

**STATEMENT OF CHRISTINE DUFFY**  
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**U.S. SENATE**  
**SENATE COMMITTEE ON COMMERCE, SCIENCE & TRANSPORTATION**

*Oversight of the Cruise Industry*

March 1, 2012

Chairman Rockefeller, Ranking Member Hutchison and respected members of the Committee, thank you for inviting me to testify today. My name is Christine Duffy. I'm President and CEO of the Cruise Lines International Association – widely known as CLIA. I became CLIA's President last February. Before joining CLIA, I was President and CEO of Maritz Travel and I began my career as a travel agent.

The Concordia incident has had a significant impact on our industry. I speak for all our cruise line members in expressing our deepest condolences to everyone affected by this tragedy. As an industry, we are wholly committed to examining what happened, and to identifying lessons that can be learned.

My remarks today will not focus on speculation over the causes of the Costa Concordia tragedy. There are ongoing investigations by Italian maritime and law enforcement authorities and we hope to have their conclusions as soon as possible.

Rather, my testimony will provide a broader industry perspective on how cruise ships are regulated and the importance we place on our commitment to safety. We applaud the Committee's interest in reviewing cruise industry operations and we welcome the opportunity to discuss our industry's practices and procedures.

The Cruise Lines International Association represents 26 major cruise lines serving North America, more than 16,000 affiliated travel agents and agencies across the United States, and 120 Executive Partners spanning a broad array of industries – from ports to food suppliers – that help make the cruise industry run efficiently and effectively. Many of CLIA's travel agent members are small businesses. The majority of cruises continue to be booked through travel agents and they are an important cruise industry partner and national economic engine. Our travel agents play a pivotal role in assuring passengers of the safety and security of their cruise vacations. They are often the first to hear passenger concerns and first to relay them important information. Their tireless work plays an important role in helping their clients understand and appreciate that cruising continues to be one of the safest of all vacation options.

In 2010, the North American cruise industry generated \$37.85 billion in U.S. economic benefits including nearly 330,000 U.S. jobs. Last year, our member lines' 211 ships served 16.3 million passengers – up from 7.2 million in 2000.

CLIA's mission is to promote the policies and practices that foster a safe, secure and healthy cruise ship environment for our guests. To fulfill that mission our member lines participate in ongoing, specialized committees, working groups, task forces and other forums to develop and promote industry-wide policies, routinely meeting with regulators and enforcement officials to promote efficiency and best practices throughout the world. Through these varied groups, and aided by a professional technical staff, consultants, and maritime authorities, our members share information, review and assist in developing applicable national and international legal requirements, and identify best industry practices for all members to adopt.

Safety is the cruise industry's number one priority. Providing a safe environment begins with the industry's hiring process and policies for crewmember and guest behavior. It continues with training our crewmembers on our safety policies and enforcing them.

Of course, we are not alone in this effort. Every aspect of the cruise experience is heavily regulated and monitored under U.S. and international maritime law for the purpose of protecting the safety of cruise passengers and crews.

These regulations begin with the design and construction of the ship and extend to the operation and navigation of the vessel, the training of the crew, the emergency equipment on board, and the evacuation protocols. A United Nations agency – the International Maritime Organization (IMO), mandates global standards for the safety and operation of cruise ships. The United States Coast Guard under the supervision of the Department of State is the primary agency that represents the United States at the IMO.

The most important of these standards are covered by the International Convention for the Safety of Life at Sea or SOLAS. This treaty has been ratified by the United States, all European Union Member States and most other nations, providing a uniform worldwide set of mandates regarding safety equipment, crew training, evacuation and emergency procedures, and navigation safety standards.

One of the most vital components of SOLAS is the International Safety Management Code or ISM. This Code is the primary mechanism for assigning safety responsibilities, functions, and procedures – both among the crew onboard an individual vessel, and the cruise line as a whole. The purpose of the ISM Code – and the continuous training exercises that instill it – is to ensure that every member of the crew, from the Captain to the most entry-level hospitality staff member, understands his or her precise responsibilities, especially in an emergency.

The stringent standards embodied by the IMO, SOLAS and the ISM Code have multiple layers of enforcement. The primary responsibility rests with the flag state of the vessel. Secondly, all ports where the vessel calls can and do take additional measures to ensure compliance.

In the United States, for example, the U.S. Coast Guard enforces all maritime regulatory requirements through both announced and unannounced inspections and a rigorous annual examination of every ship that embarks passengers in the U.S. At any time, the local Coast Guard Captain of a Port can prevent *any* cruise ship from departing if a serious violation of *any* regulation is found. CLIA's senior staff includes four retired U.S. Coast Guard officers, so we are intimately familiar with the dedication and commitment of this branch of service.

Additionally, all crewmembers receive training in emergency procedures, safety, security, and first aid. This includes but is not limited to: emergency signals and alarms; abandon ship procedures; man overboard; fire prevention and safety; and the location and donning of lifejackets. This safety training is required every five years, however, all crew are to receive familiarization training each time they report on board and each crew member must participate in the ship's weekly emergency drills at least once a month. This training ensures the crewmember is familiar with the emergency operations and the location of emergency equipment on that particular ship.

Certain members of the crew also will be trained in the operation of the lifeboats and other survival equipment. Masters, officers and other personnel designated to assist passengers in an emergency are also required to have completed specific training in "crowd management" and "crisis management and human behavior."

Crewmembers are also required to undergo emergency drills provided for in SOLAS, Chapter III, Regulation 19 regarding abandon ship protocols and firefighting. Instruction and training in the use of the ship's fire-extinguishing appliances, life-saving appliances, and in survival at sea must be given at the same interval as the drills. This training includes a mock search and rescue of passengers trapped in their staterooms. SOLAS also addresses record keeping for these drills and training sessions. Other crew training is specified in Chapter III, Regulation 19.4 as well. Chapter III, Regulation 37 also contains detailed requirements for the muster list and emergency instructions. All crew must be trained in the performance of their listed emergency duties.

All modern cruise ships are required by SOLAS to have an array of electronic navigational instruments that assist in properly navigating the vessel. Most cruise ships substantially exceed the regulatory requirements in this regard.

Additionally, the average CLIA ship, of approximately 97,000 gross tons carrying approximately 2,700 passengers and 800 crew, typically has five firefighting teams whose main members have advanced shipboard firefighting training, 4,000 smoke detectors, 500 fire extinguishers, 16 miles of sprinkler piping, 5,000 sprinkler heads and 6 miles of fire hose.

Because of the cruise industry's commitment to safety, supported by strict regulations and vigorous enforcement mechanisms, cruising is one of the safest forms of recreation and travel in the world.

In the decade from 2002 through 2011, prior to the grounding of the Costa Concordia, there were a total of 28 fatalities on cruise ships related to an operational casualty. Twenty-two of those fatalities involved crew members; six were passengers out of approximately 223 million passengers and crew who sailed during those 10 years.

Let me be clear: Not a single fatality is acceptable to our industry and our industry will continue to work to prevent such incidents. One of the reasons fatal casualties are so rare is that we treat every one of these tragedies as a profound reminder of our duty to put ourselves under a microscope so we can continuously improve our practices, procedures and performance.

Almost immediately following the Concordia incident, CLIA member cruise lines launched a Cruise Industry Operational Safety Review – a comprehensive assessment of the critical human factors and operational aspects of maritime safety. We announced this publicly on January 27, 2012 on behalf of the global cruise industry. This Review, which is well underway, is comprised of four key components:

- First, an internal review by CLIA members of their own operational safety practices and procedures covering issues of navigation, evacuation, emergency training, and related practices and procedures.
- Second, consultation on these issues with independent external experts.
- Third, the identification and sharing of industry best practices and policies, as well as possible recommendations to the IMO for substantive regulatory changes to further improve the industry's operational safety.
- Fourth, a commitment to collaborate with the IMO, governments, and regulatory bodies to implement any necessary changes – but also to act independently and voluntarily where possible to speed safety improvements.

I'm pleased to report that the industry is already moving forward with recommendations from this Review.

On February 9, 2012 CLIA members instituted a new passenger muster policy requiring mandatory muster drills for embarking passengers prior to departure from port. This new policy exceeds existing legal requirements, which call for muster drills within 24 hours of passenger embarkation. It is being undertaken voluntarily and became effective immediately. Rather than waiting until the entire Review is completed, we will take steps to implement recommendations on industry best practices as soon as they are identified and on an ongoing basis.

The Cruise Industry Operational Safety Review continues a long tradition in our industry of taking action proactively and voluntarily to improve our safety procedures. Another recent example was CLIA's development and adoption in 2008 of a series of best practices related to guest care – specifically the need to provide passengers practical assistance and emotional support during times of significant stress or trauma.

CLIA's guidelines on guest care practices cover a broad range of services. While each situation is different, these services typically include assigning a specific care team to work with guests or their families in times of need, both on-ship and onshore; meeting transportation and logistical needs; providing immediate, complimentary communications to shore; serving as a liaison with local governments or the U.S. embassy when appropriate; and contacting a guest or family once they have returned home to determine if they need additional support.

The cruise industry also has a strong record of working with Congress to enact new laws dedicated to advancing passenger safety. In 2010, CLIA worked with many members of this Committee to assist in development and enactment of the Cruise Vessel Security and Safety Act, which was signed into law by President Obama on July 27, 2010.

This legislation brought consistency and clarity to the security and safety laws and regulations for the cruise industry in the United States. CLIA member cruise lines are already in compliance with the effective provisions of the CVSSA, including crime reporting provisions; the use of latch and computerized key technology; and the requirements that log books include all reports of crime and thefts over \$1,000. To bring further transparency to the industry, the U.S. Coast Guard and the Federal Bureau of Investigation (FBI) now maintain a website with the required reporting of closed case totals by cruise line in each category.

Our members are also in compliance with new mandates that became effective on January 27, 2012 requiring 42-inch rail heights in all passenger areas and peep holes in all passenger and crew cabins. We will continue to work with the U.S. Coast Guard, the FBI and other law enforcement agencies both in the U.S. and around the world to ensure that all of the bill's provisions are fully implemented.

Quite simply Americans are extremely safe at sea today. In many ways – again, well documented by statistics and other evidence – they are even safer in the well-protected environment of a cruise ship than they are on land.

Independent surveys show that the vast majority of cruise passengers – 95 percent – say they are very satisfied with their cruising experience. Nearly half say they are *extremely* satisfied. And more than half of all passengers become repeat customers – cruising for a second or third or fourth time.

I submit that this would not be the case if safety or security were perceived as a serious problem. As the Coast Guard has testified, crime aboard cruise ships is extremely rare.

Our position is that even one incident or crime of any kind is one too many.

At the same time, we have to recognize the existence and the dangers of exaggeration. Assertions are sometimes made and unofficial statistics are sometimes quoted that bear no relation to any known reality.

In contrast, detailed studies by the renowned criminologist Dr. James Alan Fox of Northeastern University confirm the safety of passengers aboard today's cruise ships.

In Dr. Fox's words – and I quote – “While virtually no place – on land or sea – is totally free of risk, the number of reported incidents of serious crime from cruise lines is extremely low, no matter what benchmark or standard is used.”

Now I would like to provide information on the cruise industry's efforts to prevent the introduction and/or spread of Gastrointestinal illness (such as Norovirus) aboard cruise ships. Historic incidence rates of Gastrointestinal Illness aboard cruise ships are low and according to the U.S. Centers for Disease Control and Prevention (CDC) the vast majority of outbreaks occur in land based settings such as schools, hospitals, and nursing homes. Nevertheless, CLIA member lines regularly communicate with one another, local and state health departments, the



U.S. CDC and other international public health authorities to gather epidemiological information, identify sources of infection and share best practices.

CLIA member cruise lines employ a variety of sanitation practices and each line has specific, well-established Outbreak Prevention and Response Plans, all designed to keep passengers healthy during their cruise vacations. Our members take steps designed specifically to prevent sick passengers from bringing norovirus on board a ship and in the rare instances of outbreak, CLIA lines immediately employ numerous practices to mitigate its spread and treat ill passengers and crew.

Our lines also communicate with passengers and crew, especially to increase awareness of proper hand hygiene practices. Public health is an evolving area and new research and information is ongoing, so cruise lines are always assessing and updating procedures as appropriate. In fact, outbreak prevention methods are typically developed in close collaboration with CDC officials.

Unlike land-based outbreaks, which are generally not reported, the robust reporting structure for shipboard cases of norovirus allows cruise lines to share information with local and federal health officials. This practice enables these agencies to better identify the original source of infection and allows cruise lines to more effectively implement mitigation strategies. If at least three percent of a ship's passengers or crew members report a Gastrointestinal Illness (GI), including norovirus, CDC officials have the option to conduct an investigation. . In addition, thorough and regular inspections by the CDC Vessel Sanitation Program (VSP) ensure that cruise ships operating from U.S. ports have exceptional food handling and sanitary practices. A former VSP Sanitation Chief has said that the CDC program standard to which cruise ships are held for sanitation is one of the very the highest in the world for public places.

Another area that I know is of interest to this committee, is our industry's commitment to environmental stewardship. In the 37 years since CLIA was established, our industry has made

significant progress in reducing our environmental impact by implementing responsible practices and investing in new technologies. CLIA believes that it is our responsibility to protect the environment in which we operate. Our industry has been at the forefront of wastewater treatment, emissions reduction and developing innovative technologies to reduce the environmental impact of cruising.

The management of wastewater is a complex and vitally important element of cruise ship operations.

Blackwater - water from toilets and medical facility drain, and graywater - water from cabin sinks and showers, laundry, galleys and spas, discharge are often regulated or treated to a higher standard than most land based systems. Also, our industry adopted its own set of stringent wastewater practices that go substantially beyond the rules and regulations. For example, while international regulations permit the discharge of untreated blackwater 12 nautical miles from shore, as a policy CLIA members treat all blackwater using equipment certified to meet the standards set by the U.S. Coast Guard or using an advanced wastewater treatment system.

Cruise ships have adopted rigorous programs to tackle waste disposal in an environmentally friendly manner, including doing all we can to minimize the potential waste coming on board ships. We also take extensive measures to recycle as much waste as possible by using segregated on-board collection bins. CLIA lines recycle approximately 80,000 tons of solid waste annually, comprised largely of paper, plastic, aluminum cans and glass. Other waste, such as hazardous waste and oily bilge water receive special treatment as well.

As more fuel efficient ships have come into service, CLIA members have been systematically reducing air emissions, including sulfur oxides, nitrogen oxides, carbon dioxide and particulate matter. In the near future, international regulations will further reduce sulfur limits, helping to reduce air emissions across all oceans. To meet these standards, the industry has been investing

in new technologies that manage the use of energy more effectively, such as testing the first ever cruise ship engine exhaust gas scrubbers and developing engines that run more efficiently.

Cruise lines are also working alongside ports to reduce waste and emissions. This is best demonstrated by the use of shore power, a relatively new technology in the cruise ship arena, which involves a ship connecting to shore-side power and shutting down its own engines while in port. A handful of ports on the North American west coast are now equipped with the necessary, and technically rather complex, facilities for ships to 'plug-in' when they are in port. CLIA members are involved at the international regulatory level to explore a universal approach toward shore power that would overcome current obstacles, which involve the source of shore power, the connection adapter itself, as well as electrical disparities from one country to the next.

Other innovations help ships conserve energy. Environmentally friendly hull coatings make ships' hulls smoother, and a ship's design itself can be modified into a bulbous bow, for example, that generates a bow wave slightly earlier. Both result in energy savings by reducing resistance. Other innovations include heat recovery that allows heat to be collected from one system aboard a ship and used for another, and innovative air conditioning systems that run more effectively and utilize technology that minimizes the amount of energy used to cool a room when it is not occupied. Ships are now using energy-efficient light bulbs that generate less heat. Because ships spend so much time under the bright sun, solar panels are a promising source of supplementary energy and are used on many cruise ships.

Our industry has a vested interest in protecting the environment, not only because it is the socially responsible thing to do – but because the very nature of our product depends on a healthy natural environment -- clean oceans and beaches are essential to the cruise experience. CLIA has made great strides to become a leader in the maritime industry with responsible practices and innovations that are reducing environmental impact.

Thank you again for the opportunity to provide this testimony to the Committee. I hope the information is helpful in addressing the substantial oversight and accountability of cruise lines, both in the U.S. and internationally. CLIA will continue to lead the Cruise Industry Operational Safety Review and, as with the recently agreed Muster Policy, will look to apply what is learned through that process so that future incidents, however rare, can be avoided. We remain fully and deeply committed to continuous enhancement of the safety of our guests and crewmembers, as it is without question our top priority. In addition, we will continue to be a leader in environmental stewardship in the maritime community. I look forward to answering your questions. Thank you.