

**Board of Pilot Commissioners
for the Bays of
San Francisco,
San Pablo, and Suisun**



2015

Annual Legislative Report

Table of Contents

I.	Introduction	1
II.	Summary of Major Board Activities in Calendar Year 2015	2
	Discussion.....	2
	1. Pilot Fitness.....	2
	2. Personnel Matters	2
	3. Trainee Selection Exam.....	3
	4. National Transportation Safety Board (NTSB) Recommendation.....	3
	5. Litigation Involving the Board in 2015.....	4
	6. Rate Hearing conducted by the Board in 2015.....	6
	7. Legislation and Legislative Hearings Affecting the Board in 2015	6
III.	Number of Vessel Movements in 2015.....	7
IV.	Status of Pilot Licensees and Trainees in 2015	8
	1. Status of Pilot Licensees.....	8
	2. Status of Pilot Trainees.....	10
V.	Summary of Reports of Navigational Incidents That Occurred in 2015.....	11
	1. M/V OCEAN LIFE, September 5, 2014.....	11
	2. M/V CSCL SUMMER, January 23, 2015.....	12
	3. M/V ROOK, March 22, 2015.....	12
	4. USNS MATTHEW PERRY, March 23, 2015.....	13
	5. M/T FUJI GALAXY, April 28, 2015.....	14
	6. M/V JIANGMEN TRADER, June 27, 2015.....	15
	7. Tug VALOR collision with ATB BARGE 650-10, December 15, 2015..	16

I. Introduction

The Board of Pilot Commissioners for the Bays of San Francisco, San Pablo, and Suisun (Board or BOPC) – sometimes called the "the Pilot Commission" – licenses and regulates up to 60 maritime pilots who guide ships of 750 gross tons or greater in the Bays of San Francisco and Monterey and tributaries to ports in Stockton and Sacramento. The pilots are organized for business operational purposes as the "San Francisco Bar Pilots."

The Board consists of seven members (also known as Commissioners) appointed by the Governor, and one ex-officio member as follows:

- Two are pilots licensed by the Board;
- Two are "industry members" - one from the tanker industry and one from the dry cargo industry;
- Three are public members who are neither pilots nor work for companies that use pilots; and,
- The Secretary of the California Transportation Agency, who serves as an ex officio non-voting member.

The Board was created by the first legislative session of the new state of California in 1850, and has been serving continuously ever since. Statutory references to the Board can be found in the Harbors and Navigation Code § 1100 et seq. Board regulations can be found in California Code of Regulations, Title 7, § 201 et seq.

Section 1157.5 of the Harbors and Navigation Code was added to the code by Senate Bill 1217 (2008) and mandates that the Board submit an annual report to the Secretary of the Senate, the Chief Clerk of the Assembly, and the Secretary of the California Transportation Agency describing the Board's activities for the preceding calendar year and providing certain specified information.

The statutory reporting requirements include: the number of vessel movements across the bar (a sand bar approximately 12 miles west of the Golden Gate Bridge), on the bays, and on the rivers within the Board's jurisdiction; the names of pilots and trainees and license status; and, summaries of closed and open misconduct or navigational incident reports involving a pilot or pilot trainee.

The following report is hereby submitted in compliance with the statutory requirements, and has been prepared with the collaboration of the following Board officials:

Allen Garfinkle, Executive Director
Roma Cristia-Plant, Assistant Director

April 15, 2016

II. Summary of Major Board Activities in Calendar Year 2015

Discussion

Below is a summary of the major Board activities in calendar year 2015:

1. Pilot Fitness.

Following the findings in the COSCO BUSAN incident on November 7, 2007, in which prescription drug use was found to be a factor, weaknesses were identified in the Board's pilot fitness medical examination process. After contracting with the University of California, San Francisco Medical Center's Department of Occupational Medicine to conduct a pilot fitness study, and to prepare a report and recommendations concerning pilot medical assessments, the Board developed a rigorous pilot fitness regime through the adoption of administrative regulations. The study, consideration of the recommendations, and drafting new regulations occurred over a three-year period, and the new regulations became effective April 1, 2014.

Key components of the new pilot fitness regulations include requirements that: exceed the U.S. Coast Guard medical guidelines for maritime pilots; pilots and pilot trainees undertake an agility test that simulates the physical demands of providing pilotage service; pilots submit to toxicological tests for prescription medications along with physician notification when there are changes in medications; and, establish minimum qualifications for Board-appointed physicians including ensuring the physicians are personally familiar with the physical and cognitive challenges encountered by pilot licensees.

In addition, the regulations call for the appointment of a Medical Review Officer, whose duties are to review fitness for duty determinations made by an examining physician, undertaking annual peer review of the Board-appointed examining physicians, and providing advice to the Board on medical matters relating to pilot fitness.

On May 9, 2014, the Board entered into an Interagency Agreement with The Regents of the University of California, San Francisco Campus to obtain the services of physicians at the Division of Occupational and Environmental Medicine to perform medical assessments of the Board's licensees and trainees consistent with the new regulations.

2. Personnel Matters.

The Board has a staff of four, with additional staffing support provided by the Department of Justice, the California Highway Patrol, the Department of Transportation, and through contracting with private-sector Commission Investigators.

The Executive Director was re-appointed by the Board in February to a second five-year term pursuant to 1156.5(a) of the Harbors and Navigation Code.

3. Trainee Selection Examination.

The Board conducts a Pilot Trainee Training Program for qualifying mariners who wish to obtain the knowledge, skills and abilities to be licensed by the Board and have the opportunity to join San Francisco Bar Pilots. Every two to three years, the Board conducts a rigorous Pilot Trainee Training Program entrance examination to establish a ranked list of eligible candidates from which to select qualified program participants. The Board conducted a Pilot Trainee Training Program entrance examination during 2014 with the assistance of a contracted psychometrician.

The 2014 program entrance examination involved both a written examination component and a bridge simulator examination component. Out of the 51 applications received by the Board, 13 applicants successfully passed the entrance examination and were placed on a ranked list.

The Board's Pilot Power Committee meets regularly and reviews a semi-annual confidential pilot retirement survey, along with pilot work/rest data, and recommends to the Board the number of new trainees to induct into the program and at what intervals. Based on these recommendations, at the close of calendar year 2015, eight trainees from this ranked list of thirteen were participating in the Pilot Trainee Training Program. It is anticipated that several trainees in the program will graduate and be licensed by the Board in 2016, and most or all of the eligible candidates remaining on the eligible list from the 2014 entrance examination will enter the Pilot Trainee Training Program.

The Board has scheduled another Trainee Selection Examination for the summer of 2017. An examination ranked list of eligible candidates is valid for three years, and a trainee can be in the training program from one to no more than three years. It is anticipated that there will be sufficient retirements of licensed pilots to keep the demand for new licensees strong through 2020.

4. National Transportation Safety Board (NTSB) Recommendation.

On November 4, 2011, as a result of the investigation into the January 23, 2010, incident involving the tankship EAGLE OTOME that occurred in Texas, the National Transportation Safety Board (NTSB) issued Safety Recommendations to the governors of twenty-four states and territories in which state and local pilots operate detailing three recommendations concerned with preventing similar incidents from occurring.

On behalf of Governor Brown, Acting Secretary of California's Business, Transportation, and Housing Agency, Traci Stevens, responded to the three NTSB recommendations in some detail in a letter dated January 12, 2012, closing with, "While it is our assessment that existing statutory, regulatory, and BOPC oversight of the San Francisco Bar Pilots appears to satisfy concerns reflected in the NTSB Safety Recommendations, we will refer the NTSB letter to the BOPC for further review and consideration in light of its established expertise in bar pilot practices."

In consideration of the response from Acting Secretary Stevens on behalf of the Governor, NTSB Chairman Hersman responded by closing all recommendations for the

BOPC but one, M-11-19, which read, “Ensure that local pilot oversight organizations effectively monitor and, through their rules and regulations, oversee the practices of their pilots to promote and ensure the highest level of safety.”

In her decision to not close this recommendation, Chairman Hersman interpreted California’s response to mean that, following review, a report would be issued by the BOPC, and stated that “Although the NTSB is aware that the State of California has comprehensive pilot statutes and regulations, because the BOPC is conducting a review and will be providing confirmation that the statutes and regulations adequately address this issue, Safety Recommendation M-11-19 is classified “Open – Acceptable Response” pending our receipt and review of the BOPC’s report.”

On October 22, 2015, the Board approved a staff report responding to Safety Recommendation M-11-19. On November 5, 2015, the Secretary of the California Transportation Agency approved the response on behalf of the Governor, and the report was submitted to the NTSB.

On January 12, 2016, NTSB Chairman Christopher A. Hart responded to California’s response to Safety Recommendation M-11-19, stating that he was, “[P]leased California thoroughly reviewed its pilot oversight regulations and authorized the BOPC to monitor pilot practices to prevent fatigue resulting from extended hours of service, insufficient rest within a 24-hour period, and disruption of circadian rhythms. Accordingly, Safety Recommendation M-11-19 is classified “Closed – Exceeds Recommended Action.””

5. Litigation Involving the Board in 2015.

The Board was involved in three separate litigations in 2015 as shown below.

Board of Pilot Commissioners vs. Fair Political Practices Commission

This litigation evolved from a 2013 petition by the Pacific Merchant Shipping Association (PMSA) to the Board to add the Port Agent to the list of “designated employees” contained in the Board’s Conflict of Interest Code. The Board concluded that the Port Agent was not a “designated employee” of the Board and on that basis denied the petition. PMSA then filed an Appeal of Denial of Petition to the Fair Political Practices Commission (FPPC). The FPPC’s General Counsel granted the appeal, found that the Port Agent makes or participates in the making of governmental decisions, and ordered the Board to amend its Conflict of Interest Code to include the Port Agent as a designated employee in February, 2014.

The Board then requested a hearing before the FPPC’s full Commission. After reviewing both written briefs and hearing oral arguments from both PMSA and the Board, the full Commission affirmed the FPPC General Counsel’s decision and order in July, 2014.

The Board subsequently sought judicial review of the FPPC’s order in March, 2015. The case was heard in Sacramento Superior Court in September, 2015. The court found in November 2015 that the subject statutory provision and applicable case law does not support a finding that the Port Agent is a designated employee of the Board, that it was

an abuse of discretion for the Commission to rule otherwise, and the FPPC's decision was overturned. As a consequence, the FPPC was prohibited from taking any action to amend the Board's Conflict of Interest Code to include the Port Agent. The FPPC did not appeal the court ruling.

Reeder v. Board of Pilot Commissioners

Captain Reeder was formerly licensed by the Board as an inland pilot. He applied for an inland pilot's¹ pension from the San Francisco Bar Pilots Pension Plan in April, 2009, and the Board, as the administrative body of the pension plan, denied his application in February, 2011, on the grounds that Captain Reeder failed to meet two of the eligibility requirements for a pension. Captain Reeder filed a petition in December, 2014 in San Francisco Superior Court seeking to overturn the Board's decision. The San Francisco Superior Court denied his petition after a hearing in September 30, 2015, and Captain Reeder subsequently submitted an appeal in early 2016. This case is pending.

Pacific Merchant Shipping Association v. Board of Pilot Commissioners and the Port Agent in his Official Capacity

The Pacific Merchant Shipping Association (PMSA) sued the Board of Pilot Commissioners and Captain Bruce Horton "in his official capacity" as Port Agent seeking a writ of mandate ordering the Board and the Port Agent to produce specified records pursuant to the California Public Records Act (CPRA). On August 1, 2013, in a published decision the Court of Appeal reversed a trial court judgment that ordered disclosure of the records. As to the Board, the Court of Appeal accepted the Board's argument that it never possessed, owned, used or retained any of the records PMSA sought and rejected PMSA's theory that the Board should be charged with constructive possession of the Port Agent's records, which are prepared and housed in the private offices of the San Francisco Bar Pilots. The Court of Appeal also rejected PMSA's arguments that the Port Agent, who receives all of his compensation from the San Francisco Bar Pilots and none from any public entity, is an agent or employee of the Board.

Following denial of PMSA's petition for a writ of mandate, PMSA nevertheless sought an award of attorney's fees and costs against the Board and the Port Agent, contending that it was the prevailing party in the action because it obtained records from the Port Agent in response to a new CPRA request after the denial of its petition. The San Francisco Superior Court held that PMSA did not prevail against the Board in any respect, that it did prevail against the Port Agent, and ordered the Port Agent, but not the Board, to pay PMSA's fees and costs. The Court of Appeal affirmed the fee and cost award against the Port Agent, and dismissed the Board from the case in November 2015.

¹ "Inland pilot" means a person holding an inland pilot license prior to January 1, 2011. Inland pilots navigated vessel in the San Francisco bays and tributaries to ports in Stockton and Sacramento. References to inland pilots were deleted in statutes pursuant to AB 1025 (Skinner, Chapter 324, Statutes 2011).

6. Rate Hearing Conducted by the Board.

On February 23, 2015, the Board received a petition from the San Francisco Bar Pilots (SFBP) for a hearing to increase pilotage rates. Pursuant to Sections 1200-1203 of the Harbors and Navigation Code, any party directly affected by rates may petition the Board for a public hearing. Statutes require that within 10 days of the filing of a petition, the Board shall call public hearings to be held not less than 30 nor more than 60 days from the filing of the petition, and within 120 days shall submit to the Legislature a copy of its findings and recommendations for final determination.

The Board conducted two days of public hearings in April, 2015, and met again on April 10, 2015, to finalize its pilotage rate increase hearing recommendation to the Legislature. The Board delivered its rate hearing recommendation to the Legislature for its consideration on June, 22, 2015.

7. Progress Toward Implementing Senate Bill 1408 (2012).

Senate Bill 1408 (2012). The Board has been working diligently to meet the legislative mandate of Senate Bill 1408 (chtered on September 29, 2012) to conduct a study of the effects of work and rest periods on psychological ability and safety for pilots.

Integral to that effort, the Board issued a request for study proposals in December 2014, and selected San Jose State University Research Foundation (Foundation) in March, 2015. The Board subsequently approved proposed clarifications to the scope of work originally proposed by the Foundation in August, 2015. The Board's Pilot Fitness Committee, working in conjunction with Board staff, is in the process of contracting with San Jose State University Foundation to conduct this study. In addition, the Board shall, based on the study results and recommendations, promulgate regulations on establishing requirements for adequate rest periods intended to prevent pilot fatigue.

Funding was not specified in the legislation mandating the study. The Legislature has since provided partial study funding in the 2015-2016 fiscal year. The Board is hopeful that the remaining cost of the study can be funded from available resources.

III. Number of Vessel Movements in 2015

Subdivision (a) of Section 1157.5 of the Harbors and Navigation Code mandates that the Board report the number of vessel movements across the bar, on the bays, and on the rivers within the Board's jurisdiction. The following are the 2015 vessel movement statistics:

Number of vessel movements across the San Francisco Bar (<i>Includes 12 movements for Monterey Bay</i>)	5930
Number of vessel movements within the Bays of San Francisco, San Pablo and Suisun	1536
Number of vessel movements on the Sacramento and San Joaquin Rivers	534

IV. List of Status of Pilot Licensees and Trainees in 2015

1. Status of Pilot Licensees

Pilot Name	Original Licensing Date	Date Retired	Fit for Duty Dates	Licensed and Absent for Medical Reasons Dates	Not Fit for Duty Dates	Mandated Manned Model Training Dates	Mandated Combination Course Training Dates	On Active Military Duty Dates	On Leave of Absence Dates	License Suspended Dates
Alden, Bruce	7/2/1993		1/1/15 - 12/31/15				5/3/15 - 5/8/15			
Aune, Drew	4/1/2009		1/1/15 - 2/24/15 5/19/15 - 12/31/15	2/25/15 - 5/18/15		6/18/15 - 6/27/15				
Boriolo, Dan	10/1/1995		1/1/15 - 12/31/15			6/18/15 - 6/27/15				
Bridgman, Daniel	4/1/2010		1/1/15 - 10/6/15	10/7/15- 11/24/15	11/25/15 - 12/31/15	6/4/15-6/13/15	3/29/15 - 4/3/15			
Burger, Tom	9/4/1991		1/1/15 - 10/20/15 11/18/15 - 12/31/15	10/21/15 - 11/17/15			5/3/15 - 5/8/15			
Carlier, John	1/20/1989		1/1/15 - 12/31/15							
Carlson, Kenneth	1/1/1988		1/1/15 - 12/31/15							
Carr, Robert	6/28/2013		1/1/15 - 12/31/15							
Chapman, David	5/26/1997		1/1/15 - 3/25/15	3/26/15 - 5/6/15	5/7/15 - 12/31/15	6/4/15-6/13/15	3/29/15 - 4/3/15			
Cloes, Don	6/26/2009		1/1/15 - 12/31/15			6/4/15-6/13/15				
Coney, Blake	9/1/1993		2/6/15 - 12/31/15	1/1/15 - 2/5/15						
Coppo, George	1/1/1992		1/1/15 - 12/16/15	12/17/15 - 12/31/15			3/29/15 - 4/3/15			
D'Aloisio, Samuel	7/1/2014		1/1/15 - 12/31/15							
Dowdle, George	11/1/1993		1/1/15 - 12/31/15				4/12/15 - 4/17/15			
Favro, Orrin	12/14/2012		1/1/15 - 12/31/15							
Fawcett, Erik	6/24/2011		1/1/15 - 12/31/15				3/29/15 - 4/3/15			
Fuller, Peter	5/1/1998		1/1/15 - 11/16/15 12/6/15 - 12/31/15	11/17/15 - 12/5/15		6/18/15 - 6/27/15				
Gabe, Sean	5/1/1995	**	1/1/15 - 12/31/15							
Greig, William	2/9/1989	**	1/1/15 - 1/6/15 1/20/15 - 12/31/15	1/7/15 - 1/19/15			5/3/15 - 5/8/15			
Haggerty, Mark	7/1/1998		1/1/15 - 12/31/15							
Horton, Bruce	5/8/1991		1/1/15 - 12/31/15							
Hurt, Richard	9/26/2003		1/1/15 - 12/31/15							

Pilot Name	Original Licensing Date	Date Retired	Fit for Duty Dates	Licensed and Absent for Medical Reasons Dates	Not Fit for Duty Dates	Mandated Manned Model Training Dates	Mandated Combination Course Training Dates	On Active Military Duty Dates	On Leave of Absence Dates	License Suspended Dates
Johnson, Eric	12/14/2012		1/1/15 - 12/31/15							
Kellerman, Zachary	1/28/2011		1/1/15 - 12/31/15				4/12/15 - 4/17/15			
Kelso, Arnold	1/20/1989		1/1/15 - 6/7/15 9/8/15 - 12/31/15		6/8/15 - 9/7/15		4/12/15 - 4/17/15			
Kenyon, Hugo	7/1/1998		1/1/15 - 2/4/15 3/4/15 - 12/31/15	2/5/15 - 3/3/15						
Kirk, Roger	4/1/2007		5/7/2015 - 12/31/15	1/1/15 - 1/4/15	1/5/15 - 5/6/15					
Kleess, Guy	11/1/2005		1/1/15 - 12/31/15			6/4/15-6/13/15	5/3/15 - 5/8/15			
Laakso, Kristopher	8/26/2011		1/1/15 - 12/31/15				4/12/15 - 4/17/15			
Larwood, Dan	7/1/1998		1/1/15 - 12/31/15							
Lemke, William	4/1/1993		1/1/15 - 10/6/15 11/4/15 - 12/31/15	10/7/15 - 11/4/15						
LeSieur, Cevan	9/26/2014		1/1/15 - 12/31/15							
Lingo, Matthew	2/22/2013		1/1/15 - 12/31/15							
Livingstone, George	4/24/2008		1/1/15 - 12/31/15							
Long, Joe	7/1/2008		1/1/15 - 12/31/15							
MacLachlan, Steve	1/14/1987	**	1/1/15 - 9/4/15	9/5/15 - 12/31/15						
Manes, Mark	6/28/2012		1/1/15 - 12/31/15							
Martin Jr., Carl	4/1/2010		1/1/15 - 4/9/15 7/1/15 - 12/31/15	4/10/15 - 6/7/15	6/8/15 - 6/30/15	6/4/15-6/13/15				
McCloy, Dave	6/1/2008		1/1/15 - 12/31/15							
McIsaac, Peter	1/1/1994		1/1/15 - 12/31/15			6/18/15 - 6/27/15	5/3/15 - 5/8/15			
Melvin, Eddie	4/1/1988		1/1/15 - 12/31/15							
Merritt, David	8/27/2010		1/1/15 - 12/31/15			6/4/15-6/13/15				
Miller, Tom	7/1/1987		1/1/15 - 12/31/15							
Nyborg, Einar	7/1/1995		1/1/15 - 12/31/15			6/18/15 - 6/27/15	5/3/15 - 5/8/15			
Pate, David	4/1/2007		1/1/15 - 12/31/15							
Pinetti, Randall	2/1/2004		1/1/15 - 12/31/15				3/29/15 - 4/3/15			
Ridens, Ray	1/1/2007		1/1/15 - 12/31/15							
Roberts, Steve	2/11/1985		1/1/15 - 12/31/15							

Pilot Name	Original Licensing Date	Date Retired	Fit for Duty Dates	Licensed and Absent for Medical Reasons Dates	Not Fit for Duty Dates	Mandated Manned Model Training Dates	Mandated Combination Course Training Dates	On Active Military Duty Dates	On Leave of Absence Dates	License Suspended Dates
Robinson, Eric	1/1/2004		1/1/15 - 12/31/15							
Rocci, Reuben	1/1/2008		1/1/15 - 12/31/15							
Ruff, Paul	1/28/2011		1/1/15 - 12/31/15				4/12/15 - 4/17/15			
Slack, Dustin	7/1/2008		1/1/15 - 12/31/15							
Stultz, Joshua	2/24/2012		1/1/15 - 12/31/15							
Teague, Steve	1/1/2007		1/1/15 - 12/31/15							
Tylawsky, Greg	5/28/2010		1/1/15 - 12/31/15			6/18/15 - 6/27/15				
Wagner, Nancy	3/1/1990	4/01/15	1/1/15 - 12/31/15							
Wainwright, David	7/1/1991	**	1/1/15 - 12/31/15							
Wehr, Shane	6/1/2008		1/1/15 - 12/31/15							
Weiss, David	9/10/1993		1/1/15 - 12/31/15				4/12/15 - 4/17/15			

Active Pilots: 58

**** Retired Pilots:**

2. Status of Pilot Trainees

	Name of Trainee	Date Begin Training Program	Status on 12/31/2015
1	Hirschfeld, Jubal***	09/04/14	In Training
2	Kasper, Drue***	09/04/14	In Training
3	Murray, Andrew	09/15/14	In Training
4	Rubino, Michael	09/15/14	In Training
5	Billingsley, Neil	02/01/15	In Training
6	Lowe, Jeremy	02/01/15	In Training
7	Cvitanovic, David	09/02/15	In Training
8	Epperson, Dylan	09/02/15	In Training

*** Completed training 2/25/16

V. Summary of Reports of Navigational Incidents and That Occurred in 2015

Subdivision (c) of Section 1157.5 of the Harbors and Navigation Code requires the Board to provide summaries of each report of misconduct or navigational incidents involving pilots, or other matters for which a license issued by the Board may be revoked or suspended. The summaries must provide a description of findings made by the Board's Incident Review Committee (IRC), the resulting action taken by the Board, as well as a summary of any prior reportable incidents of which a finding of pilot error was made for the pilots involved.

(Note: One investigation that occurred in 2014, the M/V OCEAN LIFE, was still open at the time the 2014 Annual Legislative Report was submitted to the Legislature, but was subsequently closed in 2015, and is included below for reporting of the disposition.)

1. M/V OCEAN LIFE Loss of Propulsion and Subsequent Anchoring in San Pablo Bay on September 5, 2014.

Pilot: Captain Daniel Bridgman

While on approach to the Benicia-Martinez Union Pacific Railroad (UPRR) Bridge, the M/V OCEAN LIFE lost propulsion. The U.S. Coast Guard determined that the loss of propulsion was due to fuel switching and issues related to the use of low sulfur fuel.² In response, the pilot ordered the anchors dropped to prevent unintended contact with a nearby bridge structure. When the use of the ship's engines was regained, the pilot ordered the engines astern. In the course of backing toward the nearest safe anchorage, the anchor came in contact with the Trans Bay Cable, a 53 mile long high-voltage direct current submarine transmission cable linking San Francisco with a converter substation in Pittsburg. The Trans Bay Cable consists of two direct current conductors and a fiber optic cable nested between them. The original plan called for the cable to be buried 3 to 6 feet under the bay floor, although parts of the cable may not be buried that deep.

The ship's anchors subsequently made contact with and slid along the cable for a short distance before putting enough strain on the cable to bend it beyond the design parameters, causing an interruption in the signal through the fiber optic component. Trans Bay Cable, LLC then notified Vessel Traffic Service, who notified the ship that the cable was likely at the site of the anchoring. The anchor chain had to be cut to free the ship, and the anchor was later recovered by divers. The cost to repair the cable is stated to be approximately \$15 million, but the actual damages are expected to be determined by litigation.

² The use of cleaner marine distillate fuel (commonly referred to as low sulfur fuel) was first mandated in July 2009 by the California Air Resources Board (CARB) for ocean-going vessels that visit California seaports (within 24 nautical miles of the California coast.) This standard was later adopted by the International Maritime Organization (IMO) under MARPOL Annex VI as part of the North American and U.S Caribbean Sea Emission Control Areas (ECA) and is enforceable within 200 miles of North America. Each ship which uses higher sulfur content fuel is required to develop and implement safe procedures and compliant fuel operations to use low sulfur fuel within the ECA. The ship owners, operators, engine manufacturers, and others face many ongoing, unresolved technical issues associated with the use of low sulfur fuel oils.

The IRC concluded that each of the actions taken by Captain Bridgman was reasonable and the IRC recommended that the Board find for no pilot error and that the investigation be closed without further action. The Board accepted part of the IRC recommendation, finding for no pilot error, but voted to take further action in the form of a commendation to Captain Bridgman for exemplary performance in potentially preventing an allision with the UPRR Bridge, and concomitant detrimental environmental and economic impacts to the area.

2. M/V CSCL SUMMER Interaction with M/V HANJIN MUMBAI while transiting inbound in Oakland Inner Harbor on January 23, 2015.

Pilot: Captain Zachary Kellerman

While transiting the Oakland-Alameda Estuary inbound, the M/V CSCL SUMMER, an ultra-large containership measuring 1,100 feet in length with an approximate 44 foot draft, passed the moored M/V HANJIN MUMBAI, which felt the effects of hydraulic interaction and suffered damage to its gangway. In cases where hydraulic interaction between vessels may be an issue, the passing vessel has a duty to proceed carefully and prudently. In kind, there is also a duty placed on the moored vessel to be seaworthy and properly moored to resist ordinary and normal swells. Court cases provide that some wash from passing vessels is bound to occur and must be anticipated or guarded against, and only unusual swells or suction which cannot be reasonably anticipated form the basis for a claim.

In this incident, the IRC determined that the M/V CSCL SUMMER was traveling at a reasonable speed. Conversely, the Master of the M/V HANJIN MUMBAI provided a written statement to the IRC stating that by allowing the gangway to hang between the ship's hull and the wharf, he determined the cause of the damage was mishandling of the gangway by the ship's crew.

The IRC investigated this event to the extent that it became clear that there was no misconduct on the part of Captain Kellerman, and that the damage was due to the mishandling of the M/V HANJIN MUMBAI's equipment. Based on these early determinations, the IRC made the decision to limit the investigation as permitted by 7 CCR §210(b)(3) which reads, "If the Incident Review Committee upon initial investigation finds there is clearly no pilot error, the Committee shall discontinue the investigation and report its findings to the Board." Following the discontinuance of this investigation, the IRC reported its findings to the Board on April 23, 2015.

3. M/V ROOK Transit to the Port of Stockton without the required charts on March 22, 2015.

Pilot: Captain Donald Cloes

During a routine U.S. Coast Guard (USCG) Port State Control inspection of the bulk carrier M/V ROOK in the Port of Stockton, the USCG found that the ship had transited to the Port of Stockton without the required charts for the passage. The ship was detained in Stockton

until the master obtained the proper charts and created an acceptable passage plan. This event prompted an IRC inquiry concerning the role of the pilot in this situation.

The M/V ROOK arrived from sea on the afternoon of March 22, 2015 bound for the Port of Stockton. There were three pilots assigned to the passage: one to bring the ship from sea to the Golden Gate Bridge, one from the Golden Gate Bridge to New York Point (near Pittsburg, CA), and a third to take the ship from New York Point to Stockton. The passage from sea to New York Point was uneventful. In the vicinity of New York Point, Captain Cloes arrived on the bridge to take the conn from the second pilot. He set up his Portable Piloting Unit (or PPU, which is a laptop computer with electronic chart systems software and charts for the area), and conducted a pilot-to-pilot information exchange. During the exchange, the second pilot reported that there were no discrepancies noted. Captain Cloes assumed the conn and the second pilot retired to the pilot cabin. While en route, Captain Cloes conducted his own master-pilot information exchange covering a variety of pertinent topics, and Captain Cloes did not recall the master mentioning any deficiencies or exceptions. As the ship progressed up river, Captain Cloes inquired of the ship's master if he would like to review on a chart where in the passage Captain Cloes intended to meet a down-bound ship. Such a meeting on the river is an important event, and Captain Cloes wanted to make sure the master was fully aware of the details concerning the meeting. According to Captain Cloes' recollection, it was at this point that the master informed him that the vessel did not have charts for the area.

Federal law requires a vessel to carry charts for the area to be transited. In addition, federal law mandates that the position of the vessel be plotted on a chart of the area, and the person directing the movement of the vessel be informed of the vessel's position. Beyond federal law, there is international convention requiring up to date charts necessary for the intended voyage. There are provisions in both federal and international law allowing for the use of certain electronic charting methods as a substitute for paper charts, but this ship did not have that type of equipment.

There are federal laws that require reporting of a hazardous operating condition, as soon as practical, to the USCG. A hazardous operating condition is any condition likely to impair navigation, which can include a lack of charts. Captain Cloes was of the opinion that since he did have his PPU, which provided a view of the current nautical charts for the intended voyage, he did not consider the vessel to have a reportable condition likely to impair navigation. For this reason, he did not report the condition on the vessel to the USCG.

During the course of this investigation, the IRC determined that Captain Cloes actions were reasonable, that there was clearly no pilot error, and made the decision to limit the investigation as permitted by 7 CCR §210(b)(3). As the USCG determined, the ship was deficient and this deficiency does not transfer to the pilot. While the IRC did not second-guess Captain Cloes' decision that navigation was not impaired, by the time he learned of the chart deficiency, the risks associated with alternative courses of action, such as stopping the ship or turning around, may have been greater than the risk of proceeding on to the destination. Following the discontinuance of this investigation, the IRC reported its findings to the Board on September 24, 2015.

4. USNS MATTHEW PERRY grounding while being towed in the vicinity of BAE Systems Dry Dock in San Francisco on March 23, 2015.

Pilot: Captain David Weiss

While shifting from a wet berth to the dry dock within the Central Basin in San Francisco, the USNS MATTHEW PERRY, a dry cargo replenishment ship 689 feet in length, briefly ran aground. The ship was being towed by tugs during the move and was without propeller or rudder. The tug boats moving the ship were able to pull it free from the soft mud after about 11 minutes. It was determined that a buoy marking the boundaries of shallow water where an old pier was removed was improperly located. Pilots have historically used this buoy to avoid the shallow area it demarcated. It is unknown how or when the buoy was moved, but the misplacement of it, and the pilot's reliance on its position, misled him enough to cause him to venture into shallow water on the opposite side of the channel. The IRC found that the pilot's reliance on the position of this buoy was reasonable and recommended a finding of no pilot error.

The actions taken by the Board included a finding of no pilot error, that a recommendation be sent to the owners and operators of the dry dock to both regularly ascertain whether the shoal buoy is accurately and properly positioned, and develop a plan to ensure this information is effectively conveyed to the pilots and the ship personnel involved in movements within the Central Basin.

5. M/T FUJI GALAXY interaction with the moored M/V CS SARAFINA in the Port of Stockton on April 28, 2015.

Pilot Captain Don Cloes

The M/T FUJI GALAXY was entering the Port of Stockton following a uneventful routine transit from the Port of Richmond. The pilot reported the ship being difficult to handle in "The Cut" (a colloquialism used to describe portions of the Stockton Deep Water Channel) requiring hard-over rudder commands and increases in engine speed to maintain position in the channel. Approximately one-half hour prior to entering the Port of Stockton, the pilot called Port of Stockton Security on the radio to notify them that the arrival of the M/T FUJI GALAXY was imminent. This allowed Port Security ample time to alert the moored vessels in the port that there would be ship passing so that they would in turn check their mooring arrangements. A Vessel Arrival Log maintained by Port Security shows that the M/V CS SARAFINA was notified within ten minutes of the call made by pilot on the M/T FUJI GALAXY. When the M/T FUJI GALAXY passed the M/V CS SARAFINA, she was on a dead-slow ahead bell. The M/V CS SARAFINA experienced interaction (a hydraulic effect that takes place as a ship moves through a narrow shallow channel.) During the interaction event, the accommodation ladder of the M/V CS SARAFINA was damaged.

When there is damage due to interaction, the IRC first examines the duty of a ship to proceed carefully where other vessels are moored to avoid creating unusual swells or suction that would damage craft properly moored. Likewise there is a duty placed on the moored vessel

to be properly moored so as to resist ordinary and normal swells in narrow waters where heavy traffic may be anticipated.

Evidence gathered by the IRC following the incident (including video obtained from the Port of Stockton Security) was sufficient to convince the IRC that the M/V CS SARAFINA was not properly moored to resist anticipated traffic, and that the actions of the pilot in passing were reasonable. The IRC recommended a finding of no pilot error and the Board unanimously agreed with the recommendation.

6. M/V JIANGMEN TRADER collision with allision with navigation marker on the San Joaquin River on June 27, 2015.

Pilot Captain Eric Fawcett

The M/V JIANGMEN TRADER had departed the Port of Stockton on the afternoon of June 27, 2015. The departure from Stockton was routine and the transit proceeded normally. As the ship approached Webb Point during twilight, Navigational Marker #47, relied upon by the pilots to gauge a near 90 degree left turn, did not appear to the pilot to be lit. In a statement provided by Captain Fawcett, he stated that he saw a light on the marker. (Navigation marks switch on at darkness by an automatic photo-voltaic switch, and are powered by batteries charged by solar cells.) It was close to fully dark by the time the ship came upon Navigation Marker #47, and when the pilot could not identify its position by visual reference, he relied on radar to gauge the turn. As the ship was proceeding through the turn, the pilot and crew felt a thud and shutter, which was thought to be the starboard quarter of the ship making contact with Navigation Marker #47 as it swept through the turn.

The pilot reported the incident to Vessel Traffic Service and during the subsequent investigation by the USCG, the navigation marker could not be located. The tanks, holds, and voids within the ship were checked for damage and none was found. At the next port of call, the starboard quarter of the ship was inspected for damage and none was found. The USCG estimated the cost to replace the marker at approximately \$35,000.

The IRC was faced with conflicting witness statements of whether Navigation Marker #47 was lit. If Navigation Mark #47 was lit, then it appeared to the IRC that Captain Fawcett simply misjudged the timing of the turn, initiating the turn too late, allowing the starboard quarter of the ship to make contact with the marker. And, even if Navigation Marker #47 was not lit, the IRC concluded that there were adequate tools available to Captain Fawcett (visual, radar, and his Portable Piloting Unit – a laptop computer that integrates GPS and charts to provide a visual reference of the position of the ship) to adequately judge the location of Navigation Marker #47. The IRC also found that there were no other intervening factors. The IRC determined that the incident took place on a clear night, with light winds, and that the mechanical condition of the ship was adequate. The standard of care applied by the IRC in this case was whether Captain Fawcett exercised the degree of care and skill possessed by the average pilot. The IRC concluded that he did not and recommended to the Board a finding of pilot error.

The Board determined, in separately articulated findings, that this incident while this incident was a minor event that potentially the incident could or could not be determined to be pilot based upon the facts, but the Board ultimately agreed with IRC's recommendation of a finding of pilot error. The Board further determined that since Captain Fawcett has no prior incidents, there was no other actions necessary and that the matter be closed without further action.

7. Tug VALOR collision with ATB BARGE 650-10 while departing Martinez Shell Oil Terminal for sea on December 15, 2015.

Pilot Captain Guy Kleess

On December 15, 2015, the articulated tug barge ATB VISION, with the attached ATB BARGE 650-10, departed the Martinez Shell Oil terminal bound for sea. Due to the unique configuration of the ATB's many captains of an ATB's prefer to do their own undocking with the pilot monitoring the captain's actions and conducting the communications with the assist tugs on behalf of the captain, which was the case on this occasion.

The actual undocking assist was completed and the captain of the ATB VISON gave the order for the Assist tug VALOR to come alongside and retrieve its line. A tremor was felt on the bridge of the ATB VISON, and apparently the Tug VALOR, being driven by a Crowley Maritime Training Mate, landed hard on ATB BARGE 650-10, denting the shell plating. No other damage was found and the shell plating was not breached.

Subsequent investigation by the IRC, including evidence provided by Crowley Maritime, owner of both the Tug VALOR and the ATB BARGE 650-10, showed that the cause of the damage was operator error by the Training Mate, who was at the controls of the Tug VALOR at the time of the hard landing.

During the course of the investigation it became clear that there was clearly no pilot error involved, and the IRC made the decision to limit the investigation as permitted by 7 CCR §210(b)(3), and a report of this event was made to the Board in January 2016.