

## 2024-2025 Professional Knowledge Midshipmen Qualification Standards

### 4/C MIDSHIPMEN QUALIFICATION STANDARDS

#### **Reference: Professional Knowledge Book (Pro-Book)**

**Purpose of MQS:** To establish and meet the learning objectives (LO) for 4/C Pro-Quizzes, Pro-Exams, and Professional Competency Boards (PCB).

**Schedule of MQS:** 4/C MIDN will complete the required MQS signatures for the Chapter they will be tested on that week or two week period in accordance with the Professional Knowledge Training Schedule at the beginning of this book.

**Signature Authorities:** Each LO identifies a specific signature authority who is either a subject matter expert (SME) or a midshipman in the chain of command (CoC). By signing off a LO, the signature authority is affirming that the midshipman receiving the signature has demonstrated the requisite knowledge. The signature authority shall fill out all required information (typed/printed name, alpha, signature, and date) or, if a SME desires, they may print/sign/date a roster that each midshipman can include in their MQS. Each midshipman is responsible for achieving applicable LOs prior to a quiz/exam/board/assessment.

- Chain of Command (CoC)
  - CoC involvement is critical to the success of MQS. Mentorship requires the intentional personal engagement to meet the appropriate level of knowledge, comprehension, application, and discussion of professional material.
  - 4/C midshipmen shall receive signatures from 3/2/1/C midshipmen in their CoC.
- Subject Matter Experts (SME)
  - Based on their billet and/or experience, only certain individuals are equipped to provide signatures for specific learning objectives.
  - SMEs are signature authorities for any item in their respective area.

A current list of community/service SMEs is available on the Training Department website.

### **Definition of Terms:**

***Know:*** Recall facts, bring to mind, and recognize the appropriate material.

***Comprehend:*** Interpret principles and concepts and relate them to new situations.

***Apply:*** Utilize knowledge and comprehension of specific facts in new relationships with other facts, theories, and principles.

***Demonstrate:*** Show evidence of ability to perform a task.

***Read:*** Look at and comprehend the meaning of printed material.

***Discuss:*** Consciously identify content and their fleet applications, weigh logical and persuasive effects, critically evaluate unstated assumptions and biases, and talk about them with another person.

## CHAPTER 1: USNA NOTABLE GRADUATES & FIRST LINK ASSIGNMENT

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### 4/C MQS

1. Know graduation year and position/title held by Chester W. Nimitz.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

2. Know graduation year and position/title held by Alan B. Shepard, Jr.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

3. Know graduation year and position/title held by James Earl “Jimmy” Carter.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

4. Know graduation year and position/title held by James B. Stockdale.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

5. Know graduation year and position/title held by H. Ross Perot.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

6. Know graduation year and position/title held by John McCain.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

7. Know graduation year and position/title held by Roger Staubach.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

8. Know graduation year and position/title held by Major General Charles Bolden.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

9. Know graduation year and position/title held by Wendy Lawrence.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

10. Know graduation year and position/title held by Michelle Howard.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

11. Know graduation year and position/title held by David Robinson.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

12. Know graduation year and position/title held by Erik Kristensen.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

13. Know graduation year and position/title held by the notable graduate selected by your Squad Leader.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

14. Understand the other significant accomplishments of USNA graduates and have conversational knowledge of those listed.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

15. Know graduation year and summary of military service of assigned hero from Memorial Hall.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

## CHAPTER 2: U.S. NAVY PERSONNEL

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### 4/C MQS

1. Know the differences between URL, RL, and SC Officers.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

2. Know the Restricted Line communities and their roles.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

3. Know the five Staff Corps communities and their roles.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

4. Know the purpose of the Limited Duty Officer (LDO) and Chief Warrant Officer (CWO) programs and who competes for these commissions.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

5. Know the difference between a paygrade, a rating, and a rate.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

6. Know the common ratings by name and abbreviation in this chapter.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

7. Know the roles of a Petty Officer (PO), a Chief Petty Officer (CPO), and a Command Master Chief (CMC).

_____	_____	_____
Print Name (SME - Enlisted)	Signature	Date

8. Know and be able to identify by uniform insignia the Navy enlisted ranks

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

9. Understand the NEC system and know the five types of NEC codes.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

10. Know the role of the Engineering Duty Officer (EDO) community:

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

11. Know the three core capabilities of the Information Warfare Community (IWC):

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

12. Know the four IWC officer communities.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

13. Know the four IWC enlisted communities.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

14. Know the three network domains used in the Navy and know their associated classification levels.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

15. Know the role of the Civil Engineer Corps community.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

### **CHAPTER 3: MISSION OF THE U.S. NAVY: TACTICS, OPERATIONS, STRATEGY, & THE JOINT ENVIRONMENT**

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#### **4/C MQS**

1. Know the mission of the Navy and comprehend the Navy ethos.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

2. Understand the National Security Act of 1947 and know the members of the National Security Council.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

3. Know the responsibilities of the SECNAV, CNO, and CMC.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

4. Know the Administrative and Operational Chains of Command.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

5. Know the Geographic and Functional Unified Combatant Commands and their AORs.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

6. Know the numbered Fleet Commanders, their HQ locations, and the Combatant Commander each supports.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

7. Know the Navy's Operational Mission Areas.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

8. Comprehend the National Security Strategy's three key priorities.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

9. Understand the Design for Maintaining Maritime Superiority concept and know the CNO's three focus of effort and four Navy Core Attributes.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

## CHAPTER 4: SURFACE WARFARE

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### 4/C MQS

1. Know the mission of Surface Warfare.

\_\_\_\_\_  
Print Name (CoC)                      Alpha                      Signature                      Date

2. Know the different operations and unique capabilities the surface fleet is capable of conducting.

\_\_\_\_\_  
Print Name (CoC)                      Alpha                      Signature                      Date

3. Know the insignia worn by Surface Warfare Officers and its background.

\_\_\_\_\_  
Print Name (CoC)                      Alpha                      Signature                      Date

4. Know the visual identification, mission, major weapons/weapons systems, aircraft, and crew size of U.S. Navy ship classes:

- a. CG-47 Ticonderoga Class
- b. DDG-51 Arleigh Burke Class (To include Flt I / II / IIA / III)
- c. DDG 1000 Zumwalt Class
- d. LCS Class (Both Independence and Freedom Classes)
- e. MCM-1 Avenger Class
- f. LSD-41 Whidbey Island Class
- g. LSD-49 Harpers Ferry Class
- h. LPD-17 San Antonio Class
- i. LHD-1 Wasp Class
- j. LHA-6 America Class
- k. LCU
- l. LCAC

\_\_\_\_\_  
Print Name (CoC)                      Alpha                      Signature                      Date

5. Know how the following events influenced surface warfare:

- a. American Revolution
- b. Civil War
- c. Pre-World War Era
- d. WWI
- e. WWII
- f. Cold War

\_\_\_\_\_  
Print Name (CoC)                      Alpha                      Signature                      Date



6. Demonstrate knowledge of recent events pertaining to Surface Warfare.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

7. Understand the Basic Rates on conventional surface ships.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

8. Demonstrate knowledge of future advances in Surface Warfare.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

9. Demonstrate knowledge of the Surface Warfare Officer (Nuclear) community.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

## **CHAPTER 5: UNDERSEA WARFARE**

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### **4/C MQS**

1. Know the mission of Submarine Warfare.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

2. Know the insignia worn by Submariners and the significance of the design.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

3. Know how the following events influenced submarine design and capability:

- a. American Revolution
- b. Civil War
- c. Pre-World War Era
- d. WWI
- e. WWII
- f. Cold War
- g. Operation Odyssey Dawn

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

4. Know the visual identification, mission, weapons/weapons systems, specific capabilities, and crew size of U.S. Navy submarines to include SSNs, SSBNs, and SSGNs.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

5. Know the advantages of nuclear powered submarines compared to conventionally powered submarines.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

## **CHAPTER 6: THE UNITED STATES MARINE CORPS**

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### **4/C MQS**

1. Comprehend the mission of the U.S. Marine Corps.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

2. Know the elements and organization of the MAGTF, MEF, MEB, MEU, and SPMAGTF.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

3. Know the origin of the birth of the U.S. Marine Corps.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

4. Know the historical significance of the early traditions of the Marine Corps.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

5. Understand the Core Values of the Commandant's Planning Guidance.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

6. Understand the various USMC Military Occupational Specialties (MOS).

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

7. Know the purpose and features of and be able to identify the aviation platforms of the U.S. Marine Corps.

- |           |            |
|-----------|------------|
| a. AH-1Z  | e. F/A-18  |
| b. UH-1Y  | f. F-35B   |
| c. CH-53E | g. KC-130J |
| d. MV-22  | h. MQ-9A   |

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## **CHAPTER 7: NAVAL AIR WARFARE**

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### **4/C MQS**

1. Understand the different Naval Aviation operations.

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

2. Know the basic roles and responsibilities of Naval Aviators, Naval Flight Officers (NFO), Naval Aircrewmembers, Flight Surgeons, and Professional Aviation Maintenance Officers and identify their respective warfare insignia.

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

3. Understand the history of Naval Aviation. Specifically know the following:

- Name of the first Naval Aviator to successfully take off from and land on a ship
- Name of the first aircraft carrier
- Location of the first Naval Air Station

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

4. Comprehend the components of aircraft designations.

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

5. Be able to identify the following U.S. Navy aircraft carriers and aircraft designation/name and their role/capabilities, distinguishing features, crew composition, and responsibilities.

- a. CVN-68 Nimitz Class
- b. CVN-78 Ford Class
- c. F/A-18E/F Super Hornet
- d. EA-18G Growler
- e. F-35C Lightning II
- f. E-2D Hawkeye
- g. C-2A Greyhound
- h. P-8A Poseidon
- i. MQ-4C Triton
- j. E-6B Mercury
- k. MH-60R 'Romeo' Seahawk
- l. MH-60S 'Sierra' Knighthawk
- m. MH-53E Sea Dragon
- n. MQ-8B and MQ-8C Firescout
- o. CMV-22B Osprey

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## **CHAPTER 8: NAVAL SPECIAL WARFARE & EXPLOSIVE ORDNANCE DISPOSAL**

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### **4/C MQS**

1. Know the mission sets and capabilities as well as the limitations of NSW.

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

2. Understand the organization and composition of SEAL teams.

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

3. Know purpose and mission areas of Navy EOD.

- a. Special Operation Forces (NAVSOF & SOF) Support
- b. Expeditionary Mine Counter Measures (ExMCM)
- c. EOD MOD/CES Platoons
- d. Combined Explosives Exploitation Cell (CEXC) Platoons
- e. Mobile Diving and Salvage (MDS) Companies
- f. EOD Shore Detachments
- g. U.S. Secret Service Support (USSS)

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

4. Know the role LCDR Draper Kauffman played during WWII and his significance to the development of NSW.

\_\_\_\_\_  
Print Name (CoC)                      Alpha                      Signature                      Date

5. Know the historical reasons for the creation of Naval Combat Demolition Units (NCDUs), Underwater Demolition Teams (UDTs), and modern SEAL Teams.

\_\_\_\_\_  
Print Name (CoC)                      Alpha                      Signature                      Date

6. Know what drove the need for ordnance disposal skills and the creation of the EOD community.

\_\_\_\_\_  
Print Name (CoC)                      Alpha                      Signature                      Date

7. Understand the organization of Navy EOD.

\_\_\_\_\_  
Print Name (CoC)                      Alpha                      Signature                      Date

## **CHAPTER 9: GLOBAL CHALLENGES - CHINA**

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### **4/C MQS**

1. Comprehend China's strategy for global expansion, including the "First and Second Island Chains".

\_\_\_\_\_  
Print Name (CoC)                      Alpha                      Signature                      Date

2. Understand the U.S. policy implications of and U.S. response to China's recent international activity.

\_\_\_\_\_  
Print Name (CoC)                      Alpha                      Signature                      Date

3. Be familiar with China's military capabilities, to include the following.

- a. Renhai Class Cruiser
- b. Luyang III Class Destroyer
- c. Liaoning 16 Aircraft Carrier
- d. Jin Class Submarine
- e. Shang Class Submarine
- f. Yuan Class Submarine
- g. SU-30 Flanker
- h. J-15 Flanker X2
- i. YJ-12
- j. YJ-18

k. Dong-Feng 21

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

4. Know significant recent events involving China's military.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

## CHAPTER 10: GLOBAL CHALLENGES - RUSSIA

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### 4/C MQS

1. Comprehend Russia's current national strategy, including its evolving relationship with the U.S.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

2. Understand recent Russian military action and modernization efforts.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

3. Be familiar with Russia's military capabilities, to include the following.

- a. Admiral Kuznetsov Class Aircraft Carrier
- b. Sovremenny Class Destroyer
- c. Admiral Grigorovich Class Frigate
- d. Borei Class Submarine
- e. Yasen Class Submarine
- f. Akula Class Submarine
- g. Varshavyanka Class Submarine
- h. SU-35 Flanker-E
- i. SS-N-26 Strobile
- j. SS-N-27 Sizzler

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

4. Know recent military interactions between the U.S. and Russia.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

## **CHAPTER 11: GLOBAL CHALLENGES – ROGUE STATES: NORTH KOREA & IRAN**

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### **4/C MQS**

1. Comprehend North Korea's current national strategy, including development of its nuclear weapons program.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

2. Understand North Korea's general military posture.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

3. Know notable and recent North Korean military events.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

4. Comprehend Iran's current national strategy, including its use of proxy groups.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

5. Understand Iran's general military capabilities, including its Naval command structure.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

6. Know notable and recent incidents involving Iran's military.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

## **CHAPTER 12: GLOBAL CHALLENGES – CYBER, SPACE, & TRANSNATIONAL THREATS**

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### **4/C MQS**

1. Demonstrate knowledge of the Chinese and Russian cyber threat.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

2. Define the space domain.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

3. Demonstrate knowledge of the benefits and threats to space operations.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

4. State the different missions of space operations.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

5. Understand the different types of orbits.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

6. Demonstrate knowledge of the Chinese and Russian space threat.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

7. Understand the continuing international terrorist threat, including the continued efforts of ISIS and Al-Qa'ida.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

8. Understand the national security implications of mass population displacement.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date



## 2024-2025 Professional Knowledge Midshipmen Qualification Standards

### 3/C MIDSHIPMEN QUALIFICATION STANDARDS

#### Reference: Professional Knowledge Book (Pro-Book)

**Purpose of MQS:** To establish and meet the learning objectives (LO) for Midshipman Professional Competency Assessments (PCA). For 3/C PCA, 3/C MQS must be complete for that semester's PCA. **3/C will also be responsible for the knowledge from 4/C Learning Objectives on the PCAs.**

**Schedule of MQS:** 3/C MIDN will complete Chapters 1-6 during the Fall Semester and will take a test during the Fall PCA. They will complete Chapters 7-12 during the Spring Semester ahead of the Spring PCA. The Training Department will promulgate a separate PCA COMDTMIDNNOTE with detailed instructions on the administration of the PCA.

**Signature Authorities:** Each LO identifies a specific signature authority who is either a subject matter expert (SME) or a midshipman in the chain of command (CoC). By signing off a LO, the signature authority is affirming that the midshipman receiving the signature has demonstrated the requisite knowledge. The signature authority shall fill out all required information (typed/printed name, alpha, signature, and date) or, if a SME desires, they may print/sign/date a roster that each midshipman can include in their MQS. Each midshipman is responsible for achieving applicable LOs prior to a quiz/exam/board/assessment.

- Chain of Command (CoC)
  - CoC involvement is critical to the success of MQS. Mentorship requires the intentional personal engagement to meet the appropriate level of knowledge, comprehension, application, and discussion of professional material.
  - 3/C midshipmen shall receive signatures from 2/1/C midshipmen in their CoC.
- Subject Matter Experts (SME)
  - Based on their billet and/or experience, only certain individuals are equipped to provide signatures for specific learning objectives.
  - SMEs are signature authorities for any item in their respective area.

A current list of community/service SMEs is available on the Training Department website.

### **Definition of Terms:**

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***Comprehend:*** Interpret principles and concepts and relate them to new situations.

***Apply:*** Utilize knowledge and comprehension of specific facts in new relationships with other facts, theories, and principles.

***Demonstrate:*** Show evidence of ability to perform a task.

***Read:*** Look at and comprehend the meaning of printed material.

***Discuss:*** Consciously identify content and their fleet applications, weigh logical and persuasive effects, critically evaluate unstated assumptions and biases, and talk about them with another person.

## CHAPTER 1: USNA NOTABLE GRADUATES & FIRST LINK ASSIGNMENT

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N/A

## CHAPTER 2: U.S. NAVY PERSONNEL

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### 3/C MQS

1. Know the typical shipboard divisional chain of command.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

2. Know the typical organization of a Supply Department on a small fleet unit.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

3. Know the primary tasks performed by the following ratings.

- a. Culinary Specialist (CS)
- b. Logistics Specialist (LS)
- c. Retail Specialist (RS)

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

4. Describe the basics of each of the following and how they are used to support tactical units:

- a. Radio Frequency (RF) Communications
- b. Satellite Communications
- c. Terrestrial Network Infrastructure

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

5. Know the definition of Joint Intelligence Preparation of the Operational Environment (JIPOE).

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

6. Know the three categorizations of Cyberspace Operations.

_____	_____	_____	_____
Print Name (CoC)	Alpha	Signature	Date

7. Know the three Levels of Intelligence.

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

### **CHAPTER 3: MISSION OF THE U.S. NAVY: TACTICS, OPERATIONS, STRATEGY, & THE JOINT ENVIRONMENT**

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#### **3/C MQS**

1. Know the missions of the other services.

- a. Department of the Army
- b. Department of the Air Force
- c. U.S. Coast Guard

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

2. Comprehend the three levels of warfare.

- a. Strategic
- b. Operational
- c. Tactical

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

3. Know the following with respect to the Composite Warfare Commander Doctrine.

- a. Comprehend the dynamic nature of warfare at the tactical level.
- b. Know the roles and comprehend the relationships between the Officer in Tactical Command (OTC), the Composite Warfare Commander (CWC), Warfare and Functional Commanders, and Coordinators.
- c. Know the Primary Call Signs of the OTC (i.e., AA), the CWC, and the Warfare Commanders.

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

4. Know the six steps of the Navy Planning Process (NPP).

\_\_\_\_\_  
Print Name (CoC)

\_\_\_\_\_  
Alpha

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## CHAPTER 4: SURFACE WARFARE

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### 3/C MQS

1. Know the designation/name, purpose/significance, visual identification and U.S. Navy ship classes that carry the following weapons and systems:

- a. Aegis Weapon System and AN/SPY-1 Phased Array Radar
- b. AN/SQQ-89 Undersea Warfare/Anti-Submarine Warfare Combat System
- c. BGM-109 Tomahawk Land Attack Missile (TLAM)
- d. Littoral Combat Ship Mission Modules
- e. MK 15 Phalanx Close-in Weapon System (CIWS)
- f. MK 45 5" 54/62 Caliber Gun
- g. Mk 46 Torpedo
- h. Mk 54 Torpedo (Lightweight Hybrid Torpedo – LHT)
- i. RIM-116 Rolling Airframe Missile (RAM)
- j. RIM-162 Evolved Sea Sparrow Missile (ESSM)
- k. RGM-84 Harpoon
- l. SM-2 and SM-6 Standard Missiles
- m. SM-3 Standard Missile

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2. Know and comprehend the characteristics of two major combat systems, AEGIS and SSDS, and with which Surface Warfare ships they are associated. (Aegis and SSDS)

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3. Comprehend the general responsibilities of the following personnel on Navy surface ships.

- a. Commanding Officer
- b. Executive Officer
- c. Command Master Chief
- d. Department Head
- e. Division Officer

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4. Comprehend the general qualification for and organizational relationship between the following underway watches:

- a. Tactical Action Officer (TAO)
- b. Officer of the Deck (OOD)
- c. Engineering Officer of the Watch (EOOW)

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## CHAPTER 5: UNDERSEA WARFARE

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### 3/C MQS

1. Know the following submarine missions and identify which platform is assigned each as their primary mission:

- a. Intelligence, Surveillance, Reconnaissance (ISR)
- b. Naval Special Warfare (NSW)
- c. Strike
- d. Anti-Submarine Warfare (ASW) and Anti-Surface Warfare (ASUW)
- e. Mine Warfare
- f. Counter-Drug Operations
- g. Strategic Deterrence

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2. Know the designation, name, purpose, and U.S. Navy submarine classes that carry the following weapons or systems:

- a. MK 48 Advanced Capability (ADCAP) Heavyweight Torpedo
- b. UGM-109 Tomahawk Land Attack Missile (TLAM)
- c. Trident II (D5) Submarine Launched Ballistic Missile (SLBM)
- d. Dry Dock Shelter (DDS)

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3. Explain the Junior Officer at-sea watches including:

- a. Engineering-Officer-of-the-Watch (EOOW)
- b. Junior-Officer-of-the-Watch (JOOW)
- c. Contact Manager / Junior-Officer-of-the-Deck (JOOD)
- d. Officer-of-the-Deck (OOD)

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4. Know the difference between deployment cycles on SSNs and SSGNs, and the patrol cycle on SSBNs.

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## CHAPTER 6: NAVAL AIR WARFARE

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### 3/C MQS

1. Know the designation, name, purpose, and U.S. Navy aviation platforms that carry the following weapons or systems:
  - a. AIM-9X Sidewinder
  - b. AIM-120 AMRAAM
  - c. Joint Direct Attack Munition (JDAM)
  - d. AGM-84 SLAM-ER
  - e. AGM-88 HARM
  - f. AGM-114 Hellfire
  - g. AGM-154 Joint Stand-Off Weapon (JSOW)
  - h. AGM-84 Harpoon
  - i. MK-54 Torpedo

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2. Know squadron types and meanings and be able to identify the composition of a typical carrier air wing (CVW).

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3. Know the lifecycle of a Fleet Squadron.

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## CHAPTER 7: THE UNITED STATES MARINE CORPS

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### 3/C MQS

1. Understand the function and capabilities of the Marine Littoral Regiment (MLR).

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Print Name (CoC)	Alpha	Signature	Date

2. Know the purpose and features of and be able to identify the additional weapons and platforms of the U.S. Marine Corps.

- a. M777 Howitzer
- b. High Mobility Multipurpose Wheeled Vehicle (HMMWV)
- c. Joint Light Tactical Vehicle (JLTV)
- d. M142 High Mobility Artillery Rocket Systems (HIMARS)
- e. Amphibious Combat Vehicle (ACV)

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Print Name (CoC)	Alpha	Signature	Date

3. Know the primary function and effective range, and be able to identify the individual weapons of the U.S. Marine Corps.

- a. M4 Carbine
- b. M27 Infantry Automatic Rifle (IAR)
- c. M240B Medium Machine Gun
- d. M32A1 Multi Shot Grenade Launcher (MSG1)
- e. MK-153 Shoulder Launched Multipurpose Assault Weapon (SMAW)
- f. MK19 Mod 3 Automatic Grenade Launcher
- g. 50 Caliber Machine gun
- h. FGM-148 Javelin
- i. BGM71 TOW Missile
- j. 60mm Mortar

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4. Know and understand the role of the infantry and how non-combat arms MOS support the infantry.

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## CHAPTER 8: NAVAL SPECIAL WARFARE & EXPLOSIVE ORDNANCE DISPOSAL

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### 3/C MQS

1. Know the visual identification, mission, and capabilities of the Naval Special Warfare Craft:
  - a. Mark VIII SEAL Delivery Vehicle (SDV)
  - b. Mine-Resistant Ambush Protected Vehicle (MRAP)
  - c. Rotary Wing and Tilt Rotor Aircraft
  - d. Combatant Craft: Assault (CCA) / Medium (CCM) / Heavy (CCH)
  - e. Lightweight Tactical All-Terrain Vehicle (LT-ATV)

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2. Know the tools and equipment Navy EOD Technicians use as listed in the Pro-Book.

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3. Know the difference and relationship between EOD Technicians and Officers.

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## CHAPTER 9: GLOBAL CHALLENGES - CHINA

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### 3/C MQS

1. Describe the strength of the Chinese fleet and the geographical location of the PLAN's fleets.

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Print Name (CoC)	Alpha	Signature	Date

2. Understand the Chinese Military Modernization plan to include future milestones and end-state goals.

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3. Know the weapons capabilities of the Chinese military to include their nuclear weapons, and potential to produce chemical and biological weapons.

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## CHAPTER 10: GLOBAL CHALLENGES - RUSSIA

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### 3/C MQS

1. Understand U.S. and other Western Allies' involvement in the conflict in Ukraine.

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Print Name (CoC)	Alpha	Signature	Date

2. Know the geographic location of Russia relative to China, Ukraine, the South China Sea and Iran.

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## CHAPTER 11: GLOBAL CHALLENGES – ROGUE STATES: NORTH KOREA & IRAN

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### 3/C MQS

#### 11. Global Challenges – Rogue States: North Korea & Iran

1. Understand Iran's interactions with national states in the region to include, Syria, Iran and Israel.

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2. Understand the threats to US military forces and allies from Iran's actions in the Strait of Hormuz, including the threat of mining, FAC/FIAC, and missiles.

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Print Name (CoC)	Alpha	Signature	Date

3. Describe Iran's military modernization plans for both IRGCN and IRIN.

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## CHAPTER 12: GLOBAL CHALLENGES – CYBER, SPACE, & TRANSNATIONAL THREATS

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### 3/C MQS

1. Demonstrate knowledge of different instances of Chinese and Russian cyber operations in recent years.

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Print Name (CoC)	Alpha	Signature	Date

2. Explain the different missions of space operations.

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3. Identify the geographic locations where ISIS and Al-Qa'ida are located.

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## 2024-2025 Professional Knowledge Midshipmen Qualification Standards

### 2/C MIDSHIPMEN QUALIFICATION STANDARDS

#### **Reference: Professional Knowledge Book (Pro-Book)**

**Purpose of MQS:** To establish and meet the learning objectives (LO) for Midshipman Professional Competency Assessments (PCA). For 2/C PCA, required 2/C MQS must be complete for that semester's PCA. **2/C will also be responsible for the knowledge from 4/C and 3/C Learning Objectives on the PCAs.**

**Schedule of MQS:** 2/C MIDN will complete Chapters 1-6 during the Fall Semester and will take a test during the Fall PCA. They will complete Chapters 7-12 during the Spring Semester ahead of the Spring PCA. Training Department will promulgate a separate PCA COMDTMIDNNOTE with detailed instructions on the administration of the PCA.

**Signature Authorities:** Each LO identifies a specific signature authority who is either a subject matter expert (SME) or a midshipman in the chain of command (CoC). By signing off an LO, the signature authority is affirming that the midshipman receiving the signature has demonstrated the requisite knowledge. The signature authority shall fill out all required information (printed name, alpha, signature, and date) or, if a SME desires, they may print/sign/date a roster that each midshipman can include in their MQS. Each midshipman is responsible for achieving applicable LOs prior to a quiz/exam/board/assessment.

- Chain of Command (CoC)
  - CoC involvement is critical to the success of MQS. Mentorship requires the intentional personal engagement to meet the appropriate level of knowledge, comprehension, application, and discussion of professional material.
  - 2/C midshipmen shall receive signatures from 1/C midshipmen in their CoC.
- Subject Matter Experts (SME)
  - Based on their billet and/or experience, only certain individuals are equipped to provide signatures for specific learning objectives.
  - SMEs are signature authorities for any item in their respective area.

A current list of community/service SMEs is available on the Training Department website.

### **Definition of Terms:**

***Know:*** Recall facts, bring to mind, and recognize the appropriate material.

***Comprehend:*** Interpret principles and concepts and relate them to new situations.

***Apply:*** Utilize knowledge and comprehension of specific facts in new relationships with other facts, theories, and principles.

***Demonstrate:*** Show evidence of ability to perform a task.

***Read:*** Read, not skim, the material and comprehend the meaning of the document.

***Discuss:*** Consciously identify content and their fleet applications, weigh logical and persuasive effects, critically evaluate unstated assumptions and biases, and talk about them with another person.

## CHAPTER 1: USNA NOTABLE GRADUATES & FIRST LINK ASSIGNMENT

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N/A

## CHAPTER 2: U.S. NAVY PERSONNEL

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### 2/C MQS

1. Know the three "Engineer Functions and Activities" and identify an example of each.
  - a. Combat Engineering
  - b. General Engineering
  - c. Geospatial Engineering

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2. Know the four subsets of the Medical Community and their roles.

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3. Know the five types of enlisted service schools.

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4. Know the general requirements for enlisted advancement.

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5. Know the history and evolution of the Naval Reserve.
  - a. Official Formation
  - b. Period between WWI and WWII
  - c. At the end of World War II
  - d. Post-Vietnam to present

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6. Know the mission and organization of the Naval Reserve to include:
- a. Full-Time Support (FTS)
  - b. Individual Augmentee (IA)
  - c. Ready Reserve (Selected Reserve and Individual Ready Reserve)
  - d. Standby Reserve

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### **CHAPTER 3: MISSION OF THE U.S. NAVY: TACTICS, OPERATIONS, STRATEGY, & THE JOINT ENVIRONMENT**

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#### **2/C MQS**

1. Know the importance of joint doctrine and interoperability.

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2. Know the primary J-Directorates of a Joint Task Force staff (J-1 through J-6) and comprehend their basic functions.

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3. Know and apply the primary N and S-codes of Navy and Marine Corps staffs and comprehend associated basic functions.

- a. Navy: N1 to N6
- b. Marine Corps/Army: S1 to S-6

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### **CHAPTER 4: SURFACE WARFARE**

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#### **2/C MQS**

1. Know the basic characteristics to include designation, hull markings and crew makeup of Military Sealift Command (MSC) ships.

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2. Know the five basic categories of USNS ships and a basic understanding of the types of ships in each.
  - a. Combat Logistics Force
  - b. Special Mission
  - c. Prepositioning
  - d. Service Support
  - e. Sealift

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3. Discuss Early Command opportunities for both post-Division Officer and post-Department Head tours.

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4. Discuss Surface Warfare Officer pipeline, including the PERS-41 detailing process, JO sea and shore duty slate, and graduate education opportunities.

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Print Name (CoC)	Alpha	Signature	Date
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## **CHAPTER 5: UNDERSEA WARFARE**

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### **2/C MQS**

1. Discuss the Command organization on a submarine and the role of the following Department Heads and Division Officers:
  - a. Engineer Officer ("ENG")
    - i. Electrical Officer (EO)
    - ii. Reactor Controls Assistant (RCA)
    - iii. Main Propulsion Assistant (MPA)
    - iv. Chemistry and Radiological Controls Assistant (CRA)
    - v. Damage Control Assistant (DCA)
  - b. Navigator / Operations Officer ("NAV")
    - i. Communication Officer (COMMO)
    - ii. Assistant Operations Officer (AOPS)
  - c. Combat Systems Officer ("WEPS")
    - i. Tactical Systems Officer (TSO)
    - ii. Assistant Weapons Officer (AWEPS)
    - iii. Dive Division Officer

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2. Understand the Submarine Officer training pipeline to include the following:
- a. Naval Nuclear Power School (NNPTC)
  - b. Nuclear Power Training Unit "Prototype" (NPTU)
  - c. Submarine Officer Basic Course (SOBC)
  - d. Prospective Nuclear Engineer Officer (PNEO)

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3. Discuss shore tour opportunities for Junior Officers, including the detailing process, shore duty slating, and graduate education opportunities.

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4. Be familiar with future projects of Submarine Warfare.

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## **CHAPTER 6: NAVAL AIR WARFARE**

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### **2/C MQS**

1. Know the organizational structure of an aviation squadron to include the major departments.

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2. Know the roles and responsibilities of a Junior Officer in an aviation squadron

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3. Know the aviation Junior Officer pipeline (Pilot and NFO) to include the following phases:
- a. NIFE
  - b. Primary
  - c. Advanced
  - d. Fleet Replacement Squadron
  - e. Fleet Squadron Tour
  - f. Junior Officer Aircraft Qualifications

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## CHAPTER 7: THE UNITED STATES MARINE CORPS

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### 2/C MQS

1. Understand the Commandant's Planning Guidance, paying attention to the direction the Marine Corps is headed in the future.

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2. Know and understand the general schedule of TBS.
  - a. Phase I Individual Skills
  - b. Phase II Rifle Squad Leader Skills
  - c. Phase III Rifle Platoon Leader Skills
  - d. Phase IV Basic MAGTF Officer Skills

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3. Understand the quality spread utilized at TBS and how it affects your future MOS.

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Print Name (CoC)

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## CHAPTER 8: NAVAL SPECIAL WARFARE & EXPLOSIVE ORDNANCE DISPOSAL

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### 2/C MQS

1. Know the shifting role of NSW and SOF writ large within the Great Power Competition.

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2. Know the USNA EOD Accessions Pipeline and EOD Initial Training Pipeline.

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Date

## CHAPTER 9: GLOBAL CHALLENGES - CHINA

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### 2/C MQS

1. Understand China's ability to conduct joint operations and the goals of the PLA, PLAN, and PLAAF.

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Print Name (CoC)

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2. Discuss the exercises, both joint and independent, by the Chinese military in recent years.

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## **CHAPTER 10: GLOBAL CHALLENGES - RUSSIA**

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### **2/C MQS**

1. Understand U.S. and other Western Allies' involvement in the conflict in Ukraine.

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2. Describe the goals of the State Armament Program (SAP) and compare the goals of SAP relative to the goals of the United States military.

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## **CHAPTER 11: GLOBAL CHALLENGES – ROGUE STATES: NORTH KOREA & IRAN**

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### **2/C MQS**

1. Understand the international implications of Iranian presence in the Strait of Hormuz to include the effect on shipping lanes, territorial disputes and U.S. force projection.

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2. Describe the Farsi Island incident and the lessons learned from the incident.

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## CHAPTER 12: GLOBAL CHALLENGES – CYBER, SPACE, & TRANSNATIONAL THREATS

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### 2/C MQS

1. Understand how Russian and Chinese cyber operations affects the rules-based international order.

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2. Describe how the different missions of space operations support Combatant Commanders in executing the U.S. military goals.

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3. Understand the differences in the core ideologies of ISIS and Al Qa'ida.

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