

2010 STEWARDSHIP REPORT





SIMPLY PUT, WE MUST PROTECT
THE MARINE ENVIRONMENT AND
SUSTAIN THE WELL-BEING OF THE
PEOPLE AND PLACES WE SERVE.

– *Richard D. Fain*
Chairman and CEO
Royal Caribbean Cruises Ltd.



For Royal Caribbean, 2010 was a landmark year. We not only celebrated our 40th anniversary as a company, but we also welcomed the 40th ship to our fleet: *Allure of the Seas* — the largest and most amazing cruise ship in the world. Looking back, it is clear that our success has been a result of our loyal guests, dedicated staff and crew, trusted travel partners and our spectacular ships. Yet we wouldn't be where we are today were it not for the majestic oceans and unique destinations that provide our guests with amazing vacation destinations. We could not succeed as an industry without each of these vital components.

We adhere to the belief that safeguarding our guests and crew and conserving the marine environment are integral parts of our economic success. In this our third annual stewardship report, you will see our dedication to this principle. Building on the successes of the last two years, we have included updated information on our environmental initiatives as well as more comprehensive content on our safety, security and medical/public health programs. Throughout these pages, you will once again see our company-wide emphasis on going *Above and Beyond Compliance* and our solid commitment to *continuous improvement* in everything we do.

I would also like to take this opportunity to thank the men and women of Royal Caribbean — both at sea and onshore — who work so hard to further our stewardship goals and responsibilities.

We have made tremendous strides as a company in our first 40 years. Looking forward, we plan to maintain our focus on Safety, Security, Environment and Medical/Public Health efforts. I invite you to read about our 2010 accomplishments and areas of focus in this report. As you can see, we are constantly striving to do better, and we look forward to continuous learning and enhancement on this journey. I also invite you to join us on one of our beautiful ships, as we deliver some of the most amazing vacations the world has to offer.

A handwritten signature in black ink that reads "Richard D. Fain". The signature is written in a cursive, flowing style.

Richard D. Fain
Chairman and Chief Executive Officer
Royal Caribbean Cruises Ltd.

EXECUTIVE SUMMARY

This 2010 Stewardship Report, our third annual report, offers a look at the policies, practices and procedures of our safety, security, environment and medical/public health efforts. During 2010, our fleet of 40 spectacular ships carried more than 4.5 million people to over 400 destinations around the world. During each voyage, we remained dedicated to safeguarding our guests and crew and conserving the marine environment and destinations where we sail.

We strive to be *Above and Beyond Compliance* with all laws and regulations, and to focus on *continuous improvement* in our operations and practices. Throughout these pages, you will see examples of initiatives that reflect this approach and have helped us become a leader in the areas of environment, safety and security, and medical/public health.

Except where our other brands are specifically cited, this 2010 Stewardship Report's use of "Royal Caribbean," "Royal Caribbean Cruises Ltd." and the corresponding abbreviation "RCL," and the terms "our fleet" and "fleetwide," pertain only to the activities and performance of Royal Caribbean International, Celebrity Cruises and Azamara Club Cruises.





ENVIRONMENTAL STEWARDSHIP

RCL's commitment to the environment is embodied in our Save The Waves® program, a companywide philosophy that guides our ongoing efforts to minimize our environmental footprint, increase our support for conservation and set new environmental standards. From our onboard crew members to our senior executives, we are dedicated to continually improving our environmental performance, going *Above and Beyond Compliance* and inspiring our guests to share this commitment. Our basic philosophy is to reduce what we consume, recycle as much as possible and responsibly dispose of the rest.

Led by our Environmental Stewardship Department, we put these ideas into practice through our corporate Environmental Policy; the presence of Environmental Officers onboard our ships; our Safety, Quality and Environmental Management System; internal and external auditing; a focus on rigorous compliance with internationally recognized quality and environmental management systems; and our Corporate Sustainability Council.

ENERGY AND AIR EMISSIONS

In our daily operations, we face two primary energy challenges: how to efficiently utilize clean, secure and affordable energy, and how to minimize our impact on the environment related to our air emissions and greenhouse gas (GHG) footprint. As part of our

program to reduce energy use and associated emissions, we continue to introduce energy-efficient technology on our existing ships, design increased efficiencies into each new class of ship, and research and test new energy sources and technologies. In 2010, these efforts translated into a 4.7-percent reduction in fuel consumption per average passenger cruise day (APCD) over 2009 levels. We also used about 25,000 less metric tons of fuel than originally planned for 2010. Since 2005, we have reduced fuel consumption per APCD by about 13.6 percent. In 2010, we also reduced our GHG emissions by 5.5 percent per APCD over 2009 levels. We are committed to reducing our GHG emissions by one-third per APCD by 2015, from a 2005 baseline.

WATER AND WASTEWATER

Already, we consume about 20 to 50 gallons less of fresh water per person per day on our ships, compared to the average person living in the United States. In keeping with our company mandate of *continuous improvement*, we are always seeking new ways to further reduce the consumption of fresh water on our ships, through the development of innovative water-saving technology and procedures.

Our wastewater management systems address the treatment of three types of wastewater: bilge water, graywater and blackwater. Bilge water is cleansed using oily water separators to less than five parts per million of oil, three times cleaner than the levels allowed by international regulations. Our automated oily bilge water discharge protection system, which is installed on each ship in our fleet, provided reliable confirmation that we had zero non-compliant discharges of oily bilge water in 2010.

Graywater (which is drainage from showers and baths, washbasins, laundry, dishwashers, and kitchens)

and blackwater (which is water from toilets, urinals and medical facilities) are collected separately and treated with approved marine sanitation systems. Our plan is to equip every ship in our fleet with an Advanced Wastewater Purification (AWP) System that produces an effluent that is purer than what is required by international regulations and cleaner than what is discharged from most municipalities. As of 2010, 22 of our ships are equipped with an AWP system, and we plan to install five additional AWP systems on five ships in 2011. Regardless of whether a ship is equipped with an AWP system, at all times we remain compliant with international, national and local laws and regulations for graywater and blackwater discharge.

WASTE AND CHEMICAL MANAGEMENT

We do not discharge solid waste or chemicals into the ocean. Our crew members work hard to reduce, reuse and recycle any materials they can, and our corporate policies, procedures, equipment and training support these important practices. In 2010, we recycled and reused more than 20.7 million pounds of materials, an increase of 5.7 million pounds, or 44 percent, over 2009 levels. We were also able to reduce the amount of waste landed ashore from our ships to 1.15 pounds per APCD, a reduction of 19 percent from 2009 levels and 47 percent from 2007 levels. Through these achievements, we met our 2015 goal of increasing the amount of waste recycled by 50 percent from 2007 levels five years early, and we are firmly on track to meet our 2015 goal of decreasing waste landfilled by 50 percent from 2007 levels by next year.

Though we produce only very small quantities of hazardous waste, the potential for negative environmental impact makes management a key environmental priority. Each type of hazardous waste has a specific

handling and control process and is either recycled or landed to a qualified shoreside disposal facility. In 2010, we achieved a 17-percent reduction in the generation of hazardous waste per APCD from 2009 levels; this represents a 65-percent reduction from 2007 levels.

In 2010, we also formalized our master RCL Chemical Purchasing List (CPL), which details the only chemicals that our ships are allowed to use. Through the use of a Green Rating System, we evaluated the more than 2,000 different chemicals that were being used on RCL ships and narrowed this list down to about 700 chemicals now on the approved CPL. This reduction has not only reduced potential chemical hazards, it has improved tracking, use and storage of the chemicals our crew members work with.

CONSERVATION, DESTINATIONS AND EDUCATION

Doing our part to help protect the places where we operate is a key part of our overall environmental stewardship commitment. We make investments in marine conservation, education and innovative technologies through our Ocean Fund, which has awarded more than \$11 million to marine conservation and environmental organizations since 1996. We also supported the conservation and protection of the Galápagos Islands' species and habitats with the awarding of \$103,025 to five organizations through the *Celebrity Expedition Galápagos* Fund. And we continued to recognize and reward environmental performance and innovation by the ships in our fleet through our Environmental Ship of the Year and Innovative Ship of the Year programs.

In our many destinations around the world, we face the challenge of providing exceptional guest experiences and contributing to local economies, while at the same time managing our impacts on what are some of the most biologically rich, unique and sensitive places on Earth. In 2010, we hosted the founding meeting of the Sustainable Travel Leadership Network (STLN) onboard our newest ship, *Allure of the Seas*. STLN is an executive-level forum for industry leaders committed to achieving the highest levels of sustainability. At the inaugural meeting, STLN members collectively decided to address issues related to climate change and destination stewardship. We also continued our work on developing and implementing criteria and indicators for sustainable shore excursions, working with Sustainable Travel International (STI) to develop a shore excursion standard as part of STI's Sustainable Tourism Eco-Certification Program (STEP).

We provide training and education to our officers, staff and crew on a continual basis, so they fully understand the importance of complying with onboard environmental policies and procedures. Each ship has an Environmental Officer (EO) responsible for training all crew members on the company's policies, expectations, and the ways in which Save The Waves® affects each employee. Every year, these EOs participate in training workshops hosted by the Environmental Stewardship Department at our headquarters in Miami. The EOs also provide educational programs and tours for guests, local schools, government officials and nonprofit organizations in ports of call. In 2010, we introduced a new program, "Oceans Ahead," on our Celebrity Cruises ships, to educate

guests about the innovative approaches the brand has taken across the fleet to minimize our carbon footprint, and our ongoing commitment to go *Above and Beyond Compliance*.

COMMUNITY INVOLVEMENT

With operations throughout the world, we seek to be a good neighbor and community partner in areas where our ships sail. Our goal is to enhance the well-being of these communities by encouraging volunteerism, fulfilling the wishes of children, offering scholarships and helping protect the world's oceans.

One of our largest volunteer efforts is our annual G.I.V.E. Day, part of the RCL Get Involved, Volunteer Everywhere (G.I.V.E.) program. In 2010, about 1,000 employees participated in G.I.V.E. Day projects around the world. Royal Caribbean International ships also have a long-standing partnership with the United Way, to which we have contributed more than \$32 million in in-kind services over the last decade.

In 2010, we also had the opportunity to respond in a significant way to a community in great need – the people of Haiti in the aftermath of the devastating January earthquake that struck that country. The disaster had a personal component for RCL, as we have had a presence in Haiti for nearly 25 years, through Labadee, our private destination on the northern coast of the country. With the encouragement of the Haitian Government and the United Nations Special Envoy to the region, we organized and oversaw an extensive relief effort in the country, providing more than 120 tractor trailers full of supplies and more than \$4 million in aid to the region.



SAFETY AND SECURITY

We consider the safety and security of our guests, crew and shoreside employees to be our highest priority. Our approach to safety and security includes implementing measures that help prevent incidents from occurring, as well as being prepared to effectively respond if an incident does occur. We work closely with regulatory authorities to improve safety laws, and participate in discussions and studies to inform legislators of current practices and offer our perspective on regulations and standards to assure safety. Our system of internal and external audit and review by maritime experts also helps us continue to safely operate our vessels and maintain effective systems.

In 2010, with strong support from RCL and others in the cruise industry, the U.S. Cruise Vessel Security and Safety Act (CVSSA) of 2010 was signed into law. The CVSSA addresses areas of cruise ship design and operation, including railing heights, access control, detection technology, hailing systems, closed circuit television, security guides, resource directories, medical preparedness, patient communication, crime allegation reporting and crew training. RCL is in compliance with the law's requirements. Our own company requirements have generally exceeded those specified in the law, but we think this codification will provide for greater consistency and understanding.

PREVENTION

Preventing incidents from happening in the first place will always be our primary goal.

Some of the methods we use to prevent incidents include establishing strong navigational policies and procedures to prevent navigational incidents, carefully inspecting the safety features of new ships before they are put into service, designing our ships so that they are accessible and safe for guests with disabilities, and screening all guests and crew members, as well as all stores and provisions, before they come onto our ships.

Safety and security is a shared responsibility, and we look to our guests and crew to support our efforts in these areas. To help our guests understand our procedures, and enlist them as allies in helping our ships remain safe and secure, we provide all guests with the RCL Guest Conduct Policy (GCP). The GCP is a written code of behavior that is expected of all guests sailing on an RCL cruise vacation. We also utilize a Prohibited Items List and provide information on safety and security in services directories available in each stateroom. Our Crew Safety Program helps promote a safe working and living environment for our crew members, through safety orientations, training and periodic safety education initiatives.

Our attention to the safety and security of our guests and crew does not stop at the gangway. We consider security when deciding which ports-of-call our ships will visit and evaluate new ports before adding them to our itineraries. Even after a final itinerary is offered to our guests, we monitor the security situation in our destinations, to identify developments that may affect our guests, crew or ships

RESPONSE PREPAREDNESS

Although prevention is our primary goal, regrettably incidents do occasionally occur on our ships, just as they do

on land. For this reason, we have an extensive training program for our crew members to prepare them to effectively respond to an incident. Bridge and engine officers must complete 20 days of shoreside training upon hiring. Each RCL ship is staffed with a security team that is led by an onboard Security Officer. Our security professionals are recruited from around the world, with special priority given to candidates with backgrounds in the military, law enforcement or private security sectors. We provide these recruits with specialized training in international security codes, RCL's internal security processes and the U.S. Government security requirements and standards.

While the ship's officers and security team receive specialized training, every crew member must participate in safety and security training modules, so that they are prepared to respond quickly and effectively in the event of an emergency. We also conduct weekly, monthly and annual drills on all our ships, to train and prepare for response to a variety of potential situations. In addition, each of our vessels is equipped with advanced fire detection and suppression systems, and each ship has highly trained personnel onboard who can effectively respond to and manage a report of a fire.

INCIDENT RESPONSE

Despite our prevention and preparedness efforts, occasionally a guest or crew member will report being the victim of a crime, either onboard the ship or ashore during a port-of-call. RCL takes every allegation of crime seriously, and we are committed to reporting all allegations to the appropriate law enforcement agency (including the FBI) and to cooperating fully with authorities in each case.

Our response to alleged security incidents follows detailed company policies and procedures for caring for those involved, preserving potential evidence, reporting to government

officials, supporting their response and taking steps to understand the incident to help prevent similar incidents in the future. Our Global Security Department includes a team of senior investigators who guide shipboard personnel in their response.



MEDICAL/PUBLIC HEALTH

All RCL ships have shipboard medical facilities that are built, staffed, stocked and equipped to meet or exceed guidelines established by the American College of Emergency Physicians (ACEP) Cruise Ship & Maritime Medicine Section. Our staffing is in compliance with the new U.S. Cruise Vessel Security and Safety Act, as are our credentialing requirements, which are based on the stringent ACEP guidelines.

MEDICAL OPERATIONS

In responding to medical emergencies, our goal is to first stabilize emergency patients and, where indicated, evacuate the patient to an appropriately equipped and staffed shoreside medical facility. Our medical facilities are stocked with a variety of equipment and medications to prepare them to meet the needs of our guests and crew. RCL was one of the first cruise lines in the world to equip its ships with Automated External Defibrillators (more commonly known as AEDs), which are small portable

machines that can restart the heart of a person who has collapsed from a sudden cardiac arrhythmia, often due to a heart attack.

We are continually evaluating and implementing new technologies and practices to improve the quality of medical care for our guests and crew. One of our biggest accomplishments of 2010 was the development of our capacity to perform blood transfusions onboard our ships at sea. In 2010, ten patients required and successfully received life-saving blood transfusions on our ships. During this year, we finalized the implementation of our TeleDermatology Program, which allows us to transmit high-resolution digital photographs of a patient's skin disorder to a dedicated dermatology professional at the University of Miami, Miller School of Medicine. We also completed installation of digital x-ray equipment on all our ships. Another advancement in 2010 was the development and deployment of lightweight, portable First Responder bags that are stocked with items the medical team may need in the event of an emergency.

We employ more than 50,000 crew members from more than 100 different countries. Our Crew Wellness program helps these crew members stay as healthy as possible, through education and awareness programs, wellness screening, chronic illness management and recovery care. Our crew wellness initiatives include a voluntary, but very active vaccination program; in 2010, we were able to vaccinate 76 percent of our crew members against seasonal influenza. In 2010, we also introduced a new sports training program for our entertainers and athletes onboard *Oasis of the Seas* and *Allure of the Seas*.

We want our crew members to be in good health and able to perform the

essential functions of their positions, as well as emergency duties. We therefore require a Pre-Employment Medical Examination (PEME) before hiring, and a Re-Employment Medical Examination (REME) every two years thereafter. In 2010, we began the process of identifying approved providers for these medical exams in our top hiring countries, with a long-term goal to have an approved provider in most countries where we hire crew members. By the end of 2010, approximately 85 percent of our new hires were being evaluated through approved PEME medical providers. For those who do not have access to one of these providers, our Miami-based specialists evaluate their exam reports.

While crew members have access to our onboard medical facilities in the event of illness or injury, sometimes they need more extensive or specialized facilities. In such cases, our Crew Medical department oversees the care and treatment of the affected crew member, either in a nearby port-of-call or in their home country. In 2010, we increased the number of "Centers of Medical Excellence," which manage acute and complex medical cases. To date, we have identified Centers of Medical Excellence in the Dominican Republic, Panama and Croatia, and our goal is to identify additional centers in Asia, the Pacific Northwest, South America and Northern Europe in the coming years.

PUBLIC HEALTH

Our public health policies and programs also seek to exceed the public health standards, procedures and inspection criteria of the U.S. Centers for Disease Control (CDC) Vessel Sanitation Program (VSP). Our ships are subject to unannounced inspections by CDC/VSP inspectors throughout the year. In 2010, our average USPH inspection score (based on 50 different inspections) was

97.2%, an all-time high for the company. Eight of our ships received perfect scores of 100% on their inspections.

We are also subject to an ever-widening variety of public health regulations from other countries. For example, in 2010, the Brazilian National Health Surveillance Agency released a draft of its own regulations. A similar initiative is underway in Europe, where the European Union Ship Sanitation Strategy and Program (SHIPSAN) has been established to standardize public health regulations for ships sailing through the jurisdictions of the 27 member states of the European Union. In the summer of 2011, RCL will have 20 ships visiting European ports, and, as such, we are working closely with SHIPSAN authorities on the development and implementation of the standard.

Our Public Health staff coordinates communication and information dissemination among our 40 ships around the world, to share experiences and best practices on public health issues. One of the best ways that we share information among ships is through our team of traveling public health inspectors, who spend about 95 percent of their working time traveling from ship to ship conducting regular inspections.

One of our highest public health priorities is ensuring the purity and cleanliness of our shipboard water systems, which include potable (drinking) water and recreational water (swimming pools, whirlpools and spa pools). All water used onboard is chlorinated to eliminate any harmful bacteria that may be present and tested for coliforms before being released for use onboard. Our rigorous testing procedures are designed so that water systems on each ship are tested frequently for coliform

and Legionella. In 2010, we installed electronic chlorine and acidity (pH) level recording devices on water facilities on every ship in our fleet, to keep chlorination levels standard and to alert us if adjustment is needed in a particular area.

To help prevent and respond to an outbreak of illness onboard our ships, we have a company Outbreak Prevention Plan. An emphasis of this plan is on gastro-intestinal illnesses, which are the most common cause of land-based and shipboard outbreaks. This plan was developed in consultation with internal and external experts, to first prevent outbreaks and then to halt the spread of the outbreak if one should occur. This strategy includes screening guests and crew before they board a ship, surveillance of any illnesses that may arise on a cruise, constant sanitation of public areas, effective communication with guests and crew in the event of an outbreak of illness, isolation and treatment of any ill guests or crew members, electronic reporting systems that enable us to effectively track data on illnesses and report them to the relevant authorities, and appropriate disembarkation of any guest or crewmember who requires hospitalization or medical treatment that cannot be provided onboard the ship.

The safety of food on our ships continues to be a priority, and we have adopted the Hazard Analysis Critical Control Point (HACCP), a systematic seven-step preventative approach that includes hazard analysis, identification of critical control points, identification of critical limits for each critical control point, identification of critical control point monitoring requirements, corrective actions, record keeping and verification.

Our Housekeeping Department works diligently to clean and sanitize staterooms, recreational areas, dining areas, public restrooms and other parts of the ship to help protect the health of guests and crew onboard.

We also have an Integrated Pest Management (IPM) program that emphasizes prevention, focusing on food preparation and serving areas, provisioning areas, garbage storage, incinerators, bars, food venues and dining rooms and includes nightly inspections.

CARETEAM

Our CareTeam is a dedicated group of trained specialists who provide professional, logistical and emotional support in the event one of our guests or crew members experiences a personal emergency while sailing with us. This team is available 24 hours a day, seven days a week, to provide support during a family tragedy at home, an illness or emergency onboard, or an incident while ashore.

In 2010, we extended the capabilities of our CareTeam by creating a shipboard CareTeam Associate function on each of our ships. This new program involves selection and training of suitable crew members on each ship who are available to assist in situations where it is necessary to have someone physically present with a guest or crew member in need. The CareTeam Associates augment the CareTeam Specialists in initiating specialized services and handling incidents where the presence of an understanding and knowledgeable person on the ship is crucial.

You can see the complexity of what we do. In the following pages, you will also see the dedication we have to our safety, security, environment and medical/public health efforts.



WELCOME



Bastia, Corsica, France



At Royal Caribbean, we are dedicated to safeguarding our guests and crew and conserving the marine environment upon which our business depends. I am proud of our accomplished and dedicated shipboard and shoreside teams who strive to both prevent and effectively respond to incidents or issues. In this, our 2010 Stewardship Report, you will see not only some of the successes and achievements that resulted from our work this past year, but you will also see several areas where I feel further improvement can be achieved. Fortunately, our culture of *continuous improvement* positions us well for translating lessons learned into new and enhanced strategies.

In the following pages, you will see that in 2010 we continued to reduce fuel consumption, air emissions and waste production from our ships. We even met one of our 2015 recycling goals — five years ahead of schedule. We began performing life-saving blood transfusions at sea with immediate results — lives saved. We expanded the number of Centers of Medical Excellence around the world that provide high-quality medical care to our valued crew members. We worked to pass the U.S. Cruise Vessel Security and Safety Act of 2010 and to exceed its mandates. We further strengthened our valued CareTeam and developed an enhanced injury response protocol. We managed our way through several challenges and unfortunate situations that arose, including the devastating earthquake that struck Haiti in January 2010 and complications presented by the eruption of Iceland's Eyjafjallajökull volcano in April 2010. And we suffered through a year that saw an increase in the number of guests and crew who intentionally went overboard during their cruise. Although about 4.5 million guests sailed with us in 2010, I'll not be satisfied until these and other such tragedies end.

Looking ahead, we will continue to enhance our practices and seek new products that can help us meet our ambitious environmental, safety and security, and medical/public health goals. When taken as a whole, I am pleased with our 2010 progress, and look forward to 2011 and the opportunity to build upon our strengths, as well as reduce the areas where we sometimes come up short. Until then, I invite you to read about our 2010 accomplishments in this report and to join us on one of our 40 spectacular ships, to see for yourselves what a dedicated company can achieve.

A handwritten signature in black ink that reads "Gary M. Bald". The signature is fluid and cursive.

Gary M. Bald
Senior Vice President
Safety, Security, Environment and Medical/Public Health
Royal Caribbean Cruises Ltd.

ABOUT ROYAL CARIBBEAN CRUISES LTD.

Royal Caribbean Cruises Ltd. (RCL) is one of the world's premier vacation companies, with a combined total of 40 ships in service, providing approximately 92,300 berths as of December 31, 2010. We own and operate five brands: Royal Caribbean International, Celebrity Cruises, Azamara Club Cruises, Pullmantur Cruises and Croisières de France. In addition, we are joint venture partners in the German-based cruise line TUI Cruises.

During 2010, our brands carried more than 4.5 million guests on two-to-18-night itineraries, visiting approximately 400 different destinations throughout the world. We also have two ships under construction in Celebrity Cruises' Solstice class. *Celebrity Silhouette* is expected to enter into service in the third quarter of 2011, while *Celebrity Reflection* is scheduled to begin sailing in the fourth quarter of 2012. In addition to our cruises, our company offers unique pre- and post-cruise hotel packages, including fully escorted premium land tours in Alaska, Asia, Australia, New Zealand, Canada, Europe and South America.

Our common stock is listed on the New York Stock Exchange and the Oslo Stock Exchange under the symbol "RCL." Our headquarters are located in Miami, Florida, USA, and we have approximately 58,000 employees on our ships and at our shoreside offices around the world. Our investor website is www.rclinvestor.com.



Except where indicated, this report and its references to "Royal Caribbean," "Royal Caribbean Cruises Ltd." and the corresponding abbreviation "RCL," and the terms "our fleet" and "fleetwide," addresses the operation of our Azamara Club Cruises, Celebrity Cruises and Royal Caribbean International brands. Future versions of this Stewardship Report will include expanded information on our non-U.S. based brands.



Legend of the Seas



Liberty of the Seas



Allure of the Seas



Azamara Journey



Celebrity Eclipse



Celebrity Mercury

HERE'S A TIMELINE OF SOME OF OUR MAJOR MILESTONES:

- 1968 Royal Caribbean International is founded.
- 1970 We introduce the first ship built for warm-weather cruising, *Song of Norway*.
- 1988 We launch the world's first "megaship," *Sovereign of the Seas*, which boasts the first five-deck Centrum with glass elevators, sweeping staircases and fountains in marble pools.
- 1993 Royal Caribbean Cruises Ltd. is traded publicly as RCL on the New York Stock Exchange.
- 1995–1998 We introduce the "Ships of Light," six vessels in Royal Caribbean International's Vision class that feature an extraordinary expanse of glass — almost two acres of windows — bringing natural light deep within the ships.
- 1995–1997 The company gains greater sophistication with the acquisition of the five-ship Celebrity Cruises fleet, featuring *Celebrity Century*, *Celebrity Galaxy*, and *Celebrity Mercury*, built in 1995–1997.
- 1999–2003 Royal Caribbean International launches *Voyager of the Seas* and four sister ships, the then-largest cruise ships in the world, with each accommodating 3,114 guests.
- 1999 We unveil the world's first ice-skating rink, rock-climbing wall and horizontal atrium on a cruise ship, all onboard the then-largest ship in the world, *Voyager of the Seas*.
- 2000–2002 Celebrity Cruises launches *Celebrity Millennium* (2000), *Celebrity Infinity* (2001), *Celebrity Summit* (2001) and *Celebrity Constellation* (2002) and becomes synonymous with elegant cruising by consistently ranking in the top 10 among large ships in the *Condé Nast Traveler* magazine poll.
- 2000 We venture onto land with Royal Celebrity Tours, providing pre- and post-cruise land vacations in Alaska via glass-domed railcars to Denali National Park and the Talkeetna River Valley. Our cruise tours have since expanded globally.
- 2004 We follow in the wake of Charles Darwin in the Galápagos Islands with the 90-guest megayacht *Celebrity Expedition*.
- 2006–2008 We welcome the 154,000-ton *Freedom of the Seas* and her two sisters, *Liberty of the Seas* and *Independence of the Seas*, then the world's largest ships, to the Royal Caribbean International fleet.
- 2006 We introduce the first onboard surfing simulator, the Flow Rider, aboard *Freedom of the Seas*.
- 2007 We introduce a new brand, Azamara Club Cruises, with *Azamara Journey* and *Azamara Quest* exploring exotic destinations, such as Antarctica, Brazil and the Chilean fjords.
- 2008–2012 Celebrity Cruises undertakes a five-ship expansion with a series of extraordinary ships: *Celebrity Solstice* (2008), *Celebrity Equinox* (2009), *Celebrity Eclipse* (2010), *Celebrity Silhouette* (2011) and *Celebrity Reflection* (2012).
- 2009–2010 Royal Caribbean International unveils the next generation of cruise ship innovations and advancements with the inauguration of *Oasis of the Seas* in 2009 and *Allure of the Seas* in 2010. These 220,000-ton ships are now the largest in the world, boasting features never before seen on a cruise ship, including an open-air Central Park, an Aqua Theater with high-diving performances and a Boardwalk carousel.



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ENVIRONMENTAL STEWARDSHIP





Each year at Royal Caribbean, we offer our more than 4.5 million guests the opportunity to see and experience some of the most beautiful and unique places in the world. We are keenly aware that our ability to offer such special experiences depends strongly on a healthy marine environment and the well-being of the destinations we visit.

We know that, as a company, we have an important role to play and a strong responsibility to protect these places, both to ensure the future of our business and because it is the right thing to do. Meeting this responsibility requires minimizing our footprint on the environment while at the same time helping to safeguard and enhance the long-term sustainability of the places we visit.

I am extremely proud to note that in 2010 our environmental stewardship commitment was once again recognized with a series of prestigious awards. RCL was recognized by the 2010 *Condé Nast Traveler* World Savers Awards as the overall winner in the cruise lines category for our commitment to protect, conserve and support natural environments and local communities. Also this year, Celebrity Cruises won the Greater Miami Chamber of Commerce's Sustainable South Florida Award for Best Green Practices.

Several years ago, we set forth a series of ambitious stewardship goals for 2015. In 2010, we made major progress in achieving our aggressive targets for waste management. This year, we met our 2015 goal of increasing the amount of waste recycled by 50 percent — five years early! We are also on track to meet our 2015 goal of decreasing waste landfilled by 50 percent by next year — a full four years early. We are now in the process of setting even more ambitious goals for the coming years.

As I've stated in past Stewardship Reports, climate change is perhaps the defining environmental issue of our time, and, as a result, we recognize that our company bears an important responsibility to reduce our greenhouse gas emissions. One of our stewardship goals is to reduce our overall greenhouse gas footprint by one-third by 2015. Currently, the most effective way to reduce our overall emissions is to burn less fuel. In 2010, we were able to reduce the amount of fuel that we burned per average passenger cruise day (APCD) by 4.7 percent, and next year we hope to do even better. Our goal for 2011 is to reduce fuel consumption by 5.4 percent per APCD from 2010 levels.

Once again, I want to say that I am extremely proud of our Environmental Officers (EOs), who play a unique and important role in our company, providing a presence on every single ship in our fleet to ensure that we have as little impact as possible on the environment and that guests and crew alike are aware of, and support, our environmental policies and procedures.

I invite you to read about our environmental stewardship efforts in this report. In doing so, I think you will see why I am so proud of my team and our company, and excited about where we are going in the years ahead.

Jamie Sweeting
Vice President, Environmental Stewardship and
Global Chief Environmental Officer
Royal Caribbean Cruises Ltd.

ENVIRONMENTAL HIGHLIGHTS

1992

- We become the first cruise line to establish a formal environmental program to reduce, reuse and recycle, called Save The Waves®.

1996

- We are the first cruise line to place an Environmental Officer onboard every ship.
- We launch The Ocean Fund, which has awarded more than \$11 million in grants to date.

1997

- We are the first cruise line to obtain ISO 14001 Environmental and ISO 9001 Quality Certifications.

1998

- We establish the Environmental Committee of the Board of Directors, chaired by William K. Reilly, former Administrator of the United States Environmental Protection Agency.

1999

- We create a fleetwide competition for Environmental Ship of the Year and Innovative Ship of the Year.
- We begin installing the first generation of Advanced Wastewater Purification systems.

2000

- We establish partnerships with the University of Miami's Rosenstiel School of Marine and Atmospheric Science and the National Oceanic and Atmospheric Administration in equipping *Explorer of the Seas* with atmospheric and oceanographic laboratories for visiting scientists.

2000–2004

- We install the first smokeless gas-turbine engines on four Celebrity Cruises Millennium-class ships and four Royal Caribbean International Radiance-class ships.

2006

- We establish the Galápagos Fund to support conservation initiatives specific to the Galápagos Islands.

2007

- We launch a partnership with Conservation International to develop a comprehensive Environmental Stewardship Strategy.

2008

- We are the first cruise line to establish a corporate-officer-level Chief Environmental Officer position.
- *Celebrity Solstice* is the first cruise ship equipped with solar panels, a “green roof,” and a dedicated environmental education venue, the Team Earth lounge, created in partnership with Conservation International.



Royal Caribbean International's *Explorer of the Seas*



Celebrity Eclipse



Celebrity Constellation



Royal Caribbean International's *Radiance of the Seas*

- We establish a partnership with Sustainable Travel International to further develop our Environmental Stewardship Strategy, with a particular focus on responsible tourism, education and philanthropy.

2009

- In partnership with the Ocean Conservation and Tourism Alliance (OCTA), Conservation International and Sustainable Travel International, we are the first cruise line to pilot test the new Sustainable Marine Tour Operators Standard.
- We host a Destination Stewardship Think Tank meeting onboard *Oasis of the Seas*, bringing together leaders in the accommodations sector, tour operations and conservation to discuss the future of destination stewardship.

2010

- We win the *Condé Nast Traveler* World Savers Award, winning the top honors in the Cruise Lines category.
- We host the founding meeting of the Sustainable Travel Leadership Network (STLN) onboard *Allure of the Seas*, creating an executive leadership network and forum for sharing knowledge on sustainability, environmental initiatives and good management practices.



Celebrity Century



Celebrity Mercury



Celebrity Solstice



Royal Caribbean International's *Oasis of the Seas*

ENVIRONMENTAL AWARDS 2010

Condé Nast Traveler World Savers Award

- Cruise Lines, Overall Winner – Royal Caribbean Cruises Ltd.
- Wildlife Conservation, Runner-up – Royal Caribbean Cruises Ltd.
- Environmental and/or Cultural, Honorable Mention – Royal Caribbean Cruises Ltd.
- Doing It All, Honorable Mention – Royal Caribbean Cruises Ltd.

Greater Miami Chamber of Commerce, Sustainable South Florida Award, Best Green Practices – Celebrity Cruises

Travel Weekly, Magellan Silver Award for Overall Eco-Friendly “Green” Cruise Ship – *Oasis of the Seas*

Travel Weekly, Magellan Silver Award for Eco-Friendly “Green” Cruise Ship – *Celebrity Eclipse*

City of San Diego, Director’s Recycling Award – *Celebrity Constellation*

City of San Diego, Recycler of the Year Award – *Celebrity Mercury*

Humane Society of the United States, Corporate Progress Award, for being the first cruise line to switch to cage-free eggs – Royal Caribbean Cruises Ltd.

Seatrade Med 2010, French Riviera Cruise Club Green Award – *Celebrity Century*

Coastal America, Spirit Award – The Ocean Fund for the Alaska ShoreZone Mapping and Imagery Project

OUR ENVIRONMENTAL STEWARDSHIP COMMITMENT



Save The Waves® helps guide our company's operating philosophy. It has become an integral part of each crew member's job and is the backbone of daily operations. There are four key principles of Save The Waves®:

- **Reduce, Reuse, Recycle:** Reduce the generation of waste material, reuse and recycle wherever possible, and properly dispose of remaining wastes.
- **Practice Pollution Prevention:** Nothing may be thrown overboard. Nothing.
- **Go Above and Beyond Compliance (ABC):** ABC means doing more than is required by regulations.
- **Continuous Improvement:** Change is the only constant; innovation is encouraged and rewarded.

Save The Waves® Hotline

We provide feedback mechanisms for our employees through our Save The Waves® Hotline. Calls are monitored by the Environmental Stewardship Department and are always treated in a confidential manner. Our guests also are encouraged to use this hotline if they have any concerns. Our Save The Waves® Hotline number is: 1-888-215-9283 (WAVE).

At RCL, our commitment to the environment extends throughout our organization, from senior management to our newest crew members onboard our ships. We strive to inspire our guests to share our commitment, with the goal of making their cruise experience that much more satisfying. We acknowledge that we are not perfect; however, we are dedicated to continually improving our operations, both onboard and ashore, to minimize our environmental footprint and maximize our contribution to conservation and the destinations we visit.

Since our company was founded in 1969, we have implemented a wide variety of environmental initiatives, policies and activities. Nearly 20 years ago, we formalized those efforts into a program we call Save The Waves®. Since its creation, the Save The Waves® program has evolved from a simple focus on reducing, reusing and recycling waste to a companywide philosophy that is integrated into the daily operations onboard our ships.

Save The Waves® represents our ongoing commitment to protect the people and places we serve and maintain the distinctive guest experience for which we're known. Today, the program includes Environmental Officers onboard each ship, a comprehensive waste management program that addresses each onboard waste stream, and environmental training for every crew member. During the past two decades, we have continually improved our Save The Waves® program so that not only our employees but also our guests are directly engaged in our environmental management efforts.

Guided by our Environmental Stewardship Department, we adhere to our Save The Waves® principles, both onboard our ships and at our land-based offices. We follow a comprehensive environmental management system and require consistent fleetwide compliance with company policies and procedures, as well as numerous rules and regulations that cover our operations.

Our *Above and Beyond Compliance* (ABC) policy challenges us to rise above what is required by law. Similarly, our policy of *Continuous Improvement* drives us to look at new and different ways in which we can improve on our past performance. With regard to our stewardship of the environment, we constantly strive to minimize our environmental footprint, increase our support for conservation, and set new environmental standards in the travel industry.

How do RCL policies and practices support its responsible stewardship of the environment?

RCL values the environment and is committed to protecting and conserving environmental resources, preventing pollution, and continuous improvement of environmental management. Implementation of this policy is a primary management objective and the responsibility of every employee, shipboard and shoreside.

To this end we will:

- Always meet applicable shoreside and at-sea environmental regulations and requirements, including those of the flag administrations, port states and international conventions;
- Explore and implement programs that go *Above and Beyond Compliance* in our environmental performance;
- Set and review environmental objectives and goals that challenge the company to continually improve environmental management and pollution prevention;
- Recycle and reuse materials to the extent practical, and specify and purchase goods that have a content of recycled material without sacrificing efficiency and quality, taking into account the overall environmental impact;
- Maximize our efficiency in the use of natural resources, e.g., energy and water;
- Consider environmental issues in design and development projects;
- Promote good stewardship of the marine environment through internal and external initiatives, such as Save The Waves® and The Ocean Fund;
- Encourage vendors and suppliers to make a commitment to environmental performance improvement;
- Communicate our environmental commitment to our guests and request that they join us in respecting the environment; and
- Inform the public of our environmental commitment.

SAFETY, QUALITY AND ENVIRONMENTAL MANAGEMENT SYSTEM

Our dedication to the four principles of Save The Waves® is written into our comprehensive Safety, Quality and Environmental Management system, known internally as SQM. The SQM outlines *safe, standardized, consistent* operations that protect our employees, guests and the environment. The SQM defines personnel requirements and resources, and contains written instructions on company performance standards, work procedures and record keeping in the areas of safety, quality and environment. The system mandates regular management reviews of operations, including self-verification of our safety, quality and environmental policies, which help in maintaining our voluntary ISO 9001 and 14001 certifications.



In 1996, we launched The Ocean Fund, which has since invested more than \$11 million to support marine science, education and conservation initiatives.



We partnered with Sustainable Travel International to help us develop a comprehensive Environmental Stewardship Strategy.



RCL has certified critical segments of our operations against both the ISO 9001 (quality management) and ISO 14001 (environmental management) standards of the International Organization for Standardization (ISO). We also submit to regular external audits from independent certification agencies (e.g., DNV and Lloyd's Register) that verify our compliance with all applicable local, national and international safety, security, quality and environmental standards.

Board Oversight

We have a Board of Directors subcommittee that provides guidance and oversight of our safety, security, environmental stewardship and medical/public health efforts. This committee is chaired by William K. Reilly, former administrator of the United States Environmental Protection Agency. The committee members bring extensive environmental, maritime and management expertise and experience to help guide our work in this area. The committee meets routinely and provides guidance to all areas of our Safety, Security, Environment and Medical/Public Health work.

A DAY IN THE LIFE OF AN ENVIRONMENTAL OFFICER

In 1996, we were the first cruise line to place a dedicated Environmental Officer (EO) onboard each of our ships. EOs are responsible for adherence to our environmental management system, prevention of environmental incidents, and training of all crew members on our Save The Waves® policy and their environmental responsibilities. EOs report directly to the master of each ship and are also accountable shoreside to our Vice President of Environmental Stewardship.

7–8:00 AM: Met with port clearance officers — e.g., U.S. Customs and Border Protection (CBP) — to review records and inspect incinerator room and outer decks prior to the ship obtaining clearance.

8–8:30 AM: Breakfast

8:30–9:30 AM: Completed effluent quality testing of the Advanced Waste Purification system.

9:30–10:00 AM: Met with waste vendor, stevedores and CBP-Agriculture Officer to coordinate and obtain approval for the waste off-load.

10:00 AM–12:00 PM: Off-loaded all waste, in coordination with the waste vendor, stevedores and CBP officer, as approved in the morning's meeting.

12–1:00 PM: Lunch

1–2:00 PM: Conducted general inspection of selected chemical lockers, engine spaces and hotel areas.

2–3:30 PM: Reviewed and responded to emails and checked environmental record books and logs (i.e., Oil Record Book, Sewage & Gray Water Record Book, Garbage Record Book, Environmental Operations Log, etc.).

3:30–4:30 PM: Met with new sign-ons for Save The Waves®, Personal Protective Equipment, Hazardous Materials or Fit Test training.

4:30–5:00 PM: Met with the captain and bridge team for the pre-departure brief, and approved the voyage plan for its discharge operations for that voyage.

5–6:00 PM: Gave presentation to guests regarding our environmental programs.

6–7:00 PM: Conducted general inspection of spaces not visited in the morning inspections.

7–7:30 PM: Met with Environmental Engineer to complete weekly check of the oily water separators.

7:30 PM: Dinner

CORPORATE SUSTAINABILITY COUNCIL

RCL's Corporate Sustainability Council (CSC) provides a companywide framework and organizational structure to oversee our commitment to environmental stewardship. The Council, which was established in 2008, includes executives from all parts of our company, who champion corporate policies and programs that reduce the impact of our operations in real and measurable ways. The CSC is co-chaired by Royal Caribbean International President and CEO Adam Goldstein, Celebrity Cruises President and CEO Dan Hanrahan, and RCL Vice President of Environmental Stewardship and Global Chief Environmental Officer Jamie Sweeting.



AZAMARA JOURNEY[®]

ENERGY AND AIR EMISSIONS



One of Freedom of the Seas' main engines



Oasis of the Seas, solar panels

The cruise industry, like many industries around the world, is faced with two primary energy challenges: how to efficiently provide clean, secure and affordable energy, and how to minimize our impact on the environment related to our air emissions and greenhouse gas (GHG) footprint. To meet these challenges, we are continually seeking and implementing ways to reduce our energy use and associated air emissions. Our immediate goal is to reduce annual fuel consumption per Available Passenger Cruise Day (APCD) by 5.4 percent in the coming year. In the longer term, we aim to reduce our overall greenhouse gas footprint by one-third per APCD by 2015, as compared to 2005¹ levels.

Our primary focus is on reducing energy use wherever possible, and we pride ourselves on being a leader in the use of new technologies to improve efficiencies onboard our ships. For many years, through exploration of advanced designs and technologies, we have been progressively commissioning some of the lowest-emission ships in the shipping industry. This practice helps to make our fleet increasingly more environmentally friendly. For example, the four ships in Royal Caribbean International's Radiance class and the four ships in Celebrity Cruises's Millennium class were the first in the cruise industry to be equipped with gas-turbine engines, which are noncompression-type engines and burn cleaner fuels, therefore emitting less of the air pollutants oxides of nitrogen (known as NO_x), sulfur dioxide (known as SO_x) and particulate matter (known as PM). We now have five ships (*Celebrity Solstice*, *Celebrity Equinox*, *Celebrity Eclipse*, *Oasis of the Seas* and *Allure of the Seas*) with thin-film solar panels installed on their top decks, another industry first. These solar panels provide enough electricity to power approximately 7,000 LED lights on the Solstice-class vessels and the entire set of fixed lighting in the Royal Promenade on the Oasis-class ships.

Today, we continue to research and implement innovative technologies in our new building and marine operations programs. Royal Caribbean International's newest

¹ This year, we changed our baseline year for measuring our greenhouse gas footprint from 2008 to 2005. We made this change because 2005 is the baseline year now being used by both the International Maritime Organization (IMO) and the European Union (EU). It also better represents the time frame in which we launched our aggressive energy efficiency programs.

class of ships, the Oasis class, is an excellent example of our ongoing efforts to reduce our environmental footprint. Even at 225,000 gross tons, the carbon dioxide (CO₂) emissions from the main engines of *Allure of the Seas*, which began sailing in December 2010, are 30 percent less per person per day than from ships built just a dozen years ago (based on data from her near-identical sister ship, *Oasis of the Seas*).

Other measures to reduce energy use include improved hydrodynamics, propellers, propulsion and hull designs, all of which require less fuel per passenger mile traveled; adjusting ship speed to increase fuel efficiency; and focusing attention on current and future itinerary planning of individual sailings to optimize timing, route, speed and distances traveled. For example, we are constantly seeking ways to use the amount of waste-heat that is produced by our engines and, instead, to reuse it onboard in other ways to improve energy efficiency. There are many uses of waste-heat onboard our ships, including, for example, heating water that can be used for showers and in galleys, and efficiently preheating fuel burned in the engines.

We are also working to reduce energy consumption in our heating, ventilation and air conditioning systems. The majority of Celebrity Cruises' Millennium-class and Royal Caribbean International's Radiance-class ships have the ability to use cold Alaskan and Baltic seawater to chill water, instead of running air-conditioning compressors. This saves about four-to-five metric tons of fuel per ship per day when operating in these waters. We have also applied solar window film on earlier ships in our fleet and built our newest ships with advanced energy-efficient glass. This reduces the load on our air-conditioning systems and has the added benefit of filtering out the sun's ultraviolet rays, which can damage interiors and furnishings, requiring them to be replaced prematurely.

Our efforts to reduce energy consumption and air emissions include our practice of moving thermostats to neutral positions, and checking that balcony doors are closed and lights and appliances are turned off when staterooms are unoccupied. We are also supported by our guests, whom we encourage to participate in energy-saving initiatives by promptly turning off water and lights throughout their daily activities.

2010 METRICS AND ACHIEVEMENTS

In 2010, our ships reduced fuel consumption by 4.7 percent per available passenger cruise day (APCD) over 2009 levels. We used just over 25,000 fewer metric tons of fuel than planned. Since 2005, we have reduced fuel consumption per APCD by approximately 13.6 percent (see Figure 1). We were able to achieve these reductions in fuel consumption through technological advances in the design of our newest ships and by enhancing the way in which we sail to each of our destinations. Our goal for the coming year is to reduce fuel per APCD by another 5.4 percent.



Celebrity Millennium



Royal Caribbean International's
Radiance of the Seas

Available Passenger Cruise Days

Throughout this report, we use a metric called Available Passenger Cruise Days (APCD). This refers to the number of lower berths on a ship times the number of days that those berths are available to passengers per year. So, for example, if a 2,000-berth ship is out of service in dry dock for five days in a year, then the ship's APCD for that year would be 2,000 x 360, or 720,000.

Air Emissions

The four key air emissions that are targeted for reductions, either by governmental regulations or through our internal corporate goals, are carbon dioxide (CO₂), sulfur oxide (SO_x), nitrogen oxide (NO_x), and particulate matter. During the combustion process, the carbon and sulfur present in fossil fuels are oxidized, or fused with oxygen, creating SO_x and CO₂. Nitrogen makes up some 80 percent of air and is virtually inert at normal temperatures and pressures. However, at the temperature and pressures prevailing in the internal combustion chamber, it combines with oxygen, making NO_x. Particulate matter is the leftover hydrocarbons and other matter in fossil fuel that is not burned off during the combustion process. All of these are harmful when emitted into the atmosphere.

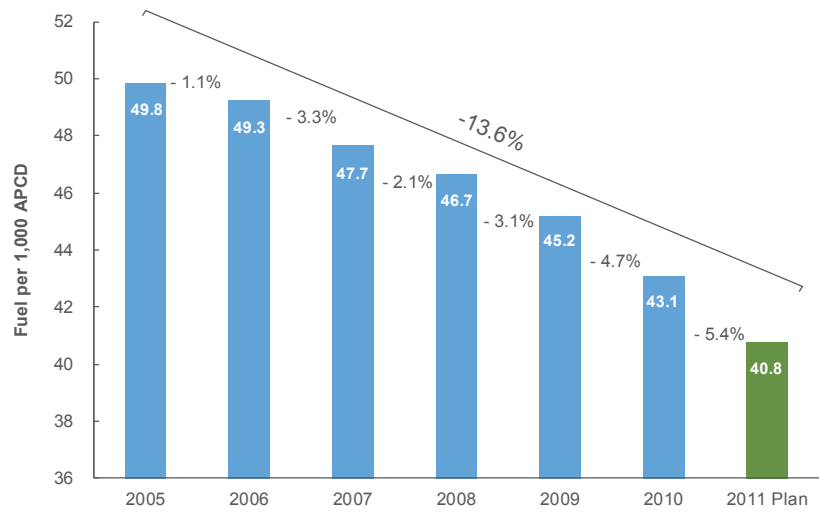


Figure 1 – Fuel Consumption per 1,000 APCD

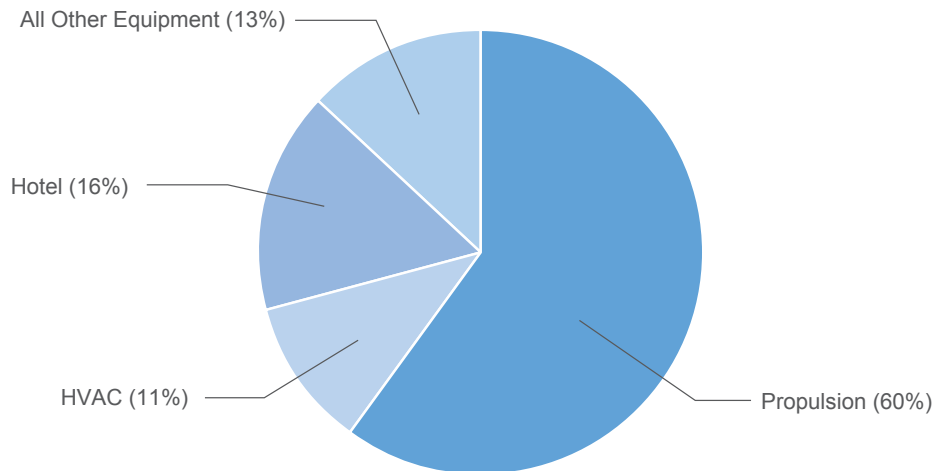


Figure 2 – 2010 Fuel Consumption Drivers

In 2010, our greenhouse gas (GHG) footprint was 4,327,349 metric tons, which equates to 0.13842 metric tons of carbon dioxide equivalents (CO₂e) per APCD. This figure was calculated using the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD) GHG Protocol standards, the most internationally accepted and respected reporting standards for GHG emissions.

This number, which includes both direct emissions from our ships and indirect emissions from electrical consumption at our shoreside facilities, represents our total GHG footprint, including carbon dioxide (CO₂), methane and nitrous oxide emissions, as well as our total refrigerant losses. While the vast majority (97 percent) of our direct GHG emissions come from the burning of fuel in our engines — both for propulsion and to generate electricity for onboard usage — refrigerant releases from leaks in our air-conditioning and refrigeration systems can also contribute to this figure. In 2010, through constant maintenance to detect, repair and prevent refrigerant leaks, we were

able to reduce our refrigerant releases on Royal Caribbean International and Celebrity Cruises ships by approximately 7 percent from 2009 levels. Our total refrigerant losses in 2010 equaled 0.00337 metric tons of CO₂e per APCD.

For the cruise and shipping industry, there are three additional regulated emissions which are not considered greenhouse gases: oxides of nitrogen (known as NO_x), sulfur dioxide (known as SO_x) and particulate matter (known as PM). Our total NO_x emissions in 2010 were 64,872 metric tons, or 0.00208 metric tons per APCD. SO_x emissions totaled 59,735 metric tons, or 0.00191 metric tons per APCD, while PM emissions were 7,373 metric tons, or 0.00024 metric tons per APCD.

What energy technologies is RCL looking at for future use?

One of the ways that we can reduce air emissions is by reducing the total amount of fossil fuels that we burn on our ships. While there are a number of new energy technologies being developed around the world, the selection of commercially available and practical clean technologies is still limited for marine applications. However, we are actively researching and watching the development of these technologies to determine what may one day be viable options for us to reduce our energy use and associated air emissions. The following is a sampling of the technologies that we are watching and the main constraints that limit their viability for use on cruise ships today.

- Solar or wind power as a primary energy source:** RCL's desire is to use renewable energy sources when appropriate and practicable. For this reason, we have installed thin-film solar panels on our latest classes of ships (the Celebrity Cruises Solstice class: *Celebrity Solstice*, *Celebrity Equinox* and *Celebrity Eclipse*; and the Royal Caribbean International Oasis class: *Oasis of the Seas* and *Allure of the Seas*). However, despite these installations, there are still notable limitations for this type of technology, as solar panels are only able to generate a modest percentage of the total energy demands of a ship. Similar challenges exist for wind turbines. In addition, the large number and size of the solar cells and wind turbines that would be needed for an onboard primary power source would introduce increased energy demands due to their significant weight and drag. Nevertheless, we continue to be enthusiastic about the prospects of integrating renewable energy sources onboard our ships. As the efficiency of these systems increases and further technological breakthroughs are made, we hope that renewable energy will become an increasingly important part of our overall efforts to reduce fuel consumption and air emissions in the future.
- Biofuels:** In 2006 and 2007, Royal Caribbean was one of the world's single largest end users of biodiesel, a cleaner-burning diesel fuel made from natural, renewable sources, such as vegetable oils. Driven in part by the apparent environmental advantages of biodiesel, we began an ambitious program to power our gas turbine ships with this alternative fuel. Unfortunately, evidence began to emerge that increased demand for biofuels was causing an increase in global prices for food staples like corn and sugar. In addition, a number of environmental groups raised concerns about increased deforestation to clear land for the cultivation of crops for biodiesel production. As a result of these and other concerns, we dramatically reduced our consumption of biodiesel in 2008, and do not have current plans to consume biodiesel in the near future. However, we continue to track the development of the next generation of biofuels, to determine whether they can make a positive contribution to our overall air emissions reduction strategy without generating secondary adverse impacts.



Installation of Solar Panels on Oasis of the Seas



Celebrity Equinox



Dynamic Trim Assistance System

As propulsion accounts for more than half of the fuel consumption on our ships, we are always looking for ways to optimize the performance of each ship as it rides through the water. When a ship is tilted either to the left or to the right (listing) or back to front (a measure of trim) or any combination of the two, this impacts the hull's resistance in the water, which in turn affects fuel efficiency. To help address this issue, in 2010 we began installing a dynamic trim assistance system on ships in our fleet. This system collects, analyzes and models shipboard data, taking into account current sea and weather conditions, to recommend an optimal stern position and bow depth. Based on this analysis, the captain can then adjust the ship's trim to increase fuel efficiency. This system is now operational on 13 of our ships and resulted in a 2-percent reduction in fuel consumption at speeds over eight knots.

- Natural Gas (NG):** NG is cleaner burning than the fuel we currently use, and there is a great deal of interest in its use within the shipping world. For natural gas to be transported, stored and used on ships, it must first be liquefied (LNG). We have been taking an active role with leading maritime organizations to help develop safety, operational and environmental concepts that may be helpful in the development of LNG as a future fuel option for cruise ships. However, there are still barriers to its widespread use. The most significant challenge in the use of LNG is the lack of ports where we can take on (bunker) the fuel. While LNG supply and infrastructure is not currently available on a scale that could support fueling a major cruise ship, we continue to monitor the status of the market and express our interest with potential suppliers. There remains interest throughout the industry in building up the market and infrastructure to increase LNG's use as a cleaner alternative for traditional marine fuels, and we will be closely watching and engaged in these developments in years to come. In addition, as natural gas is composed primarily of methane (a principle GHG), when LNG is burned as fuel, a portion of the methane from the engine is uncombusted, and thus emitted into the atmosphere (this is referred to as "methane slip"). Including these methane emissions in calculating the GHG emissions of LNG results in a much higher GHG footprint for this fuel, making it less attractive from an environmental perspective. Diesel engine manufacturers are still improving technologies to reduce and eliminate methane slip. We are actively working with some of these marine engine suppliers on design feasibility concepts, and our concerns about methane slip is one of the many topics addressed in these discussions.
- Fuel cells:** The major challenge to practical use of hydrogen fuel cells onboard our ships is that it is very hard to acquire the amount of hydrogen that we would need from outside sources. If we tried to make it ourselves onboard, the cost of the energy consumed to produce it (using electrolysis) would be more than the energy that would be provided by the fuel cell. As the technology advances, fuel cells may become viable in the near future for smaller-scale applications, such as back-up power or for lifeboats.
- Biomass:** Another option we have considered is the possibility of using biomass to generate energy on our ships. Biomass is a renewable energy source made from biological material from living or recently living organisms, such as wood, plant materials or animal waste. In practical terms, for use on a cruise ship, this would mean converting the waste generated on our ships into an onboard, renewable fuel source. However, the main problem with this fuel source is that the waste levels on our ships are not large enough to produce a significant amount of energy, and the physical plant needed to convert biomass to fuel would take up much more space and require more time for power generation than is available on a ship during a typical itinerary.
- Shore power:** In recent years, there has been an increased focus within the industry on the merits of relying on shore power to reduce emissions and improve local air quality while a ship is in port. This technology, which is also referred to as "cold ironing," can help reduce the overall sulfur dioxide, nitrogen oxides and particulate matter generated by a cruise ship while in port. However,

there are several factors that also must be considered when deciding whether to invest the significant amounts necessary to install the equipment that would allow a ship to plug into a shoreside power supply. First, shore power will only decrease a ship's emissions if the shoreside power generation plant is a cleaner source of power than the ship's own power generation plant. These clean-power connections would also need to be installed and made available in the multiple ports where the ship will call. These are significant challenges today. Although RCL visits about 400 different ports of call each year, as of the end of 2010, there are only about six ports in the world that are equipped with shore power equipment capable of servicing a cruise ship (and not all cruise berths in those ports are equipped with such shore power facilities). In addition, even if shoreside power was widely available and clean, the amount of power that a cruise ship requires for the limited hours that it is docked is only a small percentage of the total energy consumed during its cruise itinerary. Our opinion of shore power is that it is a short-term local solution, not a long-term global one. Therefore, our focus and strategy is to look to more promising emerging energy technologies that reduce energy consumption and emissions throughout our many and varied worldwide cruises.

What else is RCL doing to reduce air emissions?

No matter how much we are able to reduce our energy use, there will likely always be some detrimental air emissions if we are burning fossil fuels. So, in addition to energy reduction and efficiency practices and technologies, it is important to evaluate and invest in alternative abatement technologies to deal with fossil fuel emissions. One such technology relies on water to clean emissions before they are released into the air.

In 2010, we contracted with a Singapore-based company, Ecospec Global Technology Pte Ltd., to install and test their pioneering exhaust gas scrubbing technology on *Independence of the Seas* in 2011. Preliminary reports indicate this CSNO_x™ scrubber not only effectively removes the bulk of sulfur oxide (SO_x) from the emissions, but also can be effective in removing oxides of nitrogen (NO_x) and carbon dioxide (CO₂), the major contributor to greenhouse gas emissions and climate change. For example, an independently verified 2009 tanker ship test of this scrubber technology resulted in a 99-percent reduction of SO_x, a 66-percent reduction of NO_x and a 77-percent reduction of CO₂. Our piloting of the system on *Independence of the Seas* will be the first time it has been installed on a passenger ship.

In addition to its potential to dramatically reduce the pollutants in our air emissions, the system is designed to function without the addition of chemicals, such as urea or caustic soda. This is important because such chemicals can be the source of other undesirable emissions. Throughout the piloting on *Independence of the Seas*, we will work closely with both air emissions and wash water third-party experts to assess the system and its results and to evaluate whether it has any as-yet-undefined adverse effects on the environment.

Direct and Indirect Emissions

Direct greenhouse gas (GHG) emissions, also referred to as "Scope 1," occur from sources that are owned or controlled by the company, for example, emissions from combustion in our ships and vehicles as well as emissions from chemicals used with our equipment, such as refrigerants. Indirect, or "Scope 2," GHG emissions are consequences of the activities of the company but occur at sources owned or controlled by another company, e.g., emissions from generation of the electricity that is used at our shoreside facilities.



Royal Caribbean International's
Independence of the Seas

WATER AND WASTEWATER



Reverse osmosis pre-filters

DID YOU KNOW?

The average person in the United States uses 70 to 100 gallons of water per day. On our ships, we use about 50 to 60 gallons of water per person per day.

WATER

Our ships require large amounts of fresh water for drinking and for use in showers, sinks, toilets, galleys, pools and spas. We get fresh water for our ships in one of two ways: by producing it onboard or by acquiring it from local sources in ports (known as bunkering). Fresh water is only bunkered in locations where our use of the water resources will not stress the local community from a social, human health or environmental perspective.

The majority of fresh water is produced onboard, using steam desalination or reverse osmosis to convert seawater into fresh potable water. Steam desalination systems use evaporators that boil sea water and create steam. The heating is applied in a vacuum to minimize the energy needed to boil the seawater. Although this process requires high levels of energy, whenever possible we avoid the need to burn additional fuel by using waste heat from diesel engine cooling water and steam from exhaust gas boilers (waste-heat recovery) to heat a separate chamber of water to steam. The steam vapor is then condensed into fresh water using the relatively cool sea water.

Reverse osmosis systems operate by pumping seawater under very high pressure through a filter (or semi-permeable membrane). The filter allows only the water molecules to pass through, while the salt molecules are rejected and discharged back into the sea. The reverse osmosis systems being installed on our ships today are much more efficient than previous units. For example, today's systems provide the same amount of water for only about 35 percent of the electricity consumption of models from only a few years ago.

The typical indoor "water footprint" of an average person living in the United States is 70 to 100 gallons per person per day. Thus, we realize a 10- to 50-gallon savings of fresh water per person per day on our ships, when compared to our average guest's use of water at home. Despite this level of efficiency, we strive to implement conservation measures to further reduce water consumption, and thus energy use, without negatively affecting the comfort of our guests.

How is RCL reducing water consumption on its ships?

In keeping with our company's focus on *Continuous Improvement*, we are always looking for new technologies and practices to reduce water use on our ships. For example, our newest ice makers use 65 percent less water than their predecessor, saving energy and fresh water production in the process of making ice cubes. On Celebrity Cruises ships, we have replaced the ice beds that chill food in some buffet areas with chilled river rocks, reducing both water use and energy consumption needed for ice production. As an added bonus, from a guest perspective, the rocks are much more attractive than the ice beds.

We have installed sink aerators and low-flow showerheads in crew and guest staterooms with as little impact on our guests as possible. We are also using water-reduction technology in kitchens and laundry facilities, including reduced-flow dishwashers, sink aerators and low-consumption laundry equipment. Our laundry facilities reuse clean condensate water from the ships' air-conditioning units for washing, which can easily eliminate the need for thousands of gallons of fresh water per day.

So that these innovative systems are implemented and used properly, we provide regular training and motivation programs to crew members onboard our ships, and request the help of our guests in saving water whenever possible.

WASTEWATER

Cruise ships must address several types of wastewater, including bilge water, graywater and blackwater, albeit in differing amounts dependent upon the waste stream.

BILGE WATER

Bilge water is a mixture of liquids, primarily fresh water, collected from machinery spaces and internal drainage systems. The bilge, located in the engine room at the lowest part of the vessel, collects water, cleansers and mechanical fluids from operational sources. These sources include evaporators, potable water treatment equipment, condensation, technical rooms, seawater cooling systems, propulsion systems and main engines. Bilge water is collected and periodically pumped into special holding tanks where it is processed to remove contaminants of concern. The resulting water is then treated to levels that exceed both U.S. and international regulations and thereafter discharged.

More than 15 years ago, engineers on a number of Royal Caribbean International ships defied company policy by rigging pipes so that oily bilge water would bypass the oily water separators and be pumped into the sea. The engineers then falsified their ship's Oil Record Book to conceal from the company and U.S. Coast Guard these discharges of oil-contaminated bilge water. These incidents violated U.S. and international law and were a source of deep embarrassment for the company and its employees. Their actions were completely inexcusable. In response, we undertook extensive steps to monitor and enforce compliance, indeed, to ensure that we exceed all state, national and international regulations.

In keeping with our *Above and Beyond Compliance* policy, our ships cleanse bilge water to reduce its oil content to less than five parts per million, which is three times



Our newest ice maker.



Chilled river rocks are used to keep food cold in buffets on Celebrity Cruises ships.

cleaner than the 15 parts per million allowed by international regulations. Each ship in our fleet is now equipped with at least two oily-water separators and two oil-content meters to monitor bilge water discharges. We also restrict the discharge of treated bilge water to times when our ships are more than 12 nautical miles (22.22 km) from shore and have equipped each of our ships with a restricted-access oily bilge water discharge protection system known as the “White Box.” This automated system controls the flow and analyzes treated water, to ensure it meets legal limits and our more stringent company standards before the treated water is discharged.



Sinks and laundry equipment are a source of graywater.

GRAYWATER AND BLACKWATER

Graywater is drainage from showers, baths, washbasins, laundry and dishwashers, as well as galley (kitchen) water. It also includes additional wastewater, such as drainage from pools and spas or condensate from air-conditioning systems. Blackwater is water from toilets, urinals and medical facilities. Blackwater is collected separately from graywater and other waste liquids, since it typically contains more harmful bacteria.

In keeping with our company goal to only discharge water that exceeds most leading municipal wastewater treatment standards, we aim to thoroughly treat both graywater and blackwater before discharging anything into the ocean. In 1999, we began the research and development needed to install and operate Advanced Wastewater Purification (AWP) systems (see sidebar on page 33) on our ships. These systems treat blackwater and graywater and produce an effluent that is cleaner than what is required by international sewage regulations and what is discharged from most municipalities. We are installing these systems onboard all of our Royal Caribbean International, Celebrity Cruises and Azamara Club Cruises ships, at a cost of more than U.S.\$150 million. This is not required by current regulation or law. Our goal is that every ship in our fleet will be equipped with an Advanced Wastewater Purification system.

As indicated above, in keeping with our policy of going *Above and Beyond Compliance*, our internal policies for discharge of graywater and blackwater are stricter than U.S. and international governmental regulations. For example, although U.S. and international laws allow graywater to be discharged from ships inside of 12 nautical miles from land in many locations, since 1998, our company policy has restricted discharge of graywater to outside 12 nautical miles from land in all areas of the world. Similarly, international standards require ships to discharge *untreated* blackwater outside 12 nautical miles and at a speed of not less than *four knots* (for effective mixing); our company standard is to only allow discharges of *treated* blackwater outside 12 nautical miles and only at a speed greater than *six knots*.

We are also working with the Ocean Conservation and Tourism Alliance, a collaboration between Conservation International and the Cruise Lines International Association, to identify and map sensitive marine areas that would further benefit from additional protection beyond our current *Above and Beyond Compliance* policies. Once identified, we intend to integrate these areas into our company policies, so that we can avoid discharging even treated wastewater in these areas.

2010 ADVANCED WASTEWATER PURIFICATION METRICS

We currently have a total of 22 ships that are equipped with an AWP system. Of these, 20 ships have systems that are fully installed and operational. Two additional ships have first-generation, functioning AWP systems that will likely need to be completely remodeled or replaced in the future. In 2011, we plan to install AWP systems on five additional ships, including our newest ship, *Celebrity Silhouette* (currently under construction).

What are the most pressing future challenges that RCL is facing in wastewater treatment?

One of the challenges we share with shoreside wastewater treatment facilities is the effective removal of nutrients (phosphates and nitrogen) from our treated wastewater. Phosphates are added to detergents, surfactants, emulsifiers, degreasers, soaps and other cleaning agents to remove dirt and stains. Nitrogen comes from plants, fertilizer and human waste. When discharged into bodies of water, these substances can lead to fast-growing communities of algae (eutrophication) that can deplete the oxygen supply in the water, thus impacting fish and other marine animals. While there has been no scientific study that links cruise ship wastewater discharges with increased algae growth, we are taking a precautionary approach by seeking to reduce the amount of nutrients we discharge into the ocean.

There are two ways to reduce the phosphate load of wastewater: eliminate them at the source or remove them during treatment.

- On the source-reduction side, we are working with our suppliers to find phosphate-free options for cleaners. This has become a policy issue as well. For example, under the United States National Pollutant Discharge Elimination System (NPDES), all ships must use phosphate-free cleaners for deck washing while in port, and ships that are planning to discharge into U.S. waters must use phosphate-free detergents in their galleys. We are in compliance with their NPDES requirement.
- On the treatment end, our Advanced Wastewater Purification Systems remove some of the nitrogen and phosphates from solids during the course of treatment, but there are still some residual contaminants that remain. Removing phosphates requires the use of additional chemicals, which create another waste stream that requires treatment and/or disposal. Removing nitrogen is much more difficult, as it requires a very complex, specialized process. While technology does exist to carry out such treatment on land, its land use has been limited, and, to our knowledge, it has thus far never been applied on a ship. Addressing this challenge will become a part of our future research and development work. Fortunately, nutrients are not a significant concern in most areas where we operate. However, as a global corporation, we must be prepared to operate in all waters of the world, and this includes some areas where nutrients can be a concern.

The challenge of phosphates and eutrophication has always been an important issue for us around coral reefs, and we avoid discharging treated wastewater near delicate reef systems.



Components of the onboard Advanced Water Purification System (AWP)

Advanced Wastewater Purification Systems

There are several types of AWP systems. These include:

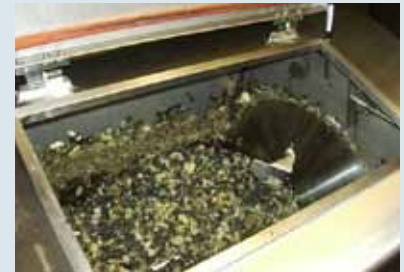
- **Moving bed bioreactors**, which mix wastewaters and use a primary screening system to remove large solids. The wastewater is sent to a bioreactor, where much of the organics and nutrients are consumed by beneficial bacteria. From these bioreactors, wastewater is moved to a second stage of solids removal, where coagulants bind the remaining solids and make them float for easier removal. The wastewater then flows through a final polishing filter and then an ultraviolet light system, where the water is disinfected prior to discharge.
- **Membrane bioreactors**, which mix wastewaters and initially use screens to remove large solids. Wastewater is sent to a bioreactor, where much of the organics and nutrients are consumed by beneficial bacteria. In these bioreactors, membranes are used to filter wastewater and leave behind all remaining solids and, in most cases, all bacteria. The treated water is processed through an ultraviolet system that disinfects it prior to discharge.

In 2010, eutrophication in the Baltic Sea became an important international focus. The Baltic is essentially a very shallow enclosed sea, with a very low flushing rate; it takes about 30 years for the water to flush out of the Baltic and be replaced with water from the North Sea and other sources. Thus, phosphates and nutrients discharged into the Baltic do not get flushed away, but remain until something eats them, which leads to the growth of aerobic algae and the resulting eutrophication and depletion of oxygen supplies for fish and other marine animals.

Cruise ships account for only 0.006 percent (or about 1/16,667th) of the nutrient load in the Baltic Sea (most of which is naturally occurring or comes from fertilizer and other industrial runoff from land-based sources). Nevertheless, in 2010, the Baltic Sea Action Program, a regional government action group, proposed new regulations to the International Maritime Organization to create a special area for the Baltic, with new passenger ship standards for sewage and wastewater discharge. The concept of designating the Baltic as a special area was approved in September 2010, but the new standards for sewage are still being debated. Another option proposed by the regional governments around the Baltic was to require ships to discharge their wastewater to land. Unfortunately, there are not many wastewater treatment plants that can actually remove nutrients in the Baltic region, and only two ports that are equipped with hook-up facilities to adequately allow cruise ships to discharge wastewater ashore.

DEALING WITH FOOD WASTE

On *Liberty of the Seas*, we are testing a new process to compost food waste, which is traditionally one of the most difficult waste streams to process through our Advanced Wastewater Purification (AWP) systems. This involves a cabinet with a drum that contains a set of rotating paddles and plastic chips that provide a place for



bacteria to live while they feed on and break down the food wastes. Food is then added and a liquid solution containing bacteria and a bacterial booster powder is added. This process is being tested in the garbage separation room on *Liberty of the Seas*, and we are evaluating its ability to effectively process waste generated in the food preparation areas of the ship. We are also trialing another new system that not only digests food waste, but also reduces the organic load in the liquid effluent from the digester.





Dubrovnik, Croatia

WASTE AND CHEMICAL MANAGEMENT



Aluminum cans packaged for recycling ashore



Aluminum and tin can densifier

SOLID WASTE

We take great measures to manage solid waste on our ships. These measures include manual sorting of recyclables, making space onboard to store materials destined for recycling and donation, and finding facilities capable of properly handling specific waste streams in the places where we operate. Our ships' crews work diligently to reduce, reuse and recycle all materials they can, and company policies, procedures, equipment, and training help ensure that no solid waste goes into the ocean — ever — period.

When we dispose of waste items from our ships, they are landed as compacted recyclables, donations, incinerator ash or landfill waste. Recyclables present a particular challenge, as, in some instances, our ships prepare waste materials for recycling only to have them inadvertently end up going to landfills because the port community does not have adequate recycling facilities. When this happens, we attempt to partner with local governments and entrepreneurs to create recycling opportunities in key destinations. Generally, wherever possible, we will store recyclables onboard until we are able to off-load them in a port with adequate recycling facilities.

2010 RECYCLING AND REUSE METRICS

Through shipboard incentive programs and the education of guests and crew members, our ships are champions for reducing, reusing and recycling waste materials. In 2010, we recycled and reused more than 20.7 million pounds of materials through continued emphasis on recycling and donations of high-quality materials. This represents an increase of 6.3 million pounds, or 44 percent, over 2009 levels (see Figure 3). In 2010, we also reduced the amount of waste landed ashore from our ships to just 1.15 pounds per APCD, a reduction of 19 percent from the previous year and 47 percent from 2007 levels. As a point of comparison, the average solid waste footprint per person in the United States is approximately 4.3 pounds per day.²

These achievements keep us firmly on track to meet our 2015 goals of decreasing waste going to landfill by 50 percent over 2007 levels and increasing the volume of waste recycled from our ships by 50 percent over a 2007 baseline.

² <http://www.epa.gov/wastes/nonhaz/municipal/>

How is RCL reducing, reusing and recycling waste generated onboard its ships?

REDUCE

The first step in managing waste is to reduce the amount of material that comes onboard our ships. We are working with our suppliers to green our supply chain, reduce packaging materials and use more sustainable resources. For example, in 2010, we began working with Staples to source 55-gallon drums of their environmentally friendly PH-neutral cleaning product, which we use onboard our ships. The larger containers, which minimize waste, transportation and packaging costs, are delivered just once a year, and then our crew members use refillable, reusable one-gallon containers for daily use. We are now working with Staples to create a market for 55-gallon drums of their glass cleaner, which we also use onboard our ships. Both the glass cleaner and the all-purpose cleanser are biodegradable and approved for use in fragile marine environments.

REUSE

To further cut back solid waste generation, we are working with our vendors on container return programs, where containers from concentrated cleaning supplies, food products and other materials can be returned for reuse. With one vendor, WOW Innovations, we have developed a container rebate program whereby ships are able to return empty five-gallon containers for a \$5 credit toward their next purchase.

We are in the process of establishing a standard donations database to provide the fleet with outlets that will accept quality items, such as mattresses, sheets, towels and furniture, for reuse. Clothes, shoes, accessories, games and other items donated by our crewmembers are separated and placed in large boxes on each ship for our donation program.

In 2010, we discovered that 5,400 mattresses destined for *Oasis of the Seas* had been manufactured with a slight defect, which made them unsuitable for use on the ship but still usable. Within just two weeks, we donated all 5,400 mattresses to several organizations, including Food for the Poor, Goodwill and YES-TU. In Riga, Latvia, *Vision of the Seas* donated old plates and bowls from the Windjammer Café to Diakonija, an organization that provides child care and free meals to disadvantaged families and senior citizens in the city. We also donated lifejackets to the YMCA-YWCA of Greater Victoria, British Columbia. In Miami, Florida, we donated four pallets of wood from *Allure of the Seas* to Habitat for Humanity of Greater Miami, to build homes for low-income families. The wood had been used in Central Park as a placeholder, before the foliage and vegetation was placed onboard.

Through our donation program, we are working with organizations such as Seafarers' House at Port Everglades, Florida; ReThink + ReUse Center in Miami, Florida; Goodwill Industries in San Diego, California; Habitat for Humanity; Food for the Poor; and others.

RECYCLE

Our recycling efforts form the core of our waste management strategy. All trash onboard our ships is hand-sorted by our crew members to determine what can be recycled. Recyclable materials generated onboard our ships include glass, paper, cardboard, aluminum and steel cans, scrap metal, incinerator ash, plastics, toner cartridges, wooden pallets, batteries, fluorescent lamps, electronics, plastic wrap and kitchen oil.

Figure 3 – Recyclables and Donations Landed Ashore (millions of pounds)

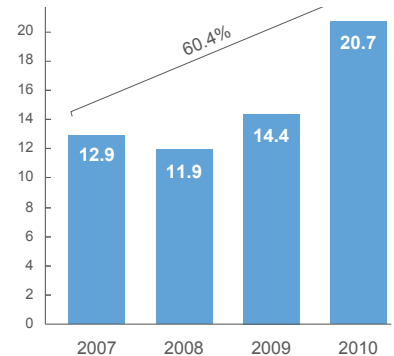
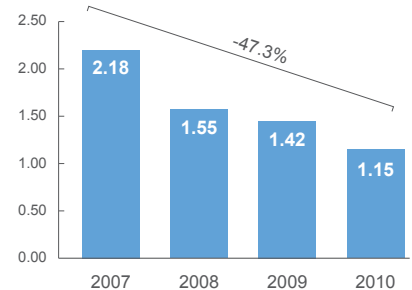


Figure 4 – Solid Waste per Average Passenger Cruise Day (pounds)





Corkboards

The crew on *Liberty of the Seas* make message boards with leftover frames and corks for use throughout the ship. If they have enough materials collected, they award crew members and environmental organizations with a message board. This allows them to build something useful from waste materials.



Rhapsody of the Seas reusable laundry bag for crew-members

Throughout our fleet, we are able to recycle approximately 30 percent of all waste worldwide, and we are diligently working to increase those numbers. As a point of comparison, approximately 32 percent of all solid municipal waste in the United States³ and 23 percent in the European Union⁴ gets recycled. Also, municipal solid waste does not include industrial or construction waste. However, as our ships complete their own repairs and maintenance at sea, we produce quantities of industrial and construction waste during normal marine and hotel operations; this waste is included in our recycling percentages. Our most successful ships have been able to attain an 80 percent recycling rate of the total waste they land. That means that eight units of waste are recycled to two units going to the landfill.

Working with local authorities, vendors, conservation groups, and recycling centers, we have agreements in 21 major ports with companies that receive separated and sorted material, including aluminum cans and scrap metal, for recycling. Recycling partnerships have been established in ten U.S. ports, six European ports, three Canadian ports, and several Caribbean and South American ports, and we are always looking for new partners in ports of call to support our recycling efforts. In 2010, we began training our shipboard Environmental Officers (EOs) to conduct due diligence audits on waste vendors — for both solid waste and hazardous wastes — in our ports of call. The purpose of a due diligence audit is to review corporate policy, inspect the waste facility in question, and identify the level of regulatory compliance conducted by the waste contractor in the transport, storage, treatment, disposal and documentation of landed waste. Due diligence audits are completed in two phases: in phase 1, needed documents and waste processing descriptions are gathered remotely (electronically or via standard mail), while in phase 2, the EO visits the site and verifies the waste-processing systems. Engaging our EOs in these audits will help us to streamline the process of identifying new recycling hubs and finding and approving new recycling vendors, as the EOs are already in port and, although shoreside management will maintain final approval based on the audit, we don't have to send representatives from our Miami headquarters to conduct the due diligence audits.

Shipboard environmental teams collect and sort garbage into waste streams that are processed by various means and equipment. For example, the teams use depressurizers for releasing residual liquids from aerosol cans; compactors for processing plastic, cardboard and metal; glass crushers; and fluorescent lamp crushers to separate mercury, aluminum and glass for recycling. Each ship is also equipped with specially designed climate-controlled storage facilities that allow them to hold recyclables until the appropriate and approved recycling hubs are reached.

To supplement our shipboard recycling efforts for ships that call at Port Everglades, in Fort Lauderdale, we work with TGL Environmental Services, Inc. to further sort our waste. When our ships dock in Port Everglades, we off-load all of our dry, non-hazardous solid waste in open-top containers to TGL, which takes the waste back to their facility, where they have a system to manually sort it. Using this system, TGL is able to recycle 80 percent of our ships' non-hazardous solid waste that would otherwise have ended up in a landfill. Ships participating in this initiative include *Allure of the Seas* and *Oasis of the Seas*.

³ <http://www.ecomindedolutions.com/waste-and-recycling-statistics-in-the-united-states/>

⁴ <http://www.letsrecycle.com/news/latest-news/waste-management/uk-achieves-average-eu-municipal-recycling-rate>

In 2010, we developed a new system for measuring the recycling success of our ships and to further inspire our crew members to increase the recycling rates on their ships. We created a system of analysis based on three factors: 1) what materials are recyclable in general anywhere in the world; 2) what materials can be recycled on a ship's particular itinerary, i.e., based on available facilities in the ports of call that ship visits; and 3) what the ship is actually recycling in a given month. This system can compare a ship's recycling achievements to its actual recycling potential, accounting for the ship's size, itinerary and class. We set specific targets for each ship, based on its recycling potential.

The results of this analysis are posted fleetwide in public folders that anyone can see. This has led to increased incentive to recycle and friendly competition among our ships to see who can achieve the highest recycling rates.

HAZARDOUS WASTE MANAGEMENT

Our commitment to effective environmental stewardship through our *Above and Beyond Compliance* policy includes our handling of hazardous waste. These wastes have the potential to pollute ground water, soil and air when not properly managed. As on land, hazardous wastes that must be addressed onboard include mercury from fluorescent bulbs; silver and chemicals from photography processing; perchloroethylene (perc) from dry cleaning; flammable liquids (solvents, lighter fluid, waste paints and thinners, and aerosol residuals); and lead, nickel and cadmium from batteries. Additional special waste items include medical waste (e.g., needles), oily waste and lube oil.

Though we produce only very small quantities of hazardous waste, as defined by the U.S. Resource Conservation and Recovery Act (RCRA), the potential for negative environmental impacts makes the management of hazardous waste one of our highest priorities. As a result, our policy says that under no circumstance may hazardous waste be disposed of in trash containers or systems for graywater (sinks and drains) and blackwater (toilets). Instead, each type of this special waste has an appropriate and defined handling and control process. For example, hazardous waste products are segregated into leak-proof containers and landed to an approved shoreside disposal facility or, for permitted types of medical waste, incinerated onboard.

While the monetary cost of this process is higher, recycling hazardous material is the most sustainable option. Therefore, wherever possible, we recycle waste that would be classified as hazardous if it were landed ashore as garbage. For example, we have invested in fluorescent lamp crushers that allow for onboard separation of glass, mercury and metal end-caps. Each separate waste stream is then recycled. This waste management system is highly efficient, allowing us to recycle 99.9 percent of mercury, from switches, lights and thermometers. Lead, lithium, nickel and cadmium are recycled through our battery recycling program. Ships reuse empty repurposed Department of Transportation (DOT) approved five-gallon chemical pails to hold the sorted batteries, saving the ship money and eliminating additional waste.

In Europe, recycling opportunities for fluorescent lamps, batteries and electronics are limited, though the opportunities for recycling batteries and electronics are improving. Where there is no approved facility to recycle these items, we work with our ships during their European season to package and store materials for recycling at ports with appropriate recycling facilities.



Building a Market for Recyclables in Cozumel

For several years, RCL has been working with a company called Ecomar to establish a successful recycling operation in Cozumel, Mexico. Two years after the program was initially piloted with *Liberty of the Seas*, recycling in Cozumel is in full operation and progressing well. Currently, 12 of our ships are off-loading recyclables to Ecomar. With the volume of recyclable materials provided by RCL ships, Ecomar has built a sustainable recycling business that also includes land-based resorts and residences. RCL's efforts are benefiting not only our company and the local Cozumel economy, but also other cruise lines, which have also benefited from the new recycling opportunities in this popular port of call. Through Ecomar's program, tons of waste that would otherwise have been landfilled is now being recycled.

Building Houses with Recycled Bottles in Brazil

In Santos, Brazil, the local recycling vendor that we off-load materials to has started a program to use recyclable water and wine bottles to build houses for local residents. The bottles, which are built into the walls, help insulate the houses, give them more structural integrity, and reduce the costs of building materials, as less concrete is needed for each structure. Each 46-square-meter (495 sq. ft.) house costs about \$8,000 to build and can be constructed in three days.

POINT OF VIEW



DITEC International

RCL is working with DITEC Marine to source environmentally safe materials to preserve and maintain the painted surfaces on our ships, including the hulls and decks.

“Royal Caribbean has adopted the philosophy that protecting the environment and operating a successful company can and must go hand-in-hand. The company has realized that a successful company must not only be ready to implement the necessary changes stemming from new regulations, but must furthermore lead the way in demanding and creating more environmentally friendly technologies and policies. DITEC has helped Royal Caribbean meet the environmental challenges in maintaining its fleet by replacing hazardous or harsh chemicals with DITEC’s environmentally safe material, which reduces water and chemical consumption, while reducing the cost of maintenance, repair and replacements, which in turn is translated into less waste and higher profitability.”

– Christopher Allen, President and CEO, DITEC International Corp.

Hazardous waste is collected and stored onboard in designated storage areas until the ship reaches a port of call where it may be landed. Our hazardous waste is only handled by qualified contractors who comply with the due diligence program we have developed for approved hazardous waste vendors. Not only do these contractors meet or exceed U.S. laws regarding disposal and handling of hazardous waste, they must also fulfill additional requirements imposed by our company policies. Many of our vendors are ISO 14001 certified, meaning they have met rigorous standards for environmental management.

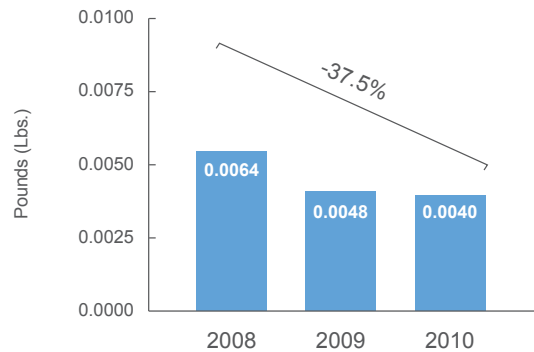
We have implemented an electronic tracking system for our Hazardous Manifests. These manifests are posted to our internal public folders so that Environmental Officers have access to upload and view them. In keeping with our company policy and regulatory compliance, we maintain records of these manifests for three years shipboard and another three years shoreside.

2010 HAZARDOUS WASTE METRICS AND ACHIEVEMENTS

In 2010, we reduced the amount of hazardous waste landed ashore from our ships to 0.004 pounds per APCD, a 17-percent reduction from 2009 levels (see Figure 5). This represents a 37.5 percent reduction from 2008 levels.

Also in 2010, we completely replaced all of our old liquid x-ray systems with digital systems in our shipboard medical facilities, thereby reducing the amount of liquid x-ray fixer that must be processed by our silver recovery units onboard. We donated all of the old x-ray systems to hospitals, clinics and animal hospitals in ports of call around the world. We are also continuing to replace perc dry-cleaning units on our ships with petroleum-based solvent units; the petroleum solvents are then either recycled or burned for energy recovery.

Figure 5 – Hazardous Waste per Average Passenger Cruise Day (pounds)



CHEMICAL MANAGEMENT

Responsible management of the purchasing, handling, distribution, use and disposal of chemicals with varying degrees of hazardous properties is an important component of our shipboard environmental practices. Our chemical management program reduces potential hazards to the environment through a process that effectively approves and regulates the use and disposal of chemicals.

How does RCL reduce potential chemical hazards?

We begin with a formal approval process, conducted by our supply chain, safety, medical and environmental experts, who as a group decide which chemical is most suitable for an intended purpose. Each chemical proposed for onboard use is fully researched to identify any potential health hazard (acute and chronic), safety factor (compatibility and flammability), or environmental impact (acute and chronic).

Once approved, we list the chemical in the master RCL Chemical Purchasing List (CPL), and ships are only allowed to utilize chemicals contained on the CPL. We also enter the chemical name in a centralized database, along with its Material Safety Data Sheet (MSDS), which contains easily retrievable information about the chemical and its proper handling and use. This database also contains the manufacturer's chemical-specific ratings for health, flammability and reactivity, as well as minimum requirements for personal protective equipment.

All chemicals must contain a label that shows identification, segregation and safety information and must be stored according to the manufacturer's instructions, using an internal color-coding system.

Beyond purchasing and storage, we manage the inventory of chemicals used on our ships through the online *Chemwatch* database, which contains more than 4.5 million MSDS's and provides instant access to information sheets in 25 languages. This database also contains contact information on how to immediately reach a team of chemical experts, as well as easy-to-use pictographs, printable color-coded storage labels specific to RCL storage and labeling policies, and specific information on personal protection equipment, first aid, medical emergencies, firefighting and spills. The underlying focus of this process is to identify the most sustainable and effective chemical products for use throughout the fleet.

Have you seen any benefits since the CPL was developed?

In 2010, we worked with *Chemwatch* to develop a Green Rating System for RCL shipboard chemicals that considers each ingredient in a chemical product and examines how it affects the environment. This allows us to identify, and remove from shipboard use, any chemical products of concern that could harm the environment or pose a threat to human health.

Through this process, it was determined that about 2,100 different chemicals were being used on our ships. Environmental Officers and our Supply Chain team used the Green Rating System to narrow down this list to about 700 chemicals now on the approved CPL. This reduction has not only reduced potential chemical hazards, it has improved tracking, use and storage of the chemicals they work with. The Green Rating System has also increased our leverage with suppliers by increasing their incentive to provide more environmentally friendly products.



Chemical Storage

The more than 700 different chemicals that we use onboard our ships can be stored safely and efficiently using our internal storage labels, which can be printed directly from the *Chemwatch* database. The labels, which have a color-coded border, indicate the product name, the recommended personal protection equipment, and the hazard communication data.

CONSERVATION, DESTINATIONS AND EDUCATION



As the ocean is the heart of our business, conserving the oceans and the rich marine life they support is one of the foremost goals at RCL. In 1996, we established The Ocean Fund to provide a strategic focus for our marine conservation efforts. For the past 14 years, we have directed our conservation funding to marine science research, education and innovative technologies. In addition, The Ocean Fund supports nonprofit marine conservation organizations that work to maintain and restore marine habitats, seek ways to minimize human impacts, and educate the public.

CONSERVATION

The ocean and the diversity of life it supports are of great importance to the guests and employees of Royal Caribbean. The world's oceans generate 70 percent of the oxygen in the atmosphere, beneficially absorb carbon dioxide, provide food and recreation, replenish our fresh water, and influence climate and weather patterns. Healthy ocean ecosystems are also the cornerstone of an enjoyable cruise. Our ships provide opportunities for guests to interact with these ecosystems through excursions to coral reefs teeming with vibrant aquatic life, beautiful sandy beaches, and exotic destinations and coastal cities. Helping to properly care for and protect the places where we operate not only makes good business sense, it is critical to the future of our planet.

Our oceans face a significant threat from climate change, a challenge that we see as the defining environmental issue of our time. Observations and analysis of past and current trends reveal the warming of land areas and the ocean, and major changes in patterns associated with weather events. Over the past century, average global temperatures have increased 1.4 degrees Fahrenheit (0.8 degrees Celsius), a rate that, if unchecked, could lead to higher ocean temperatures, melting polar ice, rising sea levels, ocean acidification and changes to the ocean's major current systems. To help protect the future of the world's oceans, RCL makes investments in conservation projects, sustainable destination management and environmental education.

How does RCL support marine conservation efforts around the world?

In 1996, we built upon our environmental commitment and launched The Ocean Fund, which supports marine conservation organizations in safeguarding the health of the world's oceans. The mission of The Ocean Fund is to:

- support efforts to restore and maintain a healthy marine environment;
- minimize the impact of human activity on this environment; and
- promote awareness of ocean and coastal issues and respect for marine life.

Grants are made to a variety of nonprofit groups and institutions whose activities are directly related to marine conservation, including initiatives in research, education and innovative technologies. Since the fund's establishment, we have contributed more than \$11 million to 66 organizations around the world for projects that relate to ocean science, climate change, key marine species, education and innovative technologies. These organizations conduct vital research, provide education, and aid the restoration of ocean ecosystems and the diverse aquatic life they support.

In 2010, The Ocean Fund awarded \$532,430 to 15 marine conservation and environmental organizations. Recipients included:

- **American Museum of Natural History:** \$25,000 to support continued research on the impact of fishing activities on sea turtles
- **Conservation International:** \$35,000 for development of a training module for conducting marine climate change vulnerability assessments
- **ECOCEAN:** \$25,000 to study the impacts of tourism activities on the behavior of whale sharks and to develop good practices for sustainable ecotourism
- **Florida Ocean Alliance:** \$2,000 to support their efforts to protect and enhance Florida's coastal and ocean resources
- **Island Dolphin Care:** \$23,000 for continued support of their Bringing the Ocean to Children program, which brings traveling marine life touch tanks to elementary, middle and high schools in Miami-Dade and Monroe Counties, and \$10,000 to build an observation deck at their Key Largo facility
- **Marine Conservation Society:** \$25,000 to assess trends in basking shark behavior at identified hotspots in the U.K. and Northern Europe
- **Marine Mammal Conservancy:** \$20,000 to support their efforts to rescue and rehabilitate marine mammals affected by the 2010 oil spill in the Gulf of Mexico
- **Massachusetts Maritime Academy:** \$25,000 to support cooperative business education, as well as hands-on maritime experience through a six-month Sea-Term for future safety and environmental officer training at the Academy
- **MAST Academy:** \$10,000 to support the South Florida Student Shark Project, which studies the effects of pollutants on the shark populations of Biscayne and Everglades National Parks
- **MEDASSET – Mediterranean Association to Save the Turtles:** \$57,378 to support training programs for marine tour operators, workshops, and educational initiatives on destination stewardship, and awareness raising for RCL guests
- **New England Aquarium:** \$25,000 to continue their research and tracking of right whales in the Bay of Fundy
- **Shake-A-Leg Foundation Miami:** \$40,000 for continued support of the eco-island project, which provides educational, recreational and island restoration activities for students with disabilities and at-risk youth
- **The Nature Conservancy:** \$25,000 to TNC-U.S. Virgin Islands chapter to raise awareness among decision-makers in the Caribbean region on marine and coastal land-use planning for climate change resilience and adaptation,

POINT OF VIEW



Island Dolphin Care

With the support of The Ocean Fund, Island Dolphin Care (IDC) has expanded their mobile Touch Tank initiative, which brings marine science education to classrooms throughout Miami-Dade and Monroe counties in southern Florida. The program is a hands-on interactive educational experience for children, who get to learn about and touch a variety of invertebrates, including sea stars, brittle stars, sea cucumbers, cowries, conch and horseshoe crabs that are native to the Florida marine environment. The children also learn about local ecosystems and are taught to care about the environment. In 2010, we partnered with IDC to bring the Touch Tank to several different RCL events, including our Bring Your Child to Work Day at our Miramar, Florida, office, and the celebration of the arrival of our newest ship, *Allure of the Seas*, in Fort Lauderdale in November.

“Island Dolphin Care had a terrific season this year, bringing the ocean to so many school children throughout Miami and South Florida. Bio Blitz brought over 1,000 people to our booth in two days, including a special guest, Dr. Sylvia Earle! We are so proud to be a part of The Ocean Fund and excited to have such a fun venue in which to teach marine science to visitors of every age.”

– Deena Hoagland, Executive Director, IDC



and \$25,000 to TNC – Alaska chapter to continue funding estuaries conservation planning and coastal management in southeast Alaska.

- **University of Miami Rosenstiel School of Marine & Atmospheric Science:** \$75,000 to complete the revitalization and automation of the *Explorer of the Seas* oceanographic research program
- **University of North Carolina, Wilmington – Aquarius Reef Base:** \$25,000 to study the impacts of climate change and local acidification on coral reefs
- **World Wildlife Fund:** \$35,000 to develop a climate change adaptation and reef protection plan for Cordelia Bank, Roatan Islands, Honduras, and \$25,000 to launch the Making a Good Buy campaign in the ports of Mexico's Yucatan Peninsula, which will educate cruise ship guests and other tourists on making responsible purchasing decisions that will help protect threatened marine species



Royal Caribbean International's Explorer of the Seas



Radiance of the Seas, Environmental Ship of the Year 2010



Liberty of the Seas, Innovative Ship of the Year 2010



Celebrity Infinity, Environmental and Innovative Ship of the Year 2010

The Ocean Fund grant process is by invitation only. We actively review introduction emails from organizations throughout the year and seek the counsel of our strategic partners to develop the list of invitees for each grant cycle. (For more information about The Ocean Fund and our past grant recipients, please visit www.theoceanfund.com.)

How does RCL recognize environmental achievements by the ships in its fleet?

Since 1999, we have held an annual internal awards competition for Environmental Ship of the Year and for Innovative Ship of the Year. These awards honor the most environmentally responsible and innovative onboard staff and crew through a review of each ship's performance on internal and external audits, weekly and monthly reports, performance of equipment, reductions in environmental impacts, and *continuous improvement* efforts. The criteria and documentation for each ship are reviewed by a panel of independent experts in environmental management and conservation. The Environmental Ships of the Year each receive \$10,000 to donate to a charity of their choice, while the Innovative Ships of the Year receive \$5,000 for their designated charity.

In 2010, *Radiance of the Seas* won the Royal Caribbean International Environmental Ship of the Year award and *Liberty of the Seas* won the Royal Caribbean International Innovative Ship of the Year Award. *Radiance of the Seas* was honored for its performance in energy savings, waste management and incident prevention programs during challenging itineraries in South America, California and Alaska. During their South American itineraries, the ship's crew was able to reduce, reuse and recycle to such an extent that they did not need to landfill waste for more than a month. *Liberty of the Seas* was honored for a significant number of innovative ideas, including donations to the Blue Iguana Recovery Project in Grand Cayman and to "Trees for the Future" for planting 75,000 trees in Haiti. The ship also excelled in fuel-saving initiatives, advanced wastewater processing system modifications, reduced sludge landings and the use of energy-saving checklists.

In 2010, for the category of Celebrity Cruises and Azamara Club Cruises, *Celebrity Infinity* received top honors in both the Environmental Ship of the Year and the Innovative Ship of the Year categories. *Celebrity Infinity* excelled in many areas, including recycling 40 percent of its total annual waste that would have otherwise been landfilled. The ship was able to achieve this level of recycling despite difficult itineraries in Alaska, Antarctica and South America. As a point of comparison, this recycling level

is 10 percent higher than the average for our United States-based ships. In addition, *Infinity's* engineers developed and implemented an alternative cooling scheme for the ship's azipods propulsion, resulting in a measureable reduction in energy consumption.

Our Environmental and Innovative Ships of the Year have donated more than \$250,000 to charitable organizations since 1999. This past year contributions were made to the following conservation groups:

- **Blue Iguana Conservation Fund:** \$5,000 from *Liberty of the Seas* for the management and protection of the wild blue iguana population on Grand Cayman; and
- **The Galápagos Conservancy:** \$10,000 from *Radiance of the Seas* and \$15,000 from *Celebrity Infinity* to support the organization's efforts to protect the unique environment and culture of the Galápagos Islands.

DESTINATIONS

Cruise destinations tend to be located in some of the most biologically rich, unique and sensitive places on Earth. Our goal is to provide exceptional guest experiences while managing our impact on fragile ecosystems and communities. We know that our activities add significantly to local and global economies, but they can also provide incentives for conservation and environmental stewardship. We have a responsibility to promote sustainability in these destinations, a responsibility we share with international and local governments, nongovernmental organizations, civil societies, excursion providers, local businesses and communities, and our guests.

There are many complex factors involved in helping maintain the natural and cultural integrity of the places we visit. Four areas where we focus are

- developing destination management plans for sustainable growth;
- creating standards and quality assurance systems for excursion providers;
- educating guests, staff and local communities about environmental and cultural issues; and
- providing support for local conservation and community development efforts.

How is RCL contributing to efforts to protect the unique destinations that its ships visit?

In November 2009, RCL hosted a Destination Stewardship Think Tank onboard *Oasis of the Seas*, which was co-convened by Sustainable Travel International and attended by more than 20 leaders from the private sector of the travel and tourism industry, academia and nongovernmental organizations. The think tank led to the establishment of the Global Sustainable Tourism Council's Destination Stewardship Working Group, which is tasked with facilitating the development of global baseline sustainable tourism criteria and indicators for destinations.

In November 2010, we hosted the founding meeting of the Sustainable Travel Leadership Network (STLN) onboard our newest ship, *Allure of the Seas*. STLN, which is convened by Sustainable Travel International, is an executive-level forum for industry leaders committed to achieving the highest levels of sustainability. Founding member companies include RCL, Abercrombie & Kent, Micato Safaris, Sabre



Protecting Sea Turtles

Monarch of the Seas is partnering with the Sea Turtle Preservation Society of Melbourne Beach, Florida, to help protect endangered sea turtles along the Florida coast. Florida's beaches host the largest numbers of nesting loggerhead turtles in the western hemisphere, but these ancient creatures are threatened by fishing practices, hunting for their shells and meat, and habitat destruction. The Green Team of *Monarch of the Seas* and its officers, staff, and crew donated money through the ship's Crew Welfare Fund to adopt 19 sea turtle hatchlings, five turtle nests and three stranded turtles through the Sea Turtle Preservation Society.



Celebrity Xpedition Galápagos Fund

In 2006, Celebrity Cruises established the *Celebrity Xpedition Galápagos Fund* to support the conservation and protection of the Galápagos Islands' species and habitats. The program draws on *Celebrity Xpedition* guest donations, which total approximately \$150,000 annually. Celebrity matches guest donations with cruise credits, up to \$250 per person. Grants are made to a variety of non-profit groups and institutions for conservation initiatives, including research and innovative technologies, as well as education initiatives that boost public awareness of ocean and coastal issues and respect for the ecosystem. Donations to this fund are used exclusively to benefit charitable organizations in the Galápagos Islands.

In 2010, the Fund awarded \$103,025 to five organizations in support of projects that contribute to the Galápagos community. The projects focus on three main areas: conservation of species and habitats of the islands, sustainable tourism supported by local communities and local businesses, and education and employment for students of the islands. Among the activities supported were creation of an ecological trail and interpretive center on Santa Cruz island; improvement of municipal recycling operations in San Cristobal; development of environmental management plans for the mitigation of air, water and soil contamination on Santa Cruz; training and technical assistance for farmers on sustainable greenhouse agriculture; and a program to promote the use of bicycles as a way to lessen dependence on gas-powered vehicles.

Holdings/Travelocity, Rock Resorts International/Vail Resorts, Fairmont Raffles Hotel International, Four Seasons Hotels and Resorts, InterContinental Hotels Group, Loews Hotels, Xanterra Parks & Resorts, Finnair and Continental Airlines.

Working together, this peer-to-peer interchange helps its member partners to identify and assess key issues and provides a forum for information exchange on good business practices that facilitate social, environmental, and economic sustainability, both locally and globally. At the inaugural meeting, STLN member partners collectively decided to address issues related to climate change and destination stewardship.

We are also continuing our work on developing and implementing criteria and indicators for sustainable shore excursions, so that the activities of our guests while in ports of call do not adversely affect the ecosystems or communities in our many destinations. Integrating environmental, cultural and socioeconomic criteria in selection and contracting procedures with shore excursion providers will enable us to respond to a growing demand by our guests for environmentally and socially responsible products and services. Suppliers will be offered incentives for engaging in good practices and achieving high levels of certification, and implementation of the criteria will be verified by independent third parties.

In partnership with Sustainable Travel International (STI), we are building on our work in rolling out and testing the *Criteria and Indicators for Sustainable Marine-based Tours* developed by the Ocean Conservation and Tourism Alliance, a collaboration between the Cruise Lines International Association and Conservation International. These criteria are designed to assist cruise lines in identifying whether shore excursion providers are meeting operating standards for marine tours that provide quality and value, while supporting local communities and conserving the environment. The criteria form the basis for the STEP-Shore Excursions Standard, which STI developed with RCL as part of its Sustainable Tourism Eco-Certification Program (STEP). STI has created a Sustainability Planning and Reporting Kit and training program for shore operators, to help them meet this standard. Although the standard is initially being developed specifically for RCL, we hope that it can one day become an industrywide tool for increasing the sustainability of cruise ship shore excursion providers.

EDUCATION

It is no small task to make sure our guests and crew fully understand the importance of complying with onboard policies and procedures related to managing chemicals and waste streams, water and energy conservation, safety, security, and medical/public health concerns. The complexity of this educational challenge is compounded by the limited amount of time guests spend onboard — generally between three and fourteen days — and the fact that we must remember they are on vacation!

We provide training and education for our officers, staff and crew on a continuous basis, as our shipboard employees are in a perpetual state of rotation. All officers, staff, and crew must complete specific training requirements mandated by international law and our company environmental policies and procedures. Our ports of call provide additional educational opportunities related to environmental and cultural issues.

How does RCL educate its guests and crew members on environmental issues?

One of the most important ways in which we educate both our guests and our crew members on the importance of environmental stewardship is through our Environmental Officers (EOs). Since 1996, we have had a dedicated EO onboard each of our ships. EOs come from a broad range of backgrounds and from all over the world. Some come up through the ranks within the cruise industry, starting as bosons or engineers, or were military officers in their home countries, while others come directly from academia with a degree in marine environment and safety management or an advanced degree in environmental science. Wherever they come from, all EOs typically have an education in an environmental field; a good understanding of basic chemistry, biology, physics, earth sciences and/or public health science; or equivalent professional experience. Before the start of their first shipboard contract, all EOs are required to attend training on RCL's environmental programs and policies and the current shoreside management tools. All EOs also attend our biannual Environmental Officer Continuing Education Conferences.

EOs are responsible for training crew members on their ships in the company's policies and expectations and the ways in which Save The Waves® affects each employee. New and returning officers, staff and crew receive orientation and instruction concerning their responsibilities in the Save The Waves® program upon joining a Royal Caribbean International, Celebrity Cruises or Azamara Club Cruises ship. This training is mandatory and must be repeated with each contract. After every Save The Waves® training, each officer, staff and crew member signs a pledge to uphold his or her responsibilities to protect the environment. This personal commitment means that everyone understands the importance of this program and will do his or her utmost to incorporate Save The Waves® into every aspect of onboard life. In addition, each officer, staff and crew member is encouraged to take time to explain the concept and importance of Save The Waves® to our guests, and it is something that we believe is a source of significant pride throughout our corporate community.

Environmental Officers also provide educational programs and tours for guests. They develop environmental lectures based on the itinerary, giving guests insights on the local area. In 2010, we introduced "Oceans Ahead," a new series of free presentations onboard our Celebrity Cruises ships. The program is designed to educate Celebrity cruisers about the innovative approaches the brand has taken across the fleet to minimize our carbon footprint and our ongoing commitment to go *Above and Beyond Compliance*. Among the topics currently covered in the Oceans Ahead series are secrets of ship navigation, innovations in power generation and energy efficiency, onboard recycling, and ways that we are reducing our greenhouse gas emissions.

We actively support the efforts of our EOs and encourage each ship to develop partnerships with local schools and organizations in their ports of call. Through this outreach, we hope to inform residents of port communities about environmental conservation, waste management practices, recycling and the innovative technologies on our ships. For example, several of our ships have created partnerships with local schools and nonprofit organizations in their ports of call to educate and inform residents about the importance of environmental conservation. The EOs facilitate environmental tours onboard our ships for groups of school children and service groups in several of our ports of call. During these tours, participants can learn about the numerous environmental processes that are conducted onboard, from garbage management and recycling efforts to wastewater discharge.

Giving Back to Destinations

As part of our companywide commitment to making a difference in the destinations that we visit, our ships' crew members often donate their time and money to support local communities near their ports of call. These initiatives are part of RCL's G.I.V.E. (Get Involved, Volunteer Everywhere) program.

For example, over the last three years, the crew of *Legend of the Seas* has been visiting the Phuket Sunshine Village, a home for children who were orphaned in the 2006 tsunami. In January 2010, volunteers from the crew brought mattresses, clothes, shoes, reading lamps, fans, food, televisions and other items to the home, and spent hours visiting with the children. As one crew member noted, "When I think of the kids smiling once the delivery truck comes with all the gifts, I would gladly spend my time in Phuket delivering the WOW again and again."

In another example, in 2010, the crew of *Rhapsody of the Seas* chose to support the Port Moresby Business and Professional Women's Club, in Papua New Guinea. The club provides education to young women so that they can be empowered to start their own small businesses. In March, seven representatives of the organization came onboard the *Rhapsody of the Seas* for a small ceremony hosted by Captain Rick Sullivan on the bridge, where they were presented with a check for \$2,636 from the crew welfare fund. While in Papua New Guinea, *Rhapsody of the Seas* crew members also donated items to the Salvation Army, including fold-out sofa beds, linens, scarves, wooden tables, cereal bowls, and window blinds.

Educating Future Crew Members

In March 2010, *Splendour of the Seas* hosted 85 tourism students, their group leaders and a TV crew in Santos, Brazil. The students were part of a Brazilian government program called "Future Crew Members," a six-month course that trains students to work on cruise ships. The students came onboard the ship to learn more about ship life, tour the guest and crew areas, and talk with Brazilian crew members about their work and life at sea. Subjects covered included training, safety, security, environment, onboard culture, excursions, conduct policies and promotion practices. After these students graduate from the course, they will be invited to take part in pre-screening, selection and final interviews for entry-level positions with RCL.

COMMUNITY INVOLVEMENT



Nearly 2,300 community and business leaders joined United Ways of Broward and Miami-Dade on November 28 and 29, for a charity cruise onboard Royal Caribbean International's newest ship, *Allure of the Seas*. The cruise raised \$1.3 million to help improve lives throughout Broward and Miami-Dade communities. All proceeds from the sold staterooms, as well as the casino, were donated to the charitable causes. In addition, \$100,000 from the proceeds has been awarded to Royal Caribbean education efforts in Haiti.

Among the highlights of the overnight cruise was the much-anticipated announcement of the ship's godmother. During the naming ceremony, a larger-than-life Princess Fiona, from DreamWorks Animation's film series "Shrek," was unveiled the first-ever 3-D animated godmother.

Throughout our company's history, we have sought to be a good neighbor and community partner. Our corporate citizenship programs enhance our relationships with our communities, customers, and employees, which in turn strengthens our company and benefits our shareholders. From our U.S. and international offices to wherever our ships sail worldwide, we help make local communities better places to live and work by encouraging volunteerism and offering funding and donations to nonprofit organizations with like-minded goals. Our corporate philosophy is to fund organizations that benefit and offer services to the entire community, and we focus support in three areas: 1) children and families, specifically foster care programming, 2) educational programming, and 3) marine conservation, through our Ocean Fund.

Executive officers of Royal Caribbean Cruises Ltd. serve on boards of nonprofit organizations in local communities, with several executives serving on more than one. This gives our company the opportunity to extend its reach into the underserved areas of our communities.

Our company has a long-standing partnership with United Way. Each of our North American offices runs an annual employee giving campaign that helps to create lasting, positive change in the lives of children, teens, families and seniors in the various communities in which we do business. With our corporate headquarters located in Miami, the largest of these campaigns takes place in partnership with United Way of Miami-Dade. In addition, several of our executives hold volunteer leadership roles with United Way, extending the impact that our company is making in the community.

We have a tiered approach to community involvement that includes volunteerism and support programs. Our volunteer programs include: our corporate volunteer day, G.I.V.E. Day; our shipboard volunteer days, G.I.V.E. for the Holidays; ongoing projects in Labadee, Haiti, and Overtown, Miami; and Executive Board placement. In conjunction with the Make-A-Wish Foundation, we sponsor *Wishes at Sea*, our tri-branded wish granting program; Destination Joy, a cause-related marketing campaign; and *Walk for Wishes*. We also provide support for hurricane relief and personal crisis aid with the Royal Caribbean's Crew/Employee relief fund. Through our focus on children, education and foster care programming, we participate in mentor programs, and sponsor the Fain Scholarship program.

Our strong belief in education and mentoring programs runs throughout the company, and we are proud that our employees participate in several volunteer programs focused on education in the South Florida and Wichita, Kansas, offices. These initiatives include the City Year Miami and BIGs in School mentoring programs, the School to Work worksite visit program, and the Kids and the Power of Work (KAPOW) program, which teaches students about various career opportunities through presentations by professionals.

G.I.V.E. PROGRAM

Royal Caribbean's **Get Involved, Volunteer Everywhere** (G.I.V.E.) program was launched in 1997. Every spring, on G.I.V.E. Day, employees and their friends and families, vendors and business partners, join forces nationally and internationally to assist nonprofit and community organizations in improving the quality of life in their communities. Our employees have pitched in at schools, children's homes, museums and neighborhoods in the United States, the Caribbean and Europe. We've expanded this program to include "G.I.V.E. for the Holidays," through which shipboard employees raise money for destination-based charities of their choice, including orphanages, shelters and community centers around the globe.

In 2010, over 1,000 employees around the world participated in G.I.V.E. Day volunteer projects. In South Florida, our employees focused on painting and landscaping two large projects at foster care agencies: His House Children Homes, JAFCO, as well as at a school in little Haiti, The Yvonne Learning Center. Employees also volunteered at an environmental project at Shake-A-Leg of Miami.

PAN-AMERICAN DEVELOPMENT FOUNDATION PARTNERSHIP

Through an alliance with the Pan-American Development Foundation (PADF), we have been able to broaden the reach of our community partnerships and assistance to include disadvantaged people and communities in Latin America and the Caribbean. PADF empowers these communities to achieve sustainable economic and social progress, strengthen their communities and society, and prepare for and respond to natural disasters and other humanitarian crises, all of which advances the principles of the Organization of American States. During 2010, PADF's programs reached more than 7 million people in 20 countries. Our partnership with the Foundation maximizes our reach to many impoverished neighborhoods and allows us to leverage resources to create a greater impact for communities with the greatest needs. In addition, crew members from our ships volunteer often with the Foundation's many partners in our ports of call throughout Latin America and the Caribbean. Our involvement has helped fund Granitos de Paz, a community development organization in Colombia; Building Haiti from the Ground Up, a program of the Inter-American Development Bank on the Haiti-Dominican Republic border; Child Resiliency, a children's support program in Jamaica; school rehabilitation and reconstruction in Panama; a water access project in Honduras; and earthquake relief in Perú, Haiti and Chile.

What is Celebrity Cruises' main charitable cause?

Celebrity Cruises has identified breast cancer research as its main charitable cause. As part of this commitment, we have honored three breast cancer survivors as godmothers for each of the three new ships in the Solstice-class: *Celebrity Solstice*, *Celebrity Equinox* and *Celebrity Eclipse*.

In April 2010, the European inaugural and naming celebrations for *Celebrity Eclipse* were presided over by godmother Emma Pontin, a highly accomplished ocean-racing yachtswoman and breast cancer survivor. As a part of these celebrations, we



G.I.V.E. Program volunteers



Walk for Wishes onboard Freedom of the Seas



Hôpital Sacre Coeur

HOW DID RCL RESPOND AFTER THE JANUARY 2010 EARTHQUAKE IN HAITI?

On January 12, 2010, the Caribbean island of Haiti suffered a catastrophic earthquake causing severe damage throughout the country and staggering loss of life. For more than 30 years, Royal Caribbean Cruises Ltd. has had close ties to Haiti, and has been one of the country's largest investors. Royal Caribbean's involvement in Haiti includes its private beach destination, Labadee, which is located on the northern coast of the island. Upon confirming that Labadee had not experienced any damage from the earthquake, Royal Caribbean faced the significant and important decision of whether or not to return to the port of call for upcoming cruises, a decision we did not take lightly. It was only after receiving approval and encouragement from the Haitian government and the U.N. Special Envoy to Haiti that Royal Caribbean made the decision to return to Labadee.

Beginning just three days after the earthquake, Royal Caribbean was transporting much-needed supplies to Haiti. Our first ship to call in Haiti after the earthquake was *Independence of the Seas*, which arrived in port at Labadee on January 15. The ship loaded the supplies – including food, water, milk, soap and hand sanitizer — mid-cruise while the ship was in San Juan, Puerto Rico. Within one week of the earthquake, our ships delivered more than 50 pallets of supplies for the relief effort, at a time when port and air operations in the nation were severely curtailed. In total, we transported more than 3,000 pallets — about 124 tractor trailers — of much needed supplies onboard Royal Caribbean International and Celebrity Cruises ships that called on Labadee.

With international relief efforts focusing mostly on the Port-au-Prince area, Royal Caribbean concentrated our relief efforts in Northern Haiti, the area where Labadee is located. Not only did the northern region receive an influx of refugees from the earthquake-affected areas, but damage to roads and bridges cut off the supply lines through the interior of the country. Through the supplies being transported on our ships, and our partnerships with numerous nongovernmental organizations and foreign government agencies, we were able to create a new lifeline of supplies.



We supported relief efforts both in the area around our port and in the larger cities of the region, Cap Haïtien and Milot. In Cap Haïtien, which is approximately six miles from Labadee (but 45 minutes away due to road conditions), we established a partnership with the Hôpital Universitaire Justinien, the only major hospital in the city, which is also supported by Konbit Sante, a Maine-based volunteer partnership.

We also established a partnership with the CRUDEM Foundation, which runs the Hôpital Sacre Coeur, the largest private hospital in the north. The hospital is located in the town of Milot, a region about 10 miles southwest of Cap Haïtien, which is about an hour and a half away by road. Sacre Coeur, normally a 72-bed hospital, received hundreds of patients within days of the earthquake, and over the ten months following the earthquake treated more than 1,000 victims and performed over 800 surgeries. We delivered much needed medical equipment and supplies to both of these hospitals, including a mini-ambulance donated by the Jacksonville Jaguars.

Other key partnerships included Burn Advocates Network, Ltd., Compassion Alliance, Project Medishare/University of Miami Miller School of Medicine, For Haiti With Love, Project C.U.R.E., Direct Relief International, Clean the World, Can Do, and Kids Against Hunger.

In addition to supplies, we also contributed significant funds to the relief effort. From January 12 until March 12, 2010, every dollar of revenue at our Labadee destination, including money generated from aquatic activities, excursions and beverage sales, was donated to Haiti relief via the Solano Foundation, Royal Caribbean's foundation in Haiti. In total, more than \$1.1 million was raised and donated during this period. We also collected \$288,650 in voluntary cash donations for Haiti relief from our guests and shoreside employees. These funds were distributed to those in need in Haiti by Food for the Poor, Compassion Alliance, the Pan American Development Foundation and the Solano Foundation. Royal Caribbean also used a portion of the funds raised to augment the company's Crew Relief Fund, which could be drawn on by any of the company's more than 200 Haitian crew members for assistance. To date, Royal Caribbean's monetary contribution to the Haiti relief effort is at least \$2.5 million, which includes money raised from the donated Labadee calls, the onboard guest donations, and matching funds.



Forward mooring deck filled with Haiti relief supplies



L'ECOLE NOUVELLE ROYAL CARIBBEAN

On October 21, 2010, Royal Caribbean opened L'Ecole Nouvelle Royal Caribbean — one of the first schools to be built in Haiti after the earthquake. The strategically located 6,500-square-foot school complex is in northern Haiti near nine towns and villages: Labadee, Cormier, Ducroix, Fort Bourgeois, Marchegalles, Cimetiere-Juif, Champ de Mars, Port Francais and Cap Haïtien. The campus consists of six buildings, with 12 classrooms, administrative offices, a computer lab and bathrooms. The school will provide an education to children from the area, including classes in English and environmental stewardship. In the evenings adults will attend vocational training.

In delivering the school to the Haitian people as promised, Royal Caribbean worked with South Florida based InnoVida and the St. Coleman's School, as well as Haiti-based ProDev, L'Ecole Nouvelle Zoranje and the Solano Foundation.

The school is on land Royal Caribbean leases from the Haitian government. Construction of the entire school complex was completed in only four weeks, using 50 local Haitian workers, in time for the 2010-2011 school year. All construction materials were transported from Miami onboard our cruise ships. The pre-fab structures can sustain hurricane winds, resist earthquakes due to their high deflection capacity, are waterproof and are a highly energy efficient system.

This first school is a primary school for grades kindergarten through 5. There are three kindergarten classes with 36 students, and each grade 1 through 5 will have 25 students, for a minimum of 230 children educated in this school year. We are now in the planning stages for our next Haitian school-building project.

Continuing our tradition of promoting innovation and creativity, Royal Caribbean partnered with the YMCA of Greater Miami and provided children an opportunity to name the school in Haiti. Out of the more than 3,000 submissions received, a seventh grader from the YMCA afterschool program in Miami Lakes proposed the winning name L'Ecole Nouvelle Royal Caribbean.





Celebrity Eclipse's Repatriation Mission

In April 2010, the eruption of the Eyjafjallajökull volcano in Iceland brought much of the world's air travel to a standstill and left many travelers stranded with no way to return home. Celebrity Cruises worked with tour operators in the U.K. to help repatriate nearly 2,200 Britons from Spain, on our newest Celebrity ship, *Celebrity Eclipse*, which was in Southampton, England, for its inaugural celebrations. The repatriation mission replaced a previously planned two-day promotional cruise for travel partners and press. The 2,200 travelers who were given a ride home on *Celebrity Eclipse* were customers of U.K. tour operations Thomson, First Choice, Thomas Cook, Travel Counselors and the Co-Operative Travel Group. We also made 50 staterooms available to other Britons who had an urgent need to return to the U.K.; these travelers were identified with assistance from the U.K. Foreign Commonwealth Office's crisis team in Madrid.

sponsored the "Celebrity SunWalk" to raise funds for the breast cancer charity Walk the Walk. The Celebrity SunWalk involved men and women in decorated bras walking 5K and 10K routes through Southampton, England, ending in Mayflower Park in front of *Celebrity Eclipse*.

In October 2010, Celebrity Cruises teamed with the Miami Dolphins to raise awareness about the importance of finding a cure for breast cancer. Through this partnership, we worked with the University of Miami's Sylvester Comprehensive Cancer Center to identify 25 breast cancer survivors in South Florida. Celebrity Cruises then partnered with the Miami Dolphins to honor these survivors during a pre-game ceremony at a Dolphins home game. As part of this ceremony, the company gave each of these survivors a complimentary cruise on *Celebrity Eclipse*, where they were hosted by Celebrity's President and CEO, Dan Hanrahan, and the ship's godmother, yachtswoman and breast cancer survivor Emma Pontin. On this sailing we also honored our courageous employees who have battled breast cancer.

What is Royal Caribbean International's main charitable cause?

Through a partnership with the Make-A-Wish Foundation®, we have contributed millions in resources to make wishes come true for children facing life-threatening illnesses around the globe. Since 2000, our Wishes at Sea cruise donation program has hosted more than 1,500 wish kids and their families around the world, contributing more than \$32 million in in-kind services and over \$450,000 in discount savings. Through employee and guest fundraising efforts such as Walk for Wishes, we have also raised more than \$1.2 million and collected over 500,000 frequent flier miles for the program since 2008. We also have executive officers serving on local chapter boards of the foundation in cities where we have corporate offices.

How was RCL recognized in 2010 for its extensive community involvement?

In 2010, RCL received several awards acknowledging our efforts to be a good community partner around the world. These honors included:

- Make-a-Wish Foundation, South Florida, Corporation of the Year – Royal Caribbean Cruises Ltd.
- International Make-A-Wish Foundation, Global Corporate Partner of the Year Award – Royal Caribbean Cruises Ltd.
- Pan-American Development Foundation, Corporation of the Hemisphere Award – Royal Caribbean Cruises Ltd.
- Jewish Adoption Foster Care Organization, Corporate Partner of the Year Award – Royal Caribbean Cruises Ltd.
- Yvonne Learning Center and Hope Development of Haiti, Corporation of the Year Award for our efforts in Haiti – Royal Caribbean Cruises Ltd.
- Seafarers House of Port Everglades, CEO of the Year Award – Adam Goldstein; Corporation of the Year Award – Royal Caribbean Cruises Ltd.



The image features a large cruise ship sailing on a body of water during a sunset. The sun is low on the horizon, casting a warm, golden glow across the sky and reflecting on the water's surface. In the background, there are dark, silhouetted mountains and a town built on a hillside. The top of the image has a decorative border with a repeating pattern of small, stylized snowflakes or floral motifs. The overall mood is serene and scenic.

SAFETY AND SECURITY



As Vice President of Global Security and Maritime Safety, I am pleased to present the Safety and Security section of our 2010 Stewardship Report. I think you will discover from the content and details in this section that our overarching goal is to be proactive in our efforts to improve our Safety and Security programs. In 2010, we have aimed to further develop and enhance the structure of our programs, building on the solid program foundations that exist.

In today's environment, the challenges faced by our Safety and Security Team are many. We have worked diligently throughout 2010 to have a positive impact on the quality, safety and security of vacations for our guests on RCL ships. A significant accomplishment this year for our Safety and Security Team was the implementation of revised procedures and operational changes to quickly and effectively comply with the new regulatory requirements contained in the Cruise Vessel Security and Safety Act, which was passed by the U.S. Congress in July 2010.

As you will see in this section, our safety and security efforts focus on prevention, training and preparedness, and incident response. Our paramount goal is to prevent any safety or security incident from happening. However, we also embrace the concept of being a "learning organization," and if an incident does occur, we consistently review the incident and seek to improve operations and procedures. Our goal in this continuing improvement process is to prevent incidents from happening.

Each year brings new challenges and opportunities. I hope that after reading the Safety and Security section, you will understand the pride that I feel in the accomplishments of our company and my team. We have set our goals for 2011 at a high level, and we fully expect to achieve them. I hope you are impressed with what you are about to read, and that the genuine commitment of our team to keep our ships safe and secure is fully reflected in our report.

A handwritten signature in black ink that reads "Lawrence J. Bowling". The signature is written in a cursive style.

Lawrence J. Bowling
Vice President, Global Security and Maritime Safety
Royal Caribbean Cruises Ltd.



Safety and Security Staff Experience

RCL's Safety and Security employees have extensive background in agencies and industries from around the world. This breadth of experience brings real-life perspective and practical appreciation of the measures needed to provide for the safety and security of our guests and crew. Current Global Security Department employees have previously served in agencies such as the Israeli Defense Forces, the U.S. Federal Bureau of Investigation, the U.S. Coast Guard, the U.S. Drug Enforcement Administration, the Florida Office of the Attorney General, the New York Police Department and other similar entities responsible for public safety. In fact, their experience includes a total of about 175 years of professional U.S. law enforcement experience. Current Maritime Safety Department employees have backgrounds and experience with the Canadian Coast Guard, the U.S. Coast Guard, and the Swedish Navy, as well as experience in industrial safety organizations, and in delivering instruction on marine firefighting. Combined, these two departments have members who have served on many different types of ships, including tankers, container ships, oil rigs and cruise ships.

The safety and security of our guests, crew, and shoreside employees is our highest priority. At Royal Caribbean Cruises Ltd. (RCL), our approach to safety and security includes being *Above and Beyond Compliance* with laws and applicable regulations, implementing measures that prevent incidents from occurring, and being prepared to effectively respond if an incident does occur.

Safety and security is a shared responsibility between RCL, governments, guests and crew. RCL is dedicated to ensuring that our guests enjoy a safe and secure cruise vacation and that our employees work in a safe and secure environment. This dedication extends to our shoreside facilities, ships and private destinations, as well as seaport terminals and while ashore in ports of call. However, occasionally, despite the best intentions of everyone involved, a safety or security incident may occur. In such cases, we are prepared to respond in a timely, effective and caring manner, to minimize adverse impacts and to understand and learn from the incident so that we can implement procedures to help prevent future incidents.

Within RCL, safety and security is managed by a dedicated vice president-level officer, who develops policy and oversees its execution throughout the fleet. The vice president is supported by a shoreside and shipboard team that has extensive technical training and experience. This team consists of experts in their field, who routinely provide issue-specific support and leadership within the company, the cruise industry, and beyond. Overall, our safety and security team is comprised of highly motivated professionals dedicated to meeting the needs of the guests and crew who sail on our ships. Our Maritime Safety and Global Security Departments report through a senior vice president directly to the RCL Chairman and Chief Executive Officer.

Many aspects of our safety and security programs are sensitive; however, the following sections provide information about some of RCL's initiatives, policies and procedures in these important areas.

REGULATORY STANDARDS

The cruise industry is highly regulated, and there are many important and internationally recognized standards that guide the industry's safety and security efforts. In general, the maritime regulatory environment is complex. Commercial ships (including cruise ships) are flagged (or legally affiliated) with a particular nation, which makes each ship then subject to the regulatory control requirements of its "flag state," regardless of where it operates in the world. This is true whether a ship is located in international waters (beyond the boundaries of any nation or state) or is within a nation's territory (when transiting, approaching, or calling at a port). RCL ships are currently registered and operate under the flags of Malta, the Bahamas or Ecuador.

In addition to worldwide flag state control, commercial ships are governed through the application of international regulations established by the United Nations, through its International Maritime Organization (IMO). The IMO establishes regulations, which are then adopted and enforced by flag states and nations around the world. Compliance is monitored by ship inspections that are carried out not only by "port states" (nations where a ship calls), but also by classification societies, nongovernmental organizations who, on behalf of the flag state, formally evaluate and certify a ship as fit for service. Without this certification, a ship may not operate. IMO regulations help standardize the maritime regulatory environment.

When a ship is located in the waters of an individual nation, it is also subject to the laws and regulations of that nation. This adds another layer of control on the activities of the ship and its guests and crew. Different laws may therefore apply as a ship passes from one nation's territorial waters to international waters and then into another nation's territorial waters. Some nations, most notably the United States, have even passed laws that provide "extra-territorial jurisdiction," which, under specific circumstances, extend their ability to enforce laws to international and even foreign national waters.

What are some of the regulatory and legal standards that apply to onboard safety and security?

Applicable standards include:

- **Flag State, Port State and other Governmental Laws and Regulations** require the reporting of alleged illegal activity and safety incidents, regardless of where in the world the activity may occur. For example, the United States has regulatory (Title 33 Code of Federal Regulations, Part 120.220) and legislative (Title 46, Section 3507, referred to as the Cruise Vessel Security and Safety Act [CVSSA] of 2010) requirements that, in specified situations, alleged shipboard criminal activity must be reported to U.S. federal law enforcement authorities (USCG and FBI).
- **The International Convention for the Safety of Life at Sea (SOLAS)** is generally regarded as the most important of all international treaties concerning the safety of merchant ships. It has been amended and updated a number of times since its first version was adopted in 1914, in response to the Titanic disaster. The fourth version, adopted in 1960, was the first major task for the IMO after the Organization's creation. The SOLAS convention is periodically amended to reflect the highest level of safety. Its provisions include (but are not limited to) construction (stability, machinery and electrical installations); fire protection, detection and extinction; life-saving appliances and arrangements; radio communications; navigation; and management for the safe operation of ships.
- The **International Code for the Safe Management of Ships (ISM)** provides an international standard for the safe management and operation of ships, for the establishment of safeguards against identified risks, and for pollution prevention. The ISM requires a safety management system to be established by "the Company" (defined as the ship owner or operator) that must include a safety and environmental protection policy, defined levels of authority and lines of communication between and among shore and shipboard personnel, procedures for reporting incidents, procedures for responding to emergencies, and procedures for internal audits and management review.
- The **International Ship and Port Facility Security (ISPS) Code** is a 2004 amendment to the SOLAS Convention (1974/1988). The ISPS Code, which was developed in the wake of the September 11, 2001, terrorist attacks in the United States, established security standards for ships, ports and government agencies around the world. It requires governments, shipping companies, shipboard personnel, and port and facility personnel to detect security threats and take preventive measures against security incidents affecting ships or port facilities used in international trade. It also requires measures such as ship security plans, ship and company security officers, certain onboard and port facility security equipment, port facility security plans and security officers, access monitoring,



International Standards

The International Ship and Port Facility Security (ISPS) Code is an amendment to the SOLAS Convention and addresses security arrangements for ships, ports and government agencies.



Celebrity Millennium *special needs access stateroom*



Celebrity Solstice *balcony stateroom*

control of the activities of people and cargo, and readily available security communications. The ISPS Code has been adopted by 148 states (nations), including each of RCL's flag states (as well as the United States). Therefore, the ISPS Code applies to RCL and each of our ships, regardless of where in the world they are sailing.

- **Transportation for Individuals with Disabilities: Passenger Vessels** (became effective November 3, 2010): Title 49 U.S. Code of Federal Regulations, Part 39 contains a list of 128 specific guidelines and changes related to service and policy issues involving guests with disabilities. This law requires compliance by vessels that originate from or visit a U.S. port.
- **Port Security within the United States**, as it relates to ISPS Code requirements, is mandated by the **Maritime Transportation Security Act of 2002 (MTSA)**. The MTSA created a consistent security program for the protection of U.S. ports and vessels, to better identify and deter security risks. The MTSA requires vessels and port facilities to conduct vulnerability assessments and develop security plans that address passenger, vehicle and baggage screening procedures; security patrols; establishment of restricted areas; personnel identification procedures; access control measures; and installation of surveillance equipment. In accordance with the MTSA, these requirements are to be enforced by the U.S. Coast Guard, which is empowered to impose control and/or enforcement actions that may include inspection, delay or detention of a ship; restriction of ship operation; expulsion of the ship from port; and/or lesser administrative or corrective measures.
- **Manifest Screening**, for ships embarking in the United States, is conducted through a U.S. screening program referred to as the electronic Notice of Arrival and Departure (eNOAD). Under this program, RCL submits for U.S. Government screening the guest manifests and crew lists for ships departing from or arriving in the United States. RCL participates in similar government screening programs in other nations that we visit.
- **Cruise Industry Zero Tolerance Policy for Crimes:** Corporate policy and industry agreement require full compliance with incident reporting requirements. RCL is committed to reporting all alleged illegal activity to law enforcement; this includes being in full compliance with Title 33 U.S. Code of Federal Regulations, Section 120 and the more recently enacted Title 46 U.S. Code, Section 3507 (see the CVSSA section of this report). As far back as 1999, RCL and other cruise companies embraced a "Cruise Industry Zero Tolerance Policy for Crimes Committed Onboard Ships," which established an industry standard that all allegations of onboard crime be reported to the appropriate law enforcement authorities. For vessels calling on U.S. ports or crimes involving U.S. citizens, this reporting may also include the FBI. According to this policy, if a crime allegation is made, the appropriate law enforcement authority will be notified so they can investigate and prosecute to the fullest extent of the law. In applying this regimen, RCL reports alleged crimes to flag state officials, the FBI (where required or indicated), and to the law enforcement authorities at the next port of call. RCL fully cooperates with the authorities so that perpetrators of crime can be brought to justice.
- **The Cruise Industry's Written Agreement with the U.S. Government:** The Cruise Lines International Association (CLIA), the world's largest cruise industry organization, represents RCL and more than 20 other companies comprising

nearly every cruise line doing business in the United States. On March 14, 2007, CLIA entered into a written agreement with the Federal Bureau of Investigation (FBI) to report allegations of criminal activity to the FBI. RCL is committed to this agreement. Subsequent to this agreement, the 2010 CVSSA codified important aspects of this agreement and unique cruise industry partnership with law enforcement.

How does RCL manage effective compliance with regulatory standards?

Our corporate safety and security policy has been developed to guide our compliance with the many regulations that govern our ships around the world. RCL's *Safety, Quality and Management System* (SQM) houses policies and procedures that keep us in compliance with not only the regulatory requirements of ISM and ISPS Codes, but also with our certifications under the International Organization for Standardization (ISO). SQM policies, processes and practices address the means by which safety, security, health and environmental stewardship are maintained from ship to ship and person to person.

Information related to company-approved methods for conducting day-to-day operations and managing company business is documented in our policies, processes and procedures. Such documentation is aimed at ensuring that consistent standards of performance are maintained throughout the organization. Through *Continuous Improvement* initiatives, our procedures and operations are enhanced.

At RCL, our SQM sets forth standards and instructions for meeting mandatory rules, regulatory requirements, and voluntary standards. By integrating our legal obligations with the aims of voluntary standards such as ISO 9001 for Quality Management and ISO 14001 for Environmental Management, RCL provides a framework for meeting our corporate goal of operating *Above and Beyond Compliance*.



Door Viewer Project

An important physical shipboard change has been made as a result of a suggestion by a guest who sailed in 2006. The guest recommended that we install viewers (or "peep holes") in each guest stateroom on every ship in the Royal Caribbean International, Celebrity Cruises and Azamara Club Cruises fleets. RCL adopted this recommendation in 2007, and completed the project in 2010. Now, just as in a hotel, our guests and crew have the ability to see who is at their door prior to opening it. The Door Viewer Project was completed well in advance of the Cruise Vessel Security and Safety Act, which by United States law now requires door viewers be installed by January 2012.



Thermal Imaging

RCL has been testing thermal imaging cameras onboard several ships to evaluate their most effective positioning for specific low-light applications. Cruise-specific software solutions for nighttime overboard detection are an important part of such capability, however they have yet to be proven sufficiently reliable.

THE CRUISE VESSEL SECURITY AND SAFETY ACT OF 2010

The Cruise Vessel Security and Safety Act (CVSSA) of 2010 (Title 46, U.S. Code, Sections 3507 and 3508) was signed into U.S. law on July 27, 2010. It was fully supported by RCL and other cruise lines and is applicable to all cruise ships that embark or disembark guests in the United States. RCL is in compliance with the law.

The CVSSA addresses several areas of cruise ship design and operation.

- **Railing Heights:** Effective in January 2012, cruise lines are required to maintain ship's railings at no less than 42 inches above the cabin deck.
- **Access Control:** Cruise lines are required to utilize security latches, time-sensitive key technology, and "peep holes" on guest stateroom and crew cabin doors.
- **Detection Technology:** Cruise lines are required to integrate technology for capturing images or detecting passengers who have fallen overboard, to the extent that such technology is available.
- **Hailing System:** Cruise lines are required to maintain an acoustic hailing system or other such warning devices to provide communication capability



Onboard CCTV

RCL utilizes CCTV cameras in public areas to document incidents that may occur.



Crew members attending training onboard

around the entire ship if it is operating in high-risk waters.

- *Closed-Circuit Television (CCTV)*: Cruise lines are required to maintain a video surveillance system to assist law enforcement in documenting incidents that may occur onboard.
- *Security Guide*: Cruise lines are required to make a Security Guide available to their guests, which explains the U.S. Government's legal jurisdictional authority in activities occurring on cruise ships and provides a description of the security and medical personnel aboard the ship, as well as their availability.
- *Resource Directory*: Cruise lines are required to provide their guests and crew with contact information for U.S. embassies/consulates, law enforcement agencies and third-party victim advocacy organizations. The law also requires that victims of crime be provided with the confidential means (private telephone or Internet access) to contact these resources.
- *Medical Preparedness*: Medical Units on cruise ships are required to be staffed by credentialed physicians and nurses meeting specific professional criteria. (For example, medical staff must possess a current physician's or registered nurse's license and have at least three years of post-graduate/post-registration clinical practice in general or emergency medicine, or hold board certification in emergency medicine, family practice or internal medicine.) Cruise ships are also required to maintain anti-retroviral drugs and evidence collection materials.
- *Patient Communication*: If an allegation of sexual assault is received, cruise lines are required to provide written documentation of the findings of medical examinations to the involved patient and to keep those records confidential.
- *Crime Allegation Reporting*: Cruise lines are required to maintain a log of information relating to crime allegations. For certain crime allegations specifically enumerated in the law, the CVSSA requires prompt reporting to the Federal Bureau of Investigation (FBI).
- *Crew Training*: The CVSSA requires the development of training standards and curricula to allow for the certification of cruise ship security personnel and law enforcement officials on the appropriate methods for prevention, detection, evidence preservation and reporting of criminal activities in the maritime environment.

How does RCL stay aware of emerging safety and security regulatory requirements, and were any issued in 2010?

RCL keeps abreast of domestic and international regulations through regular monitoring of daily postings at maritime websites and through liaison with our Classification Societies (Det Norske Veritas and Lloyd's Register), our Flag State administrations, and with Port State Control agencies, such as the U.K.'s Maritime and Coastguard Agency and the U.S. Coast Guard. We are also active members of the Cruise Lines International Association (CLIA), the world's largest cruise industry organization. Through CLIA, we provide an industry perspective and help inform positive changes in domestic and international regulatory matters that enhance both safety and security.

As one example of a recent change, in 2010 the IMO released regulatory standards for infant life jackets on cruise ships. RCL ships have been equipped with quality manufactured and regulatory agency-accepted child life jackets for use on infants onboard our ships; however, this new IMO regulation established, for the first time, a uniform international industry standard as to the design specifications of infant life jackets. (RCL is in compliance with this regulation.)

Another example of a regulatory change for RCL in 2010 involved the CVSSA, passed by the U.S. Congress in July 2010. This act includes a standardized set of security and safety requirements that must be met by every ship that embarks or debarks passengers in a U.S. port, regardless of where the vessel is flagged. (See the CVSSA section for more details on RCL's compliance with this important new law.)

How does RCL work with regulatory authorities to improve industry safety regulations and standards and inform legislators of current practices?

In 2006 and 2007, the U.S. Congress held hearings on cruise ship safety and security. RCL senior executives participated in these hearings to provide needed details about existing safety and security procedures. Over the ensuing three years, congressional staff met with private citizens and subject matter and industry experts (including RCL) to better understand existing procedures and to prepare a law that standardizes and requires best practices on ships calling on U.S. ports. Concurrently, RCL and other cruise industry leaders met frequently with private individuals and organizations interested in improving safety and security in the cruise industry. Through these meetings and outreach efforts, RCL was able to work with governmental and nongovernmental organizations to inform legislators and the public of current cruise ship safety and security practices. The result of this work by many was the widely supported CVSSA of 2010 (see CVSSA section for more details).

As a member of the Cruise Lines International Association (CLIA), RCL sends representatives to IMO committee and subcommittee meetings as industry experts and to lend its considerable operational experiences in support of the IMO. In this role, we participate as a nongovernmental consultative representative, to contribute our practical experience on what works and what doesn't in the operation of our ships, and to offer our perspective on what safety regulations and standards are needed.

For example, RCL has been involved in the Safeguard Project, a ship evacuation analysis that is being funded by the European Commission. This is an important initiative that is analyzing ship emergency evacuation processes on roll-on/roll-off ferries without cabins, ferries with cabins, and cruise ships. It is being conducted by the University of Greenwich, in conjunction with a private company, and is looking at how



IMO delegates representing member nations gather from around the world

International Maritime Organization

In recognition of the international nature of shipping, the United Nations created the International Maritime Organization (IMO) in 1948. This body establishes international conventions, protocols and codes that are then ratified and adopted by its 169 member states before coming into force. The member states are then responsible for seeing that vessels operating under their flags and within their territories meet the requirements of the various regulations.



quickly guests can assemble at their muster stations after the signal to evacuate the ship is sounded.

In support of this important initiative, in July 2010, RCL invited the Safeguard Project to conduct an evacuation drill on one of its ships. During this drill, guests wore Radio Frequency Identification (RFID) Tags to monitor their movements as they reported to their muster stations. Using video footage and information from the RFID tags, the study team assembled data on the movements of every drill participant. Analysis will assist the project team and the IMO in better understanding the dynamics of shipboard crowd movement in an emergency. RCL is proud to be part of this important project.

What type of auditing and oversight procedures does RCL use to monitor whether its safety and security policies, practices and procedures are meeting regulatory standards?

Our Safety, Quality and Management System (SQM) is subject to an ongoing process of internal and external audit and review by maritime experts who are familiar with vessel safety, security and environmental operational requirements. The purpose of these audits is to confirm that we continue to safely operate our vessels and that the SQM system itself is effective.

RCL auditors conduct yearly internal audits of each ship and shoreside location, reviewing practices relating to safety, security and environmental stewardship and evaluating their compliance with policies contained in the SQM. Opportunities for improvement or observations of best practices are noted and considered for action.

Representatives of our flag state, usually a Classification Society, also conduct audits of RCL's operations as part of their oversight responsibilities. These audits verify that applicable international regulations and national laws are being maintained to an acceptable standard. Evidence of the flag state's satisfaction with the company's compliance is provided through an endorsed Document of Compliance (DOC). Compliant vessels are issued an endorsed Safety Management Certificate (SMC).

In addition to RCL's internal audits and flag administration audits, representatives from port states (countries that a ship visits during a cruise) can also conduct inspections. These Port State Control visits are conducted, according to the IMO, "to verify that the condition of the ship and its equipment comply with the requirements of international regulations and that the ship is manned and operated in compliance with these rules." If deficiencies are found, the port state officials can require items to be corrected immediately and even detain a vessel until any matters of concern are addressed. In a severe case, the port state may recommend to the flag state that the DOC or SMC be removed, thus preventing the vessel from operating.

Oversight does not end with these audit and inspection schemes. In line with our company philosophy of being *Above and Beyond Compliance*, RCL also adheres to the requirements of a variety of voluntary standards. Two of these standards include ISO 9001, Quality Management Systems, and ISO 14001, Environmental Management Systems. ISO 9001 is principally known for encouraging organizations to set standards relating to achieving customer satisfaction and fulfilling customer requirements for quality. ISO 14001 is aimed at reducing an organization's impact on the environment. Both of these standards encourage organizations to manage their businesses effectively and efficiently, with a particular emphasis on setting and achieving goals and objectives. This approach complements our other compliance efforts and, indeed, benefits all aspects of our operations, including those related to guest and crew health, safety and security.



PREVENTION

Safety and security incidents do occur on our ships, and thus our policies and procedures include responding to them in the best possible manner. However, the prevention of incidents from happening in the first place will always be our primary goal.

Some of the methods RCL uses to help prevent incidents involve establishing best practices, designing safe guest areas and crew work spaces, screening persons and provisions that come onboard our ships, creating an environment where safety and security are valued, going above and beyond government regulations, communicating expectations of good conduct to guests and crew, and striving to learn from incidents so we are better prepared to prevent them in the future.

How do RCL navigational safety policies and procedures help prevent navigational incidents?

Navigational incidents can impact guests and crew, the ship itself, other ships and port facilities. Therefore, the prevention of navigational incidents is one of the most important missions of our fleetwide bridge crew, as well as our Miami-based Navigation Working Group. The Navigation Working Group is comprised of shoreside employees who have spent time as bridge officers on our ships or elsewhere in the maritime industry. The Navigation Working Group meets regularly to discuss aspects of navigational safety, including training, incident prevention and areas for improvement. We have developed the Navigation Policies and Procedures (NPP) to guide our bridge officers in the safe operation of our ships at sea. The NPP is based on both regulatory requirements and standard best practices at sea. It addresses areas such as voyage planning, bridge manning, job descriptions/primary duties of ship's officers, operations for arrival and departure, and the responsibilities of the ship's Master. The NPP also includes response checklists for a variety of potential (albeit unlikely) situations, including heavy weather in port or at sea, groundings, allisions and collisions.

In keeping with our companywide policies of *Above and Beyond Compliance* and *Continuous Improvement*, the NPP is constantly evaluated and updated as company and industry information and practice evolves. If one ship develops a new idea or best practice, we seek to expand its use for the rest of the fleet. The development and fleetwide use of standard checklists for pre-departure briefings and the use of Emergency Quick Response Cards are just two examples of this sharing of best practices.

How does RCL evaluate the safety of new ships and features before they are put into service?

We continually look for ways to make our ships as safe as they can be for our guests, so that they can have the best vacation experience possible. Our commitment to safety extends to all guest and crew areas. Before a ship begins carrying guests, a member of our safety staff will visit the shipyard to participate in a safety inspection. This inspection involves close examination of spaces and features on the ship, including, but not limited to, staterooms, public spaces, crew areas, pools, dining facilities, shops, corridors, stairways, tiled areas, door thresholds and theaters, as well as attractions such as zip lines, rock walls, ice rinks, carousels, bungee trampolines, basketball courts and in-line skating rinks. The inspector looks for potential hazards and opportunities where safety may be enhanced. The results of this inspection are provided to the shipyard before the ship comes into service.

In addition, when a new feature, attraction or activity is introduced on our ships, an RCL team conducts research and, on occasion, works with outside consultants to develop



Navigation bridge



Liberty of the Seas, Flowrider



Shipboard Access Security

In certain ports, RCL and the local port authority have established a security screening facility close to where the ship is docked.



K-9 Dog Screening

Security screening includes K-9 (dogs) assets, which are capable of screening small and large baggage and humans, as well as stores and provisions.



Sea-Pass

The Sea-Pass access control system helps verify guest and crew access authority.

the necessary safety procedures, processes and equipment. Even after the attractions have become standard features, we look for opportunities to improve safety. For example, we noticed that when guests fall while ice skating, they tend to fall forward and try to use their arms and hands to break their fall. Because ice skating occurs on a low-friction surface, these attempts are often unsuccessful and may result in a skater's head hitting the ice. As a result, we now require guests, both adults and children, to wear helmets during our "Learn to Skate" sessions. This has helped reduce injuries by 10 percent per ice rink across our fleet.

Are there ship design requirements relating to accessibility for guests with disabilities?

There are currently no specific guidelines for cruise ship construction that relate to accessibility for guests with disabilities. However, at RCL, new ships are built using guidelines for public spaces and accommodations that incorporate specifications from the Americans with Disabilities Act (ADA) design standards. In addition, RCL follows the standards for land-based hotels when determining the number of ADA cabins to make available on our new ships.

In November 2010, the U.S. Department of Transportation issued regulations on "Transportation for Individuals with Disabilities: Passenger Vessels" (Title 49 U.S. Code of Federal Regulations, Part 39). These new regulations contain a list of 128 specific guidelines and changes related to service and policy issues with which vessels need to comply in order to accommodate guests with disabilities. Eight of these guidelines specifically relate to guest safety. They include making sure that safety videos are captioned for hearing-impaired guests, ensuring that guests with disabilities can fully participate in muster drills, and communicating safety-related information and briefings to people with visual and hearing impairments. (RCL is in compliance with the requirements of this new regulation.)

What procedures does RCL use to control access to its ships?

Guests and crew members entering and leaving each of our ships are screened in every port of call during the voyage. This screening process and many other security processes are part of the Ship's Security Plan (SSP). The SSP, which is specific to each ship, is considered the ship's security operating manual and contains standard security operating procedures. Stores (supplies, etc.) and provisions are also screened before being loaded into our ships.

The access control system used onboard our ships is called the Automated Personnel Assisted Security Screening, which we refer to as Sea-Pass. The Sea-Pass system is linked to other systems onboard and produces an electronic identity and tracking card for each guest and crew member. The Sea-Pass system is used daily on the ship's gangways and is an essential tool in preventing unauthorized boarding of our ships. There are additional screening tools and processes that help prevent incidents, and not all are visible to observers. We do not further discuss these processes and tools publicly, because doing so may undermine their effectiveness.

What are some of the ways guests are made aware of RCL's procedures and policies to help prevent onboard incidents?

One effective tool for preventing incidents onboard our ships is the RCL Guest Conduct Policy (GCP). The GCP is a written code of behavior that is expected of all guests sailing on an RCL cruise ship. Those who do not comply with this largely intuitive policy

may be subject to disciplinary measures that range up to being debarked from the ship and even having their future sailing privileges revoked. While its provisions may seem like common sense to most, our guests come from varied and diverse backgrounds, and the GCP helps provide a common understanding of the behavioral standards in place on RCL ships. The GCP addresses topics such as guest-crew interaction; discourteous, disruptive, inappropriate, unsafe or abusive behavior; and parental/guardian responsibilities. The GCP is available for review online, is incorporated into the ticket contract, and can be found in guest staterooms.

We also utilize a Prohibited Items List that prevents potentially dangerous items from being brought onboard. This list is not unlike that in place at airports around the world. Just as at airports, our prohibitions are enforced via security screening of guests, crew and cargo. Examples of prohibited items include fire hazards, knives, illegal drugs, dangerous chemicals, baseball/cricket bats and skateboards.

Another method of communication RCL uses to help inform guests is the Cruise Services Directory (on Royal Caribbean International ships) and Directory of Services (on Celebrity Cruises and Azamara Club Cruises ships). These directories include travelers' safety and security tips that provide information on safety and security within guest staterooms, within the public areas of the ship, and while ashore. By reminding guests to approach their cruise vacation with an eye for safety, RCL helps guests do their part in preventing incidents from happening.

Does RCL take any special security precautions for its younger guests?

About 450,000 children participate in our amazing onboard youth programs each year. For these younger guests, we provide age-specific onboard programs called "Adventure Ocean" (on Royal Caribbean International ships) and "Fun Factory" (on Celebrity Cruises ships). Crew members that work in these programs are required to have a minimum of a bachelor's degree, and generally have a background in either sports and recreation or child development.

As a company, we have long believed that our exceptionally enjoyable youth programs are delivered in a safe and secure environment. However, in keeping with our corporate focus on *Continuous Improvement*, in 2010 we conducted a safety and security review of our youth programs. This included areas such as physical spaces, closed-circuit television coverage, types and effectiveness of parent and youth notices, activities offered, and staff preparedness. One thing we noticed was that our ships varied in the manner in which they secured the entrances to child areas. So we identified the best approach and then modified our gates so they all meet this high standard of operation.

What measures are taken to provide crew members with a safe working and living environment?

Our crew have many opportunities to visit beautiful ports of call, and in the process they both work and live onboard our ships for a period of months at a time. Therefore, we focus not only on providing them a safe working environment, but also a safe living environment. RCL's Crew Safety Program requires each crew member to complete a safety orientation when first onboard and to undergo specialized training relevant to his or her shipboard duties. Such training topics can include personal protective equipment, job safety analysis, fire and watertight doors, fall protection, slip and fall hazards, and others.

POINT OF VIEW



Onboard Youth Programs

RCL provides its young guests with an enjoyable, safe and secure cruise vacation; just as it does for our more mature guests. Yet, while we believe this to be true, when we looked for a U.S. national standard to compare ourselves to, we were surprised to find no such standard exists for either shoreside or shipboard facilities. As a result, in 2010 we asked Dr. Richard Fiene, Professor of Human Development and Family Studies in the College of Health and Human Development at Pennsylvania State University for help. Dr. Fiene is a preeminent expert in child care studies and standards and he agreed to help review our youth programs and to develop a cruise ship standard we could use to validate our confidence in our procedures.

"I was so impressed by the commitment of RCL from line staff to senior administration in wanting to have the highest child care standards for their ships, especially when it involved their youngest passengers/guests. I have to give a great deal of credit to RCL to even suggest having child care health & safety standards for their youth programs when none existed throughout the cruise industry. This was a gutsy move, but when you are the best at what you do, you're not intimidated to be evaluated by the best."

– Dr. Richard Fiene



Fjord Land, New Zealand

Our shoreside Maritime Safety and Global Security Departments provide leadership to the important functions of preventing shipboard injuries and injury response. At the heart of these efforts are the cross-departmental partnerships with other shoreside and shipboard departments. Through lessons learned, prevention initiatives are identified and implemented. For example, just like in shoreside professions, repetitive duties can sometimes lead to what is referred to as cumulative trauma disorders. This type of repetitive motion injury often affects the back, knee or shoulder. One example involves our assistant waiters, who each day deliver many, many plates of excellent food to our guests. In considering this concern, we began using trolleys on several ships to help with carrying heavy food platters. This measure appears to be successfully reducing incidences of cumulative trauma disorders, and many of our ships are now routinely using these trollies. It is hoped that this and other measures can help prevent this type of injury to our valued crew.

Another shipboard initiative is our Work Safe/Live Well campaign, which actively involves crew members in ensuring that their working and living environments are safe. The campaign, which addresses a different safety topic each month, provides ship's Safety Officers with materials to share with the entire crew, including posters and discussion guides. Topics have included slips and trips, fall protection, reporting of injuries, blood-borne pathogens, preventing electric shock and back safety. For example, in our Back Safety Campaign, we taught crew members strategies for preventing back injuries. As a crew incentive, after each such campaign, the onboard Safety Officer distributes quiz cards to crew members to assess the program's effectiveness. Each quarter, those who score well on these quizzes can be chosen for recognition and award.

An additional safety awareness program for crew members is our system of Safety Observation Reporting. Guided by the onboard Safety Officer, a ship's crew is divided into teams, based on departments, and each team competes to see who can make the most safety observations. This is an important part of preventing incidents, and it effectively involves those with the most to gain, our valuable crew. Unsafe acts and conditions observed by the teams are logged, and action is taken to make improvements based on the observations. This process helps us share findings throughout the fleet and develop best practices for preventing future incidents.

Are there measures you take that help prevent incidents in ports of call?

Security is a shared responsibility, and we recognize that people have differing opinions and thresholds for what they consider safe and secure. Just like in our hometowns, individuals must do their part by being aware of their surroundings, carefully choosing where they visit and taking advantage of publicly available information, such as travel security assessments on government websites. Just as for land vacations, this is helpful information and advice for guests to consider in preparation for and during a cruise vacation.

Safety and security considerations are an important part of our overall decision-making process in determining where our ships will call. RCL evaluates proposed new ports of call to be added to our itineraries, beginning about two years in advance of a cruise. This includes a review of available information on the port and the country in which it is located. As appropriate, we consult government, private and public information sources, in an effort to determine the level of security and stability in the port. In some situations, a member of our security team may actually visit a port to review security procedures, coordinate with government officials, evaluate the local infrastructure, and make on-



Bureau of Consular Affairs website:
www.travel.state.gov

the-ground contacts for future coordination. During planning, a new port's compliance with ISPS international security standards will be factored into our decision on whether to call in the port. A final decision as to whether we, as a company, feel comfortable taking our guests, crew and ships to a particular port is made based on an overall assessment of the level of governmental partnership and commitment to security of our call.

Even after a final itinerary is offered to our guests, we continue to monitor indications that a selected port's security, political or social landscape has materially changed. Such changes may occasionally occur just prior to or even during a cruise. In such instances, the impact of the change is evaluated by shoreside and shipboard professionals, and we may seek assistance from representatives within the port itself or from a variety of government, private, and public information sources. Through this process, new developments may be identified and decisions made about what, if any, additional security measures may be indicated. Actions taken may be imperceptible to the guests, such as a discreet enhancement of onboard or port state security protocols; or they may involve steps that are more visible, such as the presence of additional port state security measures, verbal or written guest advisories, or even cancellation of a port of call.

If a problem arises in a port of call, what steps will RCL take?

In addition to post-incident internal review, we often work with our industry partners to review the facts and information available on incidents that have occurred elsewhere in the cruise industry. Generally, subsequent to a significant shoreside incident, an internal, cross-departmental meeting is convened, with appropriate departments represented. The meeting agenda consists of a thorough review of the facts of the incident, followed by a discussion of pertinent issues, which may include policy, procedures, equipment, training, personnel actions and communications. Action items are assigned for resolution.

How does RCL help prevent incidents when guests are on shore excursions?

Shore excursions allow our guests special ways to experience some of the most exciting destinations in the world. They are available in an incredible array of activities, such as cooking classes, city walking tours, adventure hiking, horseback riding, water sports, zip-lining and off-road four-wheeling, to name just a few. Each year, millions of guests safely enjoy shore excursions, and their vacation experiences are greatly enriched.

RCL offers shore excursions to its guests; however, the excursion itself is provided by independent contractors. RCL requires the shore excursion operators to carry insurance and to meet local licensing requirements.

If we become aware of a safety or security concern involving a shore excursion we offer to our guests, an evaluation is conducted to understand the circumstances and permit a decision as to whether to continue to offer the operator's excursion to our guests. If an actual incident occurs on one of the shore excursions we offer, RCL will also assist any involved guest or crew through our CareTeam (see the CareTeam details of the Medical/Public Health section of this report).



Hong Kong, China



Zip-line at Labadee, Haiti

RESPONSE PREPAREDNESS

In 2010, RCL provided more than 4.5 million guests with a most enjoyable cruise vacation. Although we work hard to prevent incidents, regrettably incidents do from time to time occur. For this reason, it is important to be prepared to effectively respond to incidents. RCL's safety and security preparedness efforts are focused on training our crew to handle situations so as to minimize their guest or crew impact.



Bridge officer on duty

What incident preparedness training does RCL require for its bridge officers?

In addition to the rigorous training requirements of gaining and maintaining a professional maritime officer's license, RCL officers must complete a shoreside training module that includes Marine Crew Resource Management for both the bridge and engine personnel, and Integrated Bridge Systems training for the bridge officers. This training comprises a total of eight days of classroom work and simulator training. We also provide bridge and engine room officers with RCL-specific Advanced Firefighting, Rescue Boat Training and Advanced Ship Handling courses. In total, bridge and engine room officers must complete 20 days of shoreside training upon being hired, with some training modules requiring refresher training every three to five years.

How does RCL's hiring strategy and specialized training prepare its security teams to effectively respond to incidents?

RCL ships are staffed with security teams that are part of the ship's permanent crew. The Staff Captain, who is also the second in command, oversees the Security Department. The Security Officer is the head of the security team and is responsible for day-to-day security operations onboard. The Security Officer is typically supported by one or more Deputy Security Officers and Supervisors, who direct the activities of a team of guards.



Onboard security officer

We recruit our onboard security professionals from around the world and give special hiring priority to candidates with backgrounds in the military, law enforcement or private security sectors. Our recruiting process involves conducting face-to-face interviews with candidates before they are considered for hire. We conduct such interviews in many places around the world, to find the best talent available. We look for high-caliber professionals with strong, relevant backgrounds. We seek to match the cultural and language skills of our security staff to the guest demographics and itineraries where they will work. This helps increase both their effectiveness and their appreciation by our guests. For example, for our ships that sail South American itineraries, we look for Spanish-speaking security guards; while in Southeast Asia, we look for Chinese speakers. We also staff our security teams with both male and female security professionals.

We require our security personnel to be fully familiar with the requirements of the ISPS Code. We provide them with internal specialized training, as well as training that results in certification from government-accredited companies. In addition, each security team member who works on an RCL ship with a U.S. itinerary must obtain a visa from the U.S. Department of State.

Each Security Officer is independently certified by an outside organization as having met the knowledge requirements of RCL's internal security processes, as well as the U.S. Government (CVSSA) security requirements and standards. On an annual basis, every Security Officer in our fleet participates in a week-long shoreside security seminar held in Miami. The agenda of this seminar is continually reviewed and

modified to incorporate new measures and international/national requirements. This curriculum also includes role playing in different shipboard security scenarios to allow the Security Officers to practice their skills. In addition, U.S. federal law enforcement agencies, including the FBI, the Drug Enforcement Administration, Customs and Border Protection, and Homeland Security Investigations, participate on a regular basis and provide up-to-date presentations in their respective fields of expertise.

We place an important emphasis on ship access security in our training. Most ships are docked in port several times each week, either for a scheduled port of call during a voyage or in a home port for turnaround at the end of a voyage. When a ship is docked in port, the gangways are open for an average of eight-to-twelve hours as guests and crew board and disembark from the ship. For this reason, the security team must carefully monitor all persons debarking or boarding the ship at all times.

Ship access security team members participate in a series of certification training courses when they first come onboard an RCL ship and complete refresher courses every time they start a new contract. The training programs include:

- *Technical equipment:* At every gangway checkpoint, we have a variety of access security equipment, some of which is portable and can be used in areas other than gangways. Security team members are trained to understand and use each of these security instruments. In early 2010, we introduced a new training module on x-ray equipment operation that is equivalent to the type of training that is performed in international airports. This training, which exceeds industry standards and regulations, was implemented in keeping with our company culture of going *Above and Beyond Compliance*.
- *Recognition of characteristics of persons who are likely to threaten security:* There have been some recent improvements in the recognition of persons who could cause harm to our ships, guests or crew. Our crew is a beneficiary of this advancement in training.
- *Crowd control and crowd management training:* Our security staff are trained in crowd control and crowd management to be able to help keep people calm and cooperative in case of an evacuation, drill or other emergency situation.
- *Conflict resolution:* Our security team members are trained to defuse potentially volatile situations before they escalate. For example, if a guest is being aggressive or confrontational to another guest, our security team is prepared to resolve the situation.

How does RCL train its other crew members to respond quickly and effectively in case of an emergency?

Every crew member must undergo ship familiarization and emergency assignment training upon reporting onboard and before performing their duties. Portions of this training, such as the Pre-Departure Safety Training, must be completed before the ship sails. This training is overseen by the Safety Officer (for safety-related training), the Security Officer (for vessel and guest security) and the Environmental Officer (for Save The Waves® and waste stream management training). Some specific training modules include:

- *Security Awareness Training:* Each crew member onboard is trained on security awareness. This training covers general company security policies and begins with an introduction of the onboard security team, current threat level, security



Drills, exercises and lessons learned are important components of Continuous Improvement.



Onboard security screening



incident response plan, suspicious objects and persons, crime allegation reporting, and shipboard regulations.

Crew Emergency Teams

Each ship has a detailed plan, called the Crew Station Bill, that assigns every single crew member to a specific team in case of emergency. These teams include, for example, the Crew Quarters and Corridors Evacuation Team, the Survival Craft Preparation Team, the Mobile Fire and Damage Control Group, the Safety Command and Communication Team, the Guest Assembly Station Team, and many others. Crew members receive their individual assignments along with detailed instructions about where on the ship they should report and what their specific responsibilities would be in case of an emergency and how to perform them.

- *Pre-Departure Safety Training (PDST):* Each crew member is trained on general safety procedures, as well as ship-specific safety equipment and response, as it relates to fires, medical emergencies or man-overboard situations. Crew training modules include a pre-departure safety orientation each time a crewmember comes onboard a ship at the start of a new contract. This training must take place on the first day that a crew member comes onboard.
- *Ship Safety Orientation Training (SSOT):* Each crew member must complete the SSOT module. This module includes an extensive review of shipboard safety and security routines, with a primary focus on the ship's Emergency Plan. Training includes a life-raft inflation demonstration, a safety orientation tour of the ship, and training on the use of Emergency Escape Breathing Devices. This training must be completed as soon as possible each time a crew member signs on to a vessel for a new contract.
- *Personnel Nominated to Assist Passengers in an Emergency (PAIE):* This is a 16-hour training course that includes training in personal survival techniques, fire prevention, firefighting and elementary first aid. It must be completed by all Hotel Department crew members when they are first hired by RCL.
- *Crowd Management Training:* This training module covers how to take care of guests in an emergency, how to direct people to move in the right direction, and how to get guests to follow crew instructions in case of an emergency situation. This training must be completed by crew members every five years.



Onboard Guest Security

Guest security personnel are part of a ship's security team and are dedicated to deterring and responding to incidents.

RCL vessels keep weekly, monthly and annual drill schedules to train and prepare crew members to respond to a variety of potential situations. These drills are used to verify that the company's contingency plans are effective, up-to-date and suitable for potential emergency situations, should they arise.

In addition to the frequent drills conducted onboard our vessels, RCL corporate offices and site locations (such as Labadee and Coco Cay) also participate in industry drills, corporate response and preparedness drills, and shipboard drills involving shoreside support departments. In 2010, we partnered with external agencies, including DNV, the U.S. Coast Guard, the Port of Seattle, and the U.S. Federal Emergency Management Agency, Department of Homeland Security to conduct operational preparedness drills.

What fire preparedness systems and procedures does RCL have in place?

Although all of our vessels are equipped with advanced fire detection and suppression systems, fire safety really begins with prevention. Our ships are constructed and outfitted to comply with stringent international fire safety regulations, including requirements for fire integrity of bulkheads (walls) and windows and fixtures onboard (such as furniture and carpets). Our ships are inspected throughout construction by third-party safety inspectors from recognized classification societies and flag state safety agencies like the U.S. Coast Guard.

Even though fire risk is minimal, fire suppression systems are installed throughout all areas of the vessel. The primary fire suppression system on most ships converts water into a mist state that presents more surface area for smoke and heat to be absorbed. Water mist systems are very effective and also safe for people who may be near them when they are activated. In areas such as engine spaces and galleys, we have installed both water mist and CO₂ systems. In addition, we have gone *Above and Beyond Compliance* with regulations by installing wet chemical extinguishers in all of our galleys. These are kitchen-type extinguishers that are especially effective in the case of a deep fryer fire.

Our ships are also equipped with an extensive series of fire sensors, which are monitored by crew members on the bridge and in the engine control rooms. If a fire detector indicates there may be a fire onboard, response personnel are immediately dispatched to the area to evaluate the situation. If indicated, mobile firefighting groups respond, outfitted with full firefighter gear, breathing apparatus and special heat-seeking systems that use thermal-imaging cameras. These cameras (both hand-held and helmet-mounted) help to quickly identify the source of a fire and to locate any people who may be in the affected area. Responding crew also have access to an Impulse Fire Extinguisher (IFEX), which shoots a blast of water using pressurized air and is ideal for rapid response in quickly suppressing a fire. With these tools, our highly trained personnel on the bridge and on the scene can manage fire-related situations effectively.



Oasis of the Seas large fire zones



Oasis of the Seas Central Park fire zones

furnished area
 longitudinal fire break
 transversal fire break
 other areas



Emergency Preparedness

Crew members are trained and drill on a regular basis to effectively respond in the event of an onboard emergency.

Missing Persons

Reports of a missing person most often involve a family member who temporarily cannot locate his/her spouse, child, parent or friend. Our ship's crew is trained to react quickly if we receive an indication that someone traveling on one of our cruise ships cannot be located. Almost all such situations are happily resolved within minutes.

In 2010, we carried more than 4.5 million guests and crew on our ships. Tragically, six went overboard at sea during their cruise. Three of these overboard incidents involved guests, and three involved crew members. In five of these incidents, it was determined through eyewitness reporting and/or by closed-circuit television that the guest or crew member had intentionally gone overboard. In the remaining incident, a guest went overboard; however, investigation by Italian authorities did not determine the circumstances.

In two of the 2010 overboard incidents the guests were rescued alive. (One of these guests resisted rescue crew efforts to save him.) Regrettably the other four overboard incidents did not result in rescue.

For RCL, 2010 was unusually extreme in terms of overboard incident frequency. From 2003 through 2009, RCL experienced an average of one overboard per year, with a low of zero and a high of three. It is not clear why we experienced six in 2010.

Given the intentional nature of at least five of the six overboards (there were no witnesses or video recordings in the sixth), we examined some shoreside trends to see if there was any information that might help explain this increase. Although information on 2010 is not yet available, the U.S. Centers for Disease Control and Prevention's 2007 statistical analysis reveals that there has been an upward trend in the country's suicide rates over the past decade.

Similarly, the U.S. Department of Labor reported that workplace suicides in 2009 were at the highest levels since the government started tracking, with the number of suicides and attempted suicides up 75 percent in 2009 from 2008. Researchers noted that these suicides were primarily precipitated by a combination of factors, including problems related to health, jobs, relationships and finances.

INCIDENT RESPONSE

We strive to provide our guests with a safe, secure and enjoyable cruise vacation, and our employees with a safe and secure working environment. However, despite our efforts, occasionally a guest or crew member will allege being the victim of a crime during their cruise. Such allegations may relate to activity ashore during a port of call or onboard the ship itself. In either case, RCL takes every allegation of crime seriously. We are committed to reporting all allegations of crime to the appropriate law enforcement agency and to cooperating fully with authorities in their resolution of the allegation. If a crime allegation is received, we care for those involved, preserve evidence, report to law enforcement officials, support their response, and take steps to understand the incident so we can seek ways to prevent a recurrence. In a situation where a crime allegation is reported, our guests and crew may be reassured to know that our dedicated staff of professionals are committed to developing the best practices possible to prevent and effectively respond to incidents.

How does RCL respond to allegations of serious shipboard security incidents?

Our response to security incidents is immediate and effective. We have established detailed policies and procedures for incident response, which are matched to the type of incident that is alleged to have occurred. For example, the response to an allegation of minor theft will understandably differ from the response to an allegation of assault. Nonetheless, there are seven basic principles that we employ in responding to allegations of shipboard security incidents. Those basic principles are:

- immediately respond with sufficient security and medical personnel;
- ensure the safety and security of everyone involved;
- address medical needs, if any;
- obtain preliminary details of what is alleged;
- preserve evidence;
- report the incident to the appropriate authorities; and
- take steps to understand the incident to help prevent future incidents.

RCL has procedures in place for guiding shipboard and shoreside response to incidents, including our Management System's section entitled "Operational Response/Fleet Reporting Guidelines/Event Notification." These procedures were developed to clearly outline the points of shoreside contact, the lines of communication, and the guidelines for when to contact and notify shoreside personnel about onboard situations. Most incidents that occur on our ships are capably handled by our trained shipboard officers and crew. However, in those circumstances where shoreside support is needed, the mechanisms and procedures are in place to obtain the resources and assistance that can be provided by the RCL Miami-based shoreside staff.

Our Global Security Department includes a team of senior investigators, each of whom is a prior law enforcement officer. This team is responsible for guiding shipboard personnel in preserving evidence, determining appropriate law enforcement jurisdiction, reporting crime allegations and understanding incidents. They also engage RCL's CareTeam (see CareTeam section for more details) to provide emotional and logistical support during times of need.

RCL divides security incidents into three different types: Violations of the Guest Conduct Policy (GCP), crime allegations and missing person reports. Such incidents are addressed by the onboard security team and are reported to, and coordinated with, RCL's Miami-based shoreside security team for oversight. Allegations of crime are reported to the appropriate law enforcement agency, and we fully cooperate with the efforts of those agencies. Any person reported as missing is typically located within minutes; if not, the incident is reported to the Miami corporate headquarters and appropriate governmental officials, including maritime search and rescue agencies, where indicated.

What are the reporting requirements that RCL must follow in case of an allegation of crime?

RCL is committed to reporting alleged illegal activity to law enforcement, in full compliance with flag state regulations, corporate policy, industry agreement, Title 33, U.S. Code of Federal Regulations 120, and Title 46, U.S. Code, Section 3507. RCL takes all allegations of crime seriously regardless of the parties' nationalities, regardless of their willingness to press charges, and regardless of where in the world the incident allegedly occurred. We are also committed to cooperating fully with local, state and national authorities throughout the world in their efforts to investigate such allegations. For vessels calling on U.S. ports, or for crimes involving U.S. citizens, this reporting also includes the FBI. (Our flag states require that we provide a written report of every safety and security incident occurring on our ships — see the Regulatory Standards section of this report for more on flag states.)

What support does RCL shoreside staff provide to the shipboard officers and crew in the event of an onboard incident?

At our headquarters in Miami, RCL is prepared to support our fleet at any time and in any kind of situation that may occur around the world. Our Situation Management Team, composed of cross-departmental experts, can engage quickly to address and help minimize the adverse guest and crew effects of a wide variety of incidents. This assistance can include sending a support team anywhere in the world they may be needed or providing expedited access to equipment and resources in a timely manner. In addition to ship-specific situation response, in 2010 RCL's Situation Management Team also facilitated, coordinated and contributed much-needed relief aid to people affected by devastating disasters, such as the January earthquake in Haiti, ash clouds from the April eruption of Eyjafjallajökull volcano in Iceland, and Hurricane Tomas, which caused extensive damage in St. Lucia in October (see the Environmental Stewardship section of this report for more details of our response to some of these incidents).

Crime Allegation Reports

In 2010, RCL ships carried more than 4.5 million guests and crew members on our voyages. During that time, 13 guests or crew members alleged that they were raped while onboard, 11 alleged that they were sexually assaulted (other than rape) while onboard, and 15 alleged that they were assaulted and received a serious injury while onboard. (It is important to note that the above figures reflect allegations of crime, each of which was reported to law enforcement without regard to its validity. In some of the above incidents, law enforcement may have ultimately determined the allegation was untrue.)

For comparison purposes, the FBI's annual publication "Crime in the U.S." sets forth annual shoreside crime rates per 100,000 population. According to the FBI's most recent (2009) report, the U.S. experienced a shoreside rate of 28.7 rape allegations per 100,000 population, versus RCL's 2010 shipboard rate of about 10.7 per 100,000 population. The U.S. rate of aggravated assault was 262 per 100,000 population, versus RCL's shipboard rate of about 13 serious assaults per 100,000 guest and crew population. (The FBI's "aggravated assault" category is the closest to RCL's serious assault category.)

For RCL, even one crime allegation is intolerable and we continue to strive to help prevent them.



Emergency phone onboard



MEDICAL / PUBLIC HEALTH

Giza, Egypt



I joined Royal Caribbean in the summer of 2008 as the company's first Global Chief Medical Officer. After working intermittently as a cruise ship physician and consultant to the cruise industry during my 25 years as an emergency medicine specialist, accepting this challenge seemed the next logical step in my career. In the more than two years since I assumed this role, the challenges have been as formidable and stimulating as the rewards are numerous and exciting.

RCL's commitment to conduct business *Above and Beyond Compliance* with existing laws and regulations extends to our efforts in medical operations and public health, as the well-being of our guests and crew is of fundamental importance to the company. We are extremely proud of our shipboard medical facilities — located on each of our ships — which are built, stocked and staffed to meet or exceed guidelines set by the American College of Emergency Physicians, Cruise Ship Medicine Section. In addition, we work closely with the U.S. Centers for Disease Control and Prevention's (CDC) Vessel Sanitation Program (VSP) to meet or exceed what are some of the highest sanitation standards in the world for everything from food and drink to swimming pools and whirlpools.

In 2010, we continued our expansion of shipboard medical capabilities, including development of our onboard blood transfusion program, which helped save ten lives this year. We also expanded our equipment deployment with completion of digital x-ray installation across the entire fleet, design and distribution of First Response Bags to all ships, and installation of additional Automated External Defibrillators (AEDs). We continued our efforts to recruit and retain the highest quality medical staff, bringing many doctors and nurses to Miami to take part in our "Institute of Cruise Ship Medicine."

With 40 ships in our fleet, there are always challenges, as we strive to maintain the highest public health standards for our guests and crew. I am always amazed by the flexibility and adaptability of our officers and crew as they implement and execute best practices. Our current reevaluation of our water safety plans for potable and recreational water, which includes a system for identifying potential hazards and the use of critical control monitoring to maintain quality and safety, has been an opportunity for inter-departmental teamwork to create best practices within the industry. It has been a privilege to have the opportunity to work with healthcare colleagues from governmental and regulatory organizations (such as the U.S. CDC and the European CDC) who hold the same goals as we do — to provide a healthy environment for our guests and crew.

One of our core beliefs at RCL is that great vacations begin with great employees. Looking for opportunities to improve the delivery of quality healthcare to our more than 40,000 crew members from over 100 countries has been especially rewarding, as it has given me the opportunity to meet and network with healthcare providers around the world. Whether it be arranging minimally invasive back surgery in Europe or quality pre-employment physical exam networks in the Philippines or implementation of a TeleDermatology program with the University of Miami, the opportunities and potential solutions to improve service and quality are amazing. The expansion of our Crew Wellness programs and the incorporation of crew into our CareTeam services further demonstrate the importance and priority of a healthy crew to our Medical Department and to RCL. The delivery of quality healthcare is what my team and I were trained to do, and it is at the core of all our activities.

Our CareTeam is a dedicated group of specialists available round-the-clock to support guests or crew members who, during their cruise, face a personal emergency either at home or onboard. This program exemplifies RCL's commitment to providing the highest levels of personal and professional assistance. Watching our CareTeam program mature to the point that its principles and directives can be expanded to voluntary "Associates" chosen from crew members onboard our ships has demonstrated to me the myriad of caring activities possible in this organization.

I am honored to lead the RCL Medical/Public Health team in providing the best possible medical care and public health standards at sea. We are grateful to every one of our guests and crew members who entrust us to provide these services onboard our ships. Looking to the future, we are committed to taking these achievements to the next level, with more advanced medical equipment, medications and facilities.

I hope you will enjoy reading about the activities of our department and will gain an appreciation of the hard work and dedication by my shipboard and shoreside teams, 365 days a year, to the health and well-being of our guests and crew.



Dr. Art Diskin
Vice President, Medical and Public Health and
Global Chief Medical Officer
Royal Caribbean Cruises Ltd.



MEDICAL/ PUBLIC HEALTH



Oasis of the Seas *medical team*

RCL strives to provide our guests with the vacation of a lifetime, and good health and well-being are important aspects of an enjoyable cruise experience. While the vast majority of our guests remain in the best of health during their cruise vacation, occasionally a guest or crew member does become ill or injured. The medical needs on any given cruise are unpredictable and can range from sunburn, or a sore throat to cardiac arrest or other life-threatening emergencies. RCL's goal is to develop, maintain, and staff medical facilities capable of assisting in a wide variety of medical conditions. Although our onboard capabilities are not the same as those of a hospital or surgical center, we can provide care that addresses a broad spectrum of medical needs. We are also able to take steps that help stabilize people with more serious medical situations and facilitate their transition to a land-based medical facility.

Another important part of maintaining a healthy vacation and living environment involves providing safe food and water (both potable and recreational), minimizing the opportunities for pests onboard, and limiting the chances of an infectious disease being brought onboard. In fulfilling this public health responsibility, we adhere to regulatory guidelines established by the U.S. Centers for Disease Control and Prevention (CDC) and other regulatory agencies under whose jurisdiction we may fall while our ships sail throughout the world.

MEDICAL OPERATIONS **MEDICAL FACILITIES AND STAFFING**

Every ship in the RCL fleet has a dedicated medical facility, staffed with contract medical doctors and nurses. Shipboard medical facilities are available to both guests and crew in the event medical treatment becomes necessary while they are onboard. The medical facilities are generally open six hours daily, but medical professionals are available 24 hours a day to handle acute medical needs that may arise for guests or crew. There are procedures for emergency communications and deployment of the medical teams anywhere on the ship where services are needed. These teams are supplemented by personnel trained to carry equipment and stretchers if needed.

Our shipboard medical facilities and operations are subject to guidelines from national and international agencies and organizations. The principle guidelines that regulate our shipboard medical facilities are those established by the American College of Emergency Physicians (ACEP), Cruise Ship & Maritime Medicine Section. In fact, RCL's Vice President and Global Chief Medical Officer, Dr. Arthur Diskin, has been an active ACEP member for more than 20 years and previously served as Chairman of ACEP's Cruise Ship & Maritime Section. Our shipboard medical facilities are built, stocked and equipped to meet or exceed ACEP's guidelines, which address many critical areas, including facility size, staffing, equipment and supplies, medical staff credentials, medical records and communication systems, medications, procedures, basic laboratory and x-ray facilities, and health and contingency planning.

To meet the needs of our guests and crew, RCL medical facilities stock a variety of equipment, including cardiac monitors/defibrillators, ventilators, x-ray machines and processors, laboratory equipment (for a variety of acutely needed tests), and minor surgical and orthopedic supplies. Each ship also has a well-stocked formulary of medications (including "clot-busting" thrombolytics) that is based upon ACEP-established, shipboard-appropriate categories of pharmaceuticals.

RCL was one of the first cruise lines in the world to equip its ships with automated external defibrillators, more commonly known as AEDs. AEDs are small, portable machines that can restart the heart of a person who has collapsed from a sudden cardiac arrhythmia, often due to a heart attack. These AEDs are deployed in various areas around the ships and are available to the medical staff and bystanders alike, if needed. During 2010, there were 14 medical emergencies that involved the use of AEDs. In one case, one of our guests collapsed in a public area of the ship. A fellow guest, who was a physician, witnessed the incident, summoned the medical team, and immediately commenced cardiopulmonary resuscitation. A crew member brought the portable automatic external defibrillator (AED), which had been conspicuously mounted in the area, and the physician delivered the first shock. The ship's nurse arrived within minutes, and subsequent shocks were administered by the medical team. The patient was taken to a U.S. hospital, where he underwent open heart surgery and was discharged from the hospital two weeks later with no disabilities or neurological impairment.

Although the vast majority of our guests never need to visit the ship's medical facility, a team of trained medical professionals is onboard to assist if needed.

Do RCL's medical facilities handle many guest or crew medical emergencies?

In 2010, RCL medical facilities handled a wide variety of medical situations, including some that could be considered emergencies. For example, there were 305 patients cared for across our fleet who had experienced a cardiac-related event. Fifteen of these cardiac patients were considered "acute" cases requiring immediate resuscitation and intervention. In 13 of these situations, the shipboard medical team was successful in treating and stabilizing the patient for transport and treatment ashore.

Our medical facilities also managed ten situations where a patient sustained a medical emergency requiring a blood transfusion. In each of these situations, one or more of our crew members voluntarily donated blood, which our doctor then provided to the patient, thereby saving the patient's life. Each of these patients was thereafter successfully transferred to a shoreside medical facility for follow-up care.



A medical care room on Oasis of the Seas



Automated external defibrillator



Onboard medical team diagnosing a patient

What is the impact of the Cruise Vessel Security and Safety Act of 2010 on the company's Medical/Public Health department, and what has RCL done to make sure RCL is in full compliance with the act, including the section regarding credentialing of medical staff?

In July 2010, the U.S. Congress passed the Cruise Vessel Security and Safety Act of 2010 (CVSSA). Complying with the CVSSA has required little change in our Medical/Public Health Department requirements, as most of the provisions of the new law were already common practice across our fleet. For example, the new law requires cruise ships to carry anti-retroviral medications and equipment/materials for performing a sexual assault examination. These are standard practices on our ships. The new law also requires cruise ships to prepare, provide to the patient, and maintain written documentation of the findings of a sexual assault examination, and that such records be signed by the recipient. While RCL did not previously require the signature aspect of this requirement, we do and have maintained documentation and provided such information to our patients. We have since implemented the signature aspect of this law.

Further CVSSA requirements include patient confidentiality and medical facility staffing requirements. RCL also meets these requirements. For example, each RCL ship is staffed by one to three contract medical doctors and two to five nurses, generally depending on the size of the ship and the number of guests and crew. We recruit medical staff from around the world, seeking doctors and nurses who are both interested in working on our ships and have the broad skill sets, experience, training and personal recommendations from their medical supervisors and peers necessary to meet our standards. Each staff member meets the CVSSA credentialing requirements, which are based on the stringent ACEP guidelines. For example, the CVSSA specifically requires cruise ship medical staff to have a current physician or nursing license; at least three years of post-graduate or post-registration clinical practice in general and emergency medicine or board certification in emergency medicine, family practice medicine, or internal medicine; and proper training in the examination, treatment and care of victims of sexual assault.

RCL confirms licenses and medical school graduation and closely examines post-graduate training for prospective medical personnel. Prior to serving onboard, medical personnel must also successfully complete Basic and Advanced Life Support Training Courses. In addition to cardiac care skills, our medical staff are expected to be able to manage complex problems, such as respiratory and airway emergencies, as well as suture, handle orthopedic issues, take and interpret routine x-rays, and perform and interpret basic, but comprehensive, laboratory analysis. They must be fluent in the official language of the ship (English), and many also speak additional languages.

How have guests and crew benefited from new technology in RCL medical facilities?

At RCL, we constantly evaluate new technologies that can be effectively utilized at sea. The following are some examples of new technologies that we implemented or expanded our use of this year.

- *TeleDermatology*: During 2010, we finalized the implementation of a new TeleDermatology program (*TeleDerm*), which has vastly improved our ability to diagnose and treat complex dermatology cases for our guests and crew. Through this initiative, which is in partnership with the University of Miami, Miller School of Medicine, shipboard physicians take high-resolution digital photographs of a patient's skin disorder, and then transfer them to a dedicated



Sample Tele-dermatology image to confirm diagnosis of Milia on the eyelid of a patient

dermatology professional via a secured Internet site. Shipboard medical professionals then conduct a virtual medical consultation, via the Internet, with these onshore experts, resulting in high-quality medical diagnoses and treatment plans. This technique has only become possible through recent advancements in digital photography and secured medical record transmission technology. It has not only improved care, but has also minimized the time it takes to obtain that care and reduced associated travel time and expenses by virtually eliminating downtime away from the ship for crew members. This is an emerging shoreside technology, and RCL is proud to deliver its benefits to its guests and crew.

- *Digital x-rays:* We have recently taken advantage of major advancements in the field of x-ray technology. During 2010, we completed the installation of digital x-ray equipment on our ships. This new technology enables x-ray images to be transmitted via a secured Internet connection instantly to onshore experts for further consultation. It also allows for easier storage of x-ray records for later use. An added benefit of this technology is that it has a significantly smaller environmental impact than the old liquid x-ray machines. Digital x-ray eliminates the need for chemicals that were required in the process of developing film-based x-ray images. It also eliminated the need to dispose of large x-ray acetates once they are no longer needed.
- *First Responder bags:* In 2010, we developed and deployed upgraded First Responder bags throughout our fleet. The bags are lightweight, portable and stocked with items the medical team may need in the event of a medical emergency that presents in a location other than the medical center. In addition to the importance of the items contained in each bag, proscribing the location of its contents within the bag helps doctors save time — when seconds count.
- *Improved laboratory equipment:* We have distributed new laboratory equipment to our fleet that enables the medical staff to perform medical tests with a higher degree of quality control, and in a shorter period of time. The laboratory unit is compact and can more easily be exchanged in the event maintenance is needed.
- *Blood transfusions:* Although infusion of blood and blood products provided through blood banks may be commonplace at land-based hospitals, ships at sea generally do not have ready access to land-based blood banks and blood products. Therefore, the ability to quickly infuse blood onboard a ship can be a challenge. One of our biggest accomplishments of 2010 was the development of our capacity to perform life-saving blood transfusions onboard our ships at sea. Our medical staff now have the ability to type and match blood donors and to screen their blood for communicable diseases (including HIV). Eligible family member donors of the same blood type are considered first; however, in the event a family member is not available or suitable, voluntary donors from the shipboard guest or crew population are considered.



On-board screening digital x-ray

Life Saving Medical Advances at Sea

In 2010, ten patients required and successfully received life-saving blood transfusions on our ships at sea. Although a shipboard transfusion program is not required under the American College of Emergency Physicians (ACEP), Health Care Guidelines for Cruise Ship Medical Facilities, this is one more example of RCL going *Above and Beyond Compliance*.



United States Coast Guard medical airlift

What happens if a guest or crew member needs to be evacuated from the ship due to a medical emergency?

In emergency medical care situations such as heart attacks, congestive heart failure and cardiac arrhythmias, our ships maintain special medications onboard to stabilize the patient until the patient is able to be medically evacuated to an appropriate shoreside medical facility. Evacuation of emergency medical patients from a ship may take place at a scheduled port of call or may require a deviation from the ship's scheduled itinerary to the nearest appropriate port. Another alternative that may be available for use in life-threatening situations is evacuation via helicopter from a ship's helipad or via basket lift. Such evacuation services, provided by government agencies such as the U.S. Coast Guard and the British Royal Navy, introduce increased risk, and are only carried out after careful consideration by the ship's physician and the transporting government agency. Helicopter evacuations ultimately require agreement by the involved government transport agency.

CREW WELLNESS

Once our crew members are hired, we focus on keeping them as healthy as possible. We do this, in part, through our Miami-based Crew Wellness program, and its Crew Wellness Nurse position, which was created two years ago. Its purpose is to help our valued crew members receive the information, care and treatment required for their overall well-being.



Crew wellness nurse

How does the Crew Wellness Nurse help enhance wellness care for RCL crew members?

Our Crew Wellness Nurse helps coordinate wellness care for crew members onboard our ships, including education, wellness screening, chronic illness management, recovery care and early detection.

Wellness screening: The Crew Wellness Nurse coordinates with our pre-employment medical evaluation team to identify new or returning crew members with chronic illnesses and see that they receive the appropriate wellness information and support. Information is also sent to the ship's medical facility to facilitate proper follow-up for our crew member.

Chronic illness management: Our Crew Wellness Nurse also supports wellness management for crew members who may have a chronic illness, such as diabetes, hypertension, a cardiac condition, asthma, high cholesterol, etc. We also oversee chronic illness case management for crew members who have been off the ship on medical leave following a diagnosis or flare-up of such an illness.

Early detection: The Crew Wellness Nurse also periodically visits our ships to offer voluntary wellness screening for crew members. This includes blood pressure, weight, and cholesterol level checks, as well as other healthcare parameters. If chronic wellness issues are identified, the onboard medical facility will arrange for the crew member to receive medication, information and treatment.

What kind of wellness education programs does RCL make available to crew members?

Throughout the year, the Crew Wellness Nurse conducts education and awareness programs that promote healthy lifestyle changes, prevention initiatives, strategies for managing chronic illness, and other informative health-related topics. Topics for these periodic wellness initiatives have included smoking cessation, hypertension, diabetes,

weight loss and exercise, skin cancer awareness, breast cancer awareness, and others. For each topic, the Crew Wellness Nurse distributes information to the onboard medical staff, who in turn make this information available to our crew through bulletin boards and informational displays. The Crew Wellness Nurse also assists in developing targeted wellness and safety education programs for our crew, such as developing a back safety campaign focused on ergonomics and safe lifting, as well as a stress management program that will be available to all crew members.

Are there other crew health initiatives underway?

RCL actively encourages voluntary participation in our vaccination programs. For example, our seasonal influenza vaccination program has been highly successful. In the past several years, we have increased our fleetwide vaccination rate of our crew members. In 2010, we were able to vaccinate 76 percent of our crew members.

In 2010, we also introduced a new sports training program for our entertainers and athletes onboard *Oasis of the Seas*. These crew members, who include dancers, acrobats, divers, swimmers, ice skaters and others, have a demanding schedule of often back-to-back shows during the week-long cruise. We have introduced standard training and therapy services to help them maintain their required level of fitness onboard the ship. This program was developed in partnership with a team of physical therapists and athletic trainers from CORA Rehabilitation Clinics in Florida. We began by offering these services and treatments at our shoreside dance training studio, where entertainers and athletes could be seen when their ship was docked in South Florida. After three successful months, we were able to move the program onboard *Oasis of the Seas*. We now have a sports therapist onboard the ship each Saturday when the ship is in port to provide these same services to our entertainers. In November 2010, this program was expanded to include our entertainers and athletes onboard *Allure of the Seas* when the ship is docked in Fort Lauderdale.

CREW MEDICAL CARE

When crew members become ill or injured, RCL provides medical care so that the crew member can become healthy again as soon as possible, feel better and return to work fit for duty. During this process, crew members have access to our 24-hour shipboard medical facilities, which are built, stocked and equipped to meet or exceed guidelines established by the American College of Emergency Physicians (ACEP), Cruise Ship & Maritime Medicine Section, as well as the World Health Organization (WHO) and International Labor Organization (ILO).

However, our medical facilities are not always sufficient to meet the immediate or long-term medical needs of an ill or injured crew member. In such cases, our Miami-based Crew Medical Department oversees the care and treatment of the affected crew member, either in a nearby port of call or in their home country.

Since our ships travel throughout the world, we must be prepared to arrange shoreside care for our crew in many countries. Our Crew Medical staff attempt to match quality care with patient needs to help our crew recover quickly and effectively. Case managers work closely with designated medical facilities, providers, medical facilitators and port agents to coordinate medical treatment and care around the world. With crew members from over 100 countries and more than 400 different ports of call around the world, developing relationships, maintaining flexibility and maintaining quality of care is a critical endeavor.



Oasis of the Seas and Allure of the Seas



Employee wellness programs

How does RCL prepare crew members to safely perform their duties while onboard?

It is important to make sure our crew members are in good health and can effectively perform the essential functions of their positions, as well as emergency duties, and are free of detectable communicable diseases before joining their assigned ship. One of the ways we meet this goal is through our Pre-Employment Medical Examination (PEME) and Re-Employment Medical Examination (REME) programs. Each employee must complete a PEME before joining a ship and then a REME every two years thereafter, throughout the duration of their employment. These two important processes determine whether candidates for employment have met and passed their medical examinations and are well prepared to safely begin working onboard.



Barista onboard Celebrity Solstice

In 2010, we enhanced this program to require potential hires to undergo their physical examination at an approved provider. If such a provider is not readily available to the potential crew member, the report of the exam must be submitted by the medical provider directly to RCL's Miami-based PEME team. The results are then evaluated by RCL registered nurse specialists. During 2010, a representative of our Crew Medical staff traveled to several high-volume hiring countries and met with and vetted clinics and medical providers to partner with reputable and qualified facilities. We now have approved providers in our top five hiring countries — Brazil, India, the Philippines, Indonesia and Jamaica — and we will be adding facilities in other countries and locations over the next several years. Our long-term goal is to have an approved provider in most countries where we hire crew members. By the close of 2010, approximately 85 percent of new hires were being evaluated through approved PEME medical providers.

Once a conditional offer of employment has been extended, a thorough pre-employment exam allows the company to determine ahead of time whether potential crew members are able to safely meet the requirements for their position. It also may help applicants discover — and thus manage — chronic illnesses they may not have been aware of, such as high blood pressure or diabetes.

How does RCL match an ill crew member's medical needs with high-quality medical care and services around the world?

In 2010, we began the development of a network of designated "Centers of Medical Excellence" around the world. These are medical centers that have the proper facilities, equipment and staff to manage acute to complex medical cases. We have developed a working relationship with each of these centers and work through a dedicated staff member to coordinate medical care for our crew members, and to assist with hotel, transportation or other logistical arrangements that might be necessary. The consolidation of medical care in fewer sites enables us to better monitor care and insist upon comprehensive management of our crew's medical needs. To date, we have identified Centers of Medical Excellence in the Dominican Republic, Panama and Croatia. These centers provide specialized quality care for our crew in strategic locations. Our goal is to identify additional centers in Asia, the Pacific Northwest, South America and Northern Europe.



Allure of the Seas

We have also contracted with a private healthcare provider to develop and operate a medical center at our new port of call: Falmouth, Jamaica. In Falmouth, we are working with Hospiten, a respected Spanish company that operates our center of medical excellence in the Dominican Republic. This new clinic, which is being built within walking distance of where ships will dock, will offer specialized services to our

crew members, including orthopedics, gynecology, diagnostic laboratories and other specialized treatment and care that may not be fully provided or available onboard our ships. This medical center will begin operations in 2011 and will be open to crew members or guests from any cruise line calling upon the port, as well as local residents.

Hospiten has also recently acquired a medical facility in Montego Bay, Jamaica, which will be raised to Hospiten standards and function as a higher level of attention, as well as a referral site for the port of Falmouth Clinic and any crew member disembarked in, or repatriated to, Jamaica.

Are there other initiatives underway that will help provide quality care for RCL crew members?

In 2010, we laid the groundwork on a plan to implement electronic medical records throughout our fleet. Beginning with the PEME report, we will establish an electronic file for each crew member, eliminating the need for paper records to follow crew members from ship to ship as they move throughout the fleet. With the new electronic medical records system, medical histories or treatments that crew members have had while onboard will be easily accessible from ship to ship. This will make it easier to follow-up on treatment and allow for automatic reminders about follow-up appointments or procedures. An electronic record of each employee’s PEME and REME exam will also allow our Crew Medical team to better coordinate with our Crew Wellness staff, enabling them to more effectively identify crew members who might have chronic illnesses or conditions that need to be managed and treated properly. Our ambitious goal is to have this system fully implemented by the end of 2011.

In 2010, we completed implementation of a new protocol to address back injuries among crew members. When a crew member complains of back problems, the ship’s doctor must now complete a comprehensive back assessment form prior to any disembarkation. This involves a list of questions for the crew member to help evaluate the type and best location of treatment required. This treatment location may be in a port of call, at a center of medical excellence, or in the crew member’s home country, depending on the nature of the injury. This assessment form has helped both onboard and shoreside specialists to have a baseline understanding of the condition, to help promote effective treatment, and to prevent complications. If a crew member does need to leave the ship for treatment, he or she can provide the back assessment form containing relevant information to the shoreside or home country specialist.

We have also worked closely with the U.S. Centers for Disease Control and Prevention (CDC) to reduce the possibility of a communicable disease outbreak, such as varicella (chicken pox), by developing a containment strategy to address any onboard cases in guests or crew.

PUBLIC HEALTH

PUBLIC HEALTH GUIDELINES AND REGULATIONS

There are many guidelines and regulations that govern public health and the proper maintenance of our ships. These include local, national and international requirements to which cruise line companies must adhere. We work closely with U.S. and international public health agencies, as well as other governmental, regulatory and compliance authorities, and each ship undergoes regular public health inspections. Our ships routinely receive high ratings from ship inspections conducted by organizations such as the U.S. Public Health (USPH) Department.



Legend of the Seas, Panama



Centers for Disease Control and Prevention, Atlanta, GA



European Centre for Disease Prevention and Control, Stockholm, Sweden

USPH conducts semi-annual inspections on every ship calling upon a U.S. port. In 2010, our average USPH inspection score (based on 50 different inspections) was 97.2 percent, an all-time high for the company. One of our newest and largest ships, *Oasis of the Seas*, received a perfect score of 100 percent on its inspection. Seven of our other ships also received perfect scores of 100 percent on their inspections.

The Vessel Sanitation Program (VSP) of the U.S. Centers for Disease Control and Prevention (CDC) operates under the authority of the Public Health Service Act, and assists the cruise industry in setting key standards that guide and structure the development and implementation of our public health protocols onboard our ships. The VSP's comprehensive Operations Manual details the agency's standards, procedures and inspection criteria related to topics such as communicable disease prevention, gastrointestinal illness surveillance, potable water, swimming pools and whirlpool spas, food safety, integrated pest management, housekeeping and child activity centers.

As RCL continues to expand its deployment of ships around the world, we are subject to an ever-widening variety of public health regulations from other countries. While many of these are similar or even identical to those of the CDC/VSP, some have their own local flavor. For example, in South America, Brazil is in the process of establishing its own new rules and regulations through its National Health Surveillance Agency (ANVISA). This new program will help enable greater consistency in public health inspections in Brazil. A draft manual for the standard was released in 2010.

There is a similar initiative in Europe, where the European Union Ship Sanitation Strategy and Program (SHIPSAN) was established to set uniform public health standards for guests and crew members onboard ships sailing through European jurisdictions.

How will SHIPSAN impact RCL's ships in Europe?

In recognition of the need to standardize public health regulations for the 27 member states of the European Union (EU), the EU Ship Sanitation Strategy and Program (SHIPSAN) was established. This program involves the development of standardized methodologies for public health inspections, epidemiological surveillance and outbreak investigation, as well as the creation of a network among port health and maritime authorities throughout the EU, including a web-based tool for regular exchange of information.

With an increased presence in Europe in the coming year — RCL will have 20 ships visiting European ports in the summer of 2011 — working closely with SHIPSAN will be critical to our success in this important market. In 2010, we volunteered to allow one of our ships to be used as a training forum. This included an inspection of the ship by a group of SHIPSAN inspectors. We will also be participating in SHIPSAN training programs for port health authorities in Europe.

How does RCL share information among the ships in its fleet regarding the best public health practices and standards?

With ships operating in all corners of the world and crew members from more than 100 different countries, it is very important to have effective communication between and among ships and shoreside offices on the latest regulations and standards regarding public health. RCL's corporate policy helps our ships follow safe, standardized, consistent operations that protect our employees, guests and the environment. The policy defines personnel requirements and company resources and contains written instructions on company performance standards, work procedures, instructions and record keeping in the areas of safety, quality and environment.

Our Miami-based Public Health staff support the efforts of shipboard teams by coordinating information from regulatory agencies and lessons learned from other ships. We also communicate frequently with our counterparts from other cruise lines to more effectively integrate lessons learned from across the industry.

One of our best resources for sharing information on best practices and lessons learned across our fleet is the knowledge and expertise of our company-employed health inspectors. We have a team of three health inspectors who spend about 95 percent of their working time traveling from ship to ship conducting regular inspections. They visit each ship twice a year, for an average of seven to ten days at a time, depending on the itinerary and size of the ship. The inspectors focus on public health measures related to water quality, food safety, pest management and outbreak prevention. During the inspection, they also work closely with the ship's management to identify areas in need of improvement. At the end of the visit, the inspectors prepare a report with findings and observations based on overall trends observed. The report is then discussed with the ship's management team, which has 30 days to draft and begin implementation of corrective actions for the findings.

We also provide training to our crew members to improve their ability to understand and address public health issues. Once a year, we send a retired USPH inspector to each ship to provide a week of classroom training for crew members. This training, which generally reaches about 70 percent of the crew on a given ship, is based on the CDC's training program and includes 11 different modules customized according to the different crew positions. For example, training for galley crew would be different from that for engineers or stateroom attendants.

WATER SAFETY

The purity and cleanliness of shipboard water systems is one of our highest priorities for the comfort and safety of our guests and crew members. Shipboard water includes our potable (drinking) water, as well as what we refer to as recreational water (swimming pools, whirlpools and spa pools). Potable water on our ships is either produced on the ship through reverse osmosis (desalination) or taken onboard (bunkered) while the ship is in port.

How does RCL monitor the cleanliness of its potable (drinking) and recreational water throughout the fleet?

To protect the cleanliness of our water supplies, potable water is only bunkered from reputable destinations where we know the water is safe — otherwise it is produced onboard. As a further precaution, all potable water, whether bunkered or produced, is chlorinated to eliminate any harmful bacteria that may be present. All bunkered water is also tested for coliforms and held in a tank until negative test results demonstrate it is safe for shipboard consumption. Only then is the water approved for release and use onboard.

In keeping with our *Above and Beyond Compliance* policy, we exceed CDC/VSP standards, which require testing of shipboard water systems for coliforms four times per month, by testing our systems more than 15 times as frequently. We also test potable and recreational water for the presence of Legionella (a bacteria that causes a form of pneumonia), even though it is not required by CDC/VSP.

Every six months, our crew members test an average of 50–60 samples of water from different areas on each ship. On some smaller ships, there may be only 40 sampling locations, while on a very large ship like *Oasis of the Seas*, which has 22 pools and

A Day in the Life of a Traveling Public Health Inspector

8:00–10:30 AM: Met with Executive Chef. Reviewed public health-related galley operations on Decks 3, 4 and 5.

11:00 AM–12:30 PM: Met with senior doctor. Reviewed GI logs, water bunkering and sampling logs, medical supplies, equipment issues, and OPP supplies.

12:30–1:00 PM: Lunch

1–2:00 PM: Started results and observations documentation from morning's reviews.

2–3:00 PM: Met with the youth facility manager. Reviewed safety and sanitation of facilities.

3–4:00 PM: Met with the spa manager. Reviewed the safety and sanitation of the spa, salon and gym.

4–6:30 PM: Submitted the results and observations of individual reviews to managers and department heads, copying ship's executives.

6:30–7:30 PM: Reviewed/worked on outstanding items and specific requests from ships or shoreside.

7:30–8:00 PM: Met with housekeeping supervisors to discuss public health protocols and observations from this week's review.

8:00 PM: Dinner



Potable water analyzer



Potable water bunkering



water attractions, we take more than 200 samples. These tests include drinking water from staterooms and dining facilities, samples from recreational water facilities, and condensation water from air conditioning units, which may be used for laundry, deck washing and window washing.



H₂O Zone onboard Freedom of the Seas

All shipboard whirlpools are filled with clean potable water that is chlorinated and regulated to levels recommended by CDC's VSP regulations. Whirlpools and spas, whose high temperatures can present environments where bacteria can grow, are chlorinated to higher levels than regular pools. Under some conditions, water pipes and other water-contact surfaces may develop a film that provides an environment for bacteria to grow. Regular removal of this "biofilm" is an important part of our water quality program. For example, we conduct twice-yearly biofilm removal treatments for our whirlpool technical and piping components.

In 2010, as a further level of protection for our guests and crew, we installed electronic chlorine and acidity (pH) level recording devices on water facilities on every ship in our fleet. These devices regularly record the parts per million (ppm) of chlorine in the water, so that the levels remain standard, and alert us if extra chlorination or acidity adjustment is needed in a particular area.



Celebrity Century pool deck

Another initiative for 2010 involved a comprehensive review of all ships to identify and address any location where there might be unclean water standing in unused and capped pipes that were replaced or bypassed during a remodeling or renovation project. Through this effort, we were able to identify and rectify those potential problem areas.

OUTBREAK PREVENTION PLAN

RCL's Outbreak Prevention Plan (OPP) is our guide for corporate action to prevent and respond to any outbreak of illness onboard our ships. An emphasis of this plan is on gastrointestinal (GI) illnesses, which are the most common cause of land-based and shipboard outbreaks and therefore closely monitored and regulated by the U.S. Centers for Disease Control and Prevention, Vessel Sanitation Program (CDC/VSP). The OPP is a living document, continually being improved and updated, in keeping with our companywide mandate of *Continuous Improvement*. The OPP is designed to be easy for crew members to use and implement. In addition to providing guidelines to help achieve high standards in sanitation and regulatory compliance, the OPP serves as a good source of information and line of communication between the corporate office and shipboard crew members.

Are we seeing an increase in GI illness, and what are we doing about it?

The CDC/VSP tracks and publishes gastrointestinal outbreaks onboard cruise ships carrying 100 or more guests that reach 3 percent or more of guests or crew reporting symptoms during the voyage. In 2010, we saw an increase in GI outbreaks aboard our ships. We attribute this to the virulence of the 2010 strain of the virus, which varies in intensity from year to year. We also had several instances of outbreaks on back-to-back cruises, which prompted a change and improvement in our post-cruise protocols. One of the most important factors in preventing an outbreak and avoiding becoming ill is to wash hands carefully with soap and water for a minimum of 20 seconds (the time it takes to sing happy birthday twice!) after all bathroom breaks and again before eating anything.

What is RCL's strategy for both preventing outbreaks from occurring and stopping the spread of illness should an outbreak occur?

RCL's Outbreak Prevention Plan, or OPP, was developed in consultation with both internal and external public health and medical experts, to first prevent outbreaks from occurring and then to halt the spread of the outbreak if one should occur. This strategy is known internally as the *RCL Paradigm*, which comprises many elements:

- Screening:** It is important to remember that our number-one objective is the safety of all of our guests and crew members onboard the ship. Our efforts include the active screening of all guests and crew for symptoms of gastrointestinal illness and/or influenza as part of the pre-boarding process. We do this through the use of a simple questionnaire that must be completed by all guests and crew members without exception before boarding the ship. If a guest or crew member indicates on the questionnaire that he or she is experiencing either gastrointestinal or influenza-like symptoms, a member of the ship's medical staff will interview the guest or crew member to determine the best course of action, to be sure the person will not present a health threat to other guests or crew.
- Surveillance:** Outbreaks occur when one or more persons who are actively ill with a contagious disease spread the illness to other persons who subsequently become ill. The key to preventing an outbreak from occurring is to stop the illness from spreading from person to person. We do this through surveillance — or more simply put, being aware of when a person becomes ill with a contagious illness during the cruise — and then taking steps to see that the person receives timely treatment and education to prevent that person from spreading the illness to others.
- Sanitation:** As cruise ships are held to some of the highest cleanliness standards in the world, sanitation is one of the very cornerstones of the *RCL Paradigm*. This includes enhanced cleaning of high-touch areas throughout the ship, as well as providing the latest generation of hand sanitizing gels, especially at the entrance to food venues. Although hand washing with soap and water is the most effective method of cleaning hands, the hand sanitizing gels provide an added method of protection after hand washing and just prior to eating. Guests and crew alike are constantly reminded to always wash their hands with soap and water for at least 20 seconds after all bathroom breaks and again before eating. Medical experts tell us this is the best way to remain healthy.
- Communication:** It is especially important to communicate effectively with our guests and crew in the event of an outbreak of illness onboard one of our ships. To do this most effectively, we utilize a number of tools at our disposal. This includes our onboard television system, as well as the ship's newsletter, announcements, and even letters to all guests in their staterooms. We utilize these means of communication to effectively educate and remind our guests and crew of the importance of basics like frequent hand washing, as well as what has become known as "cough and sneeze etiquette" — to always remember to cough or sneeze into your elbow or shoulder, in the event a paper tissue is not available, and never into your hands. Then always wash your hands at the next available opportunity. We also advise our guests that, if there is a GI outbreak onboard, they may seek complimentary medical attention if they feel they may be ill with the virus.

Public Health Questionnaire
Must be completed by ALL persons age 18 and above
boarding the vessel - one form per adult

Date: _____ Tour #: _____
Ship: _____ Booking#: _____
Sail Date: _____ Tour: _____
Director: _____
Name: _____

Names of all children under the age of 18 traveling with you:
1. _____ 3. _____
2. _____ 4. _____

To assist us in preventing the spread of Communicable Diseases during your cruise vacation, we require you to answer the following questions:

1. Within the last 7 days, have you or any person listed above been in contact with a confirmed Swine Flu case OR have any of the following symptoms: Fever, Chills, Cough, Runny Nose, or Sore Throat?
 Yes No

2. Within the last 2 days, have you or any person listed above developed any symptoms of Diarrhea or Vomiting?
 Yes No

If you answer "Yes", you will be required to seek medical attention to assess the risk of an influenza like virus. You will be allowed to travel, unless you are suspected to have an illness of international public health concern.

I certify that the above declaration is true and correct and that any dishonest answers may have serious public health implications.

Signature: _____

Public Health Questionnaire



Hand washing is the best method of prevention.

The RCL Paradigm for prevention and response to influenza-like illness such as H1N1:

- Screening
- Surveillance
- Sanitation
- Communication
- Isolation Treatment
- Appropriate Disembarkation
- Transparency with Local Authorities

- **Isolation:** Public health experts advise that the best way to prevent the spread of a contagious illness is to isolate those who are affected. In certain cases where a guest or crew member is considered ill, the ship’s doctor will request that the ill person remain in their stateroom for a specified period of time. If a crew member becomes ill with a contagious illness, he or she will also be isolated for a period specified by the doctor.
- **Treatment:** Treatment of any guest or crew member who is ill with a contagious illness is another cornerstone of the *RCL Paradigm*. If guests are treated and isolated, they are more likely to recover quickly and less likely to expose others during their cruise. For this reason, during an outbreak, we provide GI treatment on a complimentary basis. This includes the complete consultation, medications and follow-up visit if necessary. Most guests diagnosed with the most common gastrointestinal virus, norovirus, feel better in as little as 24 hours. During the consultation with one of the ship’s medical staff, we also take the opportunity to educate the patient about norovirus and how to prevent spreading it to others (hand washing is key).
- **Reporting:** All ship medical facilities are equipped with electronic reporting software, which enables the medical staff to input information received from the patient, including stateroom and table number, the date and time of first experiencing symptoms, and other relevant data. The software then enables the staff to sort and batch the data to search for any relevant common denominators that may assist the medical team in identifying the potential origin or source of the outbreak, and then to take steps to remedy it. For example, on one occasion the system was used to identify a number of guests who all participated in the same tour while ashore in a port of call. The medical team then worked with the tour operator to sanitize the entire establishment before the ship returned the following week. We are also required to report selected shipboard illnesses, including infectious illnesses that may pose a public health concern, to the U.S. Centers for Disease Control and Prevention (CDC), Vessel Sanitation Program (VSP) for ships with itineraries involving a U.S. port, or to public health authorities in non-U.S. ports of call along the itinerary, generally within 24 hours prior to arrival in those respective ports. At RCL, we have a policy of transparency. We report illnesses as required and work closely with local health officials to implement appropriate responses and actions.

MARITIME DECLARATION OF HEALTH
(To be completed on the arrival of every vessel at a port of call)

Part of: _____ Date: _____
Name of ship: _____ From: _____ To: _____
Nationality: _____ Master's Name: _____
Net Registered Tonnage: _____
Dwelling or Certificate: _____ Dated: _____
Description: _____
No. of Cabin: _____ No. of crew: _____
Passengers: _____ Deck: _____
List of ports of call from commencement of voyage with dates of departure: _____

Health Questions Answer Yes or No

1. Has there been on board during the voyage any case or suspected case of plague, cholera or yellow fever? Give particulars in the Schedule (on reverse of form)
2. Has plague occurred or been suspected among the rats or mice on board during the voyage, or has there been an abnormal mortality among them?
3. Has any person died on board during the voyage otherwise than as a result of accident? Give particulars in Schedule.
4. Is there on board or has there been during the voyage any case of disease which you suspect to be of an infectious nature? Give particulars in Schedule.
5. Is there any sick person on board now? Give particulars in Schedule.
NOTE: In the absence of a surgeon, the Master should report the following symptoms as ground for reporting to the nearest port of call: (a) any case of cholera, dysentery, typhoid, or any other infectious disease; (b) any case of plague; (c) any case of yellow fever.
6. Are there any cases of any other condition on board which may lead to infection or the spread of disease?

I hereby declare that the particulars and answers to the questions given in this Declaration of Health (including the schedule) are true and correct to the best of my knowledge and belief.

Signed: _____ Master
Counter-signed: _____ Ship's Surgeon
Date: _____

* If more than 6 weeks have elapsed since the voyage began, it will suffice to give particulars for the last 6 weeks.

Maritime Declaration of Health

Ships arriving in non-U.S. ports of call are required to report ill persons, infectious illnesses, and any related deaths onboard to health officials in the next port of call, utilizing a standardized form known as the Maritime Declaration of Health (http://www.seamaster.pl/pdf/seamaster_MarHlth.pdf).

- **Appropriate Disembarkation:** In the event that a guest or crew member requires hospitalization or medical treatment that cannot be provided onboard the ship, the patient may have to leave the ship at a port of call during the cruise. In this situation, the RCL CareTeam will be there to assist (please see CareTeam section of this report). Disembarkation of any ill guest or crew member at the end of a cruise is done under the supervision of our medical staff and in cooperation with local authorities.

To support our illness prevention and control efforts, we have begun phasing in new cleaning and disinfecting products for use throughout our ships. In the last year, we have begun to replace the general all-purpose cleaning product that we previously used on our ships with a new, more effective cleaning and disinfecting product, which is more environmentally friendly, safer to use, and can be sprayed on soft surfaces such as curtains, upholstery and carpet without damaging the material or leaving any kind of residue. We plan to fully replace our former cleaning agent with this new product by the end of the first quarter of 2011. As a complement, we also have begun using another disinfectant during outbreaks of GI illnesses that is applied through use of an electrostatic sprayer for maximum area coverage, down to the molecular level. These sprayers allow our crew members to quickly disinfect an entire stateroom, including the balcony and bathroom, or entire areas of the ship in minutes, as compared with more traditional “spray and wipe” methods. Because the product is nontoxic, the infected guests and/or crew members can return to their staterooms shortly after the treatment is complete.

We have learned from experience that GI illness outbreaks may be brought aboard by guests when embarking the ship, as well as after visiting a port of call during the cruise. To address this concern, we provide our shore excursion providers with basic information on public health standards that they should meet. We also send our ship’s personnel and public health inspectors to randomly inspect tour operators in our ports of call in an effort to help detect any unsanitary practices.

FOOD SAFETY, HOUSEKEEPING AND INTEGRATED PEST MANAGEMENT

What food safety measures does RCL implement on its ships?

In the area of food safety, RCL has adopted the Hazard Analysis Critical Control Point (HACCP), a systematic seven-step preventative approach. The seven principles of HACCP are hazard analysis, identification of critical control points, identification of critical limits for each critical control point, identification of critical control point monitoring requirements, corrective actions, record keeping, and verification to evaluate whether the HACCP system is working.

Our food safety protocols and procedures are based on the CDC’s VSP recommendations, and many go *Above and Beyond Compliance* of the requirements stated in the VSP operations manual. These food safety practices include cleaning and disinfection of food preparation areas and equipment, employee hygiene, prevention of cross-contamination, following instructions on proper handling of potentially hazardous foods that are susceptible to becoming contaminated, and many others.

Time control and temperature regulation are two of the most important factors in ensuring food safety. When supplies and provisions are landed on our ships, they must be at the right temperature or we will reject them. Once we have accepted the supplies, we follow strict guidelines on the time for food supplies to get from the container or truck to the refrigerator or freezer onboard. There are also strict guidelines for how long food can be out of the freezer or refrigerator before it is prepared, how foods are thawed, and how long they can remain at a buffet station.





How does a ship’s Housekeeping Department fully clean and sanitize all areas of the ship, to protect the health of guests and crew onboard?



The Housekeeping Department is responsible for keeping our ships clean and sanitized to achieve a pleasant and healthy environment for guests and crew members alike. Among the many duties of our housekeeping staff are using the proper chemicals and procedures for cleaning and sanitizing, seeing that areas of the ship are cleaned and sanitized with the correct frequency, avoiding cross-contamination, and responding quickly and efficiently to any instance of public vomiting. Areas of their focus include staterooms, recreational areas and dining areas, as well as ice machines and public restrooms. In addition to their routine daily responsibilities, on turnaround day our housekeeping staff take on additional duties to perform extensive cleaning and sanitation before guests board the ship. This thorough cleaning allows for a fresh start for the next sailing. Effective training and support are important aspects of housekeeping.

How does RCL prevent pests from coming onboard and becoming a potential challenge on our ships?



The best way to avoid problems with pests is to prevent them from coming onboard and then multiplying. In addition to our high public health standards, RCL ships have an onboard Integrated Pest Management (IPM) program designed to help keep our ships pest free. This program emphasizes prevention, focusing on food preparation and serving areas, provisioning areas, garbage storage, incinerators, bars, food venues and dining rooms, and on performing nightly inspections.



It may be difficult to observe what is entailed in our integrated pest management program or to fully appreciate the many measures that are taken to keep our ships pest free. However, there is one measure you may be able to detect. The next time you visit one of our ships, you may notice several round metal devices that fit over and around the ship’s mooring lines when the ship is tied up in ports of call. This simple device effectively prevents mice or other rodents that may be present in the port from gaining access to the ship along the ship’s lines.

Our pest management program clearly defines health and safety considerations, as well as the respective roles and responsibilities of crew members, by specific task. Topics include sanitation, elimination of areas where pests could potentially harbor, monitoring and control measures, application of approved pesticides when and if necessary, and regular inspections, including inspections of incoming supplies and shipments *before* such supplies are brought onboard our ships.

We are aware of recent media accounts regarding the resurgence of bed bugs in some cities around the world. Although bed bugs are not known to transmit diseases to humans, none of us like the thought of being around them. RCL takes a number of proactive measures to prevent bed bugs from becoming a problem onboard our ships. We also train our crew in how to identify a bed bug should they ever see one and how to eliminate them should they be found. Through these processes, we can continue to avoid the kind of problems some shoreside cities are experiencing.



St. Petersburg, Russia



CARETEAM

Family Assistance Foundation, Inc.

The Family Assistance Foundation, Inc. is an independent nonprofit support organization founded in 2000 for the purpose of training those in front-line positions who will be called upon to provide assistance and support to others in their time of need following a transportation-related tragedy.

The Family Assistance Foundation's mission is to both support and improve industry response to emergencies and disasters — whenever and wherever they occur. The Foundation takes a unique, research-based approach to helping organizations, such as RCL, in most effectively meeting the personal needs of guests, crew, their families and their companions during the acute phase of a crisis and beyond.

Experience has demonstrated that the best way to be prepared for an unforeseen event is through professional training and drills that enable a company to expect, and prepare for, the unexpected. The Family Assistance Foundation's education and training programs provide those very skills necessary to be ready to assist our guests and crew when the need arises.

In 2006, RCL established a dedicated team of trained specialists to provide professional logistical support and reassurance in the event one of our guests experiences a personal emergency while sailing with us. Led by a medical professional, this group, known as the CareTeam, is available 24 hours a day, seven days a week, to provide support during a family tragedy at home, an illness or emergency onboard, or an incident while ashore. The CareTeam, which is based at our headquarters in Miami, also provides a much-needed coordination point for communication between RCL and affected guests, their family members, and their traveling companions.

In 2009, we extended the full range of CareTeam services to our crew members on all ships. In 2010, we advanced the capabilities of this team when we created a shipboard CareTeam Associate position on each of our ships. This new function involves careful selection and training of suitable crew members who are available to assist in situations where it is necessary to have someone physically present with a guest or crew member in need. Generally, CareTeam Associates are chosen because they are very dedicated, approachable, and compassionate crew members with good listening skills. They remain cool under the toughest of situations, have strong organizational skills, are eager to learn and maintain a good disposition.

The CareTeam Associates augment the Miami-based CareTeam Specialists in initiating specialized services and handling certain cases where the presence of an understanding person on the ship is crucial. Our overall strategy is that the CareTeam Associate becomes involved immediately following the notification of an emergency at home, onboard or ashore and then serves as an extension of the CareTeam in our corporate effort to support the logistical and emotional needs of an affected guest or crew member. We have both male and female Associates on each ship, and we try to match an appropriate Associate to the person in need, depending on the circumstances. The CareTeam Associate is also available to debark along with a guest or crew member, if circumstances indicate. By the first quarter of 2011, we will have fully implemented our CareTeam Associate program on all ships in our fleet.

We fully understand that should a personal tragedy or emergency arise during a cruise, the affected guest or crew member will need to devote 100 percent of their time to focusing on their own needs. Far from home and away from family, persons in

need can benefit from trained professionals who have the experience and resources necessary to provide compassionate logistical support. In such cases, there can be an overwhelming need for a caring and understanding person to help — a person who knows what to do and how to do it, speaks the language, and is ready to step forward at the right moment.

Miami-based CareTeam Specialists are compassionate and dedicated individuals who have received specialized training and certification from the U.S. National Transportation Safety Board and the respected Family Assistance Foundation and AVIEM International. Our specialists assist persons in need all the way through their situation, from beginning to end, and often build close relationships with the person in need that they are caring for.

What types of assistance and services can the CareTeam provide?

The CareTeam can help the affected guest or crew member with a wide range of services and support, such as:

- Finding local hotel accommodations in ports of call;
- Arranging local ground transportation;
- Contacting the traveler's insurance carriers to make the necessary contacts and notifications on a timely basis;
- Contacting a citizen's embassy or consulate;
- Arranging flights home for affected guests or crew members;
- Arranging flights for family or friends to the port or ship, so that they can personally assist their friends, family or travel companions;
- Arranging conference calls to or from a ship for guests and family through our onboard telecommunications system;
- Arranging religious/clergy/onboard counseling for guests, crew and family/traveling companions in times of need;
- Arranging port agent services, including translations, travel escorts and local services, through RCL's dedicated port agents, who are located in more than 300 ports of call worldwide;
- Arranging for luggage to be shipped home or arrangements for temporary clothing and toiletries as needed;
- Providing a CareTeam Specialist as an escort to accompany the guests, crew members, or their family or traveling companions on the trip back home, when necessary;
- Arranging air ambulance services to airlift the patient to a location that can provide additional medical treatment and support; and
- Providing 24-hour telephone support to any guest or crew member who needs it.



A Day in the Life of a CareTeam Specialist

8:30 AM: Arrived at the office in Miami and assisted guest who missed the ship in Cozumel, Mexico. Assisted with booking of travel arrangements to ship's next port of call.

9:00 AM: Coordinated with a guest's travel insurer to assist the onboard guest in returning home due to a death in the family.

9:30 AM: Conference call with an onboard guest and RCL's local agent in Grand Cayman to arrange an appointment to address a dental emergency (tooth abscess).

10:00 AM: Spoke with a guest onboard for whom the ship's doctor has scheduled a medical debark to a hospital in St. Maarten. Arranged contact with the guest's daughter (emergency contact) back home.

10:30 AM: Arranged accompaniment home for an ill crew member from Dubai, United Arab Emirates, to the Philippines.

11:00 AM: Assisted an onboard guest who wishes to debark due to the death of a family member back home. Assisted with arrangements through the local port agent, travel insurer, airline and grief counselor.

1:00 PM: Followed up with guests who debarked a ship due to a medical emergency involving injury. Continued communication to confirm the guests were safely back home.

2:00 PM: Coordinated travel arrangements for the family of an elderly onboard guest who wished to travel from their home to a hospital in St. Thomas to accompany their family member guest back home.

3–5:00 PM: Arranged for grief counseling of a crew member faced with the death of a close family member back home in Japan. Also arranged for a flight home for funeral and bereavement period.



What are some examples of ways in which the CareTeam assisted guests or crew in 2010?

Since its inception, our CareTeam has compassionately assisted many guests and crew members in a time of need. Here is a representative sample from 2010.

- In the aftermath of the January 2010 earthquake in Haiti, we made CareTeam services available to our Haitian crew members throughout our fleet, to make sure that they were all right and to see if we could assist them in contacting friends or family members back home. We provided similar services to our Chilean crew members following the February 2010 earthquake in Chile.
- An elderly male guest drowned while swimming onshore at a port of call. Our CareTeam immediately reached out to the family to assist and extend much-needed support during this difficult time. The recently appointed onboard CareTeam Associate provided support by arranging accommodations and flights, and then followed up with the guest's travel insurer. Shortly thereafter, our CareTeam members received a very moving and complimentary letter from the family, thanking them for the care, assistance and support they received in their time of need.
- An elderly guest sustained a serious eye injury after falling in her stateroom during her cruise. After disembarkation was recommended by the ship's physician, our CareTeam worked together with the onboard CareTeam Associate to coordinate our guest's disembarkation from the ship, transportation to the Dominican Republic, and successful reconstruction of her eye by a top U.S.-trained ophthalmologist. The CareTeam then coordinated with the guest's travel insurer to arrange for our guest to be flown back to the United States for follow-up treatment at Miami's renowned Bascom Palmer Eye Institute. The guest later contacted the CareTeam to thank the entire team for the care she received throughout the process, which ultimately helped save her sight.
- After an elderly guest passed away due to natural causes during her European cruise, the CareTeam contacted the local American embassy to assist with funeral and other arrangements necessary to return our guest to her family back home in the United States. After the cruise, we received a nice letter from a family member in the United States saying, " ... I honestly don't know what we would have done if our CareTeam specialist wasn't there to assist me through the process...she even offered to help if I needed to fly to Spain...she was available by phone at any hour when I had a question or just to help me deal with things, especially as Spain was six hours ahead."
- An elderly guest and his wife were debarked from the ship at a port of call after the husband experienced difficulty breathing and was diagnosed with pneumonia by the ship's doctor. A Spanish-speaking CareTeam Specialist was immediately assigned to assist our guests with all arrangements, including transportation back to the United States on a jet air ambulance. During the flight, the patient's wife also experienced shortness of breath and was successfully treated while airborne. The CareTeam also helped arrange for the couple's daughter to fly into Ft. Lauderdale to meet her parents upon arrival. After both guests were discharged and cleared by hospital doctors to travel, the CareTeam assisted with scheduling to transport our guests and their family back home.





Venice, Italy



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