-326-2295, Health and counseling services are located on the main level of Curtis Hall, Castine ME 04420 https://mainemaritime.edu/student-life/health-and-counseling-services/

-Resources Regarding Sexual Misconduct and Domestic Violence:

Local and on-campus resources provided in link https://mainemaritime.edu/campus-safety/clery/resources-regarding-sexual-misconduct/

UMaine:

- -University of Maine Police Department / University Ambulance : (207)-581-4040 or dial 911, 81 Rangeley Rd, Orono, ME 04469, https://umaine.edu/police/
- -University of Maine Title IX Office: (207)-581-1406, 5748 Memorial Union, Room 315, Orono, ME 04469, https://umaine.edu/titleix/
- -University of Maine Counseling Center: (207)-581-1392, 5721 Cutler Health Center, Room 125, Orono, Maine 04469,https://umaine.edu/counseling/
- -University of Maine Bursar's Office: (207)-581-1521 ,5703 Alumni Hall, Room 100 Orono, ME 04469-5703,https://umaine.edu/bursar/