

中英對照

English-Chinese

國際海上避碰大全
COLLISION REGULATIONS MANUAL

上 冊
(Volume I)

編著者：陳 奇 珍

Edited by: Chi-Chen CHEN

幼獅文化事業公司 印行

YOUTH CULTURAL ENTERPRISES CO., LTD.

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Preface

The collecting of materials for this manual began on November 9th, 1974 when my friend Capt. Yao-nan LO died aboard M. V. "Pacific Aries" on a collision case. Through five years of exhaustive survey of the literature, I began to understand that the importance of collision regulations is beyond question.

Volume I has been compiled from the notes used by the author in presenting a two-hour course for senior students in the navigation department. The comments on the sound signal appliances (ANNEX III) is my personal interpretation. It is hoped that this part will satisfy the requirements for most of the surveyors, masters and owners. Our present maritime education is deficient in sailing. So the sailing information in Volume II will fill the void. Most of what you will find in these pages is not covered in any other single volume.

The illustrative questions and answers are not necessarily the ones a candidate may be asked to answer when taking the examination, but they are representative examples covering the subjects on which the actual questions are based. The candidate will find that examinations to-day cover a much broader scope and more technical in nature than was the case a few years ago.

The quoted foreign court interpretation may be served as a reference for our judges, assessors, lawyers, ship owners and masters in case of necessity.

This manual is edited in English-Chinese. I do hope this will meet the basic needs of mariners of both Chinese and foreign nationalities.

Finally I would like to thank Capt. Yung T. CHEN for his encouragement, Prof. Wen-pin YANG and Capt. T. C. CHUAN for their reviewing the English manuscript, Dr. Matthias H. K. HSU and Mr. Li-yan HSIA for their immeasurable aid, Capt. Li-yu LO for his proofreading and my wife, Mayer CHU for her patience.

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自序

自一九七四年十一月九日，摯友羅船長耀南在「太平洋愛麗絲號」上碰船殉職後，開始搜集有關船舶碰撞之典籍，竭盡心力，費時五載，始略窺避碰法規之全貌與要義。

本書之上冊係以個人在航海學系四年級講授「避碰規則」，每週二小時之講義為藍本，而「音響技術細則」之詮釋，乃個人之淺見，務希能滿足驗船師、船長與船東之要求；至於下冊之駁風資料，希望能夠填補我國目前海事教育之空白，讀者綜覽全書後，自會發現本書內容之完整，絕非坊間任何專書所有。

本書之範例與解析係表示欲獲得英、美、賴比瑞亞之執業證書所必須具有之基本知識，此類示範性之解析，讀者如能身歷其境自會發現其日新又新之變化，絕非一塵不變。

本書所引用之國外案例或許可作為我國法官，海事評議委員、律師、船長與船東在應用之借鏡。

本書採用中英對照之目的除供我國有關人士便於引用外，尚希能符合中外高級船員在執業方面之基本需求。

本書承蒙陳船長永才之鼓勵與襄助，楊教授文彬與全船長大鈞之英文校稿，徐博士照光與夏先生立言之鼎力協助，羅船長力餘之中文校稿及內子筱梅女士之忍耐與期待，才使本書能順利完成，在此一併申謝。

陳奇珍 謹識

民國七十一年四月序
於國立台灣海洋學院

(1)

HISTORY OF THE COLLISION REGULATIONS

For several hundred years there have been rules in existence for the purpose of preventing collisions at sea, but there were no rules of statutory force until the last century. In 1840 the London Trinity House drew up a set of regulations which were enacted by Parliament in 1846. One of these required a steam vessel passing another vessel in a narrow channel to leave the other on her own port hand. The other regulation relating to steam ships required steam vessels on different courses, crossing so as to involve risk of collision, to alter course to starboard so as to pass on the port side of each other. There were also regulations for vessels under sail including a rule, established in the eighteenth century, requiring a sailing vessel on the port tack to give way to a sailing vessel on the starboard tack.

The two Trinity House rules for steam vessels were combined into a single rule and included in the Steam Navigation Act of 1846. Admiralty regulations concerning lights were included in this statute two years later. Steam ships were required to carry green and red sidelights as well as a white masthead light. In 1858 coloured sidelights were prescribed for sailing vessels and fog signals were required to be given, by steam vessels on the whistle and by sailing vessels on the fog horn or bell.

A completely new set of rules drawn up by the British Board of Trade, in consultation with the French Government, came into operation in 1863. By the end of 1864 these regulations, known as Articles, had been adopted by over thirty maritime countries including the United States and Germany.

Several important regulations which are still in force were introduced at that time. When steam vessels were crossing so as to involve risk of collision the vessel with the other on her own star-

國際避碰規則之沿革

自有海上避碰規則以來已經有幾百年的歷史，但一直到十九世紀才具有法律上的效力。1840年倫敦海事協會（註：受政府補助之民間機構）草擬一套避碰規則，迄1846年始獲得英國議院（國會）完成立法程序。其一為要求輪船在狹窄水道中通過他船時應置他船於該船之左側。其他有關輪船的規則為航向不同之輪船交叉相遇而含有碰撞危機時應朝右轉向務使彼此在對方左舷通過。同時尚有十八世紀所訂立之帆船避碰規則，即要求左舷受風之帆船應避讓右舷受風之帆船亦包括在內。

隨後又將以上兩條規則合併為一條並將其包括於1846年之輪船航行法案內，再過兩年以後始將有關號燈之海事法規併入避碰規則內，輪船必須裝設紅綠燈舷與白色桅燈，在1858年規定帆船必須裝設有色舷燈及鳴放霧號，輪船用汽笛，帆船用號角或號鐘。

英國貿易局與法國政府磋商後研究成一套完整之避碰規則於1863年生效，此種條款式之規則迄1864年底已有三十餘國採用，其中包括美國與德國在內。

同時期訂定的好幾條重要規則，迄今仍被沿用，諸如，兩輪船交叉相遇而含有碰撞危機時，見他船在其右舷者應避讓他船。兩船迎錯

board side was required to keep out of the way. Steam vessels meeting end-on or nearly end-on were required to alter course to starboard. Every vessel overtaking any other had to keep out of the way of the vessel being overtaken. Where by any of the rules one vessel was to keep out of the way the other was required to keep her course.

In 1867 Mr Thomas Gray, Assistant Secretary to the Marine Department of the Board of Trade, wrote a pamphlet on the Rule of the Road at Sea which included a number of verses as aids to memory. The verses became popular and were translated into other languages. They are still quoted in some text books.

Some changes to the 1863 Rules were brought into force in 1880, including a new rule permitting whistle signals to be given to indicate action taken by steam ships to avoid collision. In 1884 a new set of regulations came into force but these did not differ substantially from the previous ones. An article specifying signals to be used by vessels in distress was added bringing the total number of articles to 27.

The first International Maritime Conference to consider regulations for preventing collision at sea was held in Washington in 1889. It was convened on the initiation of the Government of the United States of America. Among the new provisions agreed at the Conference were requirements that a stand-on vessel should keep her speed as well as her course, that a giving-way vessel should avoid crossing ahead of the other vessel, and that steamships should be permitted to carry a second white masthead light.

The regulations agreed at the Washington Conference were brought into force by several countries, including Britain and the United States, in 1897. At a further Maritime Conference held in Brussels in 1910 international agreement was reached on a set of regulations which differed in only minor respects from those drafted at the Washington Conference. The 1910 Regulations remained in force until 1954.

In 1929 an International Conference on Safety of Life at Sea proposed some minor changes to the Rules but these were never ratified.

正遇時，各應朝右轉向。任何船舶在追越他船時，應避讓被追越之船舶。根據以上任何一條規則兩船中之一船應避讓時則他船應保持其航向。

英國貿易局之助理秘書，湯瑪士格萊於 1867 年曾寫一本「海上避碰規則」，其中，有些是以韻文寫成，藉以幫助記憶。其詩句流傳頗廣，且有多種譯文問世，現在仍有很多教科書之編撰者樂於引用。

1863 年之規則經過修正後於 1880 年實行，修正訂出之新規則為准許輪船在採取避碰行動時使用號笛信號以表示其動態。在 1884 年雖有一套新規則付諸實行，但與舊規則並無多大的不同。有一條是遇難船專用之特別信號，終於使全部規則變成二十七條。

第一屆國際（萬國）海事會議於 1889 年在美京華盛頓舉行，會中以增改海上避碰規則為主，該會係由美國政府所發起召開者，該會議所增改之規則中，以要求直航船應保持其航向與航速；讓路船應避免橫越他船船艏，准許輪船裝設第二盞桅燈為主。

在華盛頓會議中已獲同意之規則，英美諸國於 1897 年率先實行。第二屆國際海事會議於 1910 年在比京布魯賽爾召開，在該次會議中完成一套國際避碰規則而與華盛頓會議時所訂者相差不多，1910 年規則一直實行到 1954 年為止。

在 1929 年之海上人命安全國際會議中曾提議作小幅度的改訂而

However, a recommendation that helm and steering orders should be given in the direct sense, so that 'right rudder' or 'starboard' meant 'put the vessel's rudder to starboard', was accepted and came into force in 1933. The situation with respect to helm orders had previously been confused due to the difference between the movement of the wheel and tiller.

The Regulations were revised at an International Conference on Safety of Life at Sea in 1948. No drastic changes were made. The second masthead light was made compulsory for power-driven vessels of 150 feet or upwards in length, a fixed stern light was made compulsory for almost all vessels under way, and the wake-up signal of at least five short and rapid blasts was introduced as an optional signal for use by a stand-on vessel. The revised Rules came into force in 1954.

Relatively few vessels were fitted with radar in 1948 so no changes were made to take account of this equipment. However, the Conference did add a recommendation that possession of a radio navigational aid in no way relieves a master of a ship from his obligations under the International Regulations and under Rules 15 and 16 (applying to vessels in restricted visibility) in particular.

With the considerable increase in the number of ships fitted with radar during the following years, coupled with a series of collisions involving such vessels, it became apparent that further revision of the Rules was necessary. An International Conference on Safety of Life at Sea was convened in London in 1960 by the Inter-Governmental Maritime Consultative Organisation (IMCO).

At the 1960 Conference it was agreed that a new paragraph should be added to the Rules governing the conduct of vessels in restricted visibility to permit early and substantial action to be taken to avoid a close quarters situation with a vessel detected forward of the beam. Recommendations concerning the use of radar were made in an Annex to the Rules. The changes were not confined to the Rules relating to restricted visibility but most of the other amendments were relatively minor in character. These Rules came into force in 1965.

未蒙批准，僅通過一建議案，即舵與操舵口令應具有直接意義，所謂「右舵」或「右舷舵」意即「將船舵朝右舷撥」，此項建議於 1933 年實行，此係由於舵輪與舵柄之動向有所不同，以致使過去之舵令容易發生混淆之故。

在 1948 年之海上人命安全國際會議中又重新增訂部份規則細節，但無重大改變，僅強制長度超過 150 呎之動力船舶必須裝設第二盞桅燈；強制各船在航行中應顯示固定之艏燈；直航船可酌情使用「提醒」（危險）信號，但必須為急促之短聲至少五響，修訂規則於 1954 年生效。

由於在 1948 年時僅有少數船舶裝設雷達，致未考慮有關雷達裝備之規則，僅建議裝有無線電助航設備之船舶，在能見度受限制時，不能解除船長對於現行規則中之第十五條與第十六條所負之責任。

以後幾年中，裝設雷達之船舶愈來愈多，而此類船舶發生碰撞之案件，亦層出不窮，基於事實需要，增訂規則勢在必行。聯合國政府間海事諮詢組織乃於 1960 年在倫敦召開海上人命安全公約會議。

在 1960 年之會議中，一致同意增訂一項新條款，以便在能見度受限制時，准許以雷達測出他船在本船正橫前方時可及早採取明確行動以避免彼此逼促於一處之情事，修正規則之範圍並不僅限於在能見度受限制時，其他條文亦略有訂正。此等規則於 1965 年生效。

In September 1960 the British Institute of Navigation set up a working group to consider the organisation of traffic in the Dover Straits. The French and German Institutes of Navigation agreed to co-operate in the following year and a separation scheme was devised. A new working group with representatives from additional countries was formed in 1964 to consider routing schemes for other areas. The proposals were accepted by IMCO and recommended for use by mariners in 1967.

Preparations for the 1972 Conference began in 1968. A considerable number of questionnaires was sent out to mariners by the International Chamber of Shipping and other organizations. Several meetings were held by a working group set up by IMCO to prepare a draft text. Forty-six countries were represented by delegates and others sent observers, when the Conference was held in London in October 1972.

The rules have been reorganized in the 1972 revision and a number of editorial improvements are evident. The rules provide: (a) better guidance in determining safe speed, and risk of collision (b) recognition of vessels constrained by draft and air-cushion vessels (c) regulations concerning operation in or near traffic separation schemes adopted by IMCO (d) technical details for lights, shapes and sound signalling devices in separate annexes (e) new sound signals for the overtaking situation in narrow channels (f) a number of changes concerning lights, shapes, and fog signals.

The International Rules have made provision for any local rules that nations may wish to exercise in waters under their jurisdiction that are not part of the High Seas. In U.S. Waters such a code has been established known as the *Inland Rules of the Road*.

The Inland Rules of the Road were approved by Congress on June 7, 1897, and made effective October 7, 1897. There have been some later additions and amendments. However, they are in need of further revision and should be made more uniform with the International Rules.

The line of demarkation between the waters under the International and the Inland Rules was originally set forth by the Secretary