

<p>Meeting Date: January 10, 2017</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>Navigation Technology Committee Meeting Minutes</p>	<p>Page 1 of 6</p>
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Committee Members Present

Captain George Livingstone, Chairman and Commissioner
Jennifer Ferrera Schmid, Commissioner
Dave Connolly, Commissioner
Captain Joseph Long, Port Agent

Committee Members Absent

John Schneider, Commissioner

Staff Present

Allen Garfinkle, Executive Director
Roma Cristia-Plant, Assistant Director
Dennis Eagan, Board Counsel
Luis Cruz, Staff Services Analyst
Sigrid Hjelle, Office Technician

Public Present

Commissioner Dave Hoppes; Captain Dave McCloy, San Francisco Bar Pilots (SFBP); Ray Paetzold, Business Director/General Counsel, SFBP; and Mike Jacob, Vice President-General Counsel, Pacific Merchant Shipping Association.

OPEN MEETING

1. Call to order and roll call. (Chairman Livingstone)

Committee Chairman Livingstone called the meeting to order at 9:34 a.m. Staff Services Analyst Cruz called the roll and confirmed a quorum.

2. Approval of minutes from the meeting held on December 12, 2016. (Chairman Livingstone)

Committee members were presented with the minutes of the meeting held on December 12, 2016. There was no discussion of the minutes and no public comments.

MOTION: Commissioner Connolly moved to approve the minutes of the meeting held on December 12, 2016. Commissioner Schmid seconded the motion.
VOTE: YES: Livingstone, Connolly, and Schmid.
NO: None.
ABSTAIN: Long.
ACTION: The motion was approved.

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3. Discussion regarding the process for and content of a San Francisco Bar Pilots (SFBP) Navigation Technology purchase proposal to the Committee and the Board. Possible Committee action to recommend to the Board a process for approving, and the contents of a SFBP Navigation Technology purchase proposal.

Executive Director Garfinkle reported that a process for a navigation technology purchase proposal was presented by the San Francisco Bar Pilots at the December 12, 2016, Committee meeting. He stated the process presented mirrored the pilot vessel purchase/capital improvement process, and involves a preliminary approval followed by a final approval. He further stated that from a staff perspective, the process identified in the SFBP’s handout dated 12/12/2016, item 1.e. appears a reasonable process from Board staff’s perspective for the navigation technology acquisition process.

Chairman Livingstone also noted the information presented by the SFBP that would constitute the application contents. The materials presented by the SFBP included memos describing the process, the SFBP’s presentation, and supporting materials including comparison charts for precision docking system hardware/software and route piloting system hardware, detailed cost estimates, a training plan covering 2017-2020, and a 2017 timeline.

Commissioner Connolly and Mr. Jacob agreed that the proposed process appears reasonable. Port Agent Long stated that he was not at the last Committee meeting, but the proposed process appears reasonable to him, and that the Committee should recommend the process to the Board.

MOTION: Commissioner Connolly moved that the Committee recommend to the Board (1) a process for approving a Navigation Technology purchase proposal and (2) the contents of a proposed application as the proposed process and application content are outlined in the San Francisco Bar Pilots NavTech Committee report dated December 12, 2016, which process includes a finding of necessity and reasonableness, and a preliminary navigation technology purchase approval followed by a final purchase approval. Commissioner Schmid seconded the motion.

VOTE: YES: Livingstone, Connolly, Long, and Schmid.

NO: None.

ABSTAIN: None.

ACTION: The motion was approved.

4. Presentation and review of the San Francisco Bar Pilots (SFBP) Navigation Technology purchase proposal. Possible Committee action to recommend to the Board to accept the SFBP Navigation Technology purchase proposal.

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Mr. Paetzold provided a brief review of the SFBP Navigation Technology Committee's materials that have been previously provided to the Board, to the Navigation Technology Committee, and to the Finance Committee, and spoke from a memo provided to the Committee dated December 12, 2016, that outlined the SFBP's proposed process for seeking Board approval of new navigation technology. He stated that the memo items 1 a-d were presented at the last Committee meeting, that memo item 1 e. was going to be discussed at this meeting, and that a contract with Booz Allen Hamilton for PilotMate support should be signed within the week.

Mr. Paetzold turned the discussion over to Captain McCloy, Chairman of SFBP's NavTech Committee. His presentation covered the following items:

- Features of equipment and software tested, including a comparison of vendors, along with the SFBP's selected equipment and vendors.
- The basis for the selection of equipment and software.
- The plans for equipment and software maintenance and periodic updates.
- A proposal for back up units.
- Itemized and total costs.
- Training plans for the new technology and equipment, and a proposed timeline.

Captain McCloy reviewed the precision docking system hardware/sensor comparison handout, and explained that equipment from three different manufacturers was selected and tested, and that while each system had its advantages and disadvantages, the SFBP has selected the Trelleborg/Marimatech CAT II sensor model equipment, which was the mid-priced equipment at a total 4-year cost per unit of \$18,328, including warranty costs for four years.

Captain McCloy then discussed the three different types of vendors reviewed that offer precision docking software, and stated the SFBP perceives value in proceeding with one vendor for software and hardware, and has selected the Trelleborg/Marimatech SafePilot software. He stated that the selected software was the easiest to set up and to train pilots on. He stated that of the other two software vendors, the QPS system is a good system, but not entirely appropriate for the SFBP, and that while SEAIq is also excellent software, it is supported by only one person, and that the SFBP did not desire to again receive support from one-person given the issues that have arisen with the PilotMate support. Captain McCloy answered several questions from Vice President Connolly and Board Counsel Eagan regarding wind, hydrographic, satellite data and server configurations, and confirmed that the Trelleborg/Marimatech hardware/software configuration will provide the best set-up, including server and broadband connections for software updates.

Captain McCloy discussed the SFBP's review of four different route-piloting system hardware configurations, including equipment from Trelleborg/Marimatech, Raven Marine,

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Navicom Dynamics and AD Navigation. He stated that the SFBP has selected the CAT ROT XT equipment from Trelleborg/Marimatech, which can utilize the Rosepoint software that is currently being used by the pilots. He stated that the Raven Marine system is good, but expensive, that the Navicom Dynamics equipment is not yet mature and lacks a history of commercial use, and that the AD Navigation equipment is a good product, but is still in development. He stated that the SFBP has selected the Trelleborg/Marimatech hardware because the equipment is time-tested and has been in production for about seven years, with a major upgrade in the fifth year, the two pieces of equipment are interchangeable with each other allowing powering flexibility on the bridge, the equipment will integrate well with the company's precision docking equipment, and the cost is reasonable compared to the other systems. Per unit, he summarized the cost of the proposed 4-year route piloting system as follows: hardware \$8,692, inclusive of warranty costs; \$1,267 for a new laptop; and approximately \$500 for annual RosePoint software subscription.

Captain McCloy then reviewed the SFBP's total proposed 2017-2020 cost estimates. The proposal included the following:

Item	Total Proposed Estimated Cost
<p>Precision Docking System for ULCV* (6 units) Sensor Hardware/4-year service contract Apple I-Pad Display and 2-year warranty Carrying case Precision Docking System Software (12 user displays) 4-year annual license fees, server integration, startup costs and components</p>	<p>\$252,141</p>
<p>Enhanced Route Piloting System (62 units) Sensor and display hardware 3-year warranty), laptops (3-year warranty), navigation software (4-year annual license)</p>	<p>\$797,036</p>
<p>TOTAL</p>	<p>\$1,049,176**</p>

*ULCV means ultra large container vessel.

**Includes estimated taxes and duty fees.

Captain McCloy stated that the SFBP's NavTech Committee is recommending a Lenovo laptop, but that a few pilots have expressed a concern about the weight of the laptop, and may wish to purchase lighter-weight laptop. For that reason, the SFBP's cost proposal includes a not-to-exceed cost for laptops of \$1,267.

Mr. Paetzold stated it is SFBP's intent to obtain a \$1.1 million line of credit to be used to initially purchase the equipment and software, and to pay the first year licensing and warranty fees. He indicated the SFBP's intent is that once all of the purchases are made and

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paid for, the line of credit will be converted to a term loan with the term consistent with the four-year limitation on the Navigation Technology Surcharge collection period. He stated the initial financing cost estimate is \$87,500, and that the line of credit and loan should be sufficient to cover an approximate \$900,000 up-front initial cost. He further stated the annual warranty and licensing costs, equal approximately \$54,000 and should be funded directly by the Navigation Technology Surcharge revenue.

Mr. Paetzold confirmed that the ownership of the navigation technology is proposed to be in the San Francisco Bar Pilots Benevolent and Protective Association, and that it is the association's intent to execute agreements with the individual pilots for use of the navigation technology.

Captain McCloy then discussed the SFBP's proposed Navigation Technology Training Plan 2017-2020, and Navigation Technology Timeline 2017. He stated that all parties agree that training is not an eligible use of Navigation Technology Surcharge monies, but stated that each pilot will need to be trained on the new equipment, and that the SFBP will use a "train the trainer" process. He discussed that the SFBP has outlined two training strategies. One option involves sending a pilot to be trained directly at Trelleborg's facility in Denmark. The other involves having one of the company's trainers come to San Francisco and provide training. He stated the SFBP estimates training costs to be \$9,625 and \$13,515, which will be paid for by the SFBP. He stated that the current estimated timeline calls for the equipment to be ordered in January, and in use by early April 2017, for e existing to be retired by mid-April.

Mr. Paetzold stated that the SFBP requests that the Committee recommend that the Board approve a preliminary authorization to proceed to purchase the navigation technology as discussed. He said it will take approximately 12-15 weeks to acquire the technology, after which the exact costs will be known. He stated the SFBP intends to return to the Committee and the Board with a request for a final authorization, after which the Finance Committee and the Board can then approve a Navigation Technology Surcharge rate.

Port Agent Long stated that Captain McCloy has done the majority of the work on researching, testing and recommending the proposed navigation technology, that the type of technology being considered is not "off-the-shelf" technology, and that he sees considerable value in the one-company approach. Vice President Connolly and Chairman Livingstone agreed, and Vice President Connolly moved that the Committee make a finding of reasonable and necessary, and for the Committee to recommend to the Board to give preliminary authorization for the purchase of new navigation technology as proposed by the SFBP.

Mr. Jacob thanked the SFBP for the detailed work, and noted that the technology being considered is much better than the technology available two years ago. He noted that if the actual costs are less than the \$1.2 million allowed for in the Code, there will be available

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funding for spot purchases in the future, if necessary. He also noted that the SFBP will have out-of-pocket costs not reflected in legislation, that it is difficult to draw the line between capital expenditures and maintenance, and that it will be up to the discretion of the Board given the broad nature of the navigation technology legislation. Mr. Jacob then stated that while he believes that the SFBP should keep costs down as reasonably necessary, he thought the Committee should consider a slightly higher preliminary cost amount to allow the SFBP to consider the option to purchase precision docking system software outright. He indicated this option would add approximately \$33,000 to the total preliminary authorization amount.

Commissioner Connolly then amended his initial motion to include an allowance for additional costs for the software direct purchase option.

MOTION: Commissioner Connolly moved that the Committee recommend to the Board that it grant a preliminary authorization to the San Francisco Bar Pilots to proceed with the purchase of navigation technology route piloting and precision docking hardware, related software, and warranty/service support at an estimated total cost of \$1,168,068, including acquiring the precision docking software either by purchase or subscription, and to make a finding that the proposed navigation technology purchase is reasonable and necessary. Commissioner Schmid seconded the motion.

VOTE: YES: Livingstone, Connolly, Long, and Schmid.

NO: None.

ABSTAIN: None.

ACTION: The motion was approved.

5. Public comment on matters not on the agenda.

There was no public comment on matters not on the agenda.

6. Schedule next Committee meeting, and proposals for items on the next meeting agenda.

Chairman Livingstone stated that he would schedule the next meeting when determined necessary. There were no proposals for items to the next Committee meeting agenda.

7. Adjournment.

Chairman Livingstone adjourned the meeting at 11:50 p.m.

Submitted by:



Allen Garfinkle, Executive Director