

M-CRW-1(I)-06

PASSENGER SHIP CROWD MANAGEMENT TRAINNING

REV. 09 - 2019

SEAFARERS TRAINING CENTER INC



PASSENGER SHIP CROWD MANAGEMENT TRAINNING

IN ACCORDANCE TO INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS (STCW), 1978, AS AMENDED



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SCOPE

This course is designed to provided the trainees with knowledge and skills in managing crowds .this covers the mandatory competences and the required knowledge , understanding and proficiencies specified in paragraph 3 od section A-V/2 and table A-V/2-1 of STCW Code

OBJECTIVE

The general objective of this course is that the apprentices know the procedures when managing crowds.

Specific objectives:

The trainees will acquire the following knowledge:

- The shipboard emergency plans, instructions and procedures related to management and evacuation of passengers.
- ➤ The techniques of crowd management and the relevant equipment that will be used to assist passengers in an emergency situation.
- Will learn that it is a muster list
- > The importance of emergency instructions on board.
- Will know how to acquire the Skills to give clear and reassuring orders
- ➤ How to manage passengers in corridors, stairs and passengers in an emergency situation
- Understanding the importance of and having the ability to maintain escape routes clear of obstructions

METHODOLOGY

Interactive-demonstrative classes, with support of bibliographic material and teaching Aids

ENTRY STANDARDS

This course does not have any specific requirement.

COURSE CERTIFICATE

On successful completion of the course, documentary evidence shall be issued certifying a holder's acquisition of the mandatory minimum requirements and competence as prescribed in regulation V/2 paragraph 7 of the STCW convention, as amended



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COURSE INTAKE LIMITATIONS

The maximum trainee-instructor ratio may be up to 25 to 1 for classroom #1 and 8 to 1 for classroom #2

STAFF REQUIREMENTS

Normally, the course should be conducted by experienced instructors with knowledge of the shipping industry and experience in maritime education and training. It is recommended that at least one staff member must have received training in andragogy.

The instructor should:

- ❖ Adequate capacity of instruction and comply with the requirements of rule 1 / 6 of STCW 78 as amended (course IMO 6.09)
- demonstrate competences in section A-V / 2 and in table A-V / 2-1 of the STCW 78 code (IMO course 1.41)
- Minimum 24 months of officers in charge of a navigational watch or officer in charge of an engineering watch.

Evaluation:

It is carried out through practical and theoretical examinations.

Must attend 90% of the classes.

TEACHING FACILITIES AND EQUIPMENT

Ordinary classroom facilities and an overhead projector.

IMO REFERENCES:

STCW 78 AS AMENDED SOLAS

BIBLIOGRAPHY

https://www.colorline.com/practical-information/safety-on-board



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TIMETABLE COURSE OUTLINE

	Subject Area		Time Allotment (hours)	
	·	Theoretical	Demonstration Practical Work	
Co	urse Introduction	4		
1.	Contribute to the implementation of shipboard emergency plans and procedures to muster and evacuate passengers 1.1 Shipboard emergency plans, instructions and procedures related to the management and evacuations of passengers 1.2 Muster list and emergency instructions 1.3 Crowd management in an emergency situation	Sex		
2.	Assist passengers en route to muster and embarkation stations 2.1 Give clear and reassuring orders 2.2 Manage passengers in corridors, staircases and passageways 2.3 Maintain escape routes clear of obstructions 2.4 Methods available for evacuation of persons with disability and persons needing special assistance 2.5 Methods of searching for passengers in accommodation and public spaces 2.6 Effective mustering procedures 1 Importance of keeping order 2 Use procedures for reducing and avoiding panic 3 Use, where appropriate, passenger lists for evacuation counts 4 Importance of passenger being suitably clothed as far as possible when mustering 5 Check that the passengers have donned their lifejackets correctly 2.7 Disembark passengers, with special attention to disabled personas and persons needing assistance			
3.	3. Evaluation		0.30	
TOTAL		10.30		



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COURSE TIMETABLE

Period	Day 1	Day 2
(2.0 hours)		
1 st	Course Introduction Contribute to the implementation of shipboard emergency plans and procedures to muster and evacuate passengers	Assist passengers en route to muster and embarkation stations Evaluation
2 nd	Contribute to the implementation of shipboard emergency plans and procedures to muster and evacuate passengers Assist passengers en route to muster and embarkation stations	CORT
MEAL BREAK		
3 rd	Assist passengers en route to muster and embarkation stations	
4 th	Assist passengers en route to muster and embarkation stations	



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Introduction:

The cruise ship industry is growing; more and large vessels are carrying more and more passenger industry trend is the rapid and continuing growth in the size and capacity of passenger vessels; new larger ships can accommodate more than 2,500 passengers and carry crew of over 800.

The industry is considered safe, yet during the period 1984-1994, 55 passenger vessels embarking passengers in U.S. port were involved in 92 reportable casualties. Risks inherent with travel at sea can be mitigated through enhanced safety awareness and training.

Personal injuries and fatalities associated with passenger ship accidents are low, relative to other modes of mass transportation. Ships are compartmentalized and zoned, facilitating safe evacuation in the event of a significant incident. Additionally, passengers participate in drills introducing them to safety procedures and equipment and are therefore aware of their responsibilities as well as of the crew in case of an emergency.

Included in the new training requirements enumerated in the STCW 78 as amend, is Crow Management training for, personnel designated on Muster Lists to assist passengers in emergency situations on board passenger ships. There are three basic competency areas included in the Crowd Management Training requirements:

Crowd Management Training

To ensure that seafarers are trained or qualified to carry out their duties on board ship

- 1. Seafarers shall not work on a ship unless they are trained or certified as competent or otherwise qualified to perform their duties.
- 2. Seafarers shall not be permitted to work on a ship unless they have successfully completed training for personal safety on board ship.
- 3. Training and certification in accordance with the mandatory instruments adopted by the International Maritime Organization shall be considered as meeting the requirements of paragraphs 1 and 2 of this Regulation.
- 4. Any Member which, at the time of its ratification of this Convention, was bound by the Certification of Able Seamen Convention, 1946 (No. 74), shall continue to carry out the obligations under that Convention unless and until mandatory provisions covering its subject matter have been adopted by the International Maritime Organization and entered into force, or until five years have elapsed since the entry into force of this Convention in accordance with paragraph 3 of Article VIII, whichever date is earlier.



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.1 Explain the importance of crowd management during emergency situation

Cruise ships are a place where people gather in hordes. And this huge milling causes unwanted problems and situations. The concept of crowd control has emerged as a solution to this problem and crowd control management essentially forms a part of the effective management of risks and emergencies involved in cruise ships.

Crowd control management is a specific training program that all individuals of a ship's crew need to learn. Crowd safety, is not just about trying to merely control the crowd, it involves using the right kind of communication and effectuating the perfect leadership skills to manage the crowd. This is why the crowd control safety program has been recommended by the STCW 78 as amend .



Credits: Pjotr Mahhonin/wikipedia.org



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In order to take up the training program for crowd safety, entrants do not need any precedent requirements and even the certification provided is on the basis of the aptitude and perceiving of the situation by the individual rather than a formal certificate of passing. The duration of the program is around seven hours and it is compulsory.

Some of the main instructions imparted in the program can be enumerated and elaborated as follows:

- In case of any emergency, panic is the first reaction. In cruise ships, in case of complications, the element of panic will be on the higher side. This is why crowd managers in cruise ships need to have the knowledge to pacify the crowd and provide with them with the necessary information, in a manner that does not cause them to panic further
- Leadership skills, mentioned above, also is an aspect devoted to in the crowd control for cruise ships program. A leader is a person who is able to guide others without being rude and incoherent. In a situation of extreme exigency, the people in the cruise ship will want to listen to someone who is able to give them clear instructions and reason things in the most calm manner
- Understanding the psyche is another area where the safety program looks into.
 In a cruise ship, lots of people are around so the problem of communication
 differences and other minor conflicts arising is but natural. Crew members need
 to pay close attention to people so that they can prevent such conflicts from
 arising and thereby avoid a stressful scenario.

Similarly gauging the psyche of an individual will help the communication better between the individual and the crew member as the latter will be in a better position to know the needs and requirements of the individual.

In terms of leadership qualities in cruise ships, the Y theory is preferred to the X theory where the former refers to a democracy in leading while the latter refers to an autocracy in leading.

In terms of statistics, the cruising industry has tremendous potential with a revenue generation of about US\$ 38 million. With the help of crowd control safety, channelizing and ensuring that more revenue is generated in this perpetually intriguing industry for the days to come, can be successfully carried out



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Safety on board

We welcome you on board and hope you'll have a most pleasant voyage. For your own comfort and safety, we would like you to acquaint yourself with the ship and read this brochure on our Safety On Board procedures and systems.

Before departure

Due to safety reasons we perform random checks of passengers, vehicles and baggage prior to departure. All guest (except children accompanied by adults) must bring proof of identity (i.e. passports etc). Refusing to comply with these guidelines, can result in denial of boarding, without any refund.

Gas containers

The main inlet for gas on caravans, motor home etc. must be closed before driving on board, and during the voyage. The access to the gas container must be kept unlocked so the container can easily be removed in case of fire. Please mark the door or valve where the container is placed to confirm that it is closed.

Oxygen for private medical use is allowed. Guests who require oxygen have to provide their own equipment and supply as there is only a limited supply on board. Contact our customer service centre for more information and declaration. Guest who are travelling with firearms have to contact Color Lines customer service centre for more information and declaration.

For guests using syringes for medical purposes (insulin etc), we can provide secure containers for disposal of syringes. Please contact the reception on board. Thank you for your consideration.

It is not allowed to use electrical appliances other than the standard fittings in cabins or elsewhere on board (I.e. heat sources such as kettles, irons, etc.)

No fire or flames allowed (including candles etc)

Strollers and wheelchairs may not be placed in the corridors on board due to the need for clear escape routes.

Safety on board Please read the following:

1. Study carefully the ALARM INSTRUCTION/ESCAPE PLAN which you



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will find posted in your cabin.

- 2. Study the escape route signs in corridors and stairways showing the escape routes to the assembly stations.
- 3. Note the MAIN ESCAPE ROUTES and the ALTERNATIVE ESCAPE ROUTES and try them out.
- 4. Make a point of regarding all safety signs wherever you are on board.

PROCEDURES: ALARM SIGNAL:

Should an emergency situation arise, alarm signals will be sounded all over the ship.

Alarm signal • • • • • • ————

7 short tones and 1 long tone means: Proceed at once to the assembly station.

Listen to the information given over the Public Address System. Follow the instructions given by the crew.

ALARM INSTRUCTION/ESCAPE ROUTE PLAN:

This is posted in all cabins. For your own safety we recommend that you read this carefully as it tells you what to do in an emergency situation and indicates the escape routes from your cabin to the assembly/rescue stations.

CAR DECK:

It is forbidden to stay on the car deck during the crossing. All doors will be locked. The car deck is under continuous camera surveillance from the bridge and the control room.

FIRE ZONES:

The ship is divided into fire zones so that any outbreak of fire can be easily contained. Openings in the bulkheads between fire zones are fitted with fire doors. Under normal conditions the doors will generally remain open. The doors can be shut by remote control from the bridge or each door may be shut by a means of a switch or push button adjacent to the door, marked «Fire door release». The crew will shut the doors. Some doors are hinged; others are sliding doors. All fire doors can be opened manually to allow you passage. The doors will close again automatically. A sign on or next to the



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door will show you how to open it. The car deck is isolated from the rest of the ship as a separate fire zone.

WATERTIGHT BULKHEADS:

To prevent the ship from listing heavily or from sinking if badly damaged in a collision or grounding, the ship is divided into a number of watertight compartments below the main car deck. These compartments also serve as fire zones. Watertight doors are fitted in the bulkheads between the compartments. Most of these doors are in restricted areas where only the ship's crew has access. The doors can be opened and shut locally or from a number of locations on board. When closing or opening the doors, a loud bell will sound to warn everybody to mind the doors when they are in motion.

STABILITY:

To prevent the ship from capsizing or listing heavily if the car deck becomes flooded due to damage to the hull, the car deck has also been divided into watertight compartments. The ship has either sliding partition walls dividing the car deck (closed when at sea), or watertight compartments on both sides of the car deck. Some ships have a combination of both.

FIRE-RETARDANT MATERIALS:

All interior fittings (panelling, ceilings, doors, staircases etc.) are non-flammable. Soft furnishings (carpets, curtains, upholstery, mattresses etc.) are made of fire-retardant materials.

FIRE ALARM CALL POINTS/WARNING:

Manual call points are installed at strategic points all over the ship. Should you see smoke from what you think could be a fire, press the nearest call-point button or warn the crew. The call point consists of a button inside a small red box marked BRANN/FIRE.

FIRE DETECTION:

The ship is equipped with an advanced automatic fire detection system. Automatic smoke detection devices are installed in all rooms on the ship including cabins, corridors, public rooms, storerooms, linen rooms, car deck and engine room. These are monitored from the bridge and the engine control room. The detectors will be activated by just a small amount of smoke and the exact location of the smoke will be indicated on the fire alarm central panel.

FIRE FIGHTING TEAM:

Members of the crew are organised into fire fighting teams with specific tasks and duties when a fire alarm is sounded. Each member of a fire fighting team is specially trained in



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using a self-contained breathing apparatus (smoke diver) enabling them to operate in dense smoke.

FIRE FIGHTING EQUIPMENT:

There are several fully equipped fire stations on board. In an emergency these will be manned by specially trained fire fighting crew. Fire posts and hoses are located at frequent intervals on all decks throughout the ship and connected to the fire main and the pump system. A large number of portable extinguishers are located in all corridors and public rooms as well as on the car deck and in the engine room.

FIRE FIGHTING SYSTEMS:

A sprinkler system is installed on all car decks and connected to a separate fire pump. The engine rooms and the galley area are protected by either Halon or CO2 extinguishing systems.

FIRE/SECURITY WATCH:

A fire/security patrol in radio contact with the bridge is on duty at all times. This patrol covers the entire ship and its position is registered and monitored by computer.

CAMERA SURVEILLANCE:

The car deck, engine room, other technical rooms and watertight doors (in the bow) are under camera surveillance.

EMERGENCY DRILLS:

The officers and crew are trained to extinguish all types of fire on board. Emergency drills, including training in evacuating/guiding passengers out of the danger area to assembly stations, are held regularly.

FIRE STATIONS:

There are at least five fully equipped fire stations on board containing fire fighting equipment, tools, breathing apparatus and communication equipment.

SEARCH:

In an emergency situation appointed members of the crew will search through the entire ship to ensure that everybody has been evacuated from cabins, shops, public rooms etc. in the danger area.

SMOKE:

If you encounter dense smoke from a fire, hold a wet cloth/towel over your mouth and nose. Crawl along the floor. Smoke rises so there will be less smoke near the floor.



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ASSEMBLY STATIONS:

Assembly stations are the locations where passengers must gather in an emergency or when the order has been given to go to the assembly stations. These are situated on the upper deck close to the rescue stations. When the alarm signal sounds (7 short and one long tone) or the crew gives the order, you must immediately go to the nearest assembly station. The ship's crew will inform you of the situation and how to proceed.

EMERGENCY EXIT:

The emergency exits are marked with «Emergency Exit» signs and lead to the rescue stations. Note the location of the emergency signs wherever you are on board.

LIFEJACKETS:

Lifejackets are placed in boxes or lockers marked «Lifejackets» at or near the rescue stations. The lifejackets are to be put on when you are ordered to do so. The ship's crew will assist you. Lifejackets for children are also available at the rescue stations. They will be handed out by the crew.

RESCUE STATION:

In an emergency situation the ship's crew will lead the passengers to the rescue stations where lifeboats, life rafts etc. are situated. The officer in charge will lead the operation at the rescue stations. Nobody is allowed to enter the lifeboats, liferafts etc. until the order to board the rescue crafts/abandon ship has been given.

LIFEBOATS/LIFERAFTS:

Lifeboats and liferafts are located on the «Boat deck» (evacuation deck). The capacity of the lifeboats and liferafts on board is 25% more than the total number of persons allowed on board.

INSPECTION AND MAINTENANCE:

All fire-fighting, safety and lifesaving equipment is regularly inspected and maintained in accordance with a computer maintenance program.

The Norwegian Ship Control Authority also tests and inspects this equipment once a year, and every three months the officers' and crew's ability to carry out fire-fighting and evacuation procedures is tested through comprehensive drills.

EMERGENCY EXERCISES:

All officers and crew are required to participate in weekly emergency drills. They are instructed and trained in all aspects of fire fighting, damage control, crowd management, passenger evacuation, communications, lifesaving and use of all safety equipment. Once a month a major rescue drill is held, where all safety equipment is



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tested and lifeboats and liferafts are manned and launched. The fire-fighting crew and smoke divers are trained under realistic conditions at the Fire Brigade training facility on shore. The officers and most of the crew are also thoroughly trained in first-aid treatment.

ENVIRONMENT:

In cruise's we use fuel oil with low sulphur content. We sort all waste for delivery ashore for recycling. We ask our passengers to refrain from throwing any waste overboard and to put it in a waste container so we can deliver it ashore.

SMOKING:

Smoking in bed is strictly forbidden. Exercise great care when smoking and only extinguish cigarettes in ashtrays. This applies to electrical cigarettes as well.

NO-SMOKING AREAS:

The ship has no-smoking zones. Please show consideration to no-smokers and refrain from smoking in the no-smoking zones. This applies to electrical cigarettes as well.

LIFTS:

In an alarm situation all lifts will normally be shut down. Stairways must be used. Handicapped persons will receive special assistance from the crew.

VANDALISM:

Causing malicious damage to any safety equipment is prohibited by law. Compensation will be demanded for any damaged equipment and the offence will be reported to the police.

STARTING FLUID/JUMPER SPRAY:

Any use of starting fluid or jumper spray is prohibited on board.

.2 Describe accidents on board passenger :

Our cruise ship incidents reports also include cases of crew and passenger deaths, injuries (overboard, missing people, drownings, suicides), crimes (murders, sexual, violence /assaults), cruise law news (individually filed lawsuits, class action cases, scandals, etc).

If you don't search for events on a particular vessel (via the search box above), the following link jumps down directly to our <u>list of sea-going passenger ships</u> with accident-incident reports.



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Cruise Ship Accidents

Despite everything you read here about dangers on cruise ships, remember to stay positive and don't be afraid of cruising. Unarguably, ship cruises are among travel industry's top 5 "best value for money" vacation options. And remember that even cheapest cruise deals are almost all-inclusive. Your ticket price includes accommodation, all meals (almost 24 hour available), room-service (on most companies), live entertainment, swimming pools and jacuzzies, not to forget exciting itineraries with plenty of ports.

Most statistical data regarding passenger ship accidents and cruise incidents is based on official reports published online by United States Coast Guard (USCG.mil). Other sources are online news media and local police reports. Statistics for cruise illness outbreaks are based on official reports published online by the US agency "Centers for Disease Control and Prevention" (CDC.gov). Our cruise ship tracking service is sponsored by VesselFinder.com.

- USCG department is a branch of US Armed Forces. It provides maritime service
 to both military and commercial/civilian vessels in distress at sea. The
 department provides maritime law enforcement service, and has jurisdiction in
 both US and international waters.
- CDC is USA's national public health institute, and federal agency under the umbrella of US Department of Health and Human Services. CDC is headquartered in Georgia (DeKalb County, northeast of Atlanta GA).
- Vessel Finder is a free AIS marine traffic tracker providing real-time ship tracking data and historic ship positions (vessel movement) worldwide.

US Coast Guard (USCG) medevacs

An average medevac (medical emergency evacuation) of cruise ship passenger / crew conducted by the USCG cost around USD 30,000. The cost depends on the distance between vessel and nearest Coast Guard Air Station. USCG medevacs are paid by the US taxpayers. No expenses are charged directly to cruise companies or passengers / crew.

During standard missions, the nearest USCG air station dispatches an MH-65 Dolphin helicopter (twin-engine, single-rotor search and rescue helicopter) to the cruise vessel. The helicopter usually lands on the ship's helipad (Heli Deck) or (on smaller ships) just hovers over its top deck. From there, the team airlifts / hoists the patient in a rescue basket. The patient could be accompanied by a relative (spouse), and in more serious cases - by a crew nurse. Then it transports them to the nearest land-based medical facility.



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Usually, such maritime rescue operations also include a Lockheed HC-130 Hercules (military transport aircraft) that supports communications coverage. Statistical data show that an average "cruise ship overboard" search and rescue operation conducted by the USCG could cost easily USD 0,5 million, and even reach USD 1 million.

What is the difference between cruise incident and accident?

"Accident" implies a negative association. Accidents usually result in major damages, serious injuries or even loss of life. The word is synonymous to mishap, unforeseen/unplanned bad event or circumstance with a negative outcome. For the argument sake, some use "accident" in a positive manner, when describing something bad that happened which lead to good things after all. Accidental love comes to mind.

Since "incident" can refer to anything bad or wrong that can happen, it could be both positive and negative as experience. "Incident" is used to describe feature events, usually with some adjective before the word explaining the incident type. These two words are majorly different, but often confused and interchangeably used. However, not so many among the cruise incidents can be termed "accidents". In most cases, these are simply unfortunate events (without Jim Carrey, of course).

Types of incidents and accidents on cruise ships

Cruise ship accidents and incidents can be classified as:

- disasters (sinking, grounding, capsizing, collision, allision, terrorist and pirate attacks, pollution, crashes and killings on land tours/shore excursions)
- mechanical (fire, propulsion issues, power loss) often result in cruise cancellations.
- sickness / illness outbreaks (Norovirus/GastroIntestinal, Influenza, Legionellosis/aka "Legion Fever") - often result in delayed embarkation or itinerary changes.
- deaths (overboard jumps/missing passengers and crew members, drowning in ship pools, critical traumas, murder, suicide, Myocardial infarction/heart attack)
- injuries (rape, assault, battery, fractures by accidental falling/slipping)
- crimes (bomb threats, robbery, drug smuggling/possession, arrests for past fugitive warrants, theft, belligerent behavior and indecent exposure by intoxicated passengers)
- weather-related (heavy fogs, squalls, storms, hurricanes) usually result in itinerary changes and ports of call delays.

NOTE: By "Cruise Vessel Security and Safety Act" (pdf), all passenger shipping companies are required by law to report to FBI any criminal activity against US citizens.



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Reports are mandatory, even on incidents at sea, during which the vessels were in international waters. The act became a law in 2010, when was signed by Barack Obama. The most common accidents on cruise ships are caused by:

- rogue waves (may reach height of up to 100 ft / 30 m)
- Hurricanes and squalls /heavy storms at sea (10 such events per season on average)
- ship fires (a total of 72 onboard fire incidents happened between 1990-2011)
- collisions (6 cruise vessels sunk hitting the sea bottom /rocks and reefs) or icebergs between 1990-2012, the most notorious accident being on the Costa ship Concordia.
- allisions when the vessel strikes a fixed object (such as pier, rocks, buoy, etc), usually happen during docking/undocking maneuvers.
- Norovirus illness (an average of 15 virus outbreaks on cruise ships happen per year).

Overboards

Statistical data about cruise ship overboard accidents show:

- The average overboard passenger age is 41 yo.
- Most overboards involve males.
- Most overboards happen on the voyage's last night.
- Most overboard passengers are either drunk, on drugs or engaged in tomfoolery (climbing between staterooms, playing on railings).
- The surviving rate is nearly 22% (1 in 5).
- The longest time an overboard cruise passenger managed to survive (found alive and recovered) was 18 hours.

When a passenger or crew disappears (officially is reported missing) while the vessel is at sea, the cruise company has the duty to conduct an onboard search immediately upon learning about it. If the person is not found on board, then the ship reports the incident to USCG and FBI and starts a search and rescue operation. The ship returns to the last location at sea when the victim was last seen. This location is often subject to adjusting for weather and sea conditions. The company's failure to perform a search and rescue operation can render it liable for the person's disappearance.

According to CLIA, 90% of all commercial vessels calling on US ports are foreign-flagged. Common <u>cruise ship flag-states</u> are Bahamas, Panama, Bermuda, Malta, Italy, Holland. When a person on the vessel's manifest disappears, an official report must be sent to the flag country.



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Among the common factors contributing to cruise ship overboards are:

- Inadequate security staff and CCTV surveillance
- failures to monitor onboard CCTV camera footage
- overserving alcohol to passengers on the ship
- criminal activities (homicides, violent assaults)
- overboard jumps as suicides (due to loneliness, depression, terminal illness, marital problems, etc).



Shore excursion accidents and incidents

When cruise ship passengers suffer injuries while on land tours/excursions, the resulting litigations are some of the most complex maritime injury cases. They are unique and complicated as incidents which occur in foreign countries and involve foreign tour operators.

Cruise companies often argue that tour operators are wholly independent from them and, as such, they have no legal responsibility to disembarked passengers. However, it is often apparent that tour operators are either cruise line agents or joint ventures with the companies. Cruise ship companies earn large profits from tours and excursions, and often they control nearly every aspect of the contract-based relationship with the tour company.

When a shore excursion incident occurs to a passenger, the cruise line usually rejects blame and attempts to force him/her to seek recovery against the tour operator. However, experienced maritime lawyers can successfully battle such legal deceits, establish jurisdiction over the tour company, prove the cruise line's and tour company's negligence.

Cruise ship injury lawyers can uncover contacts between foreign tour companies and the USA in order to establish Court's jurisdiction over foreign tour providers. Cruise lawyers can pinpoint where the cruise ship line failed to provide safety and welfare of its customers.

Cruise passenger accident claims

The 4 biggest ever mistakes a passenger can possibly make are:

 Failing to read and understand the terms and conditions of the cruise ticket contract. Given to all passengers before they embark on a voyage, the cruise ticket contract contains all the limitations against the cruise line company and the specific terms for filing an injury claim.



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- Failing to report the cruise incident (injury, crime) immediately after it occurred. In order to receive compensation, a victim on board the cruise vessel should act immediately to report the incident, collect witnesses' testimonies, and document about the claim.
- 3. Settling for less. After being injured, a cruise passenger is likely to be shortchanged by the cruise line company, that will want to settle the claim by offering cheap gifts (like vouchers, for example).
- 4. Not seeking proper medical care. Most passengers visit the ship's medical center after being injured, but fail to follow up with their doctors once they get home. For a positive outcome regarding the claim, it is important to document the injuries as much as possible.

Know, that maritime law is often confusing even to experts. Get in touch with an experienced attorney specialized in cruise ship accident claims to help you avoid these common mistakes and receive the compensation you're entitled to.

What victims of incidents/crimes on cruise ships should do?

On the boat, a variety of cruise line employees (butlers, stewards, cleaning staff, security) have access to passenger staterooms. Onboard crimes are not uncommon. Victims of cruise crimes/incidents should take the following steps:

- 1. Immediately report the incident to the ship's security department (in writing).
- 2. Document who you reported it to, when, who was with you.
- 3. Obtain a copy of your report.
- 4. Take photos of the crime scene if possible, before it changes. Even if it has changed, take photos.
- 5. Write down names, addresses and phone numbers of all persons who were witnesses to the incident.
- 6. If you're injured, visit the onboard doctor/infirmary for treatment.
- 7. If necessary, visit a land-based hospital at the next call port.
- 8. Contact an experienced maritime lawyer as soon as possible.

Cruise ship disasters

Synonymous to "misfortune" and "catastrophe", "cruise disaster" implies an event causing major destruction (ship crash, sinking, wreckage, manslaughter) and widespread distress.

The worst among all disastrous events at sea are:



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- RMS Titanic sinking (1500 drowned /year 1912)
- SS Eastland tipping over in Chicago (800 drowned /year 1915)
- MS Eastern Star (China-Yangtze River cruise ship) hit by cyclone, capsized and overturned (442 dead or missing /year 2015 June)
- MS Aleksandr Suvorov (Russia-Volga River cruise ship) crashed into a railway bridge girder, still in service (177 killed /year 1983)
- TSMS Lakonia caught fire and sank near Madeira island Portugal (128 drowned /year 1963)
- MS Bulgaria (Russia-Volga River cruise ship) sank in the Kuybyshev Reservoir in Tatarstan, Russia (122 drowned /year 2011)
- Concorde plane crash accident a French aircraft with 100 Peter Deilmann cruise passengers (booked on <u>MS Deutschland</u>) crashed on takeoff from Paris France, leaving no survivors.
- The ocean liner SS Andrea Doria was rammed by MS Stockholm (now Astoria) on July 25, 1956. A total of 46 people were killed in the collision. The liner capsized and sank on July 26.
- <u>Costa Concordia accident</u> hit a rock, capsized, sank near Giglio island Italy (32 drowned /year 2012)
- The terrorist attack on cruise passengers in Tunisia (22 killed /year 2015)
- MS Westerdam passengers were killed in an Alaskan plane crash accident (9 killed /year 2015).
- (statistics) In the period 1979-2013, a total of 55 cruise ships sank, of which 15 in the period 2010-2013.
- (statistics) In the period 1979-2013, a total of 106 cruise ship collisions were reported, of which 79 in the period 2005-2013.
- (statistics) In the period 1990-2013, a total of 139 cruise ship fires were reported, of which 101 in 2005-2013.

Ship grounding / aground accidents

Ship grounding is a marine accident in which the vessel impacts on the seabed. When the grounding is severe, it applies extreme loads upon the ship's whole structure. In less severe incidents, running aground results in stranding and minor hull damages. Serious ship groundings (like <u>Costa Concordia</u>) result in hull breaches (water ingress), oil spills, even total loss of the ship and human casualties.

- Worldwide statistics show ship groundings are ~1/3 of all commercial marine shipping accidents, and are second in frequency (after ship collisions).
- (statistics) In the period 1972-2013, a total of 131 passenger ships ran aground, of which 66 in the period 2005-2013.



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Cruise ship pollution at sea

On April 22, 2016, "International Maritime Organization" (IMO) officially banned cruise ships and ferries from dumping their untreated wastewater into Baltic Sea. The ban will be enforced in 2019 (for new vessels, built after 2010) and in 2021 (for older ships). The ban will chiefly affect larger ships cruising in the Gulf of Finland during summer. The measure makes Baltic Sea the world's first open sea region banning the passenger ships' sewage-dumping practice. Statistics show that 300+ international cruise vessels call at Helsinki port every year.

In December 2016, Princess Cruises pleaded guilty to 7 felony charges for sea pollution. The Carnival Corporation-owned company agreed to pay USD 40 million criminal penalties. The payment was the largest-ever that involved deliberate pollution by a marine vessel at sea. <u>Caribbean Princess</u> - together with the fleetmates Coral, Grand, Golden, and Star) were dumping waste water on a regular basis, and covered up this practice.

- These cruise ships used a "magic pipe" to bypass their usual equipment and illegally discharged large quantities of oily waste into open sea and ocean waters. The practice was reported by a ship engineer on Caribbean Princess in August 2013. Then the ship's chief and senior first engineers tried to cover it up by removing the "magic pipe" and ordering their subordinates to lie to the UK authorities when they boarded the ship for inspection in Southampton. The following month, upon arrival in NYC, USCG investigators examined the Caribbean Princess ship and eventually determined that it had been discharging waste since 2005. Other illegal practices were also discovered, among which allowing salt water in to prevent the system's alarms when too much waste was being discharged, and also preventing the bilge alarm during bilge water discharge when the engine room's storage tanks were overflowed.
- As part of the plea agreement, vessels from 8 Carnival Corporation companies (a total of 78 vessels) will operate for 5 years under a supervised "environmental compliance plan" requiring regular independent audits.
- Of the USD 40 million criminal penalties paid, USD 10 million went toward projects benefiting the maritime environment.

Note: In the table below, all ship pollution-related incidents are marked as "sea pollution". Most of the official reports are for the region of Alaska issued by USCG and also by port authorities.

Cruise crime reports and statistics



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A huge part of all listed below incidents reports and news are related to crimes done on cruise ships. Among those are murders, sexual assaults, criminal batteries, robberies. However, the most violent crimes on cruises are done ashore. A 2008 poll reports 10% of cruise passengers were affected by some sort of crime. In the period 2002-2007, FBI prosecuted only a quarter of all reported crimes, of which:

- 55% were sexual assaults
- 22% were physical assaults
- 7% were homicides
- 5% were about missing persons.

Fact is, that most of the cruise crime incidents remain unreported. The following statistics are related to cruise ship crime rates based on FBI-collected data:

- (on average per year) 50 cases of crime at sea are opened/investigated by FBI.
- In the period 2002-2007, 46% of all cruise crime cases involved members of the crew.
- In the period 2012-2014, a total of 74 rapes on cruise ships and a total of 29 assault crime cases involving serious body injuries were officially reported.
- Fact is that in only 1 year period (Oct 2007 through Oct 2008), the FBI received from Carnival Cruise Lines alone a total of 93 reports on sex-related crimes on cruise ships. In a significant proportion of those incidents, victims were minors.

Today, one of the world's top dangerous travel destinations is <u>Nassau Bahamas</u> (on New Providence Island). The country's capital city has one of the highest murder rates over 30 per 100,000. For comparison, the US rate is ~4,5 per 100,000. The city's young men jobless rate is also record high (19,5% as of 2015). There are numerous crime reports about cruise passengers on shore excursions being robbed, raped, killed. In 2015, the Nassau's tourist murder rate reached a record high. The USA issued far more Bahamas travel warnings than about any other country. The Nassau's image today is synonymous with violent crime, ineffective law enforcement, non-functioning legal system.

- All NCL cruise ships in the Caribbean changed their 2010-2011-2012 itineraries, skipping <u>St Lucia</u>. The line's decision followed the 3 attacks on cruise passengers ((armed robberies) in 2009, that occurred ashore during excursions on the island.
- In August 2015, Canada's and UK's travel advisory offices issued Bahamas travel warnings about the rising number of sexual assaults and armed robberies and break-ins (targeting foreign tourists), often with fatal results. Both reports state the most violent crimes occur in Nassau and Freeport (Grand Bahama island).



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- In March 2015, the US State Department issued its Honduras Travel Warning. While crime and violence are serious issues throughout Honduras, its Government lacks enough resources to effectively protect tourists, to investigate and prosecute. The local police lack enough vehicles and even fuel to properly respond and assist. Members of the police have been arrested, charged and convicted for criminal activities.
- The travel warning suggests while ashore, passengers to avoid wearing any jewelry (valuables in general), displaying cash or credit cards, walking at night, walking alone on beaches, car traveling with the windows up and the doors locked.

Another major "cruise crime" destination is Mexico. In April 2015, the US State Department issued its Mexico Travel Warning. Due to threats to passenger safety posed by organized crime, there are risks of traveling to certain Mexican destinations. Among those are Baja California (Ensenada), Colima (Manzanillo), Sinaloa (Mazatlan), Guerrero (Acapulco, Ixtapa), Jalisco (Puerto Vallarta), Quintana Roo (Cozumel, Cancun, Playa del Carmen) and Yucatan (Merida, Chichen Itza).

• Most of the reported incidents are related to rapes, robberies and kidnappings. The number of US citizens murdered in Mexico was 100 in 2014.

Another major crime issue is drug trafficking. There are unofficial statements that cruise ships are used on "regular basis" for smuggling cocaine and marijuana, in amounts between 3-30 kg. Most drug smuggling incidents are reported on Transatlantic repositioning cruise ships crossing the Atlantic Ocean between South America and Europe (Italy). Another "favorable" drug smuggle destination is Western Caribbean (roundtrips from Florida), with stops in Honduras, Jamaica, Mexico, from where drugs are smuggled into the US.

The improved cruise crime report policy is a direct result of the efforts of the nonprofit organization ICV ("International Cruise Victims Association") working with US Congress.

- Since 2016, cruise lines are required by law to report all crimes to US Department of Transportation.
- Cruise Line Incident Reports are officially issued by the US Department of Transportation.
- As result, the number of reported sexual assaults in 2016 jumped nearly 5 times (485%, 63 reports) over 2015 (13 reports). Total reported cruise ship crimes jumped over 3 times (339%, 95 reports) over 2015 (28 reports).
- FBI started responding to shipboard sexual assaults more aggressively.



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Cruise Ship Accident Reports and News

Below are listed almost all cruise ships, owned by major line companies. If the vessel's name is linked, it means it has a record in our database. So simply follow the corresponding links. Due to large number of ships per line, those of the largest cruise lines fleets are listed in separate tables. This also allows you to compare cruise line incidents by type and year of occurrence.

Accidents on cruise ferries

Worldwide Ferry Safety Association's statistics show between 800-1000 people die in ferry boat accidents annually. Among the main factors that usually contribute to a ferry accident are:

- Mechanical / machinery failure
- Overloaded vessel (miscalculation in boat's total weight could result in capsizing)
- Improper routine maintenance
- Adverse weather conditions (gales, storms, rogue waves)
- Operating under the influence of intoxicating substances (alcohol, drugs, narcotics).

The list of the world's deadliest accidents on <u>cruise ferries</u> (passenger / RoPax vessels only) includes:

- Al-Salam Boccaccio 98 (built 1968) sank in February 2006, deaths 1020
- Estonia (built 1980 as Viking Sally) capsized and sunk in September 1994, deaths 852
- Sewol (built 2014) sank in April 2014, deaths 306
- Heraklion (built 1949) sank in December 1966, deaths 200+
- Herald of Free Enterprise (built 1980) capsized in March 1987, deaths 193
- Princess Victoria (built 1947) sank in January 1953, deaths 133
- Express Samina (built 1966 as Corse) hit rocks off Paros island in September 2000, deaths 82
- Jan Heweliusz (built 1977) capsized and sank in January 1993, deaths 55
- TEV Wahine (built 1966) sank in a cyclone in 1968, deaths 52
- Norman Atlantic (built 2009) fire in December 20014, deaths 9 (plus 19 missing)

Most of the reported here accidents on ferries are fires, ship collisions (in port and at sea), dock allisions, running aground, power loss, overboard passengers.



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Accidents on river cruise ships

- (fires) Arosa Riva (2017), Queen of the West (2008), Regina Rheni (2012), Gerard Schmitter (2012)
- (bridge crashes) Arosa Mia (2014), River Duchess (2005), River Empress (2006), Viking Freya (2016), Swiss Crystal (2018)
- (canal / lock crashes) American Empress (2003 / as Empress of the North), MS Victory 1 (2015 / as Saint Laurent), Viking Forseti (2013)
- (ship collisions) Viking Mani (2016), Travelmarvel Jewel (2009, 2011 / as Avalon Tranquility), Viking Bragi(2013)
- (aground) American Empress (2006 / as Empress of the North), Serenissima (2013)
- propulsion/power loss Avalon Panorama (2011), Viking Danube (2011), Viking Magni (2013), Louisiane(2016)

You can mail us a detailed report, or simply share your thoughts on events at sea you know about or whatever cruising-related bothers you. The idea is much like that of a cruise forum, but with one HUGE difference - you will not find topic discussions here.

<u>.3 Explain the requirements under STCW regulation V/2 and section A-V/2 of STCW Code</u>

This regulation (V/2) applies to masters, officer, rating and other personnel serving on board passenger ships engaged on international voyages. Before being assigned shipboard duties, all persons serving on passenger ship meet the requirements of section A-VI/1, paragraph 1 of STCW Code (Safety Familiarization Training). To be able to:

- Communicate with other persons on board on elementary safety matters and understand safety information symbols, sing and alarm signals.
- Know what to do it: a person falls overboard

Fire or smoke is detected

The fire or abandon ship alarm is sounded

- ❖ Identify muster and embarkation station and emergency escape routes
- Locate and don lifejackets
- Raise the alarm and have basic knowledge of the use of portable fire extinguishers
- ❖ Take immediate action upon encountering an accident or other medical emergency before seeking further medical assistance on aboard



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Close and open the fire, weathertight and watertight doors fitted in the particular ship other than those for hull opening.

Masters, officer , rating and other personnel serving on board passenger ships engaged on international voyages shall completed trained in : contribute to the implementation of emergency plans , instructions and procedures ,ability to communication in the working language of the ship , non-verbally communication safety information and understand one of the languages in which emergency announcements may be broadcast on the ship during an emergency or drill .

Masters, officer, rating on board passenger ships engaged on international voyages needed qualified in accordance with chapters II, III and VII by STCW 78 as amend. Other personnel designated on the muster list to assist passenger in emergency situations on board passenger ships, shall completed crowd management training required by regulation V/2 paragraph 7, as set out in table A-V/2-1 and required to provide evidence that the training (certificate).

Masters , Chief Engineer , Chief Mate , second engineer and officers and person designated on the muster list of having responsibility for the safety of passenger in emergency situation on board passenger ships shall completed training human behaviour required by regulation V/2 paragraph 8 , as set out in table A-V/2-2 and evidence evaluating competence tabulated in columns 3 and 4 of table A-V/2-2 (example certificate)

Personnel providing direct service to passenger in passenger spaces on board passenger ships shall complete the safety training specified in : Ship emergency familiarization appropriate to their capacity in communication (communicate with passenger during an emergency) , loading and embarkation procedures (ability to apply properly the procedures established for the ship), Carriage of dangerous goods , securing cargoes, stability , trim and stress calculations (officer's) , life-saving appliances and embarkation procedures .

Masters , Chief Engineer , Chief Mate , second engineer and officers and person assigned immediate responsibility for embarking and disembarking passengers , for loading , discharging or securing cargo , or for closing hull opening on board ro-ro passenger ships, shall complete approved training to their duties and responsibilities as follows : Opening , closing and securing hull openings , Ro-ro deck atmosphere .



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1.Contribute to the implementation of shipboard emergency plans and procedures to muster and evacuate passengers

Evacuation is the protective action used in cases of ship emergencies and it can be seen as the withdrawal action of people from a specific area because of a real risk. An essential element of ship evacuation plan is a well-defined layout plan where accurate preplanning adds to the effectiveness of the evacuation process. Evacuation in case of any critical ship risk scenarios result in drastic movement inside the ship and in the demand over the ship's evacuation system. Therefore, the time used to complete the evacuation has critical importance and especially affects the success of the emergency evacuation. In emergency circumstances the overall objective is to muster the passengers as quickly as possible and any lack of ability in unequivocal decision-making process could lead to delays in abandoning the ship. Failure of evacuating people in time will be fatal and the time spent escaping the ship will be crucial.

Today, the objective of evacuation planning is to identify not only the best but also the shortest evacuation routes and provide estimates of time needed to evacuate the people onboard. Evacuation time estimates due to different risk scenarios provide sufficient warning to the crew (or master) and reduce people's exposure to the risk.

Analyzing the risk scenarios provides the knowledge needed to reach a balance between risk and time awareness, given the last possible time for orders to evacuate and to avoid evacuation without people losing their lives. The effectiveness of an evacuation process is measured by the estimated time for evacuation. It is defined as the time required to evacuate people from the risk sphere of influence. An evacuation model is a system to simulate and evaluate the effect of evacuation parameters. Because evacuation is mainly dependent on the behavior of individuals, evacuation parameters are those which describe the physical behavior of an evacuated individual in case of an emergency.

This is mainly because quantifying parameters for modelling purposes is challenging since many physical and psychological factors vary due to different types of accidents and environments. Consequently, human behavior is evaluated in the evacuation analysis based on velocity only The valid parameters are presented in the guidelines on evacuation analysis for new and existing passenger ships, IMO/MSC Circ.1238 approved in 2007. It should be noticed, that the aim of the guideline is to provide approximation of the ship's total evacuation performance rather than to model an actual emergency (IMO,2007). Since interests are solely directed towards identification of bottlenecks and assessment of the shi layout, developing an alternative chain of events in the emergency would increase the knowledge of how different choices influence the escape route efficiency and total performance.



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However, guidelines suggest two distinct methodologies for evaluation purposes. In the guideline, a simplified method is obligatory and used as a first stage analysis. In this case, human behaviour is modelled only on a group level. Accordingly, method utilises predefined individual data of walking speeds on stairs and corridors which are derived from civil building experience. At the method, total evacuation time is quantified as a flow time. It is based on a calculation of flow of people via escape routes from corridors and staircase either/or doors or public spaces. Flow time calculation is repeated for every space on the ship and the total evacuation time is defined by the flow times added with specific predefined congestion and counterflow factors. Furthermore, total time of evacuation is calculated separately for both day and night cases.

Another method introduced in the guideline is an advanced evacuation analysis. However, verification of simulation tool as well as validation of parameters are still on process and for this reason the advanced evacuation methodology is not totally ready for use (Galea, et al., 2013; IMO, 2007). The model proposes a set of parameters which specify a person's physical abilities on a more detailed level. These parameters are categorized into four; environmental, geometrical, procedural and population in short, the environmental category describes static and dynamic condition of the ship but assessment of listing effect is still uncompleted (IMO, 2007). More reliable data need to be gathered before these parameters can be used for modelling purposes.

The difference between static and dynamic conditions is defined by sea environmental and ship operational conditions. Intact conditions are understood as a static conditions which means that ship is in normal operational configuration. In contrast, ship dynamic conditions are related to ship damage conditions. For damaged conditions are affected by risk scenario and behaviour of the sea. Flooding increase the heeling angle and decrease stability of ship. Together with the external environmental factors it cause the ship heel at an angle. In methodology heeling angle and its dynamic nature are not taken into account and thus intact and damaged conditions have not been differentiated from each other yet (Ginnis et al., 2010; IMO, 2007). Considering passengers, listing decrease humans pedestrian in inclined plane and further availability of some designed evacuation routes might not be in use because of listing.

These factors together emphasize the necessity to facilitate way finding in complex environment. Procedural category in turn recommends four scenario cases to be modelled insteadof two (night/day). Added evacuation cases consider longest possible evacuation time during night and day time (IMO, 2007). However, for example, crew guidance under emergency is not suggested to be considered in any manner. Population is the only category containing detailed data from speeds and response



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time. It presents a composition of individual walking speeds consisting of a wider range of values regarding gender and age (IMO, 2007).

The model itself is based on dynamic movement of pedestrians. Equation is adopted from the model of social force, which measures each of individual's internal motivations to perform in a certain situation. The model produces a detailed data of interaction, crowd and counterflow-avoiding behaviour.

Ha et al. (2012) tested social force model in a ship environment by using a cellular automata model (CA). CA is a two-dimensional simulation tool, in which every agent occupies one grid at the beginning and then by using a rule-based algorithm moves from one grid to another toward the preferred direction (exit) with desired velocity.

The movement of each individual is recorded. The tool is used especially when examining the exit dynamic in a passenger evacuation case. The social force model was tested in different evacuation scenarios (day, night) and spaces (cabin, corridor) in order to verify the proposed model but also to make sure that software components worked as planned. Test results were confirmed by comparing those with requirements of total evacuation time by IMO. In case of RORO passenger ship with total number of 1892 persons onboard test result was satisfactory, 37 minutes 50 seconds in total which is less than the required 60 minutes. However, despite the fact that the total evacuation time was under the maximum requirement, it is difficult to make comparisons with corresponding accidents that occurred in the past, because there are no post-stage evacuation analysis about total evacuation times in such cases. But when reflecting the CA model results to these real-life accidents, the evacuation time usually differs quite a lot. For example, in case of RORO passenger ship Sally Albatross grounding incident in 1994 in the Gulf of Finland an orderly evacuation of 1550 people took 2 hours 20 minutes (Sally Albatross Accident Investigation Report). Reflection indicates that perhaps using only a mechanist simulation is not accurate enough to evaluate evacuation time.

Counter flow is also simulated by the CA. This shows that the total evacuation time increases with relative increase in the number of persons in the room have simulated crowd dynamic similarly but for building environment purposes and concluded that individual movement to counter direction has an obstructing influence which at its worst can trigger panic in the crowd. For this reason, it would be necessary to prevent counter flow entirely. In reality, prevention is perhaps impossible, because people have a tendency to behave similarly to people surrounding them. Affecting people's behaviour by offering environmental anchor points, way finding in complex or unfamiliar environment will likely decrease way finding errors and chaos among people (Colledge,1992). In addition, in the evacuation models are missing puzzle of escape



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behaviour where the speed of movement is directed down stairways in a threatening situation.

To summarise the guideline methodologies, the simplified method is easy to use but contains weaknesses, because it consider identical characteristics for all passengers, which reduce the quality of the method. Furthermore, in the simplified analysis, human response to emergency alarm sound is considered and determined collectively only.

Based on scenario setting response times are 5 minutes during the day time and 10 minutes at night. However, the advanced method brings up response time as one parameter in the evacuation analysis. Response time reflects the time spent in the preevacuation phase. As opposed to the advanced method, simplified analysis does not consider the dynamic flow of population with crowd behaviour and interaction. Furthermore, the ship motion has not yet been taken into account in either methods. (IMO 2007).

One way of collecting human related data about response times is by conducting empirical exercises. In maritime industry, the main purpose of data collection is to implement acceptable criteria for response and assembly time in an emergency in order to test and validate ship evacuation models. It has been stated that collection and characterisation of human performance data facilitates understanding of people's behaviour in an emergency and fills the lack of comprehensive data regarding human response times with a sufficient collection size. Data has been collected during the past few years with the help of three sea trials onboard of cruise ship and ROPAX ship at sea .

Experiment design differentiated from previous trials, because before trials were conducted in the port. For the experiment two different ship types were used for generating diversity to passenger response activities.



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Jewels of the Sea, Royal Caribbean Cruise Line (Cruise ship)



Olympia Palace, Minoan Lines (ROPAX)

Trials consist of three types of data settings. First, passengers' response time is collected by using video cameras. Cameras are positioned throughout the ships to record passengers' response time and activities during that time. This phase also included information and action tasks completed in response phase. Second type of data comprised of assembly time for evacuation model validation purposes. In the trial each of individuals' paths were tracked from their initial location to the assembly station. This was based on the usage of IR tagged system.

This method provided details of the escape routes taken by individual passengers but also the average speed and population densities in certain areas. The third data



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collecting method consists of a questionnaire filled out by each passenger participating to the trials. However, the results of questionnaires were not presented in articles, thus it was not clear what the questionnaires were for and what kind of role the answers had for the analysis of response time and the final results.

These semi-unannounced trials followed the process of evacuation procedure and thus were carried out in ideal conditions. Passengers were informed that the experiment may take a place during their cruise however, the exact time was unspecified.

The trial started by the ship Master sounding the alarm in the morning, after which the crew was guiding the passengers into the designated assembly areas. Passengers had their assembly points indicated in their keycards. The end of trial was determined by the Master and the trials were usually completed within 10-12 minutes until the most of the passengers were assembled.

In the trials the onset of stimulus was presented in audio and the response times and activities involved were analysed by video footage. When measuring response time in trials it is generally assumed that people's responses to auditory stimulus spread out in time. In functional sense, conditions were generated on a basis of explicit instructions.

The results of the experiments were presented dividing the data setting in distributions of response time and assemble time. Simulation of the validation data was conducted by maritime EXODUS software. The software suits for determining the performance of passengers as well as crew under emergency with variety of scenarios. The model is advanced and has several different unique abilities but especially due to time, simulation outputs are able to e.g. predict time frames required to assemble or for individuals or groups to perform specific tasks as a part of a given scenario.

Simulation models and tools for evacuation analysis, Evacuation analysis covers the probability of risk occurrence and the expected consequences in each scenario. The evacuation simulation used together with risk assessment provides an estimation of the consequences related to specific situation. In its simplest, simulation usually indicates the expected numbers of fatalities for each defined scenario. Utilising risk-based tools offers an ability to address any accident scenario to facilitate a systematic risk prevention/reduction by any passive or active (operation) means, thus effectively containing risk However, this kind of perspective ignores the evacuation effectiveness in case the prevention of the risk fails.

Human behaviour and computer simulation are two topics of particular interest in emergency evacuation modelling. From the beginning, evacuation simulation is playing



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an important role in the iterative design process. However, using simulation as a postevacuation stage analysis to analyse evacuation system in cases of accidents would likely improve the evacuation process further. Simulation tool assists the designers in evacuation planning and provides information about evacuation parameters to support the performance of evacuation. In addition, simulation as a training tool could offer support to decision making process and operative functionality of the crew.

1.1 <u>Shipboard emergency plans, instructions and procedures related to the</u> management and evacuation of passengers

It is very difficult to predict exactly how any one individual is going to react in any particular situation. Indeed their behaviour will be dependent upon a wide variety of factors including their state of health, their state of mind, their training, their experience their beliefs, their responsibilities etc., etc. How many of these diverse influences can we anticipate in advance of the specific event? This is especially difficult to judge, as many of these motivators are extremely variable on a daily or even hourly basis.

All kinds of reaction must therefore be expected, recognized and allowed for. More importantly, how can we prepare our team to cope with both the event and themselves?

Masters will need to have the right set of abilities, skills and knowledge. The ability we seek is the latent capability to perform well under difficult conditions. The skill required will be practical expertise to deal with abnormal or out of line situations. Knowledge is the possession of, or access to, relevant information.

Ability can be assessed by observation or examination. Whilst ability may be enhanced by intensive training and practice it is unlikely that we can afford the time and effort to make a significant difference. It is far easier to choose those who already possess the capability to cope with an emergency situation.

Skills however can be cultivated through a reasonable amount of practice or exercise. In order to sustain a high degree of skill there is a need for regular ongoing practice or training. Fire and rescue workers who are continually exposed to critical circumstances can be expected to retain the highest level of coping skills simply because of their regular involvement. The military maintain their soldiering skills by constant drilling and training.



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In the commercial world we cannot expect to attain and retain such finely tuned skills. We need to have sufficient practice to be able to recognize the limits of our skills and have the wisdom to call for help from the professionals before we make things worse. Knowledge can be acquired by study or experience; however there is little need for our team to know all there is to know. We can provide them with most of the information they require in the form of checklists, contact lists and other reference materials. Even if they were to memories all of the available data it is unlikely that they would be able to recall it in the excitement of the moment. Traumatic situations cause dispersed attention and short term memory loss. Indeed, these are the key symptoms of trauma.

Once you have selected, trained and prepared a formidable emergency management team you will be fully prepared for an event, which probably will not happen. The belief that you can cope is a powerful postulate that provides an impregnable defense. A suspicion of vulnerability on the other hand can so easily become a self-fulfilling prophecy.

Emergencies may develop slowly or very quickly. Time is critical and plans must be in place before a disaster occurs to ensure that key people know what to do. Wasting valuable time in a disaster due to lack of planning can often mean the difference between success and failure of an operation.

Success means protecting

- People
- Property
- Production
- Pollution
- Profits

Different types of emergencies can occur on any ship at any time but one design set of plans for all ships, even ships in the same fleet would not be practical. Every ship is different for a number of reasons, this may be as a result of layout, equipment, manning or a combination of all.

Decision Support Systems

SOLAS Regulation III/29 requires all passenger ships built before 1 July 1997 to provide a "decision support system" for emergency management on the navigation bridge not later than the first periodical survey after 1 July 1999. (This regulation came into effect for new ships on 1 July 1997.)



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This regulation was also adopted in November 1995 as part of a package of amendments adopted following the Estonia ferry disaster of September 1994.

On every ship a decision support system for emergency management shall be provided on the navigation bridge. The decision support system provided shall, as a minimum, consist of a printed emergency plan in English and, if different, in the working language of the crew, in respect of each Class in which the ship operates.

The emergency plan or plans provided shall identify all foreseeable emergency situations including, but not limited to:

- Fire
- Damage to the ship
- Pollution caused or likely to be caused by the ship
- Unlawful acts threatening the safety of the ship and the security of its passengers and crew
- Serious accidents or injuries to the crew or passengers
- Serious cargo-related accidents being required to provide emergency assistance to another ship establish emergency procedures for each emergency situation identified
- Provide decision support to the master for handling any combination of the emergency situations identified
- Have a uniform structure and be clear and easy to understand in accordance with Marine Guidance Note 71 (M)

Every vessel should have a pre-planned response to each potential emergency situation.

The use of checklists are invaluable in ensuring that exact procedures are being followed. The Master cannot carry the entire emergency plans in his head and therefore decision support plans in addition to the shipboard emergency plans exist. In creating these plans the following legislation must be consulted.

.1 Describe the contents of the shipboard emergency

A ship's crew must be prepared at all times to tackle and fight any kind of emergencies which can arise due to reasons such as rough weather, machinery malfunction, pirate attack, human error etc. Such emergencies can lead to a fire, collision, flooding, grounding, environmental pollution, and loss of life.

The Muster List consists of duties and responsibilities in case of such mishaps, designated and assigned to each person on the ship; in other words, it is a list of the functions each member of a ship crew is required to perform in case of emergency.



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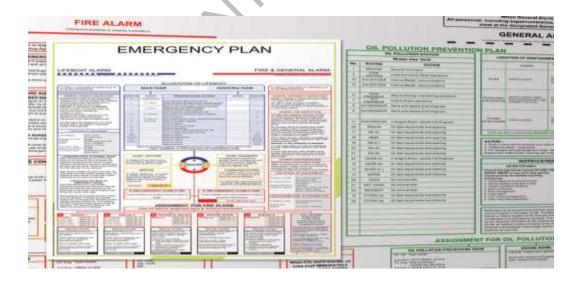
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Owing to it being a document that specifies the job that every crew member is assigned with in case of an emergency, it must be displayed at every conspicuous location onboard. Some of the important areas where the muster list is posted are- Bridge, Engine room, accommodation alleyways etc. – areas where ship's crew spends the maximum of their time.

The objective of this plan is to establish action procedures for cases of emergency, that available, both internal and external. Also established procedures general principles of action, the structure of the command and its responsibilities and the systems of Communication in the event of a maritime emergency.

This plan is governed by:

- ❖ SECURITY MANAGEMENT SYSTEM (SGS), AS ESTABLISHED BY THE ISM CODE (INTERNATIONAL CODE OF SECURITY MANAGEMENT).
- ❖ INTERNATIONAL CODE OF OPERATIONAL SECURITY MANAGEMENT OF THE SHIP AND PREVENTION OF CONTAMINATION CODE IGS CHAPTERS 7 AND 8.
- ❖ CHAPTER IX OF THE INTERNATIONAL LIFE SECURITY CODE HUMAN IN THE SEA (SOLAS), AND
- ❖ INTERNATIONAL CONVENTION TO PREVENT CONTAMINATION BY THE MARPOL SHIPS 73/78.





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.2 <u>Understand the instructions and procedures related to the management and</u> evacuation of passengers during emergency

Effective crowd and crisis management is paramount in managing an emergency on board passenger vessels. In the event of an emergency, passenger vessels face additional challenges to that of other vessel types, due to the added risk associated with passengers and therefore, crew need to be more vigilant and show greater awareness of the risks that are faced. To manage behaviour in a crisis, it is first necessary to understand the roles and rules of passengers and crew separately.

Roles and rules Passengers

Passengers usually perform an everyday role away from a vessel and will naturally continue this when they are on board. They will combine this with the role of a passenger, however, the perception of the role will be determined by the abilities of the company, ship, officers and crew. If passengers are confident in the crew's abilities, then they will follow orders and behave appropriately in emergency situations.

Officers and crew

Crews have predetermined everyday roles on board which they are very familiar with. In addition to their usual duties, they should also have clearly defined responsibilities in the event of an emergency. To improve familiarity and competency with these defined tasks, emergency drills should be carried out regularly.

The difference between these two groups of people is that passengers need to be informed of their roles during an emergency, whereas the roles of officers and crew should already be clearly defined.

Crisis Behaviour

To better understand and react to the behaviour of a passenger in a crisis; Warning, Impact, Evacuation and Post-event Reaction. At each stage the pattern of behaviour will change as the passenger is influenced by the effects of the crisis.

Warning

The way that people react to warning signs differs depending on the role they are playing in a situation. Crew are trained to raise an alarm at the first sign there is something abnormal or dangerous. Passengers, on the other hand, will require a number of signs before recognizing that there is a problem. These differing attitudes greatly influence the response in an emergency. Due to their training and familiarity with the scenario crew will generally react more efficiently than passengers. Passengers will require instruction to be given to ensure that they act accordingly in an emergency.



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Impact

Once the alarm is raised the physical and psychological effects of the emergency will start to set in. The abnormality of the situation means passengers will experience a host of emotions that will very often render them scared and helpless and will also lead to stress. Passengers may also begin to conjure up worst case scenarios which may further intensify these feelings and start to influence their reaction. The role of the crew is key in ensuring that these emotional responses are minimised and have therefore, limited impact on the emergency. If not effectively managed, it is estimated only 25% of passengers¹ will act in a rational way to tackle the threat posed by the emergency. This reinforces the need for a calm and concise approach, with good communication from officers and crew to the passengers about the actions they need to take.

Evacuation

In an evacuation situation, clear instructions and effective organisation is essential. At this point, it is key that crew know their responsibilities and proceed to follow the instructions set out in the vessel's emergency response procedures. As already outlined, people react differently in emergency situations and quite often the individuals responsible for the safe evacuation of people make incorrect assumptions¹ which can include:

- 1. Individuals will move as soon as they hear an alarm. In fact, unless they are led, some people will be slow to leave a potentially dangerous area or situation.
- 2. The motivation to escape underpins any movements people make or actions they carry out. Passengers will take time to switch into escape mode and may need strong instruction to realise the extent of the danger.
- 3. The time it takes to evacuate is only dependent on the time it takes to physically move to, and through, an exit. Reaction time, anxiety levels and group dynamic will influence time taken. Anxiety may also cause an individual to take longer than normal.
- People are most likely to move towards the exit they are closest to. They will
 move towards the exit which appears safest, suits their needs or are already
 familiar with.
- People move as individuals, without considering others. Families will most often move as a unit and the build-up of a dense crowd will mean individuals inevitably have to follow others.
- Fire exit signs help to ensure people find a route to safety. As anxiety sets in, people can lose sight of peripheral objects like exit signs, meaning they have little or no impact.



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- 7. People are unlikely to use a smoke-filled escape route. If passengers are already familiar with a route and believe it leads to safety they may choose to go through it despite the risks.
- 8. All people are equally capable of exiting the vessel. Age, experience and alcohol intake are among the factors that can affect an individual's ability to evacuate the vessel. The elderly and young will take longer than an experienced traveller.
- 9. Peoples' safety cannot be guaranteed since they are very likely to panic Panic is caused by a lack of information. Providing information will lead to clarity and allow passengers to better understand the situation.

Passengers will more often display the following reactions:

The surprise of an event may cause them to freeze.

They will look for an easy route to escape and try to gather valuables.

They will start to lose control and move from protecting others to self-preservation.

Passengers who behave in a non-panicked way may act rationally and even look for ways in which they can assist.

Some individuals (approx. 25%) take on rational behaviour and approach the emergency as it is presented.

A good understanding of these behaviours is key for crew and will enable them to best assist and direct passengers.

Post- event reaction

At this stage crew must be prepared for the resulting effects of the emergency and the behaviours of passengers upon the realization that the crisis is over. There could be many scenarios at this point ranging from no problems having occurred to the abandonment of a vessel. In some of these scenarios the crew will have to deal with possible casualties, and the way in which passengers will react to having witnessed this, as well as the way passengers will behave when re-boarding a vessel, having been told that a crisis has been averted.

Following an emergency, passengers will take time to process what has occurred and will do so at different paces. Officers and crew need to reassure and act in a manner which is both calming and encouraging. They must eliminate feelings of tension or stress because of the event and must maintain control as passengers will continue to look to them for guidance. The crew's behaviour is critical to managing the long-term effects of an emergency on passengers. The quicker the passengers are calmed, the sooner they will recover from the shock and effects will be minimalized.



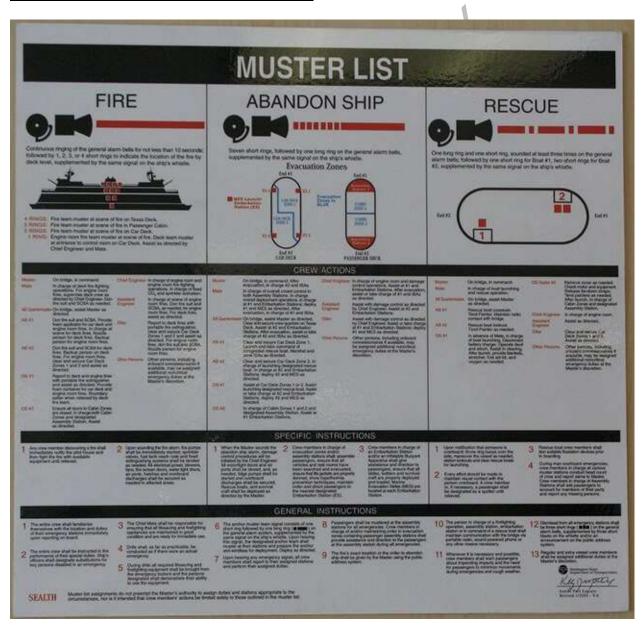
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The Club recommends the implementation of an emergency response framework, which includes drills and crew training for the care and assessment of passengers. Emergency response procedures should take into account the varying human behaviours and reactions to an emergency and should factor in ample time to react accordingly.

1.2 Muster List and emergency instructions





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Instruction to follow in case of different types of emergency

Brief instruction is given in case the alarm for a particular emergency is sounded, which includes action to be taken by the crew onboard. Specific duties that are assigned to each person on board are mentioned very clearly in the list. Some of the essential duties specified in the list are:

Closing of the watertight doors, skylights, portholes and other openings

Carriage of equipment and readying the survival craft and other life-saving appliances

Muster of the crew (and passengers, if applicable)

Heads of emergency teams and fire teams to streamline the action against such emergencies

The muster list shall also specify the apt substitute in case any person is injured or disabled

Related Reading:

General Overview of Life Raft

Common Muster point for all the crew

The common muster point is clearly described if any emergency alarm is sounded. Normally life boat deck area is made as a common muster point. However, the muster point could vary with the type of emergency that is at hand

Crew list of all crew member with assigned life boat

The crew name is displayed along with the assigned life boat for abandon ship emergency. Normally two life boats are assigned in between all the crew member i.e. port side and starboard side life boat. The list displays the officers that are in charge of LSA/FFA maintenance so that all equipment systems are ready for immediate use.

Assigned duties for abandon ship

All the crew listed in the muster list are assigned with duties to perform in an emergency situation like carrying EPIRB and SART, lifeboat and life raft launching etc. It is imperative to always remember that the ship is abandoned only when the Master's gives a verbal order

Different teams with assigned duties for the individuals of the team for emergencies Different teams are made to tackle emergencies like fire, flooding etc. these are —



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Command Team: Operated from the bridge. The Master is the overall in charge and the Third Mate assists in relaying the orders of the Master to the respective emergency teams in addition to assisting the Master on Bridge.

Emergency Team 1: Operates at the point of scenario. Usually headed by the Chief Mate/Second Engineer. The team leaders ensure that the rest are complying

Emergency Team 2: Standby team and helping hand for emergency team. Roving Commission: Team working along with all another team.

Engine room team: This team stand by in ECR.

Medical Team: Usually consists of the salon staff (GS + Chief Cook) who are conversant with the first aid to be administered in case a person is injured while carrying out his tasks in an emergency situation

Ship Specification and emergency communication equipment

Ship specifications are displayed along with the communication methods and equipment to be used in case of emergency. Most of this equipment systems have the instructions for usage very clearly given on the body or cover of it.

Special and general instruction by master

A separate section for general and special instructions is provided which is used by the master or the chief engineer of the vessel to keep inform or to instruct the crew of the ship.

The muster list is posted to keep the crew aware of the different emergency situations and duties to be performed if such situations occur in reality. For this, regular training and drill must be conducted by the master of the ship to ensure that all crew members are familiar with life-saving and fire fighting appliances.

A Muster Card must be placed (by the Third Mate since he's in charge of the LSA and FFA) in every person's cabin that specifies the person's muster station and the exact task that is assigned to them in the case of a specific emergency. The alarm signals are also mentioned so that the person is not confused as to the nature of the emergency. Illustrations and instructions for life jackets may also be included.

It is obvious that protocols laid out will hardly make any sense in the case of a real emergency on board (not drills). However, having a defined set of tasks during an emergency will actually ease the workload on each person and help deal with the situation quicker and better.

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available information and have not been authenticated by any statutory authority. The author and Marine Insight do not claim it to be accurate nor accept any responsibility for the same. The views constitute only the opinions and do not constitute any guidelines or recommendation on any course of action to be followed by the reader.

.1 Describe the instruction/actions to be taken in response to different emergency situation on board ship

Is it Safe to Go On A Cruise Ship Holiday:

The sinking of the Costa Concordia has prompted many people to ask this question. The simple answer is 'yes', if you're prepared and take reasonable steps to look after your own safety. You'll find practical tips on how to do that below.

Sensibly, the cruise industry puts a great deal of effort into passenger safety. As part of its review of the Concordia incident on February 10th, 2012 the Cruise Lines International Association released a new emergency drill policy for all of its members.

The voluntary code requires cruise companies to give passengers an emergency safety briefing prior to departure. Presently maritime law states the lifeboat drill (also known as a muster) has to be held within 24 hours of departure. In the Concordia incident many passengers had just boarded and had yet to attend a muster, which undoubtedly added to the confusion and panic.

What to do if you think your cruise ship is sinking

The sinking of a significant-sized ship such as the Concordia, with loss of life, is very rare. You have to go back to 1992 to find anything you could call an ocean liner had an incident where passengers died: The Greek registered Royal Pacific was hit by a trawler in the Straits of Malacca, carving a 2 metre hole in its hull. 'The collision happened in the middle of the night and most of the passengers were asleep below decks, and according to reports, the crew thought it more expedient to rescue themselves rather than wake anyone.

The Royal Pacific was an old vessel, built in the mid 1960's. There have been many improvements in safety since then, better radar, better communications and navigation systems, improvements to safety procedures (like the one announced this week by the CLIA).



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(Before being refitted as a cruise ship Royal Pacific was a Bass Strait ferry)

Given the number of cruise liners at sea and the increasing numbers of people they carry, it's still one of the safest forms of transport.

Polar Cruising safety tips

Fortunately cruise ships don't sink all that often. Loss of life is rare and the chance you'll have to head for the lifeboats is pretty slim, but not unheard of.

The most significant cruise ship sinking prior to the Costa Concordia was the sinking of the Antarctic cruise ship MV Explorer in 2007: The icebreaker hit an iceberg a little too hard, started taking on water and listing while it was 400 nautical miles south of South America.

150 people onboard had to put on special cold-weather suits and take to the lifeboats. Fortunately there were other cruise ships in the region and despite several hours in subzero temperatures, no-one was lost.

Arctic and Antarctic waters are inherently dangerous, but also incredibly spectacular and are attracting more and more cruise ships. As the number of ships rises, the chances something might happen also rise. The MV Explorer was the most serious of 9 groundings and incidents in polar waters since 2008, although none of the other ships sank, and in most cases the passengers were able to stay aboard.

Read your cruise ship's safety plan

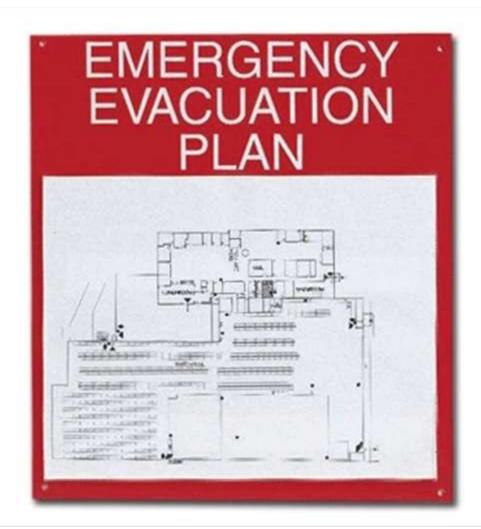
When you get onboard for the first time, check out that evacuation map on the back of your cabin door. Physically follow the route to your lifeboat station, so you're familiar with where you're going if you have to do it for real.



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Take an interest in the lifeboat drill on the first day. If you are in good physical shape, ask a crewmember to show you how to operate the launching mechanism. If your ship really is sinking you may be facing a situation without much help from the crew ' they're as scared as you are and may already be 'directing the rescue from a lifeboat' ' it's more common than you'd hope! 'So knowing how to launch the lifeboat could save your life.

If the order comes to abandon ship, follow the instructions of crew as calmly as you can. The captain knows that getting a few hundred people off a ship takes time, he won't wait until the last minute to get you off, so, no need to push and shove and panic.

Reduce panic in an emergency

One of the biggest problems with abandoning a ship is that many of the passengers are elderly. A younger fitter person may be confident they can get themselves into a



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lifeboat, but the elderly often aren't. This causes a lot of apprehension and even panic. Do your best to assure those people, and help them when you can. Less panic means a better chance everyone will survive, so it's in your best interests to keep them calm.'

Never jump overboard a cruise ship

Never jump overboard into the ocean. It's usually a long way down and water isn't soft when you're dropping like a stone. Out at sea, the deeper water will be colder than you expect, and that will affect your ability to survive.

Beware of stormy seas on a cruise ship

And one other safety tip, cruise liners can take incredible punishment from the ocean and stay upright. But if you're aboard a liner during a severe storm it's sensible to take shelter.

Don't go to the piano bar where the chairs and tables and maybe the piano are sliding from side-to-side as they did on this cruise ship in 2008. Do not go out on deck, 50 knot winds will whip you off your feet and maybe even throw you overboard. It may be best to stay in your cabin and be comforted by the knowledge that modern cruise liners have to pass very strict stability tests before they're allowed to operate.

The cruise industry is a multi-million dollar operation, and each year more than 20 million people board cruise ships with the anticipation of an unforgettable escape from reality. While for many people their cruise vacation goes according to plan, this is not the case for all passengers as unexpected emergencies can arise, bringing their vacation to an abrupt halt and potentially impacting their future. Today, in part one of a two-part series, we will review a few common types of cruise ship emergencies.

Types of Common Emergency Situations

Cruise ship emergencies and crimes are frequently in the news, and if you are preparing to go on a cruise, you may wonder what types of situations could occur. Below, we've listed some emergency situations that could potentially take place on a ship.

Breakdown

While the breakdown of a cruise ship may not sound like an emergency situation, it most definitely can turn into one if the ship is out of commission for long enough. When a cruise ship breaks down, many of its systems can be negatively impacted. If the source of the breakdown impacts the electrical system of the ship, things such as the HVAC, plumbing, and emergency alarm systems may not work. Additionally, a breakdown could render the ship inoperable, stranding passengers at sea for days without electricity and fresh food and water. As you can imagine, this can create quite the environmental and safety hazard for passengers on board the ship.



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Fire

Cruise ships are like floating cities or floating hotels, and as such, they are subject to some of the same types of emergency situations that can occur in a regular building. A fire is one of the most common and dangerous emergency situations that may occur while you are onboard a ship. In addition to the dangerous flames, fires also bring with them smoke and noxious chemicals from burning substances and materials. Common causes of fires on cruise ships may include fuel or oil leaks, equipment malfunction, and passenger or crew carelessness.

Collision

Thanks to modern technology and the captain's skill, cruise ships do not often collide with other objects, but it does happen from time to time. There are also situations where the tender (the small ship used to ferry passengers from the cruise ship to the port) collides with other objects, including the cruise ship. In these types of emergencies, there are many safety hazards for passengers. Depending on what the ship collides with, the forces could be significant enough to cause injury to those onboard the ship. Additionally, collisions bring with them the risk of the ship's exterior being compromised. This means that the vessel could take on water, causing a breakdown or the potential sinking of the ship.

In the event of a breakdown, a fire, or a collision, all cruise line operators are required to adhere to emergency procedures and first aid measures as mandated by the International Maritime Organization. As such, you will find a few different groups of individuals who are trained to assist passengers in emergency situations.

Medical Staff

In order to be compliant with the rules and regulations of the International Maritime Organization, all cruise ships must have properly trained medical staff on board in the event of an emergency and to address a wide variety of health concerns. In the event that there is an epidemic outbreak of some type of illness onboard or if passengers are hurt during an emergency, it is the cruise line's duty to ensure there is adequate medical personnel on the ship.

Security

In addition to medical professionals, the cruise line is required to have security personnel on the ship at all times. The role of security officers is very important on a ship. Not only do they ensure the safety of both employees and passengers, they are also trained in how to provide emergency response assistance. If there is a fire or other emergency onboard a ship, the security team should maintain order and calm amongst passengers.



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Trained Crew Members

Of course, in the event that there is some sort of large-scale emergency while you are on a cruise ship, it is essential to have as many crewmembers as possible who are trained in first aid and emergency procedures. To ensure the safest conditions for passengers, the International Maritime Organization requires ongoing training of all crewmembers to ensure they are equipped to perform emergency duties when necessary.

.2 Explain the importance of adhering to the emergency instructions

At the beginning of every cruise, all guests and crew must complete a drill known as the "muster" drill, to ensure they are familiar with what to do and where to go in the unlikely event of an emergency. To further ensure they are aware of their specific muster location, we identify it on each of guest's card keys. The location also is prominently noted on the back of every stateroom door.

In addition to the muster drill for our guests, our officers and crew conduct weekly, monthly and annual drills on every ship, and complete extensive training, certification and scenarios in preparation for the very unlikely event of an emergency, including training on ship evacuation procedures. All of our ships have sufficient lifesaving craft to accommodate every guest and crew member onboard, as well as additional capacity in reserve.

When Must Lifeboat Drills Be Held?

According to the Safety of Life at Sea (SOLAS) convention, which was enacted after the Titanic sinking, all cruise ships must hold lifeboat drills, also called passenger musters or muster drills, within 24 hours of departure from port.

In the aftermath of the 2012 Costa Concordia disaster, the Cruise Lines International Association and European Cruise Council agreed to implement stricter rules. Lifeboat drills are to be held before the ship leaves port. If passengers embark after the drill has taken place, they will receive a special safety briefing, either in a group or on an individual basis, as conditions dictate.

https://www.frommers.com/tips/cruise/cruise-ship-safety-what-to-expect-in-a-muster-drill **2.3 Maintain escape routes clear obstructions :**



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Stairway enclosures in accommodation and service spaces shall have direct access from the corridors and be of a sufficient area to prevent congestion, having in view the number of persons likely to use them in an emergency. Within the perimeter of such stairway enclosures, only public toilets, lockers of non-combustible material providing storage for non-hazardous safety equipment and open information counters are permitted. Only corridors, lifts, public toilets, special category spaces and open ro-ro spaces to which any passengers carried can have access, other escape stairways and external areas are permitted to have direct access to these stairway enclosures. Public spaces may also have direct access to stairway enclosures except for the backstage of a theatre. Small corridors or "lobbies" used to separate an enclosed stairway from galleys or main laundries may have direct access to the stairway provided they have a minimum deck area of 4.5 m2, a width of no less than 900 mm and contain a fire hose station.

Escape routes shall be provided from every normally occupied space on the ship to an assembly station. These escape routes shall be arranged so as to provide the most direct route possible to the assembly station, and shall be marked with symbols.

The escape route from cabins to stairway enclosures shall be as direct as possible, with a minimum number of changes in direction. It shall not be necessary to cross from one side of the ship to the other to reach an escape route. It shall not be necessary to climb more than two decks up or down in order to reach an assembly station or open deck from any passenger space.

External routes shall be provided from open decks, to the survival craft embarkation stations.

Where enclosed spaces adjoin an open deck, openings from the enclosed space to the open deck shall, where practicable, be capable of being used as an emergency exit. Escape routes shall not be obstructed by furniture and other obstructions. With the exception of tables and chairs which may be cleared to provide open space, cabinets and other heavy furnishings in public spaces and along escape routes shall be secured in place to prevent shifting if the ship rolls or lists. Floor coverings shall also be secured in place. When the ship is underway, escape routes shall be kept clear of obstructions such as cleaning carts, bedding, luggage and boxes of goods.

.1 Explain the importance of maintaining escape routes clear of obstruction at all times

The principle on which means of escape provisions are based is that the time available for escape (an assessment of the length of time between the fire starting and it making



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the means of escape from the workplace unsafe) is greater than the time needed for escape (the length of time it will take everyone to evacuate once a fire has been discovered and warning given).

Regardless of the location of a fire, once people are aware of it, they should be able to proceed safely along a recognizable escape route, to a place of safety.



In order to achieve this, it may be necessary to protect the route, i.e. by providing fireresisting construction. A protected route will also be necessary in workplaces providing sleeping accommodation or care facilities. It might also be necessary to apply positive air pressure to an escape route to discourage smoke from entering in the event of a fire.



People with mobility impairments should be provided with some form of written directions, a brochure, or a map showing all directional signs to all usable circulation paths. For new employees and other regular users of the facility it may be practical to physically show them the usable circulation paths as well as provide them with written information. In addition, simple floor plans of the building that show the locations of and



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routes to usable circulation paths should be available and given to visitors with mobility impairments when they enter the building. A large sign could be posted at each building entrance stating the availability of written directions or other materials and where to pick them up. Building security personnel, including those staffing entrance locations, should be trained in all the building evacuation systems for people with disabilities and be able to direct anyone to the nearest usable circulation path.





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Preparation and Approval

It is vital to shipboard and passenger safety that all crewmembers know their assigned stations and are able to perform respective duties in case of emergency. Upon hearing an alarm signal, each crewmember must proceed to their station and perform their functions as trained

.2 Keep escape routes and passageways clear of obstruction

Maintaining Clear Escape Routes

Some escape routes may tend to be more congested at certain times than at others. For example, dining areas will be crowded during serving hours, entertainment facilities will likely be more crowded at night, swimming pool areas will normally be at maximum capacity during mid- day. Crewmembers assigned to assist passengers during emergencies should be aware of times of the day or specific conditions that might be expected to pose particular concerns during evacuation activities.

In case of emergency; fire, fallen debris, etc. might block escape routes. Such circumstances might necessitate rerouting of passengers; crew members must be aware of alternated routes in-their area of responsibility.

Alternate Routes



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Most passengers will be able to follow directions and proceed to Muster Stations on their own. However, some might be unable to do so and will require special assistance.

Evacuation of Disabled Persons Escape routes must be kept unobstructed at all times. Typical (obstructions might include luggage, cleaning carts, toolboxes, locked doors or laundry. Constant vigilance is necessary to ensure clear

Many impairments can render passengers "disabled", such as:

- o Physically handicapped
- o Mentally handicapped
- o Injured
- o Intoxicated

Different considerations will be prompted depending upon the particular disability. Special assistance may take the form of physical aid, adjusting speech (e.g. louder or slower) or showing special affection such as in the case of a child.

Most ships have special sections designated for disabled passengers. Crewmembers should be aware of any such areas as well as escape routes there from.

2.4 Methods available for evacuation of persons with disability and persons needing special assistance.

Disabled persons and persons needing special assistance require care and are labour intensive. The ship's emergency plans will have detailed certain crew members to assist, however resources can be stretched when other casualties appear egoinjured, drunks. Extra assistance must be called for otherwise the situation could seriously deteriorate.

State the methods available for evacuation for disable persons and persons needing special assistance:

There are several methods for evacuation of persons with disabilities and persons needing assistance, which are appropriate on the type of disability of the person and the given situation. It is necessary to clear the exit routes so that the persons with disabilities can proceed to muster station. Then, explain that factors, such as ship listing and motion, crowd density and psychological factors affecting human behavior should also be considered.

Some people with mobility difficulties who are usually able to move independently may not be able to do so safely in an evacuation situation where large numbers of other people are moving quickly towards the muster stations.



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Lifts are not designed for use in an emergency, so alternatives may be required to move wheelchair users and other people with mobility impairments up and down stairs during an evacuation.

It is important that the crew understand that every passenger has different abilities and needs, so flexibility will be required.

Disabled persons and persons needing special assistance require care and are labor intensive. The ship's emergency plans will have detailed certain crew members to assist.

- Special evacuation chairs lightweigh are available on all ships which will be utilized to transport passengers down stairs if required. This assistance will be arranged / requested by the cabin stewards evacuating the cabins. In the event that a passenger is away from their cabin, either on the open decks or in a public room, at the onset of an emergency, these areas are also checked and evacuated. In this event any passenger requiring assistance would be taken directly to their Muster Station by the Passenger Assistance Party and a life jacket/s would be provided in the Muster Station. This assistance will be arranged / requested by the crew members assigned to evacuate these areas. Similarly if a passenger requiring assistance presents themselves on a stairway at the onset of an emergency, this assistance will be arranged by a Stairway guide. Stairway guides are present on all stairways designated as passenger evacuation routes.
- In the event of an emergency and when passengers are called by Public Address to their Muster Stations, all passenger cabins are checked and evacuated by the cabin stewards.
- Any passenger who requires assistance for example, drunk, injured, anxious or very noisy people, getting from their cabin to the Muster Station will be given the required assistance by the ship's specially trained Passenger Assistance Party.
- In the event of an emergency, passengers with restricted mobility will not be able to use the elevators (as with standard worldwide emergency procedures, elevators are not to be used in emergency situations). Please also note that in the event of an emergency, those passengers using motorized wheelchairs or scooters will need to be transferred to either a regular wheelchair or evacuation chair. It is not possible for the Passenger Assistance Party to transport passengers in motorized wheelchairs or scooters down the stairs, due to the additional weight and the subsequent risk of injury to the passenger and members of the Passenger Assistance Party in attempting this.



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- Assign personnel to look after them, suitable passengers may be of help
- Keep them as calm is possible
- Call for extra assistance if required
- Know where to get assistance from

.2 Demonstration of different methods of evacuation for persons with disability and
persons needing special assistance should be done by the trainees and should be able
to apply these methods during the practical activity. As an example, the following
procedures in assisting passengers with disabilities could be considered:
Two trained crewmembers are assigned to each passenger with disabilities.
□ Upon hearing the Emergency Signal, crewmembers assigned to assist passengers with disabilities are to immediately muster at the Reception Lobby for check off by the
Evacuation Control Team Leader, before proceeding to their designated passenger cabin;
☐ Ensure that passengers' lifejackets are worn properly. Assist them to their assigned
Assembly Stations and eventually to their Lifeboat station, as necessary;
□ Do not use the lift when proceeding to the Assembly Station; and
□ Report to the Evacuation Control Team Leader if assistance is needed. Otherwise,
report to the Assembly Station Leader

Types of lifting techniques

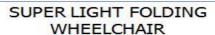
- .1 Stretcher transport
- .2 Fireman's lift
- .3 4-handed seat
- .4 Drag carry (open space / confine space)
- .5 Pulling grip
- .6 Chair carry
- .7 Fore and aft carry (2 types)
- .8 Hammock carry (3, 4, 5 or 6 carriers)
- .9 3-handed litter carry
- .10 3-man carry, one side
- .11 Clothes lift
- .12 Blanket carry
- .13 Piggy back carry
- .14 Sweetheart carry



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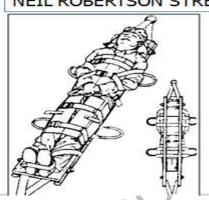
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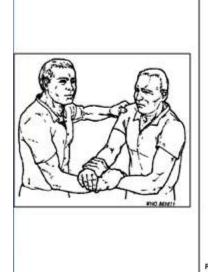




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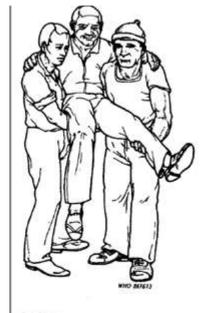


Fig. 50. Three-handed seat. a How the wrists are held. b Carrying the casualty, his uninjured arm round the shoulder of one of the helpers.

Fig. 51. Three-handed seat.
The spare hand or a lof a helper supports the casualty's injured leg, and the casualty supports himself with his arms round the helper's shoulders.





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.3 Evacuate the persons with disability and persons needing special asssitance and guide them to the muster station:

 Assemble the passengers assigned to the Assembly Station in groups according to
their lifeboat allocations. Show the numbered board;
□ Check off passengers by cabin numbers;
□ Check that lifejackets are properly worn and secured;

- □ Assembly Station Leaders to report to Evacuation Control Team Leader when mustering of passengers is completed;
- ☐ Keep passengers at the Assembly Station and await orders from the Evacuation Control Team Leader:
- □ On receiving embarkation orders from Evacuation Control Team, boat groups to be led to their lifeboat station by the Boat Group Leaders;
- ☐ Ensure that the designated routes are used as instructed from the Evacuation Control Team Leader;
- $\hfill \square$ Give assistance to those who need it;
- $\ \square$ Keep family groups together;
- □ Assist in the proper embarkation of passengers into the allocated lifeboats; and
- □ Do not overload the lifeboats. The number of persons embarked into the lifeboats should not exceed its stated capacity.



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2.5 Methods of searching passenger's accomodations and public spaces.

Searching the accommodation should be straightforward, but above all it must be methodical, documented and results relayed. Plans of the training area can be easily drawn and systematic searches carried out. A system must be devised which prevents an area from being searched twice or omitted altogether.

it is important for the crew to search the accommodation areas and public places for passengers that might be left behind during evacuation in order for them to ensure that all passengers are all accounted for.

- Organizes a search of accommodation spaces
- Crew members allotted on the muster list to search specific spaces Searching the accommodation should be straightforward, but above all it must be methodical, reported and recorded. A system should be devised to prevent an area from being searched twice or omitted altogether.

.1 Identify the points to be searched in the accomodations and public spaces
Passenger cabins and corridors:
□ Wake the passengers up and inform them of the emergency;
☐ Check the cabin thoroughly - include the toilet, wardrobes and underneath the beds;
□ Advise them to dress warmly. Make sure they put on their lifejackets;
□ Direct them calmly to the nearest stairway leading to their Assembly Stations;
☐ If the fire doors have been released, assist the passengers in passing through;
☐ All remaining lifejackets must be collected and passed to the Assembly Stations;
□ Report to your Section Leader/Zone Leader/Muster Control if you need assistance;
□ Check that all cabins in your section have been evacuated and mark each cabin door accordingly with inspection tags and/or towels;
□ Search and evacuate all spaces, rooms and offices within your section;
□ Report to your Section Leader/Zone Leader/Muster Control when your section is
completely evacuated;
□ Remain at your station and await further orders; and
☐ Keep all doors tightly closed.



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- Under the beds
- · Wardrobes/cabinets
- Toilet & bathroom
- · Behind thick curtains
- Balcony

What would you do after searching?

- ☐ Lock the cabin
- ☐ Mark the door:
- Tags
- Sticckers
- Labels
- Towels or a cloth
- ☐ Report to the leader when your section is cleared

.2 Procedures or methods of searching passengers in accommodation and public áreas.

Public rooms

☐ Guide passengers	and personnel	to the	nearest	exit a	ind o	direct	them	to	their
Assembly Stations;									

\sqcup If the fire doors have been release	d, assist the	e passengers an	ıd personnei ir	า passıng
through. Check all spaces within the	room;			

- □ Report to your Section Leader/Zone Leader when the room is completely evacuated or if you need assistance; and
- ☐ Remain at your station, await further orders and keep all doors tightly closed.



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	0	pen	dec	ks
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□ Direct all passengers via the stairways directly to their Assembly Stations;
□ Remove deck chairs, sun loungers and/or tables, etc. which may be a hindrance to
evacuation;
□ Report to the Section Leaders/Zone Leaders if you need assistance; and
□ Remain at your station and await further orders.

The muster list must contain details of the general emergency alarm and other emergency signals and the action to be taken by the crewmembers incharge of the searching for passengers. Where appropriate, communication equipment, channels and reporting chain to be used during the evacuation and searching or other emergency should be specified.

- Check all public and private areas, lounge, cabins, and toilets.
Understand the ship's emergency procedures which ensure that an area has been searched. Sending all personnel to muster point, mark doors, plans marked to show area has been searched.

2.6 Effective mustering procedures:

Introduction.

The mustering and embarkation procedures are the final stage of the evacuation. The emergency may have envolve considerably, and the danger may seem inmediate to those aboard. Queues, waiting, and a resulting tensión may be typical characterictics of these stages. Maintining control is Paramount.

The effective handling of emergency also depends on all crew knowing what to do and say – in other words, following correct systems and procedures. Then, a good understanding of crowd control, plus sound knowledge of emergency system and procedures, will enable you to be ready, at any time, to take charge on stairways, or assist passengers in a Muster/Assembly Station.

Crewmembers should be able to give clear orders which will maintain control providing the entire passenger groups are rational and well behaved, however greater control needs to be exercised should panic start or be perceived to be starting.

When passengers have reached the assembly area crew members must ensure that they have sufficient clothing although it may be dangerous to return to baggage areas or cabins. Donning life jackets should be undertaken by following a clear, visible demonstration from the leader with assistance provided by other crew members who should be evenly spaced throughout the assembly station. During the crowd management course, the instructor must ensure that all Crew can undertake this procedure

2.6.1 The importance to keeping order.



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Understand the importance to keep order, you must be in charge of the situation, see clear and reassuring orders.

The primary function in keeping order is to organise queues, to ensure and orderly boarding and to ensure that the persons are seated correctly in the lifeboats or life raft. The best way to organise a queue in an emergency situation is to make people put their hand don the person in front of them. It makes them feel more secure and they are less likely to panic.

2.6.2 Ability to use procedures for reducing and avoiding panic. Understand and demonstrate the procedure for reducing and avoiding panic

One of the biggest problems with abandoning a ship is that many of the passengers are elderly. A younger fitter person may be confident they can get themselves into a lifeboat, but the elderly often aren't. This causes a lot of apprehension and even panic. Do your best to assure those people, and help them when you can. Less panic means a better chance everyone will survive, so it's in your best interests to keep them calm.'

Psychological theories propose that panic is caused by a catastrophic misinterpretation of perception. A common agreement for the meaning of panic is missing. Thus, the conception considers panic an antithesis of organised group activities .Such behaviour arises from individuals' feelings of isolation in a crisis, as well as sensation of collective powerlessness. Almost any kind of collective disorderly activity or an individual's acute fear reaction marked by loss is defined as panic. Regardless of the absence of distinctive criteria for panic, a little assistance to characterise panic is given by such general terms as irrational, antisocial, non-functional, impulsive or inappropriate instances of behaviour. Similarly, as with the meaning of panic, there is also disagreement on the conditions which produce or facilitate panic. The presence of panic includes a various set of events, usually a situation which has a reference to a threat such as crowd and crisis, a lack or loss of leadership or a shattering of group bonds.

Flight is a distinctive feature of panic and most frequently takes a form of actual physical running. In these threatening situations, there is no overt attempt to deal directly with the danger itself, rather attempting to escape from the danger. Furthermore, attention is never directed to the past, the focus is kept on what might happen. A panicking person sees the potential threat immediately and survival may depend on a very rapid reaction. Contrary to what one might assume, fleeing while panic-stricken is not done randomly: People maintain a general orientation for flight from danger. The two factors in particular that are involved in determining the direction of flight are the habitual patterns and interaction among individuals. For example

in fire, the danger may lie between the presumed safety and a perilous object, thus making the endangered person take a direction towards the danger, or ignoring a less frequently used door closer by in favour of a often used but more distant exit. Interaction among individuals is also involved in the decision making. This interactional factor, however, has only operational and functional sense, because only the physical setting



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can present actual alternatives for choosing the direction of flight. Furthermore, panic has also nonsocial and non rational features.



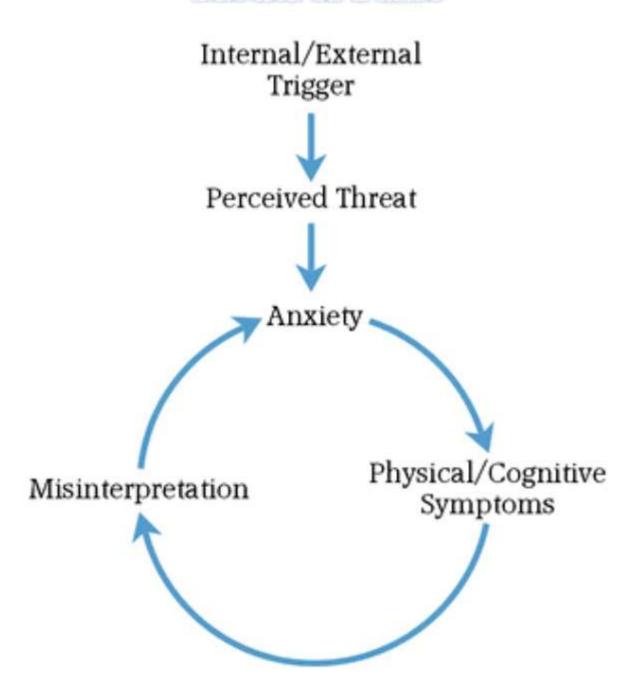


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Model of Panic





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A panicking situation involving no unity of action and no co-operation with others, highlights individual behaviour and thus breaks down concerted behaviour.

Sometimes, in a controlled withdrawal people may run around confused with partially disorganised activities included in their pattern of behaviour, but the whole structure does not collapse as it does in total panicking situation. In such cases panic causes even the strongest of primary group ties to shatter, discarding the most expected behavioural patterns

However, not all panic is collective. People in panic know they are afraid for what usually is their own physical safety, but they are also aware what they are afraid of. This experience is never an obscure reaction, rather, an individual's fear is something very specific and personal which is never unknown. In this respect, defining the panic situation people need to see the threat and associate it in a definite place from a cognitive perspective, people in panic become highly self-centred.

Subjectively it means processing the information how to get oneself away from danger. When focus is highly concentrated on saving oneself, it also means orientation of activities. Through information processing a person tries to create a sufficient awareness of the circumstances. A person in panic neither acts completely instincally nor is totally unaware of anything else. People are at least partly aware of the presence of other people. However, the decisions and activities in the situation seem rational to the person, one's actions appear to be appropriate to the situation as one perceives it at that time. Thus, a fleeing person does not take into account the consequences of their activities that sometimes may lead to an even more dangerous situation than the original threat itself. Panic in an already threatening situation causes further danger. The feeling that accelerates the occurrence and continuance of panic is entrapment without possibility to escape. The experience of entrapment does not necessarily have to do with physical obstacles, but can also be of psychological nature.

To summarise panic behaviour, it can be defined as an acute, individual fear with the loss of self-control. Panic behaviour is not random or totally irrational. On the contrary, it is followed by nonsocial and nonrational rules of flight behaviour. People in panic always have a target for their fear which is present in the situation and causes immediate and strong physical threat. Social consequences become irrelevant even to consider: the process of escaping is self-centred, where no consideration for alternative choices are made and interactional patterns are ancillary, even breaking social norms.

To reduce or avoid collective panic and reduce the number of individuals panicking, it is essential to establish an authorithy and build a perception of order and control. The



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rumour will must not allowed to run; counter it by supplying information at regular intervals e.g. by repeating orders as set out in 0. Try to maintain an optimistic attitude as far as posible: try to give the impression that the group will be able to overcome the difficulties confronting them. However, note that some Pax will need help to realice the situation. They should be informed as follows:

- *Gradual information
- *Avoid dramatising
- *Be factual.

Its is essential to keep the passensgers minds on something else than their fear. Both activity and continuos information are useful.

Trouble makers (the active persons) must not be allowed to act freely. They should be kept occupied with helping others. Connect actives persons with persons having panicked or wich are need of help in any other way.

Panic consumers resources; you will normally need 2 or 3 persons to control a panicstricken pax. Accordingly, you may encounter situations where you have to let panicstricken people go.

Children require special attention, in particular if they have been separated from parents and or others relatives. It is essential to connect capable helpers with such children. Aslong as composed adult persons, e.g...A crewmember or a helper, is present, children will ussually not panic.

When you have made the connection, it is essential to keep the chosen adult together with the child during the whole emergency.

2.6.3 The ability to use, where appropiate, passengers list for evacuation counts.

The use of Passengers list are vital for accounting of passengers. There should be a list of pax belonging to each muster station. If practicable, different scenarios may be taken into account and eventual pax being sent from others locations should be accounted for. Procedures for communication of such changes shuld be considered.

The absence of a list of pax assigned to lifeboat prevents crewmembers from acconting for their passengers. Thus, an effective and focused search of the pax áreas is not feasible.

Without passenger list the ships staff cannot count or verify that all passengers are mustered in the muster station and have a clear view of how many are missing and the place that probably will be.

This number of passenger evacuated and missed must be reported to the bridge and evacuation tema leaders.

Example: During a fire aboard a cruiseship, crewmemebers searched the Ship for pax remaining in rooms and passageways. The fire alarm had already been sounded, and



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pax found their way to the muster stations. However, crewmemebers manning the muster station had no way of knowing who where missing from that station, because no list of passengers names and their cabins was provide.

Due to continuos operation of the ventilation System, passing on smoke from the fire to non –affected áreas of the Ship, some passageways were son filled with smoke. This made both evacuation and search more difficult.

4 pax, in two adjacent cabins seeing smoke in the corridor, decided to stay in their cabins and wait for rescue. While both cabins quickly filled up with smoke, one of the pax decided to try to reach the nearest emergency exit. She reached the exit, but fainted while mounting the staircase. Upon being found by crewmember, movee and brougth back to consciousness, she provide information on the 3 pax still in the cabins. He responsable Officer sent a team of smoke-divers into the área. They found the 3 pax unconscious, sufferinf from severe injuries caused by smoke inhalation.

2.6.4 Importance of passengers being suitable clothed as far as posible when mustering.

The proper choice of clothing depends on the location, the present weather situation and wheather forecast, but also on the nature of the emergency, above all urgency. One may consider blankets ect. At embarkation stations or in lifeboats. Pax ships operating in locations with a cool climate may take special precautions, in particular in for artic and artarctic operation.

When passengers have reached the assembly area crew members must ensure that they have sufficient clothing. It may well be dangerous to return to baggage areas or cabins, so extra clothing, mainly in the form of blankets, must be available at muster station.

Ensure passenger and child are dressed

Smaller vessels can be placed in danger when caught in extremely bad weather. A large proportion of accidents involving small vessels are weather related. Bad weather makes the work environment on board the vessel extremely hazardous. It also places a lot of strain on the vessel's structure and equipment.

Such notices are required to be provided in passenger cabins, at muster stations and in other passenger spaces and as a minimum must include information on muster stations, essential action to take in an emergency and the method of donning lifejackets. The instructions may be provided on one notice or alternatively, in two parts with the instructions on donning lifejackets being provided in the form of the lifejacket manufacturer's donning instructions. The instructions should be in English followed by any other language or languages appropriate to the principal nationalities carried on the route on which the ship is operating.



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Appropriate clothing Think sensibly about the clothes you and your crew wear to sea, and remember your personal protective equipment (safety gear).

- Wear close-fitting clothing, which is less likely to be caught in machinery.
- Wear cotton or wool in case there is a fire or you fall over board.
- Keep long hair tucked under a hat or tied back.
- · Avoid wearing rings and other jewellery.
- Wear good non-slip footwear

2.6.5 The ability to check that the passesnger have donned their life jackets correctly.

.1**All crew must to check that all passengers have done their lifejacket correctly**

Donning life jackets should be undertaken by following a clear, visible demonstration from the leader with assistance provided by other crew members who should be evenly spaced throughout the assembly

Lifejacket manufacturers should provide illustrated directions for donning and adjustment and ensure as far as possible that, with orders for quantities of lifejackets up to 20, one copy is supplied with each lifejacket. English should be used in every case but repetition in other languages is recommended where passengers using those languages are likely to be carried.

If instructed to don your life jacket in an emergency situation please put your life jacket on first and then attend to your children, if you need assistance a crew member will be on hand.

- The crew members on the upper and lower deck will now demonstrate how to don your life jacket. Please pay close attention during this demonstration.
- There is a difference between adult and children life jackets and the crew will now explain these distinctions.
- Instructions on how to don your life jacket and a summary of the information covered during this briefing are displayed at the passenger accommodation areas on the lower and upper decks which the crew are now pointing out. I urge you to familiarize yourself with this important safety information.



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1. Place the life

above your head

jacket

Lower the lifejacket so that your passes through opening and rests on your



shoulders



3.

Connect the straps on either side of the life jacket immediately in front of you



Note that your lifejacket is fitted with a whistle and light



Should you need to enter the water from a small height place your hands firmly on the lifejacket above your chest and bear down to hold the life jacket in place on entry



Step A

Check the placard inside the life vest to make sure that it's rated to float as much or more than you weigh.

Step B

Open the front of the life vest and put your arms through it, just as you would a normal vest. If there is a collar to help keep your head afloat, this should hang down the back of the vest.

Step C



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Zip the front of the life vest. On some vests---especially the inflatable sort---you may have to fasten a plastic buckle in addition to or instead of the zipper. Some vests may also have hook-and-loop closures that close over the zipper to protect it, but you won't find life vests held together by only hook-and-loop closures.

Step D

Make sure that the life vest fits properly: It should be snug but not so tight that it's uncomfortable. Have someone place their hands underneath the shoulders of the vest and tug straight up while you stand with your arms out to the side. If the vest lifts up so high that your chin or ears slip through, it is too loose.

Step E

Tighten the vest if necessary. A life vest will usually adjust in one of two ways: Either there will be laces or buckles at each side that can be loosened or tightened and then tied to keep them from slipping, not unlike a corset, or if your life vest closes with a plastic buckle you may be able to tighten it by pulling on the webbing strap that comes out of the buckle or lifting the buckle and letting the webbing slide through to loosen it.

Step F

Check again to make sure the life vest fits properly. If you can't adjust it sufficiently for a proper fit---or if the life vest doesn't adjust at all---you will need to replace it with a vest of the proper size.

- 2.7 Ability to disembark passengers, with special attention to disable persons and persons needing assistance.
- .1 Guide the passengers from the muster stations en route to the embarkation station.

in the event order given from the bridge to bring the passengers from the muster/lifeboat station to the lifeboat and liferafts area, those whose in charge in the muster station will guide the passengers to the lifeboat and life rafts station. In addition, remind the trainees to keep in mind what have been discussed in dealing with different kind of passengers and apply those learning during the practical demonstration/role playing. Passengers must be controlled, directed and counted by door checkers as they leave their assembly station en route to the embarkation deck. This may be best achieved by passengers proceeding in single file following a crew member. Once the survival craft is loaded the number of persons on board should be relayed to the bridge. Passenger assembly stations



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☐ On receiving embarkation	orders from	Evacuation Control	Team,	boat group	s to be
led to their lifeboat station by	the Boat Gr	roup Leaders;			

- ☐ Keep family groups together; and
- ☐ Line up the passengers as per company abandon ship procedures.

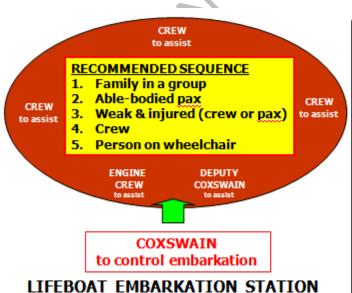
The crocodile queue

It is a line formed for an efficient, controlled, and organized movement from the muster stations to the embarkation stations.

- □ With one hand, hold the lifejacket of the person in-front of you.
- □ Never break the line formation as you move along.

Sequence of evacuation

- ☐ The 1st Boat Group Leader with the number board to lead at the head of the queue.
- $\ \square$ Passengers who are in wheelchairs and/or in stretchers should be at the tail end of the queue.
- ☐ Ensure that the designated routes are used as instructed by the Evacuation Control Team Leader.
- ☐ Give assistance to those who need it.
- ☐ Another assembly station crew to join in the middle of the line.
- ☐ Another assembly station crew to join at the tail of the line.
- ☐ The Assembly Station Leader will leave the last once all passengers and crew are cleared from the station.



- Order from the Bridge.
- Embark in an orderly manner.
- Do not block the entrance to the lifeboat.
- Distribute personnel equally to both ends of the lifeboat.
- Do not overload the lifeboat.



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Passengers will need to consider that ships are fundamentally different from premises ashore. Different legal requirements and practical safety considerations apply afloat. For example, some routine items of medical equipment (such as oxygen cylinders) may not be permitted on board vessels, or may be subject to a size limit. Large or heavy items of mobility equipment may not be permitted in all parts of the ship, particularly if the ship itself is small. Information on such restrictions will be available from the ship operator. In the event that a passenger has any questions on a vessels capacity to carry specific equipment, the passenger should consult the operator.

When a passenger is planning a cruise or a longer journey the passenger should consider that, on most ships, not all cabins are designed for wheelchair users.

This may impose a practical limit on the number of wheelchair users who can be carried on the vessel.

Similarly, the legal requirement to be able to evacuate all passengers from most vessels in an emergency within 30 minutes may necessitate limits on the numbers of passengers who cannot reach the muster station unaided. Any such restrictions will be specific to individual ships; and the operator will be able to provide further information in this respect.

A passenger can expect assistance in ports, including embarkation and disembarkation. For further details on when assistance arrangements may apply (including on board a vessel), which outlines the obligations on carriers, travel agents or tour operators on facilitating the carriage of disabled persons or persons with reduced mobility.

If a passenger requires assistance with personal care, however, (such as feeding, breathing, using medication or using the toilet) the passenger may wish to travel with a companion who can assist. In certain circumstances and where strictly necessary, carriers, travel agents and tour operators may require that a disabled person or person with reduced mobility be accompanied by another person who is capable of providing the assistance required. Any such person is to be carried free of charge on a ferry, and the ferry operator will provide information about obtaining a free ticket accordingly. Under the EU Regulation these is no such entitlement in relation to cruises, so if a passenger is booking a cruise and requires a companion, that passenger will need to pay for the companion to travel.

The passenger remains responsible for advising the carrier of any disability that may affect their ability to use the ship tenders. Even in benign sea conditions, sea movement can make tender operations challenging for people with reduced mobility

The passenger will not be charged for taking onto the ship any medical or mobility equipment (assuming that it is permitted on board) that is reasonably necessary for their needs during the voyage.

The second circumstance is where the design of the ship or ports it uses, make it impossible to embark, disembark or carry the passenger in a safe and operationally feasible manner: for example where a cruise ship embarks and disembarks passengers by tender rather than directly from / to the quay. Forecast tide levels and weather



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conditions are also likely to need to be considered by the operator when accepting a booking from a passenger with reduced mobility as this may affect their embarkation and disembarkation of the vessel.

Procedures for embarking and disembarking disabled passengers and those passengers with reduced mobility will vary from ship to ship where passengers may be called for boarding first depending on the situation, equipment and designated lift points. At an unstaffed departure point

.2 Control the embarkation of passengers to assigned survival craft in
accordance with emergency instructions
☐ Assemble the passengers assigned to the Assembly Station in groups according to
their lifeboat allocations. Show the numbered board;
□ Check off passengers by cabin numbers;
□ Check that lifejackets are properly worn and secured;
□ Assembly Station Leaders to report to Evacuation Control Team Leader when
mustering of passengers is completed;
☐ Keep passengers at the Assembly Station and await orders from the Evacuation
Control Team Leader;
☐ On receiving embarkation orders from Evacuation Control Team, boat groups to be
led to their lifeboat station by the Boat Group Leaders;
☐ Ensure that the designated routes are used as instructed from the Evacuation Control
Team Leader;
☐ Give assistance to those who need it;
□ Keep family groups together;
☐ Assist in the proper embarkation of passengers into the allocated lifeboats; and
☐ Do not overload the lifeboats. The number of persons embarked into the lifeboats
should not exceed its stated capacity.