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Departure from COLREGS infringement or good seamanship

Rakish Suppiah
World Maritime University

WORLD MARITIME UNIVERSITY
Malmö, Sweden

Departure from COLREGS
Infringement or Good Seamanship

By

RAKISH SUPPIAH
Malaysia

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DECLARATION

I Certify that all the material in this dissertation that is not my own work has been identified and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflects my own personal views, are not necessarily endorsed by the University.

Signature: 

Date: 24.08.2007

Supervised by: Captain Jan Horck
Lecturer
World Maritime University

Assessor: Proshanto Mukherjee
Professor
World Maritime University.

Co-assessor:

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ABSTRACT

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Good seamanship is a ubiquitous need of the maritime world and therefore demanded by the general maritime law. Every seaman has to exercise reasonable skill in order to avoid collisions. Lord Normand in The Queen Mary[1] defines:

> "The ship must conform to the practice of good seamanship, it lays upon those in charge of her the duty of taking account of all the concrete circumstances of the emergency, and of acting with reference to them in their totality as a skilled seaman of ordinary prudence would act."

Consequently everybody considering ex post conducts in regard to collision cases has to put himself in the position of the master and crew. This was expressed in the US case H. F. Dimock[2]:

> "(a) vessel should not ordinarily be held in fault simply because the courts, with cool deliberation, after all the facts, determine that what was done was mistaken. In such cases, a court should put itself in the position of a master at the time of the circumstances involved, and consider that the rights of the parties, when maritime contingencies are difficult and unusual, must ordinarily be settled according to his determination, provided he has suitable experience and capacity, and exercises a discretion not inconsistent with sound and good seamanship."

To obey the doctrine of good seamanship requires not the absolute perfect seaman who takes every, even the most unlikely, cause of accident into account. An error in judgment by the crew does not automatically lead to a negligent act if that error was

[1] The Queen Mary (1949) 82 Ll.L. Rep. 303.
[2] The H.F. Dimock (1896) 77 Fed.226, 229.

within the standard of good and prudent seamanship. Good seamanship does not expect by him to foresee any cause. Otherwise a self regulating system like ISM Code would be dispensable. Finally the judgment has to be based on facts. The highest degree of nautical conduct is to be considerate of the danger to other ships. Thereto counts warning other ships which one’s own ship endangers due to her own difficulties.

International Convention does not explicitly oblige a crew to apply available modern technical aids; this is a duty of good seamanship. Also, ship management has to use shore-based technical aids to mitigate the risk of collisions. Particularly the development of the Electronics Chart and Display Information System (ECDIS) shows the influences of technology in regard to the determination of good seamanship.

Today the duty of good seamanship is strongly coined by International Conventions such as COLREGS and the STCW Convention. But good seamanship does only demand compliance with the rules where it is reasonable. This principle is expressly stated in rule 2(b) COLREGS. Even local rules not made by any authority govern the duty of a seaman provided that they are firmly established, well understood, and recognized by long usage.

Keywords: Good Seamanship, collision, technology, risk, local rules, COLREGS

Table of contents

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

A.B.L.R.	Australian business law review
A.C.	Appeal cases
A.J.C.L	American journal of comparative law
A.J.I.L	American journal of international law
AMC	American Maritime Cases (1923-)
A.L.J.R.	Australian law journal reports
A.L.R.	American law reports or Australian law reports
Asp MC	Aspinall's Maritime Cases 1870-1940
Asp MLC	Aspinall's Maritime Cases 1870-1940
B.C.L.C.	Butterworths company law cases
c.	Chapter (of Act of Parliament)
C.A.	Court of Appeal
C.C.L.T.	Canadian cases on the law of torts
C.J.Q.	Civil justice quarterly
C.L.	Current law
C.L.J.	Cambridge law journal
C.L.P.	Current legal problems
C.L.R.	Commonwealth law reports (Australia)
Cr.App.R.	Criminal appeal reports
Cr.App.R.(S.)	Criminal appeal reports (sentencing)
Csl.	Counsel
Crim.L.J.	Criminal law journal
D.C.	Divisional Court
Denning L.J.	Denning law journal
F Supp.	Federal Supplement (USA)
Harv.L.R.	Harvard law review
I.M.O	International Maritime Organization

ISM	International Safety Management system
I.L.M.	International legal materials
I.L.P.	International legal practitioner
Hag Adm	Haggard's Admiralty Reports 1822-1838
J.M.L.C.	Journal of maritime law and commerce
L.C.	Lord Chancellor
L.J.R.	Law journal reports
L.M.C.L.Q.	Lloyds maritime and commercial law quarterly
L.Q.R.	Law quarterly review
Lit.	Litigation
Ll. Rep.	Lloyd's list reports (before 1951)
Lloyd's Rep.	Lloyd's list reports (after 1951)
LT	Law Times Reports 1859-1947
LJP	Law Journal Reports New Series Probate, Divorce and Admiralty 1875-1946
M.L.J.	Malayan law journal
McGill L.J.	McGill law journal
Moo PCC	Moore's Privy Council Cases 1836-1862
O.D.I.L.	Ocean development and international law
O.J.L.S.	Oxford journal of legal studies
Prob	Law Reports, Probate Division 1891-
Sp Ecc & Ad	Spinks Ecclesiastical and Admiralty Reports

CHAPTER 1
INTRODUCTION

1.1. Background

Despite the advances in marine technology, sophisticated electronic navigation aids, satellite as well as new training methods for the navigators, maritime collisions continue to feature prominently in all major maritime casualty statistics. Even though collision rarely represent the major sector of the statistics, but when they do occur they always involve significant losses.

Maritime collisions often results consequential losses such as death and personal injury, marine pollution, fire, explosion, cargo loss, and damage of property. A collision is defined as "the violent encounter of a moving body with another."[1] Collisions at sea does not necessarily involve contact between two vessels, it could also be a contact between a vessel and a bridge, wharf, crane, offshore structure and this kind of contact is referred to as 'allision'.

Maritime collision law originated from the ancient Roman law but during that period there was no mentions of any specific navigational rules other than maritime custom and the jurisprudence which concerns fault and liability for loss and damage. In 1840 the Trinity House Navigational Rules were established and followed by the first U.K. statute that embodied navigational rules in 1846, which then developed with other statutory rules in 1851, 1854 and 1858.

The first diplomatic conference on navigational rules, which was convened by the U.S. President Benjamin Harrison in Washington in 1889, resulted in first comprehensive set of international navigational regulations that became effective in 1897.[2] Many other conferences had been conducted, such as in Brussels, Belgium in 1910 and in London England, in 1948 and 1960 which had made series of changes to

[1] Oxford English Dictionary, 2005
[2] N.J. Healy & J.C. Sweeney, *The Law of Marine Collision*, Centreville: Cornell Maritime Press, 1998.

the international collision regulations and in 1972 a major revision was being carried out by the International Maritime Organization (IMO) that resulted in the Convention on the International Regulations for Preventing Collisions at Sea, 1972 also known as the COLREGS 1972. These regulations have been accepted by almost all maritime states and are "applicable to all vessels upon the high seas and in all waters connected therewith"[3]

1.2 The Human Element

The basis of preventing maritime casualties and pollution of the sea is that ships must not only be properly designed, constructed, equipped and maintained; but must also be operated by adequate number of qualified officers and trained crews. It is well recognized that the human element is a significant factor in a number of maritime casualties. Many causes and chain of events culminate to an action where human error becomes the contributing factor. Amongst which is the issue concerning fatigue, an outcome of long hours of watch keeping which can lead to a degradation of human performance, a slowing down of physical and mental reflexes and an impairment of the ability to make rational judgments.

In order to observe the bridge watch keeping principle of ensuring the maintenance of a safe navigational watch while maintaining of general surveillance of the ship, Resolution A.481 (XII) adopted by the IMO 12th.Assembly recommended that –

a) The bridge watch should consist of at least one officer qualified to take charge of a navigational watch and at least one qualified or experienced seaman;
b) The provision of qualified deck officers should be such that it is not necessary for the master to keep regular watches;
c) A three watch system should be adopted; and
d) Where the bridge watches consists of one officer and one seaman, there should be the capability to provide schedules.

The situation is compounded for deep draft vessels whose navigation must be precise, more so when such vessels require staging in order to avail of the "tidal window" at

[3] International Regulations for preventing Collision at Sea, 1972, rule 1(a) (COLREGS 1972)

specified target time over areas of critical controlling depths. To illustrate the precision required, transits must be timed to pass such controlling areas not more than 30 minutes either side of high water. This may give rise to compromising the interpretation of safe speed under the International Collision Regulations. For further assistance at any time if the officer of the watch requires additional help, such assistance should be readily available and fit for duty.

Ship with only three watch-keepers including the master when transiting a Strait would be hard pressed to meet the principles of bridge watch-keeping and cause their officers to work on very strenuous schedule.

1.3 Standards for Apportionment of Liability

This analysis creates a major impact for the courts to render judgments with regard to apportionment of liability. There is rarely a collision case where there is only one ship to be blamed. The requirement for apportionment of liability in a fair trial requires tremendous facts and proofs to ensure each vessel has received the appropriate percentage of merits in the case. The analysis creates a guideline for the court to identify the good practice of seamanship or a mere infringement of the collision regulation. This guideline would be referred to for more accurate fact findings to establish a fair judgment for both the defendant and the plaintiff.

The guideline would forbid the presumption of fault for every breach of the collision regulation and thus quantification of fault during the trial would be of quality and not quantity. Human involvement does not mean the same thing as human responsibility. People may be involved in an accident without being responsible for it. The degrees of intention, expectedness and avoidability are important to consider in assessing the extent to which responsibility (or even blame) may be allocated to individuals. In collisions, it may be more useful to allocate relative responsibility between ships. The establishment of the guideline would be in the form of a traffic regulation for the Malacca Strait where the rules for safe practice of seamanship will be identified and

thus an infringement of these rules exhibits the violation of good practice of seamanship and even without a departure from the collision regulations the Master could be identified as a violator and charged in court.

Chapter 2 identifies the human element factor contributing to marine casualty and analyzes the psychological impact on decision making during the agony of a moment before the collision. Chapter 3 explains the duties of a navigator at sea and elaborates the liability and responsibilities for any infringement or breach of the safe practice of seamanship. Chapter 4 analyzes the collision regulation and while identifying regular infringement as per the regulations. Chapter 5 lay out the procedures for establishing a collision claim.

CHAPTER 2
HUMAN ELEMENT IN SHIPPING CASUALITIES

2.1 What is Human Error?

Human error has in recent time been known to be one of the main sources of accidents at sea. Error is but one way of describing a human performance and is the term used when no other explanation can be found for a system failure. Behavior still consists of perception, attention, memory, action, etc., all functioning as they usually do. It is only how we classify the result that defines the error. The actor who commits an error recognizes it only after the fact, with the perspective provided by hindsight. Either an actor or an external judge needs a model of task performance to be able to decide whether an action has been correctly executed. In the context of this dissertation, 'error' is defined as a human action that fails to meet an implicit or explicit standard. An error occurs when a planned series of action fails to achieve its desired outcome, and when this failure cannot be attributed to the intervention of some chance occurrence.

While casualties can never be completely eliminated there is nevertheless a growing feeling that present rates of casualties are still unreasonably high. When everything else has been looked at and tried - newer designs, better sophisticated regulations and enforcement systems at every level - one thing remains about which there is almost universal agreement and that is that the underlying cause of casualties – is the human factor.[4]

Human involvement does not mean the same thing as human responsibility. People may be involved in an accident without being responsible for it. The degrees of intention, expectedness and avoidability are important to consider in assessing the extent to which responsibility (or even blame) may be allocated to individuals. In collisions, it may be more useful to allocate relative responsibility between ships. In

[4] Marine Directorate (DOT), *The Human Element in shipping casualties*, London: HMSO, 1991, pp 1-26.

none of the case looked at by the research team, was the one ship wholly to blame. Some degrees of human responsibility could be located on at least one, and usually both, of the two ships involved.[5]

Following are the illustration of four recent disasters in the history of navigation which identifies the cause as human error:

1) ***Herald of Free Enterprise***

The tragic accident to the *Herald of Free Enterprise* on 6th march 1987, in which 195 people died, resulted in an official British inquiry, carried out by Lord Justice Sheen. Its report into the causes of the disaster was published on 24th July 1987[6].The ropax (Car and Passenger Ferry) was overloaded and no doubt ballasted in the bows when it left the port of Zeebrugge with its bow doors wide open. The water rushed unhindered into the vehicle deck, quickly destabilizing and capsizing the ship.

Three men were accused of negligence. Captain David Lewry should have checked that all proper procedures had been carried out before setting sail. The first officer, Leslie Sabel, failed to check that the sailor responsible for closing the bow doors was at his station before leaving the vehicle deck. This was assistant bosun, Mark Stanley, who had fallen asleep in his cabin at the time of departure.

The inquiry also considered that the shipping company, Townsend Thoresen was at fault at all levels, from the board of directors to management staff. The directors had never really understood their responsibilities for safety, while management had never really realized its duties. The company had run with clear lack of professionalism, with a *laissez-faire* policy that had led to the rejection of several requests from

[5] *Ibid*

[6] Department of Transport, *Formal Investigation on MV Herald of Free Enterprise,* Report of the Court no 8674, London: HMSO, 1987

shipmasters asking for installation of safety equipment, and stricter supervision of the maximum number of passenger and freight weight on board.[7]

2. ***Exxon Valdez***

The biggest oil spill in the United States was caused by a series of operational and navigational errors committed on board the *Exxon Valdez*, which ran aground off Alaskan coast on 24th March 1989.[8]

Shortly after the tanker left the Aleyska terminal, Captain Joseph Hazelwood decided to move out of the compulsory traffic lanes in Prince William Sound, because of drifting ice. He handed over control of the ship to a third mate unqualified to be in charge on the bridge. Following a navigational error, the *Exxon Valdez* ran aground on Bligh Reef, tearing its hull and spilling 40,000 tons of crude oil into the sea.[9]Nine hours after the incident, the National Transport Safety Board (NTSB) carried out alcohol tests on the ship personnel. Results for Captain Hazelwood were over the limit.[10]

During the inquiry carried out by the NTSB, the company Exxon Shipping stated that the oil spill was the result of a human error by the third officer Gregory Cousins, who had delayed bringing the ship back into the traffic lane. At the same hearing, the State of Alaska recognized that the incident was the outcome of human and organizational failure. Clearly the captain had been negligent, but Exxon itself been very deficient in safety management on board the ship.[11]

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[7] Boisson, Phillippe., *Safety at Sea, Policies, Regulations and International Law*, Paris: Bureau Veritas , 1999, pp 288-301.
[8] *Ibid.*
[9] R.Cahill, *Disaster at sea: Titanic to Exxon Valdez*, London: Century, 1990, pp 214-228
[10] *'Exxon sacks masters for alcohol abuse'*, Lloyd's List. 01st April 1989
[11] National Transport Safety Board Marine Accident Report, *Grounding of the U. S.Tanker Exxon Valdez on Bligh Reef: Prince William Sound, March 24th 1989,* Washington DC, 31st July 1990

3. ***Scandinavian Star***

On 7th April 1990, the ropax *Scandinavian Star* was swept by fire shortly after it came into service on the route between Oslo and Frederikshavn. 158 people died in the accident, and criminal investigations were opened by the Danish public prosecutor. After twenty months inquiries, three people were charged, the shipmaster Hugo Larsen, the operator Olsen Hansen, manager of the shipping company Da No Lines, and the shipowner Henry Johansen.[12]

In a lengthy report published in January 1991, an inquiry commission led by the Copenhagen maritime and commercial court concluded that the ferry was not operationally fit to carry passengers when brought into service on 1st April 1990. The master was criticized for abandoning ship, before doing everything in his power to save the passengers. More important, the inquiry revealed the numerous shortcomings of the shipping line, notably the mixed crew, recruited too quickly, unable to familiarize themselves with the ship in one week, and not been through a fire drill onboard.[13]

4. ***Braer***

On 5th January 1993, the tanker ran aground and broke up on rocks in the Shetland Islands, releasing its cargo of 84,700 tons of oil into the sea. The accident led to the publication of three reports; published on 20th January 1994.The first two report is on the causes of the shipwreck, by the British Marine Accident Investigation Branch (MAIB) and the Liberian maritime administration, and the last third report by the British Marine Pollution Control Unit, on the oil pollution issue.[14]

The documents aimed sharp criticism at the behavior of the Greek shipmaster Alexandros Gelis who, according to the British report, had been guilty of several

[12] *Tragedy could lead to improved safety on ferries*, Lloyd's List. 6th April 1991
[13] Norwegian Official Reports, *The Scandinavian Star disaster of 7thApril 1990, Main Report, Oslo:* Government Printing Service, 1991
[14] '*Braer spill caused by series of failings'*. Lloyd's List. , 21st Jan 1994

forms of negligence. He had failed in his duty to preserve the seaworthiness of his vessel by taking no steps to secure or jettison the pipes carried on deck. Neither had he opposed the fact that the whole crew crowded on to the bridge, abandoning the main spaces, and in particular the engine room.[15]

The report of the Liberian Bureau of Maritime Affairs emphasized the communication difficulties between the master and the Shetland Coast Guard concerning the need for towage. The grounding was not only caused by the lack of professional competence, but also by the faulty reporting in the command chain, and by the inability to select priorities in the information available or examine the consequences of events.[16]

Among the hypotheses of collisions conclude by the research team at HMSO marine casualty investigation department, the following is apparent causes which was being conclude in their report published in the 'Human Element in Shipping Casualties' report dated 1991[17]:

1) "In condition of poor visibility, ships put their reliance on radar: misinterpretation of the picture on the screen is, however, still common, even though training and equipment has improved.
2) There are limitations on the amount of information that human beings are able to process. Ship navigators are aware of much more information that they ever use .They pick and choose what they will attend to and what they will ignore. They consistently show a preference for visual bearings, but factors like anxiety, motivation, fatigue, and boredom will influence their ability both to perceive and to process information, and hence to use it effectively in controlling the ship.
3) Fatigue is often cited as one of the main causes of collisions, but direct evidence is hard to come by. Lapses of attention, awareness or vigilance can be proposed as explanations in many collisions, which might lead us to suspect fatigue as the underlying cause. One third of collisions occurred in the four hour period 0300-0700 hrs. This may have little to do with darkness or light, but could be linked to body rhythms-changes in body temperature, and hence in performance-of the watch keeper.
4) Performance deviations appear not so much as mistakes or incorrect assessments of risk, but as violations of rules or of accepted codes of practice. The violations

[15] Department of Transport: Marine Accident Investigation Branch, *Report of the Chief Inspector of Marine Accidents into the engine failure and subsequent grounding of the motor tanker Braer at Garths Ness, Shetland* on 5th January 1993
[16] Republic of Liberia: Bureau of Maritime Affairs, *Report of investigation into the matter of loss by grounding of the motor tanker Braer on the South Coast of Shetlands, 5th Jan 1993,* Monrovia 1994.
[17] *Ibid at 16*

sometimes seem to involve a complete disregard of the unpredictable elements in a given situation.

5) The watch keeper is particularly liable to feel bored and isolated, which can alter his state of awareness. He may lose orientation in space and time and all awareness of himself. The possibility of something actually happening may come as a relief. The self generated stress of close encounters may be felt to be exciting. In extreme cases, the return to normality takes place only when things come to the worst. The economic factors driving ships owners towards further reduction of crews make this aspect of watch keeping important to be kept under review."

The distinction between errors and violations is often blurred but the main differences are shown in the table below:

ERRORS	VIOLATIONS
Stem mainly from informational factors, incorrect or incomplete knowledge, either in the head or in the world	Stem mainly from motivational factors. Shaped by attitude, beliefs, social norms and organizational culture.
They are unintended, and may be due to, a memory failure(a lapse) or an intentional failure (a slip)	They usually involve intended or deliberate deviations from the rules, regulations and safe operating procedures
They can be explained by reference to how individuals handle information	The can only be understood in a social context
The likelihood of mistakes occurring can be reduced by improving the relevant information; training, chart signs, the navigator-vessel interface, etc.	Violations can only be reduced by changing attitudes, beliefs, social norms and organizational cultures that tacitly condone non compliance (culture of evasion)
Errors can occur in any situation. They need not of themselves, incur risk	Violations, by definition, bring their perpetrators into areas of increased risk, i.e. they end up nearer to the edge.

Figure 1: The distinction between errors and violations-
Source: U.K P& I Club newsletter at www.ukpandi.com, 2007 accessed: 20.06.2007

An *error* is any significant deviation from expectation, depending on statistical criteria or experience of normal performance standards. *Human error* is a deviation from expected human performance, which refers to the point that someone judging whether an error has occurred must have a criterion. This particular distinction concerns whether the actor's behaviour alone is examined, or the performance of the human – machine system as a whole.

An error may imply a deficiency in the actor; a deficiency in the bridge equipment should be called a 'failure', or 'equipment failure'. It would be preferable to use 'failure' instead of 'error' on the grounds that 'failure' would imply a context within

which the error occurs, and 'error' would be reserved as a description only of human action. Referring to *UK P& I Club* report in 1997, human error mainly of Deck officer's error contribute to 25 percent of collision cases where else equipment failure only contribute to 8 percent of collision cases[18]

An oil tanker *British Trent* was in collision with a bulk carrier *Western Winner* on 3rd June 1993 .The investigation into the accident, which occurred in condition of restricted visibility, identified a number of contributory factors. These factors included an inadequate use of radar by both vessels given the prevailing weather conditions which were causing restricted visibility, a lack of an efficient look out by the *British Trent*, and unfamiliarity with the area combined with the lack of passage plan on behalf of the Master of the *Western Winner*. The investigation report also identified that the judgement of both Master's in the build up to the collision may have been impaired due to fatigue and stress.[19]

2.2 Classification of Errors

Individual human errors (i.e. the failure of planned actions to achieve their desired goal) have tended to be divided into two main groups, each having different underlying causes and each needing to be addressed in a different way:[20]

***Slips and lapses*:** These are failures of execution of a planned set of actions. The plan of action chosen is appropriate, but errors occur in the way the necessary actions are carried out. Slips relate to observable actions and are associated with failures in attention on behalf of an individual. Lapses are internal events in the 'mind' of the individual and relate to failures of memory

Mistakes: These relate to the selection of a wrong or inadequate plan of action for a particular goal. Human error mechanism could be classified as follows[21];

[18] Bell, R.S.P. Bright., *Human Factors in the marine environment*, C.K& Earthy, 1997, p.5
[19] Lloyds Register, *Technical Association*, Paper No.4, Session 1996-97
[20] Reason, J., *Human error*, New York: Cambridge University Press, 1990

Classification of Human Error Mechanism	
Set Objective or give priority Ignore requirements of the situation Suppress own opinion Ignore problem Did not take on challenge **Sense and detect** Lack of vigilance Visual illusion **Perceive, identify and discriminate** False hypothesis, high expectancy Overlook countersigns Habit, stubbornness, stereotype fixation Perceptual confusion **Recall** Forget isolation act Misteke alternatives Other slips of memory **Order or communicate** Slip of tongue Vague/obscure speech Contradictory/conflicting orders	**Analyse and decide** Out of sight out of mind Wrong condition – good rule Overlook side effects Did not anticipate situation Wrong understanding of the situation Wrong analysis-causality Did not understand and dynamics Great complexity Right condition-wrong rule No double checking **Act or Control** Action without intention Spontaneous (non-planned) action Distraction Omission following interruption Reversal Repetition Motor variability Slip Spatial disorientation Slow feedback Confusing noise

Figure 2: Classification of Human Error
Source: The Institute of Marine Engineers, IMAS 95 Conference on Management and operation of ships

Slips, lapses and mistakes takes a major part of the classified human error and its elements, but do navigators make an error in judgement at the imminent of a collision and why is it that departure from the Collision regulations always occurs during the last few minutes before the collisions?

2.3. Psychological Impact of the Human Brain in Decision Making

The nervous system is divided into two main parts: the central nervous system and the peripheral system. The central nervous systems are composed of the brain and the spinal cord, and it is the primary means for transmitting messages between the brain and the body. The peripheral nervous system, on the other hand, branches out from

[21] Kristiansen, S., *An approach to systematic learning from accidents*', IMAS 95 Conference on Management and operation of ships: Practical Techniques For Today and Tomorrow, The Institute of Marine Engineers, 24-25, May 1995

the spinal cord and brain and reaches the extremities of the body. It encompasses all parts of the nervous system other than the brain and spinal cord.

There are two main divisions of the peripheral nervous system, the somatic division and the autonomic division, both of which connect to the central nervous system. The somatic division specializes in the control of voluntary movements – such as motion of eyes to read books. Alternatively, the autonomic division is concerned with the parts of the body that keep us alive – the heart, glands, and other organs that function involuntarily without our awareness.

The autonomic division plays a particularly crucial role during emergency situations. Suppose a navigator senses immediate danger of an impending collision, as confusion races through his mind and fear may overcome his attempts to think rationally, what happens to his body? If he is like most people, he will react immediately on a physiological level. His heart rate may increase and he may begin to sweat. The physiological changes that occur result from the activation of one of two parts that make up the autonomic division: the sympathetic division. The sympathetic division acts to prepare the body in stressful emergency situations, engaging all of the organism's resources to respond to threat. This response often takes the form of "fight or flight". In contrast, the parasympathetic division acts to calm the body after the emergency situation is resolved. Both the sympathetic and parasympathetic nervous system work together to regulate many functions of the body. When one of this fails that is when a seafarer would omit to take the appropriate action to avoid collision and during this moment, the seafarer may not be able to think rationally and may involve making a departure from the regulations in the agony of the moment.[22]

[22] Wood, S.E., Wood, E.R.G., Wood, E., & Desmarais, S., *The World of Psychology* , 4Th Canadian Edition, ON: Toronto, Pearson Education Canada Inc., 2005

In attempting to assess the responsibility for the casualty between *Genimar* and *Larry L*[23], the court turned its attention first to the traffic separation scheme in which it occurred. The scheme was first adopted in 1967 and afterwards approved by IMCO now IMO. That, however did not make compliance mandatory at the time of the collision. It nonetheless quickly became recognized that good seamanship required a mariner to follow the scheme unless another overriding consideration compelled him to ignore it. Compliance with the scheme, however, does not exempt one from adherence to the collision regulations, though it does seem to have created that unfortunate impression in the minds of some and apparently was a consideration in this collision.

Unlike many landmarks cases, this one is of relatively recent vintage, no doubt because the rule to which it applies [10 (b)(i)] is of recent vintage itself. It had not yet been accepted as law since the rule concerning traffic lanes was only incorporated into the new body of rules adopted in the very year and month of the year in which the collision happened, and only came into force in 1977. Traffic lanes

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[23] Genimar / Larry L

The 3,353 Grt Liberian freighter Genimar was on a voyage from Newcastle, New Brunswick to Rotterdam carrying a cargo of some 4,700 tons of zinc concentrates. The Greek registered Larry L, of 16,357 Grt, was embarking on a roughly reciprocal voyage in ballast from Antwerp to a port on the St. Lawrence River. The collision occurred on October 1, 1972, in the Dover Strait, near the South Fall buoy, not long after the change of watch at 0400 hrs.

The master and chief officer watched *Genimar* for several minutes without any appreciable change of bearing, with her masthead lights open to the left and showing red sidelight. The master then blew five short blasts on the whistle as a warning, being under the impression that it was *Genimar's* duty to give way as she was proceeding in the wrong direction in a traffic lane. With the distance still closing and no sign of a course change by the rapidly approaching vessel, *Larry L's* master ordered hard right wheel and blew one blast. The helmsman had applied 10 degrees rudder and the ship began to swing to starboard when the chief officer on the starboard wing reminded the master of the presence of *Pearl Creek* shouting "Captain, we close the other ship, very dangerous." The master responded to the warning by ordering hard-a-port.

Larry L appeared to be crossing from port to starboard at a narrow angle, and it was decided to haul 10 degrees to the right to attempt to pass port to port. *Geminar* held to that course until the distance between the ships had closed to less that half a mile, unaware that the Greek ship had altered 3½ degrees to port at almost the same time *Genimar* hauled to starboard. At this point, the master ordered hard right rudder and blew one blast on the whistle. *Genimar* responded quickly, but a tow blast signal was heard from *Pearl Creek(vessel overtaking Genimar from the starboard),Larry L* which was now swinging to port. Both vessels swung rapidly through more than a right angle before Larry L struck *Genimar* at an angle of about 45 degrees leading forward. The bow of the Greek ship penetrated deeply into the port side forward of the Liberian vessel damaging her fatally.

by then (October 1972), had nevertheless, become so common a feature of the marine landscape particularity the precedent setting scheme in the Dover Strait , that it was predictable that the first collision that came to trial involving a violation of this "custom" would almost inevitably set a precedent.

It was held, that under the conditions of visibility prevailing, that the Steering and Sailing Rules applied, and *Larry L* a give way vessel and *Genimar* the stand on ship. Under the circumstances , *Larry L* should have made an appreciable alteration to starboard or, if she felt the presence of *Pearl Creek* made this unadvisable, a substantial reduction in speed. She did neither, and made two small changes to port that further complicated the situation. *Genimar*, however, was held to blame for her failure to stand on, having altered ten degrees to starboard after first sighting *Larry L.* Her subsequent turn to starboard when *in extremis* be judged proper, but *Larry L's* hard left turn was understandably condemned. The court took note of the fact that the maneuvers of the master of the Greek ship seemed to stem from an attitude on his art that, as he was proceeding in the proper lane and the other vessel was advancing against the traffic flow, it was up to her to get out of the way.

Brandon J. went on to say that, while there might be cases in clear weather where contravention of a Traffic Separation Scheme (TSS) by a vessel might be a fault, it would not necessarily be a causative fault. Such a situation might arise where two ships collided with no others about. The present case, however was not of that kind, The visibility was poor and threatened to become worse. It was, moreover, night and the Dover Strait is always a scene of heavy traffic. In this case the presence of *Pearl Creek* to starboard of *Larry L* inhibited the freedom of maneuver of that vessel and undoubtedly impinged upon her navigation, creating difficulties in her meeting of *Genimar* that might otherwise have arise. Notwithstanding this, the judge found that while the presence of *Genimar* in the wrong lane created a situation out of which the collision followed, this fault was comparatively minor in respect to the disregard of *Larry L* of the Collision Regulation. The imprudent and unseamanlike handling of

Larry L was judged to be the major cause of the collision and *Larry L* was accordingly held responsible for two thirds of the blame.

2.4 Violations of the Regulation and why it occurs

Looking at the MARS reports in Seaway magazine, the late Captain Francois Baillod, the initiator for the project to educate seafarer on understanding COLREGS and head the International survey among sea staff, training staff and examiners to discover the norms, problems and influences which affect decisions on the bridge, he had observed that 74 percent of reported incidents related to uncertainty, violations and disregard for the COLREGS. Calling on his own extensive experience in command, Captain Baillod quoted a number of possible reasons for this poor state of affairs. These included inadequate manning, many unnecessary distractions, fatigue, and reluctance to manage speed, over reliance on electronic aids and just plain poor seamanship among many others.

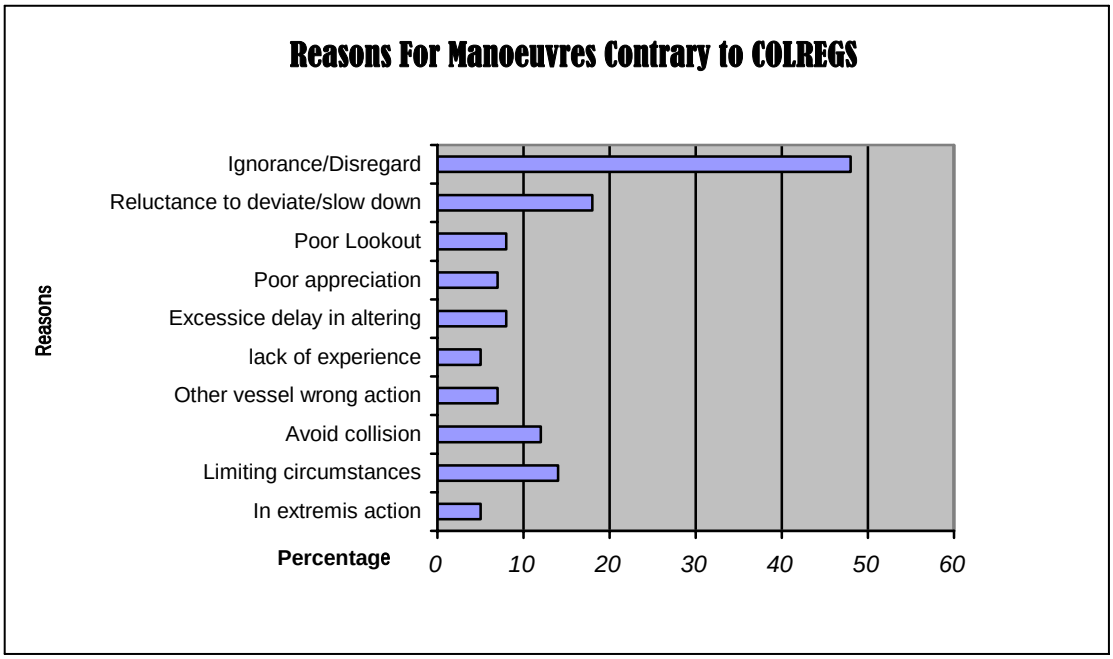

Table 1: Reasons for Manoeuvres Contrary to COLREGS
Source: Seaway, July 2003, p.13

The above chart indicates that the percentage of incidents or collisions actually occurs because navigators are ignorance to the Collision Regulations and make unnecessary departures from the regulation which results in a disaster.

Maritime New Zealand had in February 2006 released a news report on the case of collision between two vessels in New Zealand with the findings from the Court directing to breach of the Collision regulations and safe practice of seamanship[24]:

> "***Ferry master convicted for serious breach of maritime rule***
> Professional seafarers must adhere to rules and regulations for preventing collisions.
>
> This was the clear message from today's conviction in Wellington District Court of David Curd, 66, a former Master of the Cook Strait ferry *Aratere*,in relation to an incident in Wellington Harbour last year. Mr. Curd pleaded guilty for failing to navigate the ferry according to a rule relating to crossing situations.
>
> The incident happened just after 4.30am on 10 April last year when *Aratere* was entering Wellington Harbour, and the chemical tanker Bow de Jin had departed Seaview bound for Timaru.
> Both vessels were heading towards one another and a risk of collision existed. Under Maritime Rules, *Aratere* was required to keep out of the way of the Bow de Jin and avoid crossing ahead of Bow de Jin. But the Master of *Aratere* failed to realize the risk of collision had developed, and failed to take early and substantial action to keep clear.
> Director of Maritime NZ, Russell Kilvington, says Mr. Curd breached maritime rules by failing to appreciate the situation that had developed. This was a serious breach of a fundamental rule of good seamanship. Masters of vessels have a responsibility for the lives of those on board and for their vessel, and they must at all times act diligently, competently and professionally. In this case, Mr. Curd did not.
>
> 'Clearly, a collision between the two vessels of this size would have had potentially disastrous consequences for their crews and passengers. Fortunately, the crew of Bow de Jin took urgent evasive action to avoid this happening,' he said"

During World War II, a British patrol plane flies over the Bay of Biscay. Inside, an observer peers at a speckled, flickering radar screen looking for a tell-tale spot of light or 'blip' that will signal the presence of an enemy submarine on the surface of the sea. The observer has been on watch for a little over 30 minutes and nothing much has happened. Perhaps this mission, like so many others, will be fruitless. Suddenly, the 'blip' appears but the observer makes no response. The 'blip' appears a few more times. Still the observer fails to respond. Evidently, the signal has gone

[24] Maritime New Zealand , *Media Release 20th February 2006,* RCCNZ Media Line

undetected and as a result, so has the submarine.[25] The concept of attention of this matter may encompass three major subdivisions: (1) alertness or the ability to maintain optimal sensitivity to external stimuli, (2) selection or the ability to concentrate awareness upon one source of information rather than another and (3) limited processing capacity, a term which reflects the difficulty people have in processing two tasks simultaneously.

The vigilance decrement refers not only to the decrement in detection rate that is most commonly reported in vigilance studies, but also to the decrement in speed of response. In many commercial maritime environments, mariners traditionally endure harsh working conditions, extreme temperatures, long working hours (more than eight hours per day), frequent separation from the loved ones, fatigue, and long service periods sometimes exceeding three consecutive months in duration. While a ship's endurance is determined by how long it can support operations at sea without replenishing supplies or requiring in-port maintenance, its crewmembers endurance can be described as a function of physiological and psychological factors.

The term crew endurance refers to the ability to maintain performance within safety limits while enduring job related physiological and psychological challenges. Crew endurance is a function of a complex system. Factors such as the emotional state of crew members like stress, hours of work per day, quality and duration of rest periods (sleep), physical conditioning, diet and stability level of physiological systems (the biological clock), exert a direct influence on individual energy levels, alertness, and performance.[26]

The fatigue incurred by this mariners very much affect the decision making and judgment of a navigator during their watch keeping and thus this much effects their ability to conforms and take appropriate avoiding action in the agony of a collision.

[25] Warm, S. Joel, *Sustained Attention In Human Performance*, Suffolk: John Wiley & Sons, 1984, pp 2-303.
[26] Comperatore, A.Carlos., Kingsley, Leonard., *The Commercial Mariner Endurance Management System*, United States Coast Guard, CERMT, 1999

CHAPTER 3
AN ANALYSIS OF THE PHRASE 'GOOD SEAMANSHIP'

3.1 Responsibility

The obligation on the part of the owner, Master or crew to comply with the rules (COLREGS 72) is imperative. They must carry out the duties and take the actions stipulated by the rules. They must also take the precautions required by the ordinary practice of seamen. Failure to comply with the rules of the ordinary practice of seamen may be regarded as fault which, if it causes damage, will bring about civil liability. Criminal liability may also be invoked where failure to observe the rules is made an offence.

Ordinary practice of seamen or good seamanship: There is no rigid test as to what is meant by "ordinary practice of seamen". This is a question of fact to be decided in the light of all good illustration of the concept of good seamanship.

Good seamanship is a fundamental principle from which all other rules, including the collision regulations were derived. However the advantages of the rules in this respect are that they make it clear that how actions are to be carried out. Other encounters or situations not specifically covered by the rules are, of course, subject to the concept of good seamanship. In brief, the rules are part-and perhaps a small part of the concept of seamanship. Therefore, the adherence to the rules is a *prima facie* evidence that the mariner is not guilty of bad seamanship.

Good seamanship serves to fill gaps in the rules which do not provide an answer for all encounters. The Collision Regulations does not contain an answer for all encounters. The rules do not contain the whole wisdom of the sea. Even for the duties and actions required by the rules, the contents may not be fixed and solutions could be found in the concept of good seamanship. Otherwise the law would have failed if it can offer no remedy for the action or the duty to be taken.

Many years before the rule of the road was established by Act of Parliament, the practice of seamen had established rules to enable approaching ships to keep clear of each other. These rules, which are the foundation of those now in force, were well establish by custom, and formed part of the general maritime law administered by the Admiralty Court. A rule of the road for ships on opposite tacks existed in the latter part of the eighteenth century. Admiralty regulations of that time direct that a ship on the larboard tack shall bear up for another on the starboard tack. In the Earl of Warwick's Sailing Instructions of 1645 there is a Rule directing that no captain shall take the wind of an admiral, and the Duke of York's Sailing Instructions of about 1670 contained a Rule to the like effect. In neither of those codes, nor in any of the pleadings or sentences of the seventeenth and eighteenth centuries, is there any trace of the "port tack" rule.

It is clear that the precautions of good seamanship as defined by custom and case law, provides for sensible behavior. Since its rules are supported by professional mariners, they applied in the spirit as well as in the letter.

3.2 Actions to avoid collision

Tasmania –City of Corinth

> "It is provided by the Rule…that, in obeying and construing the Rules, due regard shall be had to any special circumstances which may render a departure from them necessary in order to avoid immediate danger. As soon then as it was, or ought, to a master of reasonable skill and prudence, to have been obvious that to keep his course would involve immediate danger, it was no longer the duty of the Master of the Tasmania to adhere to the …Rule. He was not only justified in departing from it, but bound to do so, and to exercise his best judgment to avoid the danger which threatened"(Lord Herschell,1890)

In case the strict adherence to any rules of the collision regulations puts the ship in a potential collision situation, paragraph (b) (Rule 2 COLREG 72) allows the Master the right to depart from this rule. Thus any rule can be broken when prudence and good seamanship demands and this is allowed under paragraph (b) (Rule 2 COLREGS 72), known as the general prudential rule.

This was first noted in the Merchant Shipping Act Amendment Act 1862 section 29 that:

> "If in any case of collision it appears to the court before which the case is tried that such collision was occasioned by the non-observance of any regulation made by or in pursuance of this Act, the ship by which such regulation has been infringed shall be deemed to be in fault, unless it is shown to the satisfaction of the court that the circumstances of the case made a departure from the rule necessary."[27]

It is desirable in considering section 29 and its equivalents in later legislation, to bear in mind the "Proviso to save special cases" contained in Rule 19 of the regulations of 1863, and the corresponding provisions,[28]which are in approximately similar terms, in subsequent regulations.[29] The terms of Rule 19 of 1863 Merchant Shipping Act of The United Kingdom were as follows:

> "In obeying and construing these rules, due regard must be had to all dangers of navigation: and due regards must also be had to any special circumstances which may exist in any particular case rendering a departure from the above rules necessary in order to avoid immediate danger."

Conditions for departure: departure from the rules is justified where four conditions are fulfilled:

a) It is absolute necessary
b) It is adopted to avoid immediate danger
c) It is exercises to the extent that such danger requires
d) The course adopted was reasonable in the prevailing circumstances.

All four conditions are to be assessed according to the concept of good seamanship as per paragraph (a) of Rule 2 COLREG 72. A vessel may assume that other vessels will observe the rules and navigate prudently and therefore may determine their own course accordingly. Thus, a vessel is not justified in departing from the rules merely because the navigator fears that the other ship will not comply with them similarly, where a ship is put into difficulty by the faulty conduct of another ship, this is not an excuse to depart from the rules-where a ship takes an action contrary to the rules,

[27] The wording of this section seems to have been suggested by a passage in the judgment of The *Fenham* (1870) L.R.3 P.C.212, *The Bougainville and James C. Stevenson* (1873) L.R. 5 P.C. 316, The Palestine (1865) 3 W.R.111, *The Pennsylvania* (1870) 23 L.T.55

[28] "Rules" up to January 1,1954, "rules" in the Regulations for Preventing Collisions At Sea which came into force on that date

[29] See The *Memnon* (1889) 6 Asp.M.C.488; 62 L.T.84 and (r.2(b) of the present COLREGS 72)

such action cannot be binding on the other ship. However, if the latter assented to it, both vessels have the right of way and both are required to proceed with extreme caution.

3.3 Navigators and Their Judgments

The truth is that Rules are equivocal. As things now stand they have to be. But this is no blessing; it is necessary evil. At present the mariner perforce must often cope with uncertainty, a rule saying 'Do thus and not otherwise' is unfitting and potentially iniquitous; the best available rule is in essence only an injunction to caution and alertness. At the opposite extreme, if all uncertainty could be dispelled for all the parties-whether two or many-a one best action could be singled out for each. The best rule then would say. 'This is what is right; do it'. To be sure, this sort of rule would deprive the mariner of responsibility - the responsibility to guess, with the safety of his/her ship as the forfeit one mariner would say commonsense but one might say prudence, would rejoice at such deprivation?[30]

The navigator must be constantly on guard against the danger of making faulty judgments due to errors in his/her observation or his/her assumptions. Among the latter includes, for example, assumptions about what the navigator of the other ship is making and what he/she is likely to do. All would agree that a mariner must respond to any possibility, however remote, not only of a collision, but of a dangerously close encounter. A more contentious question is: should he/she take avoiding action and if so, what action, when the situation is known to be safe; that is when he/she is able confidently to assess the near miss distance as being non-zero. This means that the two navigators may arrive at different estimates of the sign of the miss distance and there is possibility that their maneuvers will cancel out and give rise to a collision.[31]

[30] Sadler, D.H., *The mathematics of collision avoidance at sea*, The Journal of Navigation, Nov 1998, pp.306

[31] Hollingsdale, S.H., *The Effect of Observational Errors on the avoidance of collision at sea*. The Journal-The institute of Navigation, (Oct 1964),Vol.17.No.4, pp 345-357, 1964

The essential elements of actionable negligence were stated in 1823 by Lord Stowell in *The Dundee*[32], a case of collision between two vessels, to be:

> "a want of that attention and vigilance which is due to the security of other vessels that are navigating on the same seas, and which, if so far neglected as to become, however unintentionally, the cause of damage of any extent to such other vessels, the maritime law considers as a dereliction of bounden duty, entitling the sufferer to reparation in damages".

It is the duty of seaman to take reasonable care and to use reasonable skill to prevent the ship from doing injury,[33] and what is reasonable must be tested by the circumstances of each case.[34]The negligence usually relied on is a failure to exercise the skill, care and nerve which are ordinarily to be found in a competent seaman, amounting to a breach of the duty of good seamanship, or a breach of the international or local regulations for preventing collisions. The incidents of the duty to exercise good seamanship depend on the circumstances of each case. The duty of good seamanship may also require the crew of a vessel to observe the collision regulations[35] or the local regulations.

The law requires that a seaman should exhibit ordinary presence of mind and ordinary skill, but it is manifested that at a moment of great difficulty[36] a person may do, or omit to do, something which may contribute to the collision, without thereby showing himself/herself deficient in ordinary skill, care and nerve.[37] A wrong step thus taken in the agony of collision is not negligence[38] and, unless the emergency

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[32] (1823) 1 Hag. Ad.109 at 120

[33] *The Voorwaarts and The Khedive* (1880) 5 App. Cas 876,890, per Lord Blackburn.

[34] The *George Roper* (1880) 8 P.D. 119, following *The Andulusian* (1877) 2 P.D. 231; The *Velox* (1955) 1 Lloyd's Rep. 376 (when a seaman is called upon to face wholly exceptional conditions, ordinary case itself necessarily demands that exceptional precautions may have to be taken.)

[35] *The Albion* (1953) P.117 at 117,128

[36] *The Voorwaarts and The Khedive (*1880) 5 App. Cas. 876, 891, 903.The difficulty or danger is usually caused by a vessel with which the ship, excused for a wrong step, is in collision but this is not always the case; see e.g. The *Westcove* and The *Hebburn* (1941) 70 Lloyd's Rep.205 (a vessel avoided collision with a ferry which put in difficulty and was held free from blame for a collision which followed with the third vessel)

[37] See *The Circe* (1935) 53 Lloyd's Rep. 310,313, where Langton J. expressed the view that both the directing and executive minds were within the rule but it was, he held, unnecessary to decide this "quite novel and most ingenious point".

[38] *The Sisters* (1876) 1. p.d.117; *The Jesmond and the Earl of Elgin* (1871) L.R.4 P.C.1,7; The *Marpesia* (1872) L.R. 4 P.C.212; *Vennall* v.*Garne*r (1830) 1.Cr. & M.21;The *City of Anthwerp* and

was caused by his/her fault, the ship will not thereby incur liability. If the imminent danger of collision leading to the wrong step being taken was the result of negligence on the part of the other vessel, that other will be held to blame for the collision. But the principle applies in all cases of sudden and great danger whether caused by negligence or not; and where two ships by no fault of their own, suddenly find themselves in a position in which a collision is imminent, and if one of them omits to execute a maneuver which possibly might have averted the collision, he/she will not necessarily be held in fault for not having taken the measure suggested.[39]

In the *Hessa*[40], Hill J. said:

> "When a man by the fault of another is presented with a choice between two perilous courses, the comparative perils must not be too nicely weighed, nor must the choice be held a wrong one if the course chosen does not attain its object. What is demanded of the man who had to choose is that he should exercise judgment and discretion as becomes a reasonable and prudent seaman."

The decision in *The Bywell Castle* entitles a seaman to a favorable consideration, yet where he/she has the choice of several alternatives, any of which would, as it turns out, avoid a collision, and he/she does the one thing which is almost certain to cause it, and does, in fact undoubtedly contribute to it, it has been held that he/she will not be excused for that wrong action as being taken in the agony of collision.[41]

In the decision made for the case *The Memnon*[42]Lord Herschel in addressing the House of Lords said[43]:

> "When once it is shown that it was brought home, or ought to have been brought home, to the mind of the master of the vessel, that the courses upon which the ships were approaching , and the circumstances, involved risk of collision, the onus is thrown upon

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the *Friedrich* (1868) L.R.2 P.C.25; *The Bertagne* (1921) 7 Lloyd's Rep 127; The *Ulrikka* (1922) 12 Ll.L.rep.429

[39] The *Marpesia* (1872) L.R.4 P.C.212, N.74 (neither ship to blame, inevitable accident); see also The *Resolution and the Langton* (1789) *Nelson* c. *Fawcet*t, Mars.Ad. Cas.332

[40] The *Crown* (*Adolph Woerman*) v. *Hessa*,n.77 above at 213

[41] The *Testbank* (1941) 70 Lloyd's Rep 270.276, per Langton J.; the Court of Appeal(1942) 72 Lloyd's Rep.6 varied proportions of blame, the vessel put in sudden danger being held one half instead of one quarter to blame; see also The *Lowdock* v. *Edwards* (1941) 70 Lloyd's Rep.133,136,per Hodson J.

[42] (1889) 6 Asp. M.C. 317,CA.488,HL

[43] (1889) 6 Asp. M.C. 488,490

> him of justifying his not doing that which the rule prescribes…The question whether a departure was necessary or not must no doubt be determined by the court; but it must be determined upon the point being raised, and upon some evidence being tendered to the court to show that to have followed the rule would have either created that very risk of collision which it was the purpose of the rule to avoid, or have increased instead of diminished the risk of collision."

The statutory obligation to obey [44]the regulations remained, so that it is a breach of duty not to observe an applicable regulation, unless the departure from the prescribed course can be justified under Rule 2(b)[45] . Thus , in The *Voorwarts* and the *Khedive*[46], the master of the *Khedive* would probably under the present law still have been held guilty of an act of negligence, and the question for the court would have been , did or did not that negligence contribute to the collision and damage? In the *Voorwarts and the Khedive* there appears to have been a difference of opinion on the point between the nautical assessors, those in the court of first instance thinking that it did, and those in court of appeal that it had no material effect. The question was not decided, for at that time the presumption of fault applied irrespective of whether or not an infringement did contribute to the collision, provided that it might possible have done so; but it would seem as if the decision would have turned on where the burden of proof lay. If it had been for the *Khedive* to clear herself it is doubtful if she could have done so, and almost as unlikely that the *Voorwarts* could have proved the *Khedive* in fault. The question whether a breach of the regulations contributed to the collision is one of pure fact for the court to decide on the whole of the evidence. In the majority of cases a satisfactory conclusion can be reached without considering where the burden of proof lies, but the decision in doubtful cases will probably depend on where the onus rests. The onus lies upon the vessel alleging an infringement to prove it and to prove that it contributed to the collision and damage.[47]

[44] Now Reg. 4, Merchant Shipping (Distress and Prevention of Collision) Regulations 1996
[45] Collision Regulations 1972
[46] (1880) 5 App. Cas 876
[47] Owners of *S.S.Heranger* and the Owners of *S.S.Diamond* (1939) A.C.94, 104.

3.4 Navigators and Their Duties

Common law[48] imposes on the Master several duties arising from the concept of good seamanship. In *The Vysotsk*[49], Sheen J. said: *Vysotsk* was guilty of an alteration of course which was made in breach of her duty and in defiance of good sense. Her/his conduct is inexcusable[50].It is the duty of the master to act with proper skill and care. The duty may derive from common law or may be imposed by a statute. The following are a few examples of duties deriving from good seamanship; appraisal, planning and monitoring. It is the duty of the Master to prepare for his/her voyage in order to achieve a safe passage, he must obtain the charts covering the area or areas through which the ship will proceed and see that they are corrected. He must also obtain details of:[51]

a) Currents (direction and rate of set)
b) Tides (times, heights and direction of rate of set)
c) Draught of ship during the various stages of the intended passage.
d) Advise and recommendations given in sailing directions
e) Navigational lights (Characteristics, range, arc of visibility and anticipated raising range)
f) Navigational marks (anticipating range at which objects will show on radar and/or will be visible to the eye)
g) Traffic separation and routeing scheme

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[48] In *Donoghue* v. *Stevenson*(1932) A.C.562, where Lord Atkin formulated the famous principle that : "You must take reasonable care to avoid acts or omissions which you can reasonably foresee would be likely to injure your neighbour." Who then in law is my neighbour? The answer is the persons who are so closely and directly affected by the act. See also Lord Macmillan who said that the categories of negligence are never closed.

[49] (1981) 1 Lloyd's Rep.439

[50] See *The St.Louis* (1984) 2 Lloyd's Rep 174.at p.181.(sounding a signal which is not mandatory is permissible).See also *Afran Transport Co*.v. *The Bergechief* (1960) AMC 1380, where it was stated:" If a vessel carries properly functioning radar equipment and she is in or approaching an area of known poor visibility, there is an affirmative duty to use the radar." In the *Ian Fleming* Report of Court No.S.494 Darling, R.D., Q.C., found that the Skipper failed to navigate in accordance with the most elementary principles. He failed to make proper use of the various navigational aids which he had at his disposition. There was ample time for taking proper action. Engines should have been stopped at once. Stopping engines is always desirable as it gives more time for action and also lessens the damages if collision cannot be avoided.

[51] See M. Notice 854.See also the Code of Good Management Practise in Safe Ship Operation issued jointly by the International Chamber of Shipping (ICS) and The International Shipping Federation (ISF), where it is stated; "Safety and efficiency are integral to good management. They can only be result of structured, painstaking policy and a combination of the right skills, knowledge and experience. The direct involvement of the decision –taking management in these matters is vital."

h) Radio aids to navigation
i) Navigational warnings affecting the area.
j) Climatological data affecting the area.
k) Ship's manoeuvering data.

The guidance incorporated under the Resolution 1 adopted by the Conference on the Training and Certification of Seafarer's (STCW), 1978 which states:

> "The officer of the watch is the Master's representative and his primary responsibility at all times is the safe navigation of the ship. He should at all times comply with the applicable regulations for preventing collisions at sea.
>
> It is of special importance that at all times the officer of the watch ensures that an efficient look-out is maintained. In a ship with a separate chart-room the officer of the watch may visit the chart-room, when essential, for a short period for the necessary performance of his navigational duties, but he should previously satisfy himself that it is safe to do so and ensure that an efficient look-out is maintained.
>
> The officer of the watch should bear in mind that the engines are at his disposal and he should not hesitate to use them in case of need. However, timely notice of intended variations of engine speed should be given where possible .He should also know the handling characteristics of the ship, including its stopping distance and should appreciate that other ships may have different handling characteristics.
>
> The officer of the watch should also bear in mind that the sound signaling apparatus is at his disposal and he should not hesitate to use it in accordance with the applicable regulations for preventing collisions at sea."[52]

Mr. Justice Sheen in the *Roseline*[53] summarized the duties in the following passages which are quoted in full:

> "It is the duty of the owners to make sure that their Masters understand their duties and understand that they are expected to run an efficient ship. The other officers must be of adequate qualification and experience to enable the Master to carry out his duties.
>
> In a well run ship the following precautions will be taken when navigating in reduced visibility
>
> 1. The ship will be navigated at a safe speed and in addition the engine room telegraph will be on 'stand-by' and the engine room will be manned for immediate response to orders unless the engines are operated by direct control from the bridge.
> 2. The appropriate sound signals will be sounded and, whenever possible, they will be sounded automatically.
> 3. An efficient radar watch will be maintained .An efficient watch includes long-range scanning at regular intervals.
> 4. A look-out will be posted in a position where he can maintain a good aural look-out.

[52] See also Regulation 4 of the Merchant Shipping (Certification and Watch keeping) Regulations 1982, S.I.1982, no. 1699.
[53] (1981) 2 Lloyd's Rep. 410

5. Navigation lights will be exhibited
6. In waters in which safe navigation of the ship requires frequent and accurate fixing of her position and the alterations of course, there will be on the bridge two competent officers, one of whom will be the Master or a senior officer. This will enable one officer to concentrate on plotting the position of the ship while the other keeps a radar watch."

In an action for breach of statutory duty[54] , as in an action for common law negligence, the plaintiff bears the burden of proving the causal connection between the breach of duty and the damage. He/she may also prove that the duty is owed to him or the injury is of the kind which statute is intended to prevent.

While the Master or the navigating officers are usually the persons guilty of fault which causes the collision, the ship owner may negligently allow his ship to navigate in a defective or inefficient state as regards her hull or equipment. Where a collision happens which would not have occurred but for the defective condition of the ship, the ship owner is liable.

In must be noted that the Maritime Conventions Act 1911, abolished the statutory presumption of fault of a vessel infringing the Collision Regulations because it is quite possible that the infringement of the regulations did not cause the collision[55] Thus, a breach of a statutory duty may not necessarily be the cause of collision[56]. For instance, a vessel navigating in the wrong lane in a traffic separation scheme may not be held liable for the collision.[57]

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[54] It is a question of interpretation of the statute and whether the duties must be carried out in all events or merely that the person upon whom the duty is imposed is to use due care in performing it.
[55] The *Estrella* (1977) I Lloyd's Rep.525, The *Genimar* (1977) 2 Lloyd's Rep.17
[56] In the United States the 'Pennsylvania Rule' derived from the Pennsylvania case 86 U.S.125 (1873) Where it was decided that:" When a ship at the time of a collision is in actual violation of a statutory rule intended to prevent collisions. The burden rests upon the ship of showing not merely that her fault might not have been one of the causes, or that it probably was not, but that it could not have been."
In *Hellenic Carrier* (1984) AMC 2713, the court found that Hellenic Lines had met its burden under the 'Pennsylvania Rule' by showing that the absence of fog signals could not have contributed to the collision.
Another feature of American Law is that violating the collision rules gives rise to the presumption of fault. In *Louisiana* v. *M.V.Testbank* (1984) AMC 112, at p.124, it was stated that :"Violation of the (Collision) Rules raises a presumption , the party against the violator. In order to rebut the presumption, the party against whom the presumption is invoked must prove not only that such fault probably did not, but that it could not have contributed to causing the collision."

Even with the existence of the Collision Regulations 1972 in which all contracting states and their ships are binding to, should adhere, there is still a gap of unidentified elements within the regulations itself which require a seaman or a navigator to practice good seamanship in construing and complying with the COLREGS. This standard of good practice of seamanship is rarely identified in literature and thus it all lies within the prudent navigator to judge and take appropriate actions to avoid collision at sea.

The next chapter would therefore be dedicated to identify and analyze the elements of good seamanship in selected important regulations and bringing to light the necessity to apply good seamanship while complying with the COLREGS.

[57] In the collision case between *Genimar* and *Larry L* - quoted in page 14 Chapter 2

CHAPTER 4
ANALYSIS OF THE COLLISION REGULATIONS
(Identifying the Good Seamanship aspects)

4.1 Rule 5 - Lookout

Rule 5 of the Collision Regulations 1972 relatively connects to the STCW Convention. According to Section A VIII /2 (Watch keeping arrangements and principles to be observed) Part 3-1 (Principles to be observed in keeping a navigational watch) Rule 12 of the STCW, the officer in charge of the navigational watch is the master's representative and is primarily responsible at all times for the safe navigation of the ship and for complying with the COLREGS 1972. Furthermore Rule 13 and 14 of the same Part states (Lookout):

> "In Rule 13, A proper look out shall be maintained at all times in compliance with the Rule 5 of the International Regulations for Preventing Collisions at Sea and shall serve the purpose of:
> 1. Maintaining a continuous state of vigilance by sight and hearing as well as by all other available means, with regard to any significant change in the operating environment;
> 2. Fully appraising the situation and the risk of collision, stranding and other dangers to navigation; and
> 3. Detecting ships or aircraft in distress, shipwrecked persons, wrecks, debris and other hazards to safe navigation.
> In Rule 14, the look-out must be able to give full attention to the keeping of a proper look-out and no other duties shall be undertaken or assigned which could interfere with that task."

Both Rule 5 of COLREGS and Rule 13. 1. of STCW Convention requires the use of all available means in order to ensure a proper lookout. In the time of sailing ships a watch keeping seaman was placed at the top of the mast in the crow's nest equipped with a long glass[58]. Today there are many more nautical aids available to find out where other ships are, where one's own ship is[59], and additionally the alteration of course[60]. The most common is the radar, and today even small vessels are equipped with Automatic Radar Plotting Aids (APRA).[61] Furthermore Rule 5 also requires the

[58] Binoculars - extendable
[59] *The Santander* [1966] 2 Lloyd's Rep. 77.
[60] The *Golden Polydinamos (*1993) 2 Lloyd's Rep. 464, 477
[61] "It is an IMO SOLAS requirement that all ships of 300 gross tonnage and upwards shall be fitted with an automatic tracking aid to plot automatically the range and bearing of targets. The IMO

use of shore-based radar systems. In the case *The Nordic Ferry*[62] a pilot was obliged to use a shore-based radar system because in thick fog the ship's radar did not work efficiently. In the House of Lords, Sheen J. advised:

> "The pilot "could have sought advice from the fog watch pilot on duty in the Harwich harbour operations room…this would have been better than navigating without assistance and proceeding down the channel on the wrong side."

But the VHF radio or the automatic pilot should only be relied on in a limited manner. To depart from the COLREGS by agreement on the VHF about a special right of way leads to confusion rather than clarifying a situation[63].

The circumstances govern the way to fulfill the obligations of Rule 5 COLREGS. These circumstances may require stationing a watch keeping seaman at the fore end of the ship[64], at the upper bridge[65] or astern.[66] The choice of what a master in general has to consider is *inter alia* connected to the following factors:

1. Visibility, sea state, and weather;
2. Traffic density;
3. Traffic separation schemes and routing schemes;
4. Additional workload;
5. Fitness for duty[67];
6. Knowledge of and confidence in the crew;
7. Experience of watch keeping officers;
8. Activities taking place on board;
9. Operational status of bridge equipment manoeuvring controls and characteristics;
10. Size of the ship and the field of vision;
11. Layout of the bridge.

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carriage requirement (Regulation 19, Chapter V of the International Convention of the Safety Of life At Sea) that ARPA should be fitted on all ships of 10,000 gross tonnage and upwards." Captain N.Cockroft in Marsden, A., page 6- Caph.1

[62] The *Nordic Ferry* (1991) 2 Lloyd's Rep. 591. *The Bovenkerk* (1973) 1 Lloyd's Rep. 63. Such reliance on shore based radar should be exceptional, as shore based radar cannot indicate the relative bearings of the vessels in question. Marsden pp 6-139.

[63] The *Maloja II* (1993) 1 Lloyd's Rep. 48, 52

[64] The *British Confidence* (1951) 2 Lloyd's Rep. 615 621

[65] The *Dea Mazella* (1958) 1 Lloyd's Rep. 10,21

[66] For example, the look out ought to be maintained on a vessel being overtaken during the entire process, until the overtaking vessel is passed and clear. The *Iran Torab* (1988) 2 Lloyd's Rep. 38,43

[67] Merchant Shipping Notice No.M.1102 of UK (1984) advises, moreover, that a relieving officer or crewman or look out should not take over the watch until his vision is fully adjusted to the light conditions.

Poor look out on occasions has been regarded as main causes to many collisions. In The *Da Ye*[68], Sheen J., said:

> "….It will be observed that the answer assumes that *Da Ye* was keeping an efficient radar lookout. She was not.
>
> If *Popov* had been keeping a proper lookout it would have been seen that although a close-quarters situation was developing the ships would have passed each other starboard to starboard. No engine action was then necessary.
>
> It was that alteration of course which created the risk of collision. It was a very serious fault, which seems to have been the result of a bad lookout. The fault in the navigation of *Popov* was not reacting correctly to an emergency thrust upon her. Her master is entitled to be judged leniently.
> I have come to the conclusion that the plaintiffs (*Popov*) must bear 20 per cent of the blame for this collision and the defendants (*Da Ye*) must bear 80 per cent."

In the Queen Mary,[69] Lord Porter said:

> "The look out on the Curacao was obviously faulty. Taking the facts as found by the learned judge, even without modifications which I have suggested, she ought to have realized immediately the Queen Mary steadied on her course of 131 degrees, that the other vessels were converging at an angle of not less than two points, and ought at once to have taken steps to alter to starboard not less than two points."

In the same case, Lord Merriman expressed the following opinion:

> "It is a commonplace to say that the question of faulty lookout must be judged objectively and not subjectively. So far as the responsibility of the ship collectively is concerned, it is of no avail for one officer to excuse himself for a defective appreciation of the situation by the failure of another responsible officer to furnish him with the data for a proper appreciation."

If a ship is proved to have been negligent in not keeping a proper look out, he/she will be held answerable for all reasonable consequences of his/her negligence; thus for example, it may be negligence not to see and avoid another ship on a clear night even if that other ship has no lights. If, however, the absence of proper look out clearly had nothing to do with the collision, it will not be deemed to be a fault contributing to the collision.[70]

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[68] The *Da Ye (*1993) 1 Lloyd's Rep. 30,38
[69] (1949) 82 Ll. L. Rep. 303, 320.
[70] The *Glucometer II* and *St. Michael* (1989) 1 Lloyd's Rep. 54, 58.

In The "Sea Star"[71] a collision occurred between *Horta Barbosa* and the *Sea Star* in the Gulf of Oman. At that time, *Horta Barbosa* was in ballast and the *Sea Star* was fully laden with crude oil. Visibility was good. Both vessels had their radar in use which disclosed the presence of the other at 14 to 16 miles. They could also see the masthead lights of each other at a substantial distance and would have had a warning of the other's course eight miles away either by eye or binoculars. The courses of the vessels were nearly reciprocal with a variation of two or three degrees and the speed of both vessels was about 16 knots.

The second officer was on watch on *Horta Barbosa* and her automatic steering was on 324 degrees. Before the collision, the cadet on the lookout, who had also been on the bridge left, to call the relief. When *Sea Star* was about three to four miles away, the second officer thought she would pass safely at one mile distance. He therefore, left the bridge for the charthouse to get a radar fix.

The cadet on the lookout returned to the bridge and saw that *Sea Star* was on a crossing course. He then called the second officer, who altered the steering to manual and ordered the engines full astern. The collision took place at once. The *Sea Star* was destroyed by fire and eleven of the crewmembers lost their lives.

It was held by the learned Judge Brandon, J. that the Sea Star was seriously to blame for altering course to starboard at an improper time. This improper manoeuvre was caused by previous defective lookout or defective appreciation of the situation, or both. *Horta Barbosa* was also to blame for not taking proper avoiding action. It was negligent of her second officer to go to the chartroom and remain there for six to seven minutes before the collision. He should have remained in the wheelhouse or on the starboard wing of the bridge, watching the approach of Sea Star. Apportionment of blame was *Sea Star* 75 percent and *Horta Barbosa* 25 percent.

[71] (1976) 1 Lloyd's Rep 115. Appeal by Sea Star was dismissed, see (1976) 2 Lloyd's Rep. 477

The duties of the person on look-out: Apart from keeping a vigilant lookout, he must keep the officer in charge fully informed. He must report not only lights and whistles but any movement of vessels which may affect his own course. He reports occurrences and leaves the decision to the Master. The person on lookout should not leave his post even for a short time and in principle he must have no other duties to perform.[72]

The *Golden Mistral*[73] is a case where the overriding cause of the collision was a bad lookout on both vessels, neither vessel saw the other until one minute or less before the collision. Sheen, J. had the following to say:

> "If a good look-out had been maintained aboard *Andhika Patra* it would have become apparent that *Golden Mistral* was not taking appropriate action in compliance with the regulations long before the moment when *Andhika Patra* took action. In such circumstances it would have been correct for *Andhika Patra* to take action immediately. *Andhika Patra* was proceeding down the wrong side of the fairway towards a bend, in the vicinity of which the arc of vision for an inward-bound ship on its correct side of the fairway was restricted to some extent; that was unseamanlike."

4.2 Rule 09 - Narrow Channel

Defining Narrow Channel has been a difficult task. It has never been specified to be within a specific length or breadth. It may be formed by the extremities of two breakwater at the entrance to a harbour, or two line of mooring buoys. A two mile wide safety fairway in the Gulf of Mexico and a channel four miles wide between Duncansby Head and the Skerries has been held not to be narrow channels.[74]

The following are among the many waters which have been held or accepted, in or near the particular place in which a collision occurred, to be narrow channel: the Bosporus[75], the Rive Maas[76], the River Parana[77], the Easthem Channel in the Port of Liverpool[78], the Mae Nam Chao Phraya[79], The Danube.[80]

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[72] Mankabady, Samir, *The law of collision at sea,* Holland: Elsevier Science Publishers, 1987, p.108
[73] (1986) 1 Lloyd's Rep. 407
[74] The *En Gedi* (1986) A.M.C. 2016, The *Anna Salen* (1954) 1 Lloyd's Rep. 475
[75] The *Elazig* (1972) 1 Lloyd's Rep. 355
[76] The *Adolf Leonhardt* (1973) 2 Lloyd's Rep. 318; and The *Oldekerk* (1974) 1 Lloyd's Rep. 95
[77] The *Martin Fierro* (1974) 2 Lloyd's Rep. 203
[78] The *City of Leeds* (1978) 2 Lloyd's Rep. 346

In *The Sedgepool*[81] , Willmer, J. said:

> "As I understand the law, one of the determining factors in deciding whether a given area is or is not within the Narrow Channel Rule is the way in which a seaman in fact regards it and behaves in it."

An area should only be considered as narrow if the State, port[82]or harbour authority declares it to be narrow. Such a declaration should be published in the navigational documents or included in the local rules so that mariners will be aware of it and act accordingly.

In the *Martin Fierro*[83] , a collision occurred between *Joaquin Ponte Naya* and *Martin Fierro* in the River Parana. It was held that *Joaquin Ponte Naya* was at fault for navigating on the wrong side of the channel and for failing to sound one short blast when altering course to starboard. *Martin Fierro* was also at fault for excessive speed and for putting her wheel hard to port. Apportionment of blame: *Joaquin Ponte Naya* 85 percent and *Martin Fierro* 15 percent[84]

Interaction between ships contains important information on this subject and therefore it would be useful to quote extensively from it.

> "…there have been casualties involving British ships where hydrodynamics interaction was a major contributory factor. Situations in which hydrodynamics interaction is involved fall into two main categories. The first concerns ships which are attempting to pass one another at very close range. This is usually due to their being confined to a narrow channel. The second concerns which are necessarily manoeuvring in very close company for operational reasons.
>
> In the first Category there are two situations: (a) overtaking and (b) the head – on encounter.

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[79] The *Toluca* (1981) 2 Lloyd's Rep. 548
[80] The *Satyam Padam* (1985) 1 Lloyd's Rep. 338.
[81] (1956) 2 Lloyd's Rep. 668
[82] In the *Toluca* (1984) 1 Lloyd's Rep . 131, it was stated that Toluca was 3 ft. longer than the largest ship that was normally permitted to enter the port of Bangkok. Therefore, special permission to pass through the channel had been obtained.
[83] (1974) 2 Lloyd's Rep. 203
[84] Appeal by the owners of *Martin Fierro* and a cross appeal by the owners of *Joaquin Ponte Naya* were dismissed, (1975) 2 Lloyd's Rep. 130. The court of appeal said that in addition to the faults found by the trial judge, *Joaquin Ponte Nay*a was at fault; in deviating to port and in going hard to starboard late. *Martin Fierro* was at fault for failing to alter course to starboard before *Joaquin Ponte Naya* opened her green lights. Both vessels also had not been observing each other movements in ample time.

a) Overtaking. Interaction is most likely to prove dangerous when two ships are involved in an overtaking manoeuvre. One possible outcome is that the ship being overtaken may take a sheer into the path of the other. Another possibility is that when the ships are abeam of one another, the bow of each ship may turn away from the bow of the other causing the respective sterns to swing towards each other. This may also be accompanied by an overall strong attractive force between the two ships due to the reduced pressure between the underwater portions of the hull. There are possibilities but the effect of interaction on each ship during overtaking manoeuvre will depend on a number of factors including the size of one ship relative to the other, the smaller of the two ships feeling the greater effect.

b) The head – on encounter. In this situation, interaction is less likely to have a dangerous effect as generally the bows of the two ships will tend to repel each other as they approach. However, this can lead indirectly to a critical situation. In many cases the vessel will already be altering to starboard assuming that a normal port to port pass is intended), when the effect is to increase the swing, probably causing port helm to be applied to check it; if the ship has now approached the edge of the channel and feels bank rejection forward or bank suction aft, a marked and possibly uncontrollable port sheer will develop...

In the second category , where ships are manoeuvring at close quarters for operational reasons, there is most potential danger when one of the ships is a good deal larger than the other, and this most commonly occurs in normal merchant service operations when a ship is being attended by a tug. A dangerous situation is most likely when a tug, having been steaming alongside the ship, moves ahead to the bow as when preparing to pass or take a tow line. Due to changes in drag effects, especially in shallow water, the tug has first to exert appreciably more ahead power than she would use in open water to maintain the same speed and this effect is strongest when she is off the shoulder. At that point also, hydrodynamics forces tend to deflect the tug's bow away from the ship and attract her stern; but as she draws ahead the reverse occurs, the stern being strongly repulsed and the increased drag largely disappears.

It is thus a strong tendency to develop a sheer towards the ship to counter the previous effect. If it is very smartly reversed and engine revolutions very quickly reduced, the tug may well drive herself under the ship's bow. Further , another effect of interaction arises from the flow around the larger ship acting on the underbody of the smaller vessel causing a consequent decrease in effective stability, and thus increasing the likelihood of capsize if the ships touch. Since it has been found that the strength of hydrodynamics interaction varies approximately as the square of the speed, this sort of manouevre should always be carried out at very slow speed. If ships of disparate size are to work in close company at any higher speeds then it is essential that the smaller vessel keeps clear of the hazardous area off the other's bow."[85]

[85] Mankabady, Samir, *The law of collision at sea,* Holland: Elsevier Science Publishers, p.173

4.3 Rule 13 Overtaking

Rule 13 is concerned with a vessel proceeding in the same general direction as the other and applies to vessels in sight of one another[86].It requires the overtaking vessel to keep out of the way and overtaken vessel to hold course and speed. The overtaking vessel has the option of passing on either side of the overtaken vessel, subject to the reservation that in narrow channel the overtaken vessel should be on the right-hand side of the channel.

Rule 13 continues to apply until all danger of collision is over. It is not enough that the overtaking vessel has got slightly in the lead, but Rule applies until the overtaking vessel is past and clear. The duty of the overtaking vessel is mainly to keep out of the way of the vessel being overtaken. No special signals are required except in a narrow channel[87].

Although there is no express reference to the need for a risk of collision, it seems that this is a condition of the application of the rule,[88]although it has been held by the court of Appeal that it can apply before this, as long as there is an element of proximity between the vessels i.e. as soon as it could be said that the overtaking vessel was "coming up with" the vessel to be overtaken[89]. "It may, on the other hand, be that, when there is no risk of collision at the time (of overhauling)-if, for example, the vessel comes within sight of a sidelight at a considerable distance- the crossing

[86] Rule 13 applies in open sea as well as in narrow channels.
[87] In a narrow channel, where the overtaken vessel has to take action to permit safe passing, a proposal to pass to starboard is signalled by two prolonged and short blasts, and two prolonged and two short blasts for passage to port.
[88] The *Auriga* (1977) 1 Lloyd's Rep 384,393, per Brandon, J.:
"In determining whether such risks exist in any particular case it is necessary to take all the relevant circumstances into consideration. Of these the most important will normally be the distance between the two ships, the speed at which one is gaining on the other, and the lateral distance at which the faster ship is shaping to pass the slower ship. In connection with the last of these matters, it will be material to know , among other things, whether the courses of the two ships are diverging, converging or substantially parallel"
[89] The *Nowy Sacs* (1976) 2 Lloyd's Rep. 682; (1977) 2 Lloyd's Rep. 91,98 (CA). For criticism of this, see P. Mukherjee, "Overtaking or Crossing: Judicial interpretation and the Mariner's Dilemma" 23 J.M.L.C. (1992) Asp. M.C.364

rule comes into force (if the vessels' courses subsequently cross with risk of collision)." [90] If there is any doubt, rule 13(c) operates to trigger the rule's application.[91]

The overtaking vessel must keep a safe distance away. In the *Kylix* and the *Rustringen*[92] , a collision took place in darkness and clear weather between *Kylix* and *Rustringen.* The stem of *Kylix,* which was proceeding at considerable speed, struck the starboard side of *Rustringen* forward of amidships at an angle of about 80 degrees leading forward on the latter vessel. *Kylix* was held to be at fault because her navigating officers made erroneous estimates of both the relative course and distance of *Rustringen.* Those errors were made because the officers relied solely on visual observations instead of making use of the radar.

As for the overtaking , the court said that there was nothing improper for *Kylix* to overtake *Rustringen* in the place or at the speed or on the side of that ship, provided she had done so at a safe distance-.However , *Kylix* had attempted to overtake *Rustringen* too close on a converging course. *Rustringen* was also at fault for her bad look-out and for her failure to keep her course and speed. The apportionment of blame was held to be: *Kylix*, 80 percent, *Rustringen* , 20 percent[93].

An important case to illustrate the overtaking rules is the *The Nowy Sacz*[94] , where the collision took place in the Atlantic Ocean south of Cape St.Vincent between *Olympian* and *Nowy Sacz* . Both vessels were proceeding on about parallel courses in a northerly direction. The night was clear and the visibility good. At about 0245hrs,

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[90] The *Moliere* (1893) Asp. M.C.364
[91] Marsden, *Marsden on Collision at Sea,*12th. edition, London: Sweet & Maxwell,1998, p.204
[92] (1979) 1 Lloyd's Rep.133
[93] In the *Ercole* (1977) 1 Lloyd's Rep.516, an appeal was made on the ground that the crossing rule was not applied. Counsel for *Ercole* said that she was the stand –on ship and the Greek ship *Embiricos* was the give way ship. He added that the Greek ship ought to have kept out of the way of the other. Instead of that, she kept on course at full speed. The court of Appeal (1979) 1 Lloyd's Rep. 539, did not accept this argument because of the fact it was not a crossing but it was a case governed by the rules of navigation in restricted visibility.
[94] (1976) 2 Lloyd's Rep. 682

when *Olympian* was bearing 25 degrees to 30 degrees abaft the starboard beam of *Nowy sacz*, the second officer of *Nowy Sacz* was seeing the masthead light of *Olympian* but not her red light some three miles away. At the same time the second officer of *Olympian* had not yet observed any lights of *Nowy Sacz*.

By 0300 hrs, when the bearing of *Olympian* from *Nowy Sacz* ceased to be more than two points abaft the beam, the second officer was seeing the red light of *Olympian* as well as her masthead lights. The second officer of *Olympian* also saw the masthead lights and the green lights of *Nowy Sacz*.

Owing to the relative courses and speed of the two ships-the closing speed being between two and three knots – the time at which risk of collision arose was about 0330 hrs, when *Nowy Sacz* was on *Olympian*'s port beam and appeared to be closing on a crossing course from port to starboard at an angle of 25 degrees to 30 degrees. On hearing a signal of one short blast from the *Olympian* which was the about one-two cables away, the second officer of *Nowy Sacz* put her engines first half, then full astern and sounded three short blast. *Olympian'*s master put her engines to stand-by, ordered one short blast, and put her wheel hard to starboard. Shortly afterwards at 0357 hrs a collision occurred between the stem of *Nowy Sacz* and the port quarter of *Olympian* at an angle of about 10 degrees.

Brandon, J. rejected the contention that the situation was an overtaking one and held that it was a crossing situation. *Nowy Sacz* should have kept out of the way of *Olympian*. The latter as the stand–on vessel should have kept her course and speed. Accordingly, *Nowy Sacz* was three quarters to blame and *Olympian* one-quarter.
On appeal, the court[95] said:

> "The overtaking rule applies before there is a risk of collision. However, this does not mean that it necessarily comes into effect as soon as the vessels are in sight of one another. The overtaking rules begin to operate as soon as it could properly be said that

[95] (1977) 2 Lloyd's Rep. 91

> the overtaking ship was coming up[96] with the overtaken ship. When exactly that will be may not always be easy to determine but we see no reason to suppose that it will be any more difficult that the decision as to when the situation involves a risk of collision."[97]

Although the court of appeal approved Brandon, J. that the risk of collision arose in this case at about 0337 hrs, it considered the situation as overtaking. *Nowy Sacz* was the stand-on ship and *Olympian* was the give way ship. It apportioned the blame; *Nowy Sacz* - one quarter and *Olympian* - three quarters.

A vessel which is overtaking another vessel is required to keep out of the way and to pass at a safe distance. The overtaking vessel is not required to avoid crossing ahead of the other vessel but altering course, or reducing speed; in order to pass astern of the vessel being overtaken may be the safest form of avoiding action. The overtaking vessel is also required to take action at an early stage. If action is not taken in good time there is a danger that the vessel being overtaken may take action which could confuse the situation.

A power drive vessel which approaches another power driven vessel from a direction approximately 22.5 degrees abaft her beam may be in doubt as the whether the vessel is an overtaking vessel or a crossing vessel. There should not be any doubt at night because a crossing situation is indicated if a side light is seen, but the aspect cannot be determined accurately by day. Rule 13 (c) requires such vessel to assume that she is overtaking and keep out of the way. As the other vessel may ascertain that a crossing situation exist, and take action to avoid crossing a vessel from her own starboard side, the vessel which is to starboard should preferably turn on to a parallel course and subsequently pass ahead.[98]

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[96] In *The Auriga* (1977) 1 Lloyd's Rep. 384, Brandon, J. said that the words 'coming up with' another involve an element of proximity in space or time between the ships.
[97] (1977) 2 Lloyd's Rep. 91
[98] Cockroft, A.N., Lameijer, J.N.F., *A Guide to the Collision Avoidance Rules*, 6th .Edition, Elsevier, Burlington, 2004, p.94.

In the case of *Transhawaii* and *Republica de Columbia (Columbia)* in the Gulf of Mexico where *Republica de Columbia* was overtaking the *Transhawaii* at a very close distance and then the steering gear broke down and both the vessel collided. It might be debatable that *Transhawaii's* failure to keep *Columbia* under constant close observation until Columbia was so far ahead as no longer to be an immediate threat. *Transhawaii* had the option of increasing the passing distance if she regarded it as uncomfortably close.

In the United States, the courts have taken a consistently clear position that the overtaking vessel in inland waters must pass at a safe distance. In some early decisions yet to be successfully challenged, the courts were adamant that this was a duty the overtaking vessel could not avoid. In this case of the *Narraganset* the court stated; true, it is not the duty of a faster vessel to remain behind when the faster vessel overtakes a slower one, but, if she takes upon herself the risk and hazard of passing, the overtaking vessel must choose a safe and sufficiently wide place where it may be done with safety to both." Justice Holland, in the case of *Sif*, took the position that when *Sif* collided with *Murcia* while overtaking that vessel "it was *Sif's* duty to pass at a safe distance and at a safe point." When the steamer *Gulftrade* collided with *Tarus* while overtaking, The United States Supreme Court held that, "There is ample room for the *Gulftrade* to pass. But if not, *Gulftrade* should have slowed down and kept at a safe distance.[99]"

When such an unambiguous stance has been adopted in respect to a safe distance in inland waters, it would seem that logic demands no less forceful a posture on the high seas, In the book A Guide to the Collision Avoidance Rules, Cockroft and Lameijer have summed up the situation succinctly: " It would be good seamanship to move away as afar as it is safe and practicable, from the side of the fairway in which the overtaking vessel intends to pass, to allow a greater passing distance, and

[99] Cahill, A.Richard, *Collisions and their causes*, USA: Fairplay publishing,1997, pp-69-110

furthermore to reduce speed in order to decrease the period of running closely parallel to each other.

If the navigation of the vessel or other necessary duty is of such urgency that it cannot be delayed when a passing ship is approaching and requires constant attention until clear, then that situation requires another officer on the bridge since the keeping of a proper look-out can never be relegated to second place. The 2nd.Mate of *Transhawaii* learned that to his sorrow.

In apportioning the fault in this case, the Court first of all considered the condition of the steering gear, the failure of which precipitated the collision. A month before this casualty a similar failure had occurred when the vessel was approaching Santa Maria, Colombia. The vessel was only able to complete that voyage on that occasion by recourse to the trick wheel on the stern.

The service man that was called in to correct the fault was unable to determine the cause of the failure but found two blown fuses, the replacement of which restored steering. While it should have been apparent to all concerned that the original fault that caused the failure had not been dealt with, both the service man and the owner's representative seems content to let the matter rest. The court took a very grave view of this, holding that this lack of diligence rendered *Republica De Columbia* unseaworthy and she was hence unable to limit her liability in respect to the claims of cargo. Taking this grave defect into account and subsequent mistakes of the 1st.officer following failure of the steering system, *Republica de Columbia* was held liable for 82½ percent of the damages. The failure of the 2nd.Mate of *Transhawaii* to keep a proper look-out rendered her liable for the remaining 17½ percent.[100]

Where a vessel is being overtaken by another and it becomes obvious that the distance at passing will be inadequate, the overtaken vessel could and probably

[100] *Ibid*.

should attempt to communicate with the overtaking ship so that a satisfactory agreement on passing can be reached. Where language is not a problem, then that can be probably be done most easily by VHF radio. In clear weather, the initial contact can be made by a series of rapid flashes on the blinker or Aldis lamp[101]. If no response is forthcoming by the time the overtaking vessel is within a mile and she has made no course change to widen the passing distance, it could be inferred that the 'vessel required to keep out of the way is not taking appropriate action.' The stand-on (overtaken) vessel now would be allowed, on the grounds of good seamanship, if shoal water or other traffic does not interfere, to alter course so as to widen the separation between the two vessels. Indeed , it would be both prudent and practical to do so since with this new provision slowing such action, a vessel involved in a collision such as these under investigation here, might be held to share the blame for failure to haul off when there was nothing to prevent it.[102]

4.4 Rule 14 Head - on Situation

The requirement that every vessel that has to keep out of the way should avoid crossing ahead no longer applies, so vessels meeting starboard to starboard so as to involve risk of collision should make an early and substantial alteration to starboard to achieve port to port passing.

If one vessel sees the other end on the starboard bow, as shown in the figure, both vessels may be tempted to alter course to port. Such action would not be in accordance with the general principles of the Rules. The vessel with the other on her starboard side is required to keep out of the way by Rule 15 (Crossing Situation) and should preferably alter course to starboard to avoid crossing ahead of the other vessel, with respect to her course made good.

[101] A very bright spot light used as signalling light onboard ships
[102] *Ibid*.

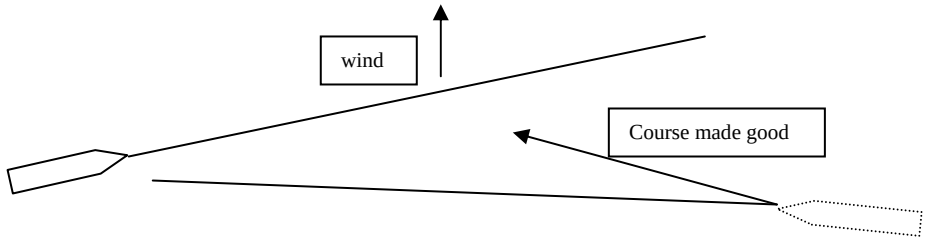

Figure 3: Actions taken based on heading and not course made good

In an American case two vessels started on reciprocal courses off the fairway buoy at the entrance to the Galveston Channel and one of them altered course to port instead of starboard, in breach of the 1972 Collision Regulation Rule 14.[103]

All parties agree that the actions of the *Mason Lykes* crew were "unbelievably stupid," as plaintiffs' expert, Captain Richard Patterson, testified. Due to the lack of visibility, both the speed and direction of the *Mason Lykes* were the result of negligent navigation of *Mason Lykes* crewmen. The Court finds that the vessel was traveling too fast and its port course was exceedingly dangerous, violations of navigational rules. In addition, the crew was negligent in not adequately plotting the position of the *Amoco Cremona,* another rule violation. Such navigational negligence presumptively caused the collision and consequent damages.

The Court also finds that the crew of the *Amoco Cremona* was slightly negligent in not clearly and decisively changing course so that its direction would be obvious on the *Mason Lykes'*s radar screen. The Court agrees with Captain Patterson's assessment that the *Amoco Cremona's* course changes - 6 degrees and then 20 degrees at the speed undertaken - were insufficient to comply with the navigational rules. Guice's[104] testimony reveals his own belief that the *Amoco Cremona* would pass to his starboard. In sum, in light of the direction of the *Mason Lykes* and the lack of visibility, Caiolo[105] should have ordered the *Amoco Cremona* to move more

[103] The *Amoco Cremona* (1983) A.M.C.1087
[104] The navigating officer on *Mason Lykes*
[105] The navigating officer on *Amoco Cremona*

decisively starboard. The Court finds this act was a violation of the navigational rules and a cause of the collision.

Moreover, no crewman was posted on the bow of the *Amoco Cremona* to watch for other vessels. This failure to have a man stand watch is also a violation of a navigational rule and presumptively a cause of the collision. Regarding the alleged failure of the *Amoco Cremona* to plot the position of the *Mason Lykes*, the Court finds that the *Amoco Cremona* crew did adequately plot the *Mason Lykes'* position. The *Amoco Cremona* crew knew the direction of the *Mason Lykes* and attempted to avoid the ensuing collision by going further starboard. Captain Patterson noted that, to make a thorough radar plot, the *Amoco Cremona* needed to remain in a constant direction. The Court finds that this action appears in conflict with the recommended avoiding action.

Regarding the alleged failure of the *Amoco Cremona* to communicate with the *Mason Lykes*, the Court finds that the *Amoco Cremona* attempted to call twice but received no response. The Court finds no negligence on the part of the *Amoco Cremona's* crew concerning its attempt to communicate with the *Mason Lykes*. In sum, the Court finds that navigational negligence was committed by the crews of both vessels and apportions it as follows: *Mason Lykes*, 90 percent; *Amoco Cremona*, 10 percent.

In The *Ballylesson*[106], the Court found that *Ballylesson* was in breach of both the Mersey Channel Rules and the Rules on Head – on situation (Rule 14). In this case, the collision occurred, at night, in the River Mersey.

At 0602 hrs *Ballylesson,* which had crossed from her starboard side of the channel, was making for the entrance to Graston Channel when the masthead lights (in line) and sidelights of *Belgulf Union* were sighted bearing ahead distant about 1.25 miles.

[106] (1968) 1 Lloyd's Rep. 69

At 0603 hrs *Ballylesson's* Master ordered port wheel, engines full ahead and sounded a two short blasts signal (not heard by *Belgulf Union*) (*Ballylesson* then had Pluckington Bank Buoy abeam to port at 500 feet's). At 0604 hrs *Ballylesson's* engines were put slow ahead. At 0605 hrs one short blast signal by *Belgulf Union* was heard by *Ballylesson* and her Master ordered hard to starboard, and gave one short blast signal (not heard by *Belgulf Union*). At 0605 hrs he ordered engines full ahead. *Ballylesson* then heard three short blasts signal by *Belgulf Union* and saw her alteration to port. The Master of *Ballylesson* put her engines full astern and sounded three short blasts. At 0606 hrs the pilot of *Belgulf Union* ordered emergency full astern and sounded three short blasts signals. The collision occurred about half a minute later between the stem of *Belgulf Union* and port side aft of *Ballylesson* at an angle of about 60 degrees, leading aft on *Ballylesson.*

It was held that *Belgulf Union* was at fault in not seeing *Ballylesson* earlier, not hearing the signals of *Ballylesson* and not altering to starboard thereafter. *Ballylesson* was in breach of the Local rules of navigation and the head-on rule. Apportionment of blame: *Belgulf Union,* two thirds, and *Ballylesson* one third

4.5 Rule 15 Crossing Situations

The crossing rule applies where the overtaking and head-on rules (Rule 13 and 14) do not, where two vessels are approaching each other, other than where one is coming up with the other from a direction more than 22.5 degrees abaft her beam or they both on reciprocal or nearly reciprocal courses and there is risk of collision, it does not apply in situations where there is any doubt.

When two such vessels are likely, if each keeps the course to be expected of her, to arrive at the same point at or nearly at the same moment, they are crossing so as to involve risk of collision, their speeds and it seems, the distance between them when they come into sight of one another, are immaterial, except in so far as they contribute to a state of risk of collision. This applies not only in the open sea but also

where two such vessels are approaching from different directions, and on intersecting courses, a buoy, lightship, headland or other point at which each must, in the ordinary course of navigation, alter her course.[107]

In The *Savina*[108], the collision between two ships where one vessel leaving roadstead at Ras Tanura and proceeding to sea. Other vessel moving from one part of roadstead to another, both vessels had bad look-out

The collision occurred at about 2213 hrs on a dark, clear night. The *Forest Hill* was beginning a voyage to Karachi, laden with crude oil, and after leaving an anchorage in the roadstead one and a half miles to the east and slightly to the south of the T-head of the South Pier was proceeding on a course slightly to the west of north towards the open sea. The *Savina* had been lying on a heading of 345 degrees at a berth at the north end of the T-head of the South Pier, where she had taken on a part cargo of crude oil, and, after moving away from the quay about two cables towards the north-east, proceeded on a course slightly to the north of east with the intention of anchoring in the roadstead, preparatory to going to the North Pier the following day to complete her loading.

The stem and starboard bow of the *Savina* collided with the port side of the *Forest Hill* at an angle of about 80 degrees or less, leading forward on the *Forest Hill*. Mr. Justice Brandon found the most reliable guide to the times of the movements of the *Forest Hill* in her engine movement book. From that book and the bridge movement book it appeared that the anchor was aweigh at 2148 hrs and the engines were put at slow astern for three minutes, dead slow ahead for five minutes, half astern for two minutes, by which time, according to the master and chief officer, this backing and filling together with wheel action had brought the ship's heading round from about 235 degrees to 340 degrees. At 2158 hrs the engines were put dead slow

[107] Marsden, *Marsden on Collision at Sea*,12th. edition, London: Sweet & Maxwell,1998, p.208
[108] [1975] 2 Lloyd's Rep. 141

ahead, at 2205hrs half ahead and at 2212 hrs full ahead. Meanwhile she had continued to turn to starboard until 2205 hrs, when she steadied on a course of 350 degrees. By 2211 hrs she had reached a speed of seven to eight knots. At 2212 hrs the engines were put to extra full ahead, and at 2213 hrs the collision occurred.

Times on the *Savina* were taken from the engine movement book and the scrap deck log, the clocks being nearly synchronized. She began to move away from the pier at 2156 hrs and swung to starboard with the assistance of a tug. By 2159 hrs she was about two cables to the north-east of the north end of the South Pier, the tug had left, the engines had been put to slow ahead and by 2200 hrs she was proceeding with engines slow ahead on a course of 080 degrees. At 2208 hrs the master, knowing that he was on a crossing course with the *Forest Hill*, ordered the engines to be stopped and put to emergency full astern. The collision, according to the *Savina's* clocks, was at 2214 hrs.

We now turn to the evidence of the appreciation that those navigating each ship had of the presence and movements of the other. At about 2202 hrs those on the *Forest Hill* saw, off the north end of the South Pier, the masthead lights, well open, and the green side light of the *Savina*, and it was appreciated that she was under way on a course of about 080 degrees. The evidence of the master and chief officer of the *Forest Hill* was that the *Savina* was bearing about one point forward of the *Forest Hill's* port beam, but this does not fit with the evidence as to the position and heading of the *Forest Hill* and was not accepted by the Judge. At some stage the chief officer of the *Forest Hill*, on the instructions of his master, had three conversations with the *Savina* on V.H.F. In the first of these the chief officer said that he had told the *Savina* that the *Forest Hill* was heading for the sea on 340 degrees. altering to 350 degrees. at dead slow ahead changing to full ahead. The radio officer of the *Savina*, however, said that what he had heard was that the *Forest Hill* was going full ahead on a course of 307 degrees. As to the second conversation, the chief officer of the *Forest Hill* said that he had asked the *Savina* to stop her engines and she replied that she would

do so. The radio officer of the *Savina* said that he had called the *Forest Hill* and said that the *Savina* was going full astern and not altering course. As to the third conversation, the chief officer of the *Forest Hill* said that he had asked the *Savina* to go full astern and the reply was that she would do so, while the radio officer of the *Savina* said that he had called the *Forest Hill* and said that the *Savina's* engines were already working full astern. The conversations were in English, which was not the native language of either speaker, and the Judge formed the view that the discrepancies were the result of genuine misunderstanding.

It was at about 2200 hrs that those on board the *Savina* claimed to have first observed the *Forest Hill.* The master of the *Savina* said that the *Forest Hill* was then showing anchor lights, bearing about 60 degrees to 70 degrees on his starboard bow, and soon afterwards he saw her masthead lights and green side light. (This obviously does not correlate with the evidence from the *Forest Hill*.) The master went on to say that shortly before 2208 hrs, *Forest Hill* suddenly opened her red light and then shut in her green, so he ordered his engines to be stopped and put emergency full astern. He said the astern action caused the heading of the *Savina* to fall off a little to port and he put the angle of blow at 40 degrees leading forward on the Forest Hill.

The Judge made the following findings:
He found that the *Forest Hill* steadied on 340 degrees not earlier than when those on board her first saw the *Savina*, and shortly afterwards altered to 350 degrees and stayed on that course up to the collision. Next, having made a plot of the likely tracks of the two ships, he found that when the *Savina* was first seen the *Forest Hill* was on a heading of 340 degrees and the bearing of the *Savina* was about 3 1/2 points on her port bow and after the *Forest Hill* altered to 350 degrees it narrowed to about three points and later to 2½ points before broadening just before the collision.

The Judge accepted the plaintiffs' evidence as to when the *Forest Hill* weighed anchor and switched on her masthead lights and side lights, which was well before

the time when the *Savina* got on to the course of 080 degrees. Moreover, by at latest the *Forest Hill* must have been showing her red light to the *Savina* and those on the *Savina* cannot have been keeping a good look-out because of their unacceptable evidence about the lights which they saw. As to the bearing of the *Forest Hill* from the *Savina*, the Judge estimated, when *Savina* first got on to the heading of 080 degrees the bearing of the *Forest Hill* was about 3½ points on her starboard bow, broadening to 6 or 6½ points and narrowing just before collision.

The Judge found the angle of blow to have been about 75 degrees., the angle narrowing rapidly after collision and leading the master of the *Savina* to think the angle of blow was as little as 40 degrees. The Judge, without claiming any precision, estimated the place of collision as 1.25 miles from the T-head of the North Pier and bearing 080 degrees to 090 degrees from it.

Lastly, after considering the engine movements of the two ships and consulting the Elder Brethren, the Judge estimated the respective speeds at collision as eight knots through the water for the *Forest Hill* and two knots for the *Savina*. On the basis of those findings of fact (which we accept completely) the Judge held in relation to the Collision Regulations first that the crossing rules did not apply until the *Forest Hill* steadied on 350 degrees because until then she was not on a definite course at all; secondly that when *Forest Hill* was steadied on 350 degrees and the *Savina* on 080 degrees the ships were crossing so as to involve a risk of collision. So the *Forest Hill* was then the stand-on ship and the *Savina* the give-way ship.

The Judge found negligence on the part of the *Savina* in bad look-out, not appreciating that the *Forest Hill* had by then turned on to a northerly course; because of that bad look-out, not stopping or reversing engines earlier. The plaintiffs had contended that the *Savina* should have altered course to starboard but the Judge did not accept this, considering that if the engines had been stopped or reversed earlier this would have been enough to avoid the collision.

The negligence found against the *Forest Hill* was bad look-out, not realizing earlier that the *Savina* was under way and not appreciating her bearing; putting the engines from dead slow ahead to half ahead, after steadying on 350 degrees. He acquitted the *Forest Hill* of any earlier breach of the Regulations, having held that the crossing rules did not apply earlier. In each case the Judge held that the second fault which he had found to have occurred was the product of the first fault, the failure to appreciate the situation properly. He found that the faults on both sides were causative of the collision.

The Judge, having found that both ships were at fault, took the view that the positive error of the *Forest Hill* in putting her engines to half ahead at a time when the *Savina*, known to be under way on a course at right-angles to that of the *Forest Hill*, was distant only about a mile and bearing 3½ points on the port bow was calculated to force drastic avoiding action on the *Savina*, with the risk that, despite such action, a collision would occur; and that this was more blameworthy than the omission by the *Savina*, due to bad look-out, to take early action of a precautionary character to prevent a situation which was not yet dangerous from developing into one which was. If he was right in this assessment, he cannot have been wrong in assessing the *Forest Hill's* proportion of liability at as much as 60 per cent. The question for this Court is whether the fault of the *Savina* should have been found equal to or greater than that of the *Forest Hill* and, if the latter, to what extent.

Darling J. contended that the learned Judge was wrong in law in holding that the bad lookout on the *Savina* and the failure to stop her engines could be regarded as a single fault instead of separate faults; in holding that the *Forest Hill* was not on a course, and the crossing rules did not apply, until she was steadied on a course of 350 degrees in failing to hold that the *Savina's* failure to take action to keep clear of the *Forest Hill* in due time was the most blameworthy and causative fault committed on either ship.

As to, the learned Judge found two faults on the part of each ship and in each case held that the two faults could be treated as one because one fault (bad look-out) led to the other (wrong action or failure to act). We do not regard this way of assessing the faults as a decision on law: when a blameworthy course of conduct leads to a casualty it is often possible to regard the whole of the conduct as a single fault or to split it into various elements and call it two or more faults. If two of the elements are entirely independent of each other it may be more logical to treat them as two faults; if one leads to another it may be more sensible to treat them as constituting a single fault. It is not of vital importance which way one looks at the matter because responsibility can never be assessed simply by counting up the number of faults on each side. In the present case the way in which the Judge dealt with the number of faults applied similarly to both ships and in our view there was no error of law in this respect.

In The *Orduna* (Owners) v. *Shipping Controller*,[109], Viscount Finlay said:

> "Crossing conditions continue to subsist until the vessels have definitely passed out of phase of crossing ships. It was far too son to conclude that the vessels had passed when the green light of *Konakry* got ahead of *Orduna*. The operation of passing was not yet completed, and it would lead to danger and collision in very many cases if such state of matters should be considered to constitute the position of passed ships so as to absolve either of them from further attention to the regulations for crossing."

Vessel should not cross the bow of another ship unnecessarily, where collision is probable and to comply with this obligation a power driven vessel should turn to starboard to a red light on her starboard bow approaching with risk of collision. If local conditions render this dangerous , she may be able to get clear by turning to port, provided her action is sufficient to keep her from crossing ahead, although that is not as advisable a course as starboarding or, where this is adequate , slackening her speed or, indeed, stopping or reversing and waiting.[110] Whatever action she takes, it

[109] (1920) 5 Ll. L. Rep. 241, (1921) A.C. 250.
[110] The *Ashton* (1905) p.21

must be seamanlike, timely and substantial, so as to leave the stand-on vessel in no possible doubt as to what she is doing.[111]

4.6 Rule 19 Conduct of Vessel in Restricted Visibility

Rule 19 applies when vessels are navigating in or near an area of restricted visibility. The word 'navigating' should be noted and therefore this rule should not apply to a ship lying dead in the water, with her engines stopped. However a vessel which stops in the water, e.g. in a busy traffic lane, would not necessarily be considered innocent if a collision followed.

When a vessel is proceeding in circumstances of limited visibility such as dense fog, even though such vessel might be able to observe the vessel through the use of radar, a vessel so proceeding is under a duty to reduce her speed when entering the fog, so as to avoid the possibility of a collision. Rule 19 not only applies when a vessel is navigating in an area of restricted visibility but also when she is near such an area. A vessel which is approaching an area of restricted visibility, or which has such an area on one side, must comply with Rule 19 and must also give the sound signals prescribed in Rule 35.

Rule 19 in section III applies to vessels not in sight of one another in restricted visibility whereas the Rules of Section II apply to vessels in sight of one another whether or not the visibility is restricted. As soon as vessels navigating in or near an area of restricted visibility come in sight of one another they must comply with the Rules of Section II. Vessels not in sight of one another should not give the manoeuvring and warning signals prescribed in Rule 34.[112]

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[111] The *Billings Victory* (1949) 82 Ll. L. Rep. 877, 881. See also The *Petroship B* (1986) 2 Lloyd's Rep. 251.
[112] Cockroft, A.N., Lameijer, J.N.F., *A Guide To The Collision Avoidance Rules*, 6th .Edition, Elsevier, Burlington 2004, p.126-130

Some masters may be reluctant to make appreciable reductions of speed in restricted visibility because of pressure to maintain schedules. The attitude of owners and marine superintendents is likely to have been affected by decisions of the Courts in the *Lady Gwendolen* case. On the 10th November 1961, a collision occurred in dense fog between the *Freshfield* and *The Lady Gwendolen,* when the *Freshfield* was lying at anchor in the River Mersey. At the formal investigation held in March 1962, it was found that the collision was solely caused by the wrongful act or default of the Master of *The Lady Gwendolen*, and his certificate was suspended.

In an action brought before the Admiralty Court in June 1964, the owners of The *Lady Gwendolen* sought to limit their liability. It was held that the owners were guilty of actual fault and were unable to limit. This judgment was upheld by the Court of Appeal. In the Admiralty Court Justice Hewson said:

> "After weighing up this case and the evidence and the circumstances with what I hope is all the care of which I am capable, I am driven to the conclusion that a total lack of sense of the urgency of the problem posed by radar navigation in fog in Captain Meredith was a contributory cause of the collision, and this sense of urgency and importance should have been instilled in him from the highest level."

In the Court of Appeal Lord Justice Sellers said:

> "A primary concern of a shipowner must be safety of life at sea. That involves a seaworthy ship, properly manned, but it also requires safe navigation. Excessive speed in fog is a grave breach of duty, and shipowners should use all their influence to prevent it. In so far as high speed is encouraged by radar the installation of radar requires particular vigilance of owners."

Lord Justice Wilmer said:

> "In the course of his evidence Captain Meredith was cross examined at some length on his log records of various previous voyages undertaken in condition of fog. This led in the end to an admission by Captain Meredith that he had for years habitually navigated his vessel in fog in excessive speed. Mr. Robbie (the marine superintendent) gave evidence to the effect that on a number of occasions he had spoken to Captain Meredith, and to the masters of the other vessels, about the problem of navigation in fog with the aid of radar. This evidence of Mr. Robbie was, however, denied by Captain Meredith, and was disbelieved by the learned judge. It became quite apparent from the cross examination of Mr. Robbie that, although all the ships logs were regularly submitted to him, he had signally failed to check the records contained therein with a view to ascertaining how *The Lady Gwendolen* was being navigated in fog. It would not have required any very detailed examination of the engine room records in order to ascertain that *The Lady Gwendolen* was frequently proceeding at full speed at times when the deck

log book was recording dense fog. Yet this fact appeared never to have been detected by Mr. Robbie, and consequently was never brought to the attention of Captain Meredith."

In reference to Rule 19 (e) COLREGS 1972 , an alteration of course has been held to be a fault in the following circumstances: a vessel hearing a two long blasts signal[113] was negligent in going forward and altering course to starboard[114] ; a vessel hearing the two long blasts signal was wrong to alter her helm before making sure that, in spite of the signal, the other vessel was not changing her bearing and distance[115] a vessel was negligent in altering course and making no reduction in speed[116] , a vessel, whose navigating officer believed that he had ascertained the position of the other vessel, was at fault for altering course to try to give the other vessel more room[117] , a vessel was negligent in putting her wheel hard to starboard when she first saw the mast head light of the other vessel[118] , a vessel was negligent when , having stopped (in accordance with the rules), she then went on and made two alterations of course[119], a vessel was negligent for stopping engines and altering course to starboard at the same time[120] , and a vessel was negligent for making first one and then second alteration of course on hearing two fog signals from the other vessel.[121]

In the *Hellenic Carrier*[122] , The District Court said that the phrase "so far as possible" makes Rule 19(d) (i) advisory instead of mandatory. Several American courts interpreted the language of Rule 19 (d) (i) as to prohibit port turns for vessels navigating in close quarters, in restricted visibility and not in sight of one another. The Court of Appeal[123] agreed with the interpretation that Rule 19 (d) (i) should

[113] Indicating a vessel underway but stopped and making no way through the water.
[114] The *Lifland* (1934) 49 Ll. L Rep 485, 487; *The Haarfagre* (1938) 64 Ll. L. Rep. 323
[115] The *Gastelu* (1934) P.86,88 ; *The London* (1938) 60 Ll.L. Rep 323
[116] The *Luso* (1933) 47 Ll. L. Rep 214 ; The *Confidenza* (1938) 61 Ll. L. Rep 343, 367
[117] *H.M.S.Malaya* (1937) 58 Ll. L. Rep 261
[118] *The Canada* (1939) 63 Ll. L. Rep 112,117
[119] The *Mathwa* (1939) 64 Ll. L. Rep 333
[120] The *Waterland* (1939) 64 Ll. L. Rep 14
[121] The *Yewvalley* (1932) 44 Ll.L.Rep.252
[122] (1984) AMC 57
[123] (1984) AMC 2713

mean that: " alterations of course to port should be avoided in situations where a vessel has room to manoeuvre and a choice of which way to turn to avoid the risk of collision. When vessels are manoeuvring in close quarters, there is not usually time for each vessel to observe the action of the other and adjust its course accordingly. A vessel if it is to adequately adjust its course to avoid the risk of collision." The Court concluded that the entire purpose of the collision rules and particularly its Rule 19 will be lost if it is construed to be advisory rather than mandatory.

4.7 Liberal approach in application of the Collision Regulation

The collision regulation are merely safety instructions designed for the practical use of mariners and provides guidance on ship maneuvering and conduct at sea. Its primary purpose is to provide guidance on how to avoid collision and to avoid risk of collision from developing.

In reference to Rule 2 (b) which warns against a rigid interpretation which otherwise request navigators to take all good seamanship precautions. Interpretation of this regulation would have to be logical, reasonable, leads to the circumstances of the particular case and should agree with the purpose of the law.

Judges, when applying the Rules and in particular the concept of good seamanship to individual cases, enjoy discretion to evolve and restrict various duties. Although judges do not claim the right to legislate, their judgment are 'creative' law with the inevitable result that the Rules become an instrument in their hands to define a situation, an encounter , and the action to be taken.[124] The 'creative Judgment' in collision cases necessary because of the evidential difficulties involved.

In the *Sea Star*[125], Sir Gordon Wilmer said:

[124] Mankabady, Samir., *The law of collision at sea,* Holland:Elsevier Science Publishers, 1987, p.72
[125] (1976) 2 Lloyd's Rep.477, at p.483

"This case arises out of disastrous collision which never should have happened. The collision occurred in the open sea between two large tankers approaching each other in fine weather on reciprocal courses. They had been aware of each other's presence by radar for a distance of something like 14 to 15 miles, and they had been within visual observation of each other for something like 8 to 10 miles. Although , as I have said, they were on more or less reciprocal courses, the two ships managed to collide at about a right angle, causing as my Lord has said, immense damage and some loss of life,"

His Lordship added:

"I am following perhaps the unwise course already adopted by the learned judge when, after having arrived at his conclusion, he started to speculate as to how such an improbable collision could have happened. It is indeed difficult to see any sensible reason why *Sea Star* should have taken such suicidal action:"

Lord Diplock in *Black-Clawson International* v. *Papierwerke Waldhof-Aschaffenburg*[126] said:

"It is for the Court and no one else to decide what words in a statute mean"

In the *Avance*[127], Brandon, J. said:

"Was the Master, in allowing that interval of about one minute to elapse, guilty of negligent delay? In order to assist me in answering that question I have asked the Elder Brethren to advise me on two points. Firstly, was it reasonable for the Master of *Avance*, when he first saw *Bambara* was moving ahead, to be in doubt whether she would persist in such action in the circumstances? If so, did he act contrary to good seamanship in waiting for about one minute before concluding that she was in fact persisting in such action and taking avoiding action by stopping and reversing his engines? The Elder Brethren's advise in relation to the first point is 'yes' and in relation to the second point 'no', but it would have been wrong for him to wait for any longer than about one minute.
I have no doubt, looking at the matter with hindsight, that it would have been prudent for the Master to take immediate action, and that it would have been much better from the point of view of avoiding a collision, or minimizing its effect if it occurred, if he had done so."

Since the Rules derive from an International convention, the courts should take note of the opinions and decisions of foreign courts[128] and also make use of the '*travaux*

[126] (1975) 2 Lloyd's Rep.11, (1975) A.C. 591 at pp.32 and 637.
[127] (1979) 1 Lloyd's Rep.143
[128] In *Stag Line Ltd* v. *Foscolo, Mango & Co* (1932) A.C.328, a case concerned with the Hague Rules , 1924, on bills of Lading, Lord Macmillan said; " As these rules must come under the consideration of foreign courts, It is desirable in the interest of uniformity that their interpretation should not be rigidly controlled by domestic precedents of antecedent date, but rather that the language of the rules should be construed on broad principles of general acceptance."

preparatoire[129]'. In fact, the decisions of the British Admiralty court[130] are followed by foreign courts all over the world. Uniformity of interpretation of the Collision Rules is a fundamental goal of British Admiralty Law.[131]

[129] In the House of Lord in *Forthergill* v. *Monarch Airlines Ltd*. (1980) 2 Lloyd's Rep. 295, (1981) A.C.251, accepted the use of '*travaux preparatiores*' in aid of the interpretation of conventions in treaties to provide law, provided two conditions are fulfilled:

a) that the material is public and accessible; and
b) that it is clearly and indisputably points to a definite legislative intention.

[130] Judges in the British Admiralty Court are real experts in the Maritime field.

[131] Mankabady, Samir, *The law of collision at sea,* Holland: Elsevier Science Publishers, 1987, p.75

CHAPTER 5
ESTABLISHING A COLLISION CLAIM

5.1 Elements of Conviction

A collision at sea may give rise to causes under statute in contract or in tort, in salvage or in general average, In order to claim under a statute the plaintiff must be the person to whom the statute gives a cause of action. Only a party to a contract can claim on the contract unless a statute extends the category of persons who can sue on the contract. A plaintiff has the right to sue in tort for injuries if he/she is the person injured or damage to property if, when the damage occurred , he/she is the owner of the property or is in possession of the property or has an immediate right to possession of the property.

According to the principles of tort, collision claims are based on the requirement of the fault of a person causing damage by his carelessness (incurred by the plaintiff). The defendant must commit a negligent act that consists of four elements:

1) A duty of care owed by the defendant to the plaintiff.
2) Breach of that duty.
3) That the breach caused or contributed to the collision (causation in fact).
4) It caused the damage claimed, which must not be too remote (causation in law and remoteness of damage).

If these requirements are established, then the responsibility and the allocation of blame have to be assessed by the following questions:

5) Whether and to what extent the defendant is blameworthy?
6) Does the fault of the defendant have “causative potency” and should it therefore be taken into account when examining overall blame?

Not all faults are actionable in law. The three main components of fault liability are

a) Fault
b) Damage, and
c) Causation

5.2 Fault

It's a conduct or omission to do something which a prudent seaman would do. It involves both potency and blameworthiness or any navigational defects. It is the failure of a prudent navigator to exercise the degrees of skill and care which are ordinarily to be found in a competent seaman. It is also considered on the part of the navigator not to take reasonable steps to avoid danger in navigation, and the nature of those actions must depend on the surrounding circumstances.

In the *Kapitan Aleseyev*[132] , the collision took place between that vessel and *Nordmark* because the anchors of *Aleseyev* dragged and allowed her to be blown down towards *Nordmark*. Both the ships had let go their port and starboard anchors as instructed by the pilot and both had made fast with stern lines to a bollard on the breakwater. Once these ships were in their berths it was the duty of the Master of each ship to take all reasonable care to ensure that his ship did not endanger or cause damage to others. *Alekseyev* damaged *Nordmark* and in consequence the owners of *Nordmark* claimed damages.

The advice of the Trinity Masters to the judge was that the Master of *Aleseyev* had not omitted to take any precaution which could reasonably have been expected of him/her. They would not have expected any Master to act in a different way. This advice accorded with the view already formed by the Judge. Accordingly, *Aleseyev* was free from any blame for the collision.[133]

An error of judgment may not amount to fault. In *The Toluca*[134] Sheen J. said that:

> "It is clear that to me that Captain… was doing his best to avoid a collision. He saw that Toluca was in difficulty and he took the action which at that time appeared to him to be the most helpful. The fact that in the light of after events it appears that some other action might have been better, is not to the point. I am quite satisfied that he was exercising reasonable skill and care."

[132] (1984) 1 Lloyd's Rep.173
[133] Mankabady, Samir, *The law of collision at sea*, Holland: Elsevier Science Publishers, 1987, p.272
[134] (1981) 2 Lloyd's Rep. 548.

5.2.1. Elements of fault

It is a standard of correct actions. When the standard falls below the standard of care required by the circumstance of the case then it is consider to have occurred.[135]When all other factors are in order or so to say perfect for a day without collision but the action or inaction of a navigator had resulted in an undesired event then it is described as fault. In the eyes of the law, the Master owes a duty to any person on board his/her ship and to other users of the sea in respect of any collision or risk of collision. Fault of one vessel does not excuse the fault of the other. When there is a common or statutory duty to take care and if he/she is in breach of such a duty then he/she would be guilty of fault.

The standard of care is that which reasonably can de demanded in the circumstances. Lord Macmillan[136] expressed the rule in this way:

> "The standard of foresight of the reasonable man eliminates the personal equation and is independent of the idiosyncrasies of the particular person whose conduct is in question. Some persons are by nature unduly timorous and imagine every path beset with lions. Others, of more robust temperament, fail to foresee or nonchalantly disregard even the obvious dangers. The Court will be looking for perfect skill and presence of mind or cool and deliberate judgment but for an action of a reasonable man who is presumed to be free from both over-apprehension and from over confidence. A reasonable man or woman is also cool and collected and remembers to take precautions for his own safety even in an emergency."

According to Brandon J.:

> "The standard of skill and care to be applied by the Court is that the ordinary mariner and not extraordinary one, and seamen under criticism should be judged by reference to the situation as it reasonably appeared to them at the time, and not with hindsight."

In the *Toluca*[137], Sheen J. said:

> "The fact that in the light of after events it appears that some other action might have been better is not to the point. I am quite satisfied that he (the Master) was exercising reasonable skill and care."

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[135] In the *Golden Mistral* (1986) 1 Lloyd's Rep. 407. Sheen J. said that: "The Master ought to have put his wheel hard-a-starboard instead of hard-a-port, but I regard this error as action taken in haste as a result of the total failure to keep a proper look-out. It is an understandable reaction not to turn towards a ship which is so very close on the starboard bow, even though it may now be seen that such action might have avoided the collision."
[136] *Glasgow Corporation* V. *Muir* (1945) A.C. 448.
[137] (1981) 2 Lloyd's Rep. 584.

Thus, the standard for deciding whether there has been a breach of duty is objective. Too high of skill is not demanded. A mariner must exercise such care as accords with the standards of a reasonably competent mariner at the time but he/she is not an insurer against every accidental slip. He/she must keep himself reasonably up to date. On the other hand, he/she is not negligent if he/she acts in accordance with the practice accepted at the time as proper by a responsible body of professional mariners.[138]

In an action for breach of statutory duty[139]as in an action for common law negligence, the plaintiff bears the burden of proving the causal connection between the breach of duty and the damage. He/she may also prove that the duty is owed to him/her or the injury is of the kind which the statute is intended to prevent. While the Master or the navigating officer are usually the persons guilty of fault which causes the collision, the ship owner may negligently allow his ship to navigate in a defective or inefficient state as regards her hull or equipment, where a collision happens which would not have occurred but for the defective condition of the ship, the ship owner is liable.[140]

5.3 Causation

When a breach of the Regulation or of the rules of good seamanship would be required to be proofed in a collision case, the chain of causation or caused would need to be formed to create a link to establish the reason for the collision to have occurred. The claimant must generally show that the collision and the damage resulting from it would not have happened but for the defendants fault.[141]He must also show that the damage he has suffered would not have been of a different kind from the sort of damage that ought to have been foreseen by the defendant. Otherwise, the damage will be excluded from consideration as too remote. No event

[138] Mankabady, Samir, *The law of collision at sea,* Holland: Elsevier Science Publishers, 1987, p.286
[139] It is a question of interpretation of the statute and whether the duties must be carried out in all events or merely that the person upon whom the duty is imposed is to use due care in performing it.
[140] Mankabady, Samir, *The law of collision at sea,* Holland: Elsevier Science Publishers, 1987, p.287
[141] Subject to the exceptions of concurrent liability and of damage caused partly by the negligence of the defendant and partly by that of the plaintiff.

amounting to a *novus actus interveniens* must have intervened between the defendant's fault and the plaintiff's damage. Events that break the chain of causation in this way are many; they include both acts of third parties or the plaintiff himself, and also completely extraneous events.[142]

In *Leyland Shipping Company* v. *Norwich Union Fire Insurance Society*[143] Lord Shaw said:

> "To treat *proxima causa* as the cause which is the nearest in time is out of question. Causes are spoken of as if they were as distinct from one another as beads in a row or links in a chain, but- if this metaphysical topic has to be referred to it is not wholly so. The chain of causation is a handy expression, but the figure is inadequate. Causation is not a chain, but a net. At each point influences, forces, events, precedent and simultaneous infinitely. At the point where these various influences meet, it is for the judgment as upon a matter of fact to declare which of the causes thus joined at the point of effect was the proximate and which was the remote cause.
> What does "proximate" here mean? To treat proximate cause as if it was the cause which is proximate in time is, as I have said, out of question. The cause which is truly proximate is that which is proximate in efficiency. That efficiency may have been preserved although other causes may meantime have sprung up which have yet not destroyed ijt, or truly impaired it, and it may culminate in a result of which it still remains the real efficiency cause to which the event can be ascribed."

In The *Statue of Liberty*[144] Lord Reid found that *Andulo's* fault in not taking more accurate observations at the earlier stage , had no causative effect and it should be left out of account in the final assessment of the degrees in which *Andulo* was to blame for the collision.

In the *Bovenkerk*[145], Brandon, J. held that the presence of the dredger while creating the occasion of the collision was not, in law , a contributory cause of it because its presence was well known to the pilots of both vessels.

In The *Fritz Thyssen*[146], the Court found that the sinking of the vessel was not caused by the collision but because of her failure to take necessary remedial measures. In

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[142] Marsden, *Marsden on Collision at Sea*, 12th. edition, London: Sweet & Maxwell, 1998, p.208
[143] (1918) A.C.350, ALL E.R. Rep. 443
[144] (1971) 2 Lloyd's Rep. 277
[145] (1973) 1 Lloyd's Rep. 63
[146] (1967) 2 Lloyd's Rep.199

this case, the plaintiff's vessel *Mitera Marigo* laden with iron ore, sustained damage below water line in collision at 0210 hrs on May 29, 1959, with the defendant's vessel *Fritz Thyssen*, off Ushant. *Mitera Marigo* refused assistance from *Fritz Thyssen* and the Salvage tug, *Englishman*, and continued her voyage to Rotterdam. At 0520 hrs, she altered her course for Falmouth because water was increasing in No.1 hold. Her speed was seven knots. At 1100 hrs, she engaged *Englishman* as escort and those vessels sighted each other at 1700 hrs, eleven miles from Falmouth, but *Mitera Marigo* refused a tow by *Englishman*, *Mitera Marigo* was taking water into No.1 hold at 70 to 80 tons per hour when she was towed into Falmouth Harbour by three harbour tugs. At that time, *Mitera Marigo*'s owners gave her Master authority to engage *Englishman* for any services required.

At 2000 hrs she was moored stern first to buoys with *Englishman* standing-by. At 2200 hrs, an alarming noise was heard on *Mitera Marigo*, and the Englishman was asked to pump. Pumps with capacity of 400 tons per hour were started, but 45 minutes later, when *Mitera Marigo* cast off from the buoy, preparatory to beaching she sank.

Karminski, J. said that if *Englishman's* pump had been used at 2000 hrs, *Mitera Marigo* probably would not have sunk. His Lordship held that *Mitera Marigo* omitted to take vital precautions which good seamanship required and, if those precautions had been taken two hours earlier, loss would probably have been averted. In fact the loss of the ship was caused by the Master's action and indecision in failing to accept offers of assistance.

5.3.1. Burden of proof

The burden of proof that damage would not have occurred but for the defendant's negligence is on the plaintiff. This is important, since it follows that a plaintiff who merely proves damage to his own ship (*res ipsa loquitor*) and fault in the defendant may still fail, if the cause of the damage is unclear.

In the *Santander*[147], after a collision in the Mersey for which the defendant vessel was found to have been to blame, it was found that the plaintiff vessel's propeller had been damaged prior to the collision and this had created doubt within the Court if the plaintiff itself had also contributed to the collision. The plaintiff failed to recover in respect of it.[148]

If the plaintiff proves that a collision would not have happened but for the defendant's fault, but the defendants in turn alleges fault in the plaintiff amounting to a *novus actus interveniens*, where does the burden of proof lie?[149]

Two early decisions of Dr.Lushington,[150]not to mention dicta of Lord Haldane in The *Metagama*[151] made it quite clear that , once it had been shown that damage would not have been suffered had not the defendant been at fault, the onus was then on the defendant to prove *novus actus* exculpating him. However, a strong court of Appeal in the *The Paludina*,[152] and also the learned President in *The Guilford*[153]said that the onus remained in this respect on the plaintiff throughout; moreover, it could be suggested that cases such as the *Metagama* had really involved the principles of *res ipsa loquitur*[154].

5.4 Inevitable Accident and Agony of the Moment

Inevitable accident describes a collision which was not intended and which could not have been foreseen and avoided by the exercise of reasonable skill and care or ordinary diligence. To sustain a plea of inevitable accident it is not enough to show merely that the collision was inevitable at the moment of, or for some moments

[147] (1966) 2 Lloyd's Rep.77
[148] Marsden, *Marsden on Collision at Sea*,12th. edition, London: Sweet & Maxwell, 1998, p.444
[149] Ibid. at p.460
[150] The *Mellona* (1847) 3 W.Rob,7, 13; *The Pensher* (1957) Sw.211
[151] 1928 S.C. (h.l.9 21, at 25-26 -Lord Haldane)
[152] (1927) A.C.16
[153] (1956) 2 Lloyd's Rep. 74, 84
[154] i.e. that the plaintiff had proved enough to raise a prima facie inference, not only that the defendant was at fault, but also that the defendant's fault had been causative. Whether this is a justifiable application of res ipsa loquitur must, with respect remain open to doubt.

before, its occurrence. It is not enough for a ship to show that, as soon as the necessity for taking measures to avoid collision was perceived, all that could be done was done. The question remains whether precautions should have been taken earlier.

When a breach of the duty of Collision Regulation or of the duty of good seamanship is evident in a collision case, she cannot be heard to allege inevitable accident[155].

To succeed in the plea of 'inevitable accident' it must be proved that:

a) the accident is caused by a '*force majeure*' or an Act of God
b) All reasonable precautions have been taken : and
c) There was no fault in getting into a situation where collision was unavoidable.

The defense for 'inevitable accident' is usually invoked when the vessel's movement had been overridden by the force of nature, like a storm or by the failure of her machinery. When the cause was the nature then it has be proved that reasonable measures has been taken to detect the storm or measures to reduce the effect had been taken in due time. Failure of machinery defense would only succeed if the defect had been latent[156] and could not be discovered by reasonable diligence or inspection. Also, he/she must establish that the collision was the result of the defect or the breakdown and could not be avoided by proper navigational action after the trouble had developed.[157]

In the *Merchant Prince*[158] a vessel's steam steering gear jammed and, in broad daylight, she ran into a ship at anchor in the Mersey. There was no proof as to why it jammed, the owners had taken proper care in providing and maintaining it and had recently replaced part of the chain between wheel and rudder. The tendency of new chain to stretch and kink being well known, however, it was negligent inter alia not to have the hand steering gear ready for immediate use; had this been done the

[155] The *May* (1929) 33 Lloyd's Rep. 225
[156] Latent defects are those defects which could not be discovered by any visual inspection which could reasonably be required according to the standards at the time. See The *Marine Sulphur Queen* (1979) 2 Lloyd's Rep. 285
[157] Mankabady, Samir, *The law of collision at sea*, Holland: Elsevier Science Publishers, 1987, p.299
[158] Mankabady, Samir, *The law of collision at sea*, Holland: Elsevier Science Publishers, 1987, p.380

collision could have been avoided. The defense of inevitable accident accordingly failed.

The *Virgo*[159]struck and sank the Gem, which was at anchor in the Thames in daylight. The weather was fine and clear. The collision was solely due to the breakdown of the former's steering gear. On examination two small flaws were discovered in the centre of a metal part, which had broken. The flaws were latent and the collision was held to be due to inevitable accident.

A case where the defense of necessity in this sense succeeded is The *Hessa*[160].In a full gale in the Tyne, the *Hessa* found herself in dangerously exposed moorings. She slipped them and tried cross the river to a safer anchorage on the other side, but on the way was caught by the gale and hit and damaged the *Adolf Woermann*. A claim against the *Hessa* failed; it was foreseeable that by slipping moorings in such circumstances she might be driven into and thus damage another vessel, but it did not amount to fault because she did it in the course of an attempt to escape from danger to herself. Hill J. expressed the law succinctly:

> "When a man by the fault of another is presented with choice between two perilous courses, the comparative perils must not be too nicely weighed, nor must the choice be held a wrong one if the course chosen does not attain its object. What is demanded of the man who had to choose is that he should exercise judgment and discretion as becomes a reasonable and prudent seaman."

The fact of a ship being injured by the negligence of another does not justify those on board in neglecting to take all reasonable measures to save her, lessen the effects of the collision and minimize the damage. They must exhibit ordinary courage in standing by their vessel, and show proper skill and seamanship according to the circumstances of the case. The court, however, will make reasonable allowance for the excitement which usually attends a collision, and those on board will not be

[159] (1876) 2 Asp.M.L.C.285
[160] (1921) 9 Ll.L. Rep. 271

expected to be so acute in their judgment, or to act with the same skill and coolness, and if there had been no collision.[161]

5.4.1 Agony of the Moment

In the *Rywell Castle*[162] James, C.J. Observed:

> "A ship has no right, by its own misconduct, to put another ship into a situation of extreme peril, and then charge that other ship with misconduct. My opinion is that if, in that moment of extreme peril and difficulty , such other ship happens to do something wrong , so as to be contributory to the mischief, that would not render her liable for the damage , inasmuch as perfect presence of mind, accurate judgment, and promptitude under all circumstances are not to be expected. You have no right to expect men to be something more than ordinary men."

When a Master is placed, through no fault of his own, in a real dilemma and has to take one of two courses, each of which involves risks, he is not guilty of negligence if he takes the course involving the least risk.[163] As discussed in chapter 2 on the physiological effect during the agony of the moment, it is true to say that there is an effect from the brain which induces the navigator to take contradicting action during that moment because of the situation. The factors have been discussed in that chapter and thus Court's should take into consideration into this matter seriously and consider that no human is perfect and no education is complete if those competencies could not act with the right of the mind during the agony of the moment.

5.5 Trial of Liability
(The Common Law Perspective)

After the final preparations, the public trial of liability will start. The judge has to conduct the trial, assess causative negligence respectively, the breach of collision regulations, and to determine the facts based on the evidential procedure. Unless the judge directed something else, the party who bears the burden of proof has the right to start. The counsel of that party opens the trial by stating the collision case. The

[161] The *Hannah Park* and *The Lena* (1866) 14 L.T. 675.
[162] (1879) 4 Prob.Div. 219
[163] Mankabady, Samir, *The law of collision at sea*, Holland: Elsevier Science Publishers, 1987, p.300

statement should be as far as possible uncontroversial and in any event no longer than the circumstances require. Afterwards the advocates for each of the parties will usually each be invited to make a short opening statement. After the opening the court will deal with evidence matters, which are related to the pleaded and probative facts. For the beginning of the opening the burden of proof is important, therefore, who bears the burden of proof and the standard of that burden of proof has to be examined.

Evidence Law is governed by the question: What facts must be proved and how will that be done? At this stage the first one will dominate the matter of evidence and the burden of proof always has to be related to a particular issue of fact and the relevant substantive law has to be taken into account as the statement (in regard to burden of proof in general) as mentioned by Lord Wensleydale in *The City of London* [164] :

> "The party seeking to recover compensation for damage must make out that the party against whom he complains was in wrong. The burden of proof is clearly upon him, and he must show that the loss is to be attributed to the negligence of the opposite party. If at the end he leaves the case in even scales, and does not satisfy the court that it was occasioned by the negligence or default of the other party, he cannot succeed."

At the end of the evidence procedure in regard to an issue a judge takes all the facts and the credibility of the parties into account. The facts are provided by oral, documentary and real evidence. Witnesses, parties or experts may provide oral evidence. Documentary evidence includes the ship's various documents such as the working chart, bridge and engine movement books, deck log, radar work book and the master's report, sketches and Notices to Mariners. Real evidence is, for example, peering physical objects. If he is still not convinced of an issue and hence in doubt if the claimant sufficiently adduced evidence, the burden of proof will decide the case (to the disadvantage of the claimant).

[164] *The City of London* (1857) 11 Moo.P.C. 307, 312.

5.6 Apportionment of Liability

The law requires that a seaman should exhibit ordinary presence of mind and ordinary skill; but it is manifest that at a moment of great difficulty a man may do, or omit to do, something which may contribute to the collision, without thereby showing himself deficient in ordinary skill, care and nerve. A wrong step thus taken in the agony of collision is not negligence[165].and unless the emergency was caused by her fault; the ship will not thereby incur liability. If a ship is to be excused for taking a wrong step, which in fact caused or contributed to the collision, upon the ground of sudden peril or difficulty, it must be clearly shown that she was in no way responsible for the sudden peril or difficulty.[166]In *The Winona* [167]the President, Lord Merriman, said:

> "When an emergency arises and quick decisions have to be made, it may be very easy to take wrong decision .In my opinion, the fundamental point about this case is that the look out was faulty and this emergency never ought to have arisen. That is my opinion .I am very far from being satisfied that there was any sort of justification for porting, though in truth, as I think ,it really all follows from the fact that the look out was so faulty that some emergency decision had to be taken and the wrong one was taken."

The decision in *The Bywell Castle* entitles a seaman to favourable a consideration, yet where he/she has the choice of several alternatives, any of which would as it turns out, avoid the collision, and he/she does the one thing which is almost certain to cause it, and this, in fact undoubtedly contribute to it, it has been held that he will not be excused for that wrong action as being taken in the agony of collision.[168]

To enable the claimant in a collision action to recover damages, he/she must prove that his/her loss was caused by the negligence of the defendants or of some person for whose acts he/she is responsible. With regards to the necessity of proving negligence on the part of those against whom damages are claimed, an action for

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[165] *The Sisters* (1876) 1 P.D.117; *The Jesmond* and *the Earl of Elgin (187)*

[166] See The *Bywell Case* (1876) 4 P.D.219, *The Salverry* (1968) 1 Lloyd's Rep 53 at 62 (argument that porting should be treated as a separate fault but rather as a consequence of excessive speed because porting was an error of judgement brought about by excessive speed, failed)

[167] (1944) 77 L1.L. Rep 156 at 160

[168] The *Testbank* (1941) 70 Lloyd's Rep 270,276 per Langton J: the court of appeal (1942) 72 Lloyd's Rep 6 varied the proportions of blame, the vessel put into sudden danger being held one half instead of one quarter to blame.

damages by collision does not, since the repeal of the statutory presumption of fault[169], differ from any other action for damage by negligence. The plaintiff cannot succeed if the case is left in doubt.[170]Where a ship, or each of two ships, alleges negligence on the part of the other, and it is manifest that the collision was caused by fault somewhere, but the evidence does not satisfy the court on which side the fault lies, no damages can be recovered and each ship bears her own loss. The general rule was thus stated by Lord Wensleydale[171]:

> "The party seeking to recover compensation for damage must make out that the party against whom he complains was in the wrong. The burden of proof is clearly upon him and he must show that the loss is to be attributed to the negligence of the opposite party .If at the end he leaves the case in even scales, and does not satisfy the court that it was occasioned by the negligence or default of the other party, he cannot succeed."

Having made out a prima facie case of the negligence on the part of the defendant, the burden of proof is shifted ,and the defendant will be liable unless he displaces the prima facie case or shows that his negligence in no way contributed to the loss.

In the case of a collision in daylight between a ship under way and another which is proved or admitted to be lying at anchor in a proper place, the burden is upon the former to show that she was not in fault, for when a vessel runs down a vessel at her moorings in broad daylight, that fact is by itself prima facie evidence of fault.[172]But in the collision were at night the plaintiff would also have to prove, in the absence of admission, in the first instance that the lights on his ship were burning efficiently.[173]In the case of fog, it is for the vessel at anchor to prove that she was sounding the appropriate fog signals in accordance with the regulations.[174]The duty of a ship under way to avoid doing damage to a sunken ship, or to a ship ashore, is the same as in the case of a ship at anchor, but unless a mast or some part of the wreck is above water and, at night, properly lit, or the ship underway is in some way

[169] By s.4 Maritime Conventions Act 1911- Abolition of statutory presumptions of fault.
[170] *The Ligo* (1831) 2.Hag.Ad.356; *The City Of London* (1857) Sw, 245,300,302
[171] See *Morgan v. Sim , The City Of London* (1857) 11.Moo.p.c. 307,312.
[172] Per Lord Watcon, *The City of Peking* (1888) 14 App. Cas 40, 43.
[173] *The Telegraph, Valentine v. Cleogh* (1854) 1 Sp.427
[174] *The Llanover* (1945) 78 Lloyd's Rep 461.

warned of the presence of the wreck, no presumption of fault would, it is conceived, arise against the ship under way.

The Maritime Convention Act 1911 was to abolish an arbitrary rule by which any infringement ,which by possibility might have contributed to the collision, rendered a vessel to blame unless she could show that the departure from the regulations was necessary, and to:

> "Leave the court to follow what is a reasoning judgment and to say, 'Did this want of obeying the regulations in any way contribute to the collision?' not 'Might it possibly have done so?' "[175]

In the past there has tended to arise presumption against a moving vessel if the other vessel involved is moored or anchored. To counteract such a presumption the owner of the moving vessel would probably have had to bring conclusive evidence of one or more of the following lapses on the part of the stationary vessel: (a) that the anchored ship was improperly positioned; (b) that the anchored ship was unlit or improperly lit at night ; (c) that the anchored vessel had failed to maintain a watch where the circumstances required it; or (d) that the anchored ship had failed to take adequate steps to avoid the collision.

Presumption of fault also used to arise when a ship's master had breached any one of the Collision Regulations (COLREGS).That such infringement per se should establish prima facie fault in law could lead to injustice and this injustice was remedied by the section 4(1) of the Maritime Conventions Act 1911 ,which abolished the statutory presumption of fault by repealing subsection (4) of section 419 of the Merchant Shipping Act 1894(U.K), which had provided that a ship was deemed in fault in a case of collision where any of the Collision Regulations had been infringed by the ship.[176]

[175] Per Bargrave Deane J.; *The Enterprise*(1912) P. 207,211.
[176] Christopher Hill, *Maritime Law*, 3rd. edition, London: Butterworth, 2002, p.164,165

Under Rule E of Rules for the Assessment of Damages in Maritime Collisions (1988) also known as ("Lisbon Rules) it is stated that

> "The burden of proving the loss of damage sustained in accordance with these rules shall be upon the Claimant. Damages shall not be recoverable to the extent that the person against whom the claim is made is able to show that the Claimant could have avoided or mitigated the loss or damage by the exercise of reasonable diligence."

In the International Convention for the Unification of Certain Rules of Law Relating to Collision between Vessels, 1910 it is stated in:

Rule 3:

> "If the Collision is caused by the fault of one of the vessels, liability to make good the damages shall attach to the one which has committed the fault."

Rule 4: *First Paragraph*

> "If two or more vessels are in fault the liability of each vessel shall be in proportion to the degrees of the faults respectively committed. Provided that if, having regard to the circumstance, it is not possible to establish the degrees of the respective faults, or if it appears that the faults are equal, the liability shall be apportioned equally"

Rule 6:

> "The right of action for the recovery of damages resulting from a collision shall not be conditional upon entering of a protest or the fulfilment of any other special formality. There shall be no legal presumptions of faults in regard of liability for collision."

In the 30 years (1798-1828) during which Lord Stowell presided over the Admiralty Court he had no occasion to apply the rule of division of loss. Nevertheless, two noteworthy cases, both of great importance in the history of division of loss cases, were decided by Lord Stowell in this period. In *The Woodrop - Sims* (1815)[177] and in *The Lord Melville* (1816)[178] there exist dicta with reference to the incidence of loss in case of collision in which he categorised collisions into four classes:

a) where the collision is caused without fault in either ship;
b) by the fault of both ships;
c) by the fault of the plaintiff ship;
d) by the fault of the defendant ship.

[177] (1815) 2 Dodson 83,85
[178] (1816) cited in *Hay* v. *Le Heve* (1824) 2 Shaw's Sc.App.Cas.395, at 402

The rule of division of loss is declared to be applicable only in the second class of the case (b) and this remains the law at the present day.

The Apportionment of liability or Division of loss is now provided for in the Merchants Shipping Act 1995 of the United Kingdom in section 187, The Maritime Conventions Act 1911 Section 1, Merchant Shipping Ordinance 1952(Federation of Malaya ordinance no 70) Part XIV, Australian Navigation Act 1912 section 259, The Norwegian Maritime Code of 24 June, 1994, No. 39 section 161 of Chapter 8, which provides as follows:

> "(1) Where, by the fault of two or more ships, damage or loss is caused to one or more of those ships, to their cargoes or freight, or to any property on board, the liability to make good the damage or loss shall be in proportion to the degrees in which each ship was in fault, except that if, having regard to all the circumstances of the case, it is not possible to establish different degrees of fault, the liability shall be apportioned equally. (2) Nothing in this section shall operate so as to render any ship liable for any loss or damage to which her fault has not contributed."

Then under section 1 of the Maritime Conventions Act 1911, it is wide enough to include cases not involving actual contact between ships causing damages.[179]Extending the rule of division of loss to cases where there has been no actual 'collision' is contemplated by the words of the 1910 Convention, Rule 13 which refers such damage as:

> "By the execution or non execution of a manoeuvre, or by the non-observance of the regulations, even if no collision had actually taken place"

The House of Lords had decided that a positive fault or act of commission is not necessarily more blameworthy that negligent navigation or an act of omission. But that it may be so is apparent from comparing extreme cases, for example, the difference between negligent navigation causing a collision compared with deliberate running down. Whether a court should attach more blame to any deliberate act should depend upon all circumstance.[180]The fault to the degrees of which liability is to be proportional must be fault causing or contributing to the damage.[181]In one case the process was described as considering "the culpability and causative effect of the

[179] *The Norwhale* (1975) 1 Lloyd's Rep.610; see also , *The Cairnbahn* (1914) P.25,CA; *The Batavier III* (1925) 42 T.L.R.7
[180] *The Savina* (1976) 2 Lloyd's Rep 123 at 133,134, per Lord Simon of Glaisdale.
[181] *The Peter Benoit* (1915) 84 L.J. p.87 , per Pickord and Bankes L.JJ.

faults on either side", [182] The position has been explained by Scott L.J. in the following terms[183]:

> "On the question of apportionment, one has to remember that the law of apportionment, under the Maritime Conventions Act 1911, is not one of distribution of moral blame, but of the comparative appreciation of the degrees in which the respective faults of the vessels in fault have contributed to the results."

The House of Lords has drawn attention to the error of apportioning fault by means of a " crude mathematical sum"[184] and in arriving at its apportionment of blame a court should not 'total up the number of faults, and when the same case was before the Court of Appeal, Sir Gordon Wilmer L.J. said that the Admiralty Court

> "…rejects the love of nicely calculated less or more",[185] and went on to say that the "inquiry must be qualitative rather than quantitative. It is necessary to look at the over–all picture…"

Section 187 of the Merchant Shipping Act 1995 of the United Kingdom requires that liability shall be assessed "in proportion to the degrees in which each vessel was at fault" and the process of achieving this under the Act 1911 has been explained in the following terms[186]:

> "…the investigation is concerned with 'fault' which includes blameworthiness as well as causation. And no true apportionment can be reached unless both these factors are borne in mind"

For two ships to be held to blame both must be guilty of negligence contributing to the loss[187] but the acts of negligence committed by the ships respectively, need not ,it seems, be both faults contributing to the collision. The fault to the degrees of which liability is to be proportional must be fault causing or contributing to the damage.[188] Culpability shows promise of being increasingly made the measuring stick in apportioning collision damages in our own courts. Causation, heretofore necessary in

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[182] *The Estrella* (1977) 1 Lloyd's Rep .525 at 535. See also, *The Genimar* (1977) 2 Lloyd's Rep 17 at 26 , per Brandon J.
[183] *The Buccinum* (1936) 55 Ll.L. Rep 205,at 218;cited with approval in *The MS.C. Panther* and *The Ericbank* (1957) 1 Lloyd's Rep.57 at 68, per Willmer J.
[184] *The Koningin Juliana* (1975) 2 Lloyd's Rep.111 at 113, *per* Lord Wilberforce.
[185] (1974) 2 Lloyd's Rep 353,at 364
[186] *The Miraflores and the Abadesa* (1967) 1 Lloyd's Rep .191.HL at 199,per Lord Pearce.
[187] *The Frankland* (1872) L.R. 4 P.C.529,533;*The Rona and the Ava* (1874) 2 Asp.M.C.182;*Cayzer* v.*Carron* (1884) 9 App. Cas 873
[188] The *Peter Benoit* (1915) 84 L.J.P 87, per Pickford and Bankes. LJJ

The Way American courts looks at establishment of fault in the first place, is simply too difficult to weigh in apportioning damages, especially when there are several causative factors involved on each side. Perhaps British courts have summed up the problem best, as in The *Anneliese*,[189] the court stating,

> "the faults of the *Anneliese* and the *Livanos*, and he earlier faults of both vessels, were all so mixed up together that it is, in my view, impossible to treat some of those faults as causative and others as not."

Once the officer conning a vessel is found to have been negligent, that is, his conduct fell below what is required of a reasonably prudent seaman and it is shown that the negligence was a proximate cause of the collision, then, of course, liability must be assigned to that vessel. The degrees of liability, however, should be apportioned on the basis of the relative culpability, egregiousness, or blameworthiness of the parties including that of the owner in sending the vessel to sea in her particular condition and manned as she was.

Culpability should be based on the overall conduct of the vessels' navigators and owners, taking into account the following factors:

1) Customs and usages of the sea;
2) The observance of all rules of the road and other statutes and regulations for safety of navigation;
3) The level of maintenance and equipping of the vessels, i.e., their seaworthiness;
4) The shore side supervision and instruction of the officers and crew;
5) General precautions taken by all involved to avoid accidents at sea;
6) Regard for the safety of other vessels in the vicinity;
7) Whether the faults involved caused the dangerous situation to arise in the first ‘ place; and
8) The truthfulness of the vessel's officers and crew and the records they maintained.

These are not new standards by any means. The conduct of each vessel held liable for the collision should be weighed and compared with these criteria in the allocation of the damages. As one recent American court stated, "whether we use the term comparative fault, contributory negligence, comparative causation, or even comparative blameworthiness, we are merely beating around the semantical bush

[189] [1969] 2 Lloyds List L.R. 78. See case on appeal [1970] 1 Lloyd's List L.R. 355 (C.A.).

seeking to achieve an equitable method of allocating the responsibilities, for an injury or loss."[190]In this regard, justice would be best served by making the more culpable party shoulder the greater degrees of blame, if not all of it in the right circumstances.

[190] *Hosei Kaiun* v. *Seaspan Monarch*, 1981 AMC 2162, 2179 (D. Or. 1980), citing *Pan Alaska Fisheries, Inc*. v. *Marine Construction & Design*.

CHAPTER 6
CONCLUSION

Maritime law generated many international and unique measurements and standards. This also applies to collisions at sea. Long navigational of a judicial practice led to the determination of negligence. Today international Rules and Codes accomplish the prevention of collisions and therefore increase safety at sea. Even where international provisions are not applicable practical necessities of shipping demand compliance to good seamanship. The general and international principle of good seamanship supplements the closely knitted net of international rules and prevention. Each lawyer can refer either to the international standards or even to national measurements as long as they are in accordance to good seamanship and thus required by the nautical practice.

The best claim will not enjoy a happy ending if ignorance of facts bars a party from the procedural implementation. Without comprehensive knowledge of a collision case a plaintiff will find himself at the Danaid's barrel[191]. English law works mainly with the disclosure proceeding, which compels the parties to disclose all relevant documents, according to the "cards face upon the table" principle. Moreover the parties have to provide comprehensive the underlying facts by filing a statement of case. Facing the pleaded and disclosed facts the solicitors (advocates) have to work out the relevant facts (the issues) for the trial in order to catalyze the proceedings. This leads to an early overview of the merits of the case.

The burden of representing the case substantively and the allocation of that burden and the burden of proof (particularly the reversal of the burden of proof/shifting of the burden of proof) takes the difficulties of pleading relevant facts into consideration. Each party must always have a look at the pleading of his opponents and often his burden to plead particulars will depend on his special knowledge and

[191] Greek legendary women who were condemned to keep trying to fill up a barrel that had no bottom in it!

on the pleading of his opponent. Also the judge is involved in the enlightenment of the merits of the case. Where a party obviously ignores issues the court bears the obligation to point the party at the failure but duties of pointing (indication) and warning are limited by the duty to be neutral. The overriding duty of a judge is to ascertain the equality of arms.

The success of collision litigation (collision at sea) depends on the procedural and tactical work of solicitors and of the availability of information and not on the substantive law. Therefore shipping lawyers in each country must accomplish a fundamental collection of facts of the collision and then place the facts in a methodical way in front of the proper court.

6.1 Seaworthiness

Except in rare cases of *force majeure*, there is always a human action behind every navigational incident or accident. Many accidents at sea produced by technical or structural failures originate in lack of maintenance of equipment on board. This can also be related to human failings. In other words, its not the direct action of human himself could lead to a collision, it's a condition of latent failure in which few other considerations of the failure of the human in managing the equipment or structure itself could lead to the same event. This condition can be categorized as the seaworthiness of the ship. Apart from its implications in commercial maritime law, particularly in the law of carriage of goods by sea and marine insurance, and in some aspects of maritime labour law, it is an offence to send or take an unseaworthy ship to sea for which penal sanctions can be imposed on a shipowner, master or other person and the ship may be detained.

Seaworthiness connotes that vessel must be properly supplied and provisioned and also properly equipped for navigation[192]. It must of course, satisfy all mandatory law

[192] *Toepfer G.m.b.h* v *Tossa Marine Co.* (The Derby) , (1985) 2 Lloyd's Rep. 325.

regarding surveys, onboard documentation and operational standards.[193] It must also carry a full complement of competent crew which has been adequately trained in seamanship for its rank and in the operational and safety procedures of the ship.

One general demand is the seaworthiness of a ship. As long as the unseaworthiness of a ship causes a collision, the shipowner of the unseaworthy ship will be faced with liability. In the US case Tug Ocean Prince, seaworthiness was determined as;

> "a relative term depending upon its application to the type of vessel and the nature of the voyage. The general rule is that the vessel must be staunch, strong, well equipped for the intended voyage and manned by a competent and skilful master of sound judgment and discretion. The burden to prove seaworthiness and the exercise of due diligence to make the ship seaworthy is upon the vessel owner or operator."

Furthermore "the owner's duty to use due and proper care to provide a competent master and to see that the ship is seaworthy; any loss occurring by reason or neglect in these particulars is within his privity." Today the original general requirement of seaworthiness has found access to several codifications.

Particularly the adoption of the International Management Code (ISM Code) for the Safe Operation of Ships and for Pollution Prevention[194] and the International Ship and Port Facility Security Code (ISPS Code)[195] focuses the topic on the maritime radar screen.

In 1998, the IMO tried to accelerate the progress by issuing the ISM Code. The United Nations Law of the Sea Convention and the UN Convention on the Condition for the Registration of ships (1987) did not provide (and require) an identifiably and accountability of shipowners and managers. This was one of the reasons the ISM Code was drafted. But this was not the only purpose of the ISM Code.

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[193] International Safety Management Code, ISM Code, International Maritime Organisation, 2002

[194] On the 4th of November 1993, the ISM Code was adopted under a resolution of the International Maritime Organization (IMO). It came into effect by adopting it as Chapter IX of the International Convention of the Safety of Life at Sea, 1974 (SOLAS).

[195] On the 12th of December 2002, the ISPS Code was adopted under a resolution of the IMO. It came into effect by adopting it as Chapter XI-2 of the SOLAS Convention, 1974.

6.2 The ISM Code

The ISM Code contained a new quality concerning the attempts to improve ship safety. It tries to deal with the human factors, because most accidents are caused by human errors. The ISM Code requires, from the 1st of July 2002, that every ship (which is more than 500 gross register tons) and her company have a fully functioning Safety Management System (SMS). The company has to introduce a concept to protect the environment, take measures on all discovered risks, and continuous qualification of the employee to convert these measures. In doing so the company has to assure that applicable law is observed and the directives and the provisions of the IMO, the flag state, and the classification authorities are complied with. In addition the company has to appoint a "designated person" in order to identify the concrete persons who represent the management of a shipowning entity and who are liable.

The company has to always take care of the development of these safety standards. So each shipowner must establish and maintain "its own management regulatory regime in respect of each vessel in its fleet." Concerning the ship management, there must be discoverable records. Hence accidents and emergencies must be reported. Also, the levels of authority have to be defined and there has to be a functioning communication system between the company, the ship, and between the crew.

These are only a few of the requirements which a ship company has to fulfill. If all the requirements are fulfilled, then the company obtains a Safety Management Certificate (SMC) for their vessel and the Documents of Compliance (DOC) for their offices ashore. But ISM compliance does not stop with obtaining ISM certification, because it should be a self-regulating system. Proper documentation of the SMS has to be put together in a handbook for the organization of safety measures and prevention of marine pollution.

The master has the paramount responsibility to carry out the SMS Code. He has to report and document all problems properly. Therefore the masters' duty of care is clarified and on the basis of the requirements of the ISM Code, the reports, and the documentation it is easier to show that a ship is not seaworthy, because of the failure of crew members or onshore management. Furthermore, inventions and technical developments will throughout influence the determination of seaworthiness. This duty is accompanied by the duty to operate ships by adequately educated crews, which can run the equipment of a ship.

6.3 Novus actus interveniens

A *novus actus interveniens* can break the chain of causation and this reason can support the defense of the defendant. These are events (for instance caused by the plaintiff herself, by a third party or by nature), which cause also the damage or even aggravate the situation of the plaintiff. For example, a defendant throws a stone into a window and the same window would have been destroyed by the blast wave of an explosion. Only an extraneous factor can cut the chain of causation. Lord Wright explained in *The Oropesa*[196]:

> "ultroneous, something unwarrantable, a new cause which disturbs the sequence of events, some thing which can be described as either unreasonable or extraneous or extrinsic."

Also in the case *The Paludina* the court was engaged in considering the issue *novus actus interveniens. The Paludina* was also liable for the damaged propeller of the *Singelton Abbeys.* First, *The Paludina* caused a collision with the *Singleton Abbey* in Valletta harbour. The damage of the mentioned propeller arose from a collision between the *Singleton Abbey* and a third ship when the *Singelton Abbey* was manoeuvring to escape from the place of collision. Lord Sumner assessed the case by the following consideration:

> "The *Singleton Abbey* herself is the cause of the damage she has suffered, not merely if her captain's action brought it about negligently. She will be the cause of that damage if

[196] The *Oropesa* [1943] p. 32, 39 cited in Marsden, Chap.13, p. 509.

her captain, freely and as the direct consequence of his own decision, brought it about it all."[197]

He also took the case *The City of Lincoln* into account:

> "In that case the captain…steered his own course, as every navigator must, but he steered it wrong because his means of observation, the log, etc. had been carried away in the collision. The hand of the original wrongdoer was still heavy on his ship and his own navigation was not the sole human agency determining her fortunes." As a result *The Plaudina* was held at fault and the Appeal of the *Singleton Abbey* failed, because "the damage was due to her own action in the working of her engines, coupled with the action of it on the part of the *Sara*(the third ship)."

6.4 The Traffic Regulation

From the facts above we could see that infringement of the Collision Regulations forms a base for almost all collision claims. Because of the lack in knowledge on how the good seamanship had evolved, most lawyers rarely take it into consideration. The standard of good seamanship is rarely being put as a statute, it is very difficult for a court to see and render judgment based on how the conduct of the navigator should have been, except than referring to the COLREGS. By having traffic regulation which specifically regulate the conduct of good seamanship while navigating in certain area, then the court of that jurisdiction could bring about a fair trial to which the consideration of why the collision occur and analyze the case from the view of good seamanship while looking into the COLREGS.

With this taken into consideration, the claim could be adjudicated fairly to bring about fair apportionment of liability to each party affected by the collision. The guidance or standard to Good seamanship is illustrated in a proposed Traffic regulation for Malacca Strait which would indicate the control and measures, to ensure vessel prior of entering the Strait and while navigating in route to take adequate seamanship measures for the safety of navigation with reference to pollution and marine casualty control[198].

[197] The *Paludina* [1927] A.C. 16, 26
[198] See Annex 1

Annex 1.

Proposed Draft of Maritime Traffic Regulation in Malacca Strait

Contents

PART I

PURPOSE, SCOPE AND DEFINITIONS

Purpose and scope

Rule 1

The purpose of these Regulations, which shall apply to all ships navigating in the Malacca Strait, is to regulate the maritime traffic scheme in order to ensure the safety of navigation, life and property and to protect the environment in the region.

Definitions

Rule 2

For the purposes of these Regulations:

(a) "Administration" means Marine Department Malaysia

(b) "The Strait" mean the area within the boundaries of the Malacca Strait

(c) "Vessel" means any vehicle able to navigate at sea except craft under oars;

(d) "Vessel in transit" means a vessel, the passage of which shall be innocent, continuous, expeditious and without delay. The passage through the Strait and other waterways shall be planned so as not to stop at any port, berth or any other place, and a notification to that effect shall have been made by the master of the vessel to the Malacca Strait Vessel Traffic Control scheme authorities before entering into the Straits;

(e) "A vessel interrupting its transit passage" means a vessel the master or commander of which has notified during passage that the vessel has given up its transit passage;

(f) "Vessel whose transit passage has been interrupted" means a vessel, which, due to maritime accidents such as collision and grounding, or for other reasons, is subject to investigations, legal proceedings and inquiries carried out by the administration or legal authorities;

(g) Nuclear-powered vessels or vessels carrying nuclear, noxious and dangerous goods and wastes mean:

1. Any nuclear-powered vessel or any vessel carrying nuclear, noxious and dangerous goods, except for military vessels;

2. Vessels carrying cargo classified by the International Maritime Organization as dangerous, (including petroleum and its derivatives) and vessels constructed or used

for the carriage of substances qualified in the International Convention for the Prevention of Pollution from Ships 1973 as modified by the Protocol of 1978 (MARPOL 73/78) and its annexes as pollutants and such vessels which have not effected the necessary operations to eradicate the dangers of such cargo;

3. Vessels carrying nuclear, dangerous and noxious wastes as defined in international conventions and domestic legislation;

(h) "Deep-draught vessel" means a vessel with a maximum draught of 10 metres or more;

(i) "Large vessel" means a vessel 150 metres or more in length;

(j) "Total towing length" means the distance between the fore of the towing vessel and the aft of towed vessel or the distance between the aft of the pushing vessel and the fore of the vessel being pushed when sailing at full speed ahead.

(k) "Northern entrance to the Malacca Strait" means the line joining

(l) "Southern entrance to the Malacca Strait" means the line joining

(m) "Daytime" means the period between sunrise and sunset;

(n) "Nighttime" means the period between sunset and sunrise.

PART II

GENERAL PROVISIONS

Boundaries

Rule 3

The boundaries of the traffic separation scheme which shall apply in the Straits and other waterways are delimited:

In the north, at approximate coordinates of: Lat 005^0 00' N, Long 099^0 30' E

In the south, at approximate coordinates of: Lat 001^0 10' N Long 103^0 28'E

Competence of the Administration

Rule 4

All vessels proceeding in the Malacca Strait shall comply with the navigation rules laid down or to be laid down by the Administration to ensure the safety of life and

property, provided such rules do not violate existing regulations, as well as with the warnings of the Administration.

Technical Specification of Vessels which transit through the Straits and the Notice to be given by these Vessels

Rule 5

A. All vessels that shall pass through the Malacca Strait shall be seaworthy in accordance with international rules and the legislation of the State whose flag they fly.

B. Before giving the Sailing Plan II referred to in Rule 8, masters of the vessels, except those of military vessels, shall establish the technical conformity of their vessel with the following conditions and make an entry to this effect in the log book.

(a) Main and auxiliary machinery units shall be operational as usual and be ready to manoeuvre at any time;

(b) Emergency generators shall be readily operational at all times;

(c) Main and auxiliary steering gear, gyro-compass and radar shall be operational as usual;

(d) Navigation bridge R.P.M, steering-wheel and pitch indicators shall be operational and illuminated;

(e) Navigation lights and vessel's whistle shall be operational and the equipment of the navigation bridge shall be complete;

(f) All communication systems, particularly those between the navigating bridge and fore, aft, steering wheel and engine control room, and all alarm systems shall be operational;

(g) VHF radio-telephone equipment shall be fully operational;

(h) Projector and at least a pair of binoculars shall be kept ready for use day and night in the navigation bridge;

(i) Windlass and its running riggings shall be ready for use and both anchors will be prepared for lowering with crew standing by;

(j) There shall be an emergency fire wire at the fore and aft of vessels carrying dangerous cargo. A towing hawser and hauling lines shall be available at the fore and aft of vessels other than those carrying dangerous cargo;

(k) A vessel shall not be with trim by the stern so as to affect the ability to manoeuvre and steer, and no vessel shall enter into the Straits with trim by the head;

(l) As far as possible vessels shall be trimmed so that the propeller will be totally below water level and in cases of necessity the blade of the propeller which shall be above water level shall not exceed 5 per cent of the propeller's diameter;

(m) The vessel will be trimmed and loaded such that the fore of the vessel and the sea beyond shall be easily visible from the navigation bridge;

(n) Each vessel shall have these Regulations and an up-to-date version of the nautical charts of the Malacca Strait;

(o) All crew employed on vessels shall be in accordance with the International Convention on Standards of Training, Certification and Watch keeping for Seafarers (STCW-78). Masters of the vessels which are not in conformity with the above-mentioned conditions shall notify the Vessel Traffic Control Scheme Centre. The Administration shall take such measures prescribed in Rule 10 for
vessels which do not report in conformity with the conditions above.

Sailing Plan I

Rule 6

Masters, owners or agents of the vessels carrying dangerous cargo OR vessels which are 500 gross tons and more, 24 hours before entering the entrance of the Malacca Strait, shall give Sailing Plan I (SPI) as determined by the Administration.

Sailing Plan I, to be given to the Vessel Traffic Control Centre, shall contain the following information:

- *Name of the vessel;*
- *Flag of the vessel;*
- *Call sign;*
- *Tonnage;*
- *Port of departure;*
- *Port of arrival;*
- *Cargo;*
- *Whether a pilot is requested;*
- *Deficiencies of the vessel which affect navigation adversely;*
- *Other information;*

Vessels carrying dangerous cargo

Sailing Plan II

Rule 7

Masters who have given Sailing Plan I and established that their vessel is in conformity with the conditions prescribed in Rule 6, shall give Sailing Plan II two hours before arriving at the entrance to the Strait, or at a distance of 20 NM from the entrance to the Strait, whichever comes first.

Sailing Plan II, which shall be given by VHF to the Traffic Control Centre, should contain the following information:

- *Name of the vessel;*
- *Flag of the vessel;*
- *Call sign;*
- *Position of the vessel;*
- *Estimated arrival time to the entrance of the Strait;*
- *Whether a pilot is requested;*
- *Inabilities of the vessel affecting sailing adversely;*
- *Other information.*

After giving Sailing Plan II vessels shall navigate taking into account feedback information given by the Traffic Control Centre. The information regarding the traffic in the Straits as well as the fact that Sailing Plan II has been given should be recorded in the logbook.

Position report

Rule 8

Vessels no longer than 20 metres, when they are at a distance of 5 NM to the entrance of the Straits, shall give, by VHF, to the Traffic Control Centre situated on the approaching side, the position report as determined by the Administration and containing the necessary information for the identification of the vessel. Other vessels transiting through the strait should report to the appropriate traffic control stations (VTIS) during the passage in the strait.

Notice to be given by a vessel which loses its technical ability before entering the Straits

Rule 9

Vessels which for whatever reason lose their technical sufficiency or whose navigation equipment becomes in operational before entering the Straits shall provide the pertinent information by means of telex, telephone, fax or VHF. The relevant port authority will indicate, through the Traffic Control Centre, the place where the vessel should wait while repairs are carried out. If the breakdown of navigation equipment continues after repairs and survey, the passage of the vessel through the Straits shall be affected in a way determined by the Administration considering the safety of navigation.

The Traffic Control Centre and traffic control stations

Rule 10

For the execution and control of the traffic separation scheme and for the operation of the reporting system,

The Administration has set up a Traffic Control Centre and traffic control stations (VTIS). The relevant position of the stations and its reporting position is being indicate din the Sailing direction NP 70and the Chart of Malacca strait (BA 3502)

Pilotage sign

Rule 11

Vessels passing through the Malacca Strait and the other waterways with a pilot shall hoist an (H) pennant during daytime.

Conditions of anchorage for vessels in transit

Rule 12

Vessels transiting through the Strait can stop for 48 hours to obtain necessary provisions in the locations specified by the Traffic control centre. In such cases they shall get permission from the Port Authority and will stay under the surveillance of the concerned authorities without taking free pratique.

During this stay the following activities are allowed:

- If there is a breakdown in the vessel: to bring experts, mechanics and workers to the vessel in order to inspect and to repair the breakdown;

- Visits by the vessel's Agent;
- Disembarking of the master or a crew member to purchase necessary supplies for the vessel;
- To disembark any ill crew;
- To employ new crew to replace any hospitalized crew.

Vessels in transit which shall stay more than 48 hours in port should anchor at the anchorage indicated, and take free pratique. Vessels interrupting a transit by anchoring shall be subject to all controls and procedures rendered necessary by reason of security, customs and other legislation.

PART III

TRANSIT THROUGH THE STRAIT

Procedures for passage

Rule 13

Masters will ensure that no unauthorized personnel shall enter the navigating bridge, chart room and wings while navigating in the Strait, and that nothing will hinder the ability of the crew to command the vessel and to keep watch around the vessel.

Authorized personnel will remain on duty by the main engine whether or not the controls of the engines are in the main engine room. While navigating in the Straits steering will be controlled manually; automatic pilot systems will not be used.

The emergency steering gear will also be kept ready for immediate use with personnel on duty to use it.

Steady steering light

Rule 14

Vessels, the distance between whose bridge and fore is 150 metres or more, and vessels, whose bridge is very close to the fore of the vessel, at nighttime shall carry at the fore of the vessel a blue or green steady steering light visible only from the bridge.

Speed

Rule 15

The normal speed in the Straits is 10 nm/hr relative to land. This speed may be exceeded if steering way cannot be reached, by informing the traffic control stations and taking care to avoid collisions and creating waves harmful to the environment.

Overtaking

Rule 16

Vessels navigating in the Straits shall not overtake vessels proceeding before them except due to necessity.

(a) Vessels passing through the Strait shall maintain a distance of at least 8 cable between each other.

(b) If for any reason a vessel is going to reduce speed while navigating in the Straits, she shall first inform the vessels proceeding behind it.

(c) A vessel navigating under its own power at low speed will stay to the most starboard side of its own traffic separation lane and will permit faster vessels to overtake it.

(d) When a vessel needs to overtake another in front of it, it shall first obtain a traffic report from the traffic control station, and if the situation is clear, shall inform the vessel to be overtaken. The overtaking shall if possible take place without speed alterations.

(e) Overtaking will not take place near the One Fathom Bank, Entrance to Port Klang, Entrance to Port Dickson, Entrance to Port of Malacca

Accidents and breakdowns while under way

Rule 17

Vessels whose transit passage through the Strait has been interrupted due to accidents, breakdowns or compulsory anchoring shall immediately inform the traffic control station and request recommendations and instructions. After measures are taken by the relevant Port Authority in regard to the safety of the vessel and the area, the vessel shall take a pilot and carry out the action required for the completion of the passage.

Vessel not under command

Rule 18

The passage through the Straits of a "vessel not under command" or "a vessel restricted in its ability to manoeuvre", as defined in COLREG 72, depends on the special permission of the Administration. If a vessel becomes "not under command" in the course of passage, the master of the vessel shall immediately inform the Traffic Control Station and follow the instructions given.

Towing operations

Rule 19

A vessel or any other object may only pass through the Straits when being towed by a suitable tugboat of sufficient power. A vessel may not pass in the tow of another vessel.

(a) The length of the tow will be appropriately shortened before entering the Straits.

(b) The Administration may take the necessary measures to ensure that vessels and their tow, which together exceed 150 metres, keep their course.

(c) On vessels or objects being towed, extra hailing lines of sufficient strength and the necessary crew will be kept on board to immediately replace the towing hawser should it break.

(d) If possible the propeller and steering gear of a vessel being towed will be kept in operation.

Vessels leaving a port in the Straits

Rule 20

Before getting under way from ports, piers or anchorage positions in the Straits, vessels will inform the traffic control stations and receive any necessary information concerning the traffic flow. Such vessels will wait for clear traffic before entering the traffic flow in the Straits.

Leaving the traffic separation scheme

Rule 21

Vessels which have to leave the traffic separation scheme to berth, moor to a buoy, drop anchor, turn back or due to breakdowns and other exceptional circumstances

shall inform the traffic control station and any other vessels which may be in the vicinity.

Halting traffic due to compulsory circumstances

Rule 22

Maritime traffic in the Straits may be temporarily diverted by the Administration due to construction work including underwater work, drilling, fire extinguishing, scientific and sports activities, salvage and rescue operations, prevention and eradication of maritime pollution, pursuing criminals, accidents and similar cases. The diversion and opening of traffic will be announced by the relevant port authority and traffic control stations to vessels and persons involved. After the reopening of the Straits to traffic following a temporary diversion, the traffic control stations will announce to the vessels in transit or entering the strait.

Obligation to navigate within the lanes

Rule 23

Vessels must proceed within the designated traffic lanes. Vessels which cross the lanes may be fined according to Merchant Shipping Order 1984, as well as be brought to the attention of the International Maritime Organization and the flag State.

Deep-draught vessels

Rule 24

Deep-draught vessels navigating in the straits shall exhibit at night three red lights in a vertical line visible over an arc of the horizon of 360 degrees, and in daytime a cylinder-shaped sign visible from all directions. Other vessels in the Straits shall not inhibit the manoeuvres of deep draught vessels and shall provide sufficient space for navigation. At crossing and turning points in the traffic separation scheme, other vessels in the Straits, shall keep clear of the course of deep-draught vessels.

Anchorage locations

Rule 25

Anchorage locations for the traffic separation scheme are given below:

(a) Penang North

(b) Lumut Outer Anchorage

(c) Port Klang Outer Anchorage

(d) Malacca Port Anchorage

(e) Tanjung Pelepas Outer Anchorage

Anchored vessels will ensure that they remain within the limits of the anchorage areas. It is forbidden to anchor within 2.5 cables from the shore near all these anchorage locations.

PART IV

COMMON RULES FOR THE STRAIT

Large vessels

Rule 26

The owner or manager of large vessels which plan to pass through the Straits shall provide information to the Administration on the vessel and its cargo at the planning stage of the passage. The Administration, taking into consideration the morphological and physical structure of the Straits, the vessel's dimensions and manoeuvre capability, the safety of life, property and the environment, and maritime traffic conditions, shall inform the applicants of the outcome of its review.

Nuclear-powered vessels or vessels carrying nuclear, dangerous or noxious cargo or waste

Rule 27

To navigate through the Straits and other waterways, nuclear-powered vessels or vessels carrying nuclear cargo or waste which intend to pass through the Straits and other waterways must obtain permission, in accordance with relevant regulations from the Maritime Administration at the planning stage of the passage. Vessels carrying dangerous or noxious waste must obtain permission from the Ministry for Environment at the planning stage of the passage. Vessels carrying dangerous cargo and, nuclear-powered or nuclear cargo carrying vessels as well as vessels carrying nuclear, dangerous or noxious waste, whose passage requires special permission, must comply with the pertinent International Maritime Organization regulations and shall transport their cargo according to these regulations.

Such vessels will exhibit a (B) pennant in daytime and in nighttime, a red light visible over an arc of the horizon of 360 degrees.

Vessels which are required to take pilots

Rule 28

Foreign vessels are advised for safety purposes to take a pilot. The Administration may establish compulsory pilotage requirements in certain areas in the Straits

Berthing or anchoring without notification

Rule 29

Vessels which while navigating in the traffic separation scheme anchor, berth at docks or quays or moor to buoys without providing notification and receiving permission shall be removed by pilots and tugboats provided by the relevant port authority. The expenses for such operations will be paid by the vessel's owner, manager or agent.

Vessels are not to anchor in the traffic separation scheme except for emergency situations. In case a vessel has to anchor due to an emergency, the traffic control station will be immediately notified. The Administration will then move the vessel by using pilots and tugboats to a safer location, to clear the traffic separation scheme.

The expenses for such operations will be paid by the owner, manager or agent of the vessel.

Ban on environnemental pollution

Rule 30

No refuse, landfill, bilge water, domestic and industrial waste, ecologically harmful or unsanitary material, oil and other pollutants can be dumped or discharged into the sea in the Strait .Vessels in the Strait must take every measure not to create air pollution.

Notification requirement and reporting

Rule 31

(a) The masters of vessels in the Strait are required to notify any incidents such as illness, disease, injury or death to the traffic control stations for conveyance to the relevant authorities.

(b) Pilots, traffic control station personnel, masters and public officials who observe vessels not complying with regulations or navigating improperly will immediately report the incident to the concerned port authority and will present a written report within 24 hours. The relevant port authority will take the necessary action at once and commence the legal procedure concerning the vessel and her master.

(c) Pilots will inform the traffic control station of any maritime accidents which occur on the vessels they are piloting as well as of any situations detrimental to maritime safety which they may notice en route, and will submit a written report to the relevant port authority.

Visibility

Rule 32

Information on reduced visibility will be provided by the Administration to vessels and others concerned.

(a) Whenever visibility is 2 NM or less in any part of the Strait, vessels passing through the Strait will keep their radar turned on constantly to provide radar readings. On vessels with two radars, one of them will be assigned to the pilot's usage.

(b) When visibility is 1.5 NM or less in any part of the Strait, vessels whose radar does not provide a complete display ability shall not enter the Strait.

(c) When visibility in the Strait is 1 NM or less, vessels carrying hazardous cargo and large vessels shall not enter into the Straits.

(d) When visibility in any part of the Straits is 0.5 NM, maritime traffic shall be open in the appropriate direction and closed in the opposite. In such situations only vessels less than 100 metres in length and which do not carry hazardous cargo can navigate in the direction open to traffic.

PART V

VIOLATIONS

Violations and regulations

Rule 33

Unless a more severe penalty is prescribed by relevant Malaysian legislation, the Penal Code of Merchant Shipping Order (Collision Regulation 1984) will be applied to masters and sailors found to be in violation of these regulations.

Annex 2.

1) Genimar and Larry L

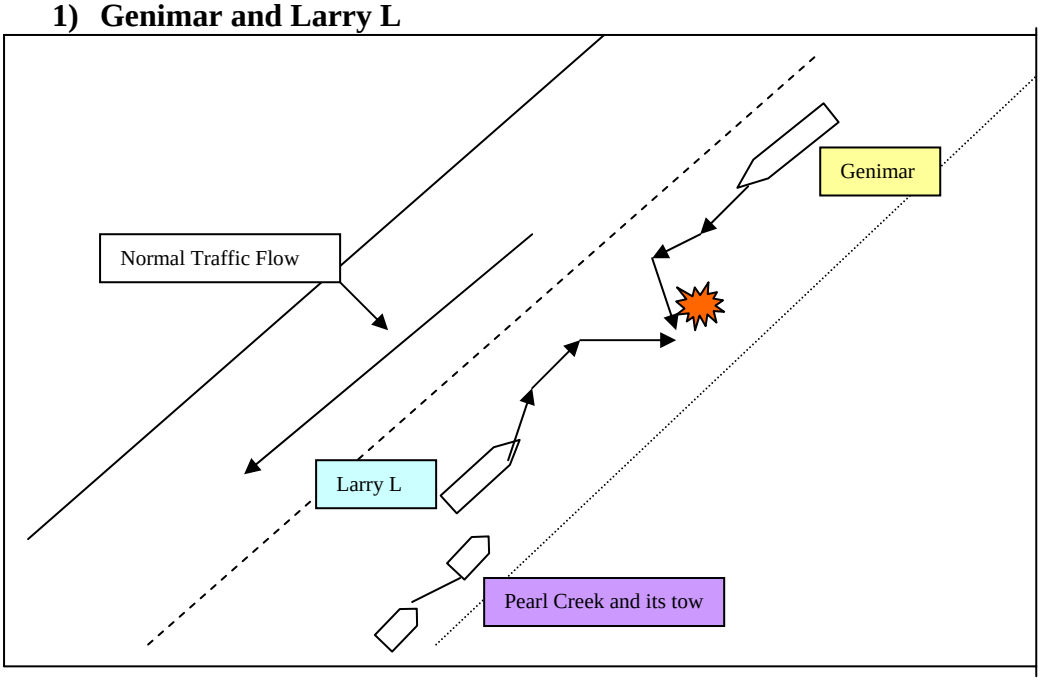

Figure 4: Collision between Genimar and Larry L

2) Joaquin Ponte Maya and Martin Fierro

At about 1910 hrs, when the vessels were 1400 metres apart, the order *hard to starboard* was given by those on board *Joaquin Ponte Maya*

At about the same time, those onboard *Martin Fierro* first saw her green light in addition to her red. At about 1912 hrs , when the vessels were about 700 metres apart, those onboard *Martin Fierro,* having lost sight of the red light of *Joaquin Ponte Naya* and being able only to see her green light, gave the order hard to port and sounded two short blasts. At 1913hrs, when the vessels were 400 to 500 metres apart, those on board *Martin Fierro*, having seen the red light of *Joaquin Ponte Naya* open again and the green light shut in, gave the order hard to starboard and sounded a signal of one short blast. At 1914 hrs, when the vessel were about 200 to 300 metres apart, those onboard *Martin Fierro* gave orders wheel amidships and full astern. A collision occurred near mid-channel at 1915hrs,when *Joaquin Ponte Naya's* speed through the water was 6 knots whilst that of *Martin Fierro* was 8 to 9 knots.The stem and port bow of *Martin Fierro* struck the port side of *Jaoquin Ponte Naya* at an angle of 35 degrees leading aft.

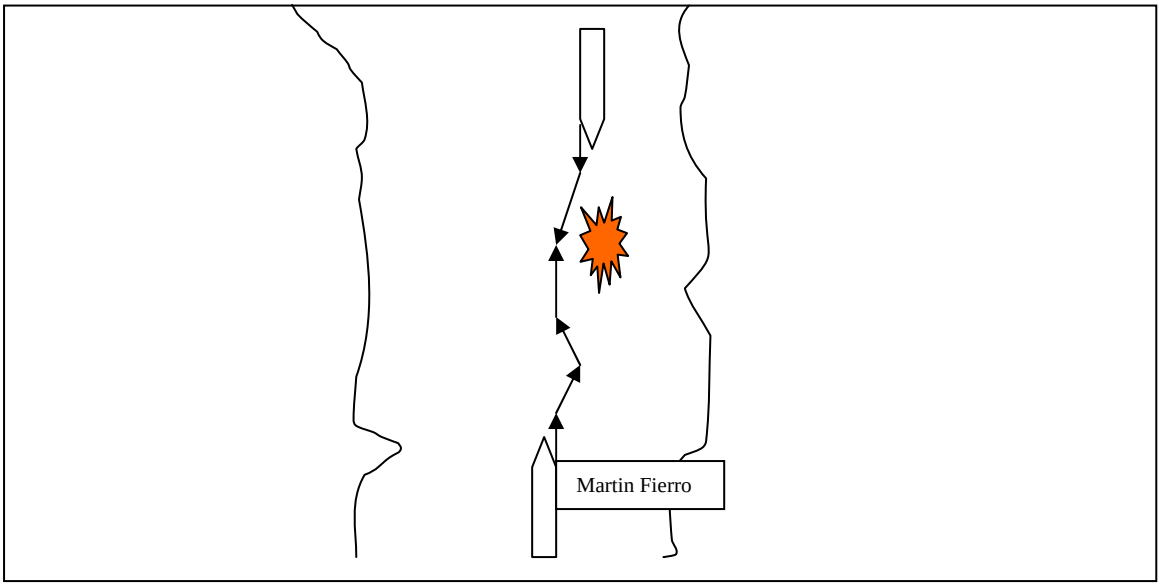

Figure 5: Collision Illustration of both the vessel (***Joaquin Ponte Maya*** **and** ***Martin Fierro***)[2]

[2] (1974) 2 Lloyd's Rep. 203. quoted in Chap. 4 p. 35

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