

**Party Submission**

**by**

**BOARD OF PILOT COMMISSIONERS FOR THE BAYS  
OF SAN FRANCISCO, SAN PABLO AND SUISUN**

**NTSB Investigation**

**COSCO BUSAN Allision with the  
San Francisco – Oakland Bay Bridge,  
San Francisco, California**

**November 7, 2007**

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1 **Party Submission by BOARD OF PILOT COMMISSIONERS FOR**  
2 **THE BAYS OF SAN FRANCISCO, SAN PABLO AND SUISUN –**  
3 **NTSB Investigation of COSCO BUSAN Allision with San Francisco-**  
4 **Oakland Bay Bridge, San Francisco, California on November 7, 2007**

5 The Board of Pilot Commissioners for the Bays of San Francisco, San Pablo and  
6 Suisun (hereinafter “the Board” or “Pilot Commission”) licensed the pilot, Captain  
7 John J. Cota, who was piloting the COSCO BUSAN at the time of the allision. The  
8 Commission is a party to the NTSB investigation. At the invitation of the NTSB, it  
9 provides the following Party Submission.

10 **Prior Board Participation in the NTSB Investigation**

11 During the initial phase of the NTSB investigation following the allision of the  
12 COSCO BUSAN with the San Francisco – Oakland Bay Bridge, the Board’s  
13 President, Commissioner Knute Michael Miller, and its Executive Director, Captain  
14 Patrick A. Moloney, met with the advance investigation team led by NTSB Member  
15 Deborah Hersman and Chief Investigator Thomas Roth-Roffy and offered the Board’s  
16 assistance and cooperation. Captain Moloney was asked to participate as a member of  
17 NTSB investigation team that focused on vessel operations, which he did throughout  
18 the team’s presence in the Bay Area. Captain Moloney was also interviewed during  
19 the same period in his capacity as the Board’s Executive Director, and again in  
20 January 2008.

21 Both Board President Miller and Captain Moloney participated in the NTSB  
22 public hearings held in Washington D.C. in April 2008. The Board also provided  
23 comments on the NTSB Technical Review Draft Factual Report dated June 27, 2008.

1

## **The Board's Incident Investigation**

2           Immediately following the incident, the Pilot Commission, through its Incident  
3 Review Committee (IRC), commenced an investigation to determine whether the  
4 incident was caused by pilot error. The Board summarily suspended the pilot's state  
5 license on November 30, 2007 pending the timely filing of charges and a hearing on  
6 those charges.

7           On December 6, 2007, the IRC filed charges against the pilot in the form of an  
8 Accusation alleging that the pilot had reason to doubt whether the ship could safely  
9 proceed under the prevailing circumstances; that the pilot proceeded with insufficient  
10 information about the level of visibility along his intended route; that he proceeded at  
11 a speed that was excessive for the circumstances; and that he failed to make full use of  
12 all available resources to determine the vessel's position prior to attempting a transit  
13 between the Delta and Echo towers of the bridge in conditions of reduced visibility. A  
14 copy of the Accusation is attached as Encl. (1).

15           The pilot denied the charges and requested a hearing. A hearing on the charges  
16 was initially scheduled for April 28, 2008, with the Board members, sitting with an  
17 administrative law judge, to decide the facts and determine the appropriate sanction, if  
18 pilot error was found. The pilot's state license remained suspended pending a hearing.  
19 (Technically, the license expired on February 1, 2008 and would have been subject to  
20 renewal but for the existing suspension.)

21           Both parties encountered difficulties in securing evidence for the hearing due to  
22 the filing of a spate of lawsuits in state and federal courts, the potential for criminal  
23 sanctions against the pilot and the crew, and the refusal of the crew to be interviewed  
24 or to testify. The administrative hearing on the IRC's charges against the pilot's state

1 license was ultimately rescheduled for September 2, 2008 to allow each party  
2 additional time to gather the evidence. The pilot's state license would remain  
3 suspended until the conclusion of the hearing. The hearing was estimated to take 16  
4 court days and was scheduled over a four-week period.

5 In late June, after unsuccessfully seeking another continuance of the hearing, the  
6 pilot issued his letter of intent to retire as a state licensed pilot effective October 1,  
7 2008, the earliest date he could retire under existing state law. A stipulation was  
8 entered into permitting the conditional dismissal of the IRC's charges, recognizing  
9 that the pilot's state license would expire by operation of law upon the pilot's  
10 retirement and would remain suspended until then, and that the only sanction the  
11 Board could impose if it found pilot error was the suspension or revocation of his state  
12 license. If for any reason the pilot withdraws his request before the effective day of  
13 his retirement, the hearing would be rescheduled. A copy of the Administrative Law  
14 Judge's Order, which includes the Stipulation to that effect, is attached as Encl. (2).

15 Once the pilot's retirement takes effect, and any potential for withdrawing the  
16 notice of retirement is permanently removed, the IRC will submit its report to the full  
17 Board. By law, the IRC cannot do so before then. It is currently anticipated that the  
18 IRC's report will be submitted to the Board at its October 23 meeting, at which time it  
19 would be come public and can be made available to the NTSB.

## 20 **Pilot Training In and Use of Electronic Navigation Systems**

21 One of the issues raised in the various investigations into the causes of the  
22 allision focused on the electronic navigation system aboard the COSCO BUSAN and  
23 whether the pilot was able to make full use of the information provided by it.

1           In response to the allision and the ensuing oil spill, Governor Schwarzenegger  
2 had directed a state investigation into the causes of, and response to, the accident and  
3 the spill. The Governor's directive outlined a number of issues to ensure "any action  
4 necessary to prevent this from ever happening again." The state Office of Oil Spill  
5 Prevention and Response (OSPR) tasked the Harbor Safety Committee of San  
6 Francisco Bay Region (HSC) to "analyze the navigational safety-related issues of the  
7 Governor's directive and to make appropriate recommendations regarding the  
8 prevention aspects of the incident." The HSC agreed to consult with the Pilot  
9 Commission on certain issues related to the use of shipboard and portable electronic  
10 navigation systems by pilots.

#### 11                           **The Board's Navigation Technology Committee**

12           In response to the incident and the Governor's directive, the Pilot Commission  
13 formed a Navigation Technology Committee to investigate the different types of  
14 navigation systems found on ships calling on the San Francisco Bay Area and the  
15 sufficiency of pilot training in the use of such systems; and to evaluate portable  
16 electronic navigation chart systems that can be brought aboard by pilots to assist in  
17 navigation.

18           The Navigation Technology Committee was chaired by Rear Admiral Frank X.  
19 Johnston, United States Maritime Service, (Ret.), who was appointed by Governor  
20 Schwarzenegger to the Pilot Commission in January 2008. Committee members  
21 included the chairs of the navigation technology committees for the San Francisco Bar  
22 Pilots, Captain Sean Gabe, and for the Jacobsen Pilot Service in Long Beach, Captain  
23 Vic Schissler, as well as a retired master mariner who helped Exxon develop an  
24 advanced electronic navigation system for its tanker fleet, Captain Tom Hill.

1           The Committee held well-attended public workshops in February, March and  
2 April, 2008, with participation or presentations by experts in navigation technology  
3 and in the training and education of mariners in that subject, including Professor Sam  
4 Pecota of the California Maritime Academy, Executive Director Glen Paine of the  
5 Maritime Institute of Technology and Graduate Studies, Training Director Scott  
6 Humphrey of the Coast Guard Vessel Traffic Service for San Francisco Bay Area,  
7 Human Factors Expert Dr. Richard Mogford from NASA and various commercial  
8 providers of portable pilot navigation units.

9           The Committee also reviewed how portable pilot units are regulated in other  
10 pilotage jurisdictions and various comprehensive reports on their use, liability issues  
11 and interface with shipboard equipment.

12           The Committee presented its initial report to the Pilot Commission on April 17,  
13 2008, recommending that the Commission's Pilot Training Curriculum Committee be  
14 directed to consider incorporating enhanced training in advanced electronic navigation  
15 systems that would provide exposure to a greater number of systems and variety of  
16 presentations than what is provided by the current training program. In addition, the  
17 Committee recommended that the Commission adopt by regulation a requirement that  
18 pilots licensed by the Commission be equipped with, and trained in the use of,  
19 portable electronic navigation equipment, commonly known as portable pilot units  
20 (PPUs), with specified minimum capabilities and other relevant provisions.

21           At its May 22, 2008 meeting, the Pilot Commission voted unanimously to direct  
22 its Curriculum Committee to consider incorporating enhanced training in advanced  
23 electronic navigation systems and directed its staff to begin the formal rulemaking

1 process for adopting the regulation recommended by the Navigation Technology  
2 Committee.

3 **Enhanced Training in Advanced Electronic Navigation Systems**

4 The Maritime Institute of Technology and Graduate Studies (MITAGS) has a  
5 contract with the Pilot Commission to provide specified training to pilots as mandated  
6 by current regulations. The curriculum is specified in the contract. That contract ends  
7 June 30, 2009. (A copy of that contract was previously provided to NTSB  
8 investigators.)

9 The Commission's Pilot Training Curriculum Committee will need to review the  
10 current curriculum taught by MITAGS under the contract, possible options to provide  
11 enhanced training in advanced electronic navigation systems, and how such training  
12 can be incorporated into the current training program within the Commission's  
13 regulatory and budget constraints.

14 Preliminary estimates are that it will take several meetings over a period of two  
15 to three months to develop specific recommendations for changing the curriculum and  
16 for the Board to take action on those recommendations, followed by possible contract  
17 negotiations with MITAGS and the preparation and execution of contract  
18 amendments. (Contract matters are handled through the California Department of  
19 Consumer Affairs.)

20 If the resulting contract expenses remain within the Commission's budget, the  
21 enhanced training, if adopted, could be in place by November 1, 2008. If the  
22 additional training expenses would exceed the Board's budget, the Board may need to  
23 seek an increase in its spending authorization unless spending on other program areas



1 can be reduced. Such a request could add a minimum of three to four months to the  
2 process.

3 **Rulemaking Re Use of Portable Pilot Units**

4 The rulemaking process is governed by the California Administrative Procedures  
5 Act (APA), and by budgetary constraints imposed by the Department of Finance  
6 (DOF) and the Legislature. The Pilot Commission has been directed by DOF to use  
7 temporary part time government employees known as AGPAs (Associate Government  
8 Policy Analysts) to meet the Commission's future rulemaking needs. The Board's  
9 current budget does not authorize expenditures for such employees, but there is such  
10 authority in the proposed budget for F/Y 08/09, which has not yet been approved.  
11 Once that budget has been approved (as part of the annual state budget approval  
12 process), the Board can proceed with the retention of an AGPA and begin the  
13 rulemaking process.

14 The AGPA will need to ensure compliance with APA requirements; prepare the  
15 notice of proposed rulemaking and supporting documentation including a fiscal  
16 analysis and have them approved by the Office of Administrative Law and, if  
17 necessary, the Department of Finance; guide the Pilot Commission through the public  
18 comment period (minimum of 45 days from the publication of the notice of proposed  
19 rulemaking and 15 additional days following notice of any substantive amendments to  
20 the original rulemaking language); guide the Board through the public rulemaking  
21 hearing or hearings, until the rulemaking language has been adopted by the  
22 Commission; prepare the final rulemaking package and supporting documents; and  
23 guide the rulemaking through the approval process before the Office of Administrative

1 Law (OAL). Once approved by OAL, the rulemaking is filed with the Secretary of  
2 State and ordinarily becomes law 30 days later.

3 The entire process can take from six to nine months or more. On an expedited  
4 basis, it is possible that the rulemaking could be completed by early 2009.

5 The Harbor Safety Committee recently reviewed the Board's proposals relative  
6 to providing enhanced training to pilots in advanced electronic navigation systems and  
7 to the use of portable pilot units by pilots. It has also examined other operational  
8 issues to help reduce the risk of a similar accident. Its report to the Office of Oil Spill  
9 Prevention and Response, including a summary of its recommendations and its reports  
10 on "Guidelines for Navigating San Francisco Bay in Reduced Visibility" and "Pilot  
11 Use of Navigational Tools" are enclosed as Encl. (3).

12 **Pilot Fitness Issues**

13 By California law, pilots are required to be of good mental and physical health  
14 and to undergo physical examinations in accordance with standards prescribed by the  
15 Board. The Board's current procedures for determining physical and mental  
16 competency of pilots are set forth in Title 7, California Code of Regulations § 217.

17 Pilots are also required to meet all Coast Guard standards, and hold and  
18 maintain a Coast Guard license.

19 Following the allusion questions were raised regarding the standards used by  
20 both the Board and the U.S. Coast Guard in determining pilots' physical and mental  
21 competency, and the procedures used to ensure that pilots meet such standards.

22 In response, the Board's Pilot Fitness Committee has been tasked with:

1           (1)     Conducting a comprehensive review of the physical and mental  
2 fitness standards for pilots, including review of the Board's current standards as  
3 outlined in the Reference Guide for Physicians for the Physical Examination  
4 for Duty Status of Seafarers in the U.S. Merchant Marine adopted by the  
5 Seafarers Health Improvement Program (SHIP); current U.S. Coast Guard  
6 Physical Evaluation Guidelines for Merchant Mariner's Documents and  
7 Licenses (NVIC 2-98); the proposed draft replacement to NVIC 2-98; any  
8 other amendments to those guidelines currently under consideration; and  
9 recommendations by the National Transportation Safety Board regarding the  
10 fitness of pilots (including M-97-44);

11           (2)     Preparing recommendations to the Board for the adoption of  
12 standards that meet or exceed Coast Guard standards to ensure that each pilot  
13 is physically and mentally fit to perform the duties of a pilot in light of the  
14 above review and any lessons learned from the COSCO BUSAN incident;

15           (3)     Preparing recommendations to the Board for the amendment of  
16 its procedures to determine a pilot's physical and mental competency,  
17 including procedures to ensure the disclosure and appropriate evaluation of the  
18 history and presence of any medical conditions, symptoms or medication use  
19 that would affect an individual's fitness to pilot a vessel;

20           (4)     Addressing state of the art/methodology in detecting decline in  
21 a pilot's situational awareness, including his or her ability to keep track of and  
22 timely act on various communications and information relevant to the vessel's  
23 safe navigation and to plan ahead for upcoming traffic and environmental  
24 situations;



1 hearings in April have also been considered, including the degree to which current  
2 incident review procedures, both at the IRC level and at the Board level, can be  
3 improved to identify patterns of substandard performance or other problems that  
4 warrant further Board action beyond the specific response to a single incident. The  
5 Board has sought funding for an audit of the Board's incident review procedures and  
6 anticipates receiving such funding for the current fiscal year, once the state budget is  
7 approved. A copy of the Board's funding request ("Spring Finance Letter") is  
8 attached as Encl. (5). It addresses the proposed IRC audit, as well as funding for the  
9 Board's Pilot Fitness Committee review, and navigation technology rulemaking.

10 There have also been legislative initiatives that could effect the Board's review  
11 of the IRC's reports, but those initiatives remain in flux. If legislation is adopted that  
12 would significantly change the Board's incident investigation procedures prior to the  
13 NTSB's report, a copy will be forwarded to the NTSB.

#### 14 **Communications Among Pilot Commissions**

15 The COSCO BUSAN incident highlighted a number of challenges faced by  
16 pilot commissions. Pilot commissions do not have a national organization to which  
17 they belong or an existing mechanism to facilitate communications among them to  
18 identify challenges and their solutions, best practices, and other items of mutual  
19 interest.

20 Both preceding and following the NTSB hearings in April, Board President  
21 Miller has participated in an effort to establish such communications, for the present,  
22 concentrating on West Coast pilot commissions. A West Coast conference of pilot  
23 commissions is currently scheduled for November 6 and 7, 2008 in Portland, Oregon.  
24 The draft agenda currently includes: (1) update on the COSCO BUSAN incident; (2)

1 current issues being addressed by each authority; (3) developing best practices; (4)  
2 protocols for sharing information; and (5) establishing a regular means of  
3 communication among the West Coast pilotage oversight authorities. Representatives  
4 from the pilot commissions in California, Oregon, Washington, British Columbia and  
5 Alaska have been contacted and have placed the regional meeting on their respective  
6 calendars.

**ENCLOSURE 1**

1 Filed 06 Dec. 2007

2  
3 BEFORE THE BOARD OF PILOT COMMISSIONERS  
4 FOR THE BAYS OF SAN FRANCISCO, SAN PABLO AND SUISUN

5 In re the Matter of the ) Case No.: No. 07-01  
6 Accusation Against: )  
7 Captain JOHN J. COTA, )  
8 )

9  
10 To: Captain JOHN J. COTA, Pilot on the Bays of San Francisco, San Pablo and Suisun, State  
11 License No. 902-27:

12  
13 The Incident Review Committee of the Board of Pilot Commissioners for the Bays of San  
14 Francisco, San Pablo and Suisun (hereinafter "the IRC" and "the Board," respectively), having  
15 investigated the navigational incident described herein, under the authority of Section 1180.6 of the  
16 California Harbors and Navigation Code (hereinafter "the Code") and Section 210 of the Board's  
17 Regulations (Title 7, California Code of Regulations, § 210), makes the following accusation against  
18 Captain John J. Cota (hereinafter "Captain Cota"), the Respondent,

19  
20 **General Background**

- 21 1. At all times relevant, Captain Cota was the holder of Pilot License Number 902-27, issued on  
22 February 1, 2007 by the Board pursuant to Chapter 4 of Division 5 the Code.  
23  
24 2. The Board has the authority to suspend or revoke a pilot license issued by it as provided by  
25 Sections 1181 and 1182 of the Code.  
26  
27 3. Captain Cota has subjected his license to suspension or revocation in that, on 07 November  
28 2007, while serving as the pilot of the outbound M/V COSCO BUSAN, he negligently caused the



1 allision of that vessel's port side with the fendering system of the "D" or "Delta" tower of the San  
2 Francisco-Oakland Bay Bridge, as more fully described below.

- 3  
4 4. The M/V COSCO BUSAN is a motor container vessel registered in Hong Kong. The vessel  
5 has a gross registered tonnage of 65,301 GRT, a length of 901 feet, a beam of 131 feet, and at the  
6 time of the allision had a draft of 39' 09" forward and 40' 04" aft. The vessel is configured with a  
7 single, fixed pitch, right turning propeller and a 2,700 hp bow thruster.

8  
9 **BASIS OF ACCUSATION**

- 10  
11 5. At about 0600 on Wednesday, 07 November 2007, Captain Cota boarded the M/V COSCO  
12 BUSAN at Oakland Berth 56 to act as its pilot for its transit from Berth 56 to sea. The vessel was  
13 scheduled to sail at 0630.

- 14  
15 6. Once aboard the vessel, Captain Cota was escorted to the bridge where he met the ship's  
16 captain and bridge team, whose English skills were limited, as was their familiarity with the ship  
17 and her navigation equipment.

- 18  
19 7. Captain Cota was unfamiliar with the ship's electronic chart system and the markings thereon.  
20 Additionally, Captain Cota had concerns regarding the operational status of the radars prior to  
21 departure.

- 22  
23 8. At 0748 the COSCO BUSAN left the safety of the berth under Captain Cota's guidance. At  
24 the time of departure, he had reason to doubt whether the ship could proceed safely and he had  
25 insufficient information about the level of visibility along his intended route. Under the  
26 circumstances, the COSCO BUSAN's departure from Berth 56 was contrary to the guidelines in  
27 the *San Francisco, San Pablo and Suisun Bays Harbor Safety Plan* ("HSP"), which provide for  
28 various factors to be considered before moving a vessel (see Section XIV. Pilotage) and further

1 provide that: "Vessels within the Bay at a dock ... should not commence movement if visibility  
2 is less than .5 nautical miles throughout the intended route, unless the operator's assessment of all  
3 variables is that the vessel can proceed safely." HSP at pp. 5 and 43.  
4

5 9. Once clear of the berth and in mid-channel, Captain Cota directed the assist tug,  
6 REVOLUTION, to put up a line to the ship's stern and follow the ship with a slack line. He  
7 planned to let the tug go once they were out of the estuary.  
8

9 10. Captain Cota ordered "Half Ahead" when the ship exited the Oakland Inner Harbor Entrance  
10 Channel. That engine order would bring the ship's speed under prevailing circumstances to about  
11 11 knots as the ship would be stemming a one-knot flood current. The engine order remained at  
12 Half Ahead for about 7 minutes, at which time Captain Cota ordered "Full Ahead." The ship  
13 allided with the bridge less than 3 minutes after the Full Ahead bell.  
14

15 11. During the period that the ship was at Half Ahead, the visibility in the approach to the bridge  
16 was reduced to about 0.1 nm, the ship's radar pictures deteriorated to the point that Captain Cota  
17 lost confidence in them, and he lost situational awareness to accurately assess the vessel's  
18 position, although he had the means to do so.  
19

20 12. Under the circumstances, prudence and compliance with Inland Navigation Rules 6, 7 and 19  
21 would have dictated that Captain Cota reduce speed and/or proceed to Anchorage 9 rather than  
22 continue to attempt to transit under the bridge between the Delta and Echo towers, which he could  
23 not see on radar and which were not visible due to the dense fog.  
24

25 13. The Bay Bridge has a fixed green light with 3 white lights in a vertical line on the bridge and a  
26 radar beacon (RACON) above the center of the channel between the Delta and Echo towers. In  
27 addition, there is a nun buoy with a radar reflector on each side of the Delta Tower, fog horns on  
28 both the Delta and Echo towers and a bell marking the Charlie tower of the bridge. As the pilot

1 with local knowledge, Captain Cota should have ensured that the lookout had been properly  
2 instructed as to what to look and listen for and what to report prior to approaching the bridge.

- 3  
4  
5 14. Captain Cota failed to make full use of all available resources, including the tug  
6 REVOLUTION, which remained tethered to the stern and thus useless to him, of the Coast Guard  
7 Vessel Traffic Service, which could have provided more information as to his position and  
8 heading if he had requested it, and of his ship's lookout, who could have provided information on  
9 the bridge's fog signals and lights if the lookout had been properly instructed.

10  
11 **DAMAGES CAUSED BY ALLISION**

- 12  
13 15. As a direct result of Captain Cota's piloting, the vessel struck the fendering system  
14 surrounding the Delta Tower, damaging the ship and the bridge's fendering system, and spilling  
15 an estimated 58,000 gallons of fuel oil from the ship's fuel tanks, which were ruptured by the  
16 allision. The resulting property damage and damage to the marine environment is estimated in the  
17 tens of millions of dollars.

18  
19 **ACCUSATION OF MISCONDUCT**

- 20  
21 16. Captain Cota's conduct, under all the circumstances described herein, constituted  
22 "misconduct" within the meaning of HNC Section 1181(g), which states in relevant part:

23 The license of a pilot or inland pilot may be revoked or suspended before its  
24 expiration only for reasons of misconduct, which shall include, but not be limited  
to, the following:

25 ....(g) Negligently, ignorantly, or willfully running any vessel on shore, or  
26 otherwise rendering it liable to damage, or otherwise causing injury to  
27 persons or damage to property....

1 Captain Cota's conduct also violated the provisions of Title 7, California  
2 Code of Regulations, Section 219(t), (u) and (v) which state in relevant part:

3 (t) A pilot ... shall not, through ignorance, willfulness or neglect, run a  
4 vessel on shore, or otherwise render a vessel liable for damage to persons,  
5 property or the marine environment during the performance of his or her  
6 duties as a pilot...;

7 (u) A pilot ... shall always obey the applicable Rules of the Road for the  
8 navigation of vessels and shall, under all circumstances, perform his or her  
9 duties in a manner so as not to endanger persons, property or the marine  
10 environment or cause damage...; and

11 (v) While engaged in any piloting activity, a pilot ... shall obey all  
12 applicable laws and conduct himself or herself so as not to cause injury or  
13 damage to persons, property or the marine environment.

14  
15 17. Captain Cota's misconduct as described above warrants the suspension or revocation of his  
16 pilot license.

17  
18 WHEREFORE, you are notified that the Board will determine whether revocation or  
19 suspension of your pilot license, or other appropriate sanction, should be imposed.

20 [Add standard Admin. Procedures Act instructions re demand for hearing, etc.]

21 Dated: December 06, 2007

22 By THE INCIDENT REVIEW COMMITTEE

23 \_\_\_\_\_/s/\_\_\_\_\_  
24 Commissioner Gunnar Lundeberg  
25 Public Member

26 \_\_\_\_\_/s/\_\_\_\_\_  
27 Captain P. A. Moloney  
28 Executive Director, Member

**ENCLOSURE 2**

BEFORE THE  
BOARD OF PILOT COMMISSIONERS  
FOR THE BAYS OF SAN FRANCISCO, SAN PABLO AND SUISUN

In the Matter of the Accusation Against:

CAPTAIN JOHN J. COTA,

Respondent.

Case No. 07-01

OAH No. 2008010073

**ORDER GRANTING  
CONTINUANCE**

This matter is currently set for hearing before the Board of Pilot Commissioners for the Bays of San Francisco, San Pablo, and Suisun, September 2 to 5, 8 to 11, 15 to 18, 22 to 25, 2008, at the Elihu Harris State Building, 1515 Clay Street, Oakland, California. A further Prehearing Conference is scheduled for August 8, 2008. Complainant, the Incident Review Committee of the Board of Pilot Commissioners for the Bays of San Francisco, San Pablo, and Suisun, is represented by Gary R. Gleeson, Attorney at Law. Respondent Captain John J. Cota is represented by John F. Meadows, Attorney at Law. A telephonic conference was held on July 30, 2008.

\* \* \* \* \*

On July 25, 2008, the parties filed an executed stipulation. Under the terms of the stipulation, the parties agree to vacate the hearing dates in view of respondent's impending retirement. The stipulation is, in effect, an agreement to vacate the Prehearing Conference and to continue the hearing so that the parties may resolve this matter without the necessity of a hearing. Good cause for a continuance of the hearing within the meaning of Government Code section 11524 has been demonstrated, and the motion is granted.

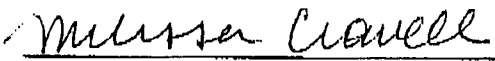
The parties request that a status conference be set for the purpose of scheduling new hearing dates should the retirement fail to be effectuated in accordance with the terms of the stipulation. All parties are available on October 3, 2008. A telephonic status conference shall take place at 4:45 p.m. on that date.

**ORDER**

1. The parties' request for a continuance is GRANTED. The Prehearing Conference scheduled for August 8, 2008, and the hearing dates of September 2 to 5, 8 to 11, 15 to 18, and 22 to 25, 2008, are vacated.

2. A Telephonic Status Conference shall take place on October 3, 2008, at 4:45 p.m. The Office of Administrative Hearings will generate the call to counsel at their telephone numbers on file, unless the office is notified of alternate numbers.

DATED: 7-31-08

  
\_\_\_\_\_  
MELISSA G. CROWELL  
Administrative Law Judge  
Office of Administrative Hearings

**PROOF OF SERVICE****Case Name: Captain John J. Cota****OAH No.: 2008010073**

I, Helen Tsai, declare as follows: I am over 18 years of age and am not a party to this action. I am employed by the Office of Administrative Hearings. My business address is 1515 Clay Street, Suite 206, Oakland, CA 94612. On July 31, 2008, I served a copy of the following document(s) in the action entitled above:

**ORDER GRANTING CONTINUANCE**

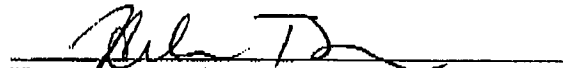
to each of the person(s) named below at the addresses listed after each name by the following method(s):

Gary R. Gleason, Attorney at Law  
Farbstein & Blackman  
411 Borel Avenue, Suite 425  
San Mateo, CA 94402  
By Facsimile only: 650-554-6240

John F. Meadows, Attorney at Law  
Jedeiken, Spaulding, Meadows & Schneider  
333 Pine Street, 5th Floor  
San Francisco, CA 94104  
By Facsimile only: 415-421-5658

**Fax Transmission.** I personally transmitted the above-described document(s) to the person(s) at the fax number(s) listed above, from fax machine number (510) 622-2743, pursuant to Government Code section 11440.20 and California Code of Regulations, title 1, section 1008, subdivision (d). The fax transmission was reported as complete and without error. A copy of the transmission report showing the date and time of transmission, properly issued by the transmitting machine, is attached to this declaration of service.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. This declaration was executed at Oakland, California on July 31, 2008.

  
Helen Tsai, Declarant



1 GARY R. GLEASON (SB#136167)  
 2 FARBSTEIN & BLACKMAN  
 3 A Professional Corporation  
 411 Borel Avenue, Suite 425  
 3 San Mateo, California 94402-3518  
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 5 Attorneys for Incident Review Committee

**FILED**

JUL 25 2008

Office of Administrative Hearings  
By \_\_\_\_\_

6  
 7 **BEFORE THE BOARD OF PILOT COMMISSIONERS**  
 8 **FOR THE BAYS OF SAN FRANCISCO, SAN PABLO AND SUISUN**  
 9

10 In re the Matter of the  
 11 Accusation Against:

) Case No.: No. 07-01

) STIPULATION AND ORDER RE:  
 ) DISMISSAL OF ACTION

12 Captain JOHN J. COTA  
 13

14  
 15 This stipulation is entered into between Respondent, Captain John J. Cota and the Incident  
 16 Review Committee of the Board of Pilot Commissioners for the Bays of San Francisco, San Pablo  
 17 and Suisun (hereinafter "the IRC" and "the Board" respectively) and is subject to the Board's  
 18 approval.

19  
 20 1. On 07 November 2007, the M/V COSCO BUSAN allided with the Delta Tower of the San  
 21 Francisco-Oakland Bay Bridge causing substantial environmental and property damage. At the time  
 22 of the incident, Captain Cota was piloting the vessel under the authority of his state pilot license  
 23 issued by the Board.

24  
 25  
 26 2. After an investigation, the IRC preferred an accusation as authorized by California Harbors  
 27 and Navigation Code Section 1180.6 alleging pilot misconduct associated with the allision. Captain  
 28 Cota filed a timely Notice of Defense, denying the allegations and requesting a hearing. In the

1 interim, the Board suspended Captain Cota's state pilot license pending a hearing on the charges set  
2 forth in the Accusation, as authorized by Harbors and Navigation Code Section 1180. By agreement  
3 of the parties, that suspension remains in effect pending a resolution of the issues raised by the  
4 Accusation and Captain Cota's Notice of Defense.

5  
6 3. The hearing in this matter is currently scheduled to begin September 02, 2008 before the  
7 Board sitting with an administrative law judge.

8  
9 4. By letter dated June 23, 2008 Captain Cota gave written notice to the Board of his intent to  
10 retire as a state licensed pilot effective October 1, 2008. By retiring, Captain Cota does not admit  
11 fault for the allision.

12  
13 5. In view of Captain Cota's impending retirement, and conditioned thereon, the parties  
14 agree that continuing to proceed with a hearing under these circumstances would not be productive,  
15 as in the event of a finding of pilot misconduct, the Board's authority to take any action against  
16 Captain Cota's professional license is limited to its suspension or revocation and would become moot  
17 upon his retirement.

18  
19 6. In consideration of the IRC's agreement to seek a conditional dismissal of the hearing  
20 herein, Captain Cota hereby agrees and stipulates that he will not withdraw his notice of retirement  
21 prior to its effective date or request reissuance of his state pilot license from the Board. Captain Cota  
22 further acknowledges that he is not authorized to pilot under his state license during the period of  
23 suspension and that his license expires by operation of law on the effective date of his retirement.

24  
25 7. For the reasons set forth above, the parties stipulate that the action against Captain Cota's  
26 state pilot license pending herein may be conditionally dismissed pending Captain Cota's retirement,  
27 and that the dismissal becomes final upon the effective date of such retirement.

Pursuant to Title 7, California Code of Regulations, §221(e), the parties jointly request Board approval hereof, and request that the hearing scheduled for September 02, 2008 herein, be taken off calendar.

**For Respondent:**

Date: 7-18-08

Capt. John J. Cota  
Captain John J. Cota  
Respondent

Date: 7.18.08

John F. Meadows  
John F. Meadows, Esq.  
Counsel for Respondent

**For the IRC:**

Date: 7-24-08

Knute Michael Miller  
Commissioner Knute Michael Miller  
Chair, Incident Review Committee

Date: 24 July '08

Patrick Moloney  
Captain Patrick Moloney  
Member, Incident Review Committee

Date: 7.21.08

Gary R. Gleason  
Gary R. Gleason, Esq.  
Counsel for Petitioner

The Board has reviewed and accepted the terms of the above stipulation and hereby requests the Office of Administrative Hearings to take the hearing currently scheduled for September 02, 2008 off calendar.

Date: 7-24-08

Knute Michael Miller  
Commissioner Knute Michael Miller  
President

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IT IS SO ORDERED.

Date: 7/30/08

*Melissa Crowell*

Hon. Melissa G. Crowell, Judge  
Office of Administrative Hearings

**ENCLOSURE 3**

# Harbor Safety Committee

of the San Francisco Bay Region

*Mandated by the California Oil Spill  
Prevention and Response Act of 1990*

July 24, 2008

Lisa Curtis, Administrator  
Office of Spill Prevention and Response  
1700 K Street, Suite 250  
Sacramento, CA 95811

Attn: Bud Leland, Deputy Administrator

SUBJECT: Harbor Safety Committee of the San Francisco Bay Region: Final Report, Response to Governor Schwarzenegger's Directive to Analyze the Cosco Busan Allision

Dear Ms. Curtis:

Following the November 7, 2007 Cosco Busan oil spill, Governor Schwarzenegger directed the Office of Spill Prevention and Response (OSPR) to investigate the causes of and response to the allision and resulting oil spill. OSPR called upon the Harbor Safety Committee of the San Francisco Bay Region (HSC) to analyze the navigational safety-related issues of the Governor's directive and make appropriate recommendations regarding the prevention aspects of the incident. The twenty-member committee, established by the state legislature, is comprised of port authorities; cargo, tanker, tug barge and ferry operators; labor; bar pilots; recreational boaters; environmental organizations; commercial fishermen; the Coast Guard Captain of the Port; BCDC; NOAA and the Corps of Engineers.

Beginning in late November 2007, the Harbor Safety Committee proceeded to address the following navigational and operational safety issues outlined in the Governor's directive: speed limit restriction, tugboat escorts, inclement weather sailing conditions, crew staffing, navigational equipment, Vessel Traffic Service system, and Physical Oceanographic Real time System (PORTS). The HSC Work Groups of maritime experts discussed the issues, and based on facts known of the allision at the time, developed recommendations to improve vessel transit in the Bay. (Public input is strongly encouraged: all meetings are open to the public, publicly noticed and agendized under the Ralph M. Brown Open Meeting Act).

Summary of Adopted Recommendations:

**Physical Oceanographic Real Time System (PORTS):** On January 10, 2008, the HSC adopted the PORTS Work Group recommendation to permanently fund the San Francisco Bay Region PORTS from the Oil Spill Prevention and Administration Fund (OSPAF), as PORTS has proven value to the maritime community. The Work Group also recommended a prioritized list of additional sensors to be deployed in critical locations in San Francisco Bay, which has a series of microclimates.

**Harbor Safety Committee** c/o Marine Exchange of the San Francisco Bay Region  
Fort Mason Center, Building B, Suite 325, San Francisco, CA 94123-1380  
(415) 441-7988 – hsc@sfmx.org

**Tug Escorting:** The HSC on March 13, 2008 adopted the Tug Escorts Work Group finding that there was no evidence to suggest tug escorting would have prevented the Cosco Busan incident or similar incidents from occurring. Additionally, the Work Group concluded that the risks associated with using an escort tug as a “leader” in limited visibility outweighs potential benefits.

**Navigating in Reduced Visibility:** On March 13, 2008, the HSC adopted ‘Guidelines for Navigating in Reduced Visibility’ and designated Critical Maneuvering Areas, which were developed primarily by the San Francisco Bar Pilots and the Coast Guard, and reviewed by the Navigation Work Group, as Best Maritime Practices for large vessels. The guidelines will be incorporated into the San Francisco Bar Pilots’ Operations Guidelines as well as the Pilots’ Tide Book, the Coast Guard Vessel Traffic Service (VTS) Training Manual, U.S. Coast Pilot 7, and the San Francisco, San Pablo and Suisun Bays Harbor Safety Plan. Similar guidelines are being developed for vessels smaller than 1600 gross tons.

**Vessel Traffic Service, Coast Guard Authority:** The HSC on March 13, 2008 adopted the Prevention Through People Work Group finding that adequate Coast Guard authority to regulate shipping and control vessel movements already exists in current law, and that the best skills for maneuvering a vessel originate from onboard the ship itself, not from the Vessel Traffic Service. VTS Operators on Yerba Buena Island do not have instantaneous knowledge of the particular ship’s characteristics (on average, more than 900 different ships enter the Bay each year) and of the tidal and wind forces acting on a vessel.

**Navigational Safety for Commute Ferries:** To increase the safe transport of commute passengers as a major segment of maritime traffic on San Francisco Bay, the HSC on May 8, 2008 adopted ferry routes developed by the Ferry Operations Work Group with ferry operators, ferry masters and the VTS, to be incorporated into the Harbor Safety Plan and by NOAA on area nautical charts. In 2007, commute ferries carried a total of five million passengers on six routes. Additional routes are planned within the next few years.

**Speed Restrictions:** On May 8, 2008, the HSC adopted the Navigation Work Group findings that federal regulations and international guidelines adequately limit the speed of large vessels transiting the Bay during periods of reduced visibility. The San Francisco Bay region, consisting of several bays and rivers, is one of the foggiest harbors in the United States. To aid mariners, the Coast Guard established Regulated Navigational Areas (RNAs) designed to improve safety by organizing traffic patterns and limiting vessel speeds.

**Crewing Requirements:** On May 8, 2008, the HSC adopted the Navigation Work Group findings that sufficient regulations and guidelines exist under federal and international law for crewing requirements.

**Navigation Tools:** The HSC voted on July 10, 2008 to urge the Board of Pilot Commissioners, which has oversight authority over licensed San Francisco Bar Pilots, to work with the Bar Pilots to incorporate in the Pilot training program enhanced training in advanced electronic navigation systems, providing exposure to a greater number of systems and variety of presentations, as a near-term priority. The HSC also supports adoption of a regulation to require that pilots licensed by the Board be equipped with portable electronic navigation equipment, commonly known as Portable Pilot Units ("PPUs") at all times while piloting San Francisco Bay.

The Harbor Safety Committee has begun developing "Best Maritime Practices" for safe navigation in the San Francisco Bay Region, a requirement by OSPR to incorporate in each committee's Harbor Safety Plan. "Best Practice" topics under discussion are policies for closing the Bar to shipping and for operation of tugs and barges and high speed commute ferries during inclement weather. Additionally, the Committee contacted the California Department of Transportation (Caltrans) to discuss the fendering protection of bridges adjacent to Bay Area shipping lanes; Caltrans representatives subsequently briefed the HSC on guidelines for bridge fendering. As a result of this discussion, the HSC then recommended in a letter that Caltrans engineers independently analyze the energy-absorbing capacities of key bridge fendering protection systems adjacent to high volume shipping lanes in the Bay Region to ensure adequate protection of the integrity of the bridges and to minimize damage to the vessel to reduce the chance of a possible oil spill.

The Committee is actively working to promote safe navigation in the San Francisco Bay Region to protect our environment. We are available for any further consultation you may require. I can be reached at (415) 461-4566.

Sincerely,

Joan L. Lundstrom, Chair  
Harbor Safety Committee of the  
San Francisco Bay Region

cc: Gary Toledo, OSPR  
Steve Sawyer, OSPR  
Larry Bowling, National Transportation Safety Board  
Harbor Safety Committee

Enclosures: Work Group Reports sent to OSPR, as approved by the HSC



March 19, 2008

TO: Lisa Curtis, Administrator, Office of Spill Prevention and Response

FROM: Joan Lundstrom, Chair, Harbor Safety Committee of the San Francisco Bay Region

SUBJECT: Governor's Directive to Analyze the Cosco Busan Oil Spill Incident,

**Harbor Safety Committee Recommendation: Guidelines for Navigating San Francisco Bay in Reduced Visibility**

**Introduction**

In response to the Cosco Busan oil spill incident, Governor Schwarzenegger directed a state investigation into the causes of and response to the oil spill. The directive outlined a number of issues to ensure "any action necessary to prevent this from ever happening again." OSPR tasked the Harbor Safety Committee (HSC) of the San Francisco Bay Region to "analyze the navigational safety-related issues of the Governor's directive and make appropriate recommendations regarding the prevention aspects of the incident."

The HSC Work Groups addressed the issues raised in the Governor's directives based on information available, noting that the National Transportation Safety Board (NTSB) report on the cause is not expected to be completed until autumn 2008, and the State Board of Pilot Commissioners Accusation (Case No. 07-01) of the pilot is scheduled for hearing before an Administrative Law Judge beginning September 2, 2008. Other investigations are focused on oil spill response efforts.

The Navigation Work Group met January 23 and March 4, 2008, to address issues related to navigating San Francisco Bay in inclement weather, specifically, those affecting large vessels transiting during reduced visibility. To advance this effort, the San Francisco Bar Pilots and the Coast Guard developed Guidelines for Navigating in Reduced Visibility ("Guidelines"), which were reviewed by the Navigation Work Group, and which are part of this recommendation.

Note: The following findings and recommendations should be considered preliminary, as not all evidence was accessible. As new information becomes available, the Harbor Safety Committee may revisit or address other policy implications.

**Report From the Navigation Work Group on Navigating San Francisco Bay in Reduced Visibility**

Navigating the San Francisco Bay Region during periods of reduced visibility requires mariners to exercise additional caution and vigilance. The Bay region, consisting of several bays and rivers, is one of the foggiest harbors in the United States. In-Bay distances are long. There is not a single regional climate, but a series of microclimates with variable fog. During summer, 30 to 40 percent of parts of the Bay may experience foggy conditions. In winter, the fog may be denser, originating from a different direction than summer fog.

## **Role of Reduced Visibility in Cosco Busan Incident**

Reduced visibility was a causal factor in the Cosco Busan incident: the State Board of Pilot Commissioners found in its Accusation (Case No. 07-01) that, “At the time of departure [from the dock], [the pilot] had reason to doubt whether the ship could proceed safely and...had insufficient information about the level of visibility along [the] intended route. Under the circumstances, the Cosco Busan’s departure from Berth 56 was “contrary to the guidelines in the San Francisco, San Pablo and Suisun Bays Harbor Safety Plan (“HSP”), which provide for various factors to be considered before moving a vessel...” and further provide that “vessels within the Bay at a dock...should not commence movement if visibility is less than .5 nautical miles throughout the intended route, unless the operator’s assessment of all variables is that the vessel can proceed safely.”

In reviewing the Harbor Safety Plan guidelines quoted above, the Navigation Work Group determined there was a need to clarify and expand on the guidelines because, as was noted, the Bay region is a series of microclimates with variable fog conditions.

## **Recommended Guidelines for Navigating in Reduced Visibility**

These guidelines should be used by the mariner when planning, initiating or navigating a transit in the Bay during periods of reduced visibility. These guidelines acknowledge that **Large Vessels** are not as maneuverable as smaller vessels and therefore define **Large Vessels** as power driven vessels of 1600 gross tons or more, and tugs with barges of 1600 gross tons or more. Mariners are at all times to comply with the requirement of the International Regulations for Avoiding Collisions at Sea, or COLREGS.

**Critical Maneuvering Areas (CMAs):** There are areas within the Bay where additional standards of care are required due to the restrictive nature of the channel, proximity of hazards, or the prevalence of adverse currents. Large vessels should not transit through CMAs when visibility is less than 0.5 nautical miles.

Locations within the Bay identified as Critical Maneuvering Areas:

Redwood Creek  
San Mateo-Hayward Bridge  
Oakland Bar Channel\*  
Islais Creek Channel  
Richmond Inner Harbor  
Richmond-San Rafael Bridge, East Span  
Union Pacific Bridge  
New York Slough, up-bound  
Rio Vista Lift Bridge

\*Note: the Oakland Bar Channel is identified due to cross currents and its proximity to the Bay Bridge and Yerba Buena Island.

**Vessels docked:** Large vessels at a dock within the Bay should not commence a movement if visibility is less than 0.5 nautical miles at the dock.

**Vessels proceeding to dock:** Large vessels proceeding to a dock should anchor if visibility at the dock is known to be less than 0.5 nautical miles, unless, under all circumstances, proceeding to the dock is the safest option.

Note: Vessel pilots or operators should notify VTS upon determination that a scheduled movement will be delayed or cancelled. If underway, they shall make a sailing plan deviation report per VTS regulations.

**Navigation Work Group Recommendations to the Harbor Safety Committee:**

1. The Work Group recommends that the “Guidelines for Navigating in Reduced Visibility” developed by the San Francisco Bar Pilots and the Coast Guard be adopted as “Best Maritime Practices for Large Vessels” and that the guidelines be incorporated into the San Francisco Bar Pilots’ Operations Guidelines as well as their Tide Book, the Coast Guard Vessel Traffic Service (VTS) Training Manual, U.S. Coast Pilot 7, and the San Francisco Harbor Safety Plan.

The Navigation Work group concluded the proposed guidelines would increase safe navigation in San Francisco Bay, and thereby respond in part to the Governor’s directive to analyze navigational safety-related issues of the Cosco Busan incident and make appropriate recommendations regarding the prevention of future incidents.

2. The Work Group recommends the Harbor Safety Committee consider drafting guidelines for navigating in reduced visibility for certain vessels less than 1600 gross tons.

3. The Work Group recommends the Harbor Safety Committee review the “Guidelines for Navigating in Reduced Visibility” within one year of adoption.

4. The Work Group recommends that the Harbor Safety Committee address issues surrounding the capacity and management of Coast Guard designated anchorages in San Francisco Bay.

5. The Work Group recommends that the Harbor Safety Committee assess the use of and advances in navigational aid technology to improve safe transit on San Francisco Bay. The Board of Pilot Commissioners has formed a Navigation Technology Committee to investigate the different types of navigation systems generally found on ships calling the Bay Area. A preliminary report is expected June 1, 2008. The HSC Navigation Work Group will review the report in considering recommendations to the full HSC.

**Harbor Safety Committee Action:** The Harbor Safety Committee unanimously adopted the Navigation Work Group findings and recommendations at its March 13, 2008 regular meeting. (Note: as a committee established by the State of California, all Harbor Safety Committee meetings are open to the public and publicly noticed and agendized under the provisions of the Ralph M. Brown Open Meeting Act).

July 15, 2008

TO: Lisa Curtis, Administrator, Office of Spill Prevention and Response  
FROM: Joan Lundstrom, Chair, Harbor Safety Committee of the San Francisco Bay Region  
SUBJECT: Governor's Directive to Analyze the Cosco Busan Oil Spill Incident,  
**Harbor Safety Committee Recommendation: Pilot Use of Navigational Tools**

Attn: Bud Leland, Deputy Administrator

### **Introduction**

In response to the Cosco Busan oil spill incident, Governor Schwarzenegger directed a state investigation into the causes of and response to the oil spill. The directive outlined a number of issues to ensure "any action necessary to prevent this from ever happening again." OSPR tasked the Harbor Safety Committee (HSC) of the San Francisco Bay Region to "analyze the navigational safety-related issues of the Governor's directive and make appropriate recommendations regarding the prevention aspects of the incident."

The HSC Work Groups addressed the issues raised in the Governor's directives based on information available, noting that the National Transportation Safety Board (NTSB) report on the cause is not expected to be completed until autumn 2008. Other investigations are focused on oil spill response efforts.

To date the Navigation Work Group completed recommendations to the HSC related to large vessel transit of the San Francisco Bay Region as well as the speed of large vessels the region during periods of reduced visibility.

To respond to the Governor's directive to develop recommendations regarding the use of advanced technology to aid pilots in navigating San Francisco Bay, the HSC agreed to coordinate with the San Francisco Board of Pilot Commissioners. The Navigation Work Group met June 27, 2008, to develop its recommendations to the HSC, based upon the adopted recommendations of the Board of Pilot Commissioners.

Note: the following findings and recommendations should be considered preliminary, as not all evidence was accessible. As new information becomes available, the Harbor Safety Committee may revisit or address other policy implications.

### **Report From Navigation Work Group on Pilot's Use of Navigational Tools**

#### **Background**

In response to the Cosco Busan incident, the Governor directed OSPR to investigate the potential role of navigational technology in reducing the risk of vessel collisions in the San Francisco Bay Region. The HSC Navigation Work Group agreed to coordinate its review of the subject with the work of the Board of Pilot Commissioners ("Pilot Commission"), which formed a Navigation Technology Committee to develop recommendations for the enhancement of pilots' ability to safely navigate using shipboard and portable electronic navigation systems.

The State Board of Pilot Commission, created in 1850, regulates the Bar Pilots of the San Francisco Bay Region. The Commission consists of seven members appointed by the Governor with the consent of the Senate: three are public members who are neither pilots nor work for companies that use pilots, two are pilots licensed by the Pilot Commission and two are industry members - one from the tanker industry and one from the dry cargo industry.

Over the course of several months, in investigating different types of navigation systems found on ships calling on the San Francisco Bay Area and the sufficiency of pilot training in the use of such systems, the Pilot Commission Technology Committee considered presentations by experts in navigation technology and in the education of mariners in the use of the technology. The committee also evaluated portable electronic navigation chart systems that can be brought aboard by pilots, various comprehensive reports on their use, liability issues and interface with shipboard equipment and how portable pilot units are regulated in other jurisdictions.

### **Work Group Discussion**

The HSC Navigation Work Group met June 27, 2008, to review the recommendations adopted by the Pilot Commission and to develop recommendations to the Harbor Safety Committee. (Attachment: *Draft Board of Pilot Commission status report on Pilot Commission's actions to enhance pilots' ability to safely navigate ships with the use of advanced navigation technology.*)

The Work Group noted that prudent mariners rely on an array of informational sources when navigating, including paper charts, electronic charts, Army Corps of Engineers charts, USCG Notices to Mariners, etc. Portable electronic navigation chart systems that can be brought aboard by pilots, or Portable Pilot Units ("PPUs"), are an additional navigational tool proposed to be carried by Pilot Commission-licensed pilots in San Francisco Bay. These units cannot supplant onboard systems; however, their use is appropriate in the Bay due to its variety of microclimates and periods of dense fog.

To further navigational safety, the Work Group agreed to support international efforts to standardize symbols used on onboard charts. Confusion can result when piloting the more than 900 different ships that transit the Bay, many of which carry different charting systems featuring proprietary symbology. Future training of Pilot Commission-licensed pilots will include the symbology used on different charts.

**Conclusion:** In discussing issues related to the use of advanced navigational technology systems, the Navigation Work Group found that Portable Pilot Units are an additional tool of value to increase navigation safety in the Bay Region, along with enhanced training of Pilot Commission-licensed pilots in advanced electronic navigation systems.

## **Navigation Work Group Recommendations to the Harbor Safety Committee**

1. Urge the Board of Pilot Commissioners, as a near-term priority, to work with the San Francisco Bar Pilots to incorporate in the Pilot training program enhanced training in advanced electronic navigation systems, providing exposure to a greater number of systems and variety of presentations.

2. Support adoption by the Board of Pilot Commissioners of a regulation to require that pilots licensed by the Pilot Commission be equipped with, and trained in the use of, portable electronic navigation equipment, commonly known as Portable Pilot Units ("PPUs"). The regulation should require that pilots be equipped with PPUs at all times while piloting except when the pilot deems that embarking on or disembarking from a vessel while carrying a PPU may present an unacceptable safety hazard to the pilot or when circumstances would prevent its use.

Such PPUs shall, at a minimum, have the following capabilities:

- (a) Displaying approved electronic navigation charts (ENCs) issued by the cognizant U.S. government authority;
- (b) Displaying the vessel's position and heading on such ENCs to the accuracy required by the International Maritime Organization (IMO) for Automatic Identification Systems (AIS); and
- (c) Displaying other navigational information as provided through the vessel's AIS pilot plug.

**Harbor Safety Committee Action:** The Harbor Safety Committee unanimously adopted the Navigation Work Group findings and recommendations at its July 10, 2008 regular meeting. (Note: as a committee established by the State of California, all Harbor Safety Committee meetings are open to the public and publicly noticed and agendaized under the provisions of the Ralph M. Brown Open Meeting Act).

## Attachment

### **Draft Board of Pilot Commissions status report on Pilot Commission's actions to enhance pilots' ability to safely navigate ships with the use of advanced navigation technology**

Following the COSCO BUSAN accident and oil spill in San Francisco Bay in November 2007, the state Board of Pilot Commissioners appointed a special committee to develop recommendations for the enhancement of pilots' ability to safely navigate ships with the use of advanced navigation technology. The Commission recently accepted the preliminary recommendations of its Navigation Technology Committee and commenced the process for incorporating enhanced training in advanced electronic navigation systems and for the adoption by regulation of a requirement that pilots licensed by the Commission be equipped with, and trained in the use of, portable electronic navigation equipment that the pilots would carry with them when they go aboard a ship. The development of these recommendations, progress to date and estimated timetable to full implementation are summarized below.

#### INTRODUCTION

In response to the COSCO BUSAN's allision with the fendering system of the Delta Tower of the San Francisco-Oakland Bay Bridge and the ensuing oil spill, Governor Schwarzenegger directed a state investigation into the causes of, and response to, the accident and the spill. The Governor's directive outlined a number of issues to ensure "any action necessary to prevent this from ever happening again." The state Office of Oil Spill Prevention and Response (OSPR) tasked the Harbor Safety Committee of San Francisco Bay Region (HSC) to "analyze the navigational safety-related issues of the Governor's directive and to make appropriate recommendations regarding the prevention aspects of the incident." The HSC agreed to consult with the state agency that licensed the pilot, the Board of Pilot Commissioners for the Bays of San Francisco, San Pablo and Suisun (the Pilot Commission), on certain issues related to the use of shipboard and portable electronic navigation systems by pilots.

#### BOARD OF PILOT COMMISSIONERS

Immediately following the incident, the Pilot Commission, through its Incident Review Committee (IRC), commenced an investigation to determine whether the incident was caused by pilot error. On December 6, 2007, the IRC filed charges against the pilot in the form of an Accusation alleging that the pilot had reason to doubt whether the ship could safely proceed under the prevailing circumstances, proceeded with insufficient information about the level of visibility along his intended route, proceeded at a speed that was excessive for the circumstances and failed to make full use of all available resources to determine the vessel's position prior to attempting a transit between the Delta and Echo towers of the bridge in conditions of reduced visibility. The pilot has denied the charges and requested a hearing. A hearing on the charges is currently scheduled for September 2, 2008.

The Pilot Commission summarily suspended the pilot's state license on November 30, 2007. That license remains suspended pending the hearing on the IRC's charges.

One of the issues raised in the investigation focused on the electronic navigation system aboard the COSCO BUSAN and whether the pilot was able to make full use of the information provided by it.

#### NAVIGATION TECHNOLOGY COMMITTEE OF THE BOARD OF PILOT COMMISSIONERS

In response to the incident, the Pilot Commission formed a Navigation Technology Committee to investigate the different types of navigation systems found on ships calling on the San Francisco Bay Area and the sufficiency of pilot training in the use of such systems; and to evaluate portable electronic navigation chart systems that can be brought aboard by pilots to assist in navigation.

The Navigation Technology Committee was chaired by RADM Frank X. Johnston, MARAD, (Ret.), who was appointed by Governor Schwarzenegger to the Pilot Commission in January 2008. Committee members included the chairs of the navigation technology committees for the San Francisco Bar Pilots, Captain Sean Gabe, and for the Jacobsen Pilot Service in Long Beach, Captain Vic Schissler, as well as a retired master mariner who helped Exxon develop an advanced electronic navigation system for its tanker fleet, Captain Tom Hill.

The Committee held well-attended public workshops in February, March and April, 2008, with participation or presentations by experts in navigation technology and in the training and education of mariners in that subject, including Professor Sam Pecota of the California Maritime Academy, Executive Director Glen Paine of the Maritime Institute of Technology and Graduate Studies, Training Director Scott Humphrey of the Coast Guard Vessel Traffic Service for San Francisco Bay Area, Human Factors Expert Dr. Richard Mogford from NASA and various commercial providers of portable pilot navigation units.

The Committee also reviewed how portable pilot units are regulated in other pilotage jurisdictions and various comprehensive reports on their use, liability issues and interface with shipboard equipment. (Copies of the Committee's meeting minutes and the various reports reviewed by the Committee are available from the Pilot Commission.)

The Committee presented its initial report to the Pilot Commission on April 17, 2008, recommending that the Commission's Pilot Training Curriculum Committee be directed to consider incorporating enhanced training in advanced electronic navigation systems that would provide exposure to a greater number of systems and variety of presentations than what is provided by the current training program. In addition, the Committee



recommended that the Commission adopt by regulation a requirement that pilots licensed by the Commission be equipped with, and trained in the use of, portable electronic navigation equipment, commonly known as portable pilot units (PPUs), with specified minimum capabilities and other relevant provisions.

At its May 22, 2008 meeting, the Pilot Commission voted unanimously to direct its Curriculum Committee to consider incorporating enhanced training in advanced electronic navigation systems and directed its staff to begin the formal rulemaking process for adopting the regulation recommended by the Navigation Technology Committee.

#### ENHANCED TRAINING IN ADVANCED ELECTRONIC NAVIGATION SYSTEMS

The Maritime Institute of Technology and Graduate Studies (MITAGS) has a contract with the Pilot Commission to provide specified training to pilots as mandated by current regulations. The curriculum is specified in the contract. That contract ends June 30, 2009.

The Commission's Pilot Training Curriculum Committee will need to review the current curriculum taught by MITAGS under the contract, possible options to provide enhanced training in advanced electronic navigation systems, and how such training can be incorporated into the current training program within the Commission's regulatory and budget constraints.

Preliminary estimates are that it will take several meetings over a period of two to three months to develop specific recommendations for changing the curriculum and for the Board to take action on those recommendations, followed by possible contract negotiations with MITAGS and the preparation and execution of contract amendments. (Contract matters are handled through the Department of Consumer Affairs.)

If the resulting contract expenses remain within the Commission's budget, the enhanced training, if adopted, could be in place by October 1, 2008. If the additional training expenses would exceed the Board's budget, the Board may need to seek an increase in its spending authorization unless spending on other program areas can be reduced. Such a request could add a minimum of three to four months to the process.

#### RULEMAKING RE USE OF PORTABLE PILOT UNITS

The rulemaking process is governed by the California Administrative Procedures Act (APA), and by budgetary constraints imposed by the Department of Finance (DOF) and the Legislature. The Pilot Commission has been directed by DOF to use temporary part time government employees known as AGPAs (Associate Government Policy Analysts) to meet the Commission's future rulemaking needs. The Board's current budget does not

authorize expenditures for such employees, but there is such authority in the proposed budget for F/Y 08/09, which begins July 1, 2008. Once that budget has been approved (as part of the annual state budget approval process), the Commission can proceed with the retention of an AGPA and begin the rulemaking process.

The AGPA will need to ensure compliance with APA requirements; prepare the notice of proposed rulemaking and supporting documentation including a fiscal analysis and have them approved by the Office of Administrative Law and, if necessary, the Department of Finance; guide the Pilot Commission through the public comment period (minimum of 45 days from the publication of the notice of proposed rulemaking and 15 additional days following notice of any substantive amendments to the original rulemaking language); guide the Board through the public rulemaking hearing or hearings, until the rulemaking language has been adopted by the Commission; prepare the final rulemaking package and supporting documents; and guide the rulemaking through the approval process before the Office of Administrative Law (OAL). Once approved by OAL, the rulemaking is filed with the Secretary of State and ordinarily becomes law 30 days later.

The entire process can take from six to nine months or more. On an expedited basis, it is possible that the rulemaking could be completed by early 2009.

It should be noted that investigations are ongoing at both the state and federal level, and that the reports and recommendations that will ultimately come out of those investigations, along with various legislation now under consideration, may result in changes or additions to the above actions.

June 5, 2008. Source: Board of Pilot Commission Navigation Technology Committee Report.

**ENCLOSURE 4**

68943

08/12/08 01:30 PM  
RN 08 25254 PAGE 4  
Substantive

Amendment 24

On page 4, between lines 13 and 14, insert:

SEC. 3. Section 1176 of the Harbors and Navigation Code is repealed.

~~1176. Pilots and inland pilots shall undergo physical examinations in accordance with standards prescribed by the board in conjunction with the renewal of their license. The examination shall designate that each pilot or inland pilot is fit to perform his or her duties as a pilot.~~

SEC. 4. Section 1176 is added to the Harbors and Navigation Code, to read:

1176. (a) The board shall appoint a physician or physicians who are qualified to determine the suitability of a person to perform his or her duties as a pilot, an inland pilot, or a pilot trainee in accordance with subdivision (c).

(b) An applicant for a pilot trainee position or for a pilot or inland pilot as well as a pilot or inland pilot seeking renewal of his or her license shall undergo a physical examination by a board appointed physician in accordance with standards prescribed by the board. Within 30 days prior to the examination, the applicant or licensee shall submit to the physician conducting the physical examination a complete list of all prescribed medications being taken by or administered to the applicant or licensee.

(c) On the basis of both the examination and an evaluation of the effects of the prescription medications named on the submitted list, the physician shall designate to the board whether or not the pilot, inland pilot, or pilot trainee is fit to perform his or her duties as a pilot, inland pilot, or pilot trainee.

(d) The license of a pilot or inland pilot shall not be renewed unless he or she is found fit for duty pursuant to subdivision (c).

(e) Whenever a pilot, inland pilot, or pilot trainee is prescribed either a new dosage of a medication or a new medication, or suspends the use of a prescribed medication, he or she shall, within 10 days, submit that information to the board appointed physician having possession of the prescribed medication list submitted pursuant to subdivision (b). Whenever the physician receives the updated information, the physician shall determine whether or not the medication change affects the licensee's or trainee's fitness for duty. If the physician determines that the medication change results in the pilot, inland pilot, or pilot trainee being unfit for duty, the physician shall inform the board.

(f) The board may terminate a pilot trainee or suspend or revoke the license of a pilot or an inland pilot who fails to submit the prescribed medication information required by this section.

Amendment 25

On page 4, line 14, strike out "SEC. 3." and insert:

SEC. 5.

AMENDED IN ASSEMBLY JUNE 11, 2008

AMENDED IN ASSEMBLY MAY 6, 2008

**SENATE BILL**

**No. 1217**

---

**Introduced by Senator Yee**

February 14, 2008

---

An act to add Section 1157.5 to the Harbors and Navigation Code, relating to vessels, and making an appropriation therefor.

LEGISLATIVE COUNSEL'S DIGEST

SB 1217, as amended, Yee. Board of Pilot Commissioners.

Existing law establishes in state government the Board of Pilot Commissioners, with jurisdiction over Monterey Bay and the Bays of San Francisco, San Pablo, and Suisun. Existing law authorizes the board to appoint an executive director to perform various duties.

This bill would require the board, on or before ~~February~~ *April* 15, 2010, and annually thereafter, to submit to the Secretary of the Senate and the Chief Clerk of the Assembly a report *containing specified information* describing its activities for the preceding calendar year. The bill would also require the board, on or before April 15, 2010, and annually thereafter, to submit to the Secretary of the Senate, the Chief Clerk of the Assembly, the Department of Finance, and the Joint Legislative Budget Committee a summary of the board's finances.

Existing law continuously appropriates the funds in the Board of Pilot Commissioners' Special Fund for the payment of the compensation and expenses of the board, its officers and employees, and training programs.

By imposing the duty to submit an annual report of the board's activities and a summary of the board's finances, the bill would make an appropriation.

This bill would provide that certain provisions would be operative only if SB 1627 and this bill are both enacted and become effective on or before January 1, 2009, and other provisions would be operative only if this bill is enacted and becomes effective on or before January 1, 2009, and SB 1627 is not enacted.

Vote: majority. Appropriation: yes. Fiscal committee: yes.  
State-mandated local program: no.

*The people of the State of California do enact as follows:*

1 SECTION 1. Section 1157.5 is added to the Harbors and  
2 Navigation Code, to read:  
3 1157.5. (a) On or before ~~February~~ *April* 15, 2010, and annually  
4 thereafter, the board shall submit to the Secretary of the Senate  
5 and the Chief Clerk of the Assembly a report describing the board's  
6 activities for the preceding calendar year. The report shall include,  
7 but not be limited to, all of the following:  
8 (1) The number of vessel movements across the bar, on the bays,  
9 and on the rivers within the board's jurisdiction.  
10 (2) The name of each licensed pilot, *inland pilot*, and pilot  
11 trainee, and the status of each person. *If a person has had more*  
12 *than one status during the reporting year, each status and the*  
13 *length of time in that status shall be indicated. For the purposes*  
14 *of this section, "status" includes all of the following designations:*  
15 (A) *Licensed and fit for duty.*  
16 (B) *Licensed and not fit for duty.*  
17 (C) *Licensed and on authorized training.*  
18 (D) *Licensed and on active military duty.*  
19 (E) *Licensed and on leave of absence.*  
20 (F) *Licensed but license suspended.*  
21 (3) A summary of each report of misconduct or a navigational  
22 incident involving a pilot, inland pilot, or pilot trainee, or other  
23 matters for which a license issued by the board may be revoked  
24 or suspended. For those cases that have been closed, the summary  
25 shall include a description of findings made by the incident review  
26 committee and of the resulting action taken by the board. For those  
27 cases that are still under investigation, the summary shall include  
28 a description of the reported incident and an estimated completion  
29 date for the investigation. *For those closed cases involving a pilot*  
30 *who has been involved in a prior incident where a finding of pilot*

1 *error had been made, the report shall also include a summary of*  
2 *that incident.*

3 (b) On or before April 15, 2010, and annually thereafter, the  
4 board shall submit to the Secretary of the Senate, the Chief Clerk  
5 of the Assembly, the Department of Finance, and the Joint  
6 Legislative Budget Committee a summary of the board's finances.  
7 Information to be included in the summary and its format shall be  
8 specified by the Department of Finance.

9 SEC. 2. Section 1157.5 is added to the Harbors and Navigation  
10 Code, to read:

11 1157.5. (a) On or before ~~February~~ *April* 15, 2010, and annually  
12 thereafter, the board shall submit to the Secretary of the Senate,  
13 the Chief Clerk of the Assembly, and the Secretary of Business,  
14 Transportation and Housing a report describing the board's  
15 activities for the preceding calendar year. The report shall include,  
16 but not be limited to, all of the following:

17 (1) The number of vessel movements across the bar, on the  
18 bays, and on the rivers within the board's jurisdiction.

19 (2) The name of each licensed pilot, *inland pilot*, and pilot  
20 trainee, and the status of each person. *If a person has had more*  
21 *than one status during the reporting year, each status and the*  
22 *length of time in that status shall be indicated. For the purposes*  
23 *of this section, "status" includes all of the following designations:*

24 (A) *Licensed and fit for duty.*

25 (B) *Licensed and not fit for duty.*

26 (C) *Licensed and on authorized training.*

27 (D) *Licensed and on active military duty.*

28 (E) *Licensed and on leave of absence.*

29 (F) *Licensed but license suspended.*

30 (3) A summary of each report of misconduct or a navigational  
31 incident involving a pilot, inland pilot, or pilot trainee, or other  
32 matters for which a license issued by the board may be revoked  
33 or suspended. For those cases that have been closed, the summary  
34 shall include a description of findings made by the incident review  
35 committee and of the resulting action taken by the board. For those  
36 cases that are still under investigation, the summary shall include  
37 a description of the reported incident and an estimated completion  
38 date for the investigation. *For those closed cases involving a pilot*  
39 *who has been involved in a prior incident where a finding of pilot*

1 *error had been made, the report shall also include a summary of*  
2 *that incident.*

3 (b) On or before April 15, 2010, and annually thereafter, the  
4 board shall submit to the Secretary of the Senate, the Chief Clerk  
5 of the Assembly, the Secretary of Business, Transportation and  
6 Housing, the Department of Finance, and the Joint Legislative  
7 Budget Committee a summary of the board's finances. Information  
8 to be included in the summary and its format shall be specified by  
9 the Department of Finance. The summary shall set forth separate  
10 reports for the following funds:

11 (1) Board of Pilot Commissioners' Special Fund.

12 (2) Pilot Trainee Fund.

13 (3) Pilot and Inland Pilot Continuing Education Fund.

14 SEC. 3. (a) Section 1 of this bill shall only become operative  
15 if this bill is enacted and becomes effective on or before January  
16 1, 2009, and Senate Bill 1627 is not enacted, in which case Section  
17 2 of this bill shall not become operative.

18 (b) Section 2 of this bill shall only become operative if both this  
19 bill and Senate Bill 1627 are enacted and become effective on or  
20 before January 1, 2009, in which case Section 1 of this bill shall  
21 not become operative.



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Substantive

AMENDMENTS TO SENATE BILL NO. 1217  
AS AMENDED IN ASSEMBLY JUNE 11, 2008

Amendment 1

In line 1 of the title, after the second "to" insert:

, and to repeal and add Section 1176 of,

Amendment 2

On page 2, line 3, strike out "(a)"

Amendment 3

On page 2, line 3, strike out "(1)" and insert:

(a)

Amendment 4

On page 2, line 10, strike out "(2)" and insert:

(b)

Amendment 5

On page 2, line 15, strike out "(A)" and insert:

(1)

Amendment 6

On page 2, line 16, strike out "(B)" and insert:

(2)

Amendment 7

On page 2, line 17, strike out "(C)" and insert:

(3)



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Substantive

Amendment 8

On page 2, line 18, strike out "(D)" and insert:

(4)

Amendment 9

On page 2, line 19, strike out "(E)" and insert:

(5)

Amendment 10

On page 2, line 20, strike out "(F)" and insert:

(6)

Amendment 11

On page 2, line 21, strike out "(3)" and insert:

(c)

Amendment 12

On page 3, strike out lines 3 to 8, inclusive

Amendment 13

On page 3, line 11, strike out "(a)"

Amendment 14

On page 3, line 17, strike out "(1)" and insert:

(a)

Amendment 15

On page 3, line 19, strike out "(2)" and insert:

(b)

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RN 08 25254 PAGE 3  
Substantive

Amendment 16  
On page 3, line 24, strike out "(A)" and insert:

(1)

Amendment 17  
On page 3, line 25, strike out "(B)" and insert:

(2)

Amendment 18  
On page 3, line 26, strike out "(C)" and insert:

(3)

Amendment 19  
On page 3, line 27, strike out "(D)" and insert:

(4)

Amendment 20  
On page 3, line 28, strike out "(E)" and insert:

(5)

Amendment 21  
On page 3, line 29, strike out "(F)" and insert:

(6)

Amendment 22  
On page 3, line 30, strike out "(3)" and insert:

(c)

Amendment 23  
On page 4, strike out lines 3 to 13, inclusive

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Substantive

Amendment 24

On page 4, between lines 13 and 14, insert:

SEC. 3. Section 1176 of the Harbors and Navigation Code is repealed.

~~1176. Pilots and inland pilots shall undergo physical examinations in accordance with standards prescribed by the board in conjunction with the renewal of their license. The examination shall designate that each pilot or inland pilot is fit to perform his or her duties as a pilot.~~

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Amendment 25

On page 4, line 14, strike out "SEC. 3." and insert:

SEC. 5.

**ENCLOSURE 5**

BOARD OF PILOT COMMISSIONERS  
FOR THE BAYS OF SAN FRANCISCO, SAN PABLO AND SUISUN  
FY 2008-09 SPRING FINANCE LETTER  
M/V COSCO BUSAN Incident/Board Task Review  
SFL # 8530-01  
Priority #1

**A. Nature of Request**

The Board of Pilot Commissioners (Board) requests a special fund budget augmentation of \$367,000 in FY 2008-09, \$58,000 in FY 2009-10, and \$39,000 ongoing, to fund expenses incurred in the investigation and administrative hearing following the M/V (motor vessel) COSCO BUSAN allision with the San Francisco/Oakland Bay Bridge in November 2007, and also to review and assess Board procedures to address questions that have surfaced as a result of the incident.

M/V COSCO BUSAN

The Board's Incident Review Committee (IRC) has investigated the M/V COSCO BUSAN incident and brought charges (termed an "accusation") against the Board-licensed pilot who was directing navigation of the vessel at the time it struck the San Francisco/Oakland Bay Bridge. The accusation will result in an administrative hearing and may result in suspension or revocation of the pilot's state license. The Administrative Law Judge (ALJ) has scheduled the hearing for early September 2008.

Failure to proceed with the administrative action would undermine public confidence and the ability of the state to regulate pilotage in waters under its jurisdiction. Public interest in the incident and the Board's response justify the highest priority with respect to continued funding, expenditure authority and the ability to continue the administrative hearing to completion. A Deficiency Funding Request of \$255,000 for FY 2007/08 to meet unanticipated legal costs was previously submitted and is awaiting legislative approval.

BOARD TASK REVIEW

As a result of this incident, the Board has identified a number of areas in which its procedures can be strengthened to provide the public with increased assurance that steps will be taken to further reduce the risk of rare, but potentially catastrophic accidents such as the M/V COSCO BUSAN. These steps include a comprehensive review of pilot fitness standards, training in shipboard and portable electronic navigation systems that are intended to provide pilots with the best achievable means of safely navigating in reduced visibility conditions, and strengthening the Board's incident investigation procedures to ensure early identification of possible problem areas for pilots.

The Board's task review will include a review of navigation technology, pilot fitness standards, the Board's IRC, staff and commissioner training, drug and alcohol testing for pilot trainees, and selection diversity outreach.

## **B. Background/History**

### **M/V COSCO BUSAN**

On November 7, 2007, the M/V COSCO BUSAN, a 902-foot long container ship, struck a blow to the "Delta Tower" of the San Francisco-Oakland Bay Bridge. The vessel damaged the fendering system of the bridge and, in turn, suffered a gash in the shell plating approximately 100 feet long, 10 feet tall, and from several inches to several feet deep. The gash penetrated two fuel tanks, causing an oil spill of approximately 54,000 gallons of heavy bunker fuel into the bay. A board-licensed pilot was directing the vessel at the time of the accident. The IRC dispatched an investigator and began its review to determine whether pilot error was involved. The IRC subsequently determined that there was sufficient cause to file charges of negligence against the pilot and recommended summary suspension of his license pending a suspension or revocation hearing. On November 30, 2007, the Board voted to summarily suspend the pilot's state license. On December 6, 2007, the IRC filed an accusation.

During the course of the investigation, the Board incurred extraordinary legal expenses, which have exceeded current budgeted levels of funding. A hearing is scheduled for early September 2008. It is in the public's best interest that this hearing proceed. Outside counsel will present the case against the pilot at the administrative hearing in September. After two pre-hearing conferences with the ALJ, the ALJ has estimated that the hearing will take 16 court days allocated over four weeks to reach its conclusions. A criminal investigation by the U.S. Attorney's office that has resulted in criminal charges against the pilot, difficulties with accessing witnesses and processing admissible evidence from the ship, as well as various other ongoing lawsuits, have complicated and prolonged the process.

### **BOARD TASK REVIEW**

#### **Navigation Technology**

As a result of the M/V COSCO BUSAN incident, the Board established a Navigation Technology Committee. The committee has been tasked with investigating the different types of navigation systems generally found on ships entering the San Francisco Bay Area, the sufficiency of pilot training in the use of these systems, and to evaluate Portable Pilot Units (portable electronic chart systems brought aboard a ship by a pilot to assist in navigation). The Navigation Technology Committee will also work with the regional Harbor Safety Committee's various subcommittees to help develop "best practices" in response

to lessons learned from the M/V COSCO BUSAN, particularly those dealing with navigation issues.

While much of the Committee's preliminary work should be completed during the current fiscal year, it is expected to continue evaluating this complex and evolving area on an ongoing basis. The committee's recommendations are likely to result in changes to the current training provided in shipboard electronic navigation systems and initiate training in portable pilot units. These recommendations are expected to result in new rulemaking, which will require additional regulations addressing these issues. Proposed changes to current training curriculum will be reviewed and evaluated by the Board's Pilot Training Curriculum Committee, which also evaluates potential vendors that provide such training. Currently, the Maritime Institute of Technology & Graduate Studies, as mandated by Title 7 California Code of Regulations (CCR) § 215(b) (2), is providing training in advanced electronic navigation systems.

#### Pilot Fitness Standards

Harbors and Navigation Code (HNC) §§ 1175 and 1176 require pilots to be of good mental and physical health and to undergo physical examinations in accordance with standards prescribed by the Board. The Board's current procedures for determining physical and mental competency of pilots are set forth in Title 7, CCR § 217.

Following the M/V COSCO BUSAN allision, questions were raised regarding the physical and mental competency of the pilot, the standards used by state and federal agencies in determining pilots' physical and mental competency, and the procedures used to ensure that pilots meet such standards. In response, the Board's Pilot Fitness Committee has been tasked with:

- 1) Conducting a comprehensive review of the physical and mental fitness standards for pilots, including review of the Board's current standards as outlined in the Reference Guide for Physicians for the Physical Examination for Duty Status of Seafarers in the U.S. Merchant Marine adopted by the Seafarers Health Improvement Program (SHIP); current U.S. Coast Guard Physical Evaluation Guidelines for Merchant Mariner's Documents and Licenses (NVIC 2-98); the proposed draft replacement to NVIC 2-98 published in the Federal Register on 9/28/06; recommendations by the National Transportation Safety Board regarding the fitness of pilots (including M-97-44).
- 2) Preparing recommendations to the Board for the adoption of standards that meet or exceed Coast Guard standards to ensure that each pilot is physically and mentally fit to perform the duties of a pilot.



- 3) Preparing recommendations to the Board for the amendment of its procedures to determine a pilot's physical and mental competency, including procedures to ensure the disclosure and appropriate evaluation of the history and presence of any medical conditions, symptoms, or medication use that would affect an individual's fitness to pilot a vessel.
- 4) Addressing state of the art methodology to proactively detect a decline in a pilot's situational awareness, that is, the ability to track and act on various communications and information relevant to the vessel's safe navigation, and to plan ahead for upcoming traffic and environmental situations.
- 5) Preparing recommendations to improve appeal procedures to ensure protection of the public and provide due process for pilots.
- 6) Evaluating the costs and benefits of requiring the opinion of a second medical examiner.

These tasks are likely to require a minimum of nine to twelve meetings over a one-year period. Current standards are not specific to pilots, but for the most part, apply to all mariners. Standards specific to pilots may be warranted. Sleep deprivation and fatigue issues are likely to be among those at the forefront and pose challenging issues that will need to be resolved.

#### Review of the Board's Incident Review Committee

The Board's Incident Review Committee (IRC) is established by HNC § 1180.3 to review and investigate all reports of misconduct or navigational incidents involving pilots. Its procedures are set forth in Title 7 CCR § 210.

Following the M/V COSCO BUSAN incident, questions were raised regarding the sufficiency of reviewing a pilot's incident history to determine whether there is a pattern of underlying problems that warrant follow up or further investigation. In addition, there has not been a comprehensive review of the Board's incident investigation procedures since the establishment of the IRC in 1993. As a result, the Board has initiated plans for a comprehensive review of the Board's investigation procedures and the guidelines for the IRC. The purpose is to ensure that the incident investigation and review process is sufficiently rigorous to enable the Board to carry out its functions of pilot oversight and to take steps to minimize the risk of recurrence of preventable incidents.

#### Staff/Commissioner Training

During FY 2007/08, the Board initiated its first staff training programs using CPS Human Resource Services as the vendor. The training programs are specific to matters affecting the administration of the Board. Examples include performance

appraisal, administrative writing, and an E-communications workshop. Current year training is focused on the state budget process and budget change proposals. CPS offers many courses that would be of use to the Board's staff and commissioners, increasing their knowledge and professionalism.

Additionally, questions have been raised concerning the use of electronic navigation devices by the pilot of the M/V COSCO BUSAN. Recent changes in the rapidly evolving field of electronic navigation make it imperative that the Board's executive director, who also is the Board's chief investigator, obtain a thorough knowledge of electronic navigation and remain current in the developments of this field. The Board intends to maintain regular training programs for staff and commissioners in the future. The Board will require additional funding to accommodate the ongoing training needs.

#### Mandatory Trainee Drug and Alcohol Testing

Federal rules now require that the Board implement a mandatory pilot trainee drug and alcohol testing program. This is a new requirement for the Board. It is anticipated that regulations will be required to outline the procedures.

#### Pilot Trainee Selection Diversity Outreach

The Legislature has raised concerns about the diversity of the Board's licensees in subcommittee meetings. The Board has established an Ad Hoc Committee on Pilot Selection. The Ad Hoc Committee on Pilot Selection is expected to provide the Board with options intended to increase the diversity of pilot trainees and the pilots licensed by the Board. One mechanism to achieve greater diversity among pilots is to establish and maintain a recruiting program to encourage qualified women and minority cadets and mariners, to sit for the Board's trainee selection examination, which is administered every few years. The recruitment program may be a joint effort with the California Maritime Academy or the Board may contract with an independent contractor.

### **C. State Level Considerations**

The Legislature has recognized the importance of the Board, as noted in Harbors and Navigation Code:

Section 1100. The Legislature finds and declares that it is the policy of the state to ensure the safety of persons, vessels, and property using the Bays of San Francisco, San Pablo, and Suisun, and the tributaries thereof, and to avoid damage to such waters and the surrounding ecosystems, as a result of vessel collision or damage by providing competent, efficient, and regulated pilotage for vessels required by this division to secure pilotage services.

Section 1101. The Legislature further finds and declares all of the following:

(c) The increase in vessel size and traffic, and the increase in cargoes carried in bulk, particularly oil and gas and hazardous chemicals, creates substantial hazards to the life, property, and values associated with the environment of such waters.

(e) A program of pilot regulation and licensing is necessary in order to ascertain and guarantee the qualifications, fitness, and reliability of qualified personnel who can provide safe pilotage of vessels entering and using the Bays of San Francisco, San Pablo, and Suisun.

(h) The individual physical safety and well being of pilots is of vital importance in providing required pilot services.

The M/V COSCO BUSAN allision and resulting oil spill, calls into focus all of the Legislature's findings and declarations. The Board's continuing response to the allision and the Board's task augmentation proposals are consistent with the Legislature's intention.

The Board of Pilot Commissioners for the Bays of San Francisco, San Pablo and Suisun is a specially funded agency. Funds are collected through user fees paid by shippers who use pilotage services. This proposal has no impact on other state departments and does not require funding from any other source, including the general fund.

#### **D. Facility/Capital Outlay Considerations**

There are no new facilities or capital needs. The Board office can be used for meetings or workshops and contractors provide their own facilities.

#### **E. Justification**

##### **M/V COSCO BUSAN**

The Board's legal counsel estimates additional expenses in FY 2008/09 of approximately \$96,335 to complete trial preparations and the administrative hearing. There will be an additional cost of \$5,000 for interpreter services. The crew of the M/V COSCO BUSAN speak Chinese or minimal nautical English. An interpreter will be needed to interview witnesses for the administrative hearing.

The Board anticipates additional Office of Administrative Hearing fees in the amount of \$36,100 for services of the ALJ during FY 2008/09 (190 hours at \$190 per hour for 16 days of hearing and decision preparation). The total estimated cost to complete the hearings for the M/V COSCO BUSAN allision in FY 2008/09 is \$137,435.

Attachment 1 provides a cost summary of this entire proposal.

#### BOARD TASK REVIEW

Total FY 2008/09 Estimated Cost: \$229,075

The Board requests funding for a temporary help position in the Associate Governmental Program Analyst (AGPA) classification to complete the necessary tasks related to rulemaking and to prepare required filing and documentation, as needed. The Board estimates the need for a 0.5 position and funding in the first two years and minimal funding ongoing. Specific tasks and associated costs for the AGPA are listed in Attachment 2.

The accumulated expansion of Board responsibilities over the years and the recent tasking in response to the M/V COSCO BUSAN incident are causing a burden to Board staffing and resources. This Spring Finance Letter (SFL) identifies those issues and provides cost estimates. The Navigation Technology, Pilot Fitness and IRC Review issues are discrete and once completed, will require a periodic review. The staff/commissioner training, drug testing program and outreach program are ongoing and will require an increase in the Board's ongoing expenditure authority. Each area of concern is listed below and is summarized on Attachment 1:

#### A) Navigation and Technology

The Navigation and Technology Committee has been directed to report and make recommendations to the Board with respect to its findings. It is anticipated that the committee will propose policy changes that will result in formal rulemaking. The rulemaking process would begin, and likely conclude in early FY 2008/09. Costs associated with committee meetings and review and advice from the Board's maritime attorney are expected to remain within the existing budget.

#### B) Pilot Fitness Standards

Review of the Board's physical and mental fitness standards and physical examination processes for licensees requires contracting with one or more medical specialists who have expertise in occupational medicine and who have or can acquire a thorough understanding of the profession and challenges of maritime piloting. This is a new one-time task and would be part of the Board's

operating expenses. It cannot be covered under the present pilot physical examination authority in FY 2008/09.

The Board anticipates working with the staff of the University of California at San Francisco Medical Center or other northern California teaching hospitals in connection with this study. Consulting physicians are expected to cost \$300 per hour.

This review is expected to result in recommendations for amendments to the current regulations and possibly in amendments to the authorizing statute. These regulatory activities would occur after FY 2008/09.

#### C) Review of the Board's Incident Review Committee

Review of the Board's IRC is an important element of the Board's overall review of its mission and practices. This review is likely to require a minimum of eight workshops and will commence early in FY 2008/09. The focus of the review will be to: ensure industry, pilot and public participation and input; develop directions for an audit; review audit results; and develop recommendations to the Board.

The first workshop will focus on bringing subject matter experts together to examine current IRC procedures and identify the general direction of the review. The second will be to develop the initial scope of work for the consulting contract; the third will be to finalize the scope of work. After the contractor completes its work, three workshops would be held to review the contractor's report and proposals. The last two workshops will finalize the report.

#### D) Staff/Commissioner Training

The Board seeks expenditure authority for staff and commissioner training to maintain and enhance skills needed to carry out the mandate of the Board.

The Board seeks expenditure authority for FY 2008/09 for thirteen days of CPS or equivalent training at \$150 per class day plus travel and per diem. Most courses are given in Sacramento. The Board anticipates that the training would be allocated as three days for the Executive Director, two days for the Administrative Assistant, five days for the analyst, and three days for commissioners. Further, the Board seeks expenditure authority to send its Executive Director to an electronic navigation training workshop. Generally, these courses are five days in duration and require out-of-state travel and per diem. Course cost is expected to be \$300 per day per participant. Total estimated cost for these training programs is \$5,000 including travel.

The Board seeks expenditure authority to send its Executive Director and the Chair of the Board's IRC to a training program focused on investigation of marine incidents, e.g., collisions and groundings, and the USCG and International

Maritime Organization requirements regarding pilot ladders and other pilot transfer equipment. These will likely be separate programs. Generally, these courses are expected to be five days in duration for investigation courses, and two days for pilot ladder courses. The Board seeks to continue ongoing training for the Executive Director and committee chairs, as needed, to maintain a level of competency in the evolving fields of marine investigation, navigation technology and pilot training. Courses are expected to cost \$300 per day per participant plus out-of-state travel and per diem. Total estimated cost is \$10,000 annually.

#### E) Mandatory Trainee Drug and Alcohol Testing

The Board seeks to establish a new line item to provide mandatory drug and alcohol testing for pilot trainees in accordance with recent changes in U.S. Coast Guard requirements. Presently there are 13 trainees in the training program. Annual costs are estimated at 13 trainees at \$75.00 per test or \$975.

#### F) Pilot Trainee Selection Diversity Outreach

The Board seeks to establish a new line item to fund an interagency agreement with the California Maritime Academy or to contract with an independent contractor to conduct recruiting and outreach to qualified minority and women mariners to compete for entry into the Board's pilot trainee training program. Estimated cost is \$25,000 in FY 2008/09 to cover initial development of the outreach program and first year recruitment efforts, and \$10,000 ongoing.

### **F. Outcomes and Accountability**

This proposal is expected to have the following outcomes:

- Complete rulemaking proposals aimed at improving safety for the public, pilot trainees, and licensed pilots.
- Identify improvements to navigation technology and update pilot training.
- Audit incident review procedures.
- Establish new procedures for the evaluation of pilot fitness standards.
- Evaluate staff and commissioner training programs.
- Implement new drug and alcohol testing requirements.
- Achieve greater diversity in pilot recruitment programs.

The establishment of the identified committees will ensure that ongoing evaluations of technology, pilot fitness standards, staff and commissioner training, and increased diversity will meet the needs of increased public and pilot safety standards.

The Board's Navigation Technology Committee, Pilot Training Curriculum Committee, Pilot Fitness Committee, and Ad Hoc Committee on Pilot Selection will conduct periodic follow-up meetings to track the progress of implementation

and to assess the efficacy of the changes made as a result of their recommendations. Annual reports on the results of their assessments will be provided to the Board. Guidelines for these assessments are to be included in the committees' initial recommendations.

Board staff will report annually on all training provided to staff and commissioners to permit reassessment and planning for the following year's training.

The Executive Director will report annually to the Board on the results of random drug testing of pilot trainees consistent with the timeline required for providing such reports to the U. S. Coast Guard.

### **G. Analysis of Feasible Alternatives**

Alternate 1: Approve a special fund expenditure authority budget augmentation of \$367,000 in FY 2008/09, \$58,000 in FY 2009/10, and \$39,000 ongoing. This alternative would provide the Board with the resources needed to address the concerns of the legislature and the public in the aftermath of the M/V COSCO BUSAN allision. It would also enable the Board to review and update current regulations, complete an audit review of Board procedures, proactively address increased pilot physical and mental fitness standards, improve the availability of new technology, improve ongoing staff and commissioner training needs, meet the new U.S. Coast Guard drug and alcohol testing requirements, and provide for a diversity outreach selection process.

Alternate 2: Approve only one of the major initiatives (Navigation Technology rulemaking, Pilot Fitness Standards, or Review of the Board's Incident Review Committee). This would reduce the cost and burden on Board members and staff. However, this alternate would limit the anticipated improvement to public and pilot safety. The Board believes that with the availability of part-time AGPA assistance it can successfully address the increased workload.

Alternative 3: Do nothing. This alternative would neglect to address the specific areas of concern raised by the legislature and the public. Public safety would remain at increased risk.

### **H. Timetable**

Beginning July 1, 2008: Begin recruiting to fill the temp help AGPA position.

Board to act on initial recommendations of Navigation Technology Committee.

Pilot Training Curriculum Committee to review training contracts for possible changes in curriculum as recommended by Navigation Technology Committee and directed by Board.

Commence rulemaking process identified by Navigation Technology Committee and approved by Board following timetable required by Administrative Procedures Act and OAL regulations.

Upon recruitment of AGPA, commence scope of work and selection process for medical consultant(s).

September 2008: Administrative hearing on IRC's Accusation

October 2008: Decision rendered following hearing on IRC's Accusation

Commence or continue Pilot Fitness Committee workshops to guide, consider and evaluate the research and recommendations of medical consultant.

November 2008: Complete interagency agreement with CMA or independent contractor for recruitment/diversity outreach.

December 2008: Selection of IRC auditor, commence workshops to guide, consider and evaluate results of audit.

Board staff/commissioner training to be scheduled based on availability of classes throughout FY 08/09.

## **I. Recommendations**

Alternative 1 is the only alternative that gives the Board the resources to address public and pilot protection needs.