



U.S. House of Representatives
Committee on Transportation and Infrastructure

James L. Oberstar
Chairman

Washington, DC 20515

John L. Mica
Ranking Republican Member

David Heysfeld, Chief of Staff
Ward W. McCarragher, Chief Counsel

James W. Coon II, Republican Chief of Staff

April 9, 2008

SUMMARY OF SUBJECT MATTER

TO: Members of the Subcommittee on Coast Guard and Maritime Transportation

FROM: Subcommittee on Coast Guard and Maritime Transportation Staff

SUBJECT: Hearing on COSCO BUSAN and Marine Casualty Investigation Program

PURPOSE OF THE HEARING

On Thursday, April 10, 2008, at 10:00 a.m., in Room 2167 of the Rayburn House Office Building, the Subcommittee on Coast Guard and Maritime Transportation will meet to receive a report from the Department of Homeland Security's Office of the Inspector General (OIG) entitled "Allision of the M/V COSCO BUSAN with the San Francisco-Oakland Bay Bridge." This report was completed pursuant to a request made by Speaker of the House Nancy Pelosi and Subcommittee Chairman Elijah E. Cummings on December 4, 2007.

Additionally, the Subcommittee will examine the recent sinking of the Fishing Vessel ALASKA RANGER on March 23, 2008, which caused the deaths of 5 crewmembers (including the Master, the Mate, Chief Engineer, the Fishing Master, and a crew member). This incident is the subject of on-going investigations by a Coast Guard Marine Board of Investigation and by the National Transportation Safety Board (NTSB).

By examining the OIG's report on the COSCO BUSAN – and by looking at the ALASKA RANGER's participation in an alternative inspection program established by the Coast Guard – the Subcommittee will continue its assessment of the ability of the Coast Guard's marine safety program to effectively regulate the maritime industry and to respond to major marine casualties.

BACKGROUND

COSCO BUSAN ALLISION WITH THE SAN FRANCISCO-OAKLAND BAY BRIDGE

The M/V COSCO BUSAN hit a support under the San Francisco-Oakland Bay Bridge at 8:30 a.m. on November 7, 2007, resulting in the release of an estimated 53,653 gallons of fuel oil (according to the OIG's report).

The Subcommittee held a field hearing in San Francisco on November 19, 2007, to conduct an initial examination of the allision. Following the hearing, Speaker Pelosi and Subcommittee Chairman Cummings requested the DHS OIG to "conduct a review of the facts and circumstances surrounding the allision and the subsequent investigation and response." Specifically, the OIG was asked to examine three aspects of the COSCO BUSAN incident, including (1) the role of the San Francisco Vessel Traffic Service (VTS) in the incident; (2) the Coast Guard's conduct of the immediate post-accident casualty and pollution investigation; and (3) the effectiveness of the response to the oil spill resulting from the allision of the COSCO BUSAN with the Bay Bridge.

In response to this request, the OIG has issued a report entitled "Allision of the M/V COSCO BUSAN with the San Francisco-Oakland Bay Bridge." The main findings of this report are summarized below. Importantly, the OIG report assesses only those aspects of the allision and subsequent response referred to it for review. The OIG did not investigate the probable cause of the accident, which is under review through other on-going investigations.

Vessel Traffic Service (VTS)

The OIG has found that the San Francisco VTS watchstanders were monitoring the COSCO BUSAN throughout the morning of November 7 and were in compliance with established procedures for managing transits during periods of restricted visibility. The watchstanders appropriately notified the ship's pilot of the conditions of reduced visibility prevalent in the Bay that morning and made appropriate inquiries of the ship's intentions throughout its transit – including up to the time the ship hit the Bay Bridge column.

The OIG found that due to the nature of extant software, the VTS system experiences a lag time between when a vessel maneuver is executed and when it is displayed on the VTS console. This lag time prevents a VTS watchstander from receiving the real-time data that would be necessary to enable watchstanders to direct individual vessel maneuvers. Consequently, by the time the VTS data showed watchstanders that the COSCO BUSAN was not in the appropriate position to transit between the Delta and Echo spans of the Bay Bridge as it intended to do, the ship had already started to execute the turn that eventually caused it to hit the bridge column. OIG stated definitively in its report that the "watchstanders on duty before the accident could not have taken any additional action that would have prevented the casualty."

The OIG did find that the software in use then (and now) at San Francisco VTS is the Coast Guard Vessel Traffic System which was installed in the 1990s rather than the more advanced Ports and Waterways Safety System (PAWSS) utilized in other VTS centers. The newer system had been partially installed in San Francisco – and provided some upgrades in technical capacity – but the installation was not fully completed due to funding constraints in 2003 and 2004.

The OIG also found that the VTS has the authority under existing laws to prohibit larger commercial vessels and passenger ferries from transiting the Bay during periods of reduced visibility; VTS also has the authority “to institute and enforce measures to enhance navigation and vessel safety and to protect the marine environment.” Nonetheless, the criteria that would be necessary to enable watchstanders to determine what measures should be required of vessels during specific conditions of reduced visibility have not been developed. OIG reports that Coast Guard Sector San Francisco and the San Francisco Harbor Safety Committee are considering issuing new guidelines pertaining to transits during periods of reduced visibility.

The OIG also reports that the San Francisco VTS will institute a new policy to require that in addition to the three watchstanders always on duty managing vessel transits at the VTS, a fourth watchstander will assume duties managing transits during periods of reduced visibility. Among other duties, the fourth watchstander will be assigned to zoom electronic displays onto localized areas of the Bay to enhance awareness of local conditions so appropriate advisories can be provided to ships in transit.

The OIG provided two specific recommendations to improve the operations of VTS centers. First, the OIG found that the Coast Guard does not have in effect a VTS national standard operating procedure. Rather, VTS watchstanders follow guidance provided in the Coast Guard’s Marine Safety Manual, which the OIG stated provides only “general concepts” for VTS operations. The OIG recommended that the Coast Guard develop National Standard Operating Procedures. Specifically, the OIG recommended that these procedures should address the following issues.

- VTS watchstanders should be required to be tested for drug and alcohol use following a casualty. Following the COSCO BUSAN allision, the VTS watchstanders were not tested for drug and alcohol use. OIG notes that this testing did not occur because Coast Guard personnel were unaware of Coast Guard personnel manual policies and Department of Transportation orders requiring such testing. Because no testing was performed, it is not possible to affirmatively state that watchstander drug or alcohol use was not a factor in this accident.
- All VTS centers should be required to synchronize the data they receive, including audio, video, and tracking data. OIG found that data was not synchronized at the San Francisco VTS on November 7, 2007, which complicated the effort to recreate the chain of events leading up to the allision.
- Center-specific quick response sheets should be developed for all VTS centers. OIG found that the San Francisco VTS did not have quick response sheets to guide watchstander actions following an accident such as occurred on November 7.

Additionally, the OIG recommended that the Coast Guard work with officials in San Francisco and Oakland, the San Francisco Pilot’s Association, and the San Francisco Harbor Safety Commission to develop criteria that would guide vessel transits through San Francisco Bay during periods of reduced visibility.

Marine Casualty and Pollution Investigation

The OIG was very critical of the Coast Guard’s investigation of this marine casualty. The OIG found that five of the six individuals assigned to marine casualty investigator billets were not

qualified for those positions; all three of the individuals who responded to the COSCO BUSAN were unqualified as marine casualty investigators. While the OIG does not define the term “qualified,” a member of the Coast Guard is typically said to be a qualified as an marine casualty investigating officer when he or she receives a “letter of qualification,” which is issued following the completion of performance qualification standards (which, in turn, are completed through on-the-job training, applicable coursework at Coast Guard training centers, and effective completion of an oral examination administered by qualified Coast Guard personnel).

Likely as a result of inadequate training and experience – and the use of inadequate manuals – the investigators who responded to the COSCO BUSAN failed to identify, collect, and secure perishable evidence related to this casualty. The investigators failed to secure the COSCO BUSAN’s communications and navigational systems to allow examination to be made of whether they were fully operational at the time of the allision. The investigators failed to identify the presence on the ship of a Voyage Data Recorder and they failed to secure it. The investigators also did not secure aids to navigation along the vessel’s transit route so that their operability could be assessed. The investigators did perform breathalyzer tests of the Master of the vessel and the personnel working on the bridge at the time of the allision. The Master was also tested by his employer for drugs within 32 hours of the incident as required following a major casualty; however, the Coast Guard failed to ensure that all other vessel personnel involved in the incident were tested for drugs within the required 32-hour period and the Coast Guard failed to test VTS watchstanders for drug and alcohol use.

Additionally, the Coast Guard incorrectly classified the investigation of the COSCO BUSAN casualty as an informal investigation rather than a formal investigation. Both of these investigations require that the Coast Guard’s investigating personnel create a timeline of events, analyze the causes of the accident, and recommend safety improvements as warranted. However, the formal investigations also require that evidence support every fact of the incident; that is not possible in this case because some critical evidence was not collected.

The OIG found that the Pollution Investigators dispatched by the Coast Guard to the COSCO BUSAN gathered inaccurate information about the size of the spill – in part because language barriers prevented the Pollution Investigators from verifying figures in the ship’s oil logbook and on the ship’s oil gauges. Additionally, reduced visibility in the Bay prevented the Coast Guard from dispatching a helicopter to conduct an overflight to assess the amount of oil in the water following the allision. Importantly, however, the Coast Guard’s Response Department assumed that the spill likely involved more oil than the 142 gallon figure received by the Coast Guard’s Pollution Investigators. Despite these doubts, however, the Coast Guard itself decided to release the 142-gallon figure to the public – a decision that the service now acknowledges was a mistake.

An accurate assessment of the total volume of oil spilled was made by an expert from the California Office of Spill Prevention and Response (OSPR); however, the expert was delayed in reaching the COSCO BUSAN because the State of California did not have a boat that could take the individual to the ship. OIG reports that it took the expert approximately one hour after boarding the ship to complete a sounding of the ship’s bunker tanks and to determine that “at least” 58,000 gallons had been released from the COSCO BUSAN. The expert did not want to communicate this conclusion via personal cell phone because of privacy concerns; however, the expert had to again wait for transportation back to shore after assessing the size of the spill and this delayed notification

to Coast Guard that the initial information that had been released about the spill was inaccurate. Once the Coast Guard was informed of the accurate spill size estimate, it was further delayed in releasing that information to the public due to the “the time required for the press release approval process.”

Nonetheless, the OIG has found that the response to the spill was not impeded by the error of the original spill size estimate and the Coast Guard based its response on the worst case scenario (which was the possibility that all of the oil on the vessel – up to 2 million gallons – had been released).

The OIG developed three recommendations to improve the Coast Guard’s Casualty and Pollution Investigation operations.

- The Coast Guard should update marine casualty investigation policies and procedures to ensure that “all relevant evidence is collected” and to clarify the drug and alcohol testing protocols to be applied to Coast Guard personnel (particularly VTS watchstanders) following a marine casualty.
- The Coast Guard should clarify the duties to be performed by Pollution Investigators to quantify the volume of oil spilled following a marine incident and to clarify what measures Pollution Investigators should employ to independently verify the size of an oil spill. Additionally, the OIG recommended that the Coast Guard should either employ experts who can independently quantify the size of an oil spill or assess the costs and benefits of providing the training to Pollution Investigators necessary to enable them to quantify the size of a spill.
- The Coast Guard should ensure that individuals who are qualified as investigating officers are assigned to such billets at Sector San Francisco.

Oil Spill Response

The OIG reports that the San Francisco Area Contingency Plan is based on a worse case scenario involving a spill of up to 50 million gallons of oil and was adequate to guide the response to the size of the spill and type of oil released from the COSCO BUSAN. The OIG further reports that the response mounted to the COSCO BUSAN spill implemented the provisions of the Area Contingency Plan – and that the “Unified Command effectively managed the resources it had available to contain and remedy the spill.” Further, the OIG found that the San Francisco Area Contingency Plan includes a rapid response plan to guide the treatment of wildlife and marine resources that are affected by oil; OIG found that this plan was implemented.

Nonetheless, there appear to have been some shortcomings in the San Francisco area’s planning process. The OIG found that the Area Contingency Plan failed to identify suitable locations where a command post could be located; as a result, it was necessary to move the command post twice in the early days of the oil spill. Further, the OIG found that attendance by local jurisdictions and by local entities in the maritime industry at Area Committee Meetings had been sporadic in the two years preceding November 7, 2007. Similarly, the City of San Francisco Department of Emergency Management had failed to include oil spills on its All-Hazards Response List and had never interacted with the Coast Guard regarding oil spills.

The OIG reported that the Unified Command was established to direct the response to the spill within one hour and 15 minutes of the allision. The Responsible Party's contracted response organizations quickly began their response activities and far exceeded the time frame within which the response was legally required to begin skimming oil.

A Joint Information Command was established on November 7 – but no parties except the Coast Guard chose to participate on the first day of the incident. Participation increased on subsequent days but did not reach full strength until several days had passed, which “placed the responsibility of responding on behalf of the Unified Command solely and inappropriately on the Coast Guard.”

The OIG found that the Coast Guard failed to make required notifications to the National Response Center and the State of California's Office of Emergency Services immediately following the allision of COSCO BUSAN with the Bay Bridge. These notifications should have been completed by Sector San Francisco's watchstanders; instead, they were completed by the Responsible Party. The OIG found that the failure of the watchstanders to make these notifications did not impact the initiation of the spill response but could have slowed the notifications that are in turn required to be made by the State of California and the National Response Center.

The OIG found that other delays in the provision of notification to local jurisdictions throughout the Bay region occurred “due to problems in coordination among members of the Unified Command, including the Coast Guard and the State of California” – not because the Contingency Plan failed to specify how notifications were to be provided.

During the course of the response to the oil spill, a number of volunteers sought to aid in oil clean-up efforts. OIG reports that the Area Contingency Plan details the training that volunteers are required to complete to handle hazardous materials. Only on the fifth day of the incident did the Cities of San Francisco and Berkeley develop a process for training and credentialing volunteers to assist in cleaning up oil.

The OIG developed four recommendations to improve the preparedness of the San Francisco area to respond to a future oil spill. Specifically, the OIG recommended that the Coast Guard should:

- Review the operating procedures in place in Sector San Francisco to ensure that Quick Response Checklists are current and reflect the requirements of the San Francisco Area Contingency Plan;
- Ensure that personnel in Sector San Francisco are adequately trained on the implementation of the tasks required in the Quick Response Checklists;
- Identify locations that can house Incident Command Posts – including a concomitant Joint Information Center – and conduct oil spill response exercises in these locations; and,
- Incorporate procedures for training and credential volunteers in the Area Contingency Plan.

Medical Waivers for Pilots

After the 90-day review of the COSCO BUSAN incident was requested from OIG by Speaker Pelosi and Chairman Cummings, questions were raised regarding the medical fitness of the pilot on board the COSCO BUSAN on the day of its allision with the Bay Bridge. Media reports

have indicated that the pilot had a waiver for a medical condition. Further, following the allision, the pilot agreed to voluntarily deposit his pilot's license with the Coast Guard due to a medical condition. Under the provisions of the voluntary deposit process, if the medical condition is resolved, a deposited license can be returned.

In its report, the OIG details how the process of evaluating the medical fitness for duty of mariners is changing. Under current federal law (Title 46, Section 7101), pilots are required to have an annual medical exam; however, prior to 2007, the results of these annual exams were required to be submitted to the Coast Guard only upon request. In September 2006, the Coast Guard announced that it would require the formal submission of pilots' annual medical reports by December 2006 (and that deadline was later extended to April 2007).

Subsequently, the Coast Guard announced that all medical data would be forwarded to the National Maritime Center beginning in October 2007 for review by the Center's medical staff; full implementation of this review process is not expected to begin until September 2008. Prior to this change, medical information was examined in the REC through which a mariner applied for a document or license. Waivers for medical conditions were issued at the REC by Coast Guard officers who were not medical professionals.

The pilot of the COSCO BUSAN submitted his most recent medical examination report to the Coast Guard's Regional Exam Center (REC) in San Francisco prior to the initiation of the changes in the review process – where it was “verified but not reviewed” according to the OIG's report.

LOSS OF F/V ALASKA RANGER ON MARCH 23, 2008

Early on the morning of March 23, 2008, the 200-foot Fishing Vessel (F/V) ALASKA RANGER began taking on water in its rudder room, and within two hours, sank into the deep waters of the Bearing Sea 90 miles west of Dutch Harbor, Alaska. There were 47 crewmembers on board the vessel at the time; a total of 42 crew members were successfully rescued by the combined efforts of another fishing vessel owned by the same company that owned the ALASKA RANGER and by Coast Guard assets, including the High Endurance Cutter (WHEC) MUNRO and aircraft based in Alaska. Despite the rescue effort, the master, mate, engineer, and a crewmember died in the incident; the vessel's fishing master is missing and presumed dead.



Background

ALASKA RANGER was a freezer trawler that was one among 40-50 other similar vessels participating in the Alternative Compliance and Safety Agreement (ACSA) program developed by Coast Guard Districts 13 (Pacific Northwest) and 17 (Alaska) after several tragedies involving other ships in this fleet, including the rapid sinking of the F/V ARCTIC ROSE in 2001 (resulting in the loss of all 15 crewmember), and a fire on board the F/V GALAXY in 2002 (which resulted in the deaths of three crewmembers).

After these two tragic events, the Coast Guard determined that many fishing vessels in the Alaska ground fishery fleet were more appropriately classified as “fish processing vessels” because they were doing more than just “heading and gutting” (H&G) the fish that they caught. Importantly, unlike other types of fishing vessels, “fishing processing vessels” are required to have a “load line” (which is a line affixed to a vessel to enable measurements to be made of whether the vessel is overloaded) and to be built or maintained in accordance with “rules” (standards) developed by a recognized vessel classification society, such as the American Bureau of Shipping. However, because many of the vessels in this fleet are more than 20 years old, classification societies would not allow them to participate in their programs.

There were two apparent alternatives available for these vessels if the Coast Guard strictly enforced all applicable regulations. The vessels could go out of business, or they could undertake fishing activities that did not involve “processing” fish by reverting to activities that did not exceed heading and gutting fish. However, if the vessels limited their activities to just heading and gutting fish, the vessels would continue to operate without being required to make any improvements in their safety features.

Finding both of these alternatives unattractive, the Coast Guard and industry chose to create a third alternative: the Coast Guard created the ACSA that would not involve the formal classification of the boats in this fleet but would require substantial structural upgrades to these vessels. As part of the ACSA, the Coast Guard developed an inspection regime under which it examined the vessels to assess their stability; conducted a dry-dock and internal structural examination; examined the tail (propeller) shafts on the vessels;

determined the thickness of the hull plating by audio gauge; examined all watertight and weather-tight closures; inspected and tested machinery; determined the adequacy, condition, and storage of lifesaving equipment; examined all fixed fire fighting equipment and fire fighting plans; examined communications and navigation equipment; and determined the number of certified drill conductors required for these vessels based on the total number of crew members.

To participate in the ACSA program, the owner of a vessel in the “head and gut” fleet was required to submit an enrollment application by July 15, 2006. No later than May 1, 2007, a Coast Guard inspector from Sector Anchorage or Sector Seattle should have performed a preliminary examination of the vessel as described above to identify all discrepancies between the vessel’s current condition and required safety standards. Following the examination, the Coast Guard inspector provided a work list of requirements to the vessel owner with specific completion dates for each deficiency.

Not later than June 1, 2007, according to the ACSA program agreement, “a letter authorizing interim enrollment” for a vessel “making a good faith effort for correction of all deficiencies noted” could be issued to a vessel. All items were to have been completed on each vessel to allow that vessel’s final enrollment into the ACSA program no later than January 1, 2008. However, waivers for meeting the full compliance deadline could be considered by the Officer of Marine Inspection “on a case by case basis.”

Most of the vessels in the “head and gut” fleet signed-up for the ACSA, and many of them are now in full compliance with the agreement. According to documents provided by the Coast Guard, all totaled, owners of these vessels may have spent approximately \$40 million upgrading their vessels and thus substantially improving the quality of the fleet.

The ALASKA RANGER was enrolled in the ACSA but was NOT in full compliance with all of the provisions of the program agreement despite the fact that the deadline for completing all items identified by the Coast Guard as needing improvement or correction was January 1, 2008. Given that the deadline had passed at the time the vessel sank, the Committee has asked the Coast Guard whether a waiver was granted to the

ALASKA RANGER

On March 31, 2008, Congressman James L. Oberstar, Chairman of the Committee on Transportation and Infrastructure, and Congressman Elijah E. Cummings, Chairman of the Subcommittee on Coast Guard and Maritime Transportation, requested that the Commandant of the Coast Guard provide the Committee with all the records pertaining to the enrollment of the ALASKA RANGER in the ACSA.

What is known about the casualty?

The following timeline is compiled from Coast Guard and media reports.

At 0205 AKDT (Alaska Daylight Time) on March 23, 2008, the F/V ALASKA RANGER issued a MAYDAY reporting “uncontrolled flooding.”

The Coast Guard diverted the CGC MUNRO to the scene. The CGC MUNRO launched an H-65 helicopter. A C-130 aircraft was also launched from Air Station Kodiak and an H-60 helicopter was launched from St. Paul.

The F/V ALASKA WARRIOR (a fishing vessel owned by the same company that owned the ALASKA RANGER, the Fishing Company of Alaska) was nearby and responded to the MAYDAY.

By 0500, the crew of ALASKA RANGER was abandoning the vessel – some into life rafts and others directly into the frigid water. The officers on board the vessel were the last to leave the vessel.

The ALASKA WARRIOR rescued 22 crewmembers – mostly from life rafts. Coast Guard helicopters rescued 20 crewmembers – most of them directly from the water – and delivered them the CGC MUNRO. A Coast Guard rescue swimmer spent several hours in a raft to make additional space in a helicopter that was delivering survivors to the MUNRO.

The National Transportation Safety Board (NTSB) launched an investigation of this incident on March 24, 2008, and the Commandant of the Coast Guard has convened a three-person Marine Board of Investigation to “investigate thoroughly the matter.” Per the Commandant’s instructions, “upon completion of its investigation, the Board will report to the Commandant the evidence adduced, the facts established thereby, and its conclusions and recommendations with respect thereto...,” and “complete and submit your investigative report to the Commandant within six months.” The Coast Guard and the NTSB are conducting joint hearings but may issue separate reports on this casualty.

What is known from the investigation to date?

Testimony received at the public hearings by the NTSB and Marine Board has indicated:

- The ALASKA RANGER was enrolled in the ACSA program.
- The vessel had been examined in June 2007 while drydocked in Seattle and was later drydocked in Japan. Examinations were performed and a work list of items needing attention was developed by the Coast Guard.
- The ALASKA RANGER returned to the U.S where the vessel was examined by a Coast Guard commercial fishing vessel dockside examiner for compliance with lifesaving, fire-fighting, and emergency drill requirements. Additional work was preformed in Dutch Harbor, Alaska, and was examined by a Coast Guard inspector, who found that the repairs that were done were adequate – but that there were still outstanding deficiencies that needed to be completed.
- Surviving crewmembers reported witnessing flooding in the rudder room, but were unable to determine the source. Leaks were noted in bulkheads and flooding appeared to progress from the rudder room to other parts of the vessel.

Questions raised by the casualty:

A number of questions are raised by this casualty that have not yet been answered. For example, what deficiencies on ALASKA RANGER were outstanding at the time of the casualty? Was the vessel owner making a good faith effort to bring the vessel into compliance with the ACSA? Was the vessel issued a letter exempting it from the requirements for a “fish processing vessel” – including construction and maintenance in accordance with the “rules” of a recognized classification society and receipt of a “load line”? Are there issues with the Marine Information for Safety and Law Enforcement (MISLE) safety database system as it applies to the ACSA program? Was there full cooperation between District 17 and Sector Anchorage and District 13 and Sector Seattle in the implementation and administrative details of the ACSA program?

PREVIOUS COMMITTEE ACTION

The Subcommittee on Coast Guard and Maritime Transportation held a hearing on the San Francisco oil spill in San Francisco, California, on November 19, 2007. Following that hearing, Speaker of the House Nancy Pelosi and Subcommittee Chairman Elijah E. Cummings requested the DHS OIG to examine the circumstances surrounding the allision of the COSCO BUSAN with the Bay Bridge and the effectiveness of the initial response to the oil spill resulting from that allision.

WITNESSES

Rear Admiral Brian Salerno

Assistant Commandant for Marine Safety, Security and Stewardship
United States Coast Guard

Ms. Anne Richards

Assistant Inspector General, Office of Audits
Office of Inspector General
Department of Homeland Security