

驾驶英语综合阅读

Navigational Comprehensive English Reading

(远洋船舶二、三副适用读本)

主 编 金 丽 马晓曼

副主编 上官瑞霞 卢 伟



大连海事大学出版社

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前 言

为了更好地帮助指导驾驶专业学生进行适任在校教育和考前培训,提高在校学生的专业英语适任水平和考试通过率,根据新修订的《中华人民共和国海船船员适任考试、评估和发证规则》和即将生效的新的《中华人民共和国海船船员适任考试大纲》,我们有针对性地编写了这本《驾驶英语综合阅读》教材。本教材旨在帮助专科层次的学生在有限的时间内更好更快地掌握远洋船舶二、三副应知应会的专业英语知识,并为通过适任证书考试打下坚实的基础。对于丙类学生可以选择部分章节内容学习和备考。

本书紧扣考试大纲,内容涉及海图与航海图书资料、航海气象、航海学、船舶值班与避碰、船舶操纵、海上货物运输、船舶结构与设备、船舶驾驶、航海仪器、海上通信、海上消防与救生等。在编排上,本书共设有 11 个章节,每一章含有一到两课课文,每篇课文除做了大量的单词注释、难句的翻译外,对于课文中涉及的专业内容,我们也做了比较详尽的解释说明和适当的汉译英翻译,以便于学生课后查阅解疑。另外,为了让学生巩固掌握每一单元的内容和语言素材,我们在每一篇课文后都附有形式多样的练习,包括词汇练习、翻译练习、单项选择、阅读理解等丰富多彩的形式。这些练习紧扣课文内容,紧扣大证考试大纲和大证考试试题,使学生能够边学习边消化所涉及的本课重点。本书的特点是综合性强(船舶二、三副该涉及的内容基本涵盖)、通俗易懂(删除了偏难的内容),便于教师安排教学(内容量适中),便于学生自学(注释较详细,练习量较大)。

本书编写的具体分工是:金丽拟定全书编写提纲,编写第一、二、三和第七章;马晓曼编写第四、五、六章和第八、九章部分内容,并编写第十、第十一章部分练习;上官瑞霞编写第十章和十一章以及第六章部分内容;卢伟编写第二章部分内容

和第一、三章的单词注释；金丽对全书进行校阅、统稿，Peter William 对语言文字进行了审阅。

编著者在编写过程中，从选材、制定提纲、课文单词的注释，到练习内容和形式的确定等方面层层把关，并经过两年多教学和实践的检验，几易其稿，编写而成。相信本书将为航海专业专科学生的教学与考证起到非常重要的作用。可供专科层次的学生在两个学期内完成。

由于航海专业涉及面甚广，适任考试内容也在不断更新，我们准备在实践中不断补充添加新内容，删除不必要的内容，也可以根据考试内容的变化，选择使用部分章节内容。

鉴于时间和作者水平所限，书中难免存在缺点和不足之处，恳请读者在使用过程中提出宝贵意见。另外，本书在编辑过程中得到 Peter William 等国外专家的热情帮助，并借鉴了国内外本专业许多专家的思想，采纳了一些相关内容，在此一并致谢。

编 者

2011 年 12 月

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Chapter 1 Nautical Publications

Lesson One

Text A Admiralty Notices to Mariners (ANM)

General information to ANM

The two main systems used to provide the mariner with the latest navigational information are Admiralty Notices to Mariners, and Radio Navigational Warnings (RNW's) for more urgent information.

Admiralty Notices to Mariners, Weekly Editions, contain information which enables the mariner to keep his charts and books published by the UKHO up-to-date for the latest reports received. Weekly edition can be obtained gratis, or dispatched regularly by surface or air mail from Admiralty Chart Agents.

Notices are numbered consecutively starting at the beginning of each year. Weekly editions are also consecutively numbered in the same way.

Notices

498-623/10



ADMIRALTY NOTICES TO MARINERS Weekly Edition 5

4 February 2010

(Published on the UKHO Website 25 January 2010)

Contents

- I . Explanatory Notes. Publications List
 - II . Admiralty Notices to Mariners. Updates to Standard Nautical Charts
 - III. Reprints of Radio Navigational Warnings
 - IV. Amendments to Admiralty Sailing Directions
 - V . Amendments to Admiralty Lists of Lights and Fog Signals
 - VI. Amendments to Admiralty List of Radio Signals
-

Mariners are requested to inform the UK Hydrographic Office, Admiralty Way, Taunton, Somerset TA1 2DN immediately of the discovery of new dangers, or changes or defects in aids to navigation and of shortcomings in Admiralty charts or publications. Copies of form H 102, which is a convenient form on which to send in a report, may be obtained gratis from any Admiralty Distributor or the reproduction at the end of Section VI of the Weekly Edition of Notices to Mariners may be used. A copy of the form, which may be used as a pro forma, is also printed in the Mariner's Handbook (NP 100). Reports can also be made through the UKHO website. In addition to postal methods, the following additional communication facilities are available:

Notices to Mariners Website Web: www.ukho.gov.uk

Searchable Notices to Mariners Web: www.nmwebsearch.com

Urgent navigational information: Fax: +44(0)1823 322352 Telex: 46464

Phone: +44(0)1823 353448

E-mail: navwarnings@btconnect.com

Other navigational information: E-mail: hdcfiles@ukho.gov.uk

General enquiries: E-mail: helpdesk@ukho.gov.uk

General website: Web: www.ukho.gov.uk

Other matters: Fax: +44(0)1823 284077 Telex: 46274

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Explanatory notes

• Dating

Weekly Notices are dated for the Thursday appropriate to the week and they are issued on the UKHO website.

• Charts and positions

The notices in Section II give instructions for the updating of standard nautical charts and selected thematic charts in the Admiralty series. Geographical positions refer to the horizontal datum of the current edition of each affected chart which is stated in the notice alongside the appropriate chart number. Positions are normally given in degrees, minutes and decimals of a minute, but may occasionally quote seconds for convenience when plotting from the graduation of some older-style charts. Bearings are true reckoned clockwise from 000° to 359°; those relating to lights are from seaward. Symbols referred to are those shown on Chart 5011. Depths and heights are given in metres or fathoms and /or feet as appropriate for the chart being updated (abbreviated where necessary to m, fm and ft respectively). Blocks and notes accompanying notices in Section II are placed towards the end of the section.

• Temporary and preliminary notices

These are indicated by (T) or (P) after the notice number and are placed at the end of Section II. They are printed on one side of the paper in order that they may be cut up and filed. To assist in filing, the year is indicated after the notice number and an in-force list is published monthly. Information from these notices is not included on charts before issue; charts should be updated in pencil on receipt.

- **Original information**

A star adjacent to the number of a notice indicates that the notice is based on original information.

- **Further guidance**

The Mariner's Handbook (NP100) gives a fuller explanation of the limitations of charts. Annual Notice 9 gives the UKHO policy for the promulgation and selection of navigationally significant information for charts. Details of chart updating methods can be found in NP 294, "How to Keep Your Admiralty Charts Up-to-date". All users are advised to study these publications.

- **Lights**

When a light is affected by a notice its Light List number is quoted. The detailed amendment to the List of Lights is given in Section V and may be published in an earlier edition than the chart-updating notice. The entire entry for each light amended will be printed (including minor changes) and an asterisk (*) will denote which column contains an amendment. In the case of a new light, or where a new sequence is added below the main light, an asterisk (*) will appear under all columns. New and extensively altered entries are intended to be pasted in. It is recommended that a manuscript entry is made for all shorter corrections. It is emphasized that the List of Lights is the primary source of information on lights and that many alterations, especially those of a temporary but operational nature, are promulgated only as corrections to the List of Lights. The range of a light is normally the nominal range, except when the responsible authority quotes luminous or geographical range.

- **Sailing directions**

Amendments to Sailing Directions are given in Section IV. Those in force at the end of the year are reprinted in the Annual Summary of Notices to Mariners. A list of amendments in force is published in Section IV of the Weekly Edition for the last week of each month.

It is recommended that amendments are kept in a file with the latest list of amendments in force on top. The list should then be consulted when using the parent book to see if any amendments, affecting the area under consideration, are in force. It is not recommended that amendments be stuck in the parent book or current supplement, but, if this is done, when a new supplement is received care must be taken to retain those amendments issued after the date of the new supplement, which may be several months before its receipt of board.

- **Updating**

Updating information is published by Weekly Notices to Mariners supplemented by radio warnings for items of immediate importance. It should be borne in mind that they may be based on reports which cannot always be verified before promulgation, and that it is sometimes necessary to be selective and promulgate only the more important items to avoid overloading users; the remainder being included in revised editions of the charts and publications concerned.

- **Terms used in updating**

INSERT is used for the insertion of all new data or, together with the **DELETE** command, when a feature has moved position sufficiently that **MOVE** command is not appropriate. For example: **DELETE** feature and **INSERT** in a different position. A light, 2FG, 5M.(verb.), is to be inserted on the mole head in position 335 metres from (a).

AMEND is used when a feature remains in its existing charted position but has a change of characteristic, for example: Amend light to, Fl. 3 s 25 m 10M 43°16.56'N, 5°20.06'E.

SUBSTITUTE is used when one feature replaces an existing feature and the position remains as

charted. The new feature is always shown first, for example: A North cardinal black and yellow pillar light-buoy, V Qk Fl, topmark two cones points up, is to be substituted for the black and white light-buoy in position.

MOVE is used for features whose characteristics or descriptions remain unchanged, but they are to be moved small distances, for example: Move No.3 light buoy from 53°11.67'N, 5°18.66'E to 53°11.62'N, 5°18.71'E.

DELETE is used when features are to be removed from the chart or, together with the **INSERT** command, when features are moved a significant distance such that the **MOVE** command is inappropriate. For example: The legend, Under Constn (1976), against the breakwater in (1) is to be deleted.

New Words and Expressions

copyright	<i>n.</i> 版权	retain	<i>vt.</i> 保持; 保留
analogue	<i>n.</i> 类似物	concerned	<i>adj.</i> 有关的, 相关的
defect	<i>n.</i> 缺点, 故障	insert	<i>vt.</i> 插入, 嵌入; (在文章中) 添加
fax = facsimile	<i>n.</i> 传真	delete	<i>vt. & vi.</i> 删除
telex	<i>n.</i> 电传, 用户电报	amend	<i>vt. & vi.</i> 修改, 修订
urgent	<i>adj.</i> 急迫的, 紧要的	substitute	<i>vt. & vi.</i> 代替, 替换, 代用
enable	<i>vt.</i> 使能够; 使可能	move	<i>vt. & vi.</i> 移动
gratis	<i>adv.</i> 免费地	Nautical Publications (NP)	航海出版物
dispatch	<i>vt.</i> 派遣, 发送	general enquiries	一般询问
geographical	<i>adj.</i> 地理学的, 地理的	Mariner's Handbook	《海员手册》
decimal	<i>n.</i> 小数	surface or air mail	水、陆或空邮
graduation	<i>n.</i> 刻度, 分度	horizontal datum	水平基准面
fathom	<i>n.</i> 英寻, 拓(约1.8288 m)	Temporary Notices	临时通告(其内容过一段时间可能取消)
accompany	<i>vt.</i> 陪伴, 伴随	Preliminary Notices	预告(其内容过一段时间可能变成永久性的)
receipt	<i>n.</i> 收到; 接收	nominal range	额定光力射程
amendment	<i>n.</i> 改动, 修改	luminous range	光达距离, 光力射程
asterisk	<i>n.</i> 星号	geographical range	地理能见距离
denote	<i>vt.</i> 指示, 指出	Sailing Directions	英版《航路指南》
paste	<i>vi.</i> 粘, 贴	in force	生效, 有效
manuscript	<i>n.</i> 手稿, 底稿		
consult	<i>vt.</i> 翻阅, 查阅		

Notes

1. 《英版航海通告周版》标题页的主要内容有:

(1) 左上角注明本期周版中所含通告的号码及其他资料

如: Notices 498-623/10 (本期周版的通告为:) 2010年自498号至623号

T & P Notices in Force

仍有效的临告及预告

(2) 标题下面注明本期周版的编号及出版日期

Weekly Edition 5: 周版第5期

4 February 2010: 2010年2月4日

(3) 周版目录内容 (contents)

Section I Explanatory Notes. Publications List

第一部分：解释性注释。出版物列表

This section contains notes on the use and correction of charts and publications, followed by Admiralty Charts affected by the Publication List, ADMIRALTY CHARTS AND PUBLICATIONS NOW PUBLISHED AND AVAILABLE, NEW ADMIRALTY CHARTS AND PUBLICATIONS, NEW EDITIONS OF ADMIRALTY CHARTS AND PUBLICATIONS, ADMIRALTY CHARTS AND PUBLICATIONS TO BE PUBLISHED, ADMIRALTY CHARTS AND PUBLICATIONS PERMANENTLY WITHDRAWN, ADMIRALTY AVCS AND ECDIS SERVICE, etc.

AVCS: The Admiralty Vector Chart Service (AVCS) brings together Electronic Navigational Charts (ENCs) from national Hydrographic offices around the world and new ENC coverage produced by UKHO in co-operation with Foreign Governments to provide comprehensive, official, worldwide coverage. 英版矢量海图服务

ECDIS: Electronic Chart Display and Information Systems 电子海图显示和信息系統

Section II Admiralty Notices to Mariners. Updates to Standard Nautical Charts

第二部分：英版航海通告。海图更新

This section contains GEOGRAPHICAL INDEX, INDEX OF NOTICES AND CHART FOLIOS, INDEX OF CHARTS AFFECTED, MISCELLANEOUS UPDATES TO CHARTS, individual updates to charts, accompanying blocks, etc.

Section III Reprints of Radio Navigational Warnings

第三部分：无线电航海警告的重印件

This section lists the serial numbers of all NAVAREA messages in force with reprints of those issued during the week. It also lists HYDROLANTS and HYDROPACS messages received, together with special warnings (ANNEX A) issued by USA Government.

Section IV Amendments to Admiralty Sailing Directions

第四部分：《英版航路指南》改正资料

This section contains amendments to Sailing Directions published during the week in various nautical publications.

Section V Amendments to Admiralty Lists of Lights and Fog Signals

第五部分：《英版灯标雾号表》改正资料

This section contains amendments to Admiralty List of Lights and Fog Signals in different volumes.

Section VI Amendments to Admiralty List of Radio Signals

第六部分：《英版无线电信号表》改正资料

This section contains amendments to Admiralty List of Radio Signals in those volumes.

(4) 标题页的 CONTENTS 下面有一段文字，是向海员提的一项要求：如海员发现了新的航海危险物，或者助航设施有变化或缺陷，或者发现英版海图或出版物有不足之处，请立即通知英国国防部海军水道测量局。

其地址为：Admiralty Way, Taunton, Somerset, 邮编 TA1 2DN

注意动词 inform 的内容由两个“of”短语引起：

(a) of the discovery of new dangers or changes in aids to navigation or defects in aids to navigation
and

(b) of shortcomings in Admiralty charts or publications

(5) Copies of form H 102, which is a convenient form on which to send in a report, may be obtained

gratis from any Admiralty Distributor or the reproduction at the end of Section VI of the Weekly Edition of Notices to Mariners may be used.

H102表格的复印件是很方便填写的表格,以报告方式寄送,可免费从英版海图发行商处获得,或者可使用《周版》第六部分后面附的复印件。

(a) form H 102: 正式名称为: HYDROGRAPHIC NOTE, H.102, 航海者进行报告的一种标准格式表格。

(b) on which to send in a report: on which mariners are to send in a report.

意为: 海员应在此表格上填写成报告进行寄送。

2. The two main systems used to provide the Mariner with the latest navigational information are Admiralty Notices to Mariners, and Radio Navigational Warnings (RNW's) for more urgent information.

翻译: 向船员提供最新航海信息的系统有两个: 一个是《英版航海通告》, 另一个是《无线电航海警告》, 后者是一些比较紧急的信息。

3. Admiralty Notices to Mariners, Weekly Editions, contain information which enables the Mariner to keep his charts and books published by the UKHO up-to-date for the latest reports received.

翻译: 《英版航海通告》周刊中收录的信息可以使航海人员对英国水道测量局出版的海图及图书资料不断进行更新。to keep sth. up-to-date: 保持……得到不断更新。

Exercises

I. Translate the following phrases into English.

航海出版物	《海员手册》	助航设施
保持……得到不断更新	《英版航海通告》	临告与预告
地理能见距离	额定光力射程	水平基准面

II. Multiple choices.

- _____ is not contained in the NM Weekly.
 - Amendments to Admiralty Sailing Directions
 - Amendments to Admiralty List of Lights and Fog Signals
 - Amendments to Admiralty List of Radio Signals
 - Supplement to Guide to Port Entry
- _____ objects are those which stand out clearly from the background or other objects and are easily identifiable from a few miles offshore in normal visibility.
 - Conspicuous
 - Permanent
 - Preliminary
 - Temporary
- Admiralty Notices to Mariners, containing important information for the mariners and enabling them to keep their charts and books corrected for the latest information, are issued daily and published in _____.
 - Weekly Editions
 - Quarterly Editions
 - Annual Editions
 - Monthly Editions
- Charts are subject to frequent correction according to _____.
 - Notices to Mariners
 - Mariner's handbook
 - Sailing Directions
 - Guide to Port Entry
- The range of a light on Admiralty Charts is normally the _____.
 - nominal range
 - luminous range
 - geographical range
 - visible range

6. Weekly Notices are dated for the _____ appropriate to the week they are issued on the UKHO website.
A. Monday B. Tuesday C. Wednesday D. Thursday
7. On notification by Admiralty Notice to Mariners that a new edition of one of the books, or a new supplement to one, has been published, it should be obtained _____.
A. as soon as possible B. prior to its publication
C. in advance of any passible accident D. by means of other than airmail
8. Positions read from this chart should be moved 0.08 minutes Southward and 0.13 minutes Eastward so as _____ adjoining chart 3446.
A. to agree upon B. in accordance with C. to be same as D. to agree with
9. SEARCHABLE NOTICES TO MARINERS can be searched by all the following options except _____.
A. Chart Number only
B. Chart Number + Previous NM Number/Year
C. Chart Number + Between Previous and Present Dates
D. Cumulative Number
10. Section V of the ADMIRALTY NOTICES TO MARINERS is _____.
A. Reprints of Radio Navigational Warnings
B. Amendments to Admiralty Sailing Directions
C. Amendments to Admiralty Lists of Lights and Fog Signals
D. Amendments to Admiralty List of Radio Signals

III. Reading comprehension.

Charts should be used with prudence: there are areas where the source data are old, incomplete or of poor quality. The mariner should use the largest scale appropriate for his particular purpose; apart from being the most detailed, the larger scales are usually corrected first. When extensive new information (such as a new hydrographic survey) is received, some months must elapse before it can be fully incorporated in published charts. On small scale charts of ocean areas where hydrographic information is, in many cases, still sparse, charted shoals may be in error as regards position, least depth and extent. Undiscovered dangers may exist, particularly away from well-established routes.

1. _____ are the most detailed.
A. the larger scale charts
B. the smaller scale charts
C. the charts covering the area where the source data are old, incomplete or of poor quality
D. the charts which are corrected to date
2. In the area _____ the charted shoals are unlikely to be in error.
A. where hydrographic information is still sparse
B. where the source data are old, incomplete or of poor quality
C. away from well-established routes
D. where new hydrographic survey information has just been incorporated in the charts
3. If the information provided by a chart covering an area where a new hydrographic survey has just been carried out has still some error as regards position, east depth and extent of shoals, the most probable reason is that _____.
A. the survey did not discover the shoals there

- B. the survey was incomplete or of poor quality
 - C. the survey was made away from well-established routes
 - D. the survey information has not yet been fully incorporated in the chart
4. This passage is most likely extracted from _____ of NM.
- A. Section I - Explanatory Notes
 - B. Section II - Updates to Standard Navigational Charts
 - C. Section III - Reprints of Radio Navigational Warnings
 - D. Section IV - Amendments to Admiralty Sailing Directions

Text B Admiralty Nautical Publications

All the books described below, except *The Nautical Almanac*, are published by The United Kingdom Hydrographic Office (UKHO), listed in *Catalogue of Admiralty Charts and Publications* and obtainable from Admiralty Chart Agents.

The Mariner's Handbook (NP 100)

A compendium of essential maritime information including information on charts; operational information and regulation; tides, currents and characteristics of the sea; basic meteorology and navigation in ice and hazards and restrictions to navigation; and the IALA Buoyage system.

Extracts from the Mariner's Handbook with regards to product information, how to select the appropriate Admiralty products, assessing their accuracy and reliability and their maintenance. In addition to obligatory reporting requirements, methods of reporting and other safety information have also been included and can be found.

Admiralty List of Lights and Fog Signals (ALL) (NPs 74-84)

Admiralty List of Lights and Fog Signals series give listings of all lighthouses, lightships, lit floating marks (over 8 m in height), fog signals and lights of navigational significance.

Each publication lists the characteristics of lights and fog signals, together with the equivalent foreign language light descriptions. Also included are tables which can be used to calculate the geographical and luminous ranges of lights. Details for all lights listed include the international number, location and/or name, geographical coordinates, characteristics and intensity, elevation in meters, range in sea miles and description of structure.

A Geographical Range Table for determining Dipping Distances, and a Luminous Range Diagram for obtaining the range at which a light can be seen allowing for its power and the prevailing visibility, are contained in each volume.

New editions of the Admiralty List of Lights and Fog Signals are published annually. Important changes are listed in Admiralty Weekly Notices to Mariners. The amendments which have accumulated while the volume has been in the press will be found in Section V of the Weekly Edition of Notices to Mariners.

Admiralty List of Radio Signals (ALRS) (NPs 281-288)

The volumes of Admiralty List of Radio Signals (ALRS) provide a comprehensive source of information on all aspects of Maritime Radio Communications as follows:

Volume 1-Coast Radio Stations is published in two parts: Part 1 (NP 281 (1)) covers Europe, Africa and Asia (excluding the Far East). Part 2 (NP 281 (2)) covers Oceania, the Americans and the Far East.

Each part contains particulars of: Global Marine Communications Services; Coast Radio Stations; Coast Guard Radio Stations; Medical Advice by Radio; Arrangements for Quarantine Reports; Locust Reports and Pollution Reports;

Maritime Satellite Services; Ship Reporting Systems; Piracy and Armed Robbery Reports; Alien Smuggling Reporting; Regulations for the use of Radio in Territorial Waters; Extract from the International Radio Regulations.

Volume 2-Radio Aids to Navigation, Satellite Navigation Systems, Legal Time, Radio Time Signals and Electronic Position Fixing Systems (NP 282).

Volume 3-Maritime Safety Information Services is published in two parts: Part 1 (NP 283 (1)) covers Europe, Africa and Asia (excluding the Far East). Part 2 (NP 283 (2)) covers Oceania, the Americans and the Far East.

Each part contains particulars of: Radio Facsimile Broadcasts; Radio Weather Services; Radio Navigational Warnings (including NAVTEX and WWNWS); GUNFACTS and SUBFACTS broadcasts; Weather Routing Services; Global Marine Meteorological Services; Certain Meteorological Codes provided for the use of shipping.

Associated diagrams and tables are shown with the text.

Volume 4-Lists of Meteorological Observation Stations (NP 284) and associated diagram.

Volume 5-Global Maritime Distress and Safety System (GMDSS) (NP 285) contains particulars of: GMDSS-Information and associated diagrams including extracts from the relevant International Telecommunications Union Radio Regulations and services available to assist vessels using or participating in the GMDSS.

Volume 6-Pilot Services, Vessel Traffic Services and Port Operations, is published in five parts. Each part contains particulars of the maritime radio procedures essential to assist vessels requiring pilots and/ or entering port. Also included is information on vessel traffic services and Port Operations.

Admiralty Tide Tables (ATT) (NPs 201-204)

The tables give daily predictions of the times and heights of high and low waters for over 230 standard and 6000 secondary ports in UK and Ireland; Europe; Indian Ocean and the South China Sea and the Pacific Ocean. The tables briefly outline the methods of prediction and the effect of meteorological conditions on tides and they comment on special tidal problems in the area.

Admiralty Tide Tables (ATT) are published in four volumes annually as follows:

Volume 1: United Kingdom and Ireland (including European Channel Ports).

Volume 2: Europe (excluding United Kingdom and Ireland), Mediterranean Sea and Atlantic Ocean.

Volume 3: Indian Ocean and South China Sea (including Tidal Stream Tables). Volume 4: Pacific Ocean (including Tidal Stream Tables).

Each volume is divided into three parts:

Part I gives daily predictions of the times and heights of high and low water for a selection of Standard Ports. In addition, in Volumes 3 and 4, Part 1a contains daily predictions of the times and rates of a number of tidal stream stations.

Part II gives data for predictions at a much larger number of Secondary Ports by applying time and

height differences to Standard Port predictions.

Part III lists the principal harmonic constants for all those ports where they are known, for use for prediction by the Simplified Harmonic Method of Tidal Prediction. In addition, in Volumes 2, 3 and 4, Part III contains similar information for a number of tidal stream stations.

Latest additions and any amendments to Admiralty Tide Tables are published in Annual Summary of Admiralty Notices to Mariners. If any amendments affect the early part of the year before the Summary has been issued, they are published in a Notice issued during the previous November.

Information in Admiralty Tide Tables on subjects such as tidal levels, harmonic constants, chart datum, etc, is subject to continual revision and information from obsolete editions should never be used.

Ocean Passages for the World (NP136)

For the mariner planning an ocean passage, Ocean Passages for the World (NP 136) provides a selection of commonly used routes with their distances between principal ports and important positions. It contains details of weather, currents and ice hazards appropriate to the routes, and so links the volumes of Sailing Directions. It also gives other useful information on Load Line Rules, Weather Routing, etc.

The volume is in two parts: Part I gives routes for powered vessels; Part II gives routes used in the past by sailing ships, edited from former editions to bring names up-to-date, and with certain notes added. The book is updated by Section IV of Admiralty Notices to Mariners, Weekly Editions, and periodically by supplements.

The Nautical Almanac

The Nautical Almanac tabulates all data for the year required for the practice of astronomical navigation at sea. It is compiled jointly by HM Nautical Almanac Office, Space Science and Technology Department, Rutherford Appleton Laboratory, Chilton, Didcot, United Kingdom, and The Nautical Almanac Office, United States Naval Observatory, and published annually by HM Stationery Office. It is obtainable through Admiralty Chart Agents and HM Stationery Office Bookshops, but not from the Hydrographic Office.

New Words and Expressions

nautical	adj. 航海的, 海员的
almanac	n. 天文历, 航海历
catalogue	n. 目录, 一览表
agent	n. 代理人, 代理商
compendium	n. 纲要, 概略
characteristic	n. 特性, 特征
meteorology	n. 气象学
hazard	n. 危险
restriction	n. 限制, 约束
obligatory	adj. 强制性的; 必须的
calculate	v. 计算, 估计
coordinate	n. 坐标
intensity	n. 强度

elevation	n. 海拔; 高程; (灯标灯芯) 高度
accumulate	v. 积累
comprehensive	adj. 综合的, 全面的
prediction	n. 预测
harmonic	adj. 调和的, 融洽的
issue	vt. 出版, 发行
revision	n. 改版, 修订
obsolete	adj. 过时的
periodically	adv. 周期性地
tabulate	vt. 制表, 列表
astronomical	adj. 天文学的, 天体的
compile	vt. 编辑, 编制
observatory	n. 天文台