



ASPIRANT HANDBOOK

WASHINGTON STATE
BOARD OF PILOTAGE
COMMISSIONERS



2024

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INTRODUCTION

ANNOUNCEMENT OF WASHINGTON STATE MARINE PILOT EXAMINATION FOR THE GRAYS HARBOR AND PUGET SOUND PILOTAGE DISTRICTS

On Monday April 8, 2024, the Washington State Board of Pilotage Commissioners (BPC) will administer to qualified applicants a **Written Examination** to be followed by a **Simulator Evaluation of Shiphandling Skills (SESS)** to those eligible. Applicants who meet or exceed the cut score set by the Board on the Written Examination and Simulator Evaluation will be placed on a waiting list to be called into a pilot training program as needed. Successful completion of a pilot training program is required to qualify for issuance of a state pilot license for the applicable Pilotage District.

The aspirant **Examination Application** is available on our website at www.pilotage.wa.gov, by written or e-mail request, and as an appendix to this Handbook.

Board of Pilotage Commissioners
2901 Third Avenue, Suite 500
Seattle, WA 98121
Fax: 206-515-3906
E-mail: PilotageInfo@wsdot.wa.gov.

Any inquiries regarding the application contents or process must be made in writing via email: PilotageInfo@wsdot.wa.gov.

The complete application must be postmarked to the Board office at 2901 Third Avenue, Suite 500, Seattle, WA 98121, by March 1, 2024, unless prior written permission to file an application at a later time is obtained from the Board. If you wish to deliver your application in-person, please contact Jolene Hamel at either 206.515.3904 or hamelj@wsdot.wa.gov. Applications will not be considered valid if they are faxed or emailed.

Please submit all parts of the application together in one envelope, including the reference letter. The 2024 Washington State Marine Pilot Exam and licensing process will be governed by and administered pursuant to [Chapter 363-116 WAC](#). A copy of the applicable WAC is available on our website.

Washington State Board of Pilotage Commissioners Examination Timeline



Board of Pilotage Commissioners
2901 Third Avenue, Suite 500
Seattle, WA 98121
Fax: 206-515-3906
Email: PilotageInfo@wsdot.wa.gov
<https://pilotage.wa.gov/>

Impartiality Statement: The Washington State Board of Pilotage Commissioners (BPC) is committed to actively implementing the practice of impartiality with regard to all recruitment, selection, training, and licensing of marine pilots. This commitment prohibits the board from tolerating any bias or undue influence with regard to organizational and professional associations, past employment experience, stakeholder representation on boards and committees, and financial interests.

Commitment to Diversity, Equity, and Inclusion (DEI): The Washington State Board of Pilotage Commissioners (BPC) is committed to supporting diversity, equity, and inclusion (DEI) within the board's activities. Specifically, the Board will not tolerate and will actively prevent unfair practices or treatment of pilots and stakeholders due to race, ethnicity, gender, age, sexual orientation, national origin, religion, or disability.

The BPC strongly supports inclusion and diversity in pilotage. In April 2022, the Board transitioned the BPC/PSP Joint Diversity Committee (JDC), established in 2016, to the BPC Diversity, Equity, and Inclusion Committee (DEIC) with the goal to: Promote diversity in the Washington state-licensed marine pilot corps.

Helpful Links to Additional Information: For information regarding Puget Sound and Grays Harbor, the two districts for which the BPC issues pilot licenses, please visit <https://www.pspilots.org/> (Puget Sound) and <https://www.portofgraysharbor.com/> (Grays Harbor).

For information regarding the BPC, its staff, and its governing board, please visit <https://pilotage.wa.gov/about-us.html>.

For direct access to review the applicable sections of the Washington Administrative Code, please visit:

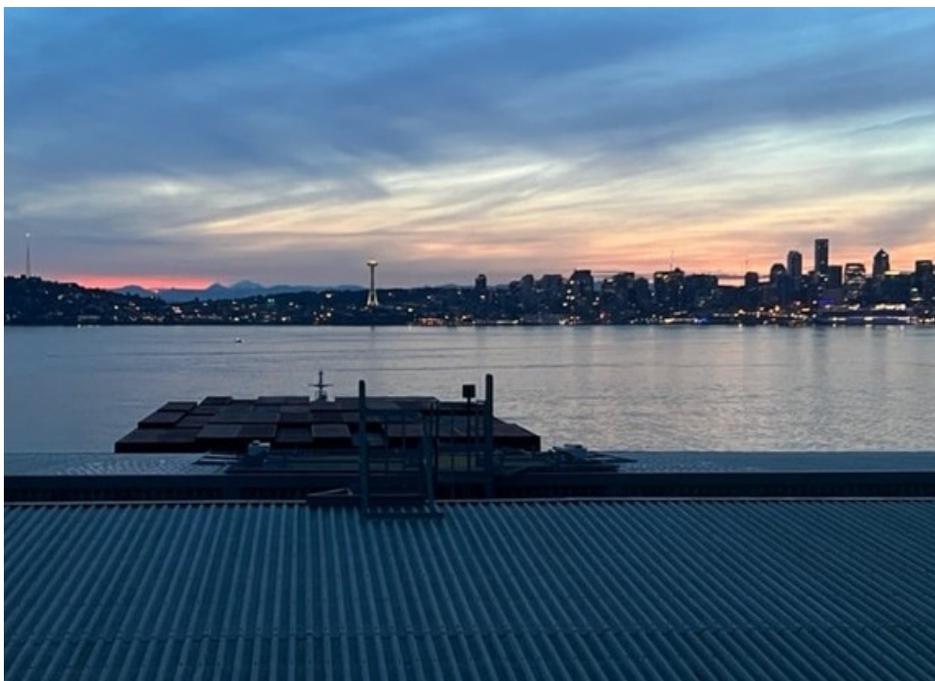
- **Qualifications:** <https://app.leg.wa.gov/WAC/default.aspx?cite=363-116-0751>
- **Written Exam:** <https://app.leg.wa.gov/WAC/default.aspx?cite=363-116-076&pdf=true>
- **Simulator Evaluation:** <https://app.leg.wa.gov/WAC/default.aspx?cite=363-116-077&pdf=true>

PREREQUISITES TO ACCEPTANCE

Prerequisites to Acceptance

To be admitted into the Washington State pilot training program, the following pre-requisites must be met:

1. The aspirant must be over the age of 25 and under the age of 70.
2. The aspirant must be a citizen of the United States.
3. The aspirant must meet the minimum required Captain sea service as detailed in [WAC 363-116-0751](#).
4. The aspirant must submit an Examination Application and supporting documentation, including employment history, a letter of reference, documentation of sea service, copies of all USCG licenses. Details regarding this documentation can be found in the Examination Application.
5. Federal Pilotage Requirements are NOT required to qualify for the exam process.
6. The aspirant must receive a passing score on the Written Exam (to be administered via computer-based testing platform and remotely proctored).
7. The aspirant must receive a passing score on the Simulator Evaluation of Shiphandling Skills (SESS).
8. Fees: A \$400 application fee is due upon submission of the Examination Application and supporting documents. If approved to test, the aspirant will pay a \$1,000 fee to take the Written Exam. Upon approval to enter the Simulator Evaluation, the fee is \$2,000.



WRITTEN EXAM

Background on Written Exam Development

In accordance with psychometric best practices, a Job Task Analysis (JTA) was conducted in the summer of 2023. A panel of Subject Matter Experts (SMEs) convened to identify and detail the knowledge and tasks necessary to be a successful Washington State Pilot. These knowledge areas and tasks were then reviewed by pilots and retired pilots, who both validated and weighted the content for the job role. The full Pilot job role description is presented in the **Job Role Content Outline**. The exam process (both the Written Exam and the Simulator Evaluation of Shiphandling Skills) will assess a subset of the knowledge areas and tasks within this outline.

These weightings were analyzed to develop the **Exam Blueprint**, which details the percentage of test questions of the Written Exam that will cover specific knowledge and task areas. Further, the Simulator Evaluation will address shiphandling skills that fall within four of the Domains in the Exam Blueprint.

Following the JTA and validation / approval of the Exam Blueprint, two additional panels of SMEs were engaged over the span of six months to develop the multiple-choice test questions for the Written Exam and to design and test the skills to be assessed in the Simulator Evaluation. The passing scores for both exams are established in a two-part process utilizing a modified-Angoff method, in accordance with psychometric best practice and engaging multiple SMEs and a team of psychometricians. This method involves careful review of each test question by the SME panel, resulting in an estimation of each question's difficulty. All estimates are analyzed for reliability and consistency, and the cut score is derived from these results.

Test Specifications

The exam will have **100 multiple-choice questions** that are mapped to the Exam Blueprint. All questions will have four possible response options and only one correct answer. Every question will have a citation (Author, Year) provided.

There will be no topics covered on the exam that are not listed in the Exam Blueprint, and there will be no questions drawn from references other than those listed on the 2024 Exam Bibliography. For example, Chart One is not listed on the Bibliography, as the knowledge related to Chart One that may be covered on the exam can be found clearly in other texts listed in the Bibliography. See Appendix A for sample questions.

Written Exam Specifications

Date	April 8, 2024 (9:00 A.M. – 2:00 P.M. PST)
Time Allowed	Five (5) Hours
Total Number of Questions	100 Questions
Type of Questions	Multiple-choice, with four (4) response options, one (1) correct response, and citation for source provided
Sections¹	Section 1: 2 Hours & 15 Minutes Break: 15 Minutes Section 2: 2 Hours & 15 Minutes
Materials Allowed During Exam	Small (no larger than 24" x 24") dry-erase board and marker, to be used for scratch paper One piece of blank 11" x 17" paper, used to keep track of any items which the examinee wishes to protest (more details provided to aspirants after their approval to test) A calculator is not required/allowed

¹Examinees move at their own pace from Section 1 to the Break as soon as they complete 50 items. They will start Section 2 once the 15-minute break is over, and can finish the test session when they have completed the second set of 50 questions.

Administration

The 2024 Written Exam will be administered on April 8, 2024, from 9:00 A.M. to 2:00 P.M. PST. The exam will be computer-based, utilizing the Surpass test platform. Videos about Surpass are available at www.Surpass.com.

Examinees will take the exam in a location of their choosing, as long as the environment meets the requirements set forth in the 2024 Remote Proctoring Guidelines, which will be provided to aspirants following their approval to test. Please see the following section for additional information regarding remote proctoring.

Once an aspirant receives approval to test from the BPC, they can request a 1:1 virtual meeting with the testing team to review the remote proctoring requirements and process; this is an optional meeting and not required by aspirants. Contact information will be provided with approval notification email.

Remote Proctoring

Remote proctoring is a testing industry-accepted practice, with numerous security and anti-cheating mechanisms in place. Examinees may use their own computer, as long as it meets specific hardware and software requirements as outlined in the 2024 Remote Proctoring Guidelines. Moderate internet speed is also required, as is a webcam and microphone.

Each examinee will be monitored by a live proctor for the entirety of the exam duration. They will have access to a chat function so that they may ask any technical-related questions of the proctor. The proctors will have no pilotage-specific knowledge.

The remote proctoring process is as follows:

1. Aspirant receives notification of eligibility to take the written exam via email from BPC by March 21st at the latest.
2. Once an aspirant receives approval to test from the BPC, they can request a 1:1 virtual meeting with the testing team to review the remote proctoring requirements and process. Contact information will be provided with approval notification email.
3. Aspirant receives specific instructions in notification email regarding their account with Surpass testing platform.
4. Aspirant is provided detailed instructions and a key code and will use their account information and key code on the examination day to access the test.
5. Aspirant is to run the hardware and software test (more details will be provided in the Remote Proctoring Guidelines) at least two (2) weeks (14 days) prior to examination day.
6. If the aspirant has any issues or questions, they can email a consulting psychometrician (contact information to be provided to qualified aspirants) to set up a 1:1 meeting. They must request this meeting by March 25, 2024.
7. On April 8, 2024, the aspirant prepares their testing environment according to the 2024 Remote Proctoring Guidelines.
8. At least 30 minutes prior to the scheduled exam time on April 8, 2024, the aspirant will sign on and check all last-minute requirements.

Scoring and Notification

In accordance with the WAC and psychometric best practices, the data from the written exam administration will be analyzed by a team of psychometricians. A passing score will be recommended to the BPC.

Once the passing score is approved, aspirants will be notified whether they passed or failed the exam via email on April 12, 2024.

Appeals: Written Exam

If an aspirant would like to make an appeal about a specific question on the Written Exam, an Appeals Form will be provided at the conclusion of each 50-question section of the exam. This form will allow the aspirant to note which item they are appealing and what their specific concerns may be.

The content of the Appeals Forms will be reviewed immediately following the written exam administration by the psychometric team and the Appeals Committee, consisting of three SMEs who will have access to all source material from the 2024 Bibliography. If any question is found to be erroneous, it will be removed from the analysis and the total score for all aspirants. Notification of such an adjustment will be made in writing to all examinees.



SIMULATOR EVALUATION

Simulator Evaluation of Shiphandling Skills (SESS)

The 2024 Simulator Evaluation of Shiphandling Skills (SESS) is scheduled in the OSV (Offshore Supply Vessel) simulator at MITAGS West, Seattle Washington, the week of April 22, 2024. The objective of the SESS is to assess an aspirant's overall skills as a Pilot. You will be acting as the Pilot during the evaluation, and you will have a Captain and Helmsperson with you on the bridge.

In order for candidates to more effectively plan their study time the following guidelines are provided: The simulation evaluation will focus primarily on general ship handling skills. There are no charts to study ahead of time, as the specific area chart will be provided to examinees following their familiarization session.

Simulator training or experience is not a prerequisite to passing the SESS. Limited guided simulation time (approximately 1 hour), as well as a broad outline of the skills to be assessed, will be provided to all aspirants progressing to the SESS portion of the exam.

Information regarding scheduling for the familiarization and testing sessions will be provided to aspirants once they are notified on April 12th that they have passed the Written Exam.



General Instructions for the SESS

1. The SESS will focus primarily on general shiphandling skills. Candidates wishing to practice for the exam in a simulator would do well to focus on shiphandling skills rather than on the type of pilot prep courses that were offered by outside parties in the past. Candidates should not assume that the content or format of the upcoming simulation evaluation will be similar to past evaluations.
2. The evaluation will not include the Master Pilot Exchange and watch turnover and you will not be expected to conduct either one.
3. You are acting as the Pilot during the evaluation.
4. You will have a Captain and a Helmperson with you on the bridge.
5. The ECDIS will be on in the simulator and will give a heading line and a course-over-ground vector. You will not be permitted to make any adjustments.
6. The radars are secured and are not available for use. There will be unrestricted visibility during the evaluation.
7. Your exam will be recorded from the moment you walk onto the bridge.
8. In the event of technical problems or malfunctions affecting the OSV simulator prior to or during a simulator session, the Evaluation will be switched to one of the other two remaining simulators available at MITAGS West.

Familiarization Session

Each aspirant will be given one hour conning time in the simulator on the evening prior to your evaluation session. During this familiarization session, there will be a Captain and a Helmperson with the aspirant on the bridge. Each aspirant will receive the full SESS Examinee Packet, including port guidelines and a chartlet, immediately following the familiarization session.



Scoring and Notification

In accordance with [WAC 173-340-820](#) and psychometric best practices, the data from the SESS will be analyzed by a team of psychometricians with guidance provided by SMEs. A passing score will be recommended to the BPC for approval after all the simulator evaluation sessions occur. *This passing score will be based on (1) the modified-Angoff process completed prior to the administration and (2) the results of the administered evaluations, considering statistical analysis of the items and the sample of test-takers.*

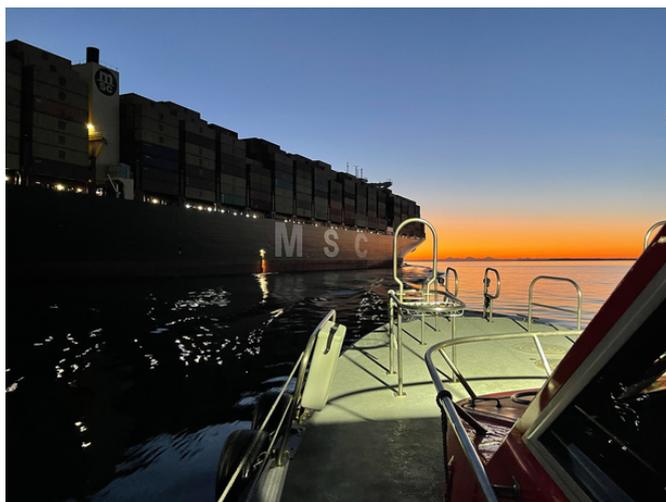
Once the passing score is approved, aspirants will be notified of their results via email.

The overall scores will also be posted on the BPC website.

In addition to the overall results of the SESS, each aspirant will receive a Simulator Evaluation of Shiphandling Skills Feedback Form, which will present a percentage-based grade to relay their performance in each main category of shiphandling tasks. The purpose of this feedback is to provide pilot aspirants information to help them prepare to retake the SESS in the future, if they choose to do so.

Appeals: SESS

In accordance with [WAC 363-116-084](#) an aspirant may submit an appeal to the board to review their SESS results if they feel they were scored incorrectly. This appeal must be made in writing and filed within five (5) business days following the SESS results email being sent from BPC. The appellant will have an opportunity to review their evaluation session results with the SESS Appeals Committee. All decisions regarding the appeal will be given in writing to the appellant, within five (5) business days following the review session.



APPENDIX A: SAMPLE QUESTIONS

Sample Questions for Release

*** Indicates Correct Answer

These sample questions reflect the format of the exam, but are not necessarily indicative of the difficulty level of the actual test.

1. According to Rule 20 of 72 COLREGS, when shall The Rules concerning shapes be complied with? (USCG Navigation Rules, 2014)
 - a. They shall be complied with by day.***
 - b. They shall be complied with from sunrise to sunset.
 - c. They shall be complied with from sunset to sunrise.
 - d. They shall be complied with at all times.

2. If dredging an anchor is to be considered a successful maneuver, which action should the shiphandler consider? (House, 2002)
 - a. Pay out the anchor chain to three times the depth of the water.
 - b. Add as much speed as possible to move the pivot point farther forward.
 - c. Walk the anchor out at the last minute to avoid wear on the anchor gear.
 - d. Walk the anchor out as soon as possible to acquire the feel of the vessel.***

3. What effect on steering, if any, can be expected from a vessel trimmed by the head? (MacElrevey & MacElrevey, 2018)
 - a. Neutral directional stability
 - b. Positive directional stability
 - c. Negative directional stability***
 - d. No effect on directional stability

4. What series of steps should be taken to keep the phase of anchoring simple? (MacElrevey & MacElrevey, 2018)
 - a. Approach, placement, laying out, and fetching up***
 - b. Approach, wind, current, and placement
 - c. Placement, laying out, range, and bearing
 - d. Entering, reduce speed, back and fill, and final heading

5. How does vessel speed impact the effectiveness of assist tugs? (Hooyer, 1983)
 - a. Tug effectiveness increases as the vessel's speed increases.
 - b. As vessel speed increases, tugs are better able to remain at right angles to the vessel's hull.
 - c. An increase in vessel speed has little influence on assist tug effectiveness.
 - d. Tug effectiveness diminishes with the increase in vessel speed.***

