

DIVISION OF PROFESSIONAL DEVELOPMENT INSTRUCTION 3511.1L

From: Deputy Commandant for Professional Development

Subj: YARD PATROL CRAFT OFFICER IN CHARGE AND CRAFTMASTER
QUALIFICATION PROCEDURES

Ref: (a) SEANAV/WFR NOTE 3530 – Voyage Management System 9 Series and Pathfinder
Job Qualification Requirement Authorized Signers
(b) SEANAV/WFRNOTE 3500 – Assessment Officers
(c) DIVPRODEVINST 1531 – LANTPAT Staff Certification
(d) MILPERSMAN 1200-040
(e) DIVPRODEVINST 3120.2D – Standard Operating Procedures for Yard Patrol craft
at USNA

Encl: (1) Navigation and Shiphandling Job Qualification Requirement
(2) Engineering, Damage Control, and Yard Patrol Craft Knowledge Job Qualification
Requirement
(3) Voyage Management System (VMS) Job Qualification Requirement
(4) Raytheon Pathfinder Job Qualification Requirement
(5) YP Qualification Record
(6) OIC/CM Underway Practice Plan
(7) Shiphandling Assessment Procedure and Assessment
(8) Shiphandling Assessment Authorized Simulations
(9) Final Qualification Assessment Procedure and Assessment

1. Purpose. To ensure that all personnel assigned as Yard Patrol (YP) Officer in Charge (OIC) or Craftmaster (CM) have been trained, assessed, and qualified prior to unsupervised operation of the craft. During this period, the candidate must demonstrate skills needed to safely operate both 676 and 703 class YPs for the purpose of training United States Naval Academy (USNA) midshipmen in a realistic maritime environment.

2. Cancellation. DIVPRODEVINST 3511.1K

3. Eligibility

a. All commissioned officers are eligible to pursue the OIC qualification. All E-6 and above assigned by the Director, Waterfront Readiness Department, and who possess the 9502 NEC shall pursue the CM qualification. Limited Duty Officers and Chief Warrant Officers may qualify either as an OIC or as CM. Both designations follow the common syllabus for qualification. The midshipmen qualification process is outlined in paragraph 12 of this instruction.

b. Civilian personnel assigned to USNA with appropriate prior military experience may pursue either qualification with permission from the Deputy Commandant for Professional Development (PRODEV).

4. Responsibilities

a. PRODEV is the final qualification authority.

b. The Chairman, Department of Seamanship and Navigation (SEANAV) will supervise the OIC qualification process.

c. The Director, Waterfront Readiness Department (WFR) will supervise the CM qualification process.

d. The SEANAV Training Officer is responsible for all sustainment training and maintaining records of qualified OICs. The Senior CM is responsible for sustainment training and maintaining records of qualified WFR personnel.

e. Both SEANAV and WFR shall maintain a list of personnel (references (a) and (b)) designated to act as Assessment Officers and VMS/Pathfinder qualifiers.

f. The SEANAV and WFR Operations Officers are the overall coordinators and responsible for the detailed supervision of the qualification process.

g. The SEANAV YP Scheduling Officer shall liaise with the WFR Operations Officer to schedule assets in support of the process. Requests for training assets shall take into regard YP commitments and availability of both craft and crew.

5. OIC/CM Qualification Procedures. The first step in the process starts with completion of the Job Qualification Requirements (JQRs), enclosures (1), (2), (3), (4). The qualification process is comprised of seven elements: Navigation and Shiphandling JQR, Engineering and Damage Control JQR, VMS JQR, Pathfinder JQR, OIC/CM training seminars, qualification examinations, and two separate on-water assessments.

a. Job Qualification Requirements are detailed in enclosures (1), (2), (3), and (4).

(1) The navigation, shiphandling, engineering, and damage control sections of the JQR for prospective OICs shall be completed under the supervision of the SEANAV Operations Officer, Training Officer, and SEANAV Chairman.

(2) The navigation, shiphandling, engineering, and damage control sections of the JQR for prospective CMs shall be completed under the supervision of the Senior Craftmaster and WFR Director.

(3) Every effort will be made to ensure that training is delivered in the most efficient manner. Personnel should utilize YPs already tasked for underway classes, Movement Orders (MOs), YP Squadron (YPRON), or other serials.

(4) The SEANAV Training Officer and the WFR Operations Officer are responsible for assigning mentors to prospective candidates in the qualification process. Progress through the qualification is to be recorded at enclosure (5).

(5) All personnel in the qualification process shall follow the prescribed OIC/CM Underway Practice Plan, enclosure (6).

b. VMS and Pathfinder JQR. All personnel are to complete the VMS JQR, enclosure (3), for the 676 class qualification. All personnel are to complete the Pathfinder JQR, enclosure (4), for the 703 class qualification. A list of authorized signers can be found in reference (a). At the conclusion of the each JQR, an exam will be administered by the SEANAV Training Officer to ensure full understanding of VMS and Pathfinder.

c. OIC/CM Seminars. All personnel in the qualification process are to attend at least two OIC/CM training seminars during any six-month period or equivalent trainings approved by SEANAV Chairman or WFR Director. The varied topics presented by Subject Matter Experts will be approved by SEANAV/WFR and publicized no less than one month in advance.

d. Qualification Exams. Three qualification exams will be based on topics listed below; the minimum passing score for all examinations is 90%. All qualification exams will be completed within respective departments under recognized exam conditions and under the supervision of either the SEANAV Training Officer or WFR Operations Officer.

(1) Navigation. This exam will cover all aspects of preparation, chart work, fixing, positioning, and navigation sensors.

(2) Rules of the Road. 25 questions (USCG standard) to test understanding of various situations that require actions of all vessels.

(3) YP Standard Operating Procedures. This exam will cover all aspects of the YP Standard Operating Procedures including vessel characteristics, propulsion, electrics, damage control, other emergency situations, and craft weather limits.

e. On-Water Assessment. Two on-water assessments will be conducted following completion of all other requirements. Nominated Assessing Officers (AOs) are detailed in reference (b).

(1) Shiphandling Assessment (SHA). The SHA process, enclosures (7) and (8), focuses on the candidate's ability to maneuver the YP using both conning orders and the Panish controls. The ability to correctly identify and respond to various engineering casualties and emergencies will also be tested.

(2) Final Qualification Assessment (FQA). The FQA process, enclosure (9), assesses the candidate's ability to supervise students in a realistic environment underway, delivering the training objectives while keeping the craft safe at all times. So far as possible, this critique of a prospective OIC/CM will be conducted during a routine SEANAV course. Non-SEANAV officers and midshipmen may be assessed during YPRON underway periods or other training opportunities as approved by SEANAV/WFR.

f. Assistant Officer In Charge (AOIC). After earning the OIC qualification, officers are required to conduct one Out of Area (OOA) movement as AOIC prior to being OIC on an OOA event. SEANAV may waive the requirement to act as AOIC after notifying PRODEV.

g. Removal from Training. Any candidate that fails to demonstrate adequate progress may be removed from the training pipeline with permission from PRODEV. Reasons include failure to complete the various JQR sub-sections in a timely manner, failure to pass written exams, and/or failure to pass either on-water assessment by the third attempt.

6. Instructor Qualification. To allow new instructors to complete curriculum labs underway in the local USNA operating area, an instructor qualification is required. Any officer or enlisted personnel instructing a SEANAV course will be expected to complete the entire instructor qualification process prior to teaching their first underway lab. This qualification is to be recorded in enclosure (5), and at a minimum consist of the following:

a. Complete 300.1 of Navigation and Shiphandling Yard Patrol JQR (676 class), enclosure (1).

b. Pass the Rules of the Road exam.

c. Observe one underway laboratory with a qualified OIC.

d. Complete a pier side familiarization of the YP with a qualified OIC or CM. The purpose of this familiarization is to ensure awareness of all basic YP equipment and their operation.

e. When any instructor embarks for a curriculum course and are not qualified as an OIC, they are to make this fact known to the CM immediately.

7. YP 703 Platform Endorsement

a. Routine Qualification Path. An additional qualification is required for the 703 class YP due to differences from the 676 class. The prerequisite for this endorsement is to be qualified as OIC or CM as outlined in paragraph 5. In addition, the YP 703 class Platform Endorsement process includes completing all JQR line items for the 703 class, the Pathfinder JQR, and a SHA, enclosure (7).

b. Direct YP 703 Qualification Path. With approval from SEANAV and under supervision of the SEANAV Training Officer, OIC candidates may progress directly to the YP 703 qualification as detailed in enclosures (1), (2), and (4). Any prospective OIC may be reverted

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back to the 676 qualification path if they fail to make sufficient progress during either the alongside or underway sections of this instruction. SEANAV officers and WFR enlisted personnel must first complete the 676 class qualification. Surface Warfare or Special Mission qualified officers assigned to USNA may request permission to attempt the 703 class direct qualification path. The following are requirements for the direct qualification:

(1) Job Qualification Requirements. Specific requirements for the 703 class are detailed in enclosures (1), (2), and (4).

(2) Pathfinder JQR. At the conclusion of the JQR an exam will be administered by the Training Officer.

(3) OIC/CM Seminars. Attend at least two OIC/CM training seminars during any six-month period.

(4) Qualification Exams. Three qualification exams similar to the 676 class qualification outlined in paragraph 5.d., however specific to the 703 class.

(5) On-Water Assessments, reference (b).

(6) Shiphandling Assessment, enclosure (7).

(7) Final Qualification Assessment, enclosure (9).

8. Award of Qualification. Once all requirements in enclosure (5) are complete, the candidate is OIC or CM qualified by issue of a designation letter from PRODEV.

9. Permanent Qualification. Personnel are eligible for permanent award of a Craftmaster insignia and are authorized to wear this designation having completed six months as a qualified OIC on either class, per reference (d), and either an OOA MO or LANTPAT summer deployment. The qualification letter shall be issued by PRODEV and forwarded for inclusion in the official service record of the individual.

10. Qualification as Officer in Tactical Command (OTC). When a group consisting of two or more YPs departs the USNA operating area, an OTC will be assigned for that group of vessels designated as a squadron. The prerequisites to be nominated as an OTC are:

a. Must be qualified to operate all types of craft deployed in the Squadron.

b. Must have completed an OOA period of underway training (MO or LANTPAT) as an OIC. SEANAV may waive the OOA requirement after notifying PRODEV.

11. Assessing Officers (AOs). SEANAV and WFR shall ensure reference (b) is kept current, using the following as the minimum requirements to designate an AO:

a. Be fully qualified to operate the type of YP on which the assessment is taking place.

- b. Officers must be O3 or above, CMs must be an E7 or above.
- c. Must have SEANAV Chairman or WFR Director approval.

12. Midshipmen. USNA midshipmen are able to complete the qualification which leads to the temporary attainment of the CM insignia. Midshipmen are only eligible to wear the CM insignia up to and including the first class year. Upon graduation from USNA, this insignia is not authorized to be worn. PRODEV may issue letters of Permanent Qualification to TAD Ensigns who have been qualified more than six months on either class, per reference (d), and completed a LANTPAT cruise as AOIC. Midshipmen wishing to undertake this qualification process must have completed the JQR sections. Midshipmen must then complete all requirements from either paragraph 5 or 7.b., except for the FQA, to be awarded a CM insignia.

13. Craftmasters

a. Oral Board. Following the successful completion of the FQA underway in a 676 class YP, WFR Director will conduct an Oral Board with each prospective CM to ensure that each candidate is ready to meet each of the additional duties and responsibilities required of a CM.

b. Award of the NEC. Enlisted personnel must qualify in both 676 and 703 class YP in order to meet the requirements for the 0161 NEC.

14. Records Management. Records created as a result of this notice, regardless of media or format, must be managed per Secretary of the Navy Manual 52 10.1 of January 2012.

15. Review and Effective Date. Per OPNAVINST 5215.17A, the SEANAV Training Officer will review this instruction annually on the anniversary of the effective date to ensure applicability, currency, and consistency with Federal, DoD, SECNAV, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will automatically expire five years after the effective date unless reissued or otherwise canceled prior to the five-year anniversary date, or an extension has been granted.


B. P. O'DONNELL

Releasability and distribution:

This instruction is cleared for public release and is available electronically only via USNA's Intranet Web site, <https://intranet.usna.edu/SeaAndNav/departInst.php>.

NAVIGATION AND SHIPHANDLING JOB QUALIFICATION REQUIREMENT

NAME _____ RATE/RANK _____

This page is to be used as a record of satisfactory completion of designated sections of the Job Qualification Requirements (JQR). Only personnel designated via paragraph 4(e) may signify completion of applicable sections either by written or oral examination, or by observation of performance.

A copy of this completed page shall be kept in the individual's qualification record.

The trainee has completed all Navigation and Shiphandling JQR requirements.

RECOMMENDED _____ DATE _____
SEANAV/WFR Operations Officer/Senior CM

APPROVED _____ DATE _____
Chairman, SEANAV/Director, WFR

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300.1 NAVIGATION

a. Describe the boundaries of the local OPAREA, to include conspicuous navigation aids and local regulations.

(Rate/Rank Name, Signature, and Date)

b. Construct and properly label a track for restricted water pilotage using turn bearings, courses and speeds, danger bearings, and parallel indexes.

(Rate/Rank Name, Signature, and Date)

c. Interpret tide and tidal current graphs for applicable stations.

(Rate/Rank Name, Signature, and Date)

d. Determine how to calculate gyro, repeater, radar, and fathometer errors. Apply the appropriate corrections to a check fix.

(Rate/Rank Name, Signature, and Date)

e. Demonstrate the ability to startup and configure all Bridge MFCs and sensors.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

f. Load the appropriate Vector Chart (usually an NGA-supplied DNC).

(Rate/Rank Name, Signature, and Date – 703)

g. Configure the Display Settings, Safety Depth, and Contours on each digital navigation system.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

h. Check the AIS Transponder Settings prior to getting underway and secure on returning to the WFR Basin.

(Rate/Rank Name, Signature, and Date – 703)

i. Operate the full functionality of the Auto Pilot underway (when greater than 1000 yards from shoal water).

(Rate/Rank Name, Signature, and Date – 703)

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j. Operate all HF/VHF/UHF and SATCOM (as fitted) communications systems, including the Weather Fax.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

k. Prepare a digital voyage plan from USNA to Baltimore.

(Rate/Rank Name, Signature, and Date)

l. Establish the craft's position using the installed electronic navigation system.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

m. Demonstrate and understanding of the importance of chart datum including the difference between horizontal and vertical datums.

(Rate/Rank Name, Signature, and Date)

n. Plot a fix by GPS.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

o. Plot a fix by three LOPs (Visually and Radar).

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

p. Compare fathometer readings with the charted depth for the current position.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

q. Using two fixes and appropriate DRs, determine set and drift, SOG, course and speed to regain PIM, course and speed to maintain desired track.

(Rate/Rank Name, Signature, and Date)

r. Demonstrate how to set up the installed radar to achieve an optimum surface picture. Explain all major controls and settings including ARPA tracking.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

- s. Explain Figure of Merit (FOM) and the importance of Dilution of Precision (DOP).

(Rate/Rank Name, Signature, and Date)

- t. Explain the actions taken upon discovering discrepancies between different positioning sources. Demonstrate the use of the Position Source Discrepancy Monitor (703 only).

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

- u. Explain Operational Risk Management procedures and how they apply to marine navigation.

(Rate/Rank Name, Signature, and Date)

300.2. SHIPHANDLING

- a. Get underway from the pier using the Panish controls.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

- b. Get underway from the pier using conning orders.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

- c. Conn the ship to recover a simulated man overboard.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

- d. Recover a simulated man overboard using Panish controls.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

- e. Conn the ship during a condition of simulated low visibility. Demonstrate a constant appraisal of Safe Speed.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

- f. Conn the ship during a simulated rudder casualty.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

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g. Conn the craft during a simulated engine casualty.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

h. Explain the different types of towing configurations available and their application.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

i. Moor to a pier from the Panish controls.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

j. Moor to a pier using conning orders

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

k. Conduct anchorage approach.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

l. Complete a slip departure and landing.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

m. Describe the underway towing procedure.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

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ENGINEERING, DAMAGE CONTROL, AND YARD PATROL CRAFT KNOWLEDGE
JOB QUALIFICATION REQUIREMENT

NAME _____ RATE/RANK _____

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A copy of this completed page shall be kept in the individual's qualification record.

The trainee has completed all Engineering and Damage Control JQR requirements.

RECOMMENDED _____ DATE _____

SEANAV/WFR Operations Officer/Senior CM

APPROVED _____ DATE _____

Chairman, SEANAV/Director, WFR

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100 YP CHARACTERISTICS

100.1 List key items of equipment that are located in all major crew compartments including berthing, passageways, heads, and lockers. Demonstrate a comprehensive understanding of specific capacities, precautions and associated operating procedures.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

100.2 List key items of equipment located in the following main operational spaces including the Pilot House, CIC, Engine Room, Enclosed Operating Space (EOS), and Galley. Demonstrate a comprehensive understanding of specific capacities, precautions, and associated operating procedures.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

100.3 List key items of equipment located in the following deck spaces including Main Deck, Foc'sle, Port/Starboard Sides, and Fantail. Demonstrate a comprehensive understanding of specific capacities, precautions, and associated operating procedures.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

100.4 Define the following vessel characteristics: Mission profile, length (overall and beam (maximum)), draft (full/light/navigational), displacement, main propulsion, maximum personnel capacity for local OPAREA, fuel consumption on a main engine at 10kts, 13kts, SSDG per hour, and the calculated operating range.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

100.5 State the following general information/capacities: electrical system, main propulsion/time delay, steering system, tanks, and capacities.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

100.6 State the characteristics and capacities of the following systems: MSD, bilge, fuel/fuel transfers, fire main.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200 DAMAGE CONTROL

200.1 State the location and contents of the Damage Control Locker.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.2 State the equipment found at a Fire Station.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.3 State the components and demonstrate how to operate (touch drills only) the installed fixed firefighting systems.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.4 List the number and location of all of CO2/PKP bottles onboard.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.5 State the amount and storage location of AFFF onboard.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.6 State the location of the SCBA locker(s) and its contents.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.7 State the number of EEBDs onboard. Demonstrate the operational procedures for the device.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.8 Trace the fire main onboard and state the pump capacities.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.9 Describe how to operate the back-up pump.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.10 Demonstrate how to operate a P-100 (touch drills only).

(Rate/Rank Name, Signature, and Date)

200.11 List the location, procedures, and safety precautions for activating the fixed fire-fighting systems.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.12 Describe the Auto-Mode capability and limitations for the FM200 system. What critical alarms must be acknowledged to avoid fuel cut-off to the MPDEs?

(Rate/Rank Name, Signature, and Date – 703)

200.13 State the location of the emergency lighting in each major compartment.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.14 State the safety precautions and actions during emergency situations when midshipmen or civilians are embarked onboard YP.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.15 State the responsibilities of the OIC/CM and crew for a Class-A fire.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.16 State the general firefighting procedures for Class-B/C fires.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.17 Describe the emergency procedures for a Class-C generator fire.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

200.18 Describe the emergency procedures for a major fuel-oil leak.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300 ENGINEERING

300.1 Conduct MLOCs with the YP Engineer. Start both MPDEs and transfer control to the Pilothouse.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.2 Explain and demonstrate the remote light-off and securing procedures for the main propulsion system.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.3 Draw a diagram to highlight each major component of the main propulsion chain.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.4 Demonstrate the procedures for operating the SSDGs.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.5 Discuss how to switch back and forth between shore and ship's power.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.6 Trace the steering systems and describe all modes of operation. Conduct touch drills to demonstrate how to operate emergency steering.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.7 Trace the fuel system. Demonstrate how to transfer fluids between tanks.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.8 Trace the bilge systems. Explain how to operate the system in all configurations.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.9 Discuss how to reconfigure the fire main.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.10 Trace the potable water system and discuss the various procedures for operation.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.11 Trace the air conditioning systems and explain the operating procedures association with the HVACs.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.12 Explain the procedures within Engineering Standing Orders for pumping and spill prevention.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.13 Explain the actions required of the YP Engineer on loss of shore electrical power.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.14 Trace the fuel oil system and explain the associated operating procedures.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.15 Explain the procedures for tank cleaning. What are the dangers associated with operating in enclosed spaces?

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.16 Trace the lube oil system and explain the associated operating procedures.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.17 Trace the MSD/CHT and grey water systems and explain the associated operating procedures.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.18 Demonstrate how to prepare, audit, and properly conduct a Tag Out.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

300.19 Discuss all aspects of RADHAZ and the controlling procedures to prevent injury to personnel aloft.

(Rate/Rank Name, Signature, and Date – 676)

(Rate/Rank Name, Signature, and Date – 703)

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VOYAGE MANAGEMENT SYSTEM (VMS) JOB QUALIFICATION REQUIREMENT

NAME _____ RATE/RANK _____

This page is to be used as a record of satisfactory completion of designated sections of the Job Qualification Requirements (JQR). Only personnel designated via paragraph 4(e) may signify completion of applicable sections either by written or oral examination, or by observation of performance.

Reference:

- a. Voyage Management System 9.4 Operator Manual (Sperry Marine)
- b. DIVPRODEVINST 3530.1B – Yard Patrol Craft (YP) Navigation Standards
- c. COMNAVSURFLANT/COMNAVLANTINST 3530.4C NAVDORM

A copy of this completed page shall be kept in the individual's qualification record.

The trainee has completed all Voyage Management System (VMS) JQR requirements.

RECOMMENDED _____ DATE _____
SEANAV/WFR Operations Officer/Senior CM

APPROVED _____ DATE _____
Chairman, SEANAV/Director, WFR

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100 SETUP

100.1 Start software for all stations and displays and identify station in control.

(Rate/Rank Name, Signature, and Date)

- 100.2 Discuss minimum required charts and perform basic functions.
- a. Identify and install latest DNC for the local area.
 - b. Validate the local area DNC is corrected and up-to-date.
 - c. Apply a vector data update (VDU) to an uncorrected DNC.
 - d. Load appropriate local chart.

(Rate/Rank Name, Signature, and Date)

- 100.3 Select chart features in accordance with reference (e).
- a. Chart Settings
 - b. Display Settings
 - c. Route Display Settings
 - d. Anchorage Settings

(Rate/Rank Name, Signature, and Date)

- 100.4 Select safety configurations in accordance with reference (e).
- a. Dangers
 - (1) Look ahead time (two fix intervals)
 - (2) Added breadth
 - (3) Select alarm and caution and show safety region
 - b. Safety depth
 - c. Safety height

(Rate/Rank Name, Signature, and Date)

200 LAYERS

200.1 Generate a new layer.

(Rate/Rank Name, Signature, and Date)

- 200.2 Input a navigation aids.
- a. Input visual aids from Annapolis Gazateer.
 - b. Input radar aids from Annapolis Gazateer.

(Rate/Rank Name, Signature, and Date)

200.3 Input a mariner object in accordance with a Notice to Mariners.

(Rate/Rank Name, Signature, and Date)

200.4 Use the query function on a point, an area, and a layer to determine critical information.

(Rate/Rank Name, Signature, and Date)

200.5 Demonstrate how to delete a layer.

(Rate/Rank Name, Signature, and Date)

300 ROUTES

300.1 Create a new route in the Annapolis OPAREA and properly save.

(Rate/Rank Name, Signature, and Date)

300.2 Add the waypoints for the outbound track in the Annapolis OPAREA.

(Rate/Rank Name, Signature, and Date)

300.3 Insert a waypoint between the last two waypoints of the Annapolis outbound route.

(Rate/Rank Name, Signature, and Date)

300.4 Adjust the off track limit for an approaching and departing legs on your route.

(Rate/Rank Name, Signature, and Date)

300.5 Adjust the angle of rudder and speed used for a turn on your route.

(Rate/Rank Name, Signature, and Date)

300.6 Create a turn bearing and turn range for each leg of your route.

(Rate/Rank Name, Signature, and Date)

300.7 Enter a critical point to increase speed after buoy 6 on your route.

(Rate/Rank Name, Signature, and Date)

400 FUNCTIONS

400.1 Enter a Man Overboard from the toolbar.

(Rate/Rank Name, Signature, and Date)

400.2 Demonstrate how to adjust set and drift for the Man Overboard.

(Rate/Rank Name, Signature, and Date)

400.3 Cancel the Man Overboard.

(Rate/Rank Name, Signature, and Date)

400.4 Demonstrate how to use a Variable Range Marker (VRM).

(Rate/Rank Name, Signature, and Date)

400.5 Demonstrate how to use an Electronic Bearing Line (EBL).

(Rate/Rank Name, Signature, and Date)

400.6 Demonstrate how to use the Parallel Index (PI) function.

(Rate/Rank Name, Signature, and Date)

500 ANCHORAGE

500.1 Select an anchorage in accordance with reference (e).

(Rate/Rank Name, Signature, and Date)

500.2 Under the Planning Tab, select a head bearing and associated NAVAID.

(Rate/Rank Name, Signature, and Date)

500.3 Under the Planning Tab, select a drop range and associated NAVAID.

(Rate/Rank Name, Signature, and Date)

500.4 Adjust inner and outer range rings in accordance with reference (e).

(Rate/Rank Name, Signature, and Date)

500.5 Demonstrate selecting appropriate anchor depth and amount of chain.

(Rate/Rank Name, Signature, and Date)

600 NAVIGATION PLAN

600.1 Demonstrate creating a new navigation plan.

(Rate/Rank Name, Signature, and Date)

600.2 Demonstrate adding a route, layer, and required DNCs that were created.

(Rate/Rank Name, Signature, and Date)

600.3 Explain the recommendation and approval process for each component of the navigation plan.

(Rate/Rank Name, Signature, and Date)

700 ROUTE MONITORING

700.1 Demonstrate loading your navigation plan.

(Rate/Rank Name, Signature, and Date)

700.2 Demonstrate monitoring your navigation plan.

(Rate/Rank Name, Signature, and Date)

800 EXAMINATION

800.1 Pass a NN310 VMS practical exercise with a 90% or above.

(Rate/Rank Name, Signature, and Date)

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RAYTHEON PATHFINDER JOB QUALIFICATION REQUIREMENT

NAME _____ RATE/RANK _____

This page is to be used as a record of satisfactory completion of designated sections of the Job Qualification Requirements (JQR). Only personnel designated via paragraph 4(e) may signify completion of applicable sections either by written or oral examination, or by observation of performance.

Reference:

- a. Raytheon Pathfinder User Guide
- b. DIVPRODEVINST 3530.1B – Yard Patrol Craft (YP) Navigation Standards
- c. COMNAVSURFLANT/COMNAVLANTINST 3530.4C NAVDORM

A copy of this completed page shall be kept in the individual's qualification record.

The trainee has completed all Pathfinder JQR requirements.

RECOMMENDED _____ DATE _____
SEANAV/WFR Operations Officer/Senior CM

APPROVED _____ DATE _____
Chairman, SEANAV/Director, WFR

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100 SETUP

100.1 Start software for all stations and displays.

(Rate/Rank Name, Signature, and Date)

- 100.2 Discuss minimum required charts and perform basic functions.
- a. Identify and install latest DNC for the local area.
 - b. Validate the DNC is corrected and up-to-date.
 - c. Demonstrate switching between DNCs.

(Rate/Rank Name, Signature, and Date)

- 100.3 Select chart options in accordance with PRODEV Navigation Standards.
- a. Chart Options
 - b. Display Settings
 - c. Depth Settings

(Rate/Rank Name, Signature, and Date)

200 INTEGRATION

200.1 Adjust Pathfinder's ship info for 703 class YP.

(Rate/Rank Name, Signature, and Date)

200.2 Demonstrate enabling ARPA/RADAR Image Overlay.

(Rate/Rank Name, Signature, and Date)

200.3 Demonstrate enabling ship auto-center.

(Rate/Rank Name, Signature, and Date)

200.4 Demonstrate entering a non-GPS fix.

(Rate/Rank Name, Signature, and Date)

200.5 Demonstrate entering an LOP.

(Rate/Rank Name, Signature, and Date)

300 ROUTES

300.1 Create a new route in the Annapolis OPAREA, add the waypoints for outbound track, and properly save.

(Rate/Rank Name, Signature, and Date)

300.2 Adjust the off track limit for the approaching and departing legs on your route.

(Rate/Rank Name, Signature, and Date)

300.3 Adjust the speed used for your route.

(Rate/Rank Name, Signature, and Date)

300.4 Adjust the turn radius for your route.

(Rate/Rank Name, Signature, and Date)

300.5 Demonstrate sending a route to RADAR.

(Rate/Rank Name, Signature, and Date)

300.6 Demonstrate loading a primary route and enabling position monitoring.

(Rate/Rank Name, Signature, and Date)

400 FUNCTIONS

400.1 Enter a Man Overboard from the toolbar.

(Rate/Rank Name, Signature, and Date)

400.2 Cancel the Man Overboard.

(Rate/Rank Name, Signature, and Date)

400.3 Demonstrate how to use a Variable Range Marker (VRM).

(Rate/Rank Name, Signature, and Date)

400.4 Demonstrate how to use an Electronic Bearing Line (EBL).

(Rate/Rank Name, Signature, and Date)

500 EXAMINATION

500.1 Pass the Raytheon Pathfinder practical exercise with at least a 90%.

(Rate/Rank Name, Signature, and Date)

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YP QUALIFICATION RECORD

The following record is to be completed and retained by the candidate. Once qualified, this record shall be retained with the candidate's qualification record by SEANAV Operations Officer or Senior CM.

1. Check in with SEANAV Training Officer. Develop POAM for qualification completion.

_____ DATE _____
SEANAV Training Officer

2. Complete pierside YP familiarization with a qualified OIC/CM.

_____ DATE _____
SEANAV Training Officer/WFR Operations Officer

3. Observe one underway lab with another OIC qualified NS101/NN210/NN310 instructor.

_____ DATE _____
SEANAV Instructor/CM

4. Complete all navigation preparations of a paper chart or digital voyage plan (using VMS) for Annapolis Harbor (12283).

_____ DATE _____
SEANAV Training Officer/WFR Operations Officer

5. JQR Requirements

- a. Engineering, Damage Control, and Yard Patrol Craft Knowledge JQR complete.

_____ DATE _____
SEANAV/WFR Operations Officer

- b. Navigation and Shiphandling JQR complete.

_____ DATE _____
SEANAV/WFR Operations Officer

- c. Voyage Management System (VMS) JQR and exam complete. (676 class only)

_____ DATE _____
SEANAV/WFR Training Officer

- d. Pathfinder JQR and exam complete. (703 class only)

_____ DATE _____
SEANAV/WFR Training Officer

6. Attend two OIC/CM Seminars. (SEANAV/WFR waiver required if unable to complete two seminars prior to SHA/FQA)

_____ DATE _____
SEANAV/WFR Training Officer

_____ DATE _____
SEANAV/WFR Training Officer

7. Complete Qualification Exams (90% or better).

EXAMINATION	SCORE	SIGNATURE	DATE
Basic Navigation			
ROR			
YP SOP			

8. Shiphandling Assessment (SHA) 676 class complete.

_____ DATE _____
SEANAV Operations Officer/Senior CM

9. Final Qualification Assessment (FQA) complete.

_____ DATE _____
SEANAV Operations Officer/Senior CM

10. Shiphandling Assessment (SHA) 703 class complete.

_____ DATE _____
SEANAV Operations Officer/Senior CM

OIC/CM UNDERWAY PRACTICE PLAN

Familiarization Stage
*Issue all training materials to include SOP, Instruction, and Annapolis Harbor Chart (12283).
 Prepare achievable plan and forward for Training Officer Approval.*

SERIAL	LOCATION	OBJECTIVES	COMPLETE/ NOTES
FAM-ZERO 1.5 hours	WFR basin	<ol style="list-style-type: none"> 1. Initial craft walkthrough, identify key systems and emergency equipment in each major compartment. 2. Review capabilities and limitations. 3. Discuss local operating regulations, including speed limits, traffic patterns, and reporting requirements. 4. Demonstrate the setup procedures for all mission systems (ECDIS, radar, and short-range communications). 5. Observe demonstration of shipboard firefighting procedures. 	
FAM-ONE 2 hours	Underway, Severn River	<ol style="list-style-type: none"> 1. Complete MLOCs and departure checklist. 2. Present a navigation brief to all key personnel onboard. 3. Start main engines. 4. Demonstrate basic shiphandling characteristics when underway to include conning and Panish maneuvering. 5. Channel PILOTEX (seawall to buoy AN). 6. MOBEX demonstration. 	
FAM-TWO 2 hours	COMEX at USNA seawall Underway, Severn River	<ol style="list-style-type: none"> 1. Complete MLOCs and departure checklist. 2. Start main engines. 3. Demonstrate basic shiphandling characteristics when underway to include conning and Panish maneuvering. 4. Pier landing techniques, both conning and from Panish control. OIC/CM will demonstrate each maneuver prior to student attempt. 5. MOBEX demonstration. 	
FAM-THREE 2 hours	Underway, Severn River	<ol style="list-style-type: none"> 1. Witness a SEANAV class underway. (NS101, NN210/310, or YPRON) 	

**On completion of the Familiarization Stage,
all examinations and the VMS JQR have to have been completed.**

SERIAL	LOCATION	OBJECTIVES	COMPLETE/ NOTES
<p>NAV-ONE 2 hours</p>	<p>COMEX at USNA seawall</p> <p>Underway, Severn River</p>	<p><u>BASIC NAVIGATION TECHNIQUES</u></p> <ol style="list-style-type: none"> 1. Complete departure checklist and correctly configure all mission systems. Start main engines. 2. Channel PILOTEX (seawall to buoy AN), demonstrating actions required for loss of GPS, loss of radar, and low visibility. 3. Ensure the OIC/CM candidate is able to make a constant appraisal of safe speed. 4. Dummy anchorage, demonstrating visual, radar, and VMS approaches. 5. MOBEX. 6. Conduct a safe pier landing, either conning or using the Panish controls. 	
<p>NAV-TWO 2 hours</p>	<p>COMEX at USNA seawall</p> <p>Underway, Severn River</p>	<p><u>ENGINEERING CASUALTY PROCEDURES</u></p> <ol style="list-style-type: none"> 1. Complete departure checklist and correctly configure all mission systems. Start main engines. 2. Channel PILOTEX (seawall to buoy AN), demonstrating actions required for loss of MPDE, loss of SSDG, and loss of steering. 3. MOBEX. 4. Conduct a safe pier landing, either conning or using the Panish controls. 5. Conduct a further series of pier landings with simulated loss of MPDE and loss of steering. 	
<p>NAV-THREE 2 hours</p>	<p>COMEX at WFR</p> <p>Underway, Severn River</p>	<p><u>ADVANCED SHIPHANDLING AND SEAMANSHIP</u></p> <ol style="list-style-type: none"> 1. Complete departure checklist and correctly configure all mission systems. 2. Start main engines. 3. Depart from YP slip. 4. Pier landing onto SCRDP pier with a simulated engine casualty. 5. Precision anchorage. Candidate must navigate to the correct 'Let Go' position and the craft is to actually anchor. 6. Moor outboard of another YP on any seawall. 7. Back into the WFR basin. 8. Moor the YP into the assigned slip. 	

SERIAL	LOCATION	OBJECTIVES	COMPLETE/ NOTES
<p>NAV-FOUR 2 hours</p>	<p>COMEX at WFR</p> <p>Underway, Severn River</p>	<p><u>ADVANCED SHIPHANDLING AND SEAMANSHIP</u></p> <ol style="list-style-type: none"> 1. Complete departure checklist and correctly configure all mission systems. 2. Start main engines. 3. Depart from the YP slip. 4. Channel PILOTEX to Area ALFA-TWO/THREE. 5. TOWEX. 6. Rub rail transfer underway, making way. 7. MOBEX. 8. Pier landing (Dewey/Farragut) with simulated engineering casualty. 	
<p>NAV-FIVE 2 hours</p>	<p>COMEX at USNA seawall</p> <p>Underway, Severn River</p>	<p><u>CHECK RIDE WITH OIC/CM MENTOR</u></p> <p>All serials in accordance with this instruction, enclosures (7) (SHA Serials) and (8) (Underway Simulations).</p> <p>This is a PASS/FAIL serial.</p>	
<p>All qualification paperwork to include PQS, JQR, and exams to be reviewed by SEANAV-TO/WFR. SHA/FQA only to be scheduled when candidate, craft, and Assessing Officer have all confirmed availability.</p>			
SERIAL	LOCATION	OBJECTIVES	COMPLETE/ NOTES
<p>SHA</p>	<p>COMEX at USNA seawall</p> <p>Underway, Severn River</p>	<p>The purpose of the Shiphandling Assessment is to ensure that the OIC/CM candidate is able to safely maneuver the craft, operate within the SOP limits and guidelines, and take the appropriate controlling actions when faced with realistic simulated emergencies – all without supervision.</p>	
<p>FQA</p>	<p>Underway, Severn River</p>	<p>The purpose of the Final Qualification Assessment is to ensure that the OIC/CM candidate is able to ably deliver the underway training mission while keeping the craft safe at all times, without any supervision.</p>	
<p>On successful completion of the FQA, a letter of designation will be signed by PRODEV authorizing wearing of CM insignia. With SEANAV/WFR endorsement, proceed directly to 703 Platform Endorsement within the following three months.</p>			

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SHIPHANDLING ASSESSMENT PROCEDURE AND ASSESSMENT

1. After the OIC, CM, or midshipman candidate completes the Job Qualification Requirements (JQR), all qualification examinations, and the mandated Voyage Management System (VMS) PQS, they are eligible to complete a Shiphandling Assessment (SHA) with a designated Assessing Officer (AO)/CM in accordance with paragraph 4(e).
2. The purpose of the SHA is to evaluate the candidate's seamanship and shiphandling abilities onboard Yard Patrol (YP) craft, as well as initial reactions to emergency situations. The assessment will consist of the following elements:
 - a. Preparation of paper chart 12283. Preparations shall be in accordance with the chart preparation checklist in reference (e), and the navigation track shall be laid at the candidate's discretion from the appropriate seawall to a position at approximately 38°57'N 76°25'45"W. Additionally, the candidate shall select and plot a suitable anchorage and be prepared to accurately navigate the YP to that anchorage, both visually and by radar.
 - b. Preparation of a navigation brief per reference (e).
 - c. Completion of the underway checklist per reference (e).
 - d. Proceed underway from the seawall and conduct seven of the following evolutions at the discretion of the AO. At least five of the serials selected shall be shiphandling (evolutions 1-10) and two shall be a casualty response procedure (evolutions 11-17):
 - (1) Man Overboard using conning orders
 - (2) Man Overboard using Panish controls
 - (3) Mooring to the seawall with engine casualty, using conning or Panish
 - (4) Mooring to the seawall with rudder casualty, using conning or Panish
 - (5) Mooring to the seawall using Panish controls
 - (6) Mooring to seawall using conning orders
 - (7) Precision anchorage visual
 - (8) Precision anchorage by radar
 - (9) Back YP into the small boats basin using conning orders – 676 only
 - (10) Back YP into the small boats basin using Panish controls – 676 only
 - (11) Main space fire
 - (12) Low visibility
 - (13) Onboard medical casualty

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- (14) Loss of power
- (15) Loss of Gyro
- (16) Loss of GPS
- (17) Loss of steering
- (18) Loss of main engine
- (19) Loss of VMS/ECDIS

3. For an Assessment to be considered successful, all evaluated items must be completed satisfactorily. Any area not considered to be fully accomplished will be highlighted in the evaluation form and remediated for reevaluation if deemed necessary.

4. Safety is paramount during any underway training onboard the YPs. The AO must ensure reference (e) is followed at **all** times. If a potentially dangerous situation is identified, it is incumbent on the AO to take charge of the YP, suspend the training serial, and return the YP to safe water/operating condition. Only the AO may determine if it is safe to continue training.

5. The Shiphandling Assessment (SHA) form on the next page will be used by the AO to evaluate the candidate. The AO will complete, sign, and submit the form to the SEANAV Training Officer or WFR Senior CM within 24 hours of completion of the assessment.

SHIPHANDLING ASSESSMENT

SERIAL	PASS	FAIL
PREPARATIONS		
Navigation Brief		
In accordance with reference (e)		
Undocking		
SHIPHANDLING		
Use of engines, rudder, and lines as required. Assessment of conditions including wind, tides, and traffic density. Speed/use of power. Appropriate use of sound signals.		
JUDGMENT		
Monitoring of shipping. Conning Officer positioning. Use of Standard Command. BRM.		
UNDERWAY		
<u>Graded Item #1</u>		
<u>Graded Item #2</u>		
<u>Graded Item #3</u>		
<u>Graded Item #4</u>		
<u>Graded Item #5</u>		

SERIAL	PASS	FAIL
<u>Graded Item #6</u>		
<u>Graded Item #7</u>		
PIER LANDING		
APPROACH		
Selection of mooring position. Assessment of conditions. Speed and angle of approach.		
SHIPHANDLING		
Continuous assessment of speed and angle of approach. Assessment of pivot point and awareness of dangerous wind quadrants. Use of rudder.		
JUDGMENT		
Conning officer positioning. Control of line handlers.		
GENERAL		
COMMAND		
Bridge Resource Management. Use of Standard Commands. Rules of the Road adherence and contact management. Bridge Presence and Leadership. Maintenance of Spatial Awareness. Use of Navigation Aides as appropriate.		

REMARKS		
OVERALL	PASS	FAIL
<u>Areas to Improve:</u>		
I have been debriefed on the above points and made fully aware of all areas on which to improve.		
	Candidate	
	Assessing Officer	

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SHIPHANDLING ASSESSMENT AUTHORIZED SIMULATIONS

1. In order to ensure drills are initiated in the same manner for all candidates conducting OIC/CM training, the following guidance is to be adhered to by any Assessing Officer (AO) when conducting a Shiphandling Assessment (SHA).
2. Drills are only to be conducted when the AO determines that the craft is sufficiently clear of shoal water and other shipping contacts. The continuous appraisal of ship's safety must be conducted and it is the responsibility of the AO to reassess the situation prior to initiating each drill. The prevailing and forecasted environmental conditions must be considered prior to getting underway for any training or assessment period.
3. For all engineering drills, a thorough understanding of EOCC and the associated controlling actions required must be demonstrated by the candidate OIC/CM. Failure to do so will result in an overall unsatisfactory grade for the assessment.
4. Navigation and Seamanship Serials

a. Low/Restricted Visibility. The AO will inform the candidate OIC/CM that visibility is reducing in 2,000-yard increments over a period of not less than three minutes. During this time, the AO will continually assess the candidate's appraisal of safe speed and execution of all other actions in accordance with the established checklists. Windows are not to be covered. The candidate shall demonstrate the ability to safely pilot the YP using both radar and electronic navigation systems.

703 class only – The AO may instruct the candidate to conn the ship exclusively from the information provided on the X-Band Radar display.

b. Loss of X/S-Band Radar. This drill may be initiated by either directly informing the candidate that the radar video picture has been lost, or the AO can adjust the sea state filters to change the video image. At no point may the radar be switched off. In the event of actual restricted visibility, or any other situation where the radar is needed to ensure safe navigation, the display setting shall be immediately restored by the AO.

c. Loss of Voyage Management System (VMS)/ECDIS. 676 class only – The aft VMS display may be dimmed only if the forward facing display is fully functional. At no point should VMS be switched off, the application shutdown, or sensor inputs deselected. The AO may choose to directly inform the candidate OIC/CM that there has been a suspected loss of VMS should the partially dimmed monitor not be sighted after a period of two minutes.

703 class only – The Raytheon ECDIS system is a fully class compliant commercial navigation system. Therefore, both ECDIS displays on the Bridge are completely independent of each other. As appropriate, the AO may either unload the current digital chart or shutdown the Multi-Function Console (MFC) as long as the second MFC is fully serviceable and the X-Band Radar has the navigation data displayed.

d. Man Overboard. This drill is commonly initiated by deploying an un-tethered life ring to simulate the man overboard. The AO should also provide a loud local alarm in the format of "Man Overboard! Port/Starboard Side!".

e. Loss of GPS. 676 class only – This serial is to be initiated by the AO informing the candidate that GPS has been lost. The purpose of the drill is to assess a student's ability to navigate the ship by other means. The GPS sensor is not to be switched off and the display is not to be covered.

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703 class only – Each of the GNSS (DGPS) sensors are completely independent of each other. One device may be switched off by the AO and the candidate should be prompted to take action on hearing the ECDIS or Nauto-Conning alarm.

5. Engineering Drills

a. Loss of Main Engine. 676 class only – The AO will place the appropriate engine control column to idle and inform the candidate that the engine has been lost. At no point is any engine to be shut down when underway.

703 class only – The AO may take propulsion control for the simulated engine failure from either the central control or port bridge control consoles. The telegraph should then be set to idle and the candidate informed of the simulated casualty. At no point is any engine to be shut down when underway.

b. Loss of Steering. 676 class only – AO will place the rudder to the required setting from the main wheel and direct the candidate OIC/CM to take the Panish controls. The drill will be initiated by directly telling the student that the steering system has failed. The AO may direct the student to follow the marked channel or attempt a pier landing. A careful appraisal must be made of the prevailing environmental conditions prior to commencing this drill.

703 class only – The AO shall take rudder control from the alternate station. The candidate should quickly identify the simulated casualty. If after a period of two minutes the casualty has not been detected, the AO will inform the student to carry out the necessary action.

c. Loss of SSDG. The AO will inform the candidate of a simulated loss of SSDG. There is to be no change to the sea-going configuration of the plant or any other system. The purpose of this serial is to assess the student's ability to conduct the appropriate checklist and demonstrate a command level appraisal of the subsequent effects on the class underway.

d. Main Space Fire. All actions are to be taken in accordance with approved emergency procedures. No simulated smoke is to be deployed within any enclosed space. The AO must ensure that the navigation and shipping situation is benign prior to initiating the serial, as the student OIC can be expected to order the CM below to direct the initial firefighting efforts almost immediately. The ability to rapidly account for all personnel and demonstrate a thorough understanding of the layout and configuration of the main machinery space is the purpose of this drill. The student must be aware of each high-energy system and associated impact of shutting down key elements of the propulsion plant when isolating the compartment.

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FINAL QUALIFICATION ASSESSMENT PROCEDURE AND ASSESSMENT

1. The purpose of the Final Qualification Assessment (FQA) is to verify the candidate's ability to safely supervise a group of trainees underway during a Seamanship and Navigation Department (SEANAV) class. Executing the training mission while maintaining the safety of the craft underway is absolutely vital.
2. Candidates will only be allowed to progress to the FQA once they have successfully completed the Shiphandling Assessment (SHA), each Job Qualification Requirement (JQR) line items, and required examinations.
3. So far as possible, the Assessing Officer (AO) should only step in for the safety of the craft. Debrief with the OIC or CM being assessed should occur after the midshipmen have departed.
4. For any FQA serial, a minimum of one fully qualified OIC and CM must be onboard.

FINAL QUALIFICATION ASSESSMENT

SERIAL	PASS	FAIL
PREPARATIONS		
Navigation and Safety Brief		
Brief all personnel on intentions and lesson objectives, ensuring all safety critical issues covered.		
Coaching of Undocking		
UNDERWAY		
COACHING		
Allows team to act. Strives to mentor team toward correct decision-making. Shifts to directive nature with team if/when necessary. Maintains proper oversight of all watchstations.		
AWARENESS		
Continuously monitors all watchstations. Does not become overly involved in a single function. Ensures trainees monitor all available sources of information. Maintains situational awareness, specifically regarding extent of safe water and traffic density.		
DIVISION OF LABOR		
Ensures OIC/CM maintain SA throughout and that there is adequate division of responsibilities and supervision of midshipmen. Particular attention must be paid to maintaining oversight of separate seamanship and navigation duties between the OIC/CM.		

SERIAL	PASS	FAIL
SAFETY		
Ensures YP is in a safe position at all times. Never allows trainees to act unsafely. Ensures Bridge Team does not become complacent.		
RESPONSIVENESS		
Acts in a timely manner toward any developing situation. Does not hesitate to mentor or direct watch team as necessary.		
The Assessing Officer will record at least three examples of action taken by OIC/CM underway.		
Coaching of Pier Landing		
GENERAL		
COMMAND		
Bridge Resource Management. Use of Standard Commands. Positioning. Contact Management. Bridge presence and Leadership. Maintenance of spatial awareness. Use of Navigation Aides where appropriate.		

REMARKS		
OVERALL	PASS	FAIL
<u>Areas to Improve:</u>		
I have been debriefed on the above points and made fully aware of all areas on which to improve.		
	Candidate	
	Assessing Officer	