

<p>Meeting Date: August 1, 2024</p>	<p>Board of Pilot Commissioners for the Bays of San Francisco, San Pablo, and Suisun 660 Davis Street, San Francisco, CA 94111</p> <p>AD HOC COMMITTEE TO REVIEW THE PILOT TRAINEE TRAINING PROGRAM SELECTION EXAM MEETING MINUTES</p>	<p>Page 1 of 10</p>
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ATTENDANCE

Committee Members Present

Jennifer Ferrera Schmid, Public Member, Committee Chairperson
 Captain Robert Carr, Pilot Member
 Captain Dave Gates, Pilot Member (Retired)
 Captain Cevan LeSieur, Pilot Member
 Captain Jesse Pullin, Pilot Member

Committee Members Absent

None.

Board Staff Present

Allen Garfinkle, Executive Director
 Matthew Millspaugh, Assistant Director
 Alethea Wong, Licensing and Training Programs Manager
 Mari McNeill, Administrative Coordinator
 Patrick Tuck, Board Counsel (by phone)

Identified Public Present (in person and by phone)

Captain John Carlier, San Francisco Bar Pilots (SFBP) President and Port Agent
 Captain Anne McIntyre, Business Director, SFBP
 Kevin Baldwin, SFBP General Counsel
 Roma Cristia-Plant, public (by phone)
 Amanda Dainis, Psychometrician, Dainis & Company, Inc. (Dainis) (by phone)

OPEN MEETING

1. Call to order and roll call. (Acting Chairperson Schmid)

Executive Director Garfinkle introduced the meeting and suggested Ms. Schmid act as chair until the official nomination.

Acting chair Schmid called the meeting to order at 9:32 a.m. Licensing and Training Programs Manager, Alethea (Ally) Wong called the roll and confirmed a quorum.

2. Committee to select a chairperson. (Acting Chairperson Schmid)

Possible committee action to select a chairperson.

MOTION: Committee member Carr nominated and moved to approve the appointment of committee member Schmid as Committee chairperson.

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VOTE: Committee member Pullin seconded the motion.
YES: Schmid, Carr, Gates, LeSieur, Pullin.
NO: None.
ABSTAIN: None.

ACTION: The motion was approved.

3. Review and approval of Committee meeting minutes. (Chairperson Schmid)

(As this is a new committee, there are no minutes to review.)

None.

Agenda item 8 was discussed prior to agenda item 4. (Since agenda item 4 was anticipated to take significant time, Executive Director Garfinkle requested to introduce Ms. Dainis and give her an opportunity to speak first.)

8. Committee member and public comments on matters not on the agenda. (Chairperson Schmid)

Ms. Dainis introduced herself as a psychometrician for Dainis & Company, Inc. (Dainis) and provided details on their recent work related to pilot exams for various entities, including Washington State Board of Pilot Commissioners, Columbia River Pilots, and Southeast Alaska Pilots Association. Ms. Dainis reported when developing exams, Dainis recognizes that the needs of [maritime] pilots are very different from other entities that utilize psychometricians. Dainis has a team of experts who assist with exam development to ensure it is legally defensible. An example of Danis’ recent exam development cited by Ms. Dainis included:

- Developing the exam for Washington State Board of Pilot Commissioners, Dainis developed a new approach to the grading system that was very different from the one utilized in the past. Candidates went through two scenarios of two separate jobs with different vessels in the same waterway, with a break between, so if candidates had experience with one vessel, they could demonstrate their expertise when piloting an unfamiliar vessel. They ran 20 candidates through the simulator in five days. Each candidate had an hour for their two simulations (30 minutes for each simulation).
- Each simulation day consisted of four candidates.
- When evaluating performance, Dainis used a panel of three active pilots. The simulator data was heavily weighed, to provide for objective scoring criteria and decrease subjective criteria to maximize fair and consistent scoring.
- Consulting with subject matter experts (SME’s) from the location corresponding with the exam, Dainis has developed unique pilot simulations. The terrain contributes to the unique simulation attributes.

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Chair Schmid emphasized the importance of retaining the confidentiality of proprietary information, stating the contract should contain language to protect intellectual property developed within the exam as belonging to the Board. This material should not be released without express permission.

Executive Director Garfinkle stated the Board has used the California Department of Human Resources' (CalHR) psychometricians for exams in the past. However, the Board staff can investigate other psychometric options and release a request for proposal, as necessary. Executive Director Garfinkle further noted the last job task analysis was performed in 2019, and the Committee should consider whether it should be updated for the next exam.

Ms. Dainis recommended generating a new job task analysis even if the job hasn't fundamentally changed. Ms. Dainis estimated it would take approximately 10 months to develop the simulations needed, including time to perform a job analysis, write new exam questions, and recommended a digital test instead of an in-person, written one.

Ms. Dainis reported the following: To confirm who is taking the exam and ensure exam security, the remote proctoring test Dainis uses is a locked down browser with camera, candidates are not allowed to go off camera outside of announced breaks and they have two proctors observing each candidate throughout their exam period. The method provides a high level of security and a greater level of assurance that exam takers adhere to all exam protocols than an in-person exam. The exam is then scored for review the next day and to confirm the exam was administered correctly. Utilization of remote exam/proctoring methods increased significantly during the Corona Virus Disease (COVID) epidemic quarantine, but it was an internationally recognized method before the pandemic. The remote exam is recorded and if there is an action taken by an examinee which raises a red flag, such as an examinee looking off camera or picking something up from off camera, then designated individuals can evaluate the candidate's actions and make a judgement if there is an issue. Candidates are encouraged to choose a room with only one entrance so it can be confirmed that no one besides themselves entered the room during the exam. Using this platform, Dainis administered an exam to 26 candidates and 20 went on to the simulator portion of the exam.

4. Report and discussion of the 2022 Pilot Trainee Training Program Selection Exam (Exam), including information on Exam preparation, staffing, venue, execution, outcome, lessons learned, contractual considerations, and best practices. (Board staff and Committee members)

Possible committee action to make recommendations to the Board on Exam preparation, staffing, venue, contractual considerations and/or policy changes, and scope of work that may result from the above discussion.

Executive Director Garfinkle and committee member Gates reported Dr. Norman Hertz, PhD and Dr. Roberta Chin, PhD developed the first simulator exam in 2002. They formed their

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own psychometrics business by the time of the second pilot trainee exam, and later parted ways, but Dr. Hertz remained involved with the Board’s exam development through the 2010 exam. In 2014, the Board began using CalHR’s psychometricians for exam development and has engaged them since.

Executive Director Garfinkle stated that the California State University Maritime Academy (CMA) may not have the resources to develop the exam as their Professional and Continuing Education department (PaCE) has faced revenue challenges, in part due to the loss of business CMA experienced when the United States Coast Guard (USCG) eliminated the radar certification program. To increase diversity, the Board revised its regulations to allow for an expanded body of exam candidates to qualify for the exam.

Assistant Director Millspaugh stated that CalHR may not have the capability to administer a virtual exam. If the committee decides on a virtual exam, discussions with CalHR will need to be held to determine if it is outside CalHR’s capability, if so then CalHR may need to contract out or the Board may need to investigate contractors other than CalHR.

Captain McIntyre reported she is very impressed with Dainis and stated that their evaluation process sounded very cutting edge. She further reported that allowing a new vendor like Dainis to conduct the exam would allow for a clean slate, eliminate some of the history and concerns from past exams, and use less time for pilots.

Committee member Gates stated a desire to step aside from heading the exam to bring a fresh take on the development of a new exam, allowing for innovative changes like the details Dainis mentioned.

Committee members were in agreeance that the timeframes Dainis mentioned were reasonable and less demanding on evaluators, which would allow for a more flexible schedule and the potential to have more date options for candidates to select from. Committee members also recognized the value of the legal defensibility Dainis could bring to the exam. Other options discussed included:

- Using Artificial Intelligence to write exam questions and including questions to screen for character instead of all questions being strictly related to maritime knowledge.
- Reviewing California’s contracting rules to confirm if using a vendor outside of CMA is a viable option.
- Checking with organizations that no longer use their simulator such as the Chevron Corporation in San Ramon.
- Investigating using alternative simulators, such as the simulators utilized by other entities such as the simulator by Orange Coast College in Orange County.

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Executive Director Garfinkle reported challenges related to contracting with a vendor other than CalHR. The Board would need to go through a request for proposal process, which would add to the timeline for development of a new exam. He added that the commissioners had, in the past, discussed that other pilot groups only conducted a written test or interview (because ability to learn is more important than current skill sets). If it was desired to eliminate the simulator portion of the exam, the Board would have to change the regulations, adding to the timeline. Executive Director Garfinkle also emphasized the importance of keeping the simulator portion of the exam, which was added in response to a lawsuit, stating that a simulator is of great value because the Board can see a candidate in action. Executive Director Garfinkle further reported a candidate who may be able to demonstrate written knowledge may not be able to apply it well in practice, due to the additional stress time pressures add to performing the necessary tasks.

Committee members Pullin and LeSieur reported their interest in seeing examples of Dainis' simulator tests. Captain McIntyre stated that Dainis will be conducting an exam in April, and committee members may be able to see examples then. Committee member Pullin added that some people can rent time in a simulator and others cannot (due to financial challenges, as simulator time can be expensive), resulting in uneven advantages.

Executive Director Garfinkle stated there would be more details related to this conversation under agenda item seven. The Board's exam development takes at least a year, outside of the contracting process. The Board should advertise the exam by December 2025 and through April 2026, and it is recommended to have a complete exam ready prior to the advertisement. The exam development must start summer of 2025 to be ready by the summer of 2026.

Committee members discussed the simulator time needed for exam development (1,200 man-hours / 13-15 days), trial checks (5-8 days, in an attempt to debug the test), candidate familiarization (one day), and actual candidate testing (three days).

5. Review and discussion on choice of providers to create, host, and execute simulator component of Exam proposed to be held in 2026.

Possible committee action to make recommendation to Board on choice of providers to create, host and execute simulator component of Exam proposed to be held in 2026.

Executive Director Garfinkle reported which psychometricians the Board can use depends on the State's contracting abilities and limitations. Board staff will pursue more in-depth details to determine which contracting options are viable.

Assistant Director Millspaugh added that the desires and decisions of the Ad Hoc Committee to Review the Pilot Trainee Training Program Selection Exam and the Board will determine which entities and details Board staff will investigate and pursue.

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Executive Director Garfinkle stated past exams were under one contract for written and practical exams through CMA. The regulations do not limit the specific details of how the exam is conducted, such as whether the exam is in-person or virtual. The regulations only specify the evaluation scheme. If the committee would like Board staff to pursue a specific psychometric entity, such as Dainis, the committee should vote on it during the meeting. Several committee members voiced an interest in the option but did not put to an official vote. Assistant Director Millspaugh stated that the committee may want to look for a contractor that can provide similar services as Dainis, but not necessarily Dainis specifically.

Committee member LeSieur stated that having the written exam provided virtually could increase the opportunity for diversity. Some pilot exams administered by other entities charge three to four times as much as BOPC charges candidates to take the test. Executive Director Garfinkle stated that when the Board set the exam price it was to help ensure that applicants were committed to taking the exam and pursuing training in the Board’s jurisdiction.

Committee members and attendees requested Board staff investigate other psychometric entities, with experience in pilot exams, that provide the same services as Dainis. It was suggested that while the Board staff investigate options, they should contact Steve Shriver from CalHR. It was requested that Board staff also analyze CalHR’s capabilities and draft a justification for an outside contractor if CalHR can’t provide the level of work needed for the exam. Assistant Director Millspaugh stated Board staff would need to investigate options contractually and who can provide what the Board is looking for while meeting current industry standards. Executive Director Garfinkle added that he had a conversation with CalHR representative, Steve Shriver, and he seemed interested.

MOTION: Committee member Gates moved to have Board Staff investigate psychometric entities in and outside of California. Committee member LeSieur seconded the motion.

VOTE: YES: Schmid, Carr, Gates, LeSieur, Pullin.
NO: None.
ABSTAIN: None.

ACTION: The motion was approved.

6. Discuss and identify ways to diversify the Exam candidate pool.

Possible committee action for recommendations to the Board regarding ways to diversify the Exam candidate pool.

Executive Director Garfinkle summarized the points discussed corresponding to the above agenda items, such as holding the written exam virtually to allow for a wider candidate pool. He encouraged committee members to continue to provide suggestions on ways to diversify the exam candidate pool and mentioned some efforts that were made in the past, such as

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reaching out to academies and unions related to maritime employment, the Women Offshore group, and the Association of Black Maritime Graduates. Captain McIntyre added that the SFBP also conducts extensive outreach and mentoring to youth interested in the maritime field.

Committee members and attendees discussed outreach to other occupation pools, such as unions, officers, military (including the U.S Navy), and sailors. Other outreach methods mentioned included holding “How to Become a Pilot Day,” additional mariner training, bulletin board posts, newspaper ads (Army, Guam, Puerto Rico, and other United States territory newspapers), directed online ads, and meta-tagging the Board website content (Assistant Director Millsbaugh stated he could have Board staff investigate this).

Captain McIntyre suggested, to reduce potential barriers related to the simulator exam, the written portion of the exam could be a free virtual test and the simulator portion of the exam could be scheduled separately with multiple dates and times available to choose from, to allow flexibility for candidates who are on a ship during some exam dates. Committee member Gates added that the Board could have more time between the written and simulator portions of the exam so candidates could have time to plan and schedule their simulator exam after passing the written portion. Mr. Baldwin and Committee member LeSieur agreed that a candidate passing a virtual written exam successfully might encourage the candidate to consider a pilot career more seriously. Committee members Carr and Gates agreed the idea of a virtual written portion of the exam should be pursued to encourage diversity. Executive Director Garfinkle noted that the virtual written test would have to be tied to the job analysis. The regulations would need to be changed if the Board decided to adjust the fees charged for the exam. The regulations would not need to be adjusted to change the timeframe for the exam.

Ms. Cristia-Plant stated the Board should develop a new job analysis and investigate the kind of exam that ensures diversity goals while screening candidates to ensure they have the character needed for the job. Executive Director Garfinkle agreed that a new job task analysis, and psychometrician might help reduce limits in diversity.

Captain McIntyre stated the previous exam focused more on existing piloting knowledge and less on the candidate’s potential. Committee member Gates agreed that the result from the 2014 exam related more to seaman skills. There was further discussion that the core of the pilot test should be situational awareness, response, and stress, which should account for 80% of the test.

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- 7. Determine efforts, including issues and considerations related to the Exam process. Considerations may include the need for further research and analysis.**

Possible committee action to make recommendation(s) to the Board regarding efforts and considerations needed to establish or implement future Exams.

Executive Director Garfinkle stated that many points discussed, such as the job task analysis and scoring criteria, can't be addressed until the new exam framework is established; then the Board will be ready to delve into the finer details of the exam. Instead, he encouraged the committee to discuss the second part of the email included in the attachment corresponding to agenda item 7.

The committee and attendees discussed policy considerations such as setting policy on simulator coaching and including considerations and language in the request for proposals that ensures even scoring (the psychometrician double checking scores, consistent evaluator energy levels, time given for testing, simulator training, rest times, study time, etc.).

Director Garfinkle detailed some of the Department of Justice (DOJ) investigation suggestions related to oral interview instructions and creating an exam manual with policies included. Committee member Carr and Ms. Cristia-Plant agreed that creating policies would also provide additional direction for staff. Assistant Director Millspaugh suggested having the agreement include that the contractor write these instructions in a manual and additional detail should be added to the agreement to eliminate future gaps in responsibility.

Agenda item 8 discussion continued below.

- 8. Committee member and public comments not on the agenda. (Chair Schmid)**

Ms. Cristia-Plant stated that, before discussing if the Board can use a contractor other than CalHR, she would like to see the Board staff and CalHR rigorously discuss the points from this meeting to see if they can perform the desired scope. If the Board contracts with and hires a psychometrician other than CalHR, then the exam costs will be much greater than historical costs. Furthermore, if the Board decides to amend current regulations for a new exam process, then the amendment should also include increasing the time during which a trainee can be dismissed without cause to more than 12 months, as the Pilot Evaluation Committee (PEC) has requested, so the PEC can properly observe and evaluate candidates.

Committee member Gates suggested breaking up the licensing into phases so trainees can get provisional licensing with additional time for continued evaluation prior to full licensing. Committee member Pullin noted that the timeline should still depend on how hard they're willing to work. Captain McIntyre added that if the candidate pool is expanded then additional time may be needed for planning, training, and evaluation for candidates with less experience.

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Committee member LeSieur and Captain McIntyre stated that pilot exams are held all over the world but there is no standard exam template, and the Board has one of the best qualification processes.

9. Schedule the next Committee meeting, and proposals for items on the next meeting agenda, if applicable. (Chairperson)

Assistant Director Millspaugh stated that Board staff would investigate contracting options for required exam components that meet current industry standards.

Chair Schmid recommended discussing the August 1, 2024, meeting points in the August 22, 2024, Board meeting and having another meeting in one to two months.

Executive Director Garfinkle stated that:

- The next meeting should be held early to mid-September so Board staff can have enough time to meet with CalHR.
- Even if the Request for Proposals is initiated in October, the exam contract would not be able to start until April or May.
- If the Board can initiate the exam contract prior to next summer, then the exam will be on track to meet the target start date.
- Board staff will discuss what is discovered, based on today, in the next Ad Hoc Committee to Review the Pilot Trainee Training Program Selection Exam Meeting.

Committee member LeSieur stated the Board needs to determine what other agencies charge for their exams.

The committee members decided to hold the next Ad Hoc Committee to Review the Pilot Trainee Training Program Selection Exam Meeting at 9:30 a.m. on September 24, 2024.

10. Adjournment.

Chair Schmid adjourned the meeting at 12:30 p.m.

Submitted by:



Executive Director Garfinkle
Executive Director

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ACRONYM INDEX

Acronyms / Abbreviations	Definition
BOPC/Board	Board of Pilot Commissioners
CA	California
CalHR	California Department of Human Resources
CalSTA	California State Transportation Agency
CMA	California State University Maritime Academy / California Maritime Academy / Cal Maritime
COVID	Corona Virus Disease
Dainis	Dainis & Company, Inc.
DOJ	Department of Justice
LA	Los Angeles
PaCE	Professional and Continuing Education department
PEC	Pilot Evaluation Committee
SFBP	San Francisco Bar Pilots
SME	Subject Matter Experts
USCG	United States Coast Guard