

**Trainee/Pilot Program
Board Staff Forecasting Report
As of 01/01/2022**

Introduction

The Board of Pilot Commissioners for the Bays of San Francisco, San Pablo, and Suisun (Board or BOPC) licenses and regulates up to 60 maritime pilots. The Pilot Power Committee is charged with evaluating, every six months, the adequacy in the current number of pilots and pilot trainees in order to provide the Board with guidance in making decisions for contracting with one or more pilot trainees for participation in the Pilot Trainee Training Program.

In January 2022, a retirement survey was deployed to all fifty-two (52) licensed pilots. The Board staff received fifty-three (53) responses to the survey.

The January 2022 retirement survey and historical data regarding the average length of time a trainee is in the Pilot Trainee Training Program was utilized to forecast the required number of pilots and pilot trainees from 2022 through 2028. Consideration to the following factors is recommended, however, they were not included in the forecast: reduction in licensed pilots due to death, disability, illnesses, resignation, or loss of license due to incidents.

Trainee Data

Trainee Statistics:				Graduates							
Exam Year	# on Eligibility List	# Graduated	Graduation Rate	Average # of Days in Program	Average # of Yrs/Mo.	Resigned	Request Deferral	Request Removal	In Program	Not Yet Picked Up	
2017	10	7	70%	604	1 yr/8 mo	1	1	1	N/A	N/A	
2019	19	5	26%	535	1 yr/6 mo	1	2	1	7	3	

Of the ten (10) candidates selected from the 2017 Exam, seven (7) completed the Pilot Trainee Training Program, resulting in a 70% success rate. The average number of days each trainee spent in the program before graduating was 604 days or 1 year and 8 months¹.

The 2019 Exam eligibility list is still active and to date five (5) of the nineteen (19) candidates (26%) have completed the Pilot Trainee Training Program, averaging 535 days or 1 year and 6 months to complete the program. There are currently seven (7) trainees in the Pilot Trainee Training Program and three (3) candidates remaining on the eligibility list. The current eligibility list expires on June 26, 2022. The next exam is planned for June 2022.

¹ Prior to the 2017 Exam, candidates entering the Pilot Trainee Training Program from 9/4/2014 through 1/4/2017 spent an average of 614 Days (1yr/8mo) in the program before graduating.

<p align="center">Currently 7 Trainees in Program Project: 6 graduates in 2022 and 1 graduate in 2023</p>		
Trainees as of 3/1/2022	Program Start Date	Projected Year to Graduate
Adams	10/1/2019	2022
Olmsted	10/1/2020	2022
Barnum	3/15/2021	2022
Snapp	3/15/2021	2022
Sappington	3/15/2021	2022
Pascucci	5/10/2021	2022
Burns	11/2/2021	2023

Based on an average period of 1yr/7mos to complete training

Based on the historical average length of time it takes for a trainee to complete the Pilot Trainee Training Program, 1 year and 7 months (average of the 2017 Exam and 2019 Exam graduates), six (6) of the current trainees are projected to complete the program in calendar year 2022 and one (1) will finish the program in 2023.

<p align="center">Currently 3 on Eligibility List Project: 3 graduates in 2023</p>		
Candidates from Eligibility List (2019 Exam)	Program Start Date	Projected Year to Graduate
Meyer	5/1/2022	2023
Barton	5/1/2022	2023
Paternoster	5/1/2022	2023

Based on the historical average length of time it takes for a trainee to complete the Pilot Trainee Training Program, (1 year and 7 months), the three (3) remaining candidates from the eligibility list would need to start the program no later than May 1, 2022 to ensure there is more than one (1) graduate in calendar year 2023.

Projected Completion Date for June Exam Candidates:

June Exam (Eligibility List TBD)			
New Eligibility List (As of 7/1/2022)	Program Start Date	Projected Year to Graduate	
Trainee #1	2022	2024	
Trainee #2	2022	2024	
Trainee #3	2022	2024	
Trainee #4	2022	2024	4 Grads in 2024
Trainee #5	2023	2025	
Trainee #6	2023	2025	
Trainee #7	2023	2025	
Trainee #8	2023	2025	4 Grads in 2025
Trainee #9	2024	2026	
Trainee #10	2024	2026	
Trainee #11	2024	2026	
Trainee #12	2024	2026	4 Grads in 2026

The above schedule is tentative and based on maintaining eight (8) trainees in the Pilot Trainee Training Program at any given time.

January 2022 Retirement Survey Data

Pilot Power Forecasting with January 2022 Survey Results - Q#1 Eligible to Retire								
Year	2022	2023	2024	2025	2026	2027	2028	After 2028
Eligible to Retire	5	0	2	1	3	6	3	32

Pilot Power Forecasting with January 2022 Survey Results - Q#2 Intention to Retire								
Year	2022	2023	2024	2025	2026	2027	2028	Beyond
Intent to Retire	6	2	1	2	1	2	2	37

As of January 1, 2022, there are fifty-two (52) licensed pilots. Based on the survey results from January 2022, eight (8) pilots (15% of the total pilots) will be eligible to retire in the next four years while eleven (11) pilots (21% of the total pilots) intend to retire in the next four years. For sake of conservatism, the “Eligible to Retire” survey results were incorporated in the forecasting calculations.

Pilot and Pilot Trainee Forecast (Maintaining Eight Trainees in the Program)

Trainees Forecasting (Based on an average period of 1yr/7mos to complete Training Program)							
Year	2022	2023	2024	2025	2026	2027	2028
Beginning # of Trainees	7	8	8	8	8	8	8
Graduates	6	4	4	4	4	4	4
Additional Trainees	7	4	4	4	4	4	4
Ending # of Trainees	8	8	8	8	8	8	8

Pilot Power Forecasting with January 2022 Survey Results - Q#1 Eligible to Retire							
Year	2022	2023	2024	2025	2026	2027	2028
Beginning # of Pilots	52	53	57	59	62	63	61
Eligible to Retire	5	0	2	1	3	6	3
Graduates	6	4	4	4	4	4	4
Ending # of Pilots	53	57	59	62	63	61	62

As of January 1, 2022, there are seven (7) trainees in the Pilot Trainee Training Program, of which six (6) trainees are projected to complete the program during calendar year 2022. To maintain eight (8) trainees in the program by the end of calendar year 2022, seven (7) more trainees need to be added to the program. There are three (3) candidates on the eligibility list that are available to be pulled into the program at any time. To ensure the program produces four (4) graduates in 2023, all three (3) candidates should be added to the program by May 1, 2022 (based on the average 1 year and 7-month timeframe to complete the program).

2022 - Based on the January 2022 Survey, five (5) pilots are eligible to retire in calendar year 2022. As of January 1, 2022, there are fifty-two (52) licensed pilots. Taking into consideration the pilots eligible to retire (five) and the projected number of trainee graduates (six), the projected number of pilots at the end of calendar year 2022 is fifty-three {52-5+6 = 53}.

2023 - Based on the January 2022 Survey, no (0) pilots are eligible to retire in calendar year 2023. As of January 1, 2023, there are fifty-three (53) projected licensed pilots. Taking into consideration the pilots eligible to retire (zero) and the projected number of trainee graduates (four), the projected number of pilots at the end of calendar year 2023 is fifty-seven {53-0+4 = 57}.

2024 - Based on the January 2022 Survey, two (2) pilots are eligible to retire in calendar year 2024. As of January 1, 2024, there are fifty-seven (57) projected licensed pilots. Taking into consideration the pilots eligible to retire (two) and the projected number of trainee graduates

(four), the projected number of pilots at the end of calendar year 2024 is fifty-nine {57-2+4 = 59}.

Pilot and Pilot Trainee Forecast (Maintaining Seven Trainees in the Program)

Trainees Forecasting (Based on an average period of 1yr/7mos to complete Training Program)							
Year	2022	2023	2024	2025	2026	2027	2028
Beginning # of Trainees	7	7	7	7	6	7	7
Graduates	6	4	3	4	3	3	4
Additional Trainees	6	4	3	3	4	3	4
Ending # of Trainees	7	7	7	6	7	7	7

Pilot Power Forecasting with January 2022 Survey Results - Q#1 Eligible to Retire							
Year	2022	2023	2024	2025	2026	2027	2028
Beginning # of Pilots	52	53	57	58	61	61	58
Eligible to Retire	5	0	2	1	3	6	3
Graduates	6	4	3	4	3	3	4
Ending # of Pilots	53	57	58	61	61	58	59

As of January 1, 2022, there are seven (7) trainees in the Pilot Trainee Training Program, of which six (6) trainees are projected to complete the program during calendar year 2022. To maintain seven (7) trainees in the program by the end of calendar year 2022, six (6) more trainees need to be added to the program in calendar year 2022. There are three (3) candidates on the eligibility list that are available to be pulled into the program at any time. To ensure the program produces four (4) graduates in 2023, all three (3) candidates should be added to the program by May 1, 2022 (based on the average 1 year and 7-month timeframe to complete the program).

2022 - Based on the January 2022 Survey, five (5) pilots are eligible to retire in calendar year 2022. As of January 1, 2022, there are fifty-two (52) licensed pilots. Taking into consideration the pilots eligible to retire (five) and the projected number of trainee graduates (six), the projected number of pilots at the end of calendar year 2022 is fifty-three {52-5+6 = 53}.

2023 - Based on the January 2022 Survey, no (0) pilots are eligible to retire in calendar year 2023. As of January 1, 2023, there are fifty-three (53) projected licensed pilots. Taking into consideration the pilots eligible to retire (zero) and the projected number of trainee graduates (four), the projected number of pilots at the end of calendar year 2023 is fifty-seven {53-0+4 = 57}.

2024 - Based on the January 2022 Survey, two (2) pilots are eligible to retire in calendar year 2024. As of January 1, 2024, there are fifty-seven (57) projected licensed pilots. Taking into consideration the pilots eligible to retire (two) and the projected number of trainee graduates

(three), the projected number of pilots at the end of calendar year 2024 is fifty-nine {57-2+4 = 58}.

Recommendation

Alternative 1

The Board staff recommends maintaining at least eight (8) trainees in the Pilot Trainee Training Program.

Based on the forecast generated utilizing the January 2022 retirement survey and the projected graduations, to maintain eight (8) trainees, the Board staff recommends:

- In 2022, add seven (7) trainees to the Pilot Trainee Training Program in calendar year 2022.
 - Pick up the remaining three (3) candidates from the current eligibility list by May 1, 2022 to ensure the number of graduates in 2023 is adequate to carry out the mission of the Board.
 - Pick up four (4) trainees from the June 2022 Exam eligibility list to ensure the number of graduates in 2024 is adequate to carry out the mission of the Board.

This recommendation is based on information available as of January 1, 2022 and should be reevaluated at the end of the calendar year 2022.

Benefits:

1. Ensuring adequate number of licensed pilots supports the draft fatigue regulations and reduces the risk of Minimum Rest Period (MRP) violations and fatigue related incidences.
2. Although eight (8) trainees are less than the Fiscal Year (FY) 2021-22 Budget Change Proposal (BCP) request of ten (10) trainees, it is more in line than seven (7) trainees. Following the budget augmentation justification and support provided to CalSTA and the Department of Finance (DOF) builds credibility and assists with future BCP requests.
3. As noted in the introduction, the forecast does not take into consideration a reduction in licensed pilots due to death, disability, illnesses, resignation, or loss of license due to incidents. Aiming for eight trainees in the program, allows for unforeseen events that impact the number of licensed pilots.

Risks:

1. If the Trainee Training Program is not adequately maintained, there is a risk of not having an adequate number of licensed pilots, impacting the ability to provide safe and efficient pilotage services.

Alternative 2

If Alternative 1 is not adopted, the Board staff recommends maintaining at least seven (7) trainees in the Pilot Trainee Training Program.

Based on the forecast generated utilizing the January 2022 retirement survey and the projected graduations, to maintain seven (7) trainees, the Board staff recommends:

- In 2022, add six (6) trainees to the Pilot Trainee Training Program in calendar year 2022.
 - Pick up the remaining three (3) candidates from the current eligibility list by May 1, 2022 to ensure the number of graduates in 2023 is adequate to carry out the mission of the Board.
 - Pick up three (3) trainees from the June 2022 Exam eligibility list to ensure the number of graduates in 2024 is adequate to carry out the mission of the Board.

This recommendation is based on information available as of January 1, 2022 and should be reevaluated at the end of the calendar year 2022.

Benefits:

1. Ensuring adequate number of licensed pilots supports the draft fatigue regulations and reduces the risk of Minimum Rest Period (MRP) violations and fatigue related incidences.
2. As noted in the introduction, the forecast does not take into consideration a reduction in licensed pilots due to death, disability, illnesses, resignation, or loss of license due to incidents. Aiming for at least seven trainees in the program, helps to mitigate unforeseen events that impact the number of licensed pilots.

Risks:

1. If the Trainee Training Program is not adequately maintained, there is a risk of not having an adequate number of licensed pilots, impacting the ability to provide safe and efficient pilotage services.
2. Seven (7) trainees are less than the FY 2021-22 Budget Change Proposal (BCP) request of ten (10) trainees. Not following the budget augmentation justification and support provided to CalSTA and the DOF, may impact the Board's credibility and future BCP requests.