Knute Michael Miller, Committee Chairman and Past Board President Dave Connolly, Board Vice President Robert Kosnik, MD Captain Einar Nyborg, Commissioner and San Francisco Bar Pilot

#### **Committee Members Absent:**

Brigadier General (Ret.) Chester L. Ward, MD

#### **Staff Present:**

Allen Garfinkle, Executive Director Roma Cristia-Plant, Assistant Director (participated by telephone) Dennis Eagan, Board Counsel Luis Cruz, Associate Governmental Program Analyst

#### **Public Present:**

Captain Joseph Long, San Francisco Bar Pilots (SFBP) President and Port Agent; Raymond Paetzold, SFBP Business Director and General Counsel; and Mike Jacob, Pacific Merchant Shipping Association Vice President and General Counsel.

#### **OPEN MEETING**

#### 1. Call to order and roll call. (Chairman Miller)

Chairman Miller called the meeting to order at 9:38 a.m. Associate Governmental Program Analyst Cruz called the roll and confirmed a quorum.

#### 2. Approval of the minutes of Committee meeting held on October 23, 2018. (Chairman Miller)

Committee members were presented with the draft minutes from the Committee meeting held October 23, 2018. Minor non-substantive edits were requested by Commissioner Connolly and members of the public.

<b>MOTION:</b>	Vice President Connolly moved to approve the draft minutes of the meeting
	held on July 20, 2018 Commissioner Nyborg seconded the motion.
<b>VOTE:</b>	Yes: Miller, Connolly, Kosnik, and Nyborg.
	No: None.
	Abstain: None.
<b>ACTION:</b>	The motion was approved.

	<b>Board of Pilot Commissioners for the Bays</b>	
	of San Francisco, San Pablo, and Suisun	
<b>Meeting Date:</b>	660 Davis Street, San Francisco, CA 94111	Page 2 of 6
November 16, 2018		1 age 2 01 0
1.0.00000000000000000000000000000000000	PILOT FITNESS COMMITTEE	
	MEETING MINUTES	

3. Report on the pilot and trainee fitness determination process involving the Division of Occupational & Environmental Medicine at the University of California, San Francisco Campus. (Executive Director Garfinkle)

Executive Director Garfinkle reported that the pilot and trainee fitness determination process involving the Division of Occupational & Environmental Medicine at the University of California, San Francisco Campus (UCSF) continues to work well. He stated that the Board's new UCSF primary contact is proactive, and that Board staff look forward to working with him.

Dr. Kosnik stated that UCSF continues to work with Board staff on post-incident drug testing protocols, and that all pilot/trainee medical assessment appointment scheduling continues to improve. There was no further discussion.

#### 4. Review and discuss the Pilot Fatigue Study produced by San Jose State University Research Foundation and NASA. Identify key recommendations appropriate for incorporation into regulations. (Committee members and staff)

Chairman Miller stated that before the Committee continued its review of the Pilot Fatigue Study produced by San Jose State University Research Foundation and NASA (Study), he would entertain discussion of sections of the Study, covered at the last Committee meetings. Commissioner Nyborg stated that section 3.1 of the Study refers to the "two-weeks on, two-weeks off" pilot work pattern, and that the work pattern has been a long part of SFBP work history. There was no further discussion.

The Committee picked up the discussion of the Study where it left off at the last meeting with analysis of Section 5.

Commissioner Nyborg referred to section 5.4.3 of the Study and noted the introduction of the SFBP policy requiring ships to order a pilot eight hours ahead of time (when ordered between the hours of 1800 to 0600), greatly improved the sleep quality of pilots. He stated that the policy change is an example of a simple adjustment having a large positive impact.

The Committee then discussed the issues revolving around possible sailing delays and the subsequent minimum rest period (MRP) exceptions experienced by the pilots. The Committee noted that crew members on tank vessels work in port and therefore sometimes experience delays due to crew members not meeting the International Maritime Organization (IMO) Standards of Training, Certification, and Watchkeeping (STCW) rest requirements. Commissioner Nyborg stated that a goal of the Committee is to find flexibility on specific situations based on efficiency and mitigating fatigue. He suggested that a "class system" concept that would prioritize ship movements. Mr. Jacob noted that there is a difference between what is appropriate to rulemaking versus the SFBP business model, and that methods of promoting efficiency within the SFBP, as a company, may not be appropriate for rulemaking.

# Board of Pilot Commissioners for the Bays of San Francisco, San Pablo, and Suisun 660 Davis Street, San Francisco, CA 94111

November 16, 2018

## PILOT FITNESS COMMITTEE MEETING MINUTES

Page 3 of 6

Chairman Miller turned the Committee's attention to section 5.4.8 of the Study and inquired about pilot napping. Port Agent Long stated that some pilots prefer to sleep before a job and may nap at the SFBP Pier 9 facility. He stated that this option mitigates the pilot's commute time. Commissioner Nyborg clarified that a pilot can choose to sleep at Pier 9, though it is the unusual circumstance, although he did point out that a pilot's "on-call" sleeping location may not be his home.

Chairman Miller inquired on how moves to Stockton or Sacramento, so called "river moves," are handled with regard to rest periods. Port Agent Long explained that, in general, a movement from sea to Sacramento or Stockton would require two pilots. He stated that the job is separated into two segments and that only in rare situations would the SFBP ask that the pilot assigned to the river portion of the job to complete the full assignment. He stated that the SFBP offers pilots overnight lodging in Sacramento or Stockton, although it is rare for a pilot to utilize that option. He stated the pilot may also have an option to stay aboard the ship in Sacramento or Stockton and rest.

Commissioner Nyborg referred to section 5.5 of the study and noted that figure 30 indicates that most stress-related fatigue is acute. He stated that this may differ among pilots, as new pilots may be stressed about certain upcoming job assignments. Dr. Kosnik concurred and gave the example of the transition of a student to a professional.

Dr. Kosnik left the meeting at 10:30 a.m.

The Committee discussed reducing nighttime pilotage services, increasing the nighttime pilotage services rate, and the economic systems of the ports. Commissioner Nyborg stated that the pilotage fee is a small percentage of the ship's port call expense. Mr. Jacob explained the various cost components of a ship being at a berth, in addition to labor costs. Commissioner Connolly noted that container ships are the biggest contributor to port traffic and operate on time critical scheduling. He added that arrival time is most controllable of all the variables.

Mr. Jacob stated that the suggestion made by pilots to, "increase efficiency by longer work hours," is a practice that the SFBP is actively performing. He stated that the Committee should remain mindful of opportunities of increasing work efficiency by increasing work hours. Commissioner Nyborg concurred and stated that the SFBP operates most efficiently when pilots are completing two assignments per work period.

Mr. Jacob explained that it appears the Committee is faced with competing principles: what is a business management principle versus what is best accomplished through regulation. He referred to the concept of a Fatigue Risk Management System (FRMS) and inquired when does the Board step in? Commissioner Nyborg proposed a system in which regulations mandate the creation of a FRMS, which may lead to the incorporation of existing SFBP internal working rules established as part of SFBP policy.

# Board of Pilot Commissioners for the Bays of San Francisco, San Pablo, and Suisun 660 Davis Street, San Francisco, CA 94111

November 16, 2018

## PILOT FITNESS COMMITTEE MEETING MINUTES

Page 4 of 6

Board Counsel Eagan noted the importance of the development of a FRMS, and that the Board has ultimate control of the FRMS content. He stated that a first attempt of the FRMS development could be delegated to the SFBP. Chairman Miller concurred with the discussion and noted that the Board and the SFBP, individually, could develop some components of the FRMS. He added that the FRMS may evolve over time and that the FRMS should be subject to periodic Board review and approval. Port Agent Long concurred with the idea of the evolving FRMS and stated that the SFBP has experience in how to introduce key changes in an orderly fashion.

Dr. Kosnik rejoined the meeting at 11:30 a.m.

Chairman Miller referred to section 5.12.2 of the Study and inquired if the Pilot Evaluation Committee curriculum includes anything concerning fatigue and fatigue management. Commissioner Nyborg stated that newly licensed pilots attend the Board's Combination Course at the California State University Maritime Academy, either prior to or shortly after licensure. Executive Director Garfinkle added that Board staff make every effort to schedule new licensees to the Combination Course within their first year of licensure.

Port Agent Long noted that the Board is starting from a landscape that is very different than it was four years ago (prior to the SFBP implementing fatigue mitigation measures as a result of their privately funded fatigue study). He went on to explain that there are changes in place that evolved over time, such as day/night differentials (with geographic boundaries).

The Committee then discussed the possibility of implementing "hard stop" working rules. Commissioner Nyborg noted that in section 6.3.2 of the Study, researchers state that 13% of MRP exceptions are less than 10 hours, and inquired if a 10 hour "hard stop" rule would work. Chairman Miller noted the importance of tracking consecutive "hard stop" days. Port Agent Long noted that MRP exceptions are well distributed among pilots and that it is rare that a pilot has consecutive MRP exceptions. Commissioner Connolly stated that the 10-hour work day is an industry standard. Port Agent Long explained that time of occurrence of an MRP is important, as well as identifying whether it occurred during day or night.

Mr. Jacob referred to Figure 73 of the Pilot Fatigue Study, and noted that probability of a pilot working three consecutive night shifts is low. Port Agent Long concurred with Mr. Jacob, but noted that working three consecutive night shifts is a low occurrence, high risk probability situation. Mr. Jacob stated the Committee should identify high risk situations and recommend regulations to eliminate these work conditions.

Chairman Miller referred to Figure 69 and Figure 70 of the Study, and noted that the 7-day oncall work period predicted effectiveness level is greater than that of the 14-day work period. He went on to state that the 7-day work period is the norm, and while there are personal reasons a pilot may choose to work a 14-day work period, the pilot may have to have a reset rest period in that longer work rotation, and will "owe" the system for that reset. He recommended the Committee consider a rest rule for pilots working a 14-day work period. Port Agent Long

# Board of Pilot Commissioners for the Bays of San Francisco, San Pablo, and Suisun 660 Davis Street, San Francisco, CA 94111

November 16, 2018

# PILOT FITNESS COMMITTEE MEETING MINUTES

confirmed that there are approximately 10 pilots who work 14-day work periods. He suggested a "track and manage" approach to the 14-day work period issue, and to prioritize this issue behind work hours and consecutive nights.

The Committee then discussed the issue of advancing shift rotations. Port Agent Long noted that an advancing shift rotation is sometimes preferable and should not be prevented, although conceded that the issue of advancing shift rotation is complicated.

Commissioner Connolly noted that in section 7 of the Pilot Fatigue Study, researchers state that although the SFBP does not currently utilize a FRMS, several elements of a FRMS are in use. Commissioner Nyborg stated that the SFBP intends to use the Study recommendations as structure for developing the FRMS, and inquired if the FRMS should be developed as a general overview, or include highly detailed sections? Mr. Jacob stated that the Board should consider whether its wants a collaborative approach to the FRMS, or rather to set limits and let the SFBP work out the rules. Dr. Kosnik added that rules do not have to consist of a hard stop. He stated a rule may indicate a hard stop, but not say what the hard stop is.

Chairman Miller suggested that the Committee further discuss the development of a FRMS, and review all study recommendations at its next meeting. Chairman Miller also requested that Board Counsel Eagan review the Federal Aviation Administration Flightcrew Member Duty and Rest Requirements that amend 14 CFR Parts 117, 119, and 121.

Board Counsel Eagan added that he thought "hard stops" a very "bare bones" regulatory approach. He suggested another approach might be to require that an FRMS consider certain elements rather than dictating answers.

#### 5. Public comments on matters not on the agenda.

There were no comments from the public.

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

The Committee agreed to schedule the next Committee meeting for January 17, 2019, at 9:30 a.m.

	Board of Pilot Commissioners for the Bays	
	of San Francisco, San Pablo, and Suisun	
Meeting Date:	660 Davis Street, San Francisco, CA 94111	Page 6 of 6
November 16, 2018		8
,	PILOT FITNESS COMMITTEE	
	MEETING MINUTES	

# 7. Adjournment.

<b>MOTION:</b>	Chairman Miller, without objection, adjourned the meeting.
VOTE:	There was no motion or vote.
ACTION:	The meeting was adjourned at 12:44 p.m.

Submitted by:

aenpo-

Allen Garfinkle, Executive Director