

Title 7. Harbors and Navigation
Division 2. State Board of Pilot Commissioners for the Bays of
San Francisco, San Pablo, and Suisun

FINAL STATEMENT OF REASONS

UPDATE OF INITIAL STATEMENT OF REASONS

The Initial Statement of Reasons is hereby incorporated by reference. There is no update to the information contained in the Initial Statement of Reasons.

MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS

The Board of Pilot Commissioners for the Bays of San Francisco, San Pablo, and Suisun (Board) has determined that the adoption of the regulations will not impose a mandate on local agencies or school districts.

**RECOMMENDATIONS REGARDING REGULATIONS
AND RESPONSES**

COMMENT LETTERS

The public comment period ended on May 31, 2023.

The Board received two letters commenting on the proposed regulations—one from the Pacific Merchant Shipping Association (PMSA) and one from Captain James Barton. The letters are summarized below, together with the Board's responses.

1. May 31, 2023 letter from the Pacific Merchant Shipping Association.

The PMSA letter made the following comments:

a. The following terms in the regulations should be removed because they are not defined: “on-call,” “off-call,” “on the board,” “from the roster,” and “return to the board.”

Response: See response to b., below.

b. If the Board intends to regulate “pilot watch standing,” it should explicitly state that this is its intent, and it should define these terms. If the Board does not intend to regulate pilot watch standing, and it intends “to only regulate the actual jobs completed,” then subsections (f) and (h) of section 218.1 of the regulations should be revised to read as follows:

(f) Pilots are limited to 15 consecutive days of any combination of work periods ~~on-call~~. The Port Agent may include in the FRMS a protocol for providing pilots who ~~are on-call~~ make themselves available to engage in any combination of work periods for 14 or 15 consecutive days a rest break at or around the midpoint of the 14- or 15-day period, stating the rationale for the protocol.

(h) When, in the opinion of the Port Agent, there is reasonable cause to believe that the risk of harm to persons, property, vessels, or the marine environment exceeds the risks associated with . . . (3) extending the number of consecutive days ~~on-call~~ pilots are available to engage in any combination of work periods . . . , the Port Agent may depart from the limitations set forth in subsections (c) through (g). . . .”

Response: The Board does intend to regulate what PMSA refers to as “pilot watch standing.” The Legislature has directed the Board, in section 1196.5 of the Harbors and Navigation Code, to enact regulations that will prevent pilot fatigue. To accomplish the Legislature’s goal, the Board has proposed regulations that expressly set forth the work and rest periods of pilots, thus making clear its intent to regulate “pilot watch standing.” The Board therefore declines to accept PMSA’s suggested revisions of subsections (f) and (h), set forth above, because these revisions are based on the inaccurate supposition that the regulations may not be intended to regulate “pilot watch standing.”

As a further reason for declining to adopt PMSA's proposed revisions, the language about "any combination of work periods" is confusing and looks only backward. This language would unduly restrict the scope of the statutory effort to prevent pilot fatigue because it focuses exclusively on work periods served in the past. Simply being available for assignment for extended periods has fatigue impacts, independent of the number of assignments ("work periods") that a pilot receives during his or her availability. The San Francisco Bar Pilot Fatigue Study explains that pilots around the world are "typically on watch for a 7- or 14-day period, during which time [the pilot] is on-call 24 hours a day to respond to requests for pilots by ship operators." (Study, p. 73.) The fatigue study explains how this erratic duty pattern can affect pilots: "This system can result in a haphazard pattern of work hours over the course of the work week, disrupting the normal sleep/wake cycle." (Study, p. 73.)

The disruptive effect of being available for assignment 24/7 was the concern of the "on call" language and the other undefined terms identified by PMSA. The Board agrees with PMSA that its regulatory intent can be better expressed. This can be done in one of two ways. First, as suggested by PMSA, the regulations could be amended to define "on call" and each of the other terms. Alternatively, the various terms could be supplanted by the more general and all-encompassing words, "available for assignment," or similar phrasing that does not employ undefined terms. The Board has decided to employ the latter alternative.

Accordingly, without changing the intended meaning, the Board has made the following nonsubstantial amendments to express its intent more clearly.

Subsection (f) of section 218.1 was revised to read:

(f) Pilots are limited to 15 consecutive days ~~on-call~~ of being available for assignment. The Port Agent may include in the FRMS a protocol for providing pilots who are ~~on-call~~ available for assignment for 14 or 15 consecutive days a rest break at or around the midpoint of the 14- or 15-day period, stating the rationale for the protocol.

Subsection (h)(3) of section 218.1 was revised to read:

extending the number of consecutive days ~~on-call~~ pilots are available for assignment,

Subsection (i)(1) of section 218.1 was revised to read:

A plan regarding assignment of ~~off-call~~ pilots that minimizes disruption of their recovery rest periods.

Subsection (i)(3) of section 218.1 was revised to read:

A plan to use various measures to increase the number of pilots available ~~on-the-board~~ to provide pilotage at any given time.

Subsection (i)(4) of section 218.1 was revised to read:

A plan to educate pilots on the importance of reporting fatigue and ~~removing themselves from the roster~~ pausing their availability for assignment when they are significantly fatigued.

Subsection (i)(5)(A) of section 218.1 was revised to read:

Delaying a pilot's ~~return to the board~~ availability for assignment following travel.

c. PMSA's final comment objected to retention of the San Jose State University Research Foundation to do an evaluation of the implementation of the fatigue regulations.

Response: This comment is not relevant to the issue at hand, which is the content of the proposed fatigue regulations. Accordingly, no responsive action or comment is required.

2. May 31, 2023, letter from Captain James Barton. Captain Barton's letter made the following comments.

a. Pilot trainees should be subject to the same fatigue regulations as are pilots. Trainees schedule their own assignments. They have a significant incentive to complete the training program expeditiously, and this incentive can result in trainees scheduling themselves for trips when they are fatigued.

Response: The regulations contain provisions that are specifically directed at preventing fatigue among pilot trainees.

Subsection (b)(24) of section 214 requires that trainees receive training on the following topic:

(24) The causes and hazards of fatigue, the means of avoiding or alleviating fatigue, the responsibility of pilots and trainees to ensure that they are rested prior to an assignment, the need for a sufficient recovery period after awakening, and the duty of pilots and trainees to refuse an assignment if they are too fatigued to complete an assignment safely.

Subsection (l) of section 220 requires that trainees, in scheduling their assignments, be guided by the same work-hour limitations and rest-period requirements that apply to pilots.

Subsection (f) of section 220 requires that a trainee “shall obey all lawful instructions and directives given to him or her, or to pilot trainees in general, by the Pilot Evaluation Committee or by any member of such Committee, the Port Agent or his or her designees.” At the orientation of trainees, they are ordered not to handle vessels when fatigued. This is reiterated many times during their training, and pilots who are on the bridge supervising a trainee’s work often ask trainees if they are sufficiently rested before a vessel move, especially during periods of circadian low.

The computerized dispatch of pilots is based on a rotation system whereby pilots go to the bottom of the assignment list upon completion of a job, then are assigned a new job when their name rotates back up to the head of the list. Pilots receive assignments independent of the type of vessel or the type of transit. Each pilot is presumed able to handle any type of piloting assignment, and, as a general matter, vessel assignments are taken in turn, regardless of type.

This automated dispatch system is ill-suited to the training regimen to which trainees are subject. In contrast to pilots, the assignment of trainees is dependent on what the unmet training needs of a particular trainee are. For instance, one trainee may need training on a particular type or size of vessel. Another trainee may need training on a particular transit—for instance, a river transit upriver to Stockton or taking a tank vessel to sea. Another may need to work on night transits. These needs of particular trainees vary with their progress in the program and also with any skills that past transits have shown they need to work on. Because of these highly individualized training needs, assignments are governed not simply by availability for assignments, as with pilots, but more by the particular training needs of the individual trainee. As a result, both the trainees and the Pilot Evaluation Committee (PEC) must tailor assignments to fit the needs of the individual trainee and must have the flexibility to take advantage of training opportunities as they arise. Any other system would be inefficient and would substantially inhibit a trainee’s ability to timely achieve training objectives. For this reason, trainees are not assigned by a computerized central dispatch system, but are allowed to schedule their own assignments, following the direction of the PEC concerning what types of assignments are needed to meet training objectives for a given trainee.

Although this need for assignments tailored to the training requirements of individual trainees renders computerized assignment of trainees unworkable, trainees are required, in scheduling, to take fatigue prevention into account. Subsection (*I*) of section 220 requires that, in scheduling training trips on vessels, trainees “shall be guided” by the work-hour limitations and rest-period requirements applicable to pilots.

The San Francisco Bar Pilot Fatigue Study focused on pilots and made no recommendations regarding pilot trainees. The “guidance” language in the proposed regulations is appropriate for now, but it may be advisable to commission a study at some point in the future that focuses specifically on the issue of fatigue as it applies to pilot trainees.

b. The regulations should provide for monitoring the trips, work hours, and rest periods of trainees.

Response: The existing pilot trainee training program has an extensive system of tracking, monitoring, and reporting on trainee activity. For each job, a trainee prepares a job card that reports the date, time aboard, time off, total time onboard, daylight or night-time, fog or clear, evaluation scores by an evaluator, and comments by the accompanying pilot. Each month this data is aggregated into a spreadsheet that allows the PEC to monitor a trainee's activities, including activity that may indicate disregard for managing fatigue. Further, the PEC has established phases of training during which the expected number of jobs worked by a trainee is adjusted, up or down, to reflect other training demands on the trainee during that phase, thereby reducing the potential for trainee fatigue.

This existing monitoring system is working well to mitigate any potential for fatigue among trainees, and there is no need to formally adopt this system as part of the regulations. The data on trainee activity collected by the existing monitoring system would be useful in the conduct of a future study of pilot trainee fatigue.

PUBLIC HEARING

In response to a timely request, a public hearing on the proposed regulations was conducted by teleconference under Government Code section 11133 on June 1, 2023. Two persons appeared: Mike Jacob, Vice President and General Counsel of the Pacific Merchant Shipping Association, and Captain James Barton. Both reiterated their positions, as stated in their respective letters, which are summarized above.

CHANGES IN REGULATIONS FROM THOSE ORIGINALLY PROPOSED

Certain nonsubstantial changes were made in the regulations with the sole purpose of more clearly expressing the intent of the regulations as initially drafted and submitted for public comment. There was no change in meaning. These changes are set forth above in the response to comments **a.** and **b.** of the Pacific Merchant Shipping Association. Because the changes were

nonsubstantial, there was no need to circulate the changes for an additional 15-day comment period.

DETERMINATION CONCERNING ALTERNATIVES

The Board has concluded that there are no reasonable alternatives to the proposed regulations, which were adopted in response to a mandate from the Legislature. In its Notice of Proposed Rulemaking, the Board invited interested persons to present statements or arguments with respect to alternatives to the proposed regulations during the written comment period. No such statements or arguments were received, nor were any such statements offered by those who appeared at the public hearing that was held on June 1, 2023.

ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES

The proposed amendments will have no adverse economic impact on small businesses. A discussion at page 5 of the Initial Statement of Reasons concluded that compliance with these regulations by the San Francisco Bar Pilots will not involve significant additional cost. That discussion is hereby incorporated by reference. There were no alternatives proposed for lessening this insignificant economic impact. Further, the San Francisco Bar Pilots do not meet the definition of a small business because the organization is “dominant in its field of operation.” (See Gov. Code, § 11346.3, subd. (b)(4)(B)(ii).) No other business provides pilotage services on San Francisco Bay and its tributaries. Accordingly, there was no need to consider proposed alternatives on this ground.