HOAGLAND
LONGO
MORAN, DUNST
& DOUKAS, LLP
ATTORNEYS at LAW

333 Pine Street, Fifth Floor
San Francisco, CA 94104
Tel: (415) 781-7050 Fax: (415) 421-5658
www.hoaglandlongo.com

John F. Meadows
jmeadows@hoaglandlongo.com
415-477-8826

March 19, 2009

Re: Captain John J. Cota, San Francisco Bar Pilot
Our File No.: 5602888 - JFM
Claim No.: 977519340
Docket No.: Case No. 07-01

To Whom It May Concern:

Attached is the public version of the detailed Submission that was provided by his attorneys on behalf of Capt. John Cota to the National Transportation and Safety Board (NTSB) prior to the February 18, 2009, hearing held by that agency concerning the cause of the allision on November 7, 2007, between the M/V COSCO BUSAN and the Oakland Bay Bridge's fendering system. The Submission was in relation to the Board's proposed report which we were invited to comment on. It was our intent to provide critical evidence which we believed was necessary to the findings and conclusions of the Board. We were not permitted to participate in the hearing itself, though Fleet Management Ltd., COSCO BUSAN's operator, was declared a party and allowed to participate to a limited extent.

The Executive Summary of the Board's interim Marine Accident Report, issued recently, may be found on the NTSB web site. The report found as one of the probable causes of the allision Capt. Cota's "degraded congnitive performance from his use of impairing prescription medications". This conclusion is, however, contrary to law as well as fact. The Federal Register of December 14, 1987, p. 47530, and Sect. 95.045 of Title 33 Code of Federal Regulations conclusively show this to be an error of law. We say this without any intent to reargue the case but the failure of the Board to follow the above authorities constitutes serious, prejudicial error in a matter of great concern to the all pilots, ship's officers, the public generally and to Capt. Cota personally, which error we hope the Board will correct in its final version.

The Federal Register reference provides as follows: "After careful consideration, Section 95.045 has been revised (from its original language in the Notice of Proposed Rule Making) to read, 'A crewmember (including a licensed individual), pilot, or watchstander not a regular member of the crew: *** (D) May consume a legal non-prescription or prescription drug provided the drug does not cause the individual to be intoxicated.' It is realized that any drug may have side effects possibly resulting in intoxication and that a physician may not know how a certain drug will effect a particular individual. Therefore, the regulation has been revised to put

the responsibility for compliance primarily on the individual. While this section specifically applies to inspected vessels, persons operating uninspected vessels must ensure that they are not intoxicated due to legal drugs." Not only was there no evidence that Capt. Cota felt intoxicated at all times material but there was also no evidence that he manifested anything akin to intoxication. In fact the Board itself stated in its report: "The pilot's order for hard port rudder at the time of the allision was appropriate and possibly limited the damage to the vessel and the bridge fendering system." Capt. Cota's action evidenced that he was not in any way intoxicated or that he was "impaired", even if, arguendo, the latter were the appropriate standard. He could not have reacted so positively and quickly when he first saw the bridge tower through the fog. Further, whether he took any of the objected-to medications at any time close to the allison was not established by the Board - in fact, he testified to a Coast Guard investigator that he had not prior to the allision taken any of the drugs the agency doctor testified at the hearing were impairing his actions. Further, the Master and the watch personnel on the bridge all testified that Capt. Cota did not seem impaired. Thus, both as a matter of law and fact, the medication issue was wrongly decided. Again, it is not the purpose of this letter to argue the whole case. We believe that the Submission does that effectively.

Before concluding, it should be noted that in his 27 years of piloting some 4,000 ships, there was only one incident which the State Board of Pilot Commissioners found was due to "pilot error" and that was a short duration grounding upriver in the mud without damage to the ship.

Sincerely,

John F. Meadows

Attorney for Capt. Cota

CAPTAIN JOHN J. COTA'S SUBMISSION AND COMMENTS TO THE NTSB'S MARINE ACCIDENT DRAFT REPORT DATED JUNE 27, 2008

K&L GATES LLP
Jeffrey L. Bornstein
Claudia A. Quiroz
4 Embarcadero Center, Suite 1200
San Francisco, California 94111
(415) 882-8200
www.klgates.com

February 4, 2009

SUBMISSION FOR PUBLIC RECORD

TABLE OF CONTENTS

Page(s)

EXECUTIVE SUMMARY 1

CAPTAIN JOHN J. COTA'S SUBMISSION AND COMMENTS TO THE NTSB'S MARITIME ACCIDENT DRAFT REPORT DATED JUNE 27, 2008—SUBMISSION FOR PUBLIC RECORD 7

I. THE COSCO BUSAN WAS UNSEAWORTHY ON THE MORNING OF NOVEMBER 7, 2007 7

A. There Was No Bridge Team Management 7

B. The Crewmembers Aboard the Cosco Busan, Including the Master, Failed to Adequately Perform Their Duties 9

1. The Master failed to adequately supervise his crew and take any responsibility for ensuring the safe navigation of the vessel 9

2. The Second Officer failed to prepare a berth-to-berth passage plan prior to departing the Port of Oakland even though Fleet Management's own policies required it 10

3. The crew failed to monitor the ship's position or to takes fixes to assist in the safe navigation of the ship 12

4. The Third Officer failed to prepare the ship's GPS unit in case the ship sailed off course 13

5. The Master failed to designate a lookout on the bridge 13

6. The Chief Officer abandoned his post on the bow without giving notice or receiving authorization to do so and later lied to the Coast Guard about this fact 13

7. The Bosun was not prepared to act as a lookout on the morning of November 7, 2007 and did not see the bridge pier until it was too late 14

8. The crew failed to take additional safety measures to compensate for foggy conditions such as efforts towards better communication 14

C. Master Sun Did Not Know How to Operate the Electronic Chart System and Refused to Either Admit his Ignorance or Ask for Help 14

D. The Radars Aboard the Cosco Busan Were Not Properly Tuned by the Master and Third Officer 16

E. Fleet Management Did Nothing to Assist the Crew—Which Was Inexperienced, Untrained, and Unreliable—to Prepare For Sailing the Cosco Busan in the Fog 16

1. Fleet failed to provide adequate training 17

2. The manner in which the outgoing crew of the Cosco Busan was replaced in its entirety prevented the incoming crew from having an opportunity to exchange information with them 18

3. Considerable language limitations prevented effective communication aboard the Cosco Busan 18

II. VTS FAILED IN ITS MISSION TO COORDINATE THE SAFE AND EFFICIENT TRANSIT OF VESSELS IN THE SAN FRANCISCO BAY 18

A. VTS Failed to Warn Captain Cota and Assist Him in Sailing Through a Safe Passage 18

B. The Foghorns on the Bay Bridge Were Disabled on the Morning of November 7, 2007 20

C. The Racons on the Bay Bridge are Unreliable 20

III. BEFORE KNOWING THE FACTS, THE GOVERNMENT PLACED BLAME ON CAPTAIN COTA, GRANTING THE MASTER AND KEY CREWMEMBERS IMMUNITY TO CREATE A CASE AGAINST HIM 21

IV. THE CREW FALSIFIED VARIOUS DOCUMENTS AND COLLABORATED ON THEIR "STORY" EVEN THOUGH THE GOVERNMENT GAVE THEM IMMUNITY 21

V. FLEET'S CONTRACT WITH EACH CREW MEMBER MOTIVATED THE CREW TO DENY RESPONSIBILITY AND BLAME THE PILOT 21

VI. DECISION TO LEAVE THE PORT IN FOGGY CONDITIONS 21

VII. CAPTAIN COTA HAS BEEN AND REMAINS THE DESIGNATED SCAPEGOAT FOR THIS ACCIDENT 22

VIII. CONCLUSION 23

EXECUTIVE SUMMARY

The following analysis of the accident involving the *Cosco Busan* on November 7, 2007 is unfortunately incomplete because of a protective order prohibiting Captain Cota's attorneys from quoting or even paraphrasing the sworn deposition testimony of the Master, Chief Officer, Second Officer, Third Officer, Bosun and Able-bodied Seaman until after that testimony is presented in the pending criminal proceedings. A copy of that court order dated February 3, 2009 is included with this report. Captain Cota's attorneys will seek the public disclosure of that testimony at the earliest possible date confident that it will fully support the conclusions in this report.

From the moment of the accident, with the glare of publicity surrounding it, Captain Cota was made the scapegoat and fully blamed for this unfortunate accident. He was vilified in the press by "government sources." The NTSB proceeding focused almost exclusively on him, entertaining gratuitous comments suggesting that after a 27-year successful career he was not able to drive a school bus that laid bare the extreme bias of the NTSB investigation against Captain Cota. [NTSB, 365:18-22]. All this happened, even though Fleet Management Limited, the crew aboard the *M/V Cosco Busan*, San Francisco's Vessel Traffic Service (VTS), and a confluence of unfortunate events all contributed to the accident. While it is clear that the Master of the *Cosco Busan* reasonably relied on Captain Cota's knowledge and experience in navigating local waters, it is also indisputable that Captain Cota was justified in expecting the owners and operators of the *Cosco Busan* to provide a seaworthy vessel, with all navigational instruments operating properly and a well-trained, English competent crew having full mastery of the navigational systems on board and who were in complete compliance with all international mandates regarding voyage planning, lookouts, bridge management, and electronic chart interpretation. Unfortunately, the *Cosco Busan*'s owners and operators failed to satisfy each of these well-founded expectations and without those failures the accident would not have happened. In retrospect, had he known of the Master's and the crew's dangerous shortcomings, Captain Cota would not have allowed the *Cosco Busan* to sail on the morning of November 7, 2007.

The evidence is that the *Cosco Busan* was unseaworthy on the morning of November 7, 2007 for a number of reasons, which Captain Cota as the pilot did not and would have had no reason to know. For example, Captain Cota could not have been expected to know that the Master of the *Cosco Busan* did not understand the symbols displayed on his ship's own electronic chart. Consequently, minutes before the accident, when he asked the Master to explain certain warning symbols on the electronic chart—which was confusing and non-ECDIS compliant—the Master gave Captain Cota knowingly faulty information upon which Captain Cota relied. Captain Cota could not have been expected to anticipate the Master's response would be an inaccurate and a tragically misleading guess. Moreover, VTS failed in its responsibilities to provide mariners on the Bay, including Captain Cota, with meaningful information, including clear warnings that the ship was heading toward the Delta Tower of the Bay Bridge. Had a clear and timely warning been provided, there would have been sufficient time for Captain Cota to take evasive action that would have prevented this accident in spite of the inaccurate navigational information he had received from the Master.

Key evidence that the NTSB needs to consider includes the following:

- Fleet Management Limited failed to properly train and prepare its crew for the safe navigation of the *Cosco Busan*;

- The crew aboard the vessel, including the Master, failed to adequately perform its duties—in particular, there was no pre-departure passage planning and none of the mandatory bridge team management procedures were followed;

- The Master failed to adequately supervise his crew and exercise any responsibility for ensuring the safe navigation of the vessel;

- The Master did not even know that the *Cosco Busan*'s intended route to sea was through the Delta-Echo span of the Bay Bridge, or if he did, he failed to give any warning that his ship was heading in the direction of the Delta Tower; [1]

- The Master did not know how to operate his ship's electronic chart system and failed to either admit his ignorance or ask for help;

- The Master was never trained on how to use or interpret the symbols on his own electronic chart and as a result, when Captain Cota twice asked him for assistance, the Master "guessed" at the meaning of the red symbols first telling Captain Cota they were lights on the bridge and later, after VTS called, confirmed they marked the center of the bridge;

- The Master never told Captain Cota that he did not know or understand the symbols on his electronic chart;

- The red triangle symbols displayed on the chart that were questioned by Captain Cota were non-standard and improperly colored symbols, different from those on the standard paper charts used world wide by mariners. Furthermore, unbeknownst to the Master, the electronic chart could have been "queried" with a simple click of the mouse and would have told the Master that they were the red/green/red buoys in front of the Delta Tower;

- The radars aboard the *Cosco Busan* were not properly tuned: the gain had been turned up considerably to compensate for the anti-clutter device that was mistakenly left in auto-mode by the Master while his ship was in the Bay;

---

[1] Master Sun should have known the intended route of his ship prior to departure because he should have looked at the paper chart which clearly showed it to be through the D-E span. Also, he should have heard Captain Cota's conversations with VTS regarding the intended route, especially since VTS repeatedly broadcast the name of his ship and its intended route prior to the ship ever setting sail and reportedly thereafter prior to the accident. Further, there was plenty of time for Master Sun to ask Captain Cota—either prior to or even after the ship left its berth—if he had any question regarding Captain Cota's intended course through the span of the Bay Bridge.

- Fleet's Superintendents and the ship's Master failed to recognize the need to take any extra precautions or even consider delaying the ship's departure given the foggy conditions on November 7, 2007;

- No berth-to-berth passage plan prior to departing the Port of Oakland was prepared by the crew even though Fleet Management's own policies—as well as custom, practice, and International law required it;

- The Master failed to place a dedicated lookout on the bridge on the morning of November 7, 2007;

- The crew failed to take positional fixes to assure the safe navigation of the vessel;

- No one told Captain Cota that the electronic chart was not IMO certified, and therefore should not be used in place of the paper chart;

- The Chief Officer abandoned his post at the bow of the ship immediately prior to the accident and went to the mess hall and later lied about this fact to the Coast Guard;

- At the direction of Fleet's Superintendents, the crew falsified documents after the accident to make it appear that the ship's records were "complete" for the anticipated audit and/or investigation;

- Various checklists and work logs were completed for the paperwork filing system but were inaccurate; i.e., the work logs reflected that the crew was getting more rest than was actually the case; and,

- At the Master's direction, the crew collaborated on their "story," and continued to be less than forthcoming even though the government gave them immunity.

The fact is that this accident would not have occurred if the Master had either admitted his ignorance or referred to the paper chart instead of pretending he knew the answer to Captain Cota's questions. Further, at sign-on, the Electronic Chart displays a warning sign that it is not ECDIS compliant. That warning was never displayed on the electronic chart at anytime Captain Cota was on board the Cosco Busan.

VTS also utterly failed in its mission to "coordinate the safe and efficient transit of vessels in San Francisco Bay in an effort to prevent accidents and the associated loss of life and damage to property and the environment" by giving Captain Cota incomplete and confusing information. VTS never directly warned Captain Cota that the *Cosco Busan* was out-of-position to safely transit through the Delta-Echo span even though VTS could clearly see the position of the *Cosco Busan* either parallel to or south and west of the Delta Tower. Rather than directly warn the ship of its peril when there was still time to avoid this accident, VTS chose to remain

silent and instead—as the operators stated under oath—they "predicted" that the ship would hit the bridge. [NTSB Interview of Mark I. Perez, 75:19-76:8].[2]

From the moment that the *Cosco Busan* navigated out of the Port of Oakland until the accident, Captain Cota was in constant communication with VTS. The Master should have been monitoring the radar. Neither he nor the Third Officer, ever advised Captain Cota of the Racon nor did he ask him what if any significance it had. VTS chose not to alert Captain Cota that he was dangerously close to the "D" Tower of the Bay Bridge, supposedly because VTS did not want to distract him. Had VTS alerted Captain Cota to this fact, the *Cosco Busan* could have altered her course and navigated safely through the Charlie-Delta span of the Bay Bridge. Instead, VTS passively inquired whether Captain Cota was still intending to pass through the Delta-Echo span, even though it was abundantly clear from the AIS information received by VTS that the vessel was not in a position to do so safely. Furthermore, it appears that the foghorns on the Bay Bridge and on the Yerba Buena Island were disabled; none can be heard on the VDR.

From the moment of the accident, the government quickly and exclusively blamed Captain Cota for the accident. The crew was initially questioned but then obtained counsel and refused to give more detailed statements or testimony absent immunity. Thus, even before knowing critical facts, the government decided to grant immunity to all of the material witnesses to build a case solely against Captain Cota. Within weeks of the accident, government officials leaked incorrect information about Captain Cota, suggesting with no evidence to support such a false suggestion, that medications prescribed to him somehow caused the allision, even though his drug tests taken little more than an hour after the accident were clear, proving his repeated statements that he was not taking any of the medications that are claimed to have impaired his functioning on November 7, 2007. [*See*, Zachary Coile, Carl Nolte, *Role of Pilot's Sleep Medication Probed*, SFGATE.COM, Jan. 19, 2008]. The six witnesses who were kept in the United States for over a year were repeatedly interviewed by the government and counsel for Fleet. They have now all been permitted to return to China.[3] While the offer of immunity required that the material witnesses provide truthful testimony, not one of those individuals has been charged or prosecuted despite clear evidence that at various times each provided untruthful, misleading, and false statements to the government.

Similarly, neither Fleet Management nor its crew has been genuinely interested at any point in revealing what truly happened on the morning of November 7, 2007 or accepting any responsibility for the accident. Rather, their goal all along has been to impose full blame on Captain Cota for the accident. In this regard, Fleet has refused to fulfill all its obligations under California Harbors and Navigation Code § 1198 to indemnify and hold harmless the pilot. Fleet has also repeatedly claimed—without proof and yet with strong evidence to the contrary—Captain Cota was under the influence of one or more prescription drugs on the morning of November 7, 2007. All of the available evidence demonstrates that this was not the case. Not a

[2] Exhibit C-39, attached to this submission, recreates the voyage of the ship and includes still shots from VTS at various times.

[3] The Master will be permitted to return shortly.

single crewmember has ever reported observing any action or failure to act on the part of Captain Cota suggesting to them he appeared impaired in any way. His drug tests confirm this—including as it relates to the opiates that would be found in pain medication.[4] The VDR clearly demonstrates the clarity and alacrity that Captain Cota exhibited on that morning. Indeed, Captain Cota's quick thinking avoided a more serious catastrophe by taking last minute evasive action thereby preventing a head-on allusion with Delta Tower. A person under the influence of and impaired by the medications that Captain Cota was falsely accused of taking, would not be capable of such actions. Certainly the government has consistently ignored the fact that once the accident appeared imminent, Captain Cota's professional demeanor and quick and prudent navigational decisions evidenced beyond dispute that he was absolutely unimpaired, fully alert and highly competent. Further, it is our belief that had the *Cosco Busan* been double-hulled,[5] it is unlikely that any oil would have spilled.

It is our expectation that the Board will review this submission to ensure that the NTSB's final report contains a complete, accurate, and objective discussion and analysis of what actually led up to the accident on November 7, 2007. Unlike Fleet, Captain Cota's representatives have not been permitted to participate as a party. Captain Cota is the only individual who initially cooperated with the NTSB—sitting for hours of interviews by both the Coast Guard (the morning after the allision) and NTSB only to have the government bring criminal charges against him.[6] Captain Cota has been subject to an administrative disciplinary process by the State Board of Pilot Commissioners, and also is the only individual to have been charged with criminal conduct by the United States Attorney's Office before a preliminary NTSB report was issued. Moreover, the State Board's Administrative Law Judge, refused to give Captain Cota time to resolve his criminal case, forcing him to resign.

It is baffling that while Fleet Management has now also been indicted by the United States, it continues to have a seat at the table during the NTSB process. NTSB General Counsel Gary L. Halbert expressed in his December 15, 2008 letter to us that the "NTSB utilizes the party system, and in this investigation Fleet Management, as the operator of the vessel, is a participant because, as an organization, it has necessary technical knowledge and expertise to assist with the fact-finding phase of the NTSB investigation." It is fundamentally unfair that the NTSB excluded Captain Cota from this process, presumably because it believes he lacks "technical knowledge and expertise," yet places responsibility for this accident solely on his shoulders. At the same time as it excluded Captain Cota from having the right to be involved in the process similar to the right given to Fleet, it asked that he provide additional testimony under oath with no protection. In fact, from the beginning, Captain Cota was never advised that the statements he initially provided to the NTSB could and would be used against him in a criminal case. In the

[4] The fact that the government failed to preserve samples for further testing is no grounds for assuming the presence of other drugs.

[5] The positioning of the *Cosco Busan*'s fuel oil tanks were unusual in that they were high and just inboard of her "skin," a design that has been roundly denounced.

[6] This stands in stark contrast to Fleet's crew, who refused to cooperate until the government gave them immunity, then—after receiving immunity—were untruthful, and now have been permitted to return to China without having been charged or prosecuted.

meantime, Fleet has repeatedly refused to take any responsibility for this accident, has consistently demonstrated an inability to remain objective, and yet is allowed into the "inner circle" of the NTSB process. It is unclear how the NTSB can reconcile Fleet's bias with its claim that Fleet can be an objective member of the NTSB's team as an "impartial" party. If the NTSB truly wanted the cooperation of individuals with knowledge and expertise to assist with fact-finding process, it should have also given a seat to Captain Cota, who has served as a pilot for over 27 years, rendering his expertise and experience a valuable requisite for a thorough and accurate investigation.

Additionally, it is worth noting that the pervasive presence of the U.S. Coast Guard throughout these proceedings presents a potential conflict of interest that has undermined any semblance of fairness and justice. [7] The facts strongly indicate that the VTS failed to carry out its mission by providing poor, if any, guidance to Captain Cota as he attempted to sail the ship out of the San Francisco Bay in the fog. In addition, under the then existing Harbor Safety Plan, the Captain of the Port had the authority and obligation to close the Port had he determined it to be unsafe to sail. In the aftermath of this incident the Coast Guard has proclaimed that it has new authority to do just that but has not acknowledged that it failed to exercise the authority it already had on November 7, 2007. Surely, Captain Cota was fully justified in deciding to get underway in the fog in the absence of any closure order by the Coast Guard and with the reasonable expectation that the vessel was seaworthy. If the Coast Guard wanted mariners to not operate in the fog, it was incumbent upon the Coast Guard to make that decision known. Moreover, it is hypocritical to claim that it was "wrong" for Captain Cota to have sailed under the weather conditions of November 7, 2007, but not wrong for the Captain of the Port to leave the Port open under these same conditions. It is also grossly misleading to create a record that implies that Captain Cota was the only professional mariner who decided it was commercially and navigationally prudent to proceed in the fog on November 7, 2007 when a significant number of other vessels including high-speed passenger ferries were operating in the fog in the bay at that time. In addition, the fact that the VTS monitors vessel traffic from a windowless control building further suggests that the presence of impediments to visibility is not a condition that inevitably requires vessels to remain in port.

The information gathered by the NTSB to date is woefully inadequate and inaccurate and presents a grossly distorted portrayal of the facts. For instance, the VDR transcript that the NTSB has been using is full of inaccuracies and important gaps. Both the Chinese and English portions of the transcript have been extensively revised with the assistance of court-certified interpreters and the crewmembers. The most recent—and the only generally accurate—version of the transcript is Exhibit 14.4, which is the version that was used during the Master's deposition. A copy of this transcript is enclosed. [8]

---

[7] Nonetheless, the Coast Guard failed to secure the necessary documents, preserve electronic evidence, and conduct appropriate interviews as determined by the Inspector General's Report dated April 2008.

[8] The government also used Exhibit 14.1 during the initial deposition of the crew (and while not as accurate as 14.4), is far superior to the transcript upon which the NTSB has relied so far. There are still issues relating to some of the voice identifications, as well as some of the detail provided but it is far superior to the NTSB's version.

Captain Cota recognizes that he played a role in this unfortunate accident and, as a life-time Bay Area resident, feels extremely remorseful for the environmental damage caused by the oil spill in this case. He has suffered the loss of his state pilot's license, he has been publicly vilified and demonized, and likely faces further retribution and punishment through the pending criminal proceedings as well as additional exposure in the pending civil proceedings against him.

The government's response to this accident has undermined the NTSB's mandate to fairly and impartially determine the cause of an accident and to determine how a similar accident could be prevented in the future. Instead, the process has been biased and politically charged. Criminal charges were brought by the United States against Captain Cota before the incident was fully investigated by the NTSB. Further, the NTSB's process itself has been flawed and incomplete. The attached report contains critical facts—all of which can be verified from evidence available to the NTSB—the crew's testimony and the documentary and electronic evidence gathered by the government – that we hope will lead to a more balanced and accurate report. While we appreciate the opportunity to submit this statement, it is not an adequate substitute for a full, fair and unbiased process. In accordance with the Stipulation and Order dated February 3, 2009, we will be providing the NTSB with a more detailed submission in a separate document.

CAPTAIN JOHN J. COTA'S SUBMISSION AND COMMENTS TO THE NTSB'S MARITIME ACCIDENT DRAFT REPORT DATED JUNE 27, 2008—SUBMISSION FOR PUBLIC RECORD

I. THE *COSCO BUSAN* WAS UNSEAWORTHY ON THE MORNING OF NOVEMBER 7, 2007

A. There Was No Bridge Team Management

Once Captain Cota boarded the *Cosco Busan* on the morning of November 7, 2007, the crewmembers disassociated themselves from all responsibility, creating a situation where unbeknownst to the pilot, he was not able to rely on the ship's crew. No crewmember ever took the initiative to ask questions of Captain Cota regarding anything related to the voyage from the berth to the pilot station. All of them, including the Master, seemed to believe that once the pilot came on board, they only needed to follow his instructions but that there was no need for them to be more involved in ensuring the safe navigation of their ship.

While the bar pilot is a local expert about specific port characteristics, his presence aboard a ship does not relieve the rest of the bridge team from the duty of knowing about local conditions. "Even when a pilot is on board, the Master and/or the [Officer in Charge of the Navigational Watch (O.O.W.)] shall cooperate closely with the pilot and maintain an accurate check on the ship's position and movement." *See* STCW ¶ 49. Similarly, Fleet's Bridge Procedure provides the following:

> The presence of a pilot does not relieve the Officer of the Watch from his duties and obligations. He should cooperate closely with the pilot and maintain an accurate check on the vessel's position and movements. Alterations of course and/or changes in wheel and/or engine order should

> be transmitted through the O.O.W. If he is in any doubt as to the pilot's actions or intentions, the O.O.W. should seek clarification from the pilot and, if still in doubt, notify the Master immediately and take whatever action is necessary before the Master arrives.

See Bridge Procedure Manual at pg. 62 (Ex. 48).

There was absolutely no bridge team management to ensure the safe navigation of the ship. There was little communication between the Master, his crew and Captain Cota aboard the *Cosco Busan.* There was no bridge team meeting where the Second Officer or Master briefed the bridge team members on the anticipated voyage before sailing. The evidence suggests there was no designated O.O.W. The Master did not ask any questions or communicate important navigational information to Captain Cota. The Chief Officer did not stay on the bow and instead abandoned his bow position. There was no one on the bridge assigned to be a lookout and no fixes or other positional information were taken.

The absence of an additional officer on the bridge also prevented an adequate bridge team. The Master should have recognized the serious limitation of his bridge team and delayed sailing, as was his absolute right and responsibility. Yet, the Master apparently believed that it was up to the Superintendents, the Ship's Agent (who were also on board that morning), the pilot or the Port Authority to tell him that it was not safe to sail. We suggest this was because he did not want to be personally responsible for the delay and the cost to the owners, operators or charterers occasioned by any delay.

Most importantly, the Master did not know that the red triangles on his electronic chart were buoys or that the Delta Tower was between those buoys. Instead, he guessed incorrectly when asked by Captain Cota to explain the symbols on the Electronic Chart System (ECS). The Master's tragically inaccurate and misleading guess directly caused the accident in this case.

Moreover, there appears to have been a severe disconnect between the Master and his crew in terms of expectations and delegation of duties. We believe the crewmembers did not do certain things and did not know what their duties were (such as who was the designated lookout or Officer of the Watch) because neither the Master nor the Superintendents specifically instructed them accordingly. Conversely, we understand that the Master believed he did not have to impart specific instructions or designate particular duties because his crew should know what duties had to be performed and who was to be at a particular post. Clearly the expectations of the Master and his crew were starkly inconsistent and resulted in their shocking lack of navigational competence—a failure for which Captain Cota cannot be held responsible.

Finally, in his NTSB testimony, Master Sun accused Captain Cota of using his cellular telephone while navigating the ship, thereby insinuating that he was distracted and therefore, negligent. Despite Master Sun's repeated allegations, there is absolutely no evidence that Captain Cota used his cellular telephone from the moment the *Cosco Busan* left the dock until the accident. This can be verified via the VDR transcript (Exhibit 14.4) and Captain Cota's cellular telephone records, which we understand are already in the NTSB's possession.

B. The Crewmembers Aboard the *Cosco Busan*, Including the Master, Failed to Adequately Perform Their Duties

1. *The Master failed to adequately supervise his crew and take any responsibility for ensuring the safe navigation of the vessel*

Master Sun, the ultimate authority aboard the *Cosco Busan*, *see* Fleet's Shipboard Management Manual (SMS) sec. 1.3 (ex. 47 at 11), failed to adequately perform his duties. As the person in charge of the vessel, he can somehow escape any responsibility for his crew's shortcomings, for the decision to leave the Port of Oakland on the morning of November 7, 2007, or for the accident itself. Any claim by the Master or Fleet that the pilot was in charge of his ship because under both the Standards of Training, Certification & Watchkeeping for Seafarers (STCW) and Fleet's own policies, the pilot is only an advisor to the Master. [9]

In reality, Fleet's SMS ¶¶ 1.1 and 1.13 states that the Master is entirely responsible for the safe navigation of the ship and that a pre-departure comprehensive briefing of all persons concerned with the ship's navigation shall he held. Fleet's Bridge Procedure Manual provides that the pilot is merely an advisor: "Master are reminded that even though pilotage may be compulsory, the pilot acts only as an advisor, the Master being responsible for the ship's safe navigation and for the observance of laws, rules, and regulations." The intentions of the pilot must be clearly understood and be acceptable to the ship's navigating staff. Even in a compulsory pilotage situation, the pilot acts only as an adviser and the pilot's advice must be rejected if it endangers the ship, after which the pilot should be relieved of his duties. See Bridge Procedures Manual, Section 1.5.8.

Master Sun's mistakes are the direct cause of this accident for may reasons including:

First, Master Sun provided completely erroneous information to Captain Cota that came from pure guess work about the meaning of certain critically important symbols on the ship's electronic chart. It was that guess under the guise of an authorative interpretation and Captain Cota's reasonable reliance on it that truly caused the accident. When Captain Cota asked the Master about the "red triangles" on the electronic chart at approximately 8:22 a.m. (eight minutes before the accident), the Master—not knowing himself what they were—merely guessed rather than admit his ignorance. At that time, the Master said they were "lights" or "bridge on a light." Exhibit 14.4 at pg. 42. About 5 minutes later, when VTS called and gave Captain Cota incorrect information about the ship's heading, he again asked the Master about the red triangles. This time he sought to confirm that the red triangles represented the center of the span because that was where the ship was clearly headed. Captain Cota added "this is the center of the bridge right?" to which the Master replied "yeah, yeah." Exhibit 14.4 at pg. 44. At no time did the Master (or VTS) give any warning that the ship was sailing towards the Delta Tower. Thus, in both exchanges, Master Sun failed to advise Captain Cota either that he did not know the meaning of the red triangles or that when he stated that the red triangles "marked the center of

---

[9] For instance, see section 2.2.3 of the Navigation section of Fleet's Shipboard Management Manual, which states that "the master of the ship is alone responsible for its safe navigation," even when a pilot is aboard a ship.

the bridge" that this was an area that the ship should not sail. It is important to note that even at that late point in the voyage, had he been properly informed by Master Sun as to the meaning of the non-standard Electronic Chart Symbols, Captain Cota had a safe passage alternative available to him through the Charlie-Delta span of the bridge. Had the ship sailed in that direction, this accident would not have occurred.

Second, the Master failed to prepare for adequate manning. Minutes after sailing, Sun radioed the bow and said: "Chief Officer, who is at the lookout"—"who is doing the lookout . . . Chief Officer, is it the Bosun who is doing the lookout? And, "who is at the bow?" See Exhibit 14.4 at p. 39. Also, the Second Officer or the Chief Officer should have been called to the wheelhouse as soon as all mooring lines were aboard. Second Officer Zhao was supposedly the most knowledgeable person on the ship of the proper operation of the ship's equipment. His presence could have allowed for the proper navigation of the vessel and monitoring of the radar for early detection of any dangers. It is a reasonable expectation that he could have been able to properly adjust the radars' anti-clutter features and the gain to allow for an effective use of the radars.

Third, Master Sun failed to communicate with his crew and instruct them as to their duties. Before the ship left the port on the morning of November 7, 2007, the Master never had a conversation or meeting to discuss the passage through the Bay Bridge. For instance, he never told anyone to look out for either the buoys, for the D or E Towers of the Bay Bridge, or to listen for fog signals coming from the Bay Bridge. He also failed to designate a dedicated bow lookout.

Fourth, despite his duty to monitor the ship's radar on the morning of November 7, 2007, Master Sun never said anything about the Y-Racon that was intermittently visible on the 3-cm radar console near where he was standing. Presumably, this was because the Master did not understand the purpose of the Y-Racon, either before or even after the accident. Had the ship sailed under or even close to the area of the Racon, this accident would not have occurred.

2. *The Second Officer failed to prepare a berth-to-berth passage plan prior to departing the Port of Oakland even though Fleet Management's own policies required it*

Fleet Management required that prior to departure from a port, the Second Officer prepare a berth-to-berth passage plan. *See* Fleet's Bridge Procedures Manual, Section 1.3.1.2. In this case, not only did he fail to prepare a berth-to-berth passage plan before the *Cosco Busan* left the dock; after the accident, Fleet's Superintendents ordered the Second Officer to prepare berth-to-berth passage plans for all legs of the voyage since the crew joined the ship on October 24, 2007. There was no passage planning done prior to setting sail on November 7, 2007. It is our understanding that the Second Officer merely copied the pre-existing pilot-to-pilot passage plan that was in the computer and may have darkened the lines on British Admiralty Chart 588 (Exhibit 26). In this regard, the passage plans purport to refer to various navigation aids that were supposedly used by the Second Officer to complete the plan. In our view, there was no planning of this sort done for any of the three voyages of the *Cosco Busan* from October 25 to November 7, 2007. It is our understanding that the Third Officer added the way points on Chart

588 after the accident (albeit, incorrectly), [10] to make it appear he had been taking fixes when in truth he had not. In addition, at the returning Superintendents' instructions, the Second Officer prepared new berth-to-berth passage plans that still did not involve any real passage plan appraisal but were merely designed to make them look better for auditing or investigation purposes. Even after the accident the Master did not question the Second Officer about the post-accident false passage plan that the Superintendent ordered the Second Officer to prepare. Had he done so, he would have realized that the proposed passage plan had the wrong way point coordinates on it and that it still brought the ship too close to the Delta Tower rather than under or near the Y-Racon. [11]

Fleet's Bridge Procedures Manuals provides that "after his arrival on board, in addition to being advised by the Master for its present condition of loading, the pilot should be clearly consulted on the Passage Plan to be followed. The general aim of the Master should be to ensure that the expertise of the pilot is fully supported by the ship's Bridge Team." Bridge Procedures Manual sec. 1.5.8, Exhibit 48 at 61. The Master did not do this in this case.

It was the Master's "responsibility to verify that the various onboard procedures and instructions, mentioned in the Company's Shipboard Manuals, are complied with, in day-to-day operation." These procedures include passage planning and navigating procedures in various conditions such as restricted water, poor visibility, etc. Nevertheless, Master Sun allowed the ship to sail even though he knew that the Second Officer had not complied with Fleet's mandatory policies.

It is clear from the VDR that Master Sun was anxious to leave the Port as quickly as possible to get away from Fleet's two Superintendents who left the ship that morning after 7:00 a.m. *See* Ex. 14.4 at wave files 494-495 & 538. Master Sun can be heard to complain that he had never seen a superintendent "like this," and he seemed upset that the Superintendents had reprimanded him for not arranging transportation for them. Master Sun appeared to be distracted from his other duties due to the tension between him and the Superintendents.

It has been reported that the pilot assigned to the ship when it arrived from Long Beach to transit through San Francisco Bay to Oakland commented that the track line on the chart was drawn too close to the Delta tower of the Bay Bridge. Even on the way inbound, on November 6, 2007, with Master Sun on the bridge, the ship's ECS reveals that the ship sailed directly under

---

[10] Even in the post-accident false passage plan, the Third Officer incorrectly plotted the way points and made no adjustment to the ship's track so it would not have been so dangerously close to the Delta Tower.

[11] We believe that Second Officer Zhao did nothing to verify the route that the previous prior crew had drawn on Chart 588. In fact, we believe he paid no attention to it. Even after making a new passage plan—or rather, "correcting" an old one—he still got it wrong. The latitude and longitude of one of the way points on the revised berth-to-berth passage plan is not the same as the way point on the paper chart. In other words, the points do not match up, demonstrating that he did not verify the information on the passage plan ever after the accident.

the Y-Racon between the Delta and Echo Towers of the Bay Bridge. This fact seemed to have no meaning to Master Sun.

3. *The crew failed to monitor the ship's position or to takes fixes to assist in the safe navigation of the ship*

Fleet's policies and procedures require that the Officer in Charge of the Navigational Watch (O.O.W.) be responsible for monitoring the position of the ship as it sails. This is true even if a pilot is onboard a ship. The purpose of monitoring is to assist the pilot to ensure that the vessel is not in any danger. No one provided this mandatory assistance to the pilot on the morning of November 7. There was no teamwork between the Master and the Third Officer in terms of passing on any helpful information to Captain Cota.

Despite the requirements of the STCW and the Master's standing orders, the vessel's crew took no "fixes" during the outbound voyage on November 7, 2007. The Master's Standing Orders required that in pilotage waters, fixes needed to be taken every five minutes and after every maneuvering order. *See* Exhibit 49 at pgs. 1-2. As incredible as it seems, the Master and navigation officers apparently had no interest in determining where the *Cosco Busan* was as it proceeded in the fog.

The evidence indicates that no meaningful fixes were taken before the accident. No one saw the Third Officer go to the chart table, nor does it appear that he had time to do so before the accident. It is therefore most likely that the positions at 0800, 0810, 0820 and 0830 were all placed on the chart after the accident. [12] This total lack of attention to where the ship was and projecting its future position is in direct violation of the watchkeeping standards of STCW95.

The O.O.W. is responsible for taking fixes while the ship is moving in a port. *See* STCW 24. Immediately upon boarding, the pilot gave Sun the San Francisco Master-Pilot Exchange Card, which "recommends" that the Master monitor his "vessel's position as well as other vessels, both underway and anchored in the immediate area."

Captain Roy Mathur claims that when he reviewed Chart 588 on the afternoon of November 7, that he saw no fixes of any kind on the chart that was presented to him. The photograph taken by the Coast Guard's untrained investigators, however, shows what appear to be some added fixes presumably made by the Third Officer. These positions appear to have been made by the intersection of two arcs made by a compass and are not accurate.

[12] It is noted that the 0820 position is over a mile from where the ship was actually located at 0820. Further, the 0800 position is over a quarter mile from where the vessel was at 0800. At 0800 the vessel was still at the berth. The 0810 position is nearly 0.9 miles from the ship's actual position. As an aside, but of significance, the initial investigators on the ship after the accident, did not see any fixes on the paper chart.

4. *The Third Officer failed to prepare the ship's GPS unit in case the ship sailed off course*

Prior to leaving the dock on November 7, 2007, none of the way points for the voyage from the dock through the Bay Bridge were entered into the ship's GPS unit nor were any alarms set on the unit prior to setting sail that would have alerted the crew whether the ship was going outside the bounds of those lines between the way points between the dock and the Bay Bridge.

No track line was entered into the ECS from the berth in Oakland to the pilot station outside the Golden Gate Bridge. The track line from the paper chart (Ex. 26) should have been inputted into the ECS, and once inputted, "parallel indexing" should have been employed as the vessel left the harbor. Furthermore, the electronic chart and the radars both had an audible alarm function that should have been set up using a CPA (Closest Point of Approach), which is one of the functions of the ARPA, which provides a zone of protection for the ship. This function would also have provided a warning if the ship was off track or heading towards a hazardous condition or a danger, and could be set up as close as 400 feet or 0.1 nautical miles away from an object.

5. *The Master failed to designate a lookout on the bridge*

The Master similarly failed to appoint a designated lookout on the bridge. Per Fleet's regulations, the bridge team in pilotage waters is supposed to consist of the master, the pilot, the officer of the watch, the lookout man, and the helmsman. See Ex. 48 at pg. 16. Given the duties that the Third Officer was required to undertake however, the Third Officer could not have possibly been the designated lookout. The Bridge Procedure Manual (and the STCW) indicates that "the lookout must be able to give full attention to the keeping of a proper look-out and no other duties shall be undertaken or assigned which could interfere with this task." See Bridge Procedure Manual sec. 1.4.2.5. The Third Officer had the responsibility to look over the engine order telegraph, take fixes, that equipment for taking fixes was not in the same place, supervise the helmsman, and act as lookout. As such, per Fleet's rules, the Third Officer did not meet the definition of a designated lookout.

6. *The Chief Officer abandoned his post on the bow without giving notice or receiving authorization to do so and later lied to the Coast Guard about this fact*

On the morning of November 7, 2007—approximately fifteen minutes prior to the accident—the Master did not know who the lookout on the bow was. At 08:12:50, Captain Cota asked the Master whether they had a lookout on the bow. [*See* VDR transcript]. The Master replied "yeah" three times. [*See* VDR transcript at 08:12:53]. Master Sun did not know this for certain however, because thirteen seconds later, he radioed the Chief Officer to ask whether the Bosun was the lookout and who was at the bow. [*See* VDR transcript at 08:13:06]. The Chief Officer then told him that he was at the bow and that the Bosun was at the stern lowering the pilot ladder. [*See* VDR transcript at 08:13:11].

Later, without receiving authorization from the Master, the Chief Officer abandoned his post. Upon the Bosun's return, the Chief Officer left the deck at apparently 8:20 a.m. The Chief

Officer neither advised the bridge that he was leaving his post, nor requested permission to do so. The Bosun then began to act as the lookout on the bow for approximately ten minutes until roughly 8:30 a.m., which is when the accident occurred.

After the accident, because the Chief Officer's duties always included staying on the bow to drop the anchor in case of an emergency, the Master was frantically looking for the Chief. The Master was unable to locate him, however Chief Hu lied to the Coast Guard, saying that he was on the deck before the accident. *See* Ex. 14.4 at pg. 120; wave file 793.

After the accident, Sun learned that the Chief Officer had abandoned his post. Section 2.2.11 of Fleet Management's policies—which addresses discipline—specifically provides that the Master is "charged with the maintenance of discipline and shall be held responsible for any disorder, irregularity, violation of law or the operating procedures whenever committed aboard ship." See Ex. 47 at pg. 27. Section 2.2.11.1 provides a list of things for which a crewmember shall be subject to instant dismissal, including subsection "o," "to be asleep on duty or fail to remain on duty." No disciplinary proceedings were initiated against Chief Officer Hu.

Moreover, Fleet's policies clearly provide that "failure of an Officer to carry out his duties is a failure on the part of the Master, who is to supervise them closely." SMS sect 2.1, (Ex. 47 at pg. 23).

7. *The Bosun was not prepared to act as a lookout on the morning of November 7, 2007 and did not see the bridge pier until it was too late*

There is no indication that anyone briefed Bosun Zheng on his duties as a lookout and in particular to watch out for the bridge piers. This is especially surprising because if a lookout fails to understand the things that may put a vessel at risk, he cannot possibly know what to look out for and accordingly, would be ineffective on his post.

8. *The crew failed to take additional safety measures to compensate for foggy conditions such as efforts towards better communication*

When the ship left the dock, there was no meeting with the bridge team or the Chief Officer or the Second Officer about what to look for or even that the ship needed a dedicated bow lookout. Nor was there any discussion with the Chief Officer or the Master or the Superintendents about the fog. There was similarly no discussion or order from the Master to look out for the bridge pier before the accident and no discussion about the buoys or about fog signals to listen for.

C. Master Sun Did Not Know How to Operate the Electronic Chart System and Refused to Either Admit his Ignorance or Ask for Help

Master Sun was never trained on how to use or interpret the symbols on his own electronic chart and as a result, when Captain Cota asked him for assistance because he had never seen certain red triangle symbols before, it is our understanding that the Master guessed, but nevertheless stated authoritatively, that the red triangle symbols on the electronic chart were "bridge lights" or "lights on bridge." He never told Captain Cota that he did not know or understand the meaning of these symbols.

Master Sun should also have know that the meaning of the red triangles on the *Cosco Busan*'s ECS also could have been easily determined by using the "query" function on the electronic chart. Essentially, by placing the cursor on the symbol in question and clicking on it, the symbol's information, including its location, its height, and all other basic information, would be instantly displayed. Obviously, the Master did not know how to do this.

After the ship was under way however, but prior to hitting the Bay Bridge, the Master failed to ask the Third Officer for assistance operating the electronic chart or interpreting the symbols on it. Had the Master pursued such an inquiry, the accident would have been prevented. We believe the Master was embarrassed by his technical incompetence, and rather than to admit his ignorance or ask for help from an officer holding an inferior position to him, he simply guessed, thereby putting his ship and his crew and the environment at risk. He repeated the erroneous information to Captain Cota minutes later, after VTS called and asked Captain Cota to reaffirm his intentions to sail through the Delta-Echo span of the Bay Bridge. At this point, Captain Cota asked Master Sun to reaffirm that the red triangles marked the center of the bridge and Sun replied "yeah, yeah."[13] See Ex. 14.4, at pg. 44, wave file 612.

After the accident, Master Sun retrieved the paper chart and within twenty seconds knew that the red triangles on the ECS were actually buoys. He had eight minutes to check the chart before the accident but chose not to do so. The Master tried to explain himself to his Third Officer after the accident when he stated in Mandarin that what he had said to the pilot was not incorrect. See Ex. 14.4 at pg. 48, wave file 617 (stating "this is the center of the bridge, not the center of the channel").

Master Sun gave Captain Cota erroneous information about the "red triangles" on the electronic chart, thereby causing the pilot to navigate directly towards the Delta Tower of the Bay Bridge. During his interview before the NTSB, when Master Sun was asked "at what point in the voyage did [you] understand that the pilot intended to go through D and E, D and E span?", Master Sun answered: "The moment that VTS called on the radio and he answered that he will go in the center of D and D—D and E, then I realized that he's going through D and E." [NTSB, 39]. If this was true (and we believe it is not), then Master Sun deliberately stood by and said nothing as his ship headed towards the Delta Tower. We believe that Master Sun did not even understand what the red triangles represented or that the Delta Tower lay between them. Thus, he remained silent because he assumed that his ship was sailing where it needed to sail. In fact, as can be seen in exhibit C-39, the actual course of the ship (blue line) followed closely the track line on BA 588 (green line).

This accident would not have occurred if the Master had either admitted his ignorance or referred to the paper chart instead of pretending he knew the answer to Captain Cota's question. Further, the Electronic Chart has a warning sign on it at start up indicating that it was not ECDIS compliant. No one advised Captain Cota of this important fact. The non-standard symbols that the ECS displayed on November 7, 2007 could also have been easily changed to more traditional

---

[13] In addition to the confusing heading information provided by VTS, this further misstatement from Master Sun reaffirmed, in Captain Cota's mind, that the ship was now headed in the proper direction to pass through the center of the Delta-Echo span.

symbols that would have clearly shown the red triangles to be the red/green/red buoys on either side of the Delta Tower. We do not believe the Master understood this either, however.

Further, the NTSB has been relying on printed images supposedly showing what the ECS displayed on the morning of November 7, 2007. These images are not accurate. The red triangles were being displayed as if they abutted the Bay Bridge as in Exhibit 6.1–6.3 (attached). The images the NTSB is using are not a true and accurate depiction of what was actually available to be viewed by Captain Cota and the bridge office that morning. This is a critical issue that further taints the validity and objectivity of the NTSB's process. In addition, as set forth in Exhibit C-39 (attached), we reconstructed the voyage, showing that it was clear to any person monitoring the voyage, that the ship was headed towards the red triangles.

D. The Radars Aboard the *Cosco Busan* Were Not Properly Tuned by the Master and Third Officer

The radars aboard the *Cosco Busan* were not properly tuned because the gain had been turned up considerably to compensate for the anti-clutter device that was mistakenly left in auto-mode by the Master while his ship was in the Bay.

Before the ship sailed on the morning of November 7, 2007, Captain Cota, the Master, and the Third Officer spent a considerable amount of time attempting to tune the radars and acquire targets. Because the anti-clutter device was on, the acquired targets would disappear as they approached the area around the *Cosco Busan*. Apparently, neither the Master nor the Third Officer knew that this was occurring, however and Captain Cota relied on them to tune their radars.

We believe that the radar closest to the helm station was the 3-cm radar and the radar on the port side of the bridge, closest to the electronic chart was the 10-cm radar. We further believe that the AB was stationed at the helm with the Third Officer to his right in front of the engine telegraph and the Master to his left between the electronic chart and the 3-cm radar, with Captain Cota to the Master's left between the 10-cm radar and the electronic chart.

In our view, neither the Third Officer nor the Master made any effort to monitor the ship's radar(s) or use "all means appropriate" to determine if there was a risk of collision. *See* Inland Rules 5 and 7, 28 U.S.C. 2005 & 2007.

E. Fleet Management Did Nothing to Assist the Crew—Which Was Inexperienced, Untrained, and Unreliable—to Prepare For Sailing the *Cosco Busan* in the Fog

Fleet Management failed to properly train and prepare its crew to sail aboard the *Cosco Busan*. Most importantly, there was no Bridge Team Management Training and no understanding of the role of the pilot as an advisor and no understanding of the role of the O.O.W. While the crewmembers possessed numerous certificates verifying their claimed but now seriously in doubt navigation qualifications, the circumstances surrounding navigation of the *Cosco Busan* called for more thorough and careful instruction by Fleet Management's superintendents. For instance, the *Cosco Busan* used equipment that was new for many of the crewmembers, making training particular to that equipment necessary. Similarly, the entire crew

was new and came on board just before the *Cosco Busan* set sail from Pusan, Korea, making it more difficult for the crew to become acquainted with the ship. Furthermore, the crew was from China, and although some crewmembers may have understood some spoken English, there were genuine language barriers that precluded the crewmembers from receiving the full benefit of the drills that were held in English.

Additionally, while there were a large number of manuals related to navigational procedure, bridge management, job duties and the like aboard the *Cosco Busan*, the crew simply did not have time or the English-language competence to understand, let alone follow these procedures. Crewmembers had to travel for two days to reach Pusan, Korea, where the *Cosco Busan* was docked. Upon arriving in Pusan, crewmembers were called to duty immediately, preventing them from getting sleep or food until some time after they had boarded the vessel, and leaving no time for them to review the manuals.

In short, the crew was tired, untrained, with virtually no spoken or written English language competence, expected to perform a large number of tasks in very little time, and made responsible for operating equipment that was new to most of them. Even during the voyage from Pusan to Long Beach, the overworked crew had no time to adequately review manuals even if they could have understood them. At most, the crew was instructed to fill out various forms and checklists so that the ship's records would appear to be complete. Nevertheless, the forms themselves were not usually read or understood nor were the tasks completed despite the checklists.

When Captain Cota boarded the *Cosco Busan* on November 7, 2007, he reasonably believed that he was boarding a vessel with a crew that was trained, competent, and knowledgeable about the ship's equipment. Instead, and unbeknownst to him, the crew was unable to provide him with the assistance that he, or any other pilot under the same conditions, needed to safely navigate the *Cosco Busan* outside of the San Francisco Bay. Indeed, the Master all but washed his hands of any responsibility for the safe navigation of his ship once Captain Cota came on board.

1. Fleet failed to provide adequate training

Fleet failed to train its crewmembers on their individual duties, and on how to operate the equipment aboard the ship, which rendered the ship unseaworthy. The crewmembers had only limited contact with Fleet's Superintendents, who were responsible for training the ship's crew.

The crew did not have the time or ability to read and understand the following, among other tasks:

(1) Passage planning, especially the need to do berth-to-berth passage plans;

(2) How to operate the *Cosco Busan*'s ECS;

(3) Bridge Team Management;

(4) How to function as a bridge lookout;

(5) The duties and responsibilities of the O.O.W.;

(6) The requirements of the Master Standing Orders; or

(7) The advisory role of the pilot.

2. *The manner in which the outgoing crew of the Cosco Busan was replaced in its entirety prevented the incoming crew from having an opportunity to exchange information with them*

Further adding to the ship's unseaworthiness was the poor transition between the incoming and outgoing crew. Turnover of a crew may be partial or complete; in either event, incoming crewmembers typically have an opportunity to speak with the crewmember who they are replacing, and documentation relevant to his position is usually exchanged. Specifically, duties are switched face-to-face and a detailed written report is made to reflect the switch in positions. In this case, when the crew boarded the *Cosco Busan*, there was a complete turnover of the previous crew, and little or no time was allocated for communication between them. This deficiency further added to the ship's unseaworthiness, especially in light of the fact that (1) several crewmembers were new at their post; and (2) Fleet failed to provide them with adequate training.

3. *Considerable language limitations prevented effective communication aboard the Cosco Busan*

Per Fleet's rules, crewmembers must understand the English language enough to be able to comprehend the manuals aboard the ship. Specifically, Fleet's Shipboard Manual mandated that "English is the language for all communication regarding Company affairs. All staff on board must be able to communicate effectively in this language." [*See* Fleet Shipboard Management Manual, Section 1.6, Company Regulations at 12]. Nevertheless, the crew of the *Cosco Busan* did not have the necessary language skills to communicate effectively aboard the ship or read Fleet's manuals.

II. VTS FAILED IN ITS MISSION TO COORDINATE THE SAFE AND EFFICIENT TRANSIT OF VESSELS IN THE SAN FRANCISCO BAY

A. VTS Failed to Warn Captain Cota and Assist Him in Sailing Through a Safe Passage

From the moment that the *Cosco Busan* departed the Port of Oakland until the accident, Captain Cota was in constant communication with VTS. VTS was in the best position to alert Captain Cota that he was dangerously close to the Delta Tower of the Bay Bridge, but failed to do so.

On its website, VTS proudly proclaims that its mission is to "coordinate the safe and efficient transit of vessels in San Francisco Bay in an effort to prevent accidents and the associated loss of life and damage to property and the environment." Captain Cota notified VTS at 6:37 a.m. before they sailed that his intended passage was through "Delta-Echo and deep water." VTS repeatedly broadcasted the *Cosco Busan*'s intended passage once the ship left the

dock. *See e.g.* VDR transcript 14.4 at 7:15:05 (wave file 539); 8:06:40 (wave file 590-591); 8:18:25 (wave file 602); 8:23:00 (wave file 607); and 8:24:03 (wave file 608).[14]

Despite having been advised of the ship's intended course, VTS waited until approximately 8:27:24 to contact Captain Cota to ask "what his intentions were." By this time the ship was already South and West of the Y-Racon and had only just begun to turn to the right (starboard). The reason the ship was out of position was that Captain Cota at approximately 8:22 a.m. had asked Master Sun about the non-standard chart red triangle symbols on the electronic chart display. When Master Sun pretended to know what they were and authoritatively told Captain Cota they were "bridge lights" or "lights on the bridge," he began to steer the ship on a course towards the "lights."[15] Master Sun never checked his paper chart or otherwise corrected the misinformation he provided to Captain Cota. There should be no doubt about Captain Cota's ability to navigate the *Cosco Busan*—he put the vessel on the precise course he intended it to be on based on what he reasonably believed to be accurate information from the Master about the significance of the solid red triangles.

VTS followed the course and speed of the *Cosco Busan* by radar, AIS, and an electronic chart display of its own. *See* Government's Ex's 18.1 & 18.2 included in Exhibit C-39. At 8:27:48, VTS mistakenly informed Captain Cota that they showed his heading as 2-3-5 when in fact the true heading of the ship at that time was 268.8. *See* Ex. 11 (689).

VTS then asked "what are your intentions?" At 08:28:04, VTS responded "Roger, understand you still intend ** (Delta) Echo span." Captain Cota then asked the Master if the red triangles were the "center of the bridge," (meaning the center of the span)—and Master Sun reported "yeah, yeah." Captain Cota then confirmed to VTS that the *Cosco Busan* was still headed for "Delta-Echo." *See* VDR transcript, exhibit 14.4. at 08:28:15.

From that time until the accident, VTS remained silent. At no point did VTS ever warn Captain Cota that the ship was out of position to make the Delta-Echo span, or that it was clearly South and West of the Delta Tower or that it was dangerously close to the towers or that an emergency procedure needed to be taken or any such other helpful information. Instead, the VTS operators—in contravention of their duties (as well as common sense)—incredibly chose to stay silent and merely "predicted" whether the ship would hit the bridge. Indeed, had the VTS given any meaningful warning, Captain Cota had a clear opportunity to escape danger by using the opening between the Charlie and Delta Towers. Had he done so, this may have been a close call, but there would not have been an accident, the ship would not have hit the bridge pier, it could not have been damaged, and no oil would have been spilled in the Bay.

The heading of the *Cosco Busan* minutes before the accident was different from what VTS had told Captain Cota. At 8:27:44, the radar showed that the heading was 261.5 degrees.

---

[14] Most of these broadcasts are not transcribed in the VDR transcript but can be heard on the designated wave files.

[15] There are lights on the bridge in the center of the D-E span. *See* Admiralty Sailing Directions, N8 (Exhibit 43).

Four seconds later, at 8:27:48, VTS called and stated that AIS showed the *Cosco Busan* heading two-three-five. *See* Ex. 14.4 at 44, wave file 610. At that time the ship's heading was 268.8.

Specifically, VTS had been watching for minutes that the *Cosco Busan* was heading straight towards the Delta Tower, yet it never said to the pilot or to anyone else "we show you on a course heading towards the tower of the Bay Bridge," or "you are out of position to safely transit through the Delta-Echo span." Even as late as 8:28:30 a.m., had VTS alerted Captain Cota of that fact, Captain Cota could have navigated the *Cosco Busan* safely through the Charlie-Delta span of the Bay Bridge. This fact is uncontrovertable.

In his testimony before the NTSB, Master Sun said that he could hear Captain Cota talking with VTS about passing traffic but it does not appear he paid any attention to the conversation. If he did, then he had a duty to say something to Captain Cota.

B. The Foghorns on the Bay Bridge Were Disabled on the Morning of November 7, 2007

The foghorns on the Bay Bridge appear to have been disabled on the morning of November 7, 2007. No fog horns are heard on the VDR as the ship approached the Bay Bridge or even after the accident. It is noted that the foghorns on the Bay Bridge each have different characteristics so that a mariner approaching the bridge can distinguish between the towers. A tower is one 1 second blast every 30 seconds; B tower is two 1 second blasts every 30 seconds, C tower is one bell ringing every 30 seconds; D tower is three 1 second blasts every 30 seconds and E tower is two 1 second blasts every 30 seconds. Thus, outbound mariners wishing to pass between D and E tower would point between the two sounds and have the 3 blasts pass down their port side and the 2 blasts pass down their starboard side. The assumption that the fog signals were disabled is confirmed by the lack of hearing them on the VDR even though the ship was alongside the Delta tower for more than 30 seconds. Captain Cota's representatives have been unsuccessful as of this time in obtaining any records from CALTRANS to determine how the foghorns were disabled and why.

C. The Racons on the Bay Bridge are Unreliable

The Racons on the Bay Bridge have a long history of unreliability. The Coast Guard has provided some limited information on this issue, but files from CALTRANS are not yet available. It is noted that the Racons spent frequent long periods of time out of service, and not all out of service periods were fully covered by a Notice to Mariners advising of the out of service status. At one time the Coast Guard threatened to fine CALTRANs if they continued to avoid timely repair, but there is no record available to us that fines were ever assessed. The enforcement of proper maintenance of "Privately Maintained" aids to navigation is of continuing concern. The Racons and the foghorns are maintained by CALTRANs, but are the responsibility of the Coast Guard.

From the radar images, in Exhibit 11, while one can see the Y-Racon intermittently, the other Racons on the Bay Bridge are never visible.

III. BEFORE KNOWING THE FACTS, THE GOVERNMENT PLACED BLAME ON CAPTAIN COTA, GRANTING THE MASTER AND KEY CREWMEMBERS IMMUNITY TO CREATE A CASE AGAINST HIM

The crewmembers who testified before the NTSB were given immunity. A court order requested by the government also gave the witnesses immunity in the criminal proceedings. In addition, the government made arrangements for each of the crewmembers to be paid in full while they were required to stay in the United States. During this year-long timeframe, the government met with the material witnesses on numerous occasions as did attorneys for Fleet. Each of the witnesses refused to testify in the related civil cases because the government refused to extend the same immunity protection to them in those proceedings. The fact that each crewmember was given immunity is a fact that should be used to evaluate credibility.

IV. THE CREW FALSIFIED VARIOUS DOCUMENTS AND COLLABORATED ON THEIR "STORY" EVEN THOUGH THE GOVERNMENT GAVE THEM IMMUNITY

The evidence establishes that the crew concocted a story to give to the government, especially immediately after the accident. For instance, on the VDR at approximately 8:58, the Master can be heard instructing his crew as follows (in Chinese)--"Think about the whole process, (so that) we would have evidence when time comes. We are all, Coast Guard will definitely come up and ask. When asked, just say used full port or starboard, and full ahead." [See Ex. 14.4, pg.

It is our understanding that from this instruction the Master was telling his crew to blame the pilot for the accident. At some point after Fleet's Superintendents reappeared on board the ship after the accident, the crew collaborated on the Master's "statement of facts." See Ex. 81.1-81.5. [*Note: Exhibits 81.2, 81.3, and 81.4 are nearly identical documents as far as the narrative but the signatures are different in each one].

V. FLEET'S CONTRACT WITH EACH CREW MEMBER MOTIVATED THE CREW TO DENY RESPONSIBILITY AND BLAME THE PILOT

Before boarding the *Cosco Busan*, each crewmember signed an employment contract with a Chinese manning agency and Fleet Management that prohibits quitting or disobeying orders, and provides for certain monetary penalties if they do. We think this is another factor the NTSB should consider in evaluating the testimony obtained from the crew.

VI. DECISION TO LEAVE THE PORT IN FOGGY CONDITIONS

During his NTSB testimony, Master Sun stated that it was not up to him whether to sail or not. [NTSB transcript, 13:24-25]. "Basically, I have to follow his direction." [NTSB transcript, 13:1-3 (referring to the ship's shoreside agent)]. Master Sun did not ask the superintendents on the morning of November 7 whether it was or was not safe to sail. The superintendents similarly did not tell Master Sun that it was not safe to sail.

Section 1.2 of Fleet's Shipboard Management Manual provides that "delays must be avoided" and "the vessels must be navigated and managed carefully and efficiently." In our

view, Master Sun did not want to do anything that would delay the sailing of the *Cosco Busan* on the morning of November 7, 2007—at least if it was his decision. So long as somebody else decided, such as the pilot, the Port Authority, Fleet's Superintendents, or the ship's agent, then he would have been fine with the delay. One can easily infer that Master Sun did not want to be blamed for any financial losses that could occur if the ship was delayed in should he decide it was unsafe to sail.

Section 1.3 of Fleet's Shipboard Management Manual outlines the Master's authority and responsibilities. The Master's "first duty is towards the safety of the lives and property entrusted to the care and prevention of marine pollution." He had "overriding authority and discretion to take whatever actions he considers to be in the best interests of the crew, ship and the marine environment." He also had to make sure that delays be avoided if they could be.

The *Cosco Busan* crew believed that it was up to the Port Authority to close the port if it was unsafe to sail. Because the Port was open and no one from VTS directed otherwise, the Master apparently believed it was necessary to set sail.

VII. CAPTAIN COTA HAS BEEN AND REMAINS THE DESIGNATED SCAPEGOAT FOR THIS ACCIDENT

Fleet's Bridge Procedures Manual provides that "The contribution which pilots make to the safety of navigation in confined waters and port approaches, of which they have up-to-date knowledge, requires no emphasis, but <u>it should be stressed that the responsibilities of the ship's navigating officers do not transfer to the pilot</u>, and the duties of the Officer of the Watch remain with that Officer." Bridge Procedures Manual, sec. 1.5.8 (ex. 48 at pg. 61) (emphasis added).

After the accident, the Master had a conversation with his Third Officer in Chinese and essentially told him to blame Captain Cota for the accident by saying "think about the whole process, (so that) we would have evidence when time comes. We are all, Coast Guard will definitely come up and ask. When asked, just say used full port or starboard, and full ahead." [Exhibit 14.4 at 8:58:22].

It is clear from the record that Master Sun has been trying to place blame on Captain Cota by slanderously painting him in a negative light. During his testimony before the NTSB on December 4, 2008, Master Sun attempted to paint Captain Cota in a negative light when he was asked questions about pilots and their attitudes, and indicated Captain Cota had frustrated him from the moment he boarded the *Cosco Busan*. When asked what caused him to be frustrated, Master Sun responded as follows:

Normally, as a captain I would welcome the pilot with open arm, enthusiastic, and I would show my hospitality in offering him if he need any food or coffee or tea, et cetera. And then some pilot came on board with a very cold face. Some of them just don't want to pay attention on us, and some of them would not like to talk with us.

Master Sun was then asked whether he had offered Captain Cota coffee or tea. He responded:

You know, coffee or tea and other drinks, you know, are available on board the ships whether they like it cold or hot, but then it seems the pilot coming on board was with cold face, doesn't want to talk. I don't know if he had a hard day before or because he was unhappy because I was Chinese.

These statements are simply not true. This is yet another example of Master Sun's (and of the NTSB's bias in undertaking such a line of questioning) attempt to paint Captain Cota in a negative light—as an unapproachable, unlikable, and racist individual.

VIII. CONCLUSION

The facts demonstrate this unfortunate accident was caused by a variety of factors. It is and has been unfair to focus blame singularly on Captain Cota and to use him as a scapegoat. The manner in which the government investigated and prosecuted this case through the United States Attorney's Office—and the Department of Justice on the one hand and the NTSB on the other—has created a confusing, prejudicial and inaccurate record that undermines the mission of the NTSB to be fair and impartial and professional in reviewing the cause of an accident. Here instead, the government's focus has been to assign blame solely on Captain Cota by initiating and maintaining a fact-finding process that is biased and grossly unfair. While we appreciate the opportunity to submit these comments, we are skeptical that the NTSB will be permitted to fully and fairly review the underlying evidence that is essential to a fair and accurate report.