THE INTERNATIONAL COLLISION REGULATIONS IN THE CONTEXT OF INTERNATIONAL LAW AND THE MUNICIPAL LAW OF THE UNITED KINGDOM AND OF SOUTH AFRICA: A CRITICAL ANALYSIS

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I INTRODUCTION

The object of this paper is to examine one aspect of safety at sea, namely, the prevention of collisions, and to consider in this regard the role of the International Regulations for Preventing Collisions at Sea. Our concern is primarily with the regulatory and preventative aspects of the law (in both the international and municipal spheres) and not so much with private law aspects, in so far as the latter are concerned with the determination of rights and liabilities as between individuals. This is not to say that private law is irrelevant for our purposes: in the first place, the Collision Regulations are usually considered by the courts in the context of delictual actions in private law, and these cases therefore constitute the most important source of judicial interpretation of the Regulations; secondly, since the Collision Regulations do play a part in the determination of civil liability, the role of private law as an indirect means of enforcement of the Regulations cannot be ignored.

The Collision Regulations are of interest from a number of points of view. Firstly, they are of interest in the context of public international law: they are intended to regulate navigation at an international level, and being the product of agreement between states, impose certain obligations on states; also, the regulations give rise to questions of state jurisdiction. Secondly, the regulations are important in the context of municipal law; here we

are concerned with the manner in which the regulations are enforced. Two states have been singled out for consideration in this regard: the Republic of South Africa, and the United Kingdom, on account of the historical role played by it in collision prevention, and also on account of the close links between the relevant law of that state and of South Africa. The experience and practice of the United Kingdom provides a useful guide and model for South Africa, and is relevant also for comparative purposes. Thirdly, the Regulations are, of course, of vital importance to the mariner. Finally, in a peripheral fashion, the Regulations are of interest to the legal historian, as they represent the legal response to a set of circumstances as they changed over the centuries.

The trend towards regulation

Navigation is one of the old uses of the sea, and has long been exercised as a traditional freedom. However, the trend of international and national activity is to restrict the area of freedom of navigation and to increase the control of its exercise. The traditional idea of freedom of the seas involves both a public and a private aspect. It has been said that:

> "As a principle of public international law, it meant that vessels on the high seas were subject, save in the most exceptional circumstances, to the authority of the State of the flag and of no other. The private concept entailed that it was the absolute right and the total responsibility of the master to choose how that public right be exercised by his ship."(1)

In effect, this view meant that it was by the unrestrained practice of good seamanship that safety at sea was best served, and that it was desirable that even the exclusive jurisdiction of the flag state not be unduly exerted to inhibit the discretion of the master. Thus it was that the

elementary collision rules had their origins in the practice of mariners, and were accepted without any national or international legal authority.(2) It is clear, however, that this laissez-faire attitude could not prevail, on account of the very nature of latter-day navigation. Accordingly, the independence of the shipping industry has over the years been eroded by national and international regulation.(3)

Identifying the problem

The risk of collision with another vessel is today a far greater hazard than is the risk of stranding on some natural obstacle.(4) This can be ascribed at least partly to the fact that charts are more accurate and more readily available, warnings provided, and advanced shipboard equipment is installed; all of these tend to diminish the dangers presented by such obstacles. On the other hand, the development of such aids gave rise to other problems, as they allowed concentrations of shipping to navigate along steamship routes in all conditions of visibility. Head-on meetings in fog became common, and close-quarter situations were difficult to avoid.(5) Increasing speed and difficulty in manoeuvering ponderous vessels compounded the problem.(6) A spectacular reminder of the hazards of modern navigation was provided by the collision between the Andrea Doria and the Stockholm in 1956, and the extent of the problem was illustrated by the calculation that by 1973, one ship in fourteen was involved in a collision every year.(7)

One of the greatest contributory factors to the collision problems is the sheer size of the international fleet. The following table gives gives an indication of its growth:

YEAR	NO. OF SHIPS (100 GRT AND ABOVE)	GROSS REGISTERED TONNAGE
1921	28 433	58 846 325
1930	29 996	68 023 804
1939	29 763	68 509 432
1948	29 340	80 291 593
1950	30 852	84 583 155
1960	36 311	129 769 500
1970	52 444	227 489 864
1980	73 832	419 910 651
1981	73 864	420 834 813
1982	75 151	424 741 682
1983	76 106	422 590 317
1984	76 068	418 682 442(8)

It will be noted that in 1983, the number of ships showed an increase over the 1982 figure, but there was a decline in tonnage; the 1984 figure shows a decline in both numbers and tonnage over 1983, although the number of ships is still greater than the 1982 figure. Despite the declining tendency, which is symptomatic of the general slump in the shipping industry, the number of ships registered in 1984 is still vast, being 2,5 times greater than the 1921 figure.(9)

Given the vast number of ships traversing the oceans, what are the risks of collision? It has been said that:

> "For traffic proceeding in random directions on a plane surface the frequency of collisions, if no avoiding action is taken, is approximately proportional to the square of traffic density and directly proportional to the size and speed of the craft."(10)

If it can be assumed that avoiding action is normally taken, the rate of collisions must then also be governed

by factors such as visibility, the effectiveness of the collision avoidance rules, the competence of personnel, the manoeuvrability of the craft, and the efficiency of on-board equipment. The problem is thus not susceptible to solution by neat mathematical formulae of these variables which cannot be quantified. Furthermore, collision statistics are not always complete and accurate; however, records kept by the Liverpool Underwriters Association show that collisions rose steadily between 1900 and 1907, when a peak of 2 208 collisions between vessels, over 500 g.r.t., were recorded; this figure was again reached in 1929, but by 1976 the figure had dropped to 1 029, of which 25 were total losses.(11) Despite the overall decline in collisions, annual total losses had by 1976 in fact increased 100% since World War II.(12)

Cockcroft,(13) in an analysis of collision statistics, produced the following conclusions:

1. The number of ships at risk increased by about 100% from 1956 to 1976.

2. The incidence of collisions did not increase from 1958 to 1974, despite the increased number of ships at risk.

3. Total losses have, however, increased by 100% since World War II.

4. Less than 25% of total losses due to collisions occur in harbours, rivers and canals. Over 50% occur at sea, outside pilotage waters.

5. Collisions in the vicinity of what are now traffic separation areas have decreased from about 50% of the total in the period 1959 to 1966 to less than 20% of the total from 1971 to 1974.

6. Over 70% of post-war sea collisions for which details are available occurred in visibility of less than one mile.(14)

Although the overall incidence of collisions has remained fairly constant in recent years,(15) no general pattern has really emerged, perhaps with the exception of limited visibility incidents mentioned above. It has, however, been shown that there has been a regional redistribution of collisions.(16)

The significance of the Collision Regulations in relation to the incidence of collisions

It appears that in most collision cases in which judgments have been passed, at least one of the ships involved contravened the collision regulations,(17) and it has been said that:

> "the most startling feature (of a U.S. coastguard analysis) was the prevalent tendency of the parties involved to disregard the basic rules for preventing collisions."(18)

It can probably be assumed that many contraventions of the regulations occur which are not followed by collisions. It cannot, however, be said with any certainty that all collisions would not have occurred if the regulations had been obeyed - in other words, it does not necessarily follow that failure to observe the regulations actually caused the collision, and it has been doubted whether strict enforcement of the regulations would solve the problem.(19) The efficacy of the regulations in preventing collisions will be discussed in greater detail below.(20)

The importance of effective collision prevention

The assertion that the prevention of collisions is of paramount importance may appear trite; nonetheless, an examination of collisions, namely, loss of property, damage to the environment, loss of life and degradation of the quality of life will serve to emphasize the importance of this matter.

Property loss

It would be futile to quantify the loss of property arising out of collisions. It is obvious that the loss of the vessel, whether total or partial, results in tremendous financial loss, as does the loss of cargo. Loss of trade and direct and indirect replacement costs must also be taken into account.

Environmental damage

The primary concern is damage caused by oil pollution. It has been estimated that only 5% of marine pollution caused by oil and oil based products is due to marine traffic accidents(21); nonetheless, such pollution acquires particular significance because of the concentration of the spill and the intensity of the damage which results. Pollution of this nature can result in severe economic loss for those who depend on marine resources for their livelihoods. An example of this type of loss is provided by the Adrian Maersk incident which occurred in 1976. Compensation amounting to £558 900 was paid to 138 fish farmers in the Hong Kong area whose crops were destroyed by oil;(22) although this was a grounding incident, the same considerations apply to collision cases. Estimates of economic loss, of course, do not take into account damage caused to the environment in general, such as is

suffered by marine life of all kinds which encounter an oil slick. The costs of cleaning up spills resulting from collisions off the British Coast over a nine-year period totalled some £3 209 000 (in 1977 prices).[23] The problem of oil pollution resulting from collisions is particularly relevant to South Africa. It is estimated that 35 tankers round the Cape every month;[24] the country was reminded of the ever-present hazard when the sister ships Venoil and Venpet collided off the East Coast in 1977.

Loss of life and injury

In 1976, 41 lives were lost in 44 collisions considered in a study.[25] Of course, no real value can be placed on a human life, although compensation is payable in most legal systems in the event of loss of life or injury. The primary concern, however, is that loss of life should occur, in the first place, as a result of an incident that is essentially avoidable.

REFERENCES

1. Warbrick p137.
2. Warbrick p138.
3. See chapter 2 below.
4. Warbrick p138.
5. Beattie p171.
6. For a discussion of the problems relating to deep draught vessels, see Couper.
7. Warbrick p137.
8. Source: Lloyd's Register 1984 p75.
9. Figures are available from 1921; no statistics are available for the war years after 1939.
10. Cockroft (3) p213.
11. Beattie p213
12. Cockroft (2) p217.
13. Cockroft (2) pp223-224.
14. Note that this analysis was produced in 1976. The incidence of reduced visibility collisions has since decreased - see Cockroft (3) p218.
15. Cockroft (3) p218.
16. Cockroft (3) p218.
17. Kemp (1) p417.
18. Fricker p175.
19. Kemp (1) p417.
20. See Chapters 6 and 7.
21. See O'Rathaille and Wiedemann p31.
22. O'Rathaille and Wiedemann p34.
23. O'Rathaille and Wiedemann p33.

24. Department of Transport Report 1984/85 p37. Although the number of ships using the route has decreased since the re-opening of the Suez Canal in 1980, the largest tankers are still compelled to use it.

25. O'Rathaille and Wiedemann p36.

II A BRIEF HISTORY OF THE REGULATIONS

A discussion of the Collision Regulations would not be complete if they were not placed in their historical perspective. The aim of this chapter is to examine collision law from its origins and to establish the background against which the present Regulations have evolved, and in so doing, to gauge the manner in which the law has developed in response to changing circumstances.

Greek and Roman Law

Ancient Greece and the Roman Republic had well-developed systems of maritime law. It appears, however, that there was no law of collision in either system,(1) although it must be assumed that collisions did occur, given the extent of maritime trade of the day.(2) Some mention of collision cases is made in Justinian's Digest, but only in the context of the ordinary rules of Aquilian liability.(3) The so-called "Rhodian Sea Law" formed the basis of the maritime law of the Roman Empire, and here, too, certain important illustrations of collision law were included.(4)

Mediaeval Mediterranean Codes

Many maritime codes existed in the Mediterranean city-states, but only three of them dealt with collision.(5) The Constitutum Usus of Pisa (c.1160) embodied the principles of Roman Law and set out rules for a number of specific instances of collision.(6) The Statute of Ancona dealt with two specific cases of collision in harbours.(7) The most important Mediterranean code was the Consolato del Mare of Barcelona, which dates from about 1340.(8) It included three chapters on collision in harbours which recognized the concept of fault, proposed certain principles for the division of damages, and reported a number of cases.(9)

Maritime Codes of the Atlantic and North Sea

The first of these codes was the Rolls of Oleron which originated around 1150. They soon became part of English maritime law, being published by order of Richard I, whose mother ruled Western France, including the island of Oleron in the Bay of Biscay.(10)

Another influential Code was to be found in the Laws of Wisby, a code which was based on the Rolls of Oleron and dated from 1505 in its complete form.(11) Unlike all the codes mentioned below, the Laws of Wisby did not deal exclusively with collisions occuring in harbours.(12)

A further code worthy of note is the Ordonnance de la Marine of Louis XIV (1681). This was a very complete code, and exerted considerable influence in the development of maritime law.(13) The stature of the Ordonnance was further enhanced when it was incorporated in Napoleon's Code de Commerce in 1807.

All of the codes were of a commercial nature, and were concerned with the determination of liability after a collision had occurred, rather than with giving guidance to help ships avoid collisions,(14) and were mostly limited to collisions involving ships anchored in harbours. Harbour collisions predominated in the older codes because relatively primitive navigational methods and aids restricted ships mainly to coastal routes.(15) This fact, as well as the fact that ships were slow, simply constructed and easy to repair, contributed to the slow development of collision law.(16)

Development in English Law

The first recorded collision case in English law took place after 1530, and for 250 years afterwards, there were few

cases of this kind.[17] During this period little development took place. In any event, it appears that collisions rarely occurred - during the entire 16th century, there were only eight recorded collision decisions, and in the 17th century, 46 decisions.[18]

The 17th century did, however, see the appearance of two codes which purported to regulate navigation: an article in the Earl of Warwick's Sailing Instructions of 1645 directed that no captain should take the wind of an admiral;[19] the Duke of York's Sailing instructions of about 1670 contained an article of similar effect.[20]

The rules stated in these instructions may have been quite workable amongst ships of a fleet, but would result in obvious difficulties if applied internationally, and particularly so amongst merchant ships; thus in 1776 there appeared what is probably the first Rule of Road at Sea aimed at actually preventing collisions, in the form of a signal book produced by Admiral Lord Richard Howe.[21] His rule has survived to this day (in the form of Rule 12(a) of the 1972 Regulations) and forms the basis for our entire system of rules for preventing collisions between ships,[22] so it is appropriate to quote it at length:

> "In order to avoid inconvenience from the customary practice founded in the regulations in the General Printed Instructions, with respect to the Conduct of Senior Officers towards their Junior, the ships of war are to bear up for each other, shorten sail, etc without regard to the seniority of the Commanders or other claims of distinction, in such manner as shall be found most convenient on either part, and may best guard against the hazard of falling on board each other. But when ships are upon different tacks and must come near each other the ship on the starboard tack is to keep her wind while that on the larboard[23] tack is always to pass to leeward."[24]

The first case in which a reference was made to this rule was the Resolution (1789).[25]

It must be pointed out, however, that prior to the existence of a regulatory code, navigation was not an entirely haphazard affair. A set of customary Rules of the Road, or "common law rules of seamanship", had developed over the years. These rules were essentially a manifestation of the practice of mariners. Although they had no statutory force, they were well known by mariners and effect was given to them by the Admiralty Courts. Indeed, these rules formed the basis of collision avoidance practice up to the mid-nineteenth century.[26]. It was at about this time that collision law development gained impetus, due to a number of coincidental events.[27] Firstly, the industrial revolution, free trade and advances in marine technology caused an expansion of trade and commerce; this was accompanied by Britain's dramatic growth as a maritime power. Furthermore, Parliament greatly extended the jurisdiction of the High Court of Admiralty; the courts, particularly in the person of Dr Stephen Lushington, who presided over the High Court of Admiralty from 1838 to 1867, embarked on a period of judicial creativity in collision law. Finally, in 1840, the London Trinity House Corporation[28] promulgated the first Collision Regulations. These Regulations contained rules for sailing ships[29] as well as for steam vessels. The basic rules for the latter type of vessel were as follows:

> "When steam vessels on different courses must unavoidably or necessarily cross so near that by continuing their respective courses there would be a risk of coming into collision, each vessel shall put her helm to port, so as always to pass on the larboard side of each other."
>
> "A steam vessel passing another in a narrow channel must always leave the vessel she is passing on the larboard side."

The first of the steamship rules (known as the "Larboard Helm Rule" or "Port Helm Rule") was amongst the most important developments in collision prevention up to that time.(30)

These regulations had no statutory authority, but were nevertheless applied by the Admiralty Court, being considered authoritative evidence of what seamen ought to do in circumstances in which the regulations were applicable.(31) In the Duke of Sussex,(32) the first case heard under the Regulations, Dr Lushington set out the position as follows:

> "The Rule in question emanates from Trinity House; and although it cannot be said to constitute a law per se, it is nevertheless a rule to be observed, and it is important that it should be distinctly understood, that in all future cases of this kind the courts will consider the rule of binding authority upon the owners of steam vessels..."(33)

Notwithstanding the Rules provided by Trinity House, the primary rule was always that all appropriate action should be taken to avoid collision, provided it could be done with safety.(34)

The steamship rules were eventually given statutory effect by an Act of Parliament in 1846(35) when they were combined into a single rule; the Act imposed a penalty on masters who failed to obey it. The wording of the Act, which came into force in 1847, was somewhat looser than the original Trinity House wording, but a further enactment in 1851(36) reverted to the stricter wording. The larboard helm rule was confirmed again by statute in 1854;(37) here it was explicitly stated that the rule applied to sailing vessels as well "whether on the port or starboard tacks and whether close hauled or not."(38)

Unfortunately, experience showed that the larboard helm rule was dangerously defective, and in a sense it created more problems than it solved.(39) The first major defect was that it did not work in a mathematically precise collision situation;(40) the second was that one of two ships approaching on parallel, or nearly parallel, courses, believing that there was a danger of collision, whereas in fact there was none, would port its helm and thereby cross the bows of the other ship.(41) After lengthy deliberation the authorities concluded that the larboard rule was most unsatisfactory; before then however, the courts had modified its dangerous tendency by holding that for sailing ships, Lord Howe's old rule still applied. The courts could not, however, escape applying the newer rules to steamships.(42) The result was an eventual redrafting of the rules in 1863 so as to eliminate the obvious defects and also to introduce meeting, crossing and overtaking rules, as well as the compulsory use of lights, whistles and horns.(43)

A major problem that remained was that the rules applied only to British vessels. With burgeoning trade and the growth of shipping fleets, it was inevitable that British and foreign ships would come into contact; clearly it was desirable that all ships should be governed by similar rules. A House of Commons Committee recommended in 1860 that steps be taken to "move the Foreign Powers, with a view to the adoption of some Common System."(44) Accordingly, the Merchant Shipping Act of 1862(45) was passed, authorizing the issuance of Rules to which other countries would, on acceptance, be bound to adhere. The Sea Regulations were subsequently issued by the Board of Trade in 1863; they were the most complete regulations yet issued and incorporated the improvements mentioned above. Initially, Britain and France agreed by treaty to be bound by the same rules; by 1868, thirty-three maritime nations, including

the United States of America, had notified Britain that they wished their ships to be bound by the Rules, even when those ships were beyond British jurisdiction.(46) The 1863 regulations thus had the distinction of being the first to be adopted internationally. The role of the United Kingdom should be noted; it was to play the role of co-ordinator in the international adoption of subsequent rules as well.

A discussion of the 1863 rules would not be complete without some mention being made of the memory aids compiled by one of the draftsmen of the regulations, a certain Thomas Gray, who felt that the rules required further amplification and for this purpose he produced in 1867 a pamphlet which provided, in both prose and verse, an explanation of the Regulations.(47) Mr Gray's efforts were, however, severely criticized; the Judicial Committee of the Privy Council objected to his pamphlet on the grounds that "in the eyes of the class of persons whose duty it is to apply the sailing regulations (i.e. seamen), the interpretation would be apt to supercede the enactment".(48) In 1868, certain explanatory clauses were annexed to the Regulations by Order-in-Council in order to clarify the matter;(49) unlike Mr Gray's verses, these clauses had the force of law.

A final word on this formative period in the development of the Regulations: in 1880 and again in 1884, the Rules of the Road at Sea were amended in various details and, in particular, the rule that two sailing vessels meeting end-on should each alter course to starboard was repealed. The larboard helm rule was now abolished for all cases except for steam vessels meeting directly end-on.(50)

In time, the foundations were laid for greater participation by the international community. In 1889, at the

initiative of the government of the United States of America, the first International Maritime Conference was held in Washington. Amendments to the international Rules of the Road were made,(51) based on the experience of U.S. coastal and inland waterways, but no major changes in principle were made.(52) The Washington proposals were implemented only in 1897, but remained virtually unaltered in substance for fifty years: an International Maritime Conference held in Brussels in 1910 put the rules on a truly international basis, but no changes were introduced in the Regulations themselves;(53) Safety of Life at Sea Conferences held in London in 1914 and 1924 did agree on changes to the rules but the conventions were never ratified.(54) A third SOLAS Conference held in 1948 agreed on some changes which came into operation in 1954.

The next SOLAS Conference, which was held in 1960, was noteworthy in two respects: it was the first SOLAS Conference to be held under the auspices of the Inter-Governmental Maritime Consultative Organization (as IMO was then known), and for the first time the use of Radar (which had been perfected in the early days of World War II) was recognized, albeit only in the form of an annex containing recommendations for the use thereof and which was attached to the 1960 version of the Regulations.(56) These regulations came into force in 1965.

The latest stage in the process is of course the 1972 Regulations, which will be dealt with in detail elsewhere in this paper.

It can be seen from the above that although there have for many centuries been codes dealing with collision law in the context of civil liability, the regulation of traffic at sea with a view to preventing collisions is a phenomenon of relatively recent vintage; this can of course be ascribed

to the fact that until a few hundred years ago, both trade and navigational ability were relatively limited. It is, however, remarkable that once the need for regulations became clear, there was a great deal of international co-operation in this field. Another aspect which is worthy of comment is the vast amount of research, learned discussions and individual effort which was involved in the formulation of the various sets of Regulations. Of course, circumstances change, and technology develops, and eventually the present Regulations will be revised once more; it is hoped that whoever is charged with that duty will draw on the wealth of experience which has accumulated over the years.

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1. Owen p760
2. Owen p760
3. The Digest, IX, 29, 2-4
4. Colombos p31; Owen p760
5. Owen p761 esp note 15
6. Owen p761
7. Owen p761
8. Owen p762
9. Owen p762
10. Colombos p32; Owen p762
11. Owen p763
12. Colombos p33; Owen p764
13. Owen p764
14. Kemp (2) p342; Owen p764
15. Owen p764
16. Van Niekerk p73; Owen p764
17. Owen p765
18. Owen p766
19. Marsden p425
20. Marsden p425
21. Kemp (2) p341
22. Kemp (2) p341
23. In early rules, the term "larboard" is sometimes used instead of "port", the two terms being synonymous in the context.
24. Kemp (2) p341

25. (1789) Mars Ad. Cas. 332

26. Van Niekerk p76

27. Owen p768

28. The Trinity House was incorporated by Henry VIII in 1514 for the promotion of commerce and navigation, and was later made responsible for pilotage and lighthouses. See Halsbury Vol.43 p46 for the history and functions of Trinity House.

29. Three rules which were considered to reflect common practice for sailing ships were listed. The first was a development of Lord Howe's rule that the vessels should bear up for each other as was the most convenient on either part; the second was a reiteration of Lord Howe's rule that vessels on the port tack should give way to vessels on the starboard tack. The third prescribed an alteration of course to starboard by both vessels with the wind free.

30. Note that the reference in the first rule to putting "her helm to port" is a reflection of the old helm orders - the tiller would be moved to port, the rudder would move in the opposite direction, with the result that the vessel would move to starboard. With the development of steering gear which was so rigged as to cause the ship to move in the direction in which the wheel was turned, the giving of the order in its old form caused confusion, with potentially disastrous results. Thus Section 29 of the Merchant Shipping (Safety and Load Lines Convention) Act of 1932 (22 Geo 5 C.9) was enacted to eliminate inconsistent helm orders. It required that an intended alteration of course to port be ordered with the use of the words "port" or "left"; an intended alteration to starboard was to be ordered with the use of the words "starboard" or "right". Rule 32 of the 1948 Regulations contained a similar provision which was not, however, repeated in subsequent regulations.

31. Marsden p425

32. (1841) I W. Robb 274 at p275

33. See also Owen pp769-770

34. Marsden p426; <u>The Test</u> (1847) 5 Not. Cases 276

35. Merchant Shipping Act (1846), 9 and 10 Vict., C 100 SS. 9, 13, 36

36. Merchant Shipping Act (1851), 14 and 15 Vict., C 79 SS. 27, 48

37. Merchant Shipping Act (1854), 17 and 18 Vict., C 104 SS. 4, 296-97

38. Kemp (2) p344

39. Owen p783

40. Kemp (2) p344. Two converging ships would alter course to starboard. The effect of this action in some circumstances would merely be to delay collision, as the respective alterations would set the ships on different but still converging courses.

41. In evidence given before a Select Committee of the House of Commons, a certain Captain Drew stated the position as follows:

> "Here is a necessity for agreement between both parties as to any danger, utterly unmindful as to any differences of opinion: one may think that if eacn continues his course, there is no danger; the other, to be on the safe side ports his helm and causes the collision, and the collision then becomes a justification for concluding that there was danger" - Kemp (2) p344.

42. Kemp (2) p344

43. Kemp (2) p345

44. Owen p578

45. 25 and 26 Vict., C 63 Table C (1862)

46. Owen p784

47. The first two of these verses are as follows:

> "1. Two Steam Ships Meeting:
>
> When both side lights you see ahead -
> Port your helm and show your RED.
>
> 2. Two Steam Ships Passing:
>
> GREEN to GREEN - or RED to RED -
> Perfect Safety - Go ahead!"

48. See Kemp (2) p345

49. See Kemp (2) for text of the Explanatory Clauses

50. Kemp (2) p346

51. Among the improvements were a requirement that a stand-on vessel hold her speed as well as her course and a provision for range lights on steamships.

52. Kemp (2) p346

53. See Marsden pp632-664 for the text of the 1910 Regulations.

54. Kemp (2) p346

55. Kemp (2) p346. See Marsden pp632-664 for the text of the 1948 Regulations.

56. The text of the 1960 rules is contained in Marsden pp667-682, and Government Gazette 549 (Proclamation R228, 1965).

III THE REGULATIONS AS A PRODUCT OF INTERNATIONAL AGREEMENT: THE ROLE OF I.M.O. AND PARTICIPATION BY STATES

The shipping industry is essentially an international one and requires a well co-ordinated approach on an international level to ensure effective control, regulation and orderly development;(1) it follows that an organization of international stature is required to carry out these functions. In the years before World War II all problems of an international nature relating to shipping were dealt with by ad hoc conferences. The establishment of a permanent international maritime commission was, however, contemplated as early as 1889 at the International Marine Conference held in Washington, which dealt exhaustively with questions of safety of life and property at sea. It was concluded, however, that "for the present the establishment of a permanent international commission is not considered expedient".(2)

The first inter-governmental organization to deal with shipping matters was set up in 1944, and was known as the United Maritime Authority; this organization was replaced by the United Maritime Consultative Council in 1946. In 1948 a conference of representatives of governments was called in Geneva to consider the establishment of a permanent governmental shipping organization and to lay down its scope and functions. This conference prepared and opened for signature a convention on the Inter-governmental Maritime Consultative Organization. This convention was to enter into force only after 21 states accepted it.(3) The Organization came into being on 17 March 1958, when the 21st state, Japan, accepted the Convention. The Organization is the 12th specialized agency of the United Nations Organization, and is the world's premier agency dedicated solely to maritime matters.

The text of the Convention has so far been amended six times. All of the amendments made up to 1975 have come into force, including one which changed the name of the organization to the International Maritime Organization with effect from 22 May 1982.(4) Two further amendments were made after 1975.(5)

As on 1 September 1982, 122 states have ratified the Convention; the Organization then consisted of 122 members(6) and one Associate member.(7) The Republic of South Africa is not at present a member of the Organization.

According to Article 1(a) of the IMO Convention, the purposes of the Organization are:

> "... to provide machinery for co-operation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and the prevention and control of maritime pollution from ships..."(8)

Part VII of the Convention (Articles 28-32) deals with the Maritime Safety Committee. Article 29(a) reads as follows:

> "The Maritime Safety Committee shall consider any matter within the scope of the Organization concerned with aids to navigation, construction and equipment of vessels, manning from a safety standpoint, rules for the prevention of collisions... and other matters directly affecting maritime safety."

Promotion of maritime safety (including the prevention of collisions) through inter-governmental co-operation is obviously one of the principal objectives of IMO, and the Convention provides the machinery for IMO to play a leading

role in this regard. IMO is, however, of relatively recent origin, and only the 1972 Regulations are wholly a product and responsibility of that Organization; all of the Rules from 1863 to 1960 became part of the international law of the sea upon promulgation by the government of the United Kingdom.(9)

Even though the 1948 Regulations were attached to SOLAS conventions, the government of the United Kingdom was invited to determine when "substantial unanimity has been reached as to the acceptance of the revised International Regulations and to fix a date when they shall be applied by the Governments which have agreed to accept them."(10) The date for the 1948 Regulations was fixed by Order-in-Council as 1 January 1954.(11) The order also specified that the regulations should apply to the vessels of accepting countries, even when beyond British jurisdiction. The 1960 Regulations were brought into operation in similar fashion in 1965;(12) in the case of these Regulations, however, IMO was to be the administrative agency.

The British Government therefore had played an important role in the promulgation of the Regulations; furthermore, the early regulations could not be considered as having full-blown treaty status. Only in 1972, when the International Conference on the Revision of the International Regulations for Preventing Collisions at Sea was covered, did IMO assume the role ab initio of administrator and co-ordinator in every respect. The 1972 Regulations are part of a true convention, that is, part of a compact between adhering nations.(14) States which are not party to the 1972 Convention are of course not bound by it.

Some mention of the proceedings of the 1972 Conference should be made here. The Conference was held in London from 4 to 20 October 1972. The Governments of 47 states

(including South Africa) were represented by delegations at the conference.(15) Several states were represented by observers, as were a number of inter-governmental and non-governmental organizations.(16) Five Committees were established by the Conference for the accomplishment of its work.(17)

The Conference had as the basis for its discussions the following documentation:

- The International Regulations for Preventing Collisions at Sea, 1960;
- A draft agreement together with draft Regulations and Annexes which had been prepared by IMO and communicated to Governments prior to the opening of the Conference;(18)
- Proposals and comments, including amendments to the documents mentioned above, submitted to the Conference by interested Governments and organizations.

The final text of the Convention was in the English, French, Russian and Spanish languages. The text of the Collision Regulations themselves was in English and French, both of these versions being authoritative. In terms of Article IV, the Convention was to enter into force 12 months after the date on which at least 15 states, the aggregate of whose merchant fleets constituted 65% by number or by tonnage of the world fleet of vessels of 100 gross tons and over became parties to it, provided that it would not in any event come into force before 1 January 1976; the convention in fact came into force on 15 July 1977. By 1980, 78 states had ratified or acceded to it. These states have between them 97% of the world merchant fleet (by gross registered tonnage).(19)

IMO has played an important role in the formulation of the present regulations; the large number of states which

participated in the Collision Regulations Conference and the number of adherents that the Convention has attracted shows that there can be little doubt about the stature of IMO in the field of international regulation of navigation. The question arises, however,as to what further role IMO has to play, now that the Convention has been widely adopted and has come into force. Part II of the IMO Convention sets out the functions of the Organization; according to article 2, the "functions of the Organization shall be consultative and advisory."

The implication of this is that IMO has no role to play in enforcing observance of the Regulations. Although the text of Article 2 has been deleted by a 1977 amendment to the Convention (not yet in force),(20) it is probable that the deletion of this article will not change the functions of IMO in any substantial way,(21) at least as far as the Collision Regulations are concerned. In any event, the text of the Convention in general does not appear to contemplate IMO playing any role in this regard.

The result is that IMO, having piloted the Regulations, has a role to play only in respect of amendments to the Regulations (Article VI of the Collision Regulation Convention) and in respect of the designation of traffic routeing schemes. In terms of Regulation 8, Chapter V of the 1960 SOLAS Convention, IMO is recognized as the only international body competent to establish and adopt routeing measures on an international level.(22) Rule 10 of the 1972 Collision Regulations requires ships to observe certain procedures in traffic separation schemes adopted by IMO. Traffic separation schemes are of course a most important means of regulation of navigation and prevention of collisions(23) and here IMO has an on-going role to fulfill.(24) IMO can, however, do no more than recommend -

it is up to individual states to enforce compliance with traffic schemes.

It has been said that a basic "defect" of IMO Conventions is that enforcement lies in the hands of the flag state.(25) At this stage, however, there is no viable alternative to relying on individual states to enforce the regulations. It has been proposed that an International Mariner's Court be established for this purpose,(26) but this proposal has been criticized as being "too ambitious in the short run".(27)

The purpose of the Collision Regulations is to regulate the conduct of officers and crews, and not that of states; on the other hand, international law does not yet possess the institutions or rules to deal with individual conduct. Actual enforcement of the regulations thus falls squarely within the ambit of municipal law, primarily by means of the imposition of criminal sanctions or disciplinary measures for contravention of the Regulations, which may be incorporated into the law of the land. The capacity of a state to carry out such enforcement and the means of doing so will be discussed later;(28) of immediate concern to us are the problems relating to gaining the co-operation of states in enforcing the regulations.

Article 1 of the Collision Regulations Convention provides that "the Parties to the present Convention undertake to give effect to the Rules and other Annexes constituting the International Regulations for Preventing Collisions at Sea, 1972..."(29) As has been indicated, virtually every state which is of any significance in the maritime sphere has ratified or acceded to the Convention. This fact is in itself encouraging; however, if a state, even if it is a party to the Convention, is unwilling to give effect to the provisions of the Convention or to enforce the Regulations,

little purpose is served; however admirable the regulations may be in theory, they will in practice be ineffective in dealing with the problem at which they are aimed if uniform observance thereof cannot be guaranteed.(30) Concerns about the failure of states to meet their obligations in international law are usually raised in respect of the flags of convenience, which, with the exception perhaps of Liberia, are alleged to be prime offenders.(31) There are two major implications attached to a state's duties in this regard: it must ensure that its ships are manned by competent persons who are conversant with the regulations, and it must also take action, in one form or another, in the event of transgression of the regulations. One of the primary reasons that shipowners register their vessels under flags of convenience is that the requirements relating to navigational safety which are imposed (if indeed they are imposed and enforced at all) is that they are generally less onerous; if these flags of convenience are to remain attractive to shipowners, it is unlikely that they will enforce the regulations more strictly.(32) It must be pointed out, however, that the two most important flags of convenience, Liberia and Panama, are parties to the Collision Regulations Convention; on the other hand, two other well-known flags of convenience, Honduras and Costa Rica, are not.(33) By the same token, it must be pointed out that it is not necessarily only the flags of convenience which are lax in enforcing the Regulations - a variety of considerations may dissuade the authorities of any state from taking the necessary action.

A basic principle of treaty law is contained in the maxim pacta sunt servanda - treaties are binding on parties and must be performed in good faith.(34) Little can be done, however, from a formal point of view to enforce compliance by states with a treaty of the nature of the Collision Regulations Convention.(35) It appears that there are

really only two methods available to secure the co-operation of delinquent states: by means of censure in an appropriate International forum such as the United Nations or IMO, or by excluding the ships of those states from ports;(36) the practicability and effectiveness of such actions is however questionable.

If any predominant theme can be distilled from the above discussion, it is that co-operation and compliance with international obligations is essential for the successful application of the regulations. A mariner should be able to have the confidence that any ship that he is likely to encounter will be navigated according to the rules; it goes without saying that the strictest observation of the regulations by one ship is of little value in a close-quarters situation with another ship which has no inclination to observe them; and no ship will be inclined to observe them if her flag state is not prepared to enforce them.

REFERENCES

1. See in general Singh (2) pp3160 and ff. for efforts over the years to regulate shipping on an international level.

2. Singh (2) p3162

3. Included in this number were to be seven states each of which had at least 1 million gross tons of ships.

4. The same 1975 amendments clarified the aims and objectives of the organization, institutionalized the Legal Committee (part VIII) and the Marine Environment Protection Committee (part IX) in the Constitution, and underlined the central co-ordinating role of the Council.

5. In 1977 and 1979

6. See Singh (2) pp3182-3184 for list of members.

7. The associate member is Hong Kong. In terms of Article 10, an associate member does not have voting rights and is not eligible for membership of the Council.

8. Art. 1(a) was amended in 1977 to include the phrase "... to encourage and facilitate the general adoption of the highest standards..." etc. This amendment is not yet in force.

9. Owen p789. It has been maintained that these rules were binding on adhering and non-adhering nations as well. See in this regard the U.S. case of Sears v The Scotia 81 U.S. (14 Wall) 170 (1872), in which it was held that the regulations were enforceable as part of the international law of the sea as recognized and adopted by "the Concurrent Consent... of maritime nations."

10. See Marsden p447; Owen p787

11. S.I. 1953 No. 1557, issued in terms of section 418 of the Merchant Shipping Act (1894) 57 and 58 Vict. C 60. The text is reproduced in Marsden pp447 and ff.

12. By way of Order-in-Council S.I. 1965 no. 1525

13. See Owen p788

14. See Owen p789

15. See Singh (1) p9 for list of delegations.

16. See Singh (1) p9

17. Singh (1) p10

18. The 1972 Regulations largely follow IMO's draft.

19. Churchill and Lowe p191; this percentage is based on 1980 tonnage.

20. See Singh (2) p3192 for text of 1977 Amendments.

21. Valenzuela p171

22. This regulation was amended by Resolution A.205 (VII). See also Warbrick p141.

23. Warbrick p140

24. Art. 22 (Sea Lanes and Traffic Separation Schemes in the Territorial Sea) and Article 41 (Sea lanes and Traffic Separation Schemes in Straits Used for International Navigation) of the Law of the Sea Convention refer to the recommending and adopting of sea lanes and traffic separation schemes by the "Competent International Organisation." This is clearly a reference to IMO.

25. Churchill and Lowe p190

26. Buzek and Wepster pp35 and ff.

27. Warbrick p147

28. In chapter 4 (State jurisdiction) and Chapter 8 (Consequences of non-observance.

29. Art. 10(1)(a) of the Geneva Convention of the High Seas furthermore provides that "Every state shall take such measures for ships flying its flag as are necessary to ensure safety at sea with regard, inter alia, to:

    (a) the use of signals, the maintenance of communications and the prevention of collisions."

    Article 94(4) of the Law of the Sea Convention provides further that "such measures shall include those measures necessary to ensure:

    (a) the proper use of signals, the maintenance of communications and the prevention of collisions;

    (b) ....

    (c) that the masters, officers and, to the extent appropriate, the crew are fully conversant with and required to observe the applicable international regulations concerning the safety of life at sea, (and) the prevention of collisions..."

30. Churchill and Lowe p190

31. Churchill and Lowe p190

32. Regarding the problems arising from flags of convenience, see generally Boczek.

33. The size of the merchant fleets of these four states in 1984 was as follows:

	NUMBER	G.R.T.
COSTA RICA	27	19 750
HONDURAS	238	276 736
LIBERIA	1 934	62 024 700
PANAMA	5 499	37 244 233

Source: Lloyd's Register 1984

34. See Harris p614 and the materials referred to therein.

35. See generally in this regard chapter 9 and 15.

36. Warbrick pp147 and 148

IV STATE JURISDICTION IN RESPECT OF THE COLLISION REGULATIONS

> "State jurisdiction is the power of a state under international law to govern persons and property by its municipal law. It includes both the power to prescribe rules (prescriptive jurisdiction) and the power to enforce them (enforcement jurisdiction)..."(1)

Although the Collision Regulations are embodied in a treaty, they may be incorporated in the Municipal law of a state; our concern in this chapter is with the jurisdiction of a state to prescribe and enforce the Collision Regulations as a matter of municipal law. The question of jurisdiction in matters of collision has been a subject of particular interest this century; it will be necessary, therefore, to consider briefly the question of state jurisdiction in the various maritime zones in general, and then to examine jurisdiction in the particular context of collisions at sea.

As a general rule, states have full jurisdiction in their internal waters, but whether they will in fact enforce their laws is a matter of policy.(2) The position regarding territorial waters is at present governed by the Geneva Convention on the Territorial Sea and the Contiguous Zone of 1958. The extent of a state's jurisdiction in its territorial waters is not entirely settled; it may however be stated as a general principle that subject to certain exceptions, a state has full legislative and enforcement jurisdiction in this zone; once again, whether jurisdiction is exercised to the full is a matter of policy. The United Kingdom, for example, has for many years claimed full jurisdiction in her territorial waters, yet enforcement will be restrained where the requirements of comity so demand.(3)

Article 17 of the Territorial Sea Convention provides that:

> "Foreign ships exercising the right of passage (in Territorial waters) shall comply with the laws and regulations enacted by the coastal state in conformity with these articles and other rules of international law, and in particular, with such laws and regulations relating to transport and navigation."

Despite this provision,(4) the position is not entirely certain, as it is not clear what limitations are imposed upon a state's legislative jurisdiction; it does, however, appear that a state has wide jurisdiction in this regard.(5)

Article 19 of the Territorial Sea Convention regulates the enforcement jurisdiction of the coastal state. It provides that the criminal jurisdiction of the coastal state should not be exercised on board a foreign ship passing through the territorial sea to arrest any person or conduct any investigation in connection with any crime committed on board the ship during its passage, except if the consequences of the crime extend to the coastal state, if the crime is of a kind to disturb the peace of the country or the order of the territorial sea, if the assistance of local authorities has been requested, or if it is necessary for the suppression of illicit traffic in narcotic drugs. Note that the article lays down that the jurisdiction of a state "should not" (and not "may not") be exercised on board a foreign ship. The result is that although states should not, as a matter of comity, enforce their laws except as provided by the article, they nonetheless retain the ultimate right to do so if they wish.(6) Enforcement jurisdiction is totally excluded in law only where the crime was committed before the ship entered the territorial sea, (Article 19(5)). Coastal states are expressly given the right, by virtue of article 19(2), to enforce their laws against ships passing through the territorial seas after leaving internal waters.(7)

The provisions of Articles 17 and 19 apply to government ships operated for commercial purposes;[8] although Article 17 also applies to government ships operated for non-commercial purposes, such ships are immune from enforcement jurisdiction.[9] Article 23 provides that a coastal state may require a warship to leave the territorial sea if, having failed to comply with regulations concerning passage, it disregards any request for compliance.[10]

The last jurisdictional zone which is of concern to us is the High Seas, defined in Article 1 of the Geneva Convention on the High Seas as "all parts of the sea not included in the territorial sea or in the internal waters of a state."[11] The general rule is that the flag state has the exclusive right to exercise legislative and enforcement jurisdiction over its ships on the high seas.[12] As to when a state becomes a flag state in relation to any ship, Article 5(1) of the High Seas Convention provides that:

> "Each state shall fix the conditions for the grant of its nationality to ships, for the registration of ships in its territory, and for the right to fly its flag. Ships have the nationality of the state whose flag they are entitled to fly. There must exist a genuine link between the state and the ship; in particular, the state must effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag."[13]

It seems unlikely, however, that the requirement of a "genuine link" between vessel and state represents customary law,[14] and, even if it did, the concept of the "genuine link" has in practice stretched to its limits. The result has been a proliferation of registrations with the flags of convenience.[15]

Enforcement jurisdiction in collision cases, in so far as it relates to penal sanctions or disciplinary measures,

calls for special consideration on account of the fact that such incidents involve at least two vessels, each of which may belong to a different flag state; each state may wish to institute proceedings against the responsibile party. A case in which the question of jurisdiction in matters of collision occurring on the high seas arose, was the Lotus (France v Turkey);(16) the judgment in the case caused considerable consternation amongst the shipping fraternity and attracted a good deal of criticism. The facts of the case are as follows: On 2 August 1926, the French steamer Lotus was involved in a collision with the Turkish steamer Boz-Kourt on the high seas; eight Turkish nationals on board the latter vessel died as a result of the collision. When the Lotus reached Constantinople, the Turkish authorities intituted proceedings for manslaughter against her officer of the watch, a certain Lt Demons, who was subsequently convicted.

The question before the Permanent Court of International Justice was whether Turkey had acted in conflict with the principles of international law by prosecuting Demons. The court held as follows:

> "Now the first and foremost restriction imposed by international law upon the state is that - failing the existence of a permissive rule to the contrary - it may not exercise its power in any form in the territory of another state. In this sense jurisdiction is certainly territorial; it cannot be exercised by a state outside its territory except by virtue of a permissive rule derived from international custom or from a convention.
>
> It does not, however, follow that international law prohibits a state from exercising jurisdiction in its own territory, in respect of any case which relates to acts which have taken place abroad and in which it cannot rely on some permissive rule of international law... Far from laying down a general prohibition to the effect that states may not extend the application of

> their laws and the jurisdiction of their courts to persons, property and acts outside their territory, it leaves them in this respect a wide measure of discretion which is only limited in certain cases by prohibitive rules..."(17)

The French government submitted essentially three arguments:

1. International law does not allow a state to take proceedings with regard to offences committed by foreigners abroad, simply by reason of the nationality of the victim; such was the position in this case because the offence had to be regarded as having been committed on board the French vessel.

2. International law recognizes the exclusive jurisdiction of the state whose flag is flown as regards everything which occurs on board a ship on the high seas.

3. The principle is especially applicable in a collision case.(18)

The court dealt with these arguments as follows:

> "As regards the first argument ... it is certain that the courts of many countries ... interpret criminal law in the sense that offences, the authors of which at the moment of commission are in the territory of another state, are nevertheless to be regarded as having been committed in the national territory, if one of the constituent elements of the offence, and more especially its effects, have taken place there ... once it is admitted that the effects of the offence were produced on the Turkish vessel, it becomes impossible to hold that there is a rule of international law which prohibits Turkey from prosecuting Lt Demons because of the fact that the author of the offence was on board the French ship."(19)

As to the second argument, the court held that:

> "Vessels on the high seas are subject to no authority except that of the flag which they fly ... but it by no means follows that a state can never on its own territory exercise jurisdiction

> over acts which have occurred on board a foreign ship on the high seas ... what occurs on board a vessel on the high seas must be regarded as if it had occurred on the territory of the state whose flag the ship flies. If, therefore, a guilty act committed on the high seas produces its effects on a vessel flying another flag or in foreign territory, the same principle must be applied as if the territories of two different states were concerned, and the conclusion must therefore be drawn that there is no rule of international law prohibiting the state to which the ship on which the effects of the offence have taken place belongs, from regarding the offence as having been committed in its territory and prosecuting, accordingly, the delinquent."(20)

As to the third argument, the court stated,

> "... the Agent for the French Government has drawn the court's attention to the fact that questions of jurisdiction in collision cases, which frequently arise before civil courts, are but rarely encountered in the practice of criminal courts. He deduces from this, that in practice, prosecutions only occur before the courts whose flag is flown and that that circumstance is proof of a tacit consent on the part of States, and consequently, shows what positive international law is in collision cases.
>
> In the Court's opinion, this conclusion is not warranted. Even if the rarity of the judicial decisions to be found among the reported cases were sufficient to prove in point of fact the circumstance alleged by the Agent for the French Government, it would merely show that states had often in practice abstained from instituting criminal proceedings, and not that they recognized themselves as being obliged to do so ..."(21)

The court accordingly found that Turkey had not acted contrary to the principles of international law. The rules set out in this case apply to the question of jurisdiction in general, but they are particularly relevant for collision cases. It will be noted that the court sets considerable store by the fact that the effects of the offence were felt on the Turkish vessel, which was regarded for these purposes

as Turkish territory. Thus, for example, in a collision occuring on the high seas and involving loss of life, the flag state of the vessel on which the effects were felt would have jurisdiction to prosecute for manslaughter, as in the case of the Lotus; if a ship contravened the Collision Regulations and as a result of this contravention it collided with another vessel, but no loss of life ensued, then it follows that the flag state of the vessel on which the effects of the offence were felt would be able to prosecute for contravention of the Regulations. If, however, the regulations were contravened, but the contravention did not result in a collision and thus the effects were not felt on another ship, then it appears that no state other than that of the ship, or of the person responsible would have jurisdiction.

In any event, the judgment in the Lotus was severely criticized and caused serious disquiet in international maritime circles, on account of the risk of criminal proceedings before foreign courts that mariners faced in the event of collision on the high seas; this was viewed as an intolerable interference with international navigation.(22) A diplomatic Conference which met in Brussels in 1952 disagreed with the judgment and the decisions of the Conference were embodied in the International Convention for the Unification of Certain Rules Relating to Penal Jurisdiction in Matters of Collision or Other Incidents of Navigation (Brussels Convention on Penal Jurisdiction in Collisions). The Convention was signed on 10 May 1952, and its effect was to reverse the Lotus judgment. Article 1 of the Convention(23) provides as follows:

> "In the event of a collision or any other incident of navigation concerning a sea-going ship and involving the penal or disciplinary responsibility of the master or of any other person in the service of the ship, criminal or disciplinary

> proceedings may be instituted only before the judicial or administrative authorities of the State of which the ship was flying the flag at the time of the collision or other incident of navigation."

Clearly, this article contemplates criminal or disciplinary proceedings of any kind, whether they be for a common-law crime, contravention of the collision regulations or any other offence, arising out of collision; reference is also made to "any other incident of navigation"; this would also cover contravention of the Regulations not resulting in Collision. Note also that Article 1 does not apply only to collisions occuring on the high seas.

Article 2 provides that no arrest or detention of the vessel shall be ordered, even as a measure of investigation, by any authorities other than those of the flag state.

Article 3 provides as follows:

> "Nothing contained in this convention shall prevent any state from permitting its own authorities, in cases of collision or other incidents of navigation, to take any action in respect of certificates of competence or licences issued by that state or to prosecute its own nationals for offences committed while on board a ship flying the flag of another state."

Article 4 provides that:

> "This Convention does not apply to collisions or other incidents of navigation occurring within the limits of a port or in inland waters. Furthermore, the High Contracting parties shall be at liberty, at the time of signature, ratification or accession to the convention, to reserve to themselves the right to take proceedings in respect of offences committed within their own territorial waters."

The provisions are self-explanatory; it should be noted, however, that states retain the right to take action against their own nationals; note should also be taken of the parties' right to take proceedings in respect of offences committed within their own waters, provided reservations are made. As on 1 January 1981, there were 74 ratifications and accessions to the convention.(24) The same Conference which gave rise to the Convention on Penal Jurisdiction in Collision also produced the International Convention on Certain Rules Concerning Civil Jurisdiction in Matters of Collision, which deals with jurisdiction in respect of civil claims arising out of collisions.(25)

At the 7th Session of the International Law Commission, which gave rise to the High Seas Convention, the matter was again considered; it was considered necessary to incorporate a rule of similar effect in the High Seas Convention.(26)

Thus Article 11 of the High Seas Convention contains a provision similar to that found in the Convention on Penal Jurisdiction in Collision. Article 11(1) provides as follows:

> "In the event of a collision or of any other incident of navigation concerning a ship on the high seas, involving the penal or disciplinary responsibility of the master or of any other person in the service of the ship, no penal or disciplinary proceedings may be instituted against such persons expect before the judicial or administrative authorities either of the flag state or of the stae of which said person is a national."

Note that this provision applies specifically to collisions occurring on the High Seas.

Article 11(2) provides:

> "In disciplinary matters, the state which has issued a master's certificate or a certificate of competence or licence shall alone be competent, after due legal process, to pronounce the withdrawal of such certificates, even if the holder is not a national of the state which issued them."

Article 11(3) is essentially the same as Article 2 of the Convention on Penal Jurisdiction in Collision.

Article 11 states what is now probably a rule of customary international law.(27)

A final matter which must be disposed of is the question of the flag state's jurisdiction over a ship in the internal or territorial waters of another state. While the coastal state, as a general rule, has jurisdiction in these areas, the jurisdiction of the flag state is by no means ousted. The English case of R v Anderson,(28) although it does not deal with collisions, serves to illustrate the extent of the flag state's jurisdiction in these circumstances. The accused, a U.S. national, was found guilty of manslaughter aboard a British merchant ship of which he was a crew member; the offence was committed on the River Garonne in France, some 300 yards from the shore. On appeal, it was held by Bovill, C.J.:

> "There was no doubt that the place where the offence was committed was within the territory of France, and that the prisoner was therefore subject to the laws of France ... but at the same time, in point of law, the offence was also committed in British territory ..."

It was held further by Byles, J.:

> "A British ship is, for the purpose of this question, like a floating island;(29) and, when a crime is committed on board a British ship ... the offender is as amenable to British law as if he and stood on the Isle of Wight and committed the crime."

Various aspect of state practice in the United Kingdom have been considered above;[30] a few other aspects require brief examination.

Although the United Kingdom is a party to the Convention on Penal Jurisdiction in Collision, the government at the time of ratification reserved" ... the right not to observe the provisions of Article 1 of the said Convention in the case of any ship of the State whose flag the ship was flying has as respect that ship or any class of ship to which that ship belongs consented to the institution of criminal or disciplinary proceedings before the judicial or administrative authorities of the United Kingdom."[31] Regarding British territorial waters, the general rule is that all offences, including those relating to collisions may be prosecuted in British Courts;[32] the same rule applies to internal waters. Section 686 of the United Kingdom Merchant Shipping Act[33] deals with jurisdiction in cases of offences committed on board ship: any British subject who commits an offence on board any British ship on the high seas or in a foreign port or harbour, is subject to British law; the same applies to foreigners on British ships on the high seas.

South Africa is not a party to the Convention on Penal Jurisdiction in Collisions, but is party to the High Seas Convention. Section 3(4) of the South African Merchant Shipping Act,[34] in terms of which Act the Collision Regulations are incorporated in South African law, provides that "unless otherwise indicated, the provisions of this act which apply to vessels which are registered or licensed in the Republic ... shall so apply wherever such vessels may be." Section 3(5) provides that unless otherwise indicated, those provisions of this act which apply to vessels other than those referred to in subsection (4) shall so apply only while such vessels are within the Republic or

territorial waters thereof.(35) Finally, section 327 of the act extends jurisdiction in respect of offences in the same way as does section 686 of the U.K. act.

The tendency in recent years has been to restrict state jurisdiction in matters of collision. The Lotus case, although it laid down general principles in regard to jurisdiction, dealt specifically with a collision incident; it is somewhat ironic, therefore, that the effect of the judgment has been limited by convention only in so far as it relates to collision cases. It is also somewhat surprising that this should be so. While the fears expressed by the maritime fraternity that extensive jurisdiction in collision cases would result in interference might have been realised, this need not necessarily have been an unwelcome development. Navigation has become subject to greater regulation on an international level in the course of this century, but since international law is not equipped with the means of enforcing international regulations, enforcement is left in the hands of the flag state. If a flag state is unwilling to carry out this function, the usefulness of the regulations is severely limited; should other states which have an interest in a particular collision case therefore not be permitted to step in and bring proceedings against those responsible for the collision? Of course, the situation that prevailed in international law prior to the 1952 Convention is unlikely to be restored, and this is perhaps somewhat unfortunate as far as the effective imposition of standards designed to promote safety at sea is concerned.

REFERENCES

1. Harris p235

2. Churchill and Lowe p49 et seq.

3. See generally Churchill and Lowe pp71 et set. See, however, R v Keyn (The Franconia) (1876) 2 EX. D.63., in which it was held that although the United Kingdom was entitled to claim jurisdiction over foreigners in a 3-mile belt of sea around the coast, it was "only in the instances in which foreigners on the seas have been made specifically liable to our law by statutory enactment that the law can be applied to them". The Territorial Waters Jurisdiction Act 1878 (41 and 42 Vict. C.23) was subsequently enacted in response to this judgment.

4. The corresponding provision of the Law of the Sea Convention, Article 21, provides a list of topics in respect of which a coastal state may legislate. It is not certain whether this list is exhaustive. Article 21(4) specifically enjoins foreign ships exercising the right of innocent passage through the territorial sea to comply with all such laws and regulations and all generally accepted international regulations relating to the prevention of collisions at sea. Note that Article 17 of the High Seas Convention applies to all ships.

5. Churchill and Lowe p73

6. Churchill and Lowe pp75-76

7. The Corresponding provision of the Law of the Sea Convention, Article 27, is substantially the same.

8. Article 21 of the Territorial Sea Convention

9. Article 22 of the Territorial Sea Convention

10. Section 3(6) of the South African Merchant Shipping Act, no.57 of 1951, in terms of which Act the Collision Regulations are incorporated, provides that the provisions of the Act shall not apply to ships belonging to the defence forces of the Republic or of any other country. The effect of this is that a foreign warship cannot contravene the collision regulations as incorporated in South African law.

11. Article 86 of the Law of the Sea Convention applies the rules of the relevant part (part VII) to "all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a state, or in the archipelagic waters of an archipelagic state."

12. High Seas Convention, Article 6; Law of the Sea Convention Article 92; See also Oteri v the Queen (1977) 1 Lloyd's Rep.105.

13. The corresponding provision in the Law of the Sea Convention is Article 91(1); this Article does not however include the words "in particular, the state must effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag."

14. Churchill and Lowe p181; See also Constitution of Maritime Safety Committee of IMCO Case I.C.J. Rep.1960, p150.

15. See generally Boczek

16. (1927) P.C.I.J. Reports, Series A, no.10.

17. Cited in Harris pp 228-239

18. Cited in Harris pp 240

19. Cited in Harris pp 241

20. Cited in Harris pp 242

21. Cited in Harris pp 244

22. Report of the International Law Commission p200

23. See Singh (2) pp3111-3113 for full text of the Convention.

24. See Singh (2) pp3113-3115 for list of parties to the Convention.

25. See Singh (2) pp3107-3111 for text and list of parties.

26. Report of the International Law Commission p200

27. Harris p351 note 2. Article II of the High Seas Convention is repeated verbatim in Article 97 of the Law of the Sea Convention.

28. (1868) II Cox's Criminal Cases 198.

29. The analogy between ship and "floating island" has been criticized. In Oteri v the Queen (above) it was stated that "a British ship is not accurately described in law as part of the United Kingdom. A more acceptable rationalization juristically is that at common law a British ship fell under the protection of the sovereign; those on board her were within the King's peace and subject to the criminal law by which the King's peace was preserved."

30. cf. R v Keyn, Oteri v the Queen, R v Anderson and the Territorial Waters Jurisdiction Act.

31. See Mankabady p53

32. Mankabady p13

33. 1894 (57 and 58 Vict. C.60)

34. Act no.57 of 1951

35. In terms of Section 3(11) the Minister of Transport Affairs may by notice in the Government Gazette declare that any provision of the Act shall not apply to foreign ships even within the Republic or territorial waters thereof, if certain conditions are fulfilled. No such notice has yet been issued.

V INCORPORATION IN MUNICIPAL LAW, PRINCIPLES OF INTERPRETATION AND APPLICATION OF THE RULES

As has been seen, the Collision Regulations are a product of international agreement, and as such, parties to the Collision Regulations Convention are under an obligation arising from such agreement to give effect to the Regulations. The prescribing of the Regulations as rules of law which bind individuals and seek to regulate their conduct is, of necessity, a matter of municipal law.

In terms of Section 418 of the United Kingdom Merchant Shipping Act, 1895[1] (hereafter referred to as the U.K. Act), Her Majesty may by Order-in-Council make Regulations for the prevention of Collisions at Sea;[2] and in terms of Section 738(3), Orders-in-Council are to take effect as if they were enacted by Parliament, subject to the provisions of the Act. Effect is given to the 1972 Regulations by the Collision Regulations and Distress Signals Order 1977, S.I. 1977 no.982[3] which came into force on 15 July 1977.

The South African Merchant Shipping Act[4] (hereafter referred to as the S.A. Act) provides for the incorporation of the Collision Regulations in South African law. Section 356 bis (1) empowers the State President to add to the Act any schedule[5] setting out any Convention relating to merchant shipping and ratified by the Republic. Subsection 2 empowers him to ratify any amendments to the Collision Regulations and to ratify any convention which substitutes the Regulations. The 1972 Convention was incorporated by virtue of Proclamation no.R107 of 10 June 1977.[6] As far as the actual giving effect to the Convention is concerned, provision is made by Section 356(2)(b) of the Act; the Minister of Transport Affairs may make such notifications, declarations and regulations as may appear necessary to

give effect to the provisions of the Convention. This was done by means of the Collision and Distress Signals Regulations of 1 July 1977.(7) The 1972 Regulations have accordingly, for all purposes, been made part of South African statute law.(8)

Principles of Interpretation

In construing the Collision Regulations, it must be remembered that they are intended to promote safety of shipping at an international level; clearly, therefore, they should be understood by the seamen of different nations in the same sense. It follows that although effect is given to the Regulations by the legal systems of the various states, the constructions placed on them by the courts of these various states should ideally be uniform.(9) Thus it has been held in an American case that:

> "The paramount importance of having international rules, which are intended to become part of the law of nations, understood alike by all maritime Powers, is manifest; and the adoption of any reasonable construction of them by the maritime Powers named affords sufficient grounds for the adoption of a similar construction of our statute by the courts of this country."(10)

It has been stated that cognisance should be taken by our courts of interpretation given in other jurisdictions, especially those of the English courts, on account of the leading role played by them in this regard.(11)

The Collision Regulations are intended to provide guidelines to those in charge of ships. The meaning of the regulations should, if they are to be of any value, correspond to the meaning ordinary seafarers assign to them, or as was stated in the Koningin Juliana,(12) they should be interpreted by the courts in the same way as seamen should interpret them. In The Libra(13) it was stated:

> "It must be remembered what these rules are. They are issued for guidance of masters of vessels; and therefore, the proper mode of construing them is to read them literally ... Certainly rules issued as these are should be construed literally if they can be construed at all."

Finally, in the Dunelm[14] it was stated by Brett M.R. that

> My view of an Act of Parliament - and this Article (Article 9 of the 1863 Regulations) is equivalent to an Act of parliament - which is made applicable to a large trade or business is, that it should be construed, if possible, not according to the strictest and the nicest interpretation of language, but according to a reasonable and business interpretation of it with regard to the trade or business with which it is dealing."

It should be noted that the English courts have the benefit of being assisted by expert Nautical Assessors, usually the "Elder Brethren" of Trinity House, in deciding collision cases. South African courts do not have this advantage, a fact which was bemoaned in the case of J.T. Rennie and Sons v Minister of Railways and Harbours.[15]

A vast number of collision cases have been decided by the English courts over the years; however, interpretations given to previous Regulations must be approached with some caution as the context in which similar terms appear in the present rules may require a different interpretation.[16] Nevertheless, if the words of an old statute are incorporated in a new statute, this is understood to be done with the object of adopting any legal interpretation which has been put on them by the courts.[17]

A final point to note is that the decisions of British Courts are not binding on South African Courts; they are, however, highly persuasive, especially in view of the fact that the Regulations are of international application.

Application of the Regulations

In discussing the application of the Regulations, it is necessary to refer to both certain of the Regulations(18) and various provisions contained in Municipal enactments.

Rule 1(a) of the Collision Regulations provides that the Rules "shall apply to all vessels upon the high seas and all waters connected therewith navigable by seagoing vessels". "Vessel" is defined in Rule 3 (a) to include "every description of water craft, including non-displacement craft and seaplanes, used or capable of being used as a means of transportation on water". This definition of "vessel" differs from the definition of "vessel" provided in section 2 of the S.A. Merchant Shipping Act, and should prevail for purposes of construing the rules.(19) The position regarding the definition is somewhat different in the law of the United Kingdom. It has been stated that "as a matter of English law, the regulations are given legal force by virtue of Section 418 of the Merchant Shipping Act 1894. That Act applies to all "ships" (excluding vessels propelled by oars) ... This means that as a matter of enforceable English law, certain categories of vessels are not strictly bound by the Collision Regulations".(20) Section 418(1) of the U.K. Act provides that regulations may be made regarding the "lights to be carried and exhibited, the fog signals to be carried and used, and the steering and sailing rules to be observed by ships ..." Thus it is probable that the Regulations cannot, in terms of the U.K. Act, apply to a "vessel' as defined in Rule 3(a), if such vessel does not also fall under the definition of "ship" provided in section 742 of the Act.(21) The Regulations are, however, expressly made applicable to Hovercraft and Seaplanes by means of other enactments.(22) Problems of conflicting definitions do not arise in South African law. Section 356(2) of the S.A. Act provides that

the "Minister may make such ratifications, declarations, and regulations ... to give effect ... to the provisions of (the International Collision Regulations Convention)". His powers are not restricted to the making of regulations for "ships" as defined in Section 2 of the Act, and therefore, in South African law, the regulations apply to "vessels" as defined in Rule 3(a) of the Regulations.

Military vessels are excluded from the operation of the U.K. Act (Section 741) and the South African Act (Section 3(6); nevertheless, the collision regulations are made applicable to such ships by virtue of the Queen's Regulations and Admiralty Instructions and South African Navy Orders respectively.(23)

The second element of Rule 1(a) is the concept of the "high seas and ... all waters connected therewith navigable by seagoing vessels". No definition of the high seas is to be found in the respective Merchant Shipping Acts or in the Collision Regulations, although Article 1 of the 1958 High Seas Convention defines the term as "all parts of the sea that are not included in the territorial sea or internal waters of a state".(24)

Rule 1(b) provides that "nothing in these Rules shall interfere with the operation of special rules made by an appropriate authority for roadsteads, harbours, rivers, lakes of inland waterways connected with the high seas and navigable by seagoing vessels ..." In this regard, Section 3(9) of the S.A. Act provides that any of the provisions of the Act may be applied by notice in the Government Gazette to any dams or other specified inland waterways; also, Section 73(2)(a) of the South African Transport Services Act(25) provides that the Minister of Transport Affairs may make regulations for the proper control and management of any anchorage, tidal river, dock basin or

harbour, and the entrance thereto; Section 73(2)(c) provides for the making of regulations for the proper control of all ships entering or within the harbour, or coming alongside any jetties, piers quays or wharves, or anchoring or mooring within the limits of any harbour. Section 421 of the U.K. Merchant Shipping Act makes provision for local regulations. It is provided that rules made under any local Act shall have full effect, notwithstanding the provisions of the Act. Further provision is made for the making of rules by Order-in-Council where no such rule previously existed; such rules are regarded as being of the same force as if they were part of the Collision Regulations.(26)

Where the local collision rules are in accordance with the international regulations, then the latter are to be considered supplementary to the local rules; if there is a conflict, the local rules will prevail.(27)

REFERENCES

1. 57 and 58 Vict. C.60

2. See Temperley p109

3. As amended by S.I. 1977 no.1301 and S.I. 1979 no.1659; See Halsbury volume 43 p610 note 10.

4. Act no.57 of 1951. Note that upon its commencement on 1 January 1960, the Act replaced parts of the U.K. Act which were applicable in South Africa, certain other pre-Union legislation, and Acts 45 of 1925 and 16 of 1929.

5. The 1972 Convention is incorporated verbatim in Schedule 3 of the Act.

6. Government Gazette no.5577

7. Government Gazette no.5616, notice no.R1111. The 1972 Rules are set out verbatim in this notice.

8. For an examination of the question of incorporation of an international convention by means of a schedule, see Pan American World Airways Incorporated v S.A. Fire and Accident Insurance Co. Ltd 1965(3) S.A. 150(A) and Steyn pp151-152.

9. Marsden p459.

10. Per Benedict J in The Sylvester Hale 6. Bened. 523, cited in Marsden p460.

11. Van Niekerk p75

12. (1974) 2 Lloyd's Rep.353 per Lord Denning M.R. at 354. See also Halsbury Vol.43 p614.

13. (1881) 6 P.D. 139 at p149, per Jessel M.R. Although this case dealt with the local Thames rules, the principle is applicable to all statutory regulations for preventing collisions. See also Marsden p460.

14. 5 ASP. 304 at p308; see also Marsden p460.

15. 1913 N.P.D. 396. At p401, Carter J. stated,

> "As is not unusual in collision cases, there is considerable conflict of evidence, both as to what actually occurred and as to what, in certain circumstances would constitute good seamanship, and it is to be regretted that the Court has not

had the advantage of the assistance of nautical assessors, to guide it in settling the many conflicting points."

16. See van Niekerk p75. Note that relatively few English cases have been decided under the new rules; South African cases, even under previous regulations, have always been few and far between.

17. Steyn p126; van Niekerk p76

18. PART A (Rules 1-3: General) and PART B (Rules 4-19): Steering and Sailing Rules) of the Regulations are set out in the Appendix for easy reference.

19. Regulation 2 of the South African Collision and Distress Signals Regulations provides that "unless the context otherwise indicates, any expression used in these regulations, to which a meaning has been assigned in the Act, bears the meaning so assigned"; however, since the Regulations provide an express definition of "vessel", this constitutes an example of the context indicating otherwise, and the definition contained in the regulations will prevail. See van Niekerk 975.

20. Grime p120

21. According to Section 742, "ship" includes every description of vessel used in navigation not propelled by oars; "Vessel", in turn, includes any ship or boat, or any other description of vessel used in navigation. See also Marsden p454.

22. Hovercraft Act 1969 and Civil Aviation Act 1949. As to the position of Oil Rigs, see Mankabady pp97-98 and Summerskill p26.

23. In the Albion (1953) 1 Lloyd's Rep 239, a British aircraft carrier was involved in a collision. She had not yet been commissioned and was thus not subject to the Queen's Regulations and Admiralty Instruction. Nevertheless, it was held that "the Collision Regulations should not however ... be taken to contain statutory duties applicable in her case but a standard of care to which those in charge of her should conform." (Per Hodson L.J. at p247).

24. In the English case of R v Liverpool Justices e.p. Molyneux (1972) 1 Lloyd's rep. 367, the high seas were described as that part of the sea where great ships can go" (at p369).

25. Act 65 of 1981

26. See Mankabady pp333-337 for a summary of the local rules in the United Kingdom.

27. Van Niekerk p77. In Chizzari and Co v The Natal Harbour Board 1894 NLR 15 it was held that the local rules were not to be applied so as to alter the general rules of navigation in the absence of express words to that effect.

VI AN ANALYSIS OF THE REGULATIONS

Rule 1 of the Regulations was considered in the preceding chapter; in this chapter we will be concerned primarily with Rule 2 (Responsibility) and the Steering and Sailing Rules (PART B, Rules 4 to 19). The analysis will be approached from the viewpoint of the courts. It will be noted that all of the cases referred to deal with civil liability; nonetheless, the interpretations that these cases attached to the rules are valid for all purposes.

Rule 2: Responsibility

Rule 2(a) provides that "Nothing in these Rules shall exonerate any vessel or the owner, master or crew thereof from the consequence of any neglect or of any precaution which may be required by the ordinary practice of seamen, or by the special circumstances of the case".(1) Rule 2(b) provides that "in construing and complying with these rules, due regard shall be had to all dangers of navigation and collision and to any special circumstances, including the limitations of the vessels involved, which may make a departure from these rules necessary to avoid immediate danger".

It was held in J.T. Rennie and Sons v Minister of Railways and Harbours(2) that the Collision Regulations are always subject to the above rules. It has been said of Rule 2(a) that "it seems difficult to attribute to it any effect. It was inserted in the regulations, probably ex abundanti cautela, and as a declaration, not be overlooked by seamen of the legal consequences of negligence".(3) In the Queen Mary,(4) it was said of the Rule that "In my opinion, it(5) is not aimed at authorising departure from the regulations, and I doubt if it is more than a solemn warning that compliance therewith does not terminate the ever-present duty of using reasonable skill and care". Thus, compliance with

the regulations may, depending on the circumstances, still amount to bad seamanship and negligence;(6) a mariner must at all times act according to the dictates of good seamanship.(7)

Similar considerations apply to Rule 2(b). Compliance with the Collision Regulations may in particular circumstances be unreasonable and dangerous, and thus a departure from the rule may in certain cases be justified. In The Boanerges and the Anglo-Indian(8) it was stated that:

> "You may depart, and you must depart, from a rule if you see with perfect clearness, almost amounting to certainty, that adhering to the rule will bring about a collision, and violating a rule will avoid it."

It must be emphasized, however, that departure from the rules is lawful only to avoid immediate danger.(9) If it is possible to obey the regulations in order to avoid a collision, then departure from the rules is not justified.(10) Furthermore, a vessel may assume that other vessels will observe the rules and navigate prudently and may therefore determine her own course immediately. Thus a vessel is not justified in departing from the rules merely because she fears that the other ship will not comply with them.(11) The departure from the rules must be no more than is necessary.(12) Finally, it should be noted that the rule

> "does not prescribe any particular measures that should be adopted in departing from the strict terms of any of the previous regulations that it governs, but it merely states that in construing and obeying these regulations as far as possible you may take into consideration urgent attendant circumstances ... It is common sense."(13)

It will be convenient at this stage to consider the circumstances under which the regulations are applicable. It

was held in The Beryl that the regulations were intended not only to prevent collision but also prevent the risk of collision, and that they are applicable at a time when the risk of collision is already fixed and determined: "We have always said that the right moment of time to be considered is that which exists at the moment before the risk of collision is constituted"(14).

In this case, the steamships Abeona and Beryl were on courses crossing one another at right angles, the Abeona having the Beryl on her starboard side. When they had approached one another within a distance of a quarter to half a mile, the Beryl, seeing that the Abeona was taking no steps to keep out of her way, whistled and eased her engines. When within 300 yards of one another, the Beryl, seeing that the Abeona was still taking no steps to keep out of her way, stopped and reversed her engines at full speed, but collision followed. It was held that it was the duty of the Beryl under Rule 18 of the 1880 Regulations to stop and reverse her engines, if necessary, to avoid the risk of collision. This should have been done at a moment before the risk of collision existed. The Beryl had failed to take this action in time and therefore was partly to blame.

It is, however, difficult to define the concept of "risk of collision". It has been described as a "chance", a "probability", a "strong" or "reasonable" probability of a collision, as opposed to a possibility of a Collision.(15) It has been said that "it was utterly impossible for the legislature to have determined, or described, what should constitute a risk of collision ..."(16) If a ship establishes that another is in a position that may involve risk of collision, but is unable to make out what course the other is on, she should keep her course, and not alter her helm, or take any decisive step until she has ascertained the other ship's course:(17)

> "As soon (the person in charge of a vessel) has opportunity of ascertaining, by reasonable care and skill, what the strange vessel is, and what course she is pursuing, then the rule which is applicable to the circumstances at once becomes binding on him."(18)

PART B - STEERING AND SAILING RULES

Section 1 - Conduct of Vessels in Any Condition of Visibility

Rule 4 - Application

This rule provides that Section 1, i.e., Rules 5-10, applies in any condition of visibility.

Rule 5 - Look-Out

It is provided by this rule that vessels should at all times maintain a proper look-out by sight and hearing as well as by all means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision. The obligation to keep a look-out derives from the ordinary practice of seamen as well as from the rules of prudence.(19) It was held in The Santander(20) that "Look-out" means "an appreciation of what is taking place". In this case, the Santander collided with the Naes Tern on the River Mersey. The incident occurred at night, in restricted visibility. It was stated by Willmer L.J. at p82:

> "I should now mention certain facts which I consider to be of special significance ... I am not satisfied that the look-out on either vessel was as good as it should have been in the circumstances. When I use the phrase "Look-out", I mean not only visual and aural look-out, but look-out in the wider sense of appreciation of what was taking place. In this case I think both vessels were slow to appreciate what was taking

> place before their eyes. Both of them failed to hear audible whistle signals given by the other vessel, signals which, if they had been heard, would have warned them of what was going on."

"Look-out" also involves the intelligent interpretation of the data received.(21) IMO has issued a document entitled "Recommendation on Basic Principles and Operational Guidance Relating to Navigational Watchkeeping", which sets out guidelines for watch arrangements, maintenance of look-out, guidance for officers in charge of a watch, etc.(22)

Rule 6 - Safe Speed

Rule 6 requires vessels to proceed at a safe speed so as to take proper and effective action to avoid collision and to be able to stop within a distance appropriate to the prevailing circumstances and conditions.(23) The Rule states a number of factors that are to be taken into account in determining a safe speed.(24) The term "safe speed" replaces the term "moderate speed" which was used in previous Regulations. The use of "moderate speed" attracted much criticism on the grounds that it was vague.(25) Although the use of "safe speed" is clearly an improvement, it remains difficult to attach an objective and all-encompassing definition to such a vague term.(26) In the George H. Jones(27) it was stated that:

> "speed is clearly relative to the situation of the ship; what is proper at sea is ordinarily improper in a harbour and one harbour speed should differ from another."

The duty to proceed at a safe speed applies in all conditions of visibility(28) and under all circumstances. It has been held that it is no excuse for excessive speed that the vessel could not be controlled at a lower speed; under such circumstances, the vessel should not be under way at all.(29) It is obvious what the consequences of excessive

speed are: in the Bovenkerk[30] they were stated as "firstly, in creating or increasing the risk of collision, and secondly, in making damage worse if a collision occurs."

Rule 7 - Risk of Collision

Rule 7(a) provides that every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists. It further provides that if there is any doubt, such risk shall be deemed to exist. This rule is broadly couched; no comprehensive description of the circumstances in which the risk of collision exists is provided, as the existence of such risk will depend on the circumstances of the case;[31] Rule 7(d)(i) does, however, provide that the risk of collision shall be deemed to exist if the compass bearing of an approaching vessel does not appreciably change; Rule 7(d)(ii) points out that even if there is an appreciable change in bearing, the risk may sometimes exist, particularly when approaching a very large vessel or a vessel under tow, or when approaching a vessel at close range.

Rule 7(b) provides that proper use shall be made of radar equipment if fitted and operational. This requirement is an innovation over previous regulations; the 1960 regulations merely included an annex providing recommendations on the use of radar as an aid to avoiding collisions. Even so, there is no requirement that radar be fitted in the first place. In any event, the use of radar does not relieve a vessel of the duty to obey the collision regulations and to navigate with proper care. The use of radar is at most a supplementary aid to the keeping of a proper look-out and one of the means of determining whether a risk of collision exists.[32]

The Sedgepool provides an interesting illustration: The Sedgepool was outward bound from New York Harbour, and the Parthia inward bound, when the two vessels collided. The collision occcurred in daylight, but in foggy weather. The latter vessel was equipped with radar, the former not. As the Parthia proceeded towards the harbour at half speed, the Sedgepool was noticed on her Radar at a distance of 2,5 miles. No action was taken by the Parthia until the distance had closed to about half a mile, when her engines were stopped and course altered. When the Sedgepool was sighted visually, more drastic action was taken, but the collision could not be avoided. The Master of the Parthia stated in evidence that, but for his possession of Radar, he probably would not have been proceeding at the half speed at which he was proceeding.

In response to this, the court held:

> "If that amounts to a claim on his part that the possession of radar entitled one to go faster than one otherwise would, I think there must be put against it the correspondingly greater duty to use this aid to navigation to the best advantage. An instrument such as radar is supplied to be used, and I think its very possession does impose some additional duty on the vessel fortunate enough to be equipped with it."(33)

It was, however, held in the Verena, that it is not necessary to use radar continually under all conditions. The radar-equipped Verena was sailing in the Mediterranean; there were light airs and the weather was a little hazy, although visibility was apparently good. The prescribed lights were being shown and a proper lookout kept. Her radar was not, however, in operation. Visibility deteriorated rapidly when the vessel was suddenly enveloped in a dense bank of unexpected fog. Shortly afterwards, the Verena collided with the Grepa. Although the court found against the Verena on the facts, Willmer J. stated:

> "... I was considering whether or not, under the circumstances, it might have been prudent at least for the Verena to have switched her radar on and kept it on throughout the night. That again appeared to be a matter of seamanship from which I could profit by the advice of the Elder Brethren, and I therefore sought it. They have advised me that, in their view, there is no need to keep a radar set on in the open sea in clear weather. Quite different circumstances, of course, may occur when fog is present or has been anticipated by weather reports; but in this particular case I have to remind myself that the Verena came from a long period of clear weather and had no reason, that I can see, to anticipate fog at that precise moment ..."

Although this case was heard before the proper use of radar became mandatory in terms of the Regulations, it is probable that the principle still applies.

Although vessels are not required by the Collision Regulations to be equipped with radar, they may be compelled by municipal legislation to do so, as in the case of the United Kingdom.(35)

Rule 7(c) states that assumptions shall not be made on the basis of scanty information, especially scanty radar information. This appears to cover omissions of radar plots, incomplete plots, or plots based on insufficient observations.

The importance of plotting was emphasized in The Gannet. In this case, The Gannet was involved in a collision with the Katharina Kollmann in the Dover Strait. The vessels were on opposite courses and proceeding at full speed. Both were using radar but the Gannet was not plotting and the Katharina Kollmann had ceased to plot at a range of six miles. Visibility was deteriorating rapidly. Each vessel had observed the other on radar, but made visual contact only when the range had decreased to half a mile.

It was stated by Karminski, J:

> "I have again consulted with the Elder Brethren on the matter, which is essentially a matter of seamanship and navigation, and they have advised me and I accept that plotting radar is the safest way of observing the bearing of an approaching vessel, in a sense watching the compass to check the bearing; and that duty is in no way abrogated by the use of radar, which is an extra eye when watching by eye is ineffective or only partly effective."(36)

Rule 8 - Action to Avoid Collision

Rule 8 prescribes the course of action to be followed once the risk of collision has been determined. Rule 8(a) provides that any action taken to avoid collision shall, if the circumstances of the case admit, be positive, made in ample time, and with due regard to the observance of good seamanship. In effect, when a course of action has been determined, it should be taken decisively and without hesitation.(37) This requirement first appeared in the preamble to the Steering and Sailing rules of the 1948 regulations; however, the principle on which it is based was recognized in the Billings Victory(38) (a case which dealt with the 1910 Regulations).

In this case, the Billings Victory was involved in a collision with the Warren Chase on the English Channel. The vessels were in a crossing situation, the latter vessel being the give-way ship. However, no action was taken by the Warren Chase until the ships were about half a mile apart, when she turned to starboard. The Billings Victory, as the stand-on vessel, had until then maintained her course, but then turned to port. It was held that the Warren Chase was to blame for taking avoiding action too late, thereby placing the Billings Victory in difficulty. It was stated by Willmer J. as follows:

> "It has been said over and over again in this court that the duty of the give-way vessel is to take timely action to keep clear. Moreover, it is her duty to act, if I may use the expression, handsomely, so as to leave the stand-on vessel in no possible doubt as to what the give-way vessel is doing. If her method of giving way is to alter course, she ought to make a substantial alteration, and ought to be particularly careful to signify that alteration by the appropriate helm signal. It may be said in this case that she could not safely make such an alteration of course because she was embarrassed by the presence of the pilot cutter. In that event, she could choose another method of keeping clear, by making a drastic reduction of her speed. Again, a sufficient alteration in her speed would leave the stand-on vessel in no doubt as to what she was doing. That was the duty of the Warren Chase, and it was a duty which, as I see it, she signally failed to perform."

The view expressed above is confirmed by Rule 8(b), which requires that any alteration of course and/or speed to avoid collision shall, if the circumstances of the case admit, be large enough to be readily apparent to another vessel observing visually or by radar.

Rule 8(c) states that if there is sufficient sea room, alteration of course alone may be the most effective action to avoid a close-quarters situation. No indication is given in the rules of what a close-quarters situation is; it has, however, been suggested that a "close-quarters situation may arise when it becomes no longer possible for one ship acting alone, to avoid the other ship by making a substantial alteration of course."(39) Rule 8(d) provides that action taken to avoid collision with another vessel shall be such as to result in passing at a safe distance. No indication is given in the rules of what "a safe distance" is; clearly, each case must be determined according to the circumstances.

Finally, Rule 8(e) provides that if necessary to avoid

collision, or allow more time to assess the situation, a vessel shall slacken speed or take all way off. Thus if there is any doubt, the risk of collision must be assumed, as provided by Rule 7(a), and the appropriate action would be to stop or slow down.

It will be appreciated that the observance of the rules of good seamanship, and the taking of precautions required by the ordinary practice of seamen, are especially important in the context of Rule 8.(40)

Rule 9 - Narrow Channels

A preliminary point to note here is that no definition of "narrow channel" is provided by the Regulations, and it is indeed difficult to define the concept. A narrow channel need be of no particular length. It has been held that the extremities of two breakwaters at the entrance of a harbour(41) and two lines of mooring buoys(42) are narrow channels.(43) A factor to be taken into account in determining whether a channel is a narrow channel is whether seamen regard it as such and conduct themselves accordingly therein.(44) Once again, of course, each case must be determined according to the particular facts. The term "fairway", which is also used in the rule, must be distinguished from "narrow channel"; the former is an open navigable passage used by vessels proceeding up and down a river or channel,(45) or the centre line of the navigable water of the channel.(46) Rule 9(a) requires vessels proceeding along the course of a narrow channel or fairway to keep as near to the outer limit of the channel which lies on the starboard side as is safe and practicable. The rule thus provides for port to port passage of opposing vessels. Note that vessels are to keep to the starboard side, and not merely move to that side when another vessel approaches.

Rule 9(b) requires vessels of less than 20 metres in length and sailing vessels not to impede the passage of a vessel which can safely navigate only within a narrow channel or fairway. The object of this provision is to leave the centre of the channel clear for vessels such as deep draught vessels which can navigate safely in the usually deeper waters of the fairway or channel.(47) Rule 9(c) prohibits a vessel engaged in fishing from impeding the passage of any other vessel navigating within a narrow channel or fairway, and Rule 9(d) prohibits a vessel from crossing a narrow channel or fairway if such crossing impedes the passage of a vessel which can safely navigate only within such channel or fairway. The effect of this rule is to give such traffic within the channel right of way over crossing vessels. Rule 9(f) requires vessels to navigate with particular alertness when nearing a bend or an area where other vessels may be obscured from sight. Finally, Rule 9(g) requires vessels to avoid anchoring in narrow channels if circumstances permit.

Narrow channels and fairways typically occur along the coastline, and may be subject to local rules.(48) If such rules are in existence, then they will prevail; if however, the local rules are silent as to the question of narrow channels and fairways, then Rule 9 will apply.(49)

Rule 10 - Traffic Separation Schemes

Traffic separation schemes have their origin in the 19th Century, when a certain Lt Maury of the U.S.A recommended that ships use separate "steam lanes", following the disastrous collision between the steamers Arctic and Vesta in 1854. Regulation was essentially left to the various shipping companies, which entered into agreements relating to the use of shipping routes.(50) International regulation gained impetus after 1956, when the passenger liners Andrea

Doria and Stockholm collided; IMO established a traffic separation scheme in the Dover Strait in 1967, and by 1977, 60 mandatory IMO schemes were in operation around the world. By virtue of the 1960 SOLAS Convention, IMO is recognized as the only body competent to establish and recommend routeing measures on an international level. Rule 1(d) of the Collision Regulations confirms IMO's competence in this sphere.(51)

Rule 10 seeks to regulate the navigation of vessels within these schemes. No definition of a traffic separation scheme is provided in the Regulations themselves, but the term has been defined by IMO as "a scheme which separates traffic proceeding in opposite or nearly opposite directions by the use of a separation zone or line, traffic lanes or by other means."(52) In the Genimar, it was stated that

> "The purpose of the traffic separation scheme is to reduce the chances of risk of collision arising in waters where heavy concentrations of traffic proceeding in opposite directions are to be expected."(53)

Rule 10(b) requires vessels using traffic separation schemes to proceed in the appropriate lane in the general direction of the traffic flow, and to keep clear of a traffic separation line or zone. Rule 10(c) requires a vessel to avoid crossing lanes as far as is practicable, but if the vessel is obliged to do so, she shall cross as nearly as practicable at right angles to the general direction of traffic flow. Rule 10 includes a number of subrules relating to the entering and leaving or traffic separation schemes and general conduct therein.(54) Note that vessels are not obliged to make use of traffic separation schemes; Rule 10(h) requires vessels not using a scheme and therefore not subject to its special rules to avoid it by as wide a margin as possible.

Section II - Conduct of vessels in sight of one another

Rule 11 - Application

Rule 11 applies the rules of this section (Rules 11-18) to vessels in sight of one another. Rule 3(k) deems vessels to be in sight of one another only when one can be observed visually from the other. It has been held that "in sight ... means something which is visible if you take the trouble to keep a look-out".(55)

Rule 12 - Sailing Vessels

Rule 3(c) defines "sailing vessel" as any vessel under sail provided propelling machinery, if fitted, is not being used. The present Rule 12 is similar to Rule 17 of the 1960 rules.(56)

Rule 12(a) provides that when sailing vessels are approaching each other so as to involve risk of collision, one of them shall keep out of the way of the other as follows:

1. When each has the wind on a different side, the vessel which has the wind on the port side shall keep out of the way of the other; and

2. When both have the wind on the same side, the vessel which is to windward shall keep out of the way of the vessel which is leeward.

Rule 12(a)(iii) provides that if a vessel with the wind on the port side sees a vessel to windward and cannot determine with certainty whether the other vessel has the wind on the port or starboard side, she shall keep out of the way of the other.

One may be inclined to wonder what the significance of Rule 12 is in this day and age, since steam and motor vessels totally dominate the merchant fleets of the world: while it is so that sailing ships in merchant fleets have dwindled to insignificant proportions, their places have been taken by an ever growing number of yachts and similar craft. Rule 12 in fact follows the same basic principles contained in the International Yacht Racing Rules.(57)

Rule 13 - Overtaking

Rule 13(a) provides that notwithstanding anything contained in the rules of section II of Part B, any vessel overtaking any other shall keep out of the way of the vessel being overtaken.(58) In terms of Rule 13(b), a vessel is deemed to be overtaking when coming up with another vessel(59) from a direction more than 22,5 degrees abaft her beam, that is, in such a position with reference to the vessel she is overtaking, that at night she would be able to see only the sternlight of that vessel but neither of her sidelights. If the sidelights were visible, the vessels would be in a crossing situation.(60) A vessel cannot, however, be an overtaking vessel unless she is going faster than the vessel ahead.(61) Rule 13 continues to apply until all danger of collision is over, that is, until the overtaking vessel is past and clear.(62)

As is clearly stated in Rule 13(a), the stand-on privilege of the vessel being overtaken is not subject to any other rule. This is the only instance in which privilege based on a vessel's position is superior to the privilege based on status as conferred by Rule 18.(63)

Rule 13(c) provides that when a vessel is in any doubt as to whether she is overtaking another, she shall assume that this is the case and act accordingly; also, Rule 13(d)

provides that any subsequent alteration of the bearing between two vessels shall not make the overtaking vessel a crossing vessel or relieve her of the duty of keeping clear until she is finally past and clear.

A case which illustrates the overtaking rule as well as the crossing rule (Rule 15, below) is the Auriga. The Manuel Campos was sailing off the west coast of Spain on a course of 205°. Approaching from astern at full speed was the Auriga, at a closing speed of 2,5 knots and on a course of 212°. It was assumed that the Auriga was overtaking. Some time later the Auriga altered course to 181°, and the Auriga was now less than 2 points (22,5°) abaft the beam of the Manuel Campos, and at this stage there was a risk of collision if the course were maintained. The vessels drew ever closer until collision occured. Neither of the vessels had taken effective avoiding action.

It was argued for the Manuel Campos that since the Auriga was originally bearing more than 2 points abaft her beam, and was proceeding faster than her, she was an overtaking vessel as defined in Rule 24 of the 1960 Regulations (now Rule 13), and was therefore obliged to keep out of the way of the Manuel Campos. The fact that the bearing later altered so as to be less than 2 points abaft her beam made no difference, on account of the provisions of Rule 24(b) of the 1960 Regulations (now Rule 13(b)). It was held by Brandon, J., however that

> "The overtaking rules apply only when the relationship between the two ships concerned is such that risk of collision between them exists. In determining whether such risk exists 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 the one is gaining on the other, and the lateral distance at which the faster is shaping to pass the slower ship."(64)

It was held that, under the circumstances, there existed no risk of collision while the Auriga was more than 22.5° abaft the beam of the other ship and that the overtaking rule therefore did not apply at that stage. Only by the time that the bearing decreased so as to give rise to a crossing situation, did the risk of collision arise. The crossing rule therefore applied, notwithstanding the provisions of Rule 24(6) (old Regulations) or Rule 13(d) (new Regulations), and the Manuel Campos, having the Auriga on her starboard side, should have given way.

Note that although Rule 14 (head-on situation) and Rule 15 (crossing situation) are expressly stated to apply in the event of "risk of collision", no such term is used in Rule 13; nonetheless, it was held in the Auriga (and other cases), that Rule 13 is impliedly subject to the same limitation.

Rule 14 - Head-on Situation

Rule 14(a) provides that when two power-driven vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision, each shall alter her course to starboard so that each shall pass on the port side of the other. Several points should be noted here. The provision applies only to power-driven vessels.(65) Both of the vessels are to alter course to starboard in order to avoid each other. The phrase "so as to involve risk of collision" does not refer to an existing risk of collision, but to an earlier time when there will be a risk if nothing is done to avoid it.(66) The alteration of course must therefore be timely and sufficient to give safe clearance. The duty to alter course to starboard is not, however, absolute, and like all other rules, may be departed from if necessary to avoid danger.(67)

As in the case of overtaking vessels, a head-on situation is deemed to exist, by virtue of Rule 14(b), in this case when a vessel sees the other ahead or nearly ahead and by night she could see the masthead lights of the other in a straight line or nearly a straight line and/or both side-lights and by day she observes the corresponding aspect of the other vessel; also, Rule 14(c) provides that when a vessel is in any doubt as to whether such a situation exists, she should assume that it does and act accordingly.

Rule 15 - Crossing Situation

Rule 15 requires that when two power-driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of her way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel.(68) The action to avoid risk of collision should be carried out early and positively.(69) The duty to avoid crossing ahead of the other vessel is not, however, absolute, as it exists only "if the circumstances of the case admit". "Crossing" is not defined in the Regulations; however, Rule 15 seems to be applicable when "two vessels, not end on, are likely, if each keeps the course to be expected of her, to arrive at the same point at or nearly the same moment".(70) In the Sestriere it was held that for the crossing rules to apply, it was necessary that the stand-on ship should be on a clearly defined course, apparent to the other ship. In this case, the Sestriere was involved in a collision with the Alonso on the River Plate. Both vessels were outward bound from Buenos Aires, and both were manoeuvring to drop their pilots when the collision occurred shortly afterwards. It was stated by Brandon, J:

> "I am not satisfied that the Alonso ever settled on such a course. She was manoeuvring to drop

> her pilot and for this purpose was, it is true, proceeding slowly ahead on a northerly heading. On the other hand she was free to adjust her heading as necessary while performing the operation of dropping her pilot and was also free to change her heading as she might wish after doing so. In these circumstances I do not think she was on a sufficiently settled course to bring the crossing rules into operation."(71)

The crossing rule applies and "the conditions (of crossing) continue to subsist until the vessels have definitely passed out of the phase of crossing ships."(72) It will be appreciated that the crossing situation may in some instances verge on the head-on or overtaking situation, and the facts in such cases will have to be examined carefully in order to determine which rule applies.(73)

Rule 16 - Action by give-way vessel

Rules 12, 13, 14 and 15 require vessels, in certain circumstances, to alter course or give way to others. Rule 16 states that every such vessel shall, so far as possible, take early and substantial action to keep well clear. The action taken will depend on the circumstances, and may involve stopping, reversing, reducing speed or altering course, but whatever action is taken must be timely and substantial, so as to leave the stand-on vessel in no possible doubt as to what the give-way vessel is doing.(74) The action taken must conform to the requirements relating to the manner in which action is to be taken to avoid collision.(75)

Rule 17 - Action by Stand-on vessel

Just as give-way vessels are obliged to follow a certain course of action, so too are stand-on vessels.(76) Rule 17(a)(1) provides that where one of two vessels is to keep

out of the way, the other shall keep her course and speed. The term "course and speed" has been held to mean "course and speed in following the nautical manoeuvre in which, to the knowledge of the other vessel, the vessel is at the time engaged".(77) It is possible that an alteration in course or speed may be a necessary part of the manoeuvre in which the stand-on vessel is engaged.

Rule 17(a)(ii), however, provides that the stand-on vessel may take action to avoid collision by her manoeuvre alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with the rules. This rule allows the stand-on vessel to depart from the usual requirement in order to take early positive action to avoid collision, and is an innovation over previous rules. Rule 21 of the 1960 Regulations provided as follows:

> "Where by any of these Rules one of two vessels is to keep out of the way, the other shall keep her course and speed. When, from any cause, the latter vessel finds herself so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avert collision."

The dangerous results to which strict adherence to this old rule could lead were illustrated by the Auriga (above). In this case, it was said:

> "Rule 21 required the Auriga to keep to her course and speed until a late stage, which she did. The proviso to the rule, however, also required her, when a collision could no longer be averted by the action of the Manuel Campos alone, herself to take appropriate avoiding action. This she failed to do, her alterations of course to starboard being made too late to be effective."(78)

The new Rule 17(a)(ii) gives the stand-on ship the discretion to take avoiding action at a far earlier stage,

thereby improving the chances of avoiding a situation such as occurred in the Auriga.

Rule 17(b) provides that when, from any cause, the stand-on vessel finds herself so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avoid collision. This provision is merely a restatement of the old Rule 21, and it is doubtful if it covers any situation not dealt with by rule 17(a)(ii).

Rule 17(c) provides that a power-driven vessel which takes action in a crossing situation in accordance with Rule 17(a)(ii) to avoid collision with another power-driven vessel shall, if the circumstances of the case admit, not alter course to port for a vessel on her port side. The reason for this new provision is that if the give-way vessel does belatedly comply with Rule 15 and alter course to pass astern of the stand-on vessel, and the stand-on vessel altered course to port, the two vessels might in fact alter course towards one another.

Finally, Rule 17(d) states that Rule 17 does not relieve the give-way vessel of her obligation to keep out of the way.

Rule 18 - Responsibilities between vessels

Rule 18 establishes a hierarchy amongst vessels in terms of which certain classes of vessels have stand-on privilege over other vessels; the "pecking order" is established generally according to the ability of the respective classes of vessels to manoeuvre, and is set out in detail in the Rule.(79) Rule 18 applies except where Rules 9 (narrow channels), 10 (traffic separation schemes) and 13 (overtaking) otherwise require. Note that Rules 12, 13

and 15 confer privilege according to relative position; Rule 18, however, grants privilege according to status.(80) This detailed designation of privilege is an innovation over previous regulations.

Rule 19 - Conduct of Vessels in Restricted Visibility

Rule 19 applies to vessels not in sight of one another when navigating in or near an area of restricted visibility.(81) Note that the word "navigating" is used; the implication is that the rule will not apply to a vessel lying dead in the water, with her engines stopped.(82) Rule 19(b) enjoins every vessel to proceed at a safe speed, adapted to the prevailing circumstances and conditions of restricted visibility;(83) furthermore, a power-driven vessel is required to have her engines ready for immediate manoeuvre. Rule 19(c) provides that every vessel shall have due regard for the prevailing circumstances and conditions of restricted visibility when complying with the rules of Section 1 of Part B (i.e. Rules 4-10). Rule 19(d) states that a vessel which detects by radar alone the presence of another vessel shall determine if a close-quarters situation is developing and/or risk of collision exists. If so, such vessel shall take avoiding action in ample time, provided that the following courses of action shall so far as possible be avoided:

i. alteration of course to port for a vessel forward of the beam, other than for a vessel being overtaken;

ii. alteration of course towards a vessel which is abeam or abaft the beam.

The first of these two prohibitions preserves the principle contained in Recommendation 6 of the Annex to the 1960 Rules, which states that:

> "The direction of an alteration of course is a matter in which the mariner must be guided by the circumstances of the case. An alteration to starboard, particularly when vessels are approaching apparently on opposite or nearly opposite courses, is generally preferable to an alteration to port."

A situation analogous to one of those contemplated by Rule 19(d)(i) is covered by Rule 14 - the head on situation when vessels are in sight of one another.(84) In such a case, both vessels are to alter course to starboard. In a head-on situation contemplated by Rule 19(d)(i), the vessel detecting another by radar would usually alter course to starboard. Likewise, Rule 15 deals with crossing situations when vessels are in sight of each other; in such a case the vessel which has the other on her own starboard side shall keep out of the way. In an analogous situation covered by Rule 19(d)(i), i.e. crossing vessels when detection is by radar alone, a vessel detecting another vessel would keep out of the way by altering course to starboard or standing down so as to allow the other to pass ahead of her.(85) Note that whereas Rules 14 and 15 apply to power-driven vessels, Rule 19 applies to vessels of all kinds. Note further that Rule 19(d)(i) places the onus of taking avoiding action on the vessel which detects the other. Thus even in situations which are not analogous to those covered by Rules 14 and 15, the detecting vessel is obliged to act.

The rationale behind the second of these prohibitions is obvious: alteration of course towards a vessel abeam or abaft the beam may itself give rise to a close quarters situation or risk of collision vis-a-vis such vessel.

Note that neither of these prohibitions is absolute - it is merely provided that the courses of action stated therein should as far as possible be avoided.

Finally, Rule 19(e) provides that a vessel shall reduce speed to the minimum at which the course can be kept, and if necessary take all her way off, when she hears apparently forward of her beam the fog signal of another vessel, or if she cannot avoid a close-quarters situation with another vessel forward of her beam. This rule does not apply where it has been determined that a risk of collision does not exist.

Parts C and D - Lights and Shapes and Sound and Light Signals

It is not proposed to examine these Parts in any detail. Part C (Rules 20 to 31) prescribes the use of lights and shapes to be displayed by various categories of vessels, and under what circumstances they are to be displayed. Similarly, Part D (Rules 22 to 37) prescribes the use of signals in certain circumstances. It is interesting to note, however, that Rule 37 requires the use of signals prescribed in Annex IV of the Regulations by vessels in distress and requiring assistance; distress signals, strictly speaking, have no place in regulations aimed at preventing collisions at sea.

Part E - Exemptions

Part E provides for exemptions from the requirement of installation of certain lights and sound signal appliances, provided certain conditions are fulfilled.

The Annexes

Annex I deals with positioning and technical details of lights and shapes, Annex II with additional signals for fishing vessels, Annex III with technical details of sound signal appliances, and Annex IV with distress signals.

REFERENCES

1. As to what constitutes the precautions required by the "ordinary practice of seamen" see Marsden pp602 et seq.

2. 1913 NPD 396 at 407. The court referred to Articles 27 and 29 of the 1897 Regulations which correspond to the present Rule 2. See also Springbok Boating Co v South African Railways and Harbours 1945 AD 114.

3. Marsden p603

4. (1949) 82 Lloyd's Reports at 341

5. Referring to Article 29 of the 1910 Regulations, which was identical to Article 29 of the 1897 Regulations.

6. Van Niekerk p77

7. In the Hardwick Grange (1940) 67 Lloyd's Rep. 355 at 359 it was stated that "the Collision Regulations do not contain the whole wisdom of the sea, but whatever may be said about the regulations, they are the rules and the dictates of good seamanship".

8. (1865) 2 Mar. L. Cas. (O.S.) 239, cited in Marsden p93. See also Springbok Boating Co. v South African Railways and Harbours (above) esp. p126.

9. Mankabady p93

10. Marsden p585, van Niekerk p78

11. Mankabady p93; Marsden p585; see also The Jesmond and the Earl of Elgin (1871) L.R. 4 P.C. 1 and The Otto and the Thorsa (1894) A.C. 116.

12. Marsden p586

13. Per Dr Lushington, The Allan and the Flora (1866) 14 L.T. 860 at p861.

14. 5 ASP. 321 per Brett M.R. at p323

15. The Cleopatra (1857) SW 135; The Ericsson (1856) SW 38; The Duke of Sussex (1840) 1 W. Rob. 274; The Dumfries (1857) SW 63. See also Marsden p462.

16. Per Dr Lushington, in The Mangerton (1857) SW. 120 at p124.

17. Marsden p463

18. Per Dr Lushington, The Great Eastern (1865) 11 L.T. 5 at p6.

19. Mankabady p105

20. The Santander (1966) 2 Lloyd's Rep. 77

21. Mankabady p106; van Niekerk p78

22. See Mankabady pp255-263 for text of the Recommendation.

23. See Cockroft and Lameijer pp67-70 for a discussion of the dangers inherent in the rapid deceleration of a ship; these include damage to machinery, loss of rudder effect, and the tendency to veer off course.

24. See appendix. The rule states a number of factors that are to be taken into account by all vessels equipped with operational radar.

25. See Marsden p526 as to the meaning of moderate speed.

26. Van Niekerk p79. It is suggested that "moderate" does not necessarily include "safe", whereas "safe" does include "moderate".

27. (1928) A.M.C. 1504 cited in Mankabady p114

28. As is provided in Rule 4

29. The Sagacity and the Icemaid (1948) 81 Lloyd's Rep. 237 at p241.

30. (1973) 1 Lloyd's Rep. 63, per Brandon J. at p72

31. Van Niekerk p79

32. Van Niekerk p79

33. (1956) 2 Lloyd's Rep. 668 at p679

34. (1960) 2 Lloyd's Rep. 286 at p292

35. In terms of S.I. no.302 of 1976, all merchant vessels over 1 600 gross tons registered in the U.K. are required to carry radar (as from 1 April 1970). In the U.S.A., the idea that a radar-equipped vessel might be held to a higher degree of liability induced at least one shipowner to remove the radar equipment from all its vessels - see Jacobsen p1081. However, most categories of U.S. vessels are now also required, in terms of regulations made under the Ports and Waterways Safety Act 33 U.S.C. (1970), to carry radar.

36. (1967) 1 Lloyd's Rep. 67 at p102; see also Mankabady p120.

37. Mankabady p131

38. (1949) 82 Lloyd's Rep.877 at p881

39. Mankabady p138 note 2

40. See Marsden pp603 et seq. for the meaning of "good seamanship". Generally, mariners are required to apply ordinary skill and ordinary intelligence in order to avoid collisions, even if this means that the rules cannot literally be complied with.

41. The Kaiser Wilhelm der Grosse (1907) P. 259 at p263-4

42. The Wheatear (1920) 3 Lloyd's Rep. 229 at p230

43. See generally Marsden pp575 et seq. and the cases referred to therein; see also Springbok Boating Co. v South African Railways and Harbours 1945 AD 114.

44. Van Niekerk p81; The Sedgepool (above) at p678.

45. The Blue Bell (1895) P. 242 at p246

46. Van Niekerk p81

47. See Couper p310

48. c.f. Rule 1(b)

49. Marsden p581

50. For a detailed history of traffic separation schemes, see Beattie.

51. See IMO Resolution A 378(x) of 14 Movember 1977, "General Provisions on Ships' Routeing", which sets out the objectives of routeing, procedures and responsibilities, methods of establishing schemes, planning and use of schemes. The text of this resolution is reproduced in Singh (1) pp36-52.

52. IMO Resolution A. 284 (VIII)

53. (1977) 2 Lloyd's Rep. 17, per Brandon J. at p25

54. See appendix

55. The Lucille Bloomfield (1966) 2 Lloyd's Rep. 239 per Karminski J. at p245

56. The present rule differs from the 1960 rule only in the addition of subrule (9)(iii).

57. Mankabady p162

58. In J.T. Rennie and Sons v Minister of Railways and Harbours 1913 NPD 396, however, it was said: "This rule (referring to Article 24 of the 1897 Regulations, which corresponds to the present Rule 13(a)), however, is subject to the qualification that an overtaking vessel is entitled to carry out the nautical manoeuvre in which she is, to the knowledge of the other vessel, engaged" - per Carter, J. at p406.

59. In The Auriga (1977) 1 Lloyd's Rep. 384, Brandon, J. said: "The expression 'coming up with another vessel' appears to me to involve, in the ordinary and natural meaning of the words used, the concept of a certain degree of proximity between the two ships in either space or time or both, so that the navigation of each ship impinges, or may reasonably be expected to impinge, in the normal course of things, on the navigation of the other" (at p394).

60. Mankabady p164; Rule 21(b) defines "sidelights" as "a green light on the starboard side and a red light on the port side each showing an unbroken light over an area of the horizon of 112,5 degrees and so fixed as to show the light from right ahead to 22,5 degrees abaft the beam on its respective side".

61. The Franconia (1877) 2 P.D. 8 at p12. See also Marsden p570.

62. Mankabady p164; see also Rule 13(d)

63. Van Niekerk p83

64. The Auriga (above) at p393

65. "Power-driven vessel" is defined in Rule 3(b) as "any vessel propelled by machinery".

66. See the Beryl (above) and Mankabady p170

67. See for example Springbok Boating Co. v South African Railways and Harbours (above) esp. p126.

68. Mankabady at p172 suggests that a ship can keep clear by:

    i. altering course to starboard so as to pass astern of the other;

    ii. by reducing speed, allowing the other to cross ahead; or

    iii. by altering course to port and turning through some 360°.

69. Mankabady p172

70. Marsden p553

71. (1976) 1 Lloyd's Rep. 125 at p130

72. Orduna (owners) v Shipping Controller (1921) 1. A.C. 250, per Viscount Finlay.

73. See Mankabady pp186 and ff; see also the discussion of the Auriga (above).

74. Mankabady p190; see also The Billings Victory (above) and also The Auriga (above), in which it was stated at p395:

> "Such (avoiding) action should, moreover, have been ample, positive and in good time ...The easiest action for the Manuel Campos to have taken for this purpose would have been either a substantial alteration to port or a substantial reduction of speed. In fact, however, she failed altogether to take the kind of action which was required, her port wheel action at the last being far too late to be of any use".

75. See Rules 2 and 8

76. In a head-on situation, there will be no stand-on vessel, as both vessels are required by Rule 14 to alter course to starboard.

77. The Roanoke P. 231 per Lord Alverstone C.J.; see also J.T. Rennie and Sons v Minister of Railways and Harbours (above).

78. At p395. See also Mankabady p197.

79. See Appendix

80. See van Niekerk p86

81. The term "restricted visibility" means any condition in which visibility is restricted by fog, mist, falling snow, heavy rainstorms, sandstorms or any other similar causes (Rule 3(l)).

82. Mankabady p206. It follows that none of the provisions of Rule 19 apply to a stationary vessel. For example, the requirement contained in Rule 19(b) that "every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility" would not apply to such a vessel - in other words, the rule does not oblige a vessel to proceed at all. This proposition is, however, subject to the all-important

requirements of the "ordinary practice of seamen" (see Rule 2(a)), which may, for example dictate that a stationary vessel take avoiding action under certain circumstances. Mankabady states at p206, footnote 1, that "a vessel which stops in the water, e.g. in a busy traffic lane, would not necessarily be considered innocent if a collision followed".

83. See the discussion of "safe speed" above. Note that Rule 6(a)(i) in any event provides that the determination of a safe speed must take into account the state of visibility.

85. In terms of Rule 3(k), vessels are deemed to be in sight of one another only when one can be observed visually from the other.

85. cf note 68 above.

VII THE VIEW FROM THE BRIDGE

If the Collision Regulations are to succeed in their object of preventing collisions, they should reflect sound navigational practice; if this were not so, the actual practice of mariners might eventually supplant the rules, and the uniformity which they seek to impose would thereby be undermined. Of course, even the most perfect regulations would not lead to the total elimination of collisions; nonetheless, the ideal remains that the Collision Regulations should be of such a nature that adherence to them in all circumstances would result in collision avoidance in all cases. Related to this is the ideal that the Regulations should be clear enough so as to be easily understood, and so as not to be susceptible to any conflicting interpretations. The Regulations in their various manifestations have not been free from criticism in these respects, especially from mariners, and the present regulations are no exception. In the preceeding chapter, the Regulations were examined from the lawyer's point of view; it is the object of this chapter, on the other hand, to establish from the mariner's point of view the extent to which the Regulations meet the ideals stated above.

The 1960 Regulations, which the present regulations replace, were "assailed from one quarter to another almost from the time that they came into force",(1) partly on account of their failure to deal adequately with the use of radar.(2) Furthermore, there had taken place a number of technical developments which tended to render certain aspects of the Regulations obsolete; for example, the average top speed of vessels at the time that the 1960 Regulations were first conceived was approximately 10 knots; there was a smaller speed differential between vessels and a slower average rate of closing.(3) The 1960

Regulations did not take into account the advances that took place in these respects, and likewise did not take into account the over-riding advantage which speed and manoeuvrability confer on one vessel when keeping clear of another.(4) The result of these and other shortcomings was that there was "a general dissatisfaction amongst seafarers with the lack of guidance provided in the Rules".(5)

A series of interesting experiments which produced some startling results was conducted at the City of London Polytechnic to establish the problem encounters in which mariners tend to disregard the Rules and to establish the manoeuvre patterns which mariners tend to follow in resolving problem encounters.(6) Subjects of varying levels of experience were given a series of standardized encounters to resolve; each subject was required to manoeuvre one of two ships shown on the screen of a marine radar simulator. End-on and nearly end-on encounters were initially studied because most sea collisions are believed to have developed from initial situations of this class.(7)

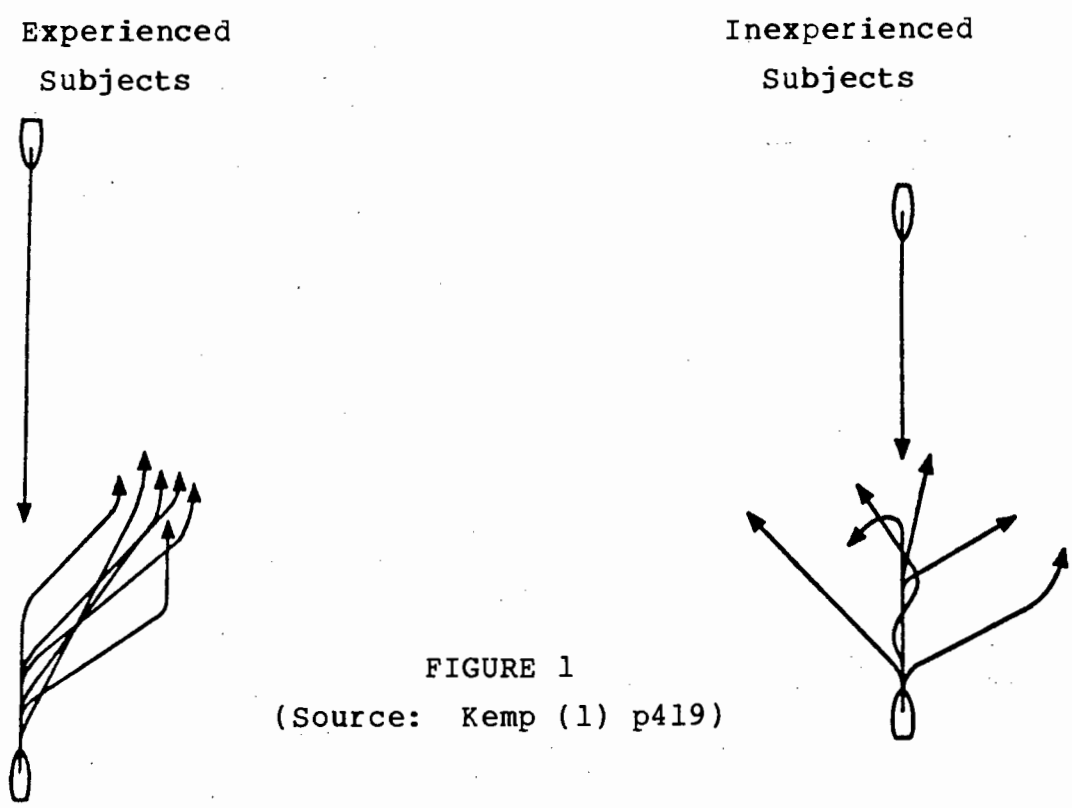

FIGURE 1
(Source: Kemp (1) p419)

In exactly end-on encounters, experienced mariners all altered course to starboard, showing great consistency in the final miss-distance. In similar situations, inexperienced subjects, i.e. non-mariners with no knowledge of the (1960) Collision Regulations, took unpredictable action with alterations to course either way (see fig. 1). It was concluded that the difference in behaviour could be ascribed to the experienced mariners' knowledge of the Collision Regulations, since there was no apparent difference between the actions of mariners with differing levels of experience provided the knew the Rules.(8)

In encounters between ships on reciprocal and parallel courses, but offset by 1 mile starboard to starboard, however, experienced mariners took inconsistent action approximately equally divided between alterations of course to port and alterations to starboard.

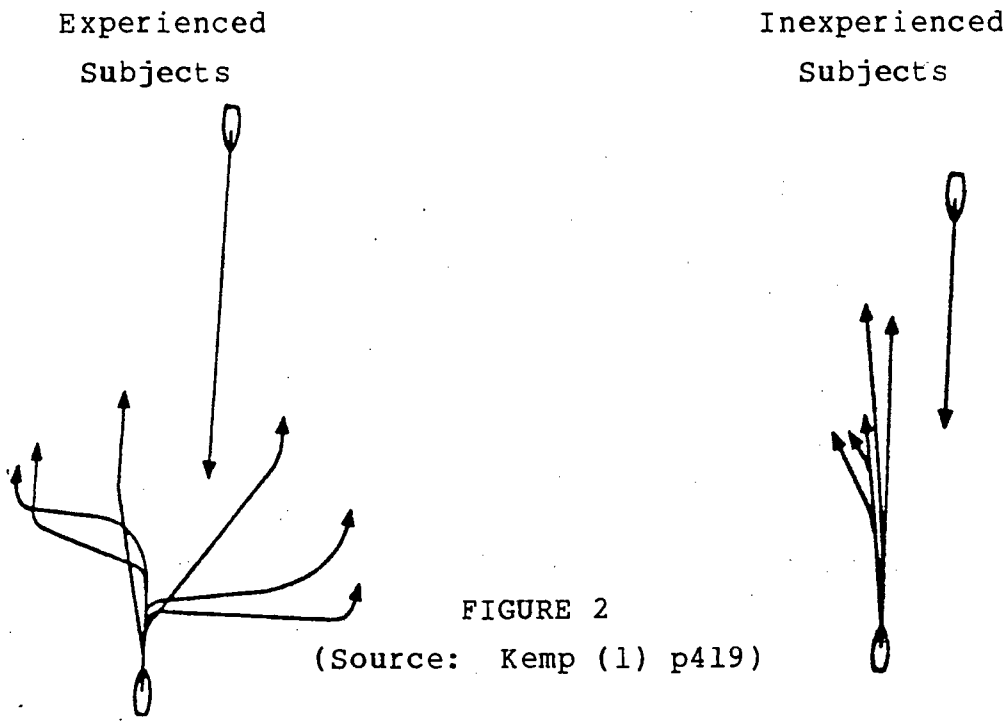

FIGURE 2
(Source: Kemp (1) p419)

In similar situations, inexperienced subjects consistently altered course to port or maintained course and speed (see fig. 2). Once again, it was concluded that the difference

in behaviour between the two groups could be ascribed to the mariners' knowledge of the Collision Regulations, and for this type of encounter, knowledge of the Regulations made disengagement more difficult.(9)

Experiments were also carried out to establish behaviour patterns in right-angled crossing from both the port side and the starboard side. For threats from the starboard side, experienced subjects altered course to starboard to pass astern of the vessel they were avoiding. Inexperienced subjects took similar action, but a minority showed a preference for increasing speed to pass ahead of the other vessel (fig. 3). It was concluded that the requirements of the rules coincided with what is generally regarded as the natural reaction to the situation.(10)

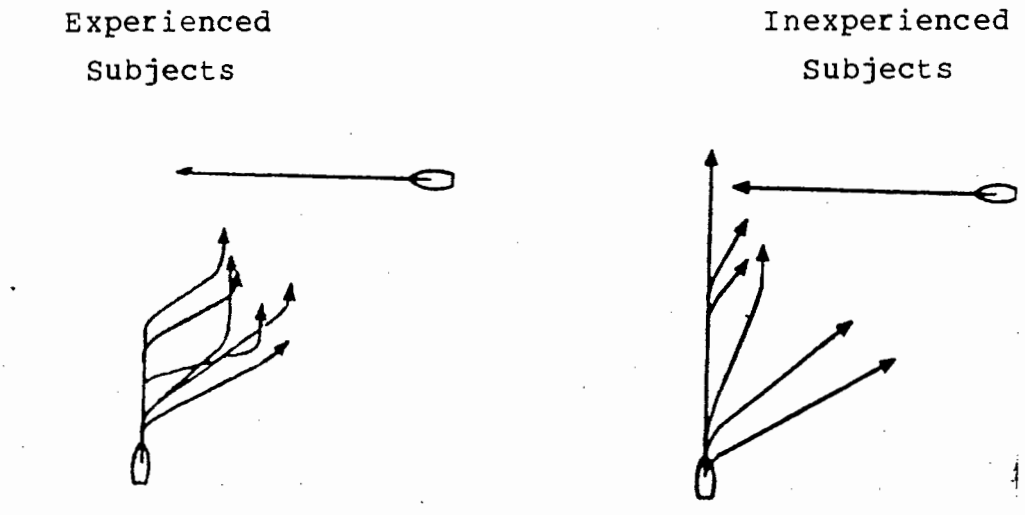

FIGURE 3
(Source: Kemp (1) p421)

For threats from the port side, experienced mariners took unpredictable action whilst inexperienced subjects generally altered course to pass astern of the threat, but again a minority preferred to increase speed so as to pass ahead

of the other vessel (fig. 4). It was concluded that for this type of encounter, a knowledge of the Collision Regulations apparently caused a more confused situation than if there were no rules.(11)

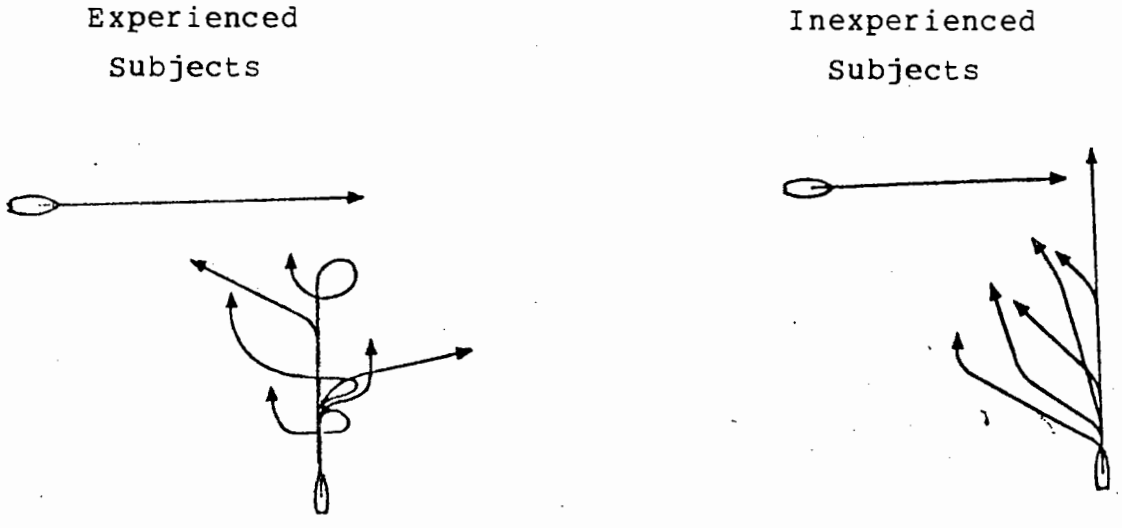

FIGURE 4
(Source: Kemp (1) p421)

The result of these experiments should not be taken as proof that the regulations are largely ineffectual in promoting safety at sea; they do, however, serve to underline the grave concerns that were expressed in this regard.

It appears that the critics of the 1960 Regulations were divided into three camps: those who felt that only minor adjustment was required, taking into account recent advances; those who wanted the rules re-written and re-ordered in the interest of logic and clarity, but nonetheless wanted to retain the basic principles; and those who wanted a reconsideration of the fundamental basis for the rules and whose views were usually founded

on mathematical studies of collision avoidance.[12] This last school of thought supported (at least in part) the interesting proposals put forward by one E.S. Calvert,[13] which sought to formulate anti-collision manoeuvres on a rigorous logical basis for craft moving on a plane; the approach merits some discussion here. The concept was based on a rotation of the sight line (the imaginary line joining two craft); each vessel would, when proceeding in such directions as to involve risk of collision, be required to manoeuvre in such a way that if the other stood on, an anticlockwise rotation of the sight-line would result. Examples of how this principle would operate are as follows:

- a vessel that has another forward of her beam keeps out of the way by altering course to starboard;

- a vessel that has another to starboard keeps out of the way by reducing speed;

- a vessel which has another vessel to port may increase her speed to keep out of the way but shall not alter course to port.[14]

It was recognized even by supporters of this approach, however, that it could at most be a contribution to the solution to the problem, and not the final answer.[15]

Criticisms levelled against the 1960 Regulations included the following: they were based on collision avoidance responsibility rather than collision avoidance action; also, that responsibility was placed on a single vessel (except in the case of an end-on situation) rather than both or all the vessels in a potential collision situation, thereby failing to utilise all the available resources for avoiding a collision. Further criticism was levelled at

the organization of the rules, and their failure to take into account technical advances.(16)

The difference of opinion amongst experts as to how revision of the Regulations should be approached was considerable;(17) even so, it did not take long for a new set of Regulations to be produced at the Revision Conference held in London in 1972. The delegates had before them IMO's own proposals for a new set of Regulations, and after a brief period of deliberation, the conference produced a new set of Regulations which followed the general form of IMO's proposals.(18)

As was the case with the 1960 Regulations, the 1972 Regulations had scarely been formulated when they were subjected to criticism, some of the most severe of which came from the Old Guard in the maritime fraternity. The criticism from this quarter revolve largely around inconsistencies, ambiguities and redundancies in the text which could give rise to difficulties in interpretation and thus compound the difficulties found by a mariner when he finds himself in a collision situation.(19) Amongst these criticisms is the suggestion that the 1972 Regulations are too prolix when compared with the the simpler texts of previous regulations, with the result that they are more difficult to remember and understand. Furthermore, there are inconsistencies between the two authoritative texts (i.e. English and French). As far as specific rules are concerned, it has been said, for example, that Rule 16 (Action by give-way vessel) adds nothing that is not provided for in Rule 8 (Action to avoid collision), and that this gives rise to redundancies in the text; furthermore, the effect of Rule 17(a)(i) (Action by stand-on vessel), which requires the stand-on vessel to maintain course and speed, is virtually cancelled by Rule 17(a)(ii), which permits such a vessel to take avoiding action as

soon as it becomes apparent that the give-way vessel is not taking appropriate action.(20)

Most of the new Steering and Sailing Rules are similarly criticised by their detractors, and in turn, these criticisms have largely been rebutted.(21) Whatever the merits of the various arguments, the very fact that there is a dispute about the meaning of the regulations indicates that they are subject to different interpretations. It must be remembered that the Regulations are to be applied in the first instance by mariners, often in the heat of the moment, and are not interpreted by them with the benefit of hindsight, as might be done in a courtroom. This is clearly unsatisfactory and indeed dangerous, since rules for preventing collision are of use only as long as they are understood and observed in a uniform fashion by all concerned.

It must be pointed out, however, that not all comment on the 1972 Regulations has been negative. One of the obvious features of the Regulations is that, unlike their predecessors, they have been set out in a logical order, and give priority to the Steering and Sailing Rules, which constitute the most important element of the Regulations. Furthermore, they accommodate technical developments, include rules for radar and traffic separation schemes, make provision for vessels of limited manoeuvrability, replace the concept of "moderate speed" with that of "safe speed"; and establish higher standards for light and sound signals. Some of these innovations call for comment.

Rule 6 requires vessels to proceed at all times at a safe speed "so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailong circumstances and conditions". Rule 16 of the 1960 Regulations, on the other hand, required vessels

in conditions of restricted visibility to "go at a moderate speed having careful regard to the existing circumstances and conditions". Over the years several attempts were made to define the term "moderate speed" in the context of the Rule; all attempts failed, and this is not surprising, since "moderate speed" depends on many variable factors.(22) Although the term "safe speed" is also not subject to precise definition, it is a vast improvement; furthermore, the rule requires a vessel to proceed at a safe speed "so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions; this requirement does establish a standard of sorts for determining a safe speed. Furthermore, Rule 6 applies (by virtue of Rule 4) in all conditions of visibility.

Rule 7(b) requires vessels to make proper use of radar equipment if fitted and operational. As was mentioned in the preceding chapter, the 1960 Rules regulated the use of radar only by means of an annex containing a set of recommendations; these recommendations referred directly to the use of radar only in cases of restricted visibility. The present Regulations accord greater priority to the use of radar; the vast majority of ocean-going vessels are today fitted with radar, and if properly used, this equipment is of great value as an aid to safe navigation. The fact that the 1972 Regulations impose a positive obligation to make proper use of radar equipment in all conditions of visibility is, once again, a great improvement.

Another innovation in the 1972 Regulations is the provision made in Rule 10 for traffic separation schemes; the duties of ships using these schemes were discussed in the preceding chapter; it is sufficient at this stage to note that traffic separation schemes have made a significant contribution to collision prevention - indeed, collisions

in the English Channel and southern North Sea, where schemes have been in operation for some time, fell from an alarming 116 incidents in the period 1957-61 to 17 in 1972-76. The fact that Rule 10 imposes a standard of conduct for traffic using separation schemes can only contribute to their effectiveness.

Rule 18 describes the responsibilities between vessels of different status. It is interesting to note that this rule recognized developments in marine technology by granting stand-on privilege to vessels engaged in laying, servicing or pitching up a navigation mark, submarine cable or pipeline, and vessels in dredging, surveying or underwater operations; furthermore, a degree of privilege is conferred on vessels constrained by their draught, such as large oil tankers.(23)

The above are but a few examples of improvements incorporated in the 1972 Regulations, but a general comparison with earlier regulations indicates that the present regulations are, notwithstanding the criticisms levelled against them, considerably superior to anything that has gone before them.

Despite the changes made to the Regulations, they remain much the same on matters of substance: for example, the stand-on principle remains a cornerstone of the rules; also, the action to be taken to avoid collision is still set out in fairly general terms;(24) many of the rules in the 1960 Regulations are repeated in the 1972 Regulations in the same, or nearly the same, form.

Although the 1972 Regulations have largely corrected the technical deficiencies that were obvious in the 1960 Regulations, they have not gone so far as to meet the furthest criticisms levelled against the old Regulations,

and do not incorporate the more radical suggestions. Thus, for example, the "anti-clockwise" system proposed by Calvert (discussed briefly above) received no recognition at all in the 1972 Regulations; likewise, the concept of single-vessel responsibility still prevails, with the exceptions of head-on situations. The basic concepts which were tested in the City of London Polytechnic experiment discussed above still apply today. The somewhat conservative approach to matters of substance can largely be ascribed to the significant divisions between the various schools of thought; as a result of these divisions, the 1972 Regulations represent a compromise. Perhaps it is as well that no radical developments have taken place at this stage: any set of Regulations that is produced has to serve the maritime community for many years before it is likely to be revised;(25) the root causes of collisions are not yet perfectly understood,(26) and development of the regulations should therefore proceed cautiously and at all times reflect the prevailing needs and capabilities of mariners. There is no doubt that there is yet room for improvement; the future will show how deficiencies are met. In the meantime, the position is governed by the 1972 Regulations, and until such time as they are revised, the interest of safety are best served by observance thereof by mariners.

REFERENCES

1. Warbrick p139

2. It will be remembered that radar was dealt with only in an annex to the Regulations, which set out recommendations for its use.

3. Richey p449

4. Richey p449

5. Garcia-Frias p71

6. See Kemp (1) pp417 and ff. for a full description of the experiment.

7. Kemp (1) p418

8. Kemp (1) p419

9. Kemp (1) p420

10. Kemp (1) p421

11. Kemp (1) p422

12. Warbrick p139

13. See Calvert (1) pp127 and ff.

14. See generally, Thompson

15. Richey p450; see also Cockroft (1) p259 for a discussion of the disadvantages of the "anti-clockwise" system.

16. Warbrick p139

17. See for example Richey p451 on the divisions within the Collision Regulations Working Party of the Royal Institute of Navigation.

18. Warbrick p139

19. One of the most vehement critics in this regard is Wylie; see also Hopkins.

20. Under Rule 21 of the 1960 Regulations, the stand-on vessel had to wait until the other vessel was so close that "collision (could) not be avoided by the action of the give-way vessel alone".

21. See Hugon

22. Harley p179

23. In regard to vessels constrained by their draught, see generally Couper.

24. Warbrick p139

25. Article VI of the Collision Regulations Convention does provide for a relatively simple procedure for amending the rules; however, bearing in mind the far-reaching nature of the changes that might be contemplated, it is unlikely that this procedure will speed up a radical revision of the rules.

26. Warbrick p140

VIII CONSEQUENCES OF NON-OBSERVANCE OF THE REGULATIONS

Under this heading, the consequences of non-observance of the Regulations in both public and private law will be considered. The public law aspect revolves around the enforcement of the regulations and the penalties applicable in the event of non-observance; the private law aspect relates to the role of the Regulations in the determination of civil liability arising out of collisions.

Enforcement and Penalties

Although the Collision Regulations are usually considered in the context of civil cases, it must be remembered that their primary function is to prevent collision occurring in the first place, and not to serve as a yardstick for determining liability in private law. In order for the Regulations to be effective as a preventative measure, it is clear that they should be linked to some form of sanction enforceable by the appropriate authorities; furthermore, it follows that in order to achieve regular compliance with the Regulations, such sanction should be applicable even if breach of the regulations does not result in actual collision and damage. In this context, the Collision Regulations fall foursquare in the realm of public law of the state having jurisdiction. The means available to the authorities of the United Kingdom and of South Africa to enforce the regulations, assuming that jurisdiction exists in a particular case, will therefore be considered.

The Merchant Shipping Acts of both the United Kingdom and South Africa attach criminal sanctions to non-compliance with the Collision Regulations. Section 419 of the U.K. Act provides as follows:

"1. All owners[1] and masters of ships shall obey the Collision Regulations, and shall not carry or exhibit any other lights, or use any other fog signals, than such as are required by those regulations.

2. If infringement of the Collision Regulations is caused by the wilful default of the master or owner of the ship, that master or owner shall, in respect of each offence, be guilty of a misdemeanour."

Section 680(1)(a) of the Act provides that:

> "An offence under this Act declared to be a misdemeanour shall be punishable by a fine or by imprisonment not exceeding two years, with or without hard labour, but may, instead of being prosecuted as a misdemeanour, be prosecuted summarily in the manner provided by the Summary Jurisdiction Acts, and if so prosecuted shall be punishable only with imprisonment for a term not exceeding six months, with or without hard labour, or with a fine not exceeding one hundred pounds."

Section 313(3) of the S.A. Act provides as follows:

> "Every person who ... being the master of a ship to which any provision of the Collision Regulations applies, without reasonable cause contravenes or fails to comply with that provision, shall on conviction be liable to a fine not exceeding R2 000,00 or imprisonment for a period not exceeding two years, or both such fine and imprisonment."

Certain differences between the provisions of the two Acts are apparent: the U.K. Act enjoins both owners and masters to obey the Collision Regulations; the South African Act applies in this regard only to masters. Secondly, the U.K. Act imposes criminal liability if an infringement is caused by the "wilful default" of the owner or master of the ship; the South African Act, on the other hand, imposes liability if the regulations are contravened "without reasonable cause". Nonetheless, it is submitted that the term "wilful default" does not imply deliberate or intentional conduct, but merely voluntary conduct that is

subject to human control;[2] therefore, liability may attach even if there is mere negligence on the part of the person concerned. The term "without reasonable cause" in the South African Merchant Shipping Act clearly contemplates an objective standard.[3] The result is that in both the United Kingdom and South Africa, negligence is sufficient for criminal liability to attach.

In both the United Kingdom and South Africa, there are essentially two methods of enforcing the Regulations. The first is by means of the normal criminal trial procedure on a charge formulated in terms of the above enactments; this requires no further elaboration. The second is by means of what, for the sake of convenience, may be referred to as a Shipping Tribunal. Section 52 of the U.K. Merchant Shipping Act 1970[4] provides that the Secretary of State for Trade may cause an inquiry to be held if it appears inter alia that an officer is unfit to discharge his duties, whether by reason of incompetence or misconduct or for any other reason, or has been seriously negligent in the discharge of his duties. The person conducting the inquiry may cancel or suspend any certificate issued to the officer or censure him. Furthermore, the Secretary of State for Trade may in terms of Sectio 55 cause a preliminary inquiry and/or a formal investigation[5] to be held in the event of the loss, presumed loss, stranding, grounding, abandonment or damage to a ship, or loss of life caused by fire on board, or by any accident to, a ship or a ship's boat, or any damage caused by a ship. In the event of it being found that the casualty was caused by or contributed to by the unfitness of an officer to discharge his duties or serious negligence on his part, the licence or certificate of such officer may likewise be cancelled or suspended.

Section 264 of the S.A. Merchant Shipping Act provides that the Director-General of Transport Affairs may appoint any

competent person to hold a preliminary inquiry whenever an allegation of incompetency or misconduct is made against the master or any of the officers of a ship which is licensed or registered in the Republic, or if such ship has been lost, abandoned, or stranded, or has been damaged or has caused damage to any other ship, or loss of life or inquiry to any person on board a ship has occurred.(6)

Whether or not a preliminary inquiry is conducted, the Minister of Transport Affairs may in terms of Section 266 convene a Court of Marine Enquiry to hold a formal investigation into such allegation or event as is referred to in Section 264.(7) If a Court of Marine Enquiry finds that any master or ship's officer is incompetent or has been guilty of an act of misconduct, or that any of the incidents referred to in Section 264 was caused by the wrongful act or default of such person, it may in terms of Section 269 cancel the certificate of service of the person or suspend it, or prohibit his employment in any stated capacity in a ship for a stated period, or reprimand him. Section 269 applies only in respect of masters or officers of ships registered or licensed in the Republic, or of ships wholly engaged in plying between ports of the Republic; a Court of Marine Enquiry may, however, order its findings to be transmitted to the authorities of the flag state of a ship not belonging to any of the above categories.(8)

A master or officer need not be specifically indicted before being found guilty of any of the acts contemplated above. In re SS Sceptre(9) it was held that:

> "... a finding may be arrived at not only on a definite arraignment of the master on a charge of incompetency or misconduct, but also as a consequence of an investigation into the loss or abandonment of a ship. In other words ... investigation into the loss of a ship may at some stage mature into an inquiry as to the conduct of the master ... and in such an investigation a finding may be adverse to the master in that respect."

Non-compliance with the Collision Regulations clearly falls within the scope of the shipping tribunals of both the United Kingdom and South Africa, whether or not a collision actually occurred.

Mention should also be made of a further provision of the S.A. Act, namely, Section 354, in terms of which the Director-General of Transport Affairs may in effect impose an admission of guilt fine on a person for the contravention of any provision of the Act, or failure to comply with any provision with which it was that person's duty to comply.(10)

The Regulations in Private Law

The relevance of the Collision Regulations in private law, i.e., their role in the determination of civil liability, is best appreciated by approaching the matter from a historical point of view. Various enactments in the United Kingdom severely limited the right of shipowners to recover damages in the event of non-compliance by their vessels with the Regulations. The Steam Navigation Act of 1846,(11) in terms of which the Admiralty Regulations as to lights were promulgated, provided that the owner of a vessel in breach of the regulations in rivers or narrow channels, or in the sea within 20 miles of Great Britain, would not be entitled to recover any damages in consequence of any other vessel colliding with her at night. This Act did not alter the rights and liabilities of shipowners in other respects.(12)

The Steam Navigation Act of 1851(13) took the matter further. It provided, in effect, that if a collision was occasioned by the non-observance of any of the rules as to lights or navigation contained in or made under the Act, the owner of the ship by which the rule was infringed should

recover no damages for injury to his ship, unless it was proved that departure from the rule was necessary. The Merchant Shipping Act of 1854[14] contained a provision (in Section 298) to the same effect. The harshness of this provision was, however, mitigated by the decision in Tuff v Warman,[15] in which it was held that if the defendant ship could by reasonable care have avoided the collision, the plaintiff could still recover, even though his ship had not observed the regulations, since the collision was not occasioned by his non-observance of the rule.

A further development took place in the form of the Merchant Shipping Act Amendment Act of 1862.[16] Section 298 was repealed and in its place Section 29 of the 1862 Act provided 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 rules necessary."

The doctrine set out in Tuff v Warman still applied, however, and the presumption of fault under Section 29 arose only when it was proved that the collision had been occasioned by the infringement.[17]

The final steps in the development of this statutory presumption of fault came with Section 17 of the Merchant Shipping Act of 1873,[18] which was in turn re-enacted in Section 419(4) of the Merchant Shipping Act of 1894. This latter enactment provided as follows:

> "Where, in a case of collision, it is proved to the Court before which the case is tried that any of the Collision Regulations have been in-

> fringed, the ship by which the regulations have 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 departure from the regulations necessary."

The provision has several effects. In the first place, the doctrine in Tuff v Warman was eliminated, since it was no longer necessary to show that the collision had been occasioned by non-observance of the regulations. Secondly, the courts could adjudicate upon collision cases without the necessity of determining upon conflicting evidence the question of fact whether or not infringement of a regulation that might possibly have contributed to the collision, did, in fact contribute to it. Thirdly, the effect was, of course, to make the regulations generally more stringent.(19)

The provision was, however, mitigated in so far as the term "any of the Collision Regulations" was not construed literally; the courts held that the section would be brought into operation only in the event of the infringement of a regulation "which was in the circumstances applicable".(20) Nonetheless, when the infringement of such a regulation was proved, the penalty was strictly enforced.(21)

The effect of "this arbitrary rule"(22) was that the courts were required to hold a ship at fault for a collision even though no negligence in the ordinary sense was proved; indeed, a ship could be held liable not only where negligence was not proved, but also did not exist, and where those in charge of the ship were, as regards negligence, absolutely free from blame. Evidence to show that the infringement did not in fact contribute to the collision was excluded; in order to escape liability, it had to be shown that departure from the rules could not possibly have contributed to the collision.(23)

The provision was clearly unsatisfactory, and it was perhaps inevitable that it would eventually be abolished; this was done by the Maritime Conventions Act of 1911,(24) the effect of which was to restore the requirement of proving fault. Thus it is now once again necessary to prove that the non-observance of a regulation was the cause or part of the cause of a collision or of the damage resulting from the collision, as it had been before 1873.(25)

There remains, however, in both the U.K. Act (Section 419(3)) and the S.A. Act (Section 347) a further statutory provision relating to the Collision Regulations. The wording in both enactments is identical:

> "If any damage to person or property arises from the non-observance by any ship of any of the Collision Regulations, the damage shall be deemed to have been caused by the wilful default of the person in charge of the deck of the ship at the time, unless it is proved that the circumstances of the case made a departure from the regulations necessary."

It has been suggested that the purpose of this section is not clear.(26) It is probable, however, that even once it is proved by the plaintiff that the defendant ship failed to observe the regulations and that the damage arose from such non-observance, the provision was not intended to create some statutory presumption of fault in respect of the defendant ship; at most it creates a presumption as to the identity of the actor, i.e. the actual wrongdoer who may be held personally liable as opposed to the shipowner who may still be held vicariously liable.(27) It has been stated that the term "wilful" does not imply deliberate or intentional conduct, but rather merely voluntary conduct which at the time of its occurrence was subject to control by the actor's will.(28)

The true importance of the Collision Regulations in relation

to the question of civil liability is, however, not to be found in the context of statutory provisions, but rather in the standards of good seamanship that they lay down. It is the duty of those in charge of vessels to observe rules laid down for the public safety, and if they do not, "they will be guilty of unseamanlike conduct and the owners will be responsible for the consequences that may result from their disobedience".(29) In the absence of a lawful excuse, disobedience to the regulations is, generally speaking, evidence of negligence. The regulations are evidence of what a vessel's duty is under the circumstances, and if it should appear that a vessel, by breach of any one of them, has occasioned or contributed to a collision, such a breach "would afford the very strongest reason for holding that a vessel has been guilty of a breach of duty and was to blame for the collision".(30)

When considering the consequences of non-observance of the Regulations in the context of public law and private law, one may be inclined to wonder which of the two branches of the law provides the more effective means of ensuring compliance with them. The criminal sanctions that are at present applicable in both the United Kingdom and South Africa are not particularly severe, and it may be doubted that they have the necessary effect of deterring delinquent mariners from contravening the regulations; similar considerations apply to the Shipping Tribunals. On the other hand, although private law gives rise to rights and duties between individuals, and functions primarily to regulate relations between individuals, it can be harnessed to supplement the machinery of public law for the purpose of enforcing certain standards; this notion was recognized and taken to its extreme in the form of the statutory presumption of fault which prevailed from 1873 to 1911. Although this rule was plainly unrealistic, it did have some merit in that it recognized that mariners and ship-

owners would be more inclined to obey the regulations if a penalty - far more severe than that provided for by criminal law - might attach in the form of damages in the event of non-compliance.(31) The fact that the Collision Regulations are still used as a standard of good seamanship in private law, perpetuates this notion; as long as the conduct of mariners is measured against the standard provided by the regulations, private law will remain a potent means of indirect enforcement.(32)

This is not to suggest that public law should assume a secondary role; on the contrary, it remains the primary means of enforcement, and in fact provides the only solution in the event of non-compliance with the regulations which does not result in collision and damage, and it will be appreciated that sanctions are necessary in such a case if the Regulations are to be effective. It is the combination of the machinery of both private and public law, however, which best assures adherence to the regulations.

REFERENCES

1. The extent of the shipowner's obligation to observe the Collision Regulations was considered in The Lady Gwendolyn (1965) 1 Lloyd's Rep. 335:

> "In their capacity as shipowners they must be judged by the standard of conduct of the ordinary reasonable shipowner in the management and control of a vessel or a fleet of vessels. 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." - per Sellers L.J. at 339.

2. See van Niekerk p91, note 366.

3. As to when "reasonable cause" exists, guidance may be sought from rule 2(b) (see chapter VI above).

4. 1970 C 27.

5. In England, Wales and Northern Ireland the formal investigation is presided over by a Wreck Commissioner, and in Scotland, by the Sheriff.

6. Subsection 2 empowers the Director-General also to appoint a person to hold an inquiry into incompetency or misconduct if the ship, although licensed in another country, is wholly engaged in plying between ports in the Republic, or if the incident occurred in a port in the Republic or near the coasts of the Republic.

7. See Bamford pp151-154 for a discussion of Courts of Marine Inquiry, and the procedure that is followed by them. See also pp359 et seq for summaries of findings of Courts of Marine Enquiry, especially those relating to collision.

8. See Bamford p153. Note that a Maritime Court may in terms of Section 270 be convened outside the Republic to investigate certain allegations or incidents. The powers of a Maritime Court are similar, but not identical, to those of a Court of Marine Enquiry.

9. 1925 E.D.L. 267 at 273

10. No legal proceedings are involved; the Director-General is merely obliged to conduct such investigations as he deems necessary. The penalty may not exceed the maximum fine which could have been imposed by a court upon conviction; in the case of contravention of the Collision Regulations, this would be a maximum of R2 000.

11. 9 and 10 Vict. C.100

12. See generally Marsden p426

13. 14 and 15 Vict. C.79

14. 17 and 18 Vict. C.104

15. (1857) 2 C.B. (N.S.) 740; affirmed (1858) 5 C.B. (N.S.) 573. See in this regard Marsden p428.

16. 25 and 26 Vict. C.63

17. See Marsden p430

18. 36 and 37 Vict. C.85

19. Marsden p432

20. The Voorwaarts and the Khedive (1880) 5 App. Cas. 876 at 907

21. The Voorwaarts and the Khedive (above); Marsden pp434-435

22. Marsden p434

23. The Englishman (1877) 3 P.D. 18. See also Marsden p433.

24. 1 and 3 Geo. 5 C.57

25. Today the U.S.A. is virtually alone amongst maritime nations in that a presumption of negligence applies, although not in terms of a statute, but by virtue of the doctrine in the Pennsylvania 86 U.S. (19 Wall) 125 (1873). This rule places upon a vessel violating a statute the burden of establishing that its omission could not have contributed to the casualty. See in this regard Griffin pp41 et seq and Owen pp796 et seq.

26. Van Niekerk p91

27. Van Niekerk p91; Marsden pp54-55; Temperley p112 note 41.

28. Van Niekerk p91 esp. note 366

29. Per Dr Lushington in the Duke of Sussex (1841) 1 W. Rob. 274 at 275; see also Marsden p469.

30. Marsden p470

31. For a discussion of the role of private law as a means of regulation in the maritime sphere, see Wiswall.

32. A further indirect (and informal) means of enforcement is to be found in the so-called "insurance sanction": the tendency amongst marine insurers is to assess the risk not only on past safety record, but also in the light of compliance with safety standards. See in this regard Warbrick p149.

IX CONCLUSION

The 1972 Collision Regulations came into force ten years ago, and they represent the latest stage in a process which began more than two centuries ago when Lord Howe produced his signal book containing the first positive rule of the Road at Sea. Since then, the regulations have undergone many changes designed to meet the realities of contemporary navigation; yet collisions still occur.

One may be inclined to doubt whether the efforts aimed at regulating navigation in this regard have been successful. In almost all the Collision cases in which judgments have been given, at least one of the two ships involved has been found to have contravened the regulations. However, the Regulations in their latter-day manifestations have been very complex, and the 1972 Regulations are no exception; the result of the complexity is that whatever the circumstances of the collision, some contravention can almost always be discovered. Furthermore, the fact that the Regulations are disobeyed may sometimes be because they conflict with what mariners consider to be the best and most expedient action in certain situations.(1)

It has been said that the importance of the Regulations is that they are intended as a guide to mariners, to establish common standards as to lights and signals and to achieve some degree of predictability of manoeuvring in collision situation.(2) Even if the Regulations are correctly described as being merely a guide, they nonetheless constitute a guide of uncommon importance, and it follows that every endeavour should be made to develop Regulations which will not only result in uniformity of practice, but which are also realistic and which apply the most appropriate principles of collision avoidance. There is clearly scope for development in this regard.

Regulations are of little value if they are not uniformly applied. It is essential, therefore, that mariners have a sound knowledge of the regulations and know how to apply them in practice. This requirement calls for the co-operation of the authorities of all states to ensure that all mariners who are certified by them are properly trained and conversant with the Regulations. The role of the authorities does not end here, however, for it is up to them to ensure that there is regular compliance with the regulations; this can be done by making use of the mechanism provided by municipal law to bring criminal proceedings or institute disciplinary action in the event of non-compliance. Effective enforcement does, however, presuppose effective policing of the seas, and it remains to be seen whether states are prepared to carry out this function.

Furthermore, the effectiveness of the Regulations depends to some extent on the attitude of the shipping industry. A merchant ship is built and operated for the sole purpose of earning money for her owners. If safety becomes too expensive (for example, because a ship is required to carry expensive navigation aids, or is required to travel at an unprofitably low speed) she will at some point cease to earn, whereupon her owners will dispose of her. Nonetheless, the vast majority of ocean-going ships are equipped with a wide variety of navigational equipment, and shipowners are no doubt aware of the severe consequences that can result from imprudent navigational practices; it is assumed that they will encourage observance of the regulations.(3)

Observance of the Collision Regulations does, however, depend ultimately on the mariner. Even if he is fully conversant with the regulations, and is aware of the possible consequences of failure to obey them, he may, for any of a

number of reasons, be disinclined to do so; in such a case, the Regulations are of no value whatsoever.

It follows that the Collision Regulations cannot stand on their own; they are but one of a number of elements that must be present before there can be any thought of effective collision prevention. However, even if the impossible were achieved, that is, if the perfect set of Regulations were meticulously observed by expert mariners in superbly equipped ships, collisions would still occur; that much is certain. This is not to suggest that any effort to prevent collisions would be futile; on the contrary, there can be little doubt that the Collision Regulations have made a vast contribution to safety at sea; it is not difficult to imagine the chaos that would ensue if there were no form of regulation. It must be remembered, though, that the science of collision prevention is an ongoing process that involves continuous development and refinement and even as this process continues, it is perhaps wise always to keep in mind the thoughts of an old salt who opined:

> "If vessels should be very near each other, though it may be a perfectly dead calm, and the sea as smooth as glass, and even vessels broadside to each other, still, experience teaches us that the two vessels will gradually approach each other, until collision takes place."(4)

REFERENCES

1. Kemp (1) p417

2. Warbrick p138

3. See Jacobsen p1075

4. Liardet, Professional Recollection of Points of Seamanship, Discipline, etc. (1849), quoted in van Niekerk p72.

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APPENDIX

THE COLLISION REGULATIONS, PARTS A AND B

PART A : GENERAL

RULE 1

APPLICATION

(a) These Rules shall apply to all vessels upon the high seas and in all waters connected therewith navigable by seagoing vessels.

(b) Nothing in these Rules shall interfere with the operation of special rules made by an appropriate authority for roadsteads, harbours, rivers, lakes or inland waterways connected with the high seas and navigable by seagoing vessels. Such special rules shall conform as closely as possible to these Rules.

(c) Nothing in these Rules shall interfere with the operation of special rules made by the Government of any State with respect to additional station or signal lights or whistle signals for ships of war and vessels proceeding under convoy, or with respect to additional station or signal lights for fishing vessels engaged in fishing as a fleet. These additional station or signal lights or whistle signals shall, so far as possible, be such that they cannot be mistaken for any light or signal authorized elsewhere under these Rules.

(d) Traffic separation schemes may be adopted by the Organisation for the purpose of these Rules.

(e) Whenever the Government concerned shall have determined that a vessel of special construction or purpose cannot comply fully with the provisions of any of these Rules with respect to the number, position, range or arc of visibility of lights or shapes, as well as to the disposition and characteristics of sound-signalling appliances, without interfering with the special function of the vessel, such vessel shall comply with such other provisions in regard to the number, position, range or arc of visibility of lights or shapes, as well as to the disposition and characteristics of sound-signalling appliances, as her Government shall have determined to be the closest possible compliance with these Rules in respect of that vessel.

RULE 2

RESPONSIBILITY

(a) Nothing in these rules shall exonerate any vessel, or the owner, master or crew thereof, from the consequences of any neglect of any precaution which may be required by the ordinary practice of seamen, or by the special circumstances of the case.

(b) In construing and complying with these Rules due regard shall be had to all dangers of navigation and collision and to any special circumstances, including the limitations of the vessels involved, which may make a departure from these Rules necessary to avoid immediate danger.

RULE 3

GENERAL DEFINITIONS

For the purpose of these Rules, except where the context otherwise requires -

(a) the word "vessel" includes every description of water craft, including non-displacement craft and seaplanes, used or capable of being used as a means of transportation on water;

(b) the term "power-driven vessel" means any vessel propelled by machinery;

(c) the term "sailing vessel" means any vessel under sail provided that propelling machinery, if fitted, is not being used;

(d) the term "vessel engaged in fishing" means any vessel fishing with nets, lines, trawls or other fishing apparatus which restrict manoeuvrability, but does not include a vessel fishing with trolling lines or other fishing apparatus which do not restrict manoeuvrability;

(e) the word "seaplane" includes any aircraft designed to manoeuvre on the water;

(f) the term "vessel not under command" means a vessel which through some exceptional circumstance is unable to manoeuvre as required by these Rules and is therefore unable to keep out of the way of another vessel;

(g) the term "vessel restricted in her ability to manoeuvre" means a vessel which through the nature of her work is restricted in her ability to manoeuvre as required by these Rules and is therefore unable to keep out of the way of another vessel.

The following vessels shall be regarded as vessels restricted in their ability to manoeuvre:

(i) A vessel engaged in laying, servicing or picking up a navigation mark, submarine cable or pipeline;

(ii) a vessel engaged in dredging, surveying or underwater operations;

(iii) a vessel engaged in replenishment or transferring persons, provisions or cargo while underway;

(iv) a vessel engaged in the launching or recovery of aircraft;

(v) a vessel engaged in minesweeping operations;

(vi) a vessel engaged in a towing operation such as severely restricts the towing vessel and her tow in their ability to deviate from their course.

(h) The term "vessel constrained by her draught" means a power-driven vessel which because of her draught in relation to the available depth of water is severely restricted in her ability to deviate from the course she is following;

(i) the word "underway" means that a vessel is not at anchor, or made fast to the shore, or aground;

(j) the words "length" and "breadth" or a vessel mean her length overall and greatest breadth;

(k) vessels shall be deemed to be in sight of one another only when one can be observed visually from the other;

(l) the term "restricted visibility" means any condition in which visibility is restricted by fog, mist, falling snow, heavy rainstorms, sandstorms or any other similar causes.

PART B: STEERING AND SAILING RULES

SECTION I - CONDUCT OF VESSELS IN ANY CONDITION OF VISIBILITY

RULE 4

APPLICATION

Rules in this Section apply in any condition of visibility.

RULE 5

LOOK-OUT

Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.

RULE 6

SAFE SPEED

Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.

In determining a safe speed the following factors shall be among those taken into account:

(a) By all vessels;

(i) The state of visibility;

(ii) the traffic density including concentrations of fishing vessels or any other vessels;

(iii) the manoeuvrability of the vessel with special reference to stopping distance and turning ability in the prevailing conditions;

(iv) at night the presence of background light such as from shore lights or from back scatter of her own lights;

(v) the state of wind, sea and current, and the proximity of navigational hazards;

(vi) the draught in relation to the available depth of water.

(b) Additionally, by vessels with operational radar:

(i) The characteristics, efficiency and limitations of the radar equipment;

(ii) any constraints imposed by the radar range scale in use;

(iii) the effect on radar detection of the sea state, weather and other sources of interference;

(iv) the possibility that small vessels, ice and other floating objects may not be detected by radar at an adequate range;

(v) the number, location and movement of vessels, detected by radar;

(vi) the more exact assessment of the visibility that may be possible when radar is used to determine the range of vessels or other objects in the vicinity.

RULE 7

RISK OF COLLISION

(a) Every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists. If there is any doubt such risk shall be deemed to exist.

(b) Proper use shall be made of radar equipment if fitted and operational, including long-range scanning, to obtain early warning of risk of collision and radar plotting or equivalent systematic observation of detected objects.

(c) Assumptions shall not be made on the basis of scanty information, especially scanty radar informatin.

(d) In determining if risk of collision exists the following considerations shall be among those taken into account:

(i) Such risk shall be deemed to exist if the compass bearing of an approaching vessel does not appreciably change;

(ii) such risk may sometimes exist even when an appreciable bearing change is evident, particularly wnen approaching a very large vessel or a tow or when approaching a vessel at close range.

RULE 8

ACTION TO AVOID COLLISION

(a) Any action taken to avoid collision shall if the circumstances of the case admit, be positive, made in ample time and with due regard to the observance of good seamanship.

(b) Any alteration of course and/or speed to avoid collision shall, if the circumstances of the case admit, be large enough to be readily apparent to another vessel observing visually or by radar; a succession of small alterations of course and/or speed should be avoided.

(c) If there is sufficient sea room, alteration of course alone may be the most effective action to avoid a close-quarters situation provided that it is made in good time, is substantial and does not result in another close-quarters situation.

(d) Action taken to avoid collision with another vessel shall be such as to result in passing at a safe distance. The effectiveness of the action shall be carefully checked until the other vessel is finally past and clear.

(e) If necessary to avoid collision or allow more time to assess the situation, a vessel shall slacken her speed or take all way off by stopping or reversing her means of propulsion.

RULE 9

NARROW CHANNELS

(a) A vessel proceeding along the course of a narrow channel or fairway shall keep as near to the outer limit of the channel or fairway which lies on her starboard side as is safe and practicable.

(b) A vessel of less than 20 metres in length or a sailing vessel shall not impede the passage of a vessel which can safely navigate only within a narrow channel or fairway.

(c) A vessel engaged in fishing shall not impede the passage or any other vessel navigating within a narrow channel or fairway.

(d) A vessel shall not cross a narrow channel or fairway if such crossing impedes the passage of a vessel which can safely navigate only within such channel or fairway. The latter vessel may use the sound signal prescribed in Rule 43(d) if in doubt as to the intention of the crossing vessel.

(e) (i) In a narrow channel or fairway when overtaking can take place only if the vessel to be overtaken has to take action to permit safe passing, the vessel intending to overtake shall indicate her intention by sounding the appropriate signal prescribed in Rule 34(c)(i). The vessel to be overtaken shall, if in agreement, sound the appropriate signal prescribed in Rule 34(c)(ii) and take steps to permit safe passing. If in doubt she may sound the signals prescribed in Rule 34(d).

(ii) This Rule does not relieve the overtaking vessel of her obligation under Rule 13.

(f) A vessel nearing a bend or an area of a narrow channel or fairway where other vessels may be obscured by an intervening obstruction shall navigate with particular alertness and caution and shall sound the appropriate signal prescribed in Rule 34(e).

(g) Any vessel shall, if the circumstances of the case admit, avoid anchoring in a narrow channel.

RULE 10

TRAFFIC SEPARATION SCHEMES

(a) This Rule applies to traffic separation schemes adopted by the Organization.

(b) A vessel using a traffic separation scheme shall -

(i) proceed in the appropriate traffic lane in the general direction of traffic flow for that lane;

(ii) so far as practicable keep clear of a traffic separation line or separation zone;

(iii) normally join or leave a traffic lane at the termination of the lane, but when joining or leaving from the side shall do so at as small an angle to the general direction of traffic flow as practicable.

(c) A vessel shall so far as practicable avoid crossing traffic lanes, but if obliged to do so shall cross as nearly as practicable at right angles to the general direction of traffic flow.

(d) Inshore traffic zones shall not normally be used by through traffic which can safely use the appropriate traffic lane within the adjacent traffic separation scheme.

(e) A vessel, other than a crossing vessel, shall not normally enter a separation zone or cross a separation line except -

(i) in cases of emergency to avoid immediate danger;

(ii) to engage in fishing within a separation zone.

(f) A vessel navigating in areas near the terminations of traffic separation schemes shall do so with particular caution.

(g) A vessel shall so far as practicable avoid anchoring in a traffic separation scheme or in areas near its terminations.

(h) A vessel not using a traffic separation scheme shall avoid it by as wide a margin as is practicable.

(i) A vessel engaged in fishing shall not impede the passage of any vessel following a traffic lane.

(j) A vessel of less than 20 metres in length or a sailing vessel shall not impede the safe passage of a power-driven vessel following a traffic lane.

SECTION II - CONDUCT OF VESSELS IN SIGHT OF ONE ANOTHER

RULE 11

APPLICATION

Rules in this Section apply to vessels in sight of one another.

RULE 12

SAILING VESSELS

(a) When two sailing vessels are approaching one another, so as to involve risk of collision, one of them shall keep out of the way of the other as follows:

(i) When each has the wind on a different side, the vessel which has the wind on the port side shall keep out of the way of the other;

(ii) when both have the wind on the same side, the vessel which is to windward shall keep out of the way of the vessel which is to leeward;

(iii) if a vessel with the wind on the port side sees a vessel to windward and cannot determine with certainty whether the other vessel has the wind on the port or on the starboard side, she shall keep out of the way of the other.

(b) For the purposes of this Rule the windward side shall be deemed to be the side opposite to that on which the mainsail is carried or, in the case of a square-rigged vessel, the side opposite to that on which the largest fore-and-aft sail is carried.

RULE 13

OVERTAKING

(a) Notwithstanding anything contained in the Rules of this Section any vessel overtaking any other shall keep out of the way of the vessel being overtaken.

(b) A vessel shall be deemed to be overtaking when coming up with another vessel from a direction more than 22,5 degrees abaft her beam, that is, in such a position with reference to the vessel she is overtaking, that at night she would be able to see only the sternlight of that vessel but neither of her sidelights.

(c) When a vessel is in any doubt as to whether she is overtaking another, she shall assume that this is the case and act accordingly.

(d) Any subsequent alteration of the bearing between two vessels shall not make the overtaking vessel a crossing vessel within the meaning of these Rules or relieve her of the duty of keeping clear of the overtaking vessel until she is finally past and clear.

RULE 14

HEAD-ON SITUATION

(a) When two power-driven vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision each shall alter her course to starboard so that each shall pass on the port side of the other.

(b) Such a situation shall be deemed to exist when a vessel sees the other ahead or nearly ahead and by night she could see the masthead lights of the other in a line or nearly in a line and/or both sidelights and by day she observes the corresponding aspect of the other vessel.

(c) When a vessel is in any doubt as to whether such a situation exists she shall assume that it does exist and act accordingly.

RULE 15

CROSSING SITUATION

When two power-driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel.

RULE 16

ACTION BY GIVE-WAY VESSEL

Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear.

RULE 17

ACTION BY STAND-ON VESSEL

(a) (i) Where one of two vessels is to keep out of the way the other shall keep her course and speed.

(ii) The latter vessel may however take action to avoid collision by her manoeuvre alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with these Rules.

(b) When, from any cause, the vessel is required to keep her course and speed finds herself so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avoid collision.

(c) A power-driven vessel which takes action in a crossing situation in accordance with subparagraph (a)(ii) of this Rule to avoid collision with another power-driven vessel shall, if the circumstances of the case admit, not alter course to port for a vessel on her own port side.

(d) This Rule does not relieve the give-way vessel of her obligation to keep out of the way.

RULE 18

RESPONSIBILITIES BETWEEN VESSELS

Except where Rules 9, 10 and 13 otherwise require -

(a) a power-driven vessel undereway shall keep out of the way of -

(i) a vessel not under command;

(ii) a vessel restricted in her ability to manoeuvre;

(iii) a vessel engaged in fishing;

(iv) a sailing vessel;

(b) a sailing vessel underway shall keep out of the way of -

(i) a vessel not under command;

(ii) a vessel restricted in her ability to manoeuvre;

(iii) a vessel engaged in fishing;

(c) a vessel engaged in fishing when underway shall, so far as possible, keep out of the way of -

(i) a vessel not under command;

(ii) a vessel restricted in her ability to manoeuvre;

(d) (i) any vessel other than a vessel not under command or a vessel restricted in her ability to manoeuvre shall, if the circumstances of the case admit, avoid impeding the safe passage of a vessel constrained by her draught, exhibiting the signals in Rule 28;

(e) a seaplane on the water shall, in general, keep well clear of all vessels and avoid impeding their navigation. In circumstances, however, where risk of collision exists, she shall comply with the Rules of this Part.

SECTION III - CONDUCT OF VESSELS IN RESTRICTED VISIBILITY

RULE 19

CONDUCT OF VESSELS IN RESTRICTED VISIBILITY

(a) This Rule applies to vessels not in sight of one another when navigating in or near an area of restricted visibility.

(b) Every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility. A power-driven vessel shall have her engines ready for immediate manoeuvre.

(c) Every vessel shall have due regard to the prevailing circumstances and conditions of restricted visibility when complying with the Rules of Section I of this Part.

(d) A vessel which detects by radar alone the presence of another vessel shall determine if a close-quarters situation is developing and/or risk of collision exists. If so, she shall take avoiding action in ample time, provided that when such action consists of an alteration of course, so far as possible the following shall be avoided:

(i) An alteration of course to port for a vessel forward of the beam, other than for a vessel being overtaken;

(ii) an alteration of course towards a vessel abeam or abaft the the beam.

(e) Except where it has been determined that a risk of collision does not exist, every vessel which hears apparently forward of her beam the fog signal of another vessel, or which cannot avoid a close-quarters situation with another vessel forward of her beam, shall reduce her speed to the minimum at which she can be kept on her course. She shall if necessary take all her way off and in any event navigate with extreme caution until danger of collision is over.