OFFICER OF THE DECK
QUALIFICATION CARD

Name: [(b)(3)/(b)(6)]

Applicability (APPL):

1. This card will be used for persons qualifying as Officer of the Deck (OOD) surfaced and submerged. For OOD Surfaced, only those requirements marked with an applicability code of "S" need be completed. For OOD Submerged, all requirements must be met. "R" codes suggest core items to be included in requalification. Commanding Officers are not constrained to limit or include all "R" items, and should establish specific requirements based on their assessment of a requalifying officer's background.

2. Qualification as Weapon Duty Officer (WDO) satisfies requirements with a code of "W," and may be signed off upon successful completion of WDO qualifications.

3. Satisfactory completion of the following courses satisfies designated requirements and may be signed off:

a. Satisfactory completion of the Junior Officer Fire Control Course (F-2E-0056, F-2E-0057, or L-2E-0058) satisfies requirements with APPL Code of "FC."

b. Satisfactory completion of the Junior Officer Sonar Course (F-2E-0059, F-2E-0060, or F-2E-0061) satisfies requirements with APPL Code of "SC."

c. Satisfactory completion of the Junior Officer Missile and OTH-T or Junior Officer Weapons Course (F-2E-0062 or F-2E-0063) satisfies requirements with APPL Code of "WC."

d. Satisfactory completion of the Junior Officer Navigation, Communications, and Electro-Optical Sensors Course (L-2E-0064) satisfies requirements with APPL Code of "NCE."

e. Satisfactory completion of the Junior Officer Tactics Course (L-2E-0065 or L-2E-0066) satisfies requirements with APPL Code of "T."

A. PREREQUISITES

1. Completed Officer Basic Submarine Orientation Card [(b)(3)/(b)(6)] 9/22/99 (S)

2. Qualified Contact Coordinator _____ 1/24/00 (S)

Tab 21

3. Qualified Diving Officer of the Watch _____ 5/26/00 (S)(R)

4. Qualified Battery Charging Line-up Officer _____ 8/1/99 (S)

5. Be a URL or an LDO assigned to submarines. _____ 8/1/99 (S)

R 6. Qualified EOOW (or completed Enclosure (10) if an LDO prohibited from qualifying EOOW) _____ 8/1/99 (S)

B. DEPARTMENT KNOWLEDGE REQUIREMENTS/PRACTICAL FACTORS

NOTE: KNOWLEDGE AND PRACTICAL FACTOR CHECKOUTS MUST BE SIGNED OFF BY A QUALIFIED OFFICER OF THE DECK UNLESS INDICATED OTHERWISE.

1. Engineering Department

a. Atmosphere control

Ref: 25, 28, 29, 30, 37, 39

(1) Knowledge Requirements:

(a) Determine the ventilation half life for the ship using the low pressure blower, the diesel or both (rapid ventilate). Show how to determine the ventilation half life for any compartment. _____ 9/1/99 (S)(R)

(b) Using the training aid booklet drawings, explain the operation of the following atmosphere control equipment. State their numbers and locations. Discuss the criteria for starting and securing atmosphere control equipment and safety considerations in their operation. _____ 9/1/99 (S)

1. Oxygen generator, including hydrogen discharge (if applicable)

2. CO2 scrubber, including CO2 overboard discharge

3. CO-H2 burner

(c) Explain the purpose, function and location of backup atmosphere control equipment. _____ 9/1/99 (S)

(2)

(d) Be able to sketch a simple one line diagram of the oxygen system, including oxygen banks, isolation valves, headers, and bleed station. State the location of each.

[63/66] 9/1/99 (S)

1. Using that sketch, explain in general terms, starting and securing an oxygen bleed including safety precautions.

(e) For each of the following constituents, state the personnel hazards associated with exceeding their limits (for oxygen and hydrogen, include the fire hazards associated with exceeding these limits and the percentages at which hydrogen will burn). Discuss the significance of an increase in pressure in the boat with respect to the biological effects of these gases (at constant volume percent).

10/4/99 (S)

1. Oxygen

2. Hydrogen

3. Carbon dioxide

4. Carbon monoxide

5. Freon

6. Total hydrocarbons

(f) Explain the methods and routine requirements for ventilating the ship.

9/14/99 (S) (R)

(g) Discuss the safety precautions required when opening or entering tanks or void spaces.

Smith 10/5/99 (S)

(2) Practical Factors

(a) Review and evaluate hourly atmosphere samples, explaining OOD considerations in regard to operation of atmosphere control equipment and limits.

Thompson 31 Aug 99

(b) Sample the ship's atmosphere using each piece of portable sampling equipment.

[63/66] 9/1/99

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b. Air Conditioning and Refrigeration

Ref: 29, 30

(1) Knowledge Requirements — 11/10/99 (S)

(a) Using a drawing or schematic, explain in general terms, the operation and location of the air conditioning and refrigeration plants.

(b) Explain the operation of the chilled water system. State location of major header isolation valves, and list the equipments or systems serviced by the chill water system.

(c) List the equipment or systems served by the ship's refrigeration plants.

2. Operations Department

a. Communications

Ref: 4, 6, 14, 18, 22, 39, 40, 41, 66, 67, 71, 108

NOTE: READ REFERENCE 71 CHAPTERS 1 AND 2

(1) Practical Factors

(a) Observe and explain the procedures for streaming and/or retrieving:

1. The floating wire from local operating station — 9/6/99

2. Towed buoy antenna from remote station — N/A

(b) Observe the receipt of a SSIXS broadcast from the Radio Room and explain in general terms, the broadcast format. — 9/1/99 (S)

(c) Observe the receipt of a VLF broadcast and explain in general terms, the broadcast format. — 9/1/99 (S)

(d) Demonstrate the required watch routine to preclude inadvertent release of the AN/BST-1 buoy and discuss the arming/disarming requirements. N/A (S)

(e) Demonstrate proficiency in the operation of the bridge-to-bridge transceiver. Discuss required deck log entries. 6/7/99 (S)

(f) Demonstrate proficiency as the UHF transceiver operator. including proficiency in voice communications. authentication. beadwindow. and challenge/reply procedures. 6/7/99 (S)

(g) Demonstrate knowledge of the ship's communication requirements and the communication plan in effect. 9/1/95

(h) Demonstrate proficiency in the operation of the under water telephone system. including: 6 JUN 99

1. Voice communication procedures
2. WQC range checks (Refs 14. 41)
3. Safety signals
4. UNCLE JOE procedures

b. ESM

Ref: 3. 4. 39. 54. 55. 56. 57. 66. 71

(1) Practical Factors

(a) Demonstrate proficiency in the operation of the periscope early warning receiver. including signal strength identification. aural classification. and DF procedures. 10 Sep 99

(b) Demonstrate knowledge of ESM search procedures and reports including use of the BRD-7 as applicable. 3/22/00

3. Weapons/Combat Systems Department

a. Conventional Weapons and Launcher Systems

Ref: 19. 24. 25. 29. 39. 65. 75 76 77. 82. 93. 130

(1) Knowledge Requirements

(a) Safety and Security Considerations

1. Describe Peacetime Safety Rules.

2. For each weapon carried. be able to list auto-ignition temperatures for fuel and warhead.

3. Discuss the purpose of the torpedo tube interlocks. Whose permission is required to break interlocks: and what torpedo tube or fire control routines require that interlocks be broken.

(b) Vertical Launch System

1. Explain the operation of the following systems:

a. Flood and Drain 3/22/00

b. Automatic/Manual Pressure Vent Control (PVC) 5/28/00

c. Hydraulic Control (normal/emergency) 5/28/00

d. Environmental Monitoring System 5/22/00

A

2. Demonstrate a general knowledge of the following:

a. Controls. indications and alarms for:

1. Missile interface console (MK1 Mod 3) NA

2. Interface control console (MK1 Mod 3) NA

3. Status firing panel NA

4. Missile tube control panel NA

5. TCP (BSY-1) 9/3/99

b. VLS Casualties 9/3/99

c. Preventive and corrective maintenance 9/3/99

d. Logs and Records 9/3/99

e. Lessons Learned 9/3/99

(2) Practical Factors

(a) Observe and explain the procedures for loading a torpedo into a torpedo tube and moving a weapon to another stowage position. Explain the safety precautions and ship limitations.

[b3/b6] [illegible] SEP 99 (S)(W)

(b) Demonstrate the ability to respond as OOD to the following weapon-related casualties:

Hot run in the torpedo room or torpedo tube 1/2/00 (S)

Fire in the torpedo room 1/2/00 (S)

OTTO fuel spill 1/2/00 (S)

b. Sonar

Ref: 4. 6. 19. 29. 39. 40. 52. 61. 62. 63. 76. 77. 87. 88. 92. 124. 134

(1) Knowledge Requirement 3/6/00 (R)(SC)

(a) Sonar Watchstanding Principles

1. Discuss manning requirements for various ship conditions. (surfaced/submerged). which stations are manned during various searches.

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2. Discuss contact reporting procedures and their interpretation as outlined in Reference 63.

3. Discuss the coordination considerations between sonar and the OOD with respect to changing course, speed, depth, noisy evolutions, visual contact information, ascent to periscope depth, and counterdetection maneuvers.

(2) Practical Factors

(a) Conduct basic sonar broadband, narrowband, and active searches. Track a contact on each type of sonar tracker as a sonar operator. _____ 3/12/00

(b) Proficiently interpret and control each sonar equipment/display in the control room. _____ 3/12/00

1. Spherical/Cylindrical Array

2. Hull/Conformal Array

3. ~~AN/BQR-19~~

4. BTRs

5. Towed Arrays

6. _____

(c) Proficiently evaluate sonar information and make contact reports to the CO. _____ 3/21/00

(d) Use the sonar search plan to monitor and direct sonar suite employment as OOD. _____ 9/10/99

(e) Evaluate towed array handling limitations. _____ 10/28/99

c. Fire Control and Tactical Considerations

Ref: 3, 4, 6, 19, 20, 21, 24, 54, 65, 71, 72, 73, 74, 75, 90, 91, 93, 95, 114, 115, 123

(9)

(1) Practical Factors

(a) Proficiently evaluate initial contact information from all available sources, (including plots), and make initial safe maneuvers for suspected close-in contacts.

3/30/00

(b) Act as OOD for a simulated torpedo evasion.

1/7/00

(c) Act as OOD (U/I) for a Snapshot (Quick Reaction Firing).

1/7/00

(d) Demonstrate the ability to combat Fire Control System Casualties as determined by the Weapons Officer.

5/30/00

(e) Demonstrate proficiency in periscope telemeter ranging.

5/31/00

d. Strategic Weapons and TRIDENT Command and Control System (SSBN only)

Ref: 6, 23, 29, 30, 39, 76, 79, 80, 111, 112, 129

(1) Knowledge Requirements

(a) Readiness conditions and alert posture

NA

WDO (W)

1. Define the following readiness and alert posture items:

a. 1SQ, 2SQ, 4SQ

b. Alert, Mod-Alert, Non-Alert

2. Discuss the navigation system requirements for support of the missile fire control system.

(b) Weapon Procedures NA

WDO (W)

(10)

1. Using the appropriate procedural guide, discuss the weapon procedures (WPs) which are conducted during each of the following periods:

   a. Sea trial operations

   b. Transition from in port to patrol operations

   c. Patrol operation

   d. Transition from patrol to in port operations

2. For those WPs which affect ship's operations or which directly involve the OOD, explain:

   a. Limitations on ship control (roll, pitch, heading)

   b. OOD actions

   c. OOD coordination considerations with other watchstations

   d. Safety and security considerations

(c) Safety and Security NA (W)
WDO

1. List and explain specific safety rules for the ship's missile system as outlined in Reference 23.

2. Discuss the safety summary for the ship's missile system as listed in Reference 109.

3. Discuss the following as applicable to this ship:

   a. Two man rule requirements

   b. Nuclear weapons security areas

   c. Handling and use of sensitive keys

   d. Duress system

(d) Strategic Weapons Casualty Procedures

NA (WC)

1. Discuss the immediate actions required by the OOD for a high temperature in a missile tube.

2. Discuss the OOD actions required for a missile jettison (both surfaced and submerged).

(2) Practical Factors

(a) Walk through the immediate actions for the OOD for a WSRT.

NA _____

(b) Walk through the immediate actions for the OOD for a command and control exercise.

NA _____

(c) Demonstrate the ability as OOD to recognize that a targeting change may be in progress, and how it should be authorized.

NA _____

(d) Operate and interpret the indications of the Attack Center Indicating Panel/Captain's Indicating Panel.

NA _____

(e) Observe those Weapons Procedures (Wps) which affect the ship's operations or directly involve the OOD.

NA _____

(f) Demonstrate the ability to take proper action for Sound Monitoring Subsystem alarms.

NA _____

4. Navigation Department

a. Navigation Systems

Ref: 3, 4, 9, 39, 56, 83, 84, 99, 116, 127, 128

(1) Knowledge Requirements

(a) Inertial Navigation

1. Describe the ship's inertial navigation system, (SINS, ESGM/N) explaining: NAV 12/2/99 _____ (S)(R)(NCE)

a. The ship's inertial navigation references, purpose and operation.

b. The purpose of the associated computers and processors.

c. The following terms:

((1)) LAC, LOC, HEC

((2)) Inertial position

((3)) Corrected (or estimated) inertial position

((4)) Inertial reference resets

2. Describe the accuracy of the ship's inertial navigation system, including: 9/25/95
NAV SLOAN (S)(R)(NCE)

a. Significance of EM log damping on the performance of the inertial reference, including:

((1)) The significance of and actions required if the EM log reference fails or is lost

((2)) The actions required if the ship is gaining sternway

b. Factors affecting Inertial Navigation System accuracy

(b) Conventional Navigation

1. EM log LTJSN SLOAN 10/4/95 (S)(NCE)

a. Describe the operation of the ship's EM log system, including:

((1)) Location of rodmeters, transmitters and selector switches

((2)) Normal system lineup and reliability features

((3)) Use of the dummy log system, including use and locations of controls

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((4)) Expected log accuracy and its significance to conventional navigation and torpedo fire control system solution accuracy

2. Dead Reckoning System

(S) Rahn 10/4/99

a. Describe the purpose, use and inputs to the Dead Reckoning Systems on board.

b. Describe how a reset of each system is performed. Who must approve a reset?

b. Navigation Procedures

Ref: 3, 4, 9, 56, 83, 99, 116, 127, 128

(1) Knowledge Requirements

(a) Navigation and piloting procedures (restricted water)

8/15/99 (S)(R)

1. Describe in detail the duties and responsibilities of the key members of the navigation and piloting party with particular emphasis on navigator and contact coordinator relationships with the OOD, including standard reports and recommendations.

a. Describe the information required in the Deck Log during operations in restricted waters.

b. Discuss additional or modified procedures used during reduced visibility in restricted waters.

c. Discuss information available in Notices to Mariners, Hydrolants/Hydropacs, port guides, directories, fleet guides, and light lists.

d. Discuss procedures for Dead Reckoning.

(b) Open ocean navigation

8/15/99 (S)(R)(NCE)

1. Discuss open ocean navigation, especially with regard to OOD responsibilities for supervision of the Quartermaster and evaluation of the accuracy of the navigation work maintained on the chart in use.

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2. Discuss open ocean navigation including knowledge of the various sources of position information and their accuracy.

   a. Radio Direction Finding (RDF)

   b. Celestial

   c. NAVSAT

   d. GPS

   e. OMEGA

   f. Bathymetric

   g. Ship's Inertial Navigation System (SINS) and Electrostatically Support Gyro Monitor (ESGM/ESGN)

   h. Loran C

   i. DDRT

3. Use of the hand DR, expanding circle of estimated positions (EP), and the DDRT and other methods of fix expansion to predict position.

4. Discuss information required in the Deck Log at sea.

5. Explain how you evaluate the plots maintained in the Navigation Center as a relieving OOD.

6. Discuss concept of moving havens.

c. Optical Sensors

Ref: 4, 39, 54, 66, 74

(1) Knowledge Requirements DB3/B6J _____ 7/5/93(S)(NCE)

(a) Discuss visual search considerations and procedures (lookouts, periscope operator, OOD) during the following conditions:

1. Maneuvering watch

2. Open ocean (normal surface steaming)

3. Reduced visibility

d. Navigation Fixes

Ref: 3, 59, 83

1/4/00

(1) Knowledge Requirements _____ (S)(R)(NCE)

(a) Visual

1. Describe how visual fixes are obtained when the Navigation and Piloting Bill watches are stationed, including the duties of each member of the plotting party, when the fix is started/finished, how visual navigation aids are selected, and how fixes are evaluated.

2. Describe how visual fixes are plotted with only relative bearings available.

3. Explain the types of visual fixes, including how a single navigation aid is used to get a fix (i.e., running fix, bobbing a light).

4. Describe the techniques required to positively identify navigation aids including the use of timing techniques and light list, etc.

5. Explain proper fix intervals for restricted and unrestricted waters.

(2) Practical Factors

(a) Take proper actions with respect to the inertial navigation system for failure of the EM log reference and gaining sternway. _____ 9/5/97 (S)

(b) Take proper action for loss of heading reference. _____ 1/10/00 (S)(R)

(c) Scale the MK 19 Plotter/MK 6 DRT Plotter to the navigation chart. _____ 1/4/00 (S)

(d) Estimate the magnitude of error in the ship's DR position using fix expansion techniques. _____ 3/6/00 (S)(R)

(e) Demonstrate a thorough knowledge of local area charts, including the OOD's responsibility in reviewing the

charts and track. 1/11/00 (S)(R)

(f) Review the ship's track for entering or leaving port, and discuss the reasons for turn bearings, danger bearings, red and yellow soundings, navigation aids, etc.
NAV 9/13/99 (S)

(g) Using the OPORDER/SUBNOTE, determine the ship's authorized operating area(s) including the applicable moving haven. 9/25/99 (S)(R)

(h) Determine gyro error and bearing transmission error by each of the following methods: 9/25/99 (S)

1. Dockside fix

2. Range between two navaids

3. Azimuth to a celestial object

(i) Perform a periodic compass check and discuss the associated requirements, limits, and reports. 9/25/99 (S)

(j) Estimate contact range using binocular field of view and distance to the horizon thumb rules. Use all night vision devices carried. Describe proper lookout reports. 9/5/99 (S)

(k) Operate all fathometers in all modes. Explain how sounding reports are made and possible misinterpretation of sounding data. Compare fathometer soundings with the navigation chart. 12/2/99 (S)(R)

(l) Obtain a fix from the following systems. Explain the factors affecting fix accuracy, ship restrictions in course speed or depth, and fix evaluation techniques. Discuss reset procedures for the hand DR and navigation systems.

1. Satellite 12/2/99 (S)

2. Loran N/A (S)

3. Omega N/A (S)

4. Bottom Contour [signature] 12/2/99 (S)

(m) Estimate sea state and direction, wind velocity and visibility by visual observation. Estimate sea state and direction from deep by evaluating ship's roll and ASVDU display. [signature] 12/2/99 (S)

e. Honors and Ceremonies

Ref: 1, 2, 8, 48, 96

(1) Knowledge Requirements [signature] 12/2/99 (S)

(a) Demonstrate a familiarity with the following sources of information regarding honors and ceremonies:

1. Navy Regulations

2. NTP-13, Flags, Pennants and Customs

3. Watch Officer's Guide

(b) Discuss how passing honors are rendered both as senior and junior. Discuss the use of CLF/CPFNOTE 5440, Fleet Administrative Organization. Discuss how honors have been modified by local requirements and Navy Regulations for submarines.

(c) Discuss the procedures for returning honors rendered by a merchant vessel.

f. Ship Handling Considerations

(1) Knowledge Requirements

(a) Deck Seamanship [signature] 12/2/99 (S)

Ref: 2, 3, 4, 10, 15, 30, 42, 45

1. Discuss criteria for allowing personnel on the main deck, top of sail, fairwater planes and bridge to assure their safety underway. Include requirements for proper wearing and securing of approved safety harness and lanyard.

2. Discuss line handling safety, use of capstan and rigging of various equipment topside.

3. Demonstrate a thorough knowledge of the use of lines, tugs and ship's power in positioning the ship alongside a pier. Discuss the techniques used to "dip" a line.

4. Demonstrate a thorough knowledge of orders to line handlers and their meaning.

5. Discuss the proper method of making a tug up to the bow and to the quarter. Know standard signals for use in directing tugs.

6. Discuss procedures for doubling and tripling lines.

7. Discuss procedures for receiving a small boat alongside and taking passengers on board.

8. Discuss "tender" areas of the ship and locate their extent (sonar, screw, stern planes shutter doors, ballast tanks).

(b) Ship Handling (surfaced) 1/7/00 (S)

Ref: 42, 45, 47, 132

1. Maneuvering Characteristics

   a. State the location of the pivot point.

   b. State the advance, transfer and turning diameter for "FULL RUDDER".

   c. State normal ship's speed for each normal main engine bell order.

   d. State the length, maximum beam, and maximum draft of the ship.

   e. Explain the concept of "squatting" as it applies to shallow water operations.

   f. Describe how and what dynamic forces act on the rudder while answering ahead and astern bells.

   g. Explain the techniques used to twist the ship taking advantage of these forces.

h. Discuss the considerations for and techniques used to turn the ship using the SPM.

i. Discuss the use of tugs in moving and turning the ship.

j. Explain the effect of wind direction on the ship's heading while backing down.

k. Discuss the hazards of a following (or pooping) sea while operating on the surface in heavy weather. Include safety precautions required for bridge personnel and the importance of keeping ballast tanks dry.

l. Explain the importance of making significant course changes when on the surface, to open the CPA to a contact.

m. Discuss the techniques used by the OOD on the bridge to maintain the status of and to evaluate contact information from sensor operators and the contact coordinator.

n. Discuss the concerns and precautions for testing the shaft on the EPM and main engines while alongside the pier.

o. Discuss the procedures and hazards associated with shaft reversal transients. Ref: 132

(c) Piloting Techniques 9/5/96 (S)

1. Explain the techniques used to determine the direction of the current by observing the water action on a buoy or pier.

2. Discuss the techniques for using the bridge compass alidade to assist in estimating:

a. Time to turn based on turn bearing

b. Contact bearing rates

(d) Shiphandling (submerged) 1/7/00

Ref: 42, 45, 47, 64 [illegible]

1. Maneuvering Characteristics

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a. State the turning diameter for full rudder orders.

b. State the ship's speed for each normal engine and EPM bell order.

c. Explain the effect of surface suction forces on periscope depth control.

d. Explain the significance of relative sea direction on depth control at periscope depth. What is the best/worst relative sea direction for depth control at periscope depth?

(2) Practical Factors

(a) Demonstrate proficiency in directing line handlers as a line handling supervisor, including standard orders to line handlers and capstan operators. 1/11/00 (S)

(b) Demonstrate proper techniques for making up lines to and from tugs, the pier, shipboard cleats and capstans, and through the bull nose. 1/11/00 (S)

(c) Conduct a walk thru topside identifying the location and proper nomenclature of all lines, cleats, bull noses, towing pad eyes, capstan, capstan control, sound powered phone stations. 1/11/00 (S)

g. COMSUBLANT OPORD 2000/COMSUBPAC OPORD 201, ANNEX C

(1) Knowledge Requirements

Ref: 4, 6

(a) Discuss the following submarine movement system elements: 12/1/99 (S/R) A

1. Moving Haven

2. Weekly OPSKED

3. SUBNOTE

4. Submarine Transit Lanes

5. Stove Pipes

(b) Describe requirements and limitations regarding the following aspects of submerged navigation:

3/6/00 (S)

1. Water Depth

2. Depth Zone Constraints

3. Submerged Operations outside assigned operating areas

(c) Describe procedures associated with a change of Operational Control (CHOP)

3/7/00

A

C. OOD KNOWLEDGE REQUIREMENTS/PRACTICAL FACTORS

1. Watchstanding

a. OOD Duties, Responsibilities and Authority

12/2/99 (S/R)

Ref: 2, 3, 4

(1) Discuss the responsibilities of the OOD.

(2) Discuss what information is contained in the CO's Night Order Book.

(3) Discuss the difference between the Deck and Conn including the policy for taking over and relinquishing the Conn.

(4) Discuss evolutions requiring CO's permission.

b. Command Relations/Watch Organization

12/2/99 (S/R)

Ref: 1, 2, 4, 50

(1) Read and discuss in detail, the command relationship as prescribed in Navy Regulations, SSORM, and CO's Standing Orders.

(2) Discuss the specifics for the coordination required between the EOOW and OOD with respect to equipment status, tagouts, communication circuits and casualty control.

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c. Pre/Post-Watch Procedures 1/7/97(S/R)

Ref: 2, 4 + [b3/b6]

(1) Discuss the pre-watch relief actions by the on watch OOD to provide a proper relief.

(2) Discuss the pre-watch relief routine required for the oncoming OOD.

(3) Discuss in detail the post-watch relief routine required for an off-going OOD.

(4) Be familiar with pre and post-watch relief actions for all watch stations.

(5) Discuss the sequence of watchstander reliefs and reports of relief.

(6) Discuss reports made by the off-going OOD to CO/XO/department heads/OOD.

d. Reports Required 12/16/96(S/R)

Ref: 2, 4, 6, 47, 48

(1) Discuss the reports to be made to CO/XO/department heads, both oral and written.

(2) Discuss the reports made between the EOOW and OOD, both written and oral.

(3) Discuss the operational reports that must be transmitted to higher authority.

e. Practical Factors

(1) Stand at least one watch under instruction including the pre-watch tour and relief procedure, for the following watchstations. Review and discuss each of the watchstanders' logs with special emphasis on parameters monitored and effects on ship safety of abnormal readings. Include the requirements for OOD log review.

(a) Quartermaster of the Watch QM2(SS) 03/12/00
QMOW

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(b) Radio Supervisor [b3/b6] 6/10/00
Radio Sup

(c) Sonar Supervisor 5/26/00
Sonar Sup

(d) MCC Supervisor (if applicable)

N/A (W)
MCC Sup

(e) Launcher Supervisor (if applicable)

N/A (W)
LOS

(f) Navigation Center Supervisor/NAV ET

3/12/00 (W)
NAV SUP/NAV ET

2. Bills

a. Operational Bills (operating procedures)

Ref: 3, 42

(1) Discuss the Reduced Visibility Bill.

3/6/00 (S)
OPS/NAV

(2) Practical Factors

(a) Rig the bridge for dive. 9/5/99 (S)(R)

(b) Dive the ship as OOD. 1/13/00 (S)(R)

(c) Surface the ship as OOD. Explain methods which are not performed. 12/6/99 (R)

(d) Shift propulsion modes as OOD. 1/7/00 (S)

(e) Snorkel and ventilate as OOD. 9/5/99

(f) Rig each space for surface and general emergency.

1/11/00 (S)

b. Damage Control/Casualty Procedures

Ref: 2, 3

(1) Damage Control Organization

2/22/00 (S)

(a) Damage Control Parties

1. Discuss the damage control party organization and equipment.

2. Explain the responsibilities for each party.

(b) Damage Control Responsibilities

1. Explain the detailed responsibilities of the watch section supervisors (DOOW, EOOW and EWS)

2. Discuss general responsibilities for the following personnel: Executive Officer, Engineer Officer, Weapons Officer/Combat Systems Officer, Medical Department Representative, Electrical Officer, Navigator, Damage Control Assistant and Main Propulsion Assistant.

3. Discuss the immediate actions for all hands, including the initial and subsequent condition required for watertight doors for general emergency.

(c) Officer of the Deck

1. Discuss your responsibilities and duties as OOD during a casualty with respect to:

a. Safety of the ship

b. Control of watertight doors

c. Reports to the Commanding Officer

d. Providing status reports

e. Ensuring the ship control party uses the proper casualty/emergency procedure and bills

(2) Casualty Procedures 3/6/00 (S)

(a) For Passive Defense, Man Overboard, Ship Destruction, and Abandon Ship, demonstrate the indicated level of knowledge.

1. State the purpose of the bill and a general discussion of the actual procedures.

2. Know all immediate actions taken by the OOD and the immediate action taken by subordinate watchstanders.

3. Discuss in detail, the supplemental actions taken by the OOD.

4. Discuss in general terms, the supplemental actions taken by subordinate watchstanders.

(3) Practical Factors

(a) Demonstrate proficiency as OOD (under instruction) in carrying out all immediate actions for the following ship casualties:

1. Emergency Ship Control

a. Jam Rudder (surfaced and simulating restricted water) 2/22/00 (S)

b. Jam Dive 5/25/00

2. Flooding 3/21/00

3. Emergency Deep 3/22/00

4. Fire or Toxic Gas (requiring the ship to emergency ventilate) 3/21/00

5. Man Overboard (perform a man overboard recovery) 1/7/00 (S)

6. Loss of Hydraulics 3/27/00

7. Reactor SCRAM 1/11/00 (S)