

# Chart 5011

(INT 1 Format)

Edition 4 - October 2008



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## SYMBOLS and ABBREVIATIONS

### used on Admiralty Charts

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# INTRODUCTION

## General

Chart 5011 is primarily a key to symbols and abbreviations used on Admiralty and International paper charts compiled by the UKHO (United Kingdom Hydrographic Office). Variations may occur on charts adopted into the Admiralty Series that were originally produced by another hydrographic office. Where these symbols and abbreviations are easily understood they will not be included as examples in this publication. Symbols and abbreviations shown on navigational display systems using vector electronic charts may differ from those described in this document.

## Schematic Layout of Chart 5011

This edition of Chart 5011 is based on the "Chart Specifications of the IHO" (International Hydrographic Organization) adopted in 1982, with later additions and corrections. The layout and numbering accords with the official IHO version of Chart INT 1 (English version produced by Germany).

		Tracks Marked by Lights → P		Leading Beacons → Q		Tracks	
1	2 Bns # 270.5	2 Bns # 270.5	Leading line (the firm line is the track to be followed)	† Bn	Bns in Line 27030'	433.1	433.2
	2 Bns # 270.5			Ldg Bns 270.5		433.3	
				270.5			

- ① Section.
- ② Section designation. (In some nautical publications, this reference is pre-fixed "I", for International.)
- ③ Sub-section.
- ④ Cross-reference to terms in other sections.
- ⑤ Column 1: Numbering following the International "Chart Specifications of the IHO". A letter in this column, e.g. a, indicates a supplementary national symbol for which there is no International equivalent.
- ⑥ Column 2: International (INT) symbols used on Admiralty charts. Where both are shown, true to scale representations are to the left of symbols.
- ⑦ Column 3: Term and explanation in English.
- ⑧ Column 4: Other symbol or abbreviation used on Admiralty charts, if different from Column 2.
- ⑨ Column 5: Not navigationally significant. Cross references to the "Chart Specifications of the IHO", M-4 (Part B, unless a reference letter to another part is given).

The mark † indicates that this representation or usage is obsolescent.

The mark # in Columns 2, 3 and 4 indicates that this symbol will only be found on charts adopted into the Admiralty chart series.

However, users should note that on such charts additional or different symbols not listed in this publication may be used. Where not easily understood, such symbols will be explained on those charts.

**Metric Charts & Fathoms Charts** Metric units are introduced on Admiralty charts as they are modernised (except for charts of the waters around the United States of America, where fathoms or feet continue to be used). Fathom and/or feet charts can be distinguished from metric charts by the use of grey for land areas, a note in the title block and in some cases by a prominent legend in the margin.

**Chart Datum** On metric charts, the reference level for soundings is given under the chart title. On fathoms charts, the reference level for soundings may be given under the title; if not, it can be deduced from the tidal information panel.

**Depths** The units used are given under the title of the chart. The position of a sounding is the centre of the area covered by the figures.

On metric charts, depths of less than 21m are generally expressed in metres and decimetres. Where source information is sufficiently precise, depths between 21m and 31m may be given in half-metres. All other depths are rounded down to whole metres.

On fathom charts, depths are generally expressed in fathoms and feet where less than 11 fms, and in fathoms elsewhere. Where source information is sufficiently precise, depths between 11 and 15 fms may be given in fathoms and feet. Older charts may show fractions of fathoms in depths of 10 fathoms or less, and a few large-scale charts show all depths in feet.

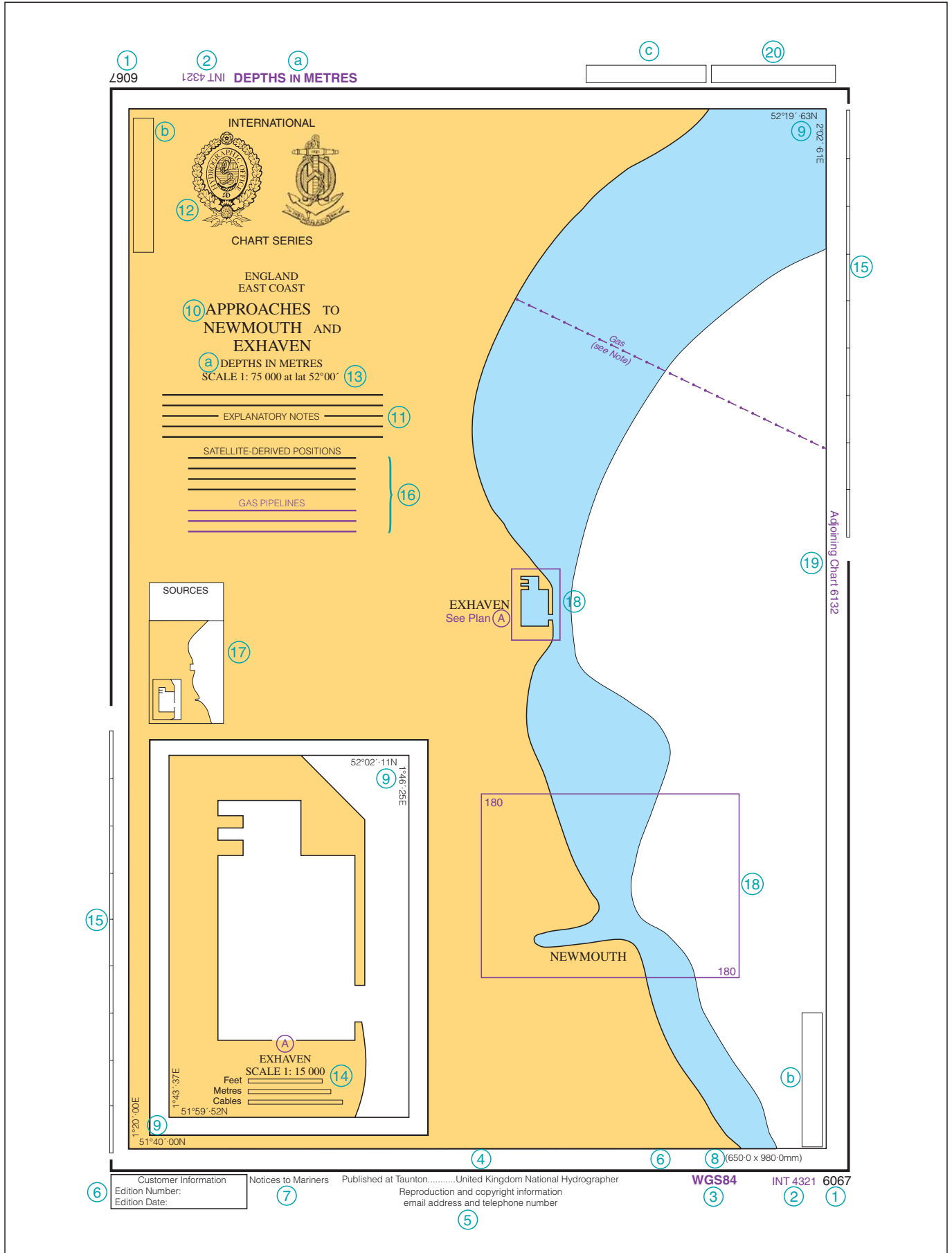
On adopted or co-produced charts these ranges may vary.

**Drying heights** Underlined figures on rocks and banks which uncover indicate heights above chart datum. They are given in metres and decimetres or in feet as appropriate.

<i>Heights</i>	Heights are given in metres or in feet above the charted height datum; details are given in the Explanatory Notes under the chart title. The position of a height is normally that of the dot alongside it, thus ·79. Parentheses are used when the figure expressing height is set apart from the object (eg when showing the height of a small islet). Clearance heights may be referred to a higher datum than other heights. In such cases this will be stated in the Explanatory Notes.
<i>Bearings</i>	Bearings are given from seaward and refer to the true compass.
<i>Sea Miles and Cables</i>	A sea mile is the length of one minute of latitude locally, and is the principal means of expressing distance on Admiralty charts. A cable is one-tenth of a sea mile.
<i>Names</i>	Names on Admiralty charts are spelt in accordance with the principles and systems approved by the Permanent Committee on Geographical Names for British Official Use.  A second name may be given, usually in parentheses, in the following circumstances: <ul style="list-style-type: none"> <li>a. if the retention of a superseded rendering will facilitate cross-reference to related publications;</li> <li>b. if, in the case of a name that has changed radically, the retention of the former one will aid recognition;</li> <li>c. if it is decided to retain an English conventional name in addition to the present official rendering;</li> </ul>
<i>Chart Catalogues</i>	Details of Admiralty charts are given in the "Catalogue of Admiralty Charts and Publications" (NP 131) and regional catalogues 'Caribbean' (NP105), 'Mediterranean' (NP106), 'Scandinavian' (NP107), 'North West Europe' (NP109), all published annually.
<i>The Mariner's Handbook and other Publications</i>	The Mariner's Handbook (NP 100) includes information on the following:  The use of charts and the degree of reliance that may be placed on them; chart supply and correction; names; charted navigational aids; navigational hazards; traffic separation schemes; offshore oil and gas operations; tides and currents; general marine meteorology. A glossary of terms used on Admiralty charts is also given.  Information about features represented on charts can also be found in the following publications or their digital equivalents:  Admiralty Sailing Directions; Admiralty List of Lights and Fog Signals; Admiralty Tide Tables and Tidal Stream Atlases; Admiralty List of Radio Signals; Annual Notices to Mariners; IALA Maritime Buoyage System.
<i>Copyright</i>	Admiralty charts and publications (including this one) are protected by Crown Copyright. They are derived from Crown Copyright information and from copyright information published by other organisations. They may not be reproduced in any material form (including photocopying or storing by electronic means) without prior permission of the copyright owners, which may be sought by applying, in the first instance, to the Copyright Manager; The United Kingdom Hydrographic Office, Taunton, Somerset TA1 2DN, UK.

# A Chart Number, Title, Marginal Notes

Schematic Layout of an Admiralty INT chart (reduced in size)



# Chart Number, Title, Marginal Notes **A**

Magnetic Features → B	Tidal Data → H	Satellite Navigation Systems → S
① Chart number in the Admiralty series.		251
② Chart number in the International (INT) Chart series.		251.1
③ Use of WGS84 geodetic reference system.		201 255.3
④ Publication note (imprint) showing the date of publication as a New Chart.		252.1 252.4
⑤ Reproduction and Copyright acknowledgement note. All Admiralty charts are subject to Crown Copyright restrictions.		253
⑥ Customer Information, Edition Number, Edition Date, (charts revised prior to May 2000 have New Edition date at bottom right of chart)		252.2
⑦ Notices to Mariners: (a) the year dates and numbers of Notices to Mariners and (b) the dates (usually bracketed) of minor corrections included in reprints but not formally promulgated (abandoned as a method of correction in 1986), (charts revised prior to May 2000 have the legend 'Small corrections').		252.3
⑧ Dimensions of the inner neat-lines of the chart border. In the case of charts on Transverse Mercator and Gnomonic projections, dimensions may be quoted for all borders of the chart which differ. Some Fathoms charts show the dimensions in inches e.g. (38.40 x 25.40).		222.3 222.4
⑨ Corner co-ordinates.		214
⑩ Chart title. This should be quoted, in addition to the chart number, when ordering a chart.		241.3
⑪ Explanatory notes on chart content; <b>to be read before using the chart.</b>		242
⑫ Seals. Where an Admiralty chart is in the International Chart series, the seal of the International Hydrographic Organization (IHO) is shown in addition to the national seal. Reproductions of international charts of other nations (facsimile) have the seals of the original producer (left), publisher (centre) and the IHO (right). Reproductions of other charts have the seals of original producer (left) and publisher (right); charts which are co-productions carry the seals of the nations involved in their production.		241.1 241.2
⑬ Scale of chart; on Mercator projection, at a stated latitude.		211 241.4
⑭ Linear scales on large-scale plan.		221
⑮ Linear border scales (metres). On smaller scale charts, the latitude border should be used to measure Sea miles and Cables.		221.1
⑯ Cautionary notes (if any) on charted detail; <b>to be read before using the chart.</b>		242
⑰ Source Diagram (if any). If a Source Diagram is not shown, details of the sources used in the compilation of the chart are given in the explanatory notes (see 10). <b>The Source Diagram or notes should be studied carefully before using the chart in order to assess the reliability of the sources.</b>		290-298
⑱ Reference to a larger scale chart or plan (with reference letter if plan on same chart).		254
⑲ Reference to an adjoining chart of similar scale.		254
⑳ Note 'IMPORTANT - THE USE OF ADMIRALTY CHARTS'.		243
Ⓐ Reference to the units used for depths measurement. The legend, 'DEPTHS IN FATHOMS/FEET', is shown on certain more recent fathoms charts where confusion might otherwise arise.		241.5 255.2
Ⓑ Conversion scales. To allow approximate conversions between metric and fathoms and feet units. On older charts, conversion tables are given instead.		280
Ⓒ Copyright Notice		

# B Positions, Distances, Directions, Compass

Geographical Positions				
1	Lat	Latitude		
2	Long	Longitude		
3		International Meridian (Greenwich)		
4	°	Degree(s)		130
5	'	Minute(s) of arc		130
6	"	Second(s) of arc		130
7	PA	Position approximate (not accurately determined or does not remain fixed)	† (PA)	† (P.A.) 417 424.1
8	PD	Position doubtful (reported in various positions)	† (PD)	† (P.D.) 417 424.2
9	N	North		131.1
10	E	East		131.1
11	S	South		131.1
12	W	West		131.1
13	NE	North-east		
14	SE	South-east		
15	NW	North-west		
16	SW	South-west		

Control Points, Distance Marks				
20		Triangulation point		304.1
21		Observation spot	† + Obs Spot	† + Obsn. Spot 304.2
22		Fixed point		305.1 340.5
23		Benchmark	† † BM	† † B.M. 304.3
24		Boundary mark		306
25.1		Distance along waterway, no visible marker		307
25.2		Distance along waterway, with visible marker		361.3
a		Viewpoint		◦ See View 390.2

Symbolised Positions (Examples)				
30				Symbols in plan: position is centre of primary symbol 305.1
31				Symbols in profile: position is at bottom of symbol 305.1
32	◦ Mast	◦ MAST	★	Point symbols (accurate positions) 305.1 340.5
33	◦ Mast PA			Approximate position † ◦ Mast PA 305.1

# Positions, Distances, Directions, Compass **B**

				Units
40	km	<i>Kilometre(s)</i>		
41	m	<i>Metre(s)</i>		130
42	dm	<i>Decimetre(s)</i>		130
43	cm	<i>Centimetre(s)</i>		
44	mm	<i>Millimetre(s)</i>		130
45	M	<i>International Nautical Mile(s) (1852m) or Sea Mile(s)</i>		130
46		<i>Cable (0.1M)</i>		130
47	ft	<i>Foot/feet</i>		
48		<i>Fathom(s)</i>		<i>fm., fms.</i>
49	h	<i>Hour</i>		130
50	# m	min	<i>Minute(s) of time</i>	130
51	s	# sec	<i>Second(s) of time</i>	130
52	kn	<i>Knot(s)</i>		130
53	t	<i>Tonne(s), Ton(s), tonnage (weight)</i>		328.3
54	# cd	<i>Candela</i>		


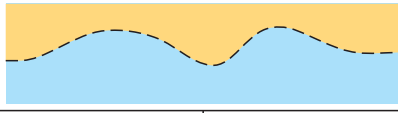
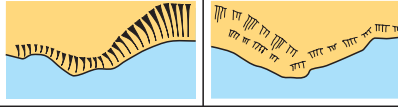
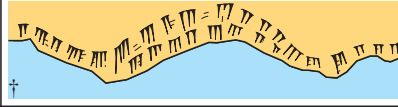
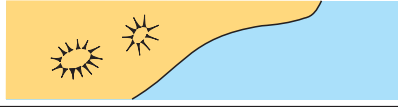
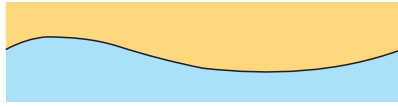


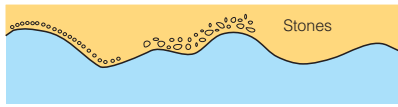
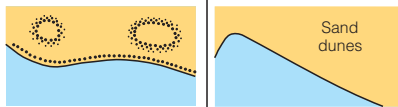

				Magnetic Compass
60		<i>Variation</i>	Var	
61		<i>Magnetic</i>	Mag	
62		<i>Bearing</i>		132
63		<i>true</i>		
64		<i>decreasing</i>	decr	
65		<i>increasing</i>	incr	
66		<i>Annual change</i>		
67		<i>Deviation</i>		
68.1	#	Magnetic Variation 4°30' W 2007 (8'E)	<i>Note of magnetic variation, in position</i>	272.2
68.2	#	Magnetic Variation at 55°N 8°W 4°30' W 2007 (8'E)	<i>Note of magnetic variation, out of position</i>	
			Magnetic Variation: 4°30' W 2007 (10'E)	

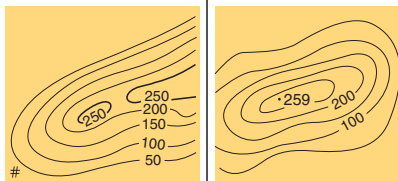

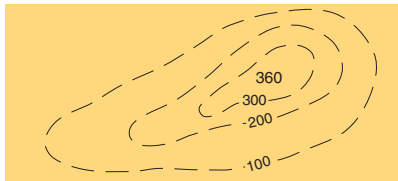
# B Positions, Distances, Directions, Compass

<p>70</p>	<p>Compass Roses, True and Magnetic.  <math>4^{\circ}30'W</math> 2004 (9'E) on magnetic north arrow means          Magnetic Variation <math>4^{\circ}30'W</math> in 2004, annual change 9'E          (i.e. magnetic variation decreasing 9' annually)</p> <p>Magnetic Variation is expressed to the nearest 5' and relates to 1 January of the year stated. Annual change E or W is given to the nearest minute.</p> <p>True Compass Rose          Magnetic North indicated by arrow</p> <p>The arrow indicating Magnetic North is omitted on charts comprising separate plans and on charts showing isogonals.</p> <p>† #</p> <p>†</p>	<p>260- 262.2 272.3</p>		
<p>71</p>	<p>Magnetic Variation Lines, Isogonals (lines of equal magnetic variation)</p> <p>MAGNETIC VARIATION LINES ARE FOR 2000</p> <p>The magnetic variation is shown in degrees, followed by the letter E or W, as appropriate, at certain positions on the lines. The annual change is expressed in minutes with the letter E or W and is given in brackets, immediately following the variation.</p> <p>Magnetic variation values are for 1 January of the year stated</p>	<p>272.1</p>		
<p>82.1</p>		<p>Local Magnetic Anomaly          Within the enclosed area the magnetic variation may deviate from the normal by the value shown.</p> <p>†</p>		<p>274</p>
<p>82.2</p>	<p>Local Magnetic Anomaly (see Note)</p>	<p>Where the area affected cannot be easily defined, a legend only is shown at the position.</p> <p>†</p>	<p>Local Magnetic Anomaly (see Note)</p>	

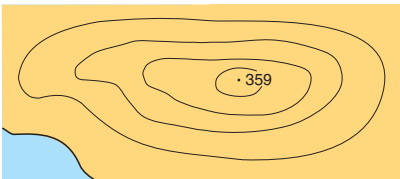
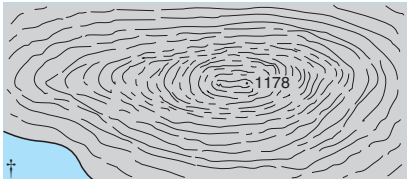

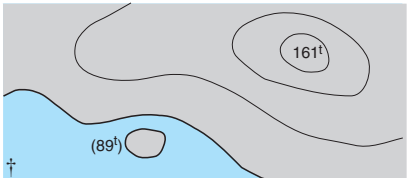


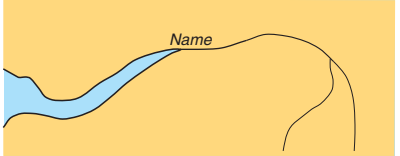
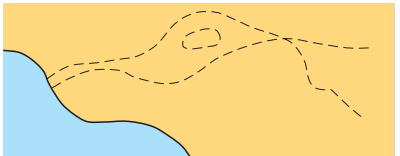
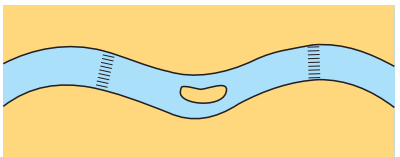
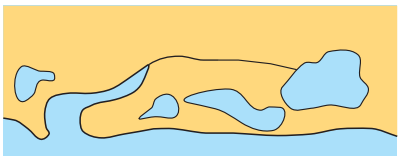
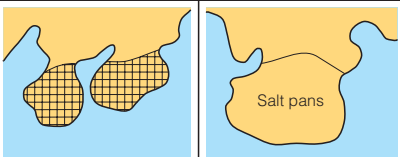
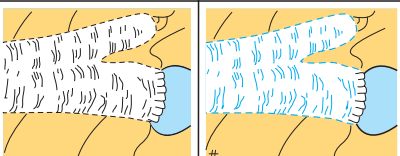
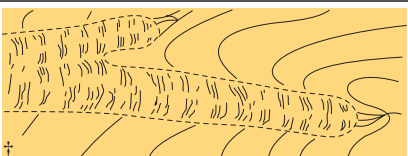
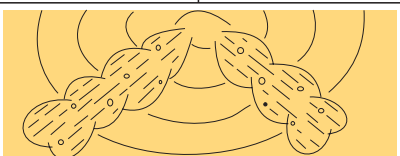

# Natural Features **C**

Foreshore → I, J		Coastline	
1		Coastline, surveyed	310.1 310.2
2		Coastline, unsurveyed	311
3		Steep coast, Cliffs	 312.1
4		Hillocks	312.1
5		Flat coast	312.2
6		Sandy shore	 312.2
7		Stony shore, Shingly shore	312.2
8		Sandhills, Dunes	 312.3

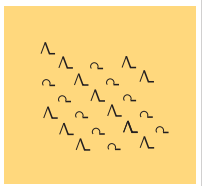
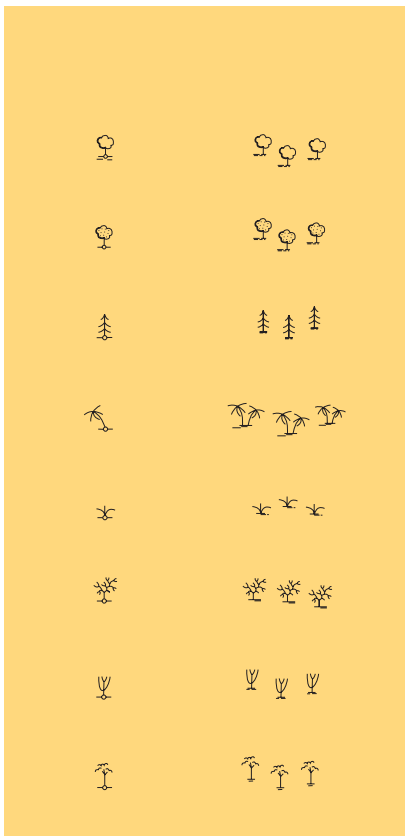
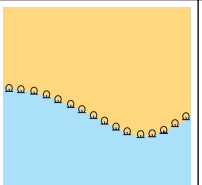
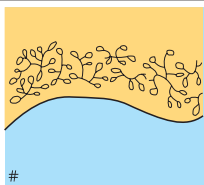
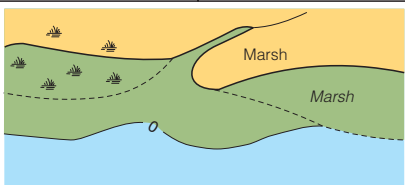
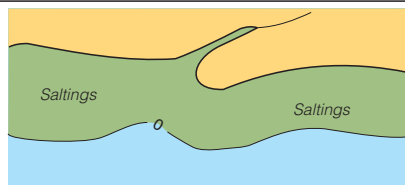
Plane of Reference for Heights → H		Relief	
10		Contour lines with values and spot height	351.3 351.4 351.5 351.6 352.2
11		Spot heights	352.1 352.2
12		Approximate contour lines with values and approximate height	351.3 351.4 351.5 351.6 352.3

# C Natural Features

13		Form lines with spot height		351.2 351.3 351.7 352.2
14		Approximate height of top of trees (above height datum)		352.4

Water Features, Lava				
20		River, Stream		353.1 353.2 353.4
21		Intermittent river		353.3
22		Rapids, Waterfalls		353.5
23		Lakes		353.6
24		Salt pans		353.7
25		Glacier		353.8
26		Lava flow		355

# Natural Features **C**

				Vegetation
30		Wooded	<i>Woods in general</i>	354.1
31			<i>Prominent trees (isolated or in groups)</i>	354.2
31.1			<i>Deciduous tree, unknown or unspecified tree</i>	
31.2			<i>Evergreen (except conifer)</i>	
31.3			<i>Conifer</i>	
31.4			<i>Palm</i>	
31.5			<i>Nipa palm</i>	
31.6			<i>Casuarina</i>	
31.7			<i>Filao</i>	
31.8			<i>Eucalypt</i>	
32			<i>Mangrove</i>	312.4
33		<i>Marsh, Swamp, Salt marsh</i>		312.2

# D Cultural Features

Settlements, Buildings			Height of objects → E	Landmarks → E
1			Urban area	370.3 370.4
2			Settlement with scattered buildings	370.5
3			Settlement (on medium and small-scale charts)	370.7
4			Inland village	370.6
5			Building	Bldg
6			Important building in built-up area	370.3
7			Street name, Road name	371
8			Ruin, Ruined landmark	378 378.2











Roads, Railways, Airfields				
10			Motorway	365.1
11			Road (hard surfaced)	365.2
12			Track, Path (loose or unsurfaced)	365.3
13			Railway, with station	328.4 362.1 362.2
14			Cutting	363.2
15			Embankment	364.1
16			Tunnel	363.1
17			Airport, Airfield	366.1 366.2
a			Tramway	
b			Helicopter landing site, Heliport	

# Cultural Features **D**

Plane of Reference for Heights → H		Other Cultural Features	
20		Vertical clearance above Height Datum (in parentheses when displaced for clarity)	380.1 380.2
21		Horizontal clearance	380.3
22		Fixed bridge with vertical clearance	381.1
23.1		Opening bridge (in general) with vertical clearance	381.3
23.2		Swing Bridge with vertical clearance	
23.3		Lifting Bridge with vertical clearance (closed and open)	
23.4		Bascule bridge with vertical clearance	
23.5		Pontoon bridge	
23.6		Draw bridge with vertical clearance	
24		Transporter bridge with vertical clearance between Height Datum and lowest part of structure	381.2
25		Overhead transporter, Aerial cableway with vertical clearance	382.3
26		Power transmission line with pylons and safe vertical clearance (see Note below D29)	382.1
27		Overhead cable, Telephone line, Telegraph line with vertical clearance	382 382.2
28		Overhead pipe with vertical clearance	383
29		Pipeline on land	377





























Note: The safe vertical clearance above Height Datum, as defined by the responsible authority, is given in magenta where known (see H20); otherwise the physical vertical clearance is shown in black as in D20.

# E Landmarks

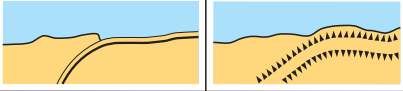
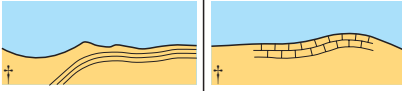
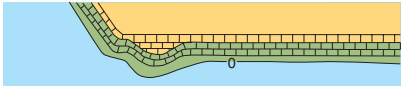


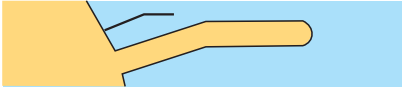
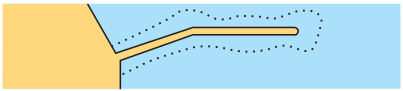
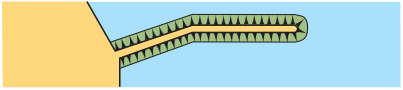
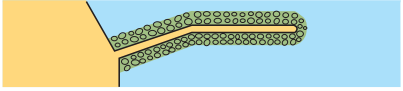
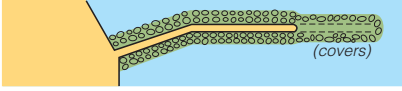
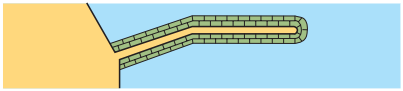
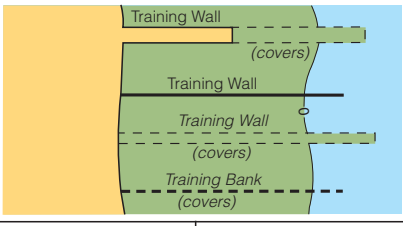
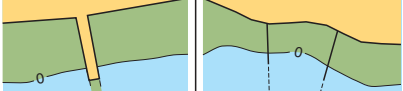


General	Plane of Reference for Heights → H	Lighthouses → P	Beacons → Q
1	 Factory  Hotel	Examples of landmarks	340.1 340.2 340.5
2	 FACTORY  HOTEL  WATER TOWER	Examples of conspicuous landmarks. A legend in capital letters indicates that a feature is conspicuous	 conspic 340.1 340.2 340.3 340.5
3.1		Pictorial symbols (in true position)	340.7 373.1 390 456.5 457.3
3.2		Sketches, Views (out of position)	
4	 (30)	Height of top of a structure above height datum	302.3
5	 (30)	Height of top of a structure above ground level	303


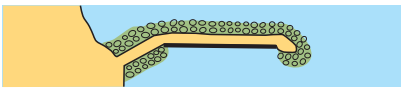

Landmarks				
10.1	 	Ch	Church, Cathedral	 Cath 373.1 373.2
10.2	 Tr  Tr		Church tower	373.2
10.3	 Sp  Sp		Church spire	373.2
10.4	 Cup  Cup		Church cupola	373.2
11			Chapel	 Ch
12			Cross, Calvary	 #
13			Temple	 373.3
14			Pagoda	 Pag 373.3
15			Shinto shrine, Joss house	373.3
16	 	#	Buddhist temple or shrine	 373.3
17			Mosque, Minaret	 373.4
18	 Marabout		Marabout	 Tomb  373.5
19			Cemetery (all religions)	 Cemy 373.6

# Landmarks **E**



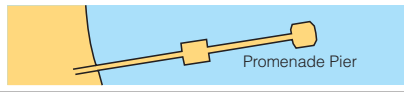
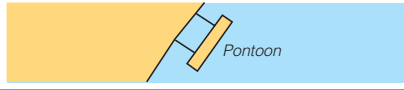

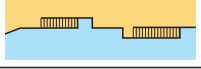
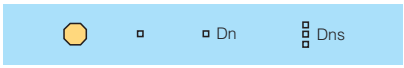


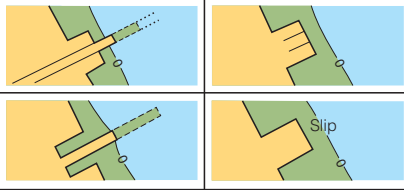
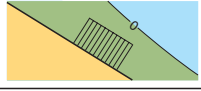
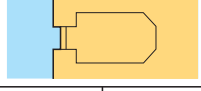
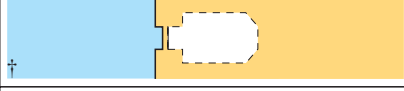

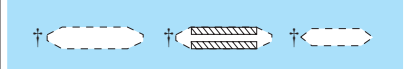
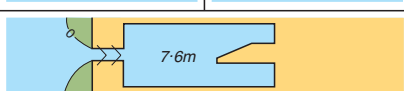
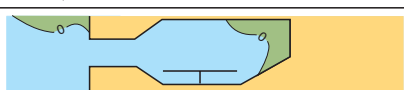

20		Tr	Tower		374.3		
21			Water tower, Water tank on a tower	⊙ Water Tr	374.2 376		
22		Chy	Chimney		374.1		
23			Flare stack (on land)		374.1		
24		Mon	Monument (including column, pillar, obelisk, statue)	† Mont	† Col	374.4	
25.1			Windmill		374.5		
25.2		Ru	Windmill (without sails)	†	⊗ (ru)	378.2	
26.1			Wind turbine	Wind turbine Windmotor	† 	† 	374.6
26.2			Wind farm			374.6	
27		FS	Flagstaff, Flagpole		374.7		
28			Radio mast, Television mast, Mast	⊙ Radio mast ⊙ TV mast		375.1	
29			Radio tower, Television tower	⊙ Radio Tr ⊙ TV Tr		375.2	
30.1	⊙ Radar Mast		Radar mast			487.3	
30.2	⊙ Radar Tr		Radar tower				
30.3	⊙ Radar Sc		Radar scanner				
30.4	⊙ Radome		Radome				
31			Dish aerial	†	⊙ Dish aerial	375.4	
32		Tanks	Tanks	†	○	376.1 376.2	
33	○ Silo	⊙ Silo	Silo			376.3	
34.1		Fort	Fortified structure (on large-scale charts)			379.1	
34.2			Castle, Fort, Blockhouse (on smaller scale charts)	† 	Cas	379.2	
34.3			Battery, Small fort (on smaller scale charts)	† 	Batt	Baty	379.2
35.1			Quarry (on large-scale charts)	†		367.1	
35.2			Quarry (on smaller scale charts)			367.2	
36			Mine			367.2	

# F Ports





Protection Structures					
1		<i>Dyke, Levee, Berm</i>			313.1
2.1		<i>Seawall (on large-scale charts)</i>			313.2
2.2		<i>Seawall (on smaller scale charts)</i>			
3		<i>Causeway</i>			313.3
4.1		<i>Breakwater (in general)</i>			322.1
					
					
4.2		<i>Breakwater (loose boulders, tetrapods, etc)</i>			
4.3		<i>Breakwater (slope of concrete or masonry)</i>			
5		<i>Training wall</i>			322.2
6.1		<i>Groyne (always dry)</i>			313.4 324
6.2		<i>Groyne (intertidal)</i>			
6.3		<i>Groyne (always underwater)</i>			




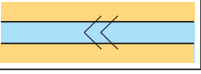
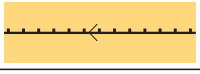

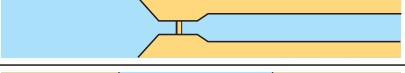

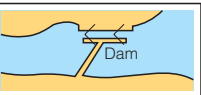
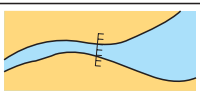
Harbour Installations					
	<i>Depths</i> → I	<i>Anchorage, Limits</i> → N	<i>Beacons and other fixed marks</i> → Q	<i>Marina</i> → U	
10		<i>Fishing harbour</i>			320.1
12		<i>Mole (with berthing facility)</i>			321.3
13		<i>Quay, Wharf</i>	<i>Whf</i>		321.1





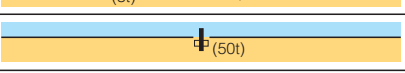
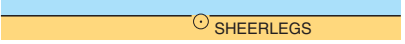









14		Pier, Jetty		321.2 321.4
15		Promenade pier		321.2
16		Pontoon		326.9
17		Landing for boats	† Ldg	324.2
18		Steps, Landing stairs		
19	④      Ⓑ      234	Designation of berth	†      ④	323.1
20		Dolphin		327.1
21		Deviation dolphin		327.2
22		Minor post or pile		327.3
23		Slipway, Patent slip, Ramp		324.1
24		Gridiron, Scrubbing grid		326.8
25		Dry dock, Graving dock	† 	326.1
26		Floating dock	† 	326.2
27		Non-tidal basin, Wet dock		326.3
28		Tidal basin, Tidal harbour		326.4
29.1		Floating oil barrier		449.2
29.2		Oil retention barrier (high pressure pipe)		
30	Dock under construction (2004)	Works on land, with year date		329.1
31	Being reclaimed (2004)	Works at sea, Area under reclamation, with year date		329.2
32	Under construction (2004) Works in progress (2004)	Works under construction, with year date	const    † constm.    † constn	329 329.4

# F Ports

33.1		Ruin		378.1
33.2		Ruined pier, partly submerged at high water		
34		Hulk		
a		Bollard		◦ Bol

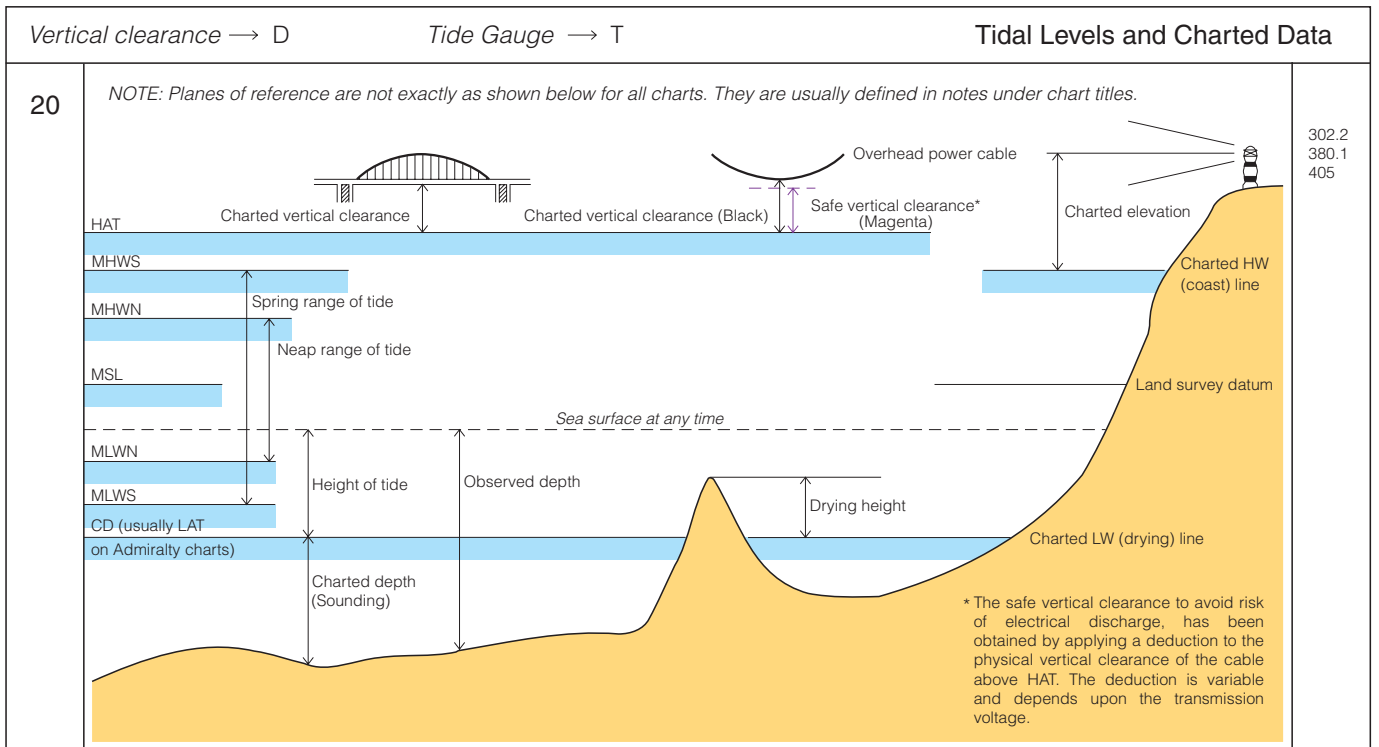
	Rivers, Canals, Barrages	Clearances → D	Signal Stations → T	Cultural Features → D	
40			Canal		361.6
41.1			Lock (on large-scale charts)		326.6 361.6
41.2			Lock (on smaller scale charts)		
42			Caisson, Gate		326.5
43			Flood barrage		326.7
44			Dam, Weir → Direction of flow		364.2

	Transshipment Facilities	Roads → D	Railways → D	Tanks → E	
50			Roll-on, Roll-off (RoRo) Ferry Terminal		321.5
51			Transit shed, Warehouse (with designation)		328.1
52			Timber yard		328.2
53.1			Crane (with lifting capacity) Travelling crane on railway		328.3
53.2			Container crane (with lifting capacity)		
53.3			Sheerlegs (conspicuous)		

Public Buildings				
60		<i>Harbour Master's office</i>	† Hr Mr	325.1
61		<i>Custom office</i>		325.2
62.1		<i>Health office, Quarantine building</i>		325.3
62.2	 Hospital	<i>Hospital</i>	 Hosp † Hospl	
63		<i>Post office</i>	† PO	372.1




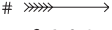


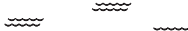







# H Tides, Currents




Terms Relating to Tidal Levels				
1	CD	<i>Chart Datum Datum for sounding reduction</i>		405
2	LAT	<i>Lowest Astronomical Tide</i>		405.3
3	HAT	<i>Highest Astronomical Tide</i>		
4	MLW	<i>Mean Low Water</i>		
5	MHW	<i>Mean High Water</i>		
6	MSL	<i>Mean Sea Level</i>		
7		<i>Land survey datum</i>		
8	MLWS	<i>Mean Low Water Springs</i>		
9	MHWS	<i>Mean High Water Springs</i>		
10	MLWN	<i>Mean Low Water Neaps</i>		
11	MHWN	<i>Mean High Water Neaps</i>		
12	MLLW	<i>Mean Lower Low Water</i>		
13	MHHW	<i>Mean Higher High Water</i>		
14	MHLW	<i>Mean Higher Low Water</i>		
15	MLHW	<i>Mean Lower High Water</i>		
16	Sp	<i>Spring tide</i>	† Spr.	
17	Np	<i>Neap tide</i>		
a		<i>High Water</i>	HW	
b		<i>Low Water</i>	LW	
c		<i>Mean Tide Level</i>	MTL	
d		<i>Ordnance Datum</i>	OD	


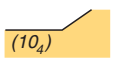
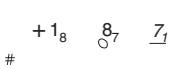


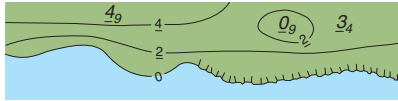
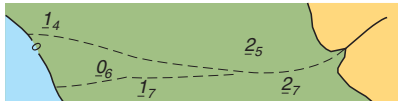


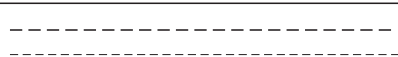
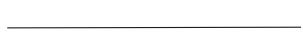
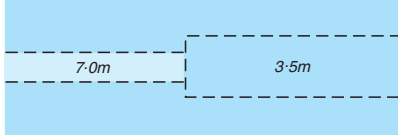
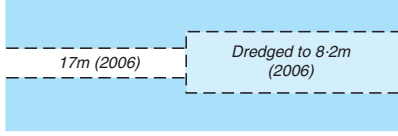
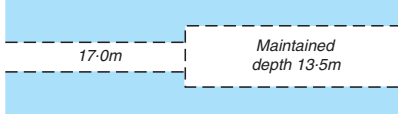
		Tide Tables																																																																																																																																																																																																																																																																																																																																															
30	<p><i>Tabular statement of semi-diurnal or diurnal tides</i></p> <p style="text-align: center;"><b>Tidal Levels referred to Datum of Soundings</b></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Place</th> <th rowspan="2">Lat. N/S</th> <th rowspan="2">Long. E/W</th> <th colspan="4">Heights in metres/feet above datum</th> <th rowspan="2">Datum and Remarks</th> </tr> <tr> <th>MHWS</th> <th>MHWN</th> <th>MLWN</th> <th>MLWS</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td>MHHW</td> <td>MLHW</td> <td>MHLW</td> <td>MLLW</td> <td></td> </tr> </tbody> </table>	Place	Lat. N/S	Long. E/W	Heights in metres/feet above datum				Datum and Remarks	MHWS	MHWN	MLWN	MLWS				MHHW	MLHW	MHLW	MLLW			406.2 406.3 406.4 406.5																																																																																																																																																																																																																																																																																																																										
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31	<p><i>Tidal stream table</i></p> <p>Tidal streams referred to....</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Hours</th> <th rowspan="2">Geographical Position</th> <th colspan="4">A</th> <th colspan="4">B</th> <th colspan="4">C</th> <th colspan="4">D</th> <th colspan="4">E</th> </tr> <tr> <th colspan="2">Directions of streams (degrees)</th> <th colspan="2">Rates at spring tides (knots)</th> <th colspan="2">Directions of streams (degrees)</th> <th colspan="2">Rates at spring tides (knots)</th> <th colspan="2">Directions of streams (degrees)</th> <th colspan="2">Rates at spring tides (knots)</th> <th colspan="2">Directions of streams (degrees)</th> <th colspan="2">Rates at spring tides (knots)</th> <th colspan="2">Directions of streams (degrees)</th> <th colspan="2">Rates at spring tides (knots)</th> </tr> </thead> <tbody> <tr> <td>6</td> <td rowspan="12" style="writing-mode: vertical-rl; transform: rotate(180deg);">                     Before High Water                      High Water                      After High Water                 </td> <td colspan="20"></td> </tr> <tr><td>5</td><td colspan="20"></td></tr> <tr><td>4</td><td colspan="20"></td></tr> <tr><td>3</td><td colspan="20"></td></tr> <tr><td>2</td><td colspan="20"></td></tr> <tr><td>1</td><td colspan="20"></td></tr> <tr><td>0</td><td colspan="20"></td></tr> <tr><td>-1</td><td colspan="20"></td></tr> <tr><td>-2</td><td colspan="20"></td></tr> <tr><td>-3</td><td colspan="20"></td></tr> <tr><td>-4</td><td colspan="20"></td></tr> <tr><td>-5</td><td colspan="20"></td></tr> <tr><td>-6</td><td colspan="20"></td></tr> <tr> <td colspan="2"></td> <td colspan="4">No</td> <td colspan="4">Maximum Rates</td> <td colspan="4">For predictions, use Admiralty Tide Tables</td> <td colspan="4"></td> </tr> </tbody> </table>	Hours	Geographical Position	A				B				C				D				E				Directions of streams (degrees)		Rates at spring tides (knots)		Directions of streams (degrees)		Rates at spring tides (knots)		Directions of streams (degrees)		Rates at spring tides (knots)		Directions of streams (degrees)		Rates at spring tides (knots)		Directions of streams (degrees)		Rates at spring tides (knots)		6	Before High Water High Water After High Water																					5																					4																					3																					2																					1																					0																					-1																					-2																					-3																					-4																					-5																					-6																							No				Maximum Rates				For predictions, use Admiralty Tide Tables									407.2 407.3
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# H Tides, Currents

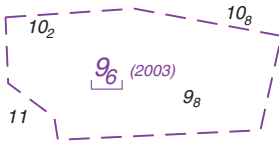
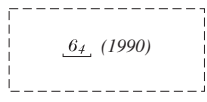
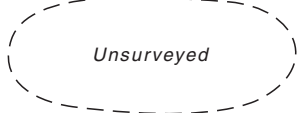
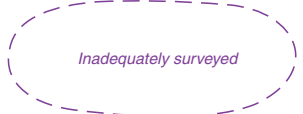
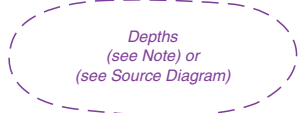
Tidal Streams and Currents		Breakers →K	Tide Gauge →T	
40		<i>Flood tide stream (with mean spring rate)</i>	 The number of black dots on the tidal stream arrows indicates the number of hours after High or Low Water at which the streams are running	407.4 408.2
41		<i>Ebb tide stream (with mean spring rate)</i>		407.4 408.2
42		<i>Current in restricted waters</i>		408.2
43	 (see Note)	<i>Ocean current. Details of current strength and seasonal variations may be shown</i>		408.3
44		<i>Overfalls, tide rips, races</i>		423.1
45		<i>Eddies</i>		423.3
46		<i>Position of tabulated tidal stream data with designation</i>		407.2
47		<i>Offshore position for which tidal levels are tabulated</i>		406.5
e		<i>Wave recorder</i>		
f		<i>Current meter</i>		

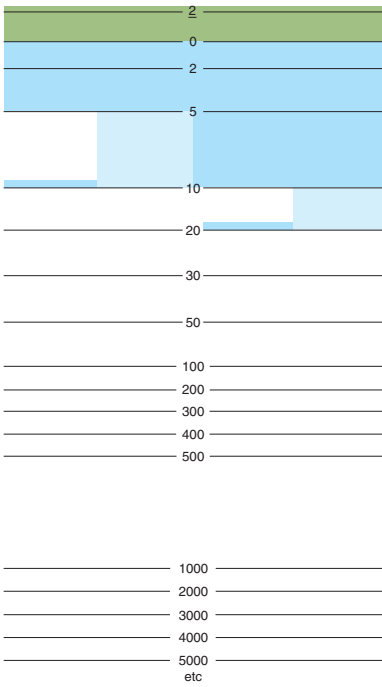
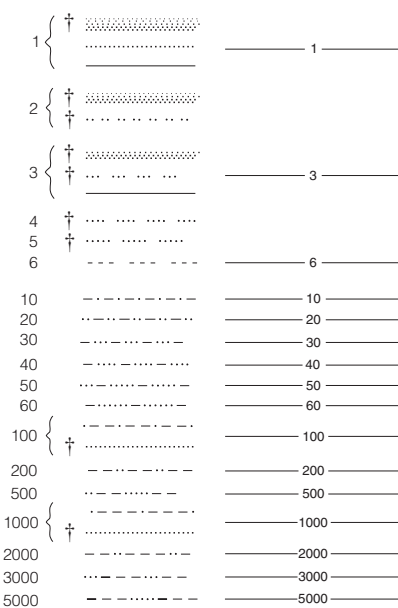
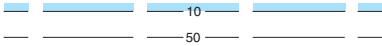
General				
1	ED	Existence doubtful	† (ED)	417 424.3
2		Sounding of doubtful depth		417 424.4
3.1	Rep	Reported, but not confirmed	† Repd	417 424.5
3.2	Rep (1973)	Reported, with year of report, but not confirmed	† Repd (1973)	
4	 	Reported, but not confirmed, sounding or danger (on small-scale charts only)		M-4 Part C 404.3
a		Unexamined	unexam †unexamd	

Plane of Reference for Depths → H		Plane of Reference for Heights → H		Soundings and Drying Heights	
10	12 9 <sub>2</sub> # 9.7	Sounding in true position			403.1 410/412 412.1
11		Sounding out of position			412 412.1 412.2
12		Least depth in narrow channel			412 412.1 412.2
13		No bottom found at depth shown			412.3
14	12 9 <sub>1</sub>	Soundings taken from old or smaller scale sources shown in upright, hairline figures			412.4 417.3
15		Drying heights and contours above chart datum			413 413.1 413.2
16		Natural watercourse (in intertidal area)			413.3

Plane of Reference for Depths → H		Depths in Fairways and Areas		
20		Limit of dredged channel or area (major and minor)	# 	414.3
21		Dredged channel or area with depth of dredging in metres and decimetres	Depths may be shown as 3,5 or 3 <sub>5</sub> on some adopted charts	414
22		Dredged channel or area with depth of dredging and year of the latest control survey		414.1
23		Dredged channel or area with depth regularly maintained		414.2




# Depths

24		<p>Area swept by wire drag. The depth is shown at Chart Datum. (The latest date of sweeping may be shown in parentheses)</p>		415 415.1
25	 <p>Unsurveyed</p>	<p>Unsurveyed or inadequately surveyed area; area with inadequate depth information</p>		410 417 417.6 417.7
	 <p>Inadequately surveyed</p>  <p>Depths (see Note) or (see Source Diagram)</p>			

Depth Contours				
30		<p><i>Drying contour</i> Low Water (LW) Line, Chart Datum (CD)</p> <p>Blue tint, in one or more shades, and tint ribbons, are shown to different limits according to the scale and purpose of the chart and the nature of the bathymetry.</p> <p>On some charts, the standard set of contours is augmented by additional contours in order to delimit particular bathymetric features or for the benefit of particular categories of shipping. However, in some instances where the provision of additional contours would be helpful, the survey data available does not permit it.</p> <p>On some charts, contours and labels are printed in blue.</p>	<p>On charts showing depths in fathoms/feet, the following contours are used:</p>  <p>On some recently-corrected charts, contours may be shown by continuous lines.</p>	404.2 410 411
31		<p>Approximate depth contours (length of dashes may vary)</p>		411.2 417.5

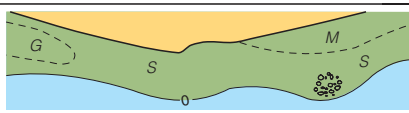
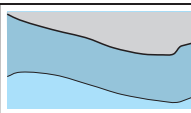
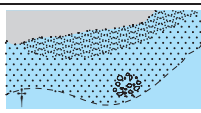

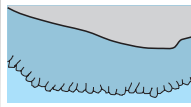
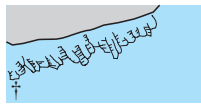

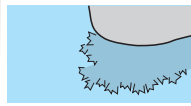



# Nature of the Seabed **J**

Rocks →K			Types of Seabed		
1	S	Sand	†	s	425 427
2	M	Mud	†	m	
3	Cy	Clay	†	cl	
4	Si	Silt			
5	St	Stones	†	st	
6	G	Gravel	†	g	
7	P	Pebbles	†	peb	
8	Cb	Cobbles			
9.1	R	Rock, Rocky	†	r	
9.2	Bo	Boulder(s)			421.2
10	Co	Coral	†	crl	
11	Sh	Shells	†	sh	
12.1	S/M	Two layers e.g. Sand over Mud		#M (25)/SG S (<1)/R (Thickness of surface layer in metres)	425.8
12.2	fS.M.Sh	Mixed: where the seabed comprises a mixture of materials, the main constituent is given first, e.g. fine Sand with Mud and Shells			425.9
13.1	Wd	Weed (including Kelp)	†	wd	425.5
13.2		Kelp			428.2
14		Sandwaves			428.1
15		Spring in seabed			428.3
a		Ground	†	Gd      grd	
b		Ooze	†	Oz	
c		Marl	†	Ml	
d		Shingle	†	Sn      shin	
e		Chalk	†	Ck      chk	
f		Quartz	†	Qz      qrtz	
g		Madrepore	†	Md      mad	
h		Basalt	†	Ba	
i		Lava	†	Lv	
j		Pumice	†	Pm      pum	
k		Tufa	†	T	
l		Scoriæ	†	Sc	
m		Cinders	†	Cn      cin	

# J Nature of the Seabed

n		Manganese	†	Mn	man	
o		Glauconite	†	Gc		
p		Oysters	†	Oy	oys	
q		Mussels	†	Ms	mus	
r		Sponge	†	Sp		
s		Algae	†	Al		
t		Foraminifera	†	Fr	for	
u		Globigerina	†	Gl		
v		Diatoms	†	Di		
w		Radiolaria	†	Rd	rad	
x		Pteropods	†	Pt		
y		Polyzoa	†	Po	pol	

Intertidal Areas					
20		Area of sand and mud with patches of stones or gravel			426.1
21		Rocky area			426.2
22		Coral reef			426.3

Qualifying Terms					
30	f	Fine	} only used in relation to sand		425 427
31	m	Medium			
32	c	Coarse			
33	bk	Broken	†	brk	
34	sy	Sticky	†	stk	
35	so	Soft	†	sft	
36	sf	Stiff	†	stf	
37	v	Volcanic	†	vol	
38	ca	Calcareous	†	cal	
39	h	Hard			425.5 425.7

# Nature of the Seabed **J**

aa		<i>Small</i>	†	<i>sm</i>	
ab		<i>Large</i>	†	<i>l</i>	
ac		<i>Glacial</i>	†	<i>ga</i> <i>glac</i>	
ad		<i>Speckled</i>	†	<i>sk</i> <i>spk</i>	
ae		<i>White</i>	†	<i>w</i>	
af		<i>Black</i>	†	<i>bl</i> <i>blk</i>	
ag		<i>Blue</i>	†	<i>b</i>	
ah		<i>Green</i>	†	<i>gn</i>	
ai		<i>Yellow</i>	†	<i>y</i>	
aj		<i>Red</i>	†	<i>rd</i>	
ak		<i>Brown</i>	†	<i>br</i>	
al		<i>Chocolate</i>	†	<i>ch</i> <i>choc</i>	
am		<i>Grey</i>	†	<i>gy</i>	
an		<i>Light</i>	†	<i>lt</i>	
ao		<i>Dark</i>	†	<i>d</i>	

# K Rocks, Wrecks, Obstructions

General			
1		Dangerline: A danger line draws attention to a danger which would not stand out clearly enough if represented solely by its symbol (e.g. isolated rock) or delimits an area containing numerous dangers, through which it is unsafe to navigate	411.4 420.1
2		Depth cleared by wire drag sweep or diver. The symbol may be used with other symbols, e.g. wrecks, obstructions, wells	415 422.3 422.9
3		Safe clearance depth. Obstruction over which the exact depth is unknown, but which is considered to have a safe clearance at the depth shown. The symbol may be used with other symbols, e.g. wrecks, wells, turbines	422.5 422.7
a		Dries	† <sub>Dr</sub> † <sub>dr</sub>
b		Covers	† <sub>cov</sub>
c		Uncovers	† <sub>uncov</sub>

Rocks		Plane of Reference for Heights → H	Plane of Reference for Depths → H	
10		Rock (islet) which does not cover, height above height datum	(1,7) (3,1) (4,1)	421.1
11		Rock which covers and uncovers, height above Chart Datum, where known	† Dries 1-6m † Dr 1-6m	421.2
12		Rock wash at the level of Chart Datum		421.3
13		Underwater rock over which the depth is unknown, but which is considered dangerous to surface navigation		421.4
14		Underwater rock of known depth:		421.4
14.1		inside the corresponding depth area	Height datum CD 5m 10m 20m + (12 <sub>1</sub> ) + (5 <sub>7</sub> ) + (2 <sub>8</sub> )	
14.2		outside the corresponding depth area, dangerous to surface navigation	Height datum CD 5m 10m 20m (12 <sub>1</sub> ) + (4 <sub>5</sub> )	

# Rocks, Wrecks, Obstructions **K**

15		Underwater rock of known depth, not dangerous to surface navigation		421.4
16		Coral reef which is always covered		421.5
17		Breakers		423.2
d		Discoloured water	Discol † Discold	424.6

	Hulk → F	Plane of Reference for Depths → H	Historic Wreck → N	Wrecks and Fouls
20		Wreck, hull never covers, on large-scale charts		422.1
21		Wreck, hull covers and uncovers, on large-scale charts	†	†
22		Submerged wreck, depth known, on large-scale charts	†	422.1
23		Submerged wreck, depth unknown, on large-scale charts	†	422.1
24		Wreck showing any part of hull or superstructure at the level of Chart Datum		422.2
25		Wreck of which the mast(s) only are visible at Chart Datum		422.2
26		Wreck over which the depth has been obtained by sounding but not by wire sweep		422.4
27		Wreck, least depth obtained by wire sweep or diver		422.3
28		Wreck, depth unknown, which is considered potentially dangerous to surface navigation		422.5
29		Wreck, in over 200m or depth unknown, which is considered not dangerous to surface navigation. For information about depth criteria, which may vary, see NP100, The Mariner's Handbook		422.6
e		Submerged wreck, depth unknown	†	

# K Rocks, Wrecks, Obstructions

30		Wreck over which the exact depth is unknown, but which is considered to have a safe clearance at the depth shown		422.5 422.7
31		Foul area, not dangerous to surface navigation, but to be avoided by vessels anchoring, trawling, etc (eg remains of wreck, cleared platform)		422.8
f		Navigation light on stranded wreck		

Obstructions		Plane of Reference for Depths → H	Kelp, Seaweed → J	Underwater Installations → L	
40					422.9
41					422.9
42					422.9
43.1		#			327.5
43.2	#				
44.1					447.1
44.2					447.2
45					447.3
46.1					447.5
46.2					
47					447.4
48.1					447.6
48.2					

Combined symbols → K (General)		Areas, Limits → N		General
1	<i>EKOFISK</i> <i>OILFIELD</i>	Name of oilfield or gasfield		445.3
2		Platform with designation/name		445.3
3		Limit of safety zone around offshore installation		439.2 445.16
4		Limit of development area		
5.1	FLY	Wind turbine, lit wind turbine and wind turbine with vertical clearance		445.8
5.2		Wind farm, wind farm with restricted area		445.9
Mooring Buoys → Q		Platforms and Moorings		
10		Production platform, Platform, Oil derrick		445.2
11		Flare stack (at sea)		445.2
12		Fixed Single Point Mooring, including Single Anchor Leg Mooring (SALM), Articulated Loading Column (ALC)		445.2 445.4
13		Observation / research platform (with name)		
14		Disused platform		
15		Artificial Island		
16		Floating Single Point Mooring, including Catenary Anchor Leg Mooring (CALM), Single Buoy Mooring (SBM)		445.4
17		Moored storage tanker including FSU and FPSO		445.5
18		Mooring ground tackle for fixing floating structures		431.6
Plane of Reference for Depths → H		Obstructions → K		Underwater Installations
20		Production well, with depth where known		445.5
21.1		Suspended well (wellhead and pipes projecting from the seabed) over which the depth is unknown		445.1
21.2		Suspended well over which the depth is known		445.1
21.3		Suspended well with height of wellhead above the sea floor		
22	#	Site of cleared platform		422.8

# L Offshore Installations

23	Pipe  Pipe (1a)	Above-water wellhead (lit and unlit). The drying height or height above height datum is charted if known		445.1
24	Turbine  FL(2) Underwater Turbine	Underwater turbine		445.10
c		Single Well Oil Production System. The depth shown is the least depth over the wellhead. For substantial periods of time a loading tanker is positioned over the wellhead	SWOPS	445.1
d		Underwater installations; template, manifold	Template  Manifold	445.1

Submarine Cables				
30.1		Submarine cable		443.1
30.2		Submarine cable area		443.2 439.3
31.1		Submarine power cable		443.2
31.2		Submarine power cable area		443.2 439.3
32		Disused submarine cable		443.7

Submarine Pipelines				
40.1		Supply pipeline: unspecified, oil, gas, chemicals, water		444 444.1
40.2		Supply pipeline area: unspecified, oil, gas, chemicals, water		444.3 439.3
41.1		Outfall and intake: unspecified, water, sewer, outfall, intake		444 444.2
41.2		Outfall and intake area: unspecified, water, sewer, outfall, intake		444.3 439.3
42		Buried pipeline / pipe (with nominal depth to which buried)		444.5
43		Diffuser, crib		444.8
44		Disused pipeline / pipe		444.7



Tracks Marked by Lights → P		Leading Beacons → Q		Tracks	
1		Leading line (≠ means "in line", the continuous line is the track to be followed)		433.1 433.2 433.3	
2		Transit (other than leading line), Clearing line		433.4 433.5	
3		Recommended track based on a system of fixed marks ‡		434.1 434.2	
4		Recommended track not based on a system of fixed marks ‡		434.1 434.2	
5.1		One-way track and DW track based on a system of fixed marks		432.3	
5.2		One-way track and DW track not based on a system of fixed marks			
6		Recommended track with maximum authorised draught ‡		432.4 434.3 434.4	

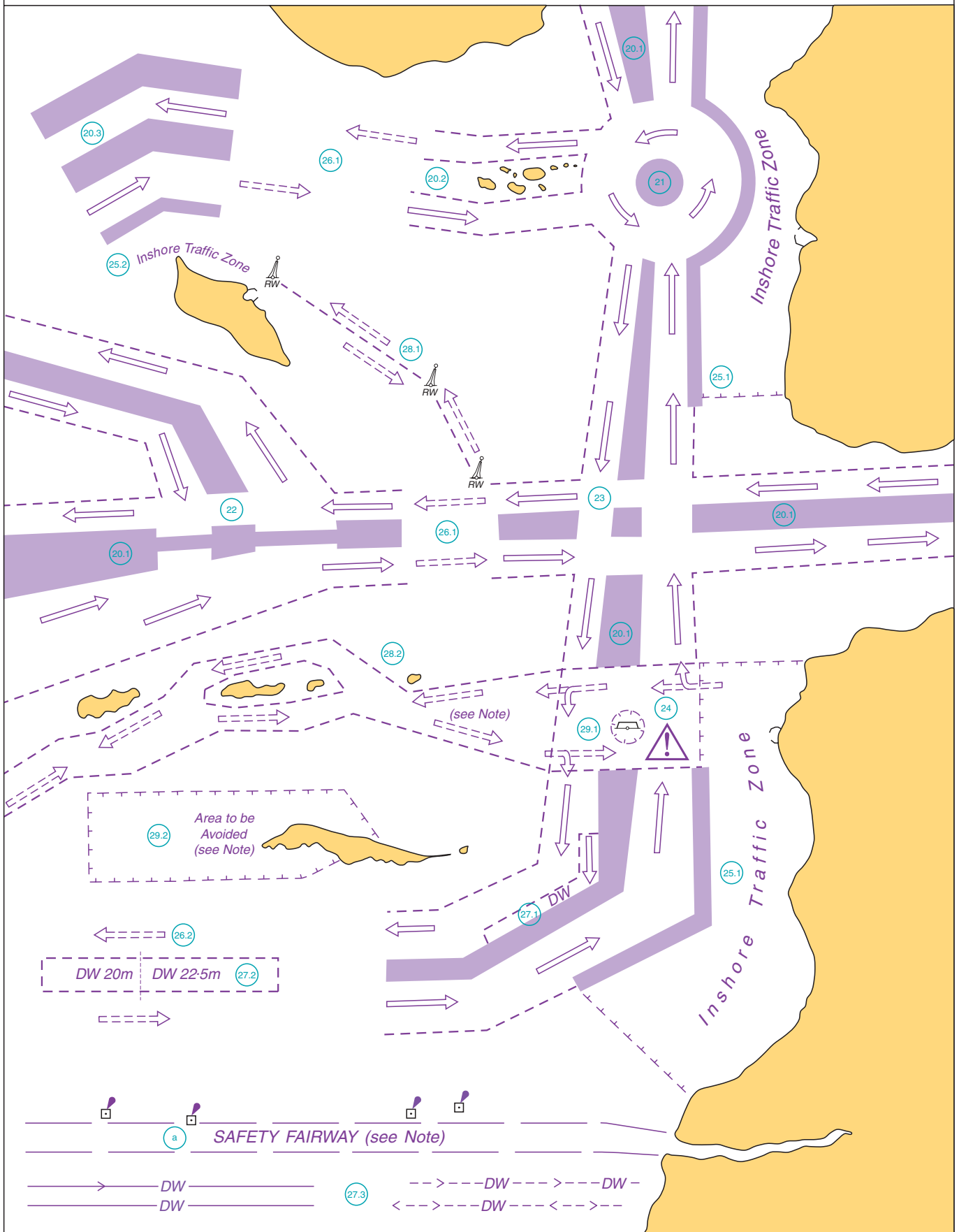
## Routeing Measures - Basic Symbols

10		Established (mandatory) direction of traffic flow		435.1
11		Recommended direction of traffic flow ‡		435.5
12		Separation line (large-scale, small-scale)		435.1 436.3
13		Separation zone		435.1 436.3
14		Limit of restricted routeing measure (e.g. Inshore Traffic Zone, Area to be Avoided)		435.1 436.3 439.2
15		Limit of routeing measure		435.1 436.3
16		Precautionary Area		435.2
17		Archipelagic Sea Lane; axis line and limit beyond which vessels shall not navigate		435.10
18		Fairway, designated by regulatory authority; with minimum depth  with maximum authorised draught		

‡ The term 'recommended' in connection with tracks and routeing measures does not imply recommendation by the United Kingdom Hydrographic Office. It is usually by a regulatory authority, but may be established by precedent.





# M Tracks, Routes





Examples of Routing Measures


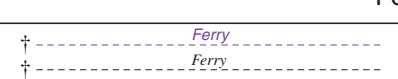



Examples of Routeing Measures (see diagram on page 34)		
20.1	Traffic separation scheme (TSS), traffic separated by separation zone	435.1
20.2	Traffic separation scheme, traffic separated by natural obstructions	435.1
20.3	Traffic separation scheme, with outer separation zone, separating traffic using scheme from traffic not using it	435.1
21	Traffic separation scheme, roundabout	435.1
22	Traffic separation scheme with "crossing gates"	435.1
23	Traffic separation schemes crossing, without designated precautionary area	435.1
24	Precautionary area	435.2
25.1	Inshore traffic zone (ITZ), with defined end limits	435.1
25.2	Inshore traffic zone, without defined end limits	435.1
‡ 26.1	Recommended direction of traffic flow, between traffic separation schemes	435.5
‡ 26.2	Recommended direction of traffic flow, for ships not needing a deep water route	435.5
27.1	Deep water route (DW), as part of one-way traffic lane	435.3
27.2	Two-way deep water route, with minimum depth stated	435.3
27.3	Deep water route, centre line shown as recommended one-way or two-way track	435.3
‡ 28.1	Recommended route (often marked by centre line buoys)	435.4
28.2	Two-way route with one-way sections	435.6
29.1	Area to be avoided (ATBA), around navigational aid	435.7
29.2	Area to be avoided, because of danger of stranding	435.7
a	Safety fairway	432.2

‡ The term 'recommended' in connection with tracks and routeing measures does not imply recommendation by the United Kingdom Hydrographic Office. It is usually by a regulatory authority, but may be established by precedent.

Radar Surveillance System				
30	 Radar Surveillance Station	Radar surveillance station		487 487.3
31		Radar range		487.1
32.1		Radar reference line		487.2
32.2		Radar reference line coinciding with a leading line		











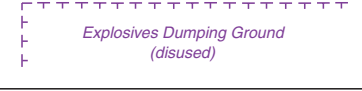



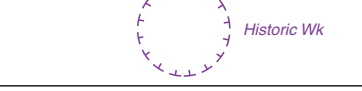










Radio Reporting				
40.1		Radio calling-in point, way point, or reporting point (with designation, if any) showing direction(s) of vessel movement		488
40.2		Radio reporting line (with designation, if any) showing direction(s) of vessel movement		488.1

Ferries				
50		Ferry		438.1
51		Cable Ferry		438.2

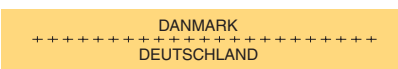
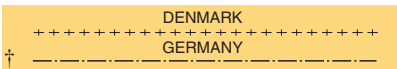


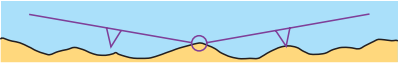










# N Areas, Limits






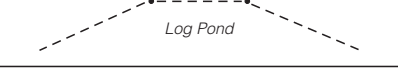

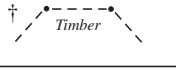

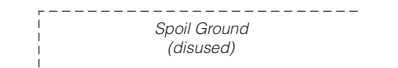




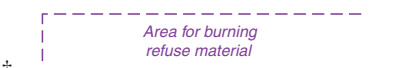
General	Dredged and Swept Areas → I	Submarine Cables, Submarine Pipelines → L	Tracks Routes → M
1.1	 (for emphasis)	Maritime limit in general, usually implying permanent physical obstructions	
1.2	 (for emphasis)	Maritime limit in general, usually implying no permanent physical obstructions	439.1 439.6
2.1	 (for emphasis)	Limit of restricted area	439.2 439.3 439.6 441.6
2.2	 †	Limit of area into which entry is prohibited	†  Entry Prohibited












Anchorages, Anchorage Areas			
10		Reported anchorage (no defined limits)	† 
11.1		Anchor berths	† 
11.2		Anchor berths with swinging circle shown	† 
12.1		Anchorage area in general	431.3
12.2		Numbered anchorage area	† 
12.3		Named anchorage area	
12.4		Deep water anchorage area, anchorage area for deep-draught vessels	
12.5		Tanker anchorage area. This symbol may be adapted for other types of vessel, e.g. small craft	
12.6		Anchorage area for periods up to 24 hours	
12.7		Explosives anchorage area	
12.8		Quarantine anchorage area	
12.9		Reserved anchorage area	
13		Seaplane operating area	† 
14		Anchorage for seaplanes	† 

Restricted Areas				
20		<i>Anchoring prohibited</i>	† 	431.4 439.3 439.4
21		<i>Fishing prohibited</i>		439.3 439.4
22	<i>Example</i> 	<i>Environmentally Sensitive Sea Areas: Limit of marine reserve, national park, non-specific nature reserve</i>	†  # 	437.3 437.6 437.7
	<i>Examples</i> 	<i>Bird sanctuary, seal sanctuary (other animal silhouettes may be used for specialized areas)</i>		
		<i>Particulary Sensitive Sea Area (coloured tint band may vary in width between 1 and 5mm)</i>		
23.1		<i>Explosives dumping ground</i>	† 	442.1 442.2 442.3 442.4
23.2		<i>Explosives dumping ground (disused)</i>	† 	
24		<i>Dumping ground for chemical waste</i>		442.1 442.2 442.3
25		<i>Degaussing range</i>	† <i>D.G. Range</i> <i>DG Range</i>	448.1 448.2
26		<i>Historic wreck and restricted area</i>		449.5
27		<i>Maximum speed</i>		430.2
a		<i>Seabed operations dangerous/prohibited</i>	# 	
b		<i>Diving prohibited</i>	# 	
Military Practice Areas				
30		<i>Firing practice area</i>		441.1 441.2 441.3
31		<i>Military restricted area into which entry is prohibited</i>	† 	441.6
32		<i>Mine-laying (and counter-measure) practice area</i>		441.4
33		<i>Submarine transit lane and exercise area</i>		441.5
34		<i>Minefield</i>	† 	441.8

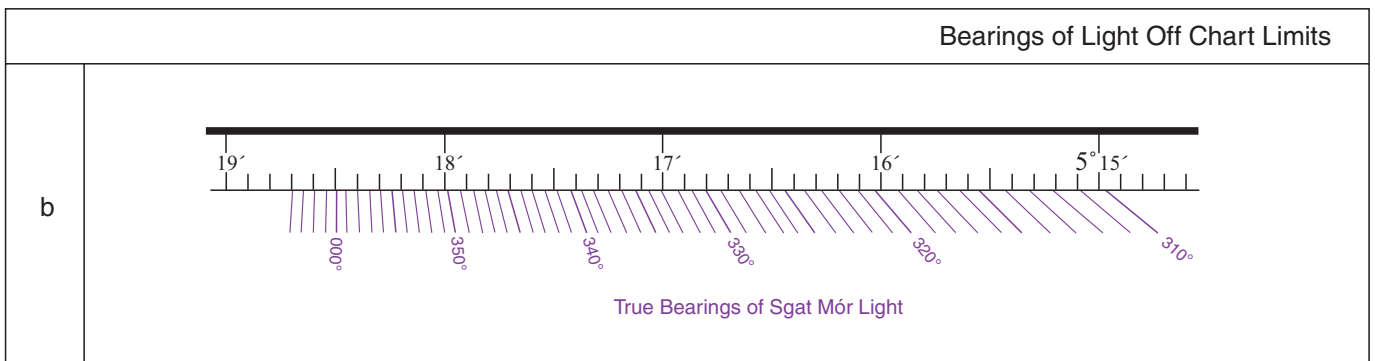
# N Areas, Limits

International Boundaries and National Limits				
40		International boundary on land		440.1
41		International maritime boundary		440.3
42		Straight territorial sea baseline with base point		440.4
43		Seaward limit of Territorial Sea		440.5
44		Seaward limit of Contiguous Zone		440.6
45		National fishery limits		440.7
46		Limit of Continental Shelf		440.8
47		Limit of Exclusive Economic Zone		440.9
48		Customs limit		440.2
49		Harbour limit		430.1






















Various Limits							
60.1		#		Limit of fast ice, Ice front (with date)		449.1	
60.2		#		Limit of sea ice (pack ice) seasonal (with date)			
61				Floating barrier, including log ponds, security barriers, ice booms, shark nets			449.2
62.1				Spoil ground			446.1
62.2				Spoil ground (disused)			446.2
63				Extraction (dredging) area			446.4
64				Cargo transshipment area			449.4
65		†		Incineration area			449.3

Beacons → Q		Light Structures, Major Floating Lights		
1		<i>Major light, minor light ‡, light, lighthouse</i>		470.5
2		<i>Lighted offshore platform</i>		445.2
3		<i>Lighted beacon tower ‡</i>		456.4 457.1 457.2
4		<i>Lighted beacon ‡ On smaller scale charts, where navigation within recognition range of the daymark is unlikely, lighted beacons are charted solely as lights</i>		457.1 457.2
5		<i>Lighted buoyant beacon, resilient beacon ‡</i>		459.1 459.2
6		<i>Major floating light (light vessel, major light float, Large Automatic Navigational Buoy (LANBY))</i>		462.9 474
a		<i>Navigation lights on landmarks or other structures</i>		


‡ Minor lights, fixed and floating, usually conform to IALA Maritime Buoyage System characteristics



# P Lights

Light Characters			Light Characters on Light Buoys → Q		471.2
	Abbreviation		Class of Light	Illustration	Period shown 
	International	National			
10.1	F		Fixed		
10.2	<i>Occulting (total duration of light longer than total duration of darkness)</i>				
	Oc	† Occ	Single-occulting		
	Oc(2) Example	† GpOcc(2) Example	Group-occulting		
	Oc(2+3) Example	† GpOcc(2+3) Example	Composite group-occulting		
10.3	<i>Isophase (duration of light and darkness equal)</i>				
	Iso		Isophase		
10.4	<i>Flashing (total duration of light shorter than total duration of darkness)</i>				
	Fl		Single-flashing		
	Fl(3) Example	† GpFl(3) Example	Group-flashing		
	Fl(2+1) Example	† GpFl(2+1) Example	Composite group-flashing		
10.5	LFI		Long-flashing (flash 2s or longer)		
10.6	<i>Quick (repetition rate of 50 to 79 - usually either 50 or 60 - flashes per minute)</i>				
	Q	† QkFl	Continuous quick		
	Q(3) Example	† QkFl(3) Example	Group quick		
	IQ	† IntQkFl	Interrupted quick		
10.7	<i>Very quick (repetition rate of 80 to 159 - usually either 100 or 120 - flashes per minute)</i>				
	VQ	† VQkFl	Continuous very quick		
	VQ(3) Example	† VQkFl(3) Example	Group very quick		
	IVQ	† IntVQkFl	Interrupted very quick		
10.8	<i>Ultra quick (repetition rate of 160 or more - usually 240 to 300 - flashes per minute)</i>				
	UQ		Continuous ultra quick		
	IUQ		Interrupted ultra quick		
10.9	Mo(K) Example		Morse Code		
10.10	FFI		Fixed and flashing		
10.11	Al.WR Example	† Alt.WR Example	Alternating		



Colours of Lights and Marks				
11.1	W		White (for lights, only on sector and alternating lights)	450.2 450.3 470.4 470.6 471.4 475.1
11.2	R		Red	
11.3	G		Green	
11.4	Bu		Blue	† Bl
11.5	Vi		Violet	
11.6	Y		Yellow	
11.7	Y	# Or	Orange	† Or
11.8	Y	# Am	Amber	
	#		Colours of lights shown on: standard charts on multicoloured charts on multicoloured charts at sector lights	

Period				
12	90s Examples	2.5s	Period in seconds and tenths of a second	† 90sec 471.5

Plane of Reference for Heights → H		Tidal Levels → H		Elevation
13	12m Example		Elevation of light given in metres	† On fathoms charts, the elevation of a light is given in feet e.g. 40ft 471.6

Range				
<i>Note: Charted ranges are nominal ranges given in sea miles</i>				
14	15M Example		Light with single range	
	15/10M Example		Light with two different ranges	† 15,10M 471.7 471.9 475.5
	15-7M Example		Light with three or more ranges	† 15,10,7M

Disposition				
15	(hor)		horizontally disposed	† (horl.) 471.8
	(vert)		vertically disposed	† (vertl.) 471.8

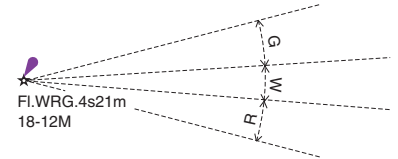
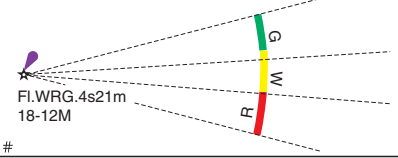
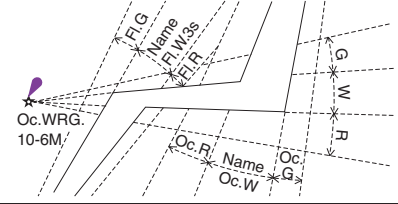
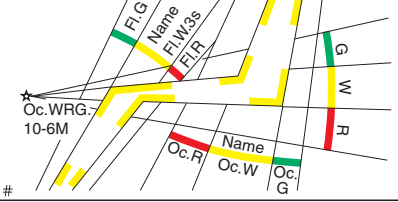
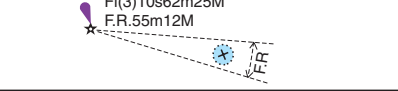
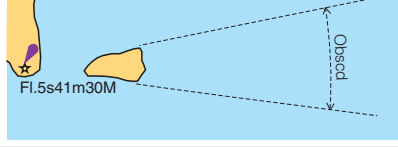
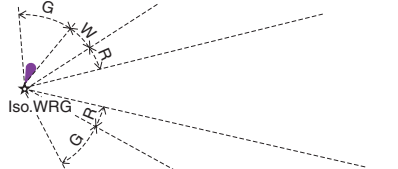
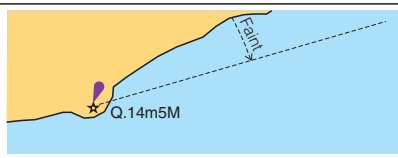
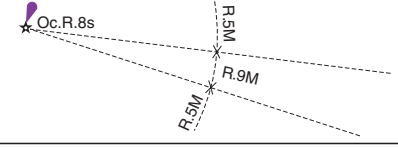
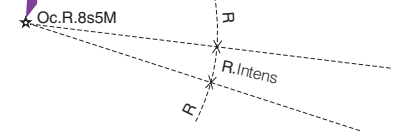
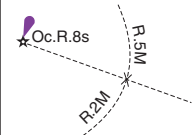
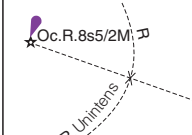
Example of a full Light Description 471.9				
16	<b>Example</b> of a light description on a metric chart using international abbreviations: ★ FI(3)WRG.15s13m7-5M		<b>Example</b> of a light description on a fathoms chart using international abbreviations: ★ AI.FI.WR.30s110ft23/22M	
	FI(3) <b>Class or character of light:</b> in this example a group-flashing light, regularly repeating a group of three flashes.		AI.FI. <b>Class or character of light:</b> in this example exhibiting single flashes of differing colours alternately.	
	WRG. <b>Colours of light:</b> white, red and green, exhibiting the different colours in defined sectors.		WR. <b>Colours of light shown alternately:</b> white and red all-round (ie, not a sector light).	
	15s <b>Period of light in seconds, i.e., the time taken to exhibit one full sequence of 3 flashes and eclipses:</b> 15 seconds.		30s <b>Period of light in seconds, ie, the time taken to exhibit the sequence of two flashes and two eclipses:</b> 30 seconds.	
	13m <b>Elevation of focal plane above height datum:</b> 13 metres.		110ft <b>Elevation of focal plane above height datum:</b> 110 feet.	
	7-5M <b>Luminous range in sea miles:</b> the distance at which a light of a particular intensity can be seen in 'clear' visibility, taking no account of earth curvature. In those countries (eg United Kingdom) where the term 'clear' is defined as a meteorological visibility of 10 sea miles, the range may be termed "nominal". In this example the ranges of the colours are: white 7 miles, green 5 miles, red between 7 and 5 miles.		23/22M <b>Range in sea miles.</b> Until 1971 the lesser of geographical range (based on a height of eye of 15 feet) and luminous range was charted. Now, when the charts are corrected, luminous (or nominal) range is given. In this example the luminous ranges of the colours are: white 23 miles, red 22 miles. The geographical range can be found from the table in the Admiralty List of Lights (for the elevation of 110 feet, it would be 16 miles).	

# P Lights







Lights marking Fairways Note: Quoted bearings are always from seaward





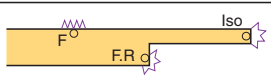

Leading Lights and Lights in line			
20.1		Leading lights with leading line (the firm line is the track to be followed) and arcs of visibility	433 433.1 433.2 433.3 475.1 475.6
20.2		Leading lights (≠ means "in line"; the firm line is the track to be followed; the light descriptions will be at the light stars or on the leading line, not usually both).	433.2 433.3 475.6
20.3		Leading lights on small-scale charts	433.1 475.6
21		Lights in line (marking the sides of a channel)	433.4 475.6
22	Rear Lt or Upper Lt	Rear or upper light	470.7
23	Front Lt or Lower Lt	Front or lower light	470.7

Direction Lights			
30.1		Direction light with narrow sector and course to be followed, flanked by darkness or unintensified light	471.3 471.9 475 475.1 475.5 475.7
30.2		Direction light with course to be followed, uncharted sector is flanked by darkness or unintensified light	
30.3		Direction light with narrow fairway sector flanked by light sectors of different characters on standard charts	
30.4		Direction light with narrow fairway sector flanked by light sectors of different characters on multicoloured charts	
31		Moiré effect light (day and night), variable arrow mark. Arrows show when course alteration needed	475.8


Sector Lights					
40.1		Sector light on standard charts		475 475.1 475.2 475.5	
40.2		Sector light on multicoloured charts			
41.1		Sector lights on standard charts, the white sector limits marking the sides of the fairway			475 475.1 475.5 470.4
41.2		Sector lights on multicoloured charts, the white sector limits marking the sides of the fairway			
42		Main light visible all-round with red subsidiary light seen over danger			471.8 475.4
43		All-round light with obscured sector			475.3
44		Light with arc of visibility deliberately restricted			475.3
45		Light with faint sector			475.3
46		Light with intensified sector			475.5
					
c		Light with unintensified sector			














































# P Lights











Lights with limited Times of Exhibition				
50	 F.R.(occas)	Lights exhibited only when specially needed (e.g. for fishing vessels, ferries) and some private lights	† (fishg.) † (Priv.) † (occasl.)	473.2
51	 Fl.10s40m27M (F.37m11M Day)	Daytime light (charted only where the character shown by day differs from that shown at night)	 Fl.10s40m27M (F.37m11M by Day)	473.4
52	 Q.WRG.5m10-3M (Fl.5s Fog)	Fog light (exhibited only in fog, or character changes in fog)	 Q.WRG.5m10-3M Fl.5s (in Fog)	473.5
53	 Fl.5s(U)	Unwatched (unmanned) light with no standby or emergency arrangements		473.1
54	(temp)	Temporary	† (temp)      † (tempy.)	
55	(exting)	Extinguished	† (extingd.)	
b		Synchronized (synchronous or sequential)	(sync) or (sync)	


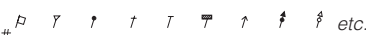






Special Lights				
		Flare Stack (at Sea) → L	Flare Stack (on Land) → E	Signal Stations → T
60	 AeroAl.Fl.WG.7-5s11M	Aero light (may be unreliable)		476.1
61.1	 AeroFR.353m11M RADIO MAST (353)	Air obstruction light of high intensity		476.2
61.2	(89)  (R Lts)	Air obstruction lights of low intensity	(Red Lt.)	476.2
62	Fog Det Lt	Fog detector light		477
63	 (illuminated)	Floodlit, floodlighting of a structure	(illum)      † (lit)	478.2
64		Strip light		478.5
65	 F.R.(priv)	Private light other than one exhibited occasionally	# ○ Y.Lt # ○ R.Lt      † (Priv)	473.2

IALA Maritime Buoyage System, which includes Beacons → Q 130	Buoys and Beacons
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<b>General</b>			
1		Position of buoy or beacon	455.3 460.1 462.1










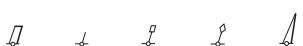



<i>Abbreviations for colours (lights) → P 11</i>		<b>Colour of Buoys and Beacon Topmarks</b>	
2	    	Single colour; green (G) and black (B)	†  
3	     	Single colour other than green and black: red (R), yellow (Y), orange (Or)	†   
4	  	Multiple colours in horizontal bands: the colour sequence is from top to bottom	†    
5	   	Multiple colours in vertical or diagonal stripes; the darker colour is given first. In these examples, red(R), white(W), blue (Bu), yellow (Y) & black(B)	†    
6		Retroreflecting material may be fitted to some unlit marks. Charts do not usually show it. Black bands will appear dark blue under a spotlight	† <span style="text-align: center;">Refl</span>
a		Single colour other than green and black (non-IALA system: white (W) grey (Gy), blue (Bu))	†      
b		Wreck buoy (not used in the IALA System)	†    
c		Chequered	†    




<i>Marks with Fog Signals → R</i>		<b>Lighted Marks</b>	
7	 	Lighted marks on standard charts (examples)	†     
8	  	Lighted marks on multicoloured charts (examples)	457.1 466 466.1

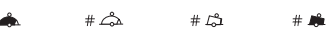


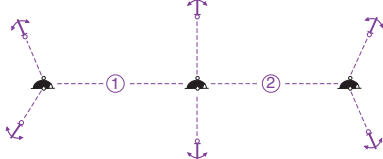
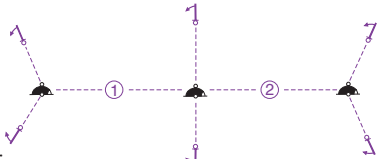


<i>For Application of Topmarks within the IALA System → Q 130</i>		<i>Radar reflector → S</i>	<b>Topmarks and Radar Reflectors</b>	
9		IALA System buoy topmarks (beacon topmarks shown upright)	Non-IALA System #  etc.	
10		Beacon with topmark, colour, radar reflector and designation (example)	 	450 455.2 455.7
11		Buoy with topmark, colour, radar reflector and designation (example). Radar reflectors are not generally charted on IALA System buoys	 	460.3 460.6 465.1 465.2













# Q Buoys, Beacons


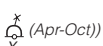


Buoys	<i>Features Common to Beacons and Buoys</i> → Q 1-11
-------	--

Shapes						
20		<i>Conical buoy, nun buoy, ogival buoy</i>	†		<i>etc.</i>	462.2
21		<i>Can buoy, cylindrical buoy</i>	†		<i>etc.</i>	462.3
22		<i>Spherical buoy</i>	†		<i>etc.</i>	462.4
23		<i>Pillar buoy</i>	†			462.5
24		<i>Spar buoy, spindle buoy</i>	†			462.6
25		<i>Barrel buoy, tun buoy</i>				462.7
26		<i>Superbuoy. Superbuoys are very large buoys, e.g. a LANBY (P6) is a navigational aid mounted on a circular hull of about 5m diameter. Oil or gas installation buoys (L16) and ODAS buoys (Q58), of similar size, are shown by variations of the superbuoy symbol</i>	†			445.4 460.4 462.9 474

Minor Light Floats						
30	 <i>Fl.G.3s</i> Name	<i>Light float as part of IALA System</i>				462.8
31	 <i>Fl.10s</i>	<i>Light float not part of IALA System</i>	†			462.8















	<b>Mooring Buoys</b>	<i>Oil or Gas Installation Buoy</i> → L	<i>Visitors' (Small Craft) Mooring</i> → U
40		<i>Mooring buoy</i>	
41	 <i>Fl.Y.2-5s</i>	<i>Lighted mooring buoy (example)</i>	431.5 466.1 466.2 466.3 466.4
42		<i>Trot, mooring buoys with ground tackle and berth numbers</i>	
43		<i>Mooring buoy with telegraphic or telephonic communications</i>	431.5
44		<i>Numerous moorings (example)</i>	431.7









<i>The symbols shown below are examples: shapes of buoys may differ; lateral or cardinal buoys may be used in some situations; the use of the cross topmark is optional.</i>			Special Purpose Buoys
50		<i>Firing danger area (Danger Zone) buoy</i>	441.2
51		<i>Target</i>	
52		<i>Marker Ship</i>	
53		<i>Barge</i>	
54		<i>Degaussing Range buoy</i>	448.2
55		<i>Cable buoy</i>	443.6
56		<i>Spoil ground buoy</i>	446.3
57		<i>Buoy marking outfall</i>	444.4
58		<i>Data collection buoy (Ocean Data Acquisition System) of superbuoy size</i>	462.9
59		<i>Buoy marking wave recorder or current meter</i>	
60		<i>Seaplane anchorage buoy</i>	
61		<i>Buoy marking traffic separation scheme</i>	
62		<i>Buoy marking recreation zone</i>	
d		<i>Racing mark</i>	# 










Seasonal Buoys			
70		<i>Buoy privately maintained (example)</i>	
71		<i>Seasonal buoy (the example shows a yellow spherical buoy on station between April and October)</i>	#  (1.4 -15.10)  (occas)      460.5













# Q Buoys, Beacons

Beacons	<i>Lighted Beacons</i> → P	<i>Features Common to Beacons and Buoys</i> → Q 1-11
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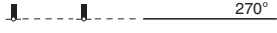

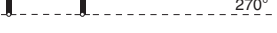
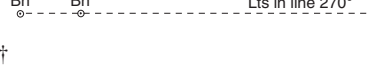
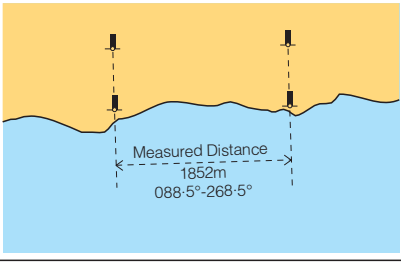




General				
80	 	<i>Beacon in general, characteristics unknown or chart scale too small to show</i>		455.5
81		<i>Beacon with colour, no distinctive topmark (example)</i>		455.4 456 456.3
82	  	<i>Beacon with colour and topmark (examples)</i>	    etc.	455.4 456 463 463.1
83		<i>Beacon on submerged rock (topmark and colours as appropriate)</i>		455.6
e		<i>Beacon which does not conform with the IALA system</i>	 (non-IALA)	

Minor Impermanent Marks usually in Drying Areas (Lateral Mark for Minor Channel)					<i>Minor Pile</i> → F
90		<i>Stake, pole</i>		456.1	
91	PORT HAND 	STARBOARD HAND 	<i>Perch, stake</i>		456.1
					
92			<i>Withy</i>		456.1

Minor Marks, usually on Land					<i>Landmarks</i> → E
100		<i>Cairn</i>		456.2	
101		<i>Coloured or white mark (the colour may be indicated)</i>		456.2	
102.1	 	<i>Coloured topmark (colour known or unknown) with function of a beacon</i>	 	456.3	
102.2	 	<i>Painted boards with function of leading beacons</i>			

Beacon Towers					
110	     	<i>Beacons towers without and with topmarks and colours (examples)</i>	    	456.4	
111		<i>Lattice beacon</i>		456.4	



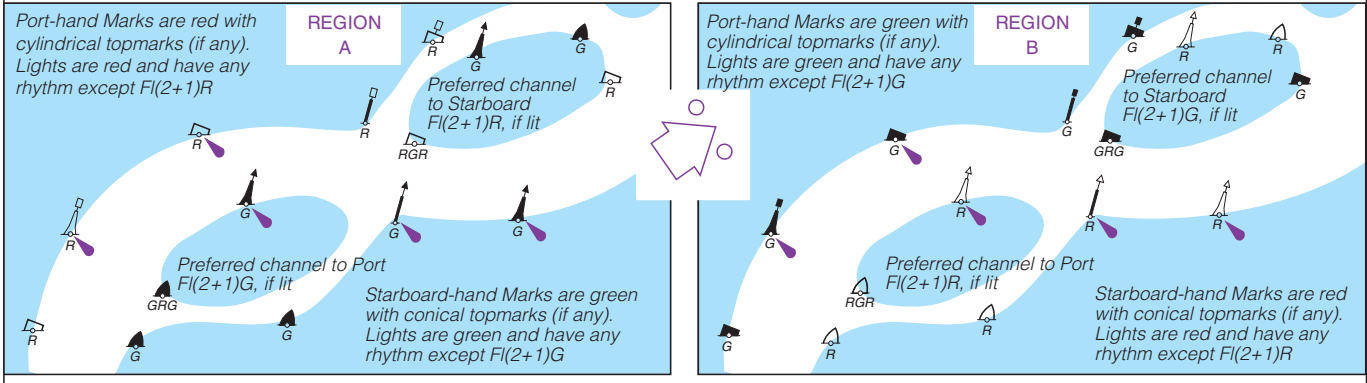
<i>Leading Lines, Clearing Lines</i> → M		Special Purpose Beacons		
<i>Note: Topmarks and colours are shown where scale permits</i>				
120		<i>Leading beacons (the firm line is the track to be followed)</i>	 †	458
121		<i>Beacons marking a clearing line or transit</i>	 †	458
122		<i>Beacons marking measured distance with quoted bearings. The track is shown as a firm line if it is to be followed precisely</i>		458
123		<i>Cable landing beacon (example)</i>		443.5 458
124	 #		<i>Refuge beacon</i>	456.4
125		<i>Firing practice area beacons</i>		
126		<i>Notice board</i>	NB	456.2

# Q Buoys, Beacons

<b>130 IALA Maritime Buoyage System</b>	IALA International Association of Marine Aids to Navigation and Lighthouse Authorities	<b>NP 735</b>
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Where in force, the IALA System applies to all fixed and floating marks except landfall lights, leading lights and marks, sectored lights and major floating lights. The standard buoy shapes are cylindrical (can) , conical , spherical , pillar , and spar , but variations may occur, for example: minor light floats . In the illustrations below, only the standard buoy shapes are used. In the case of fixed beacons (lit or unlit) only the shape of the topmark is of navigational significance.

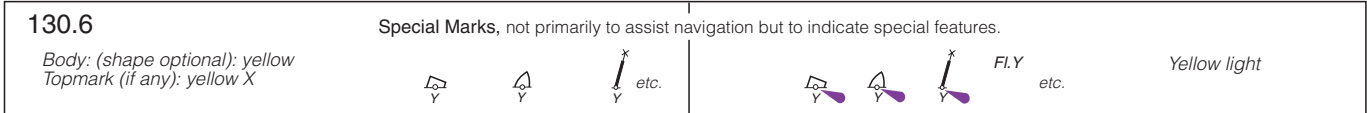
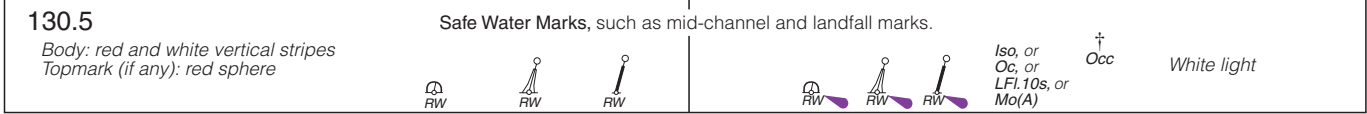
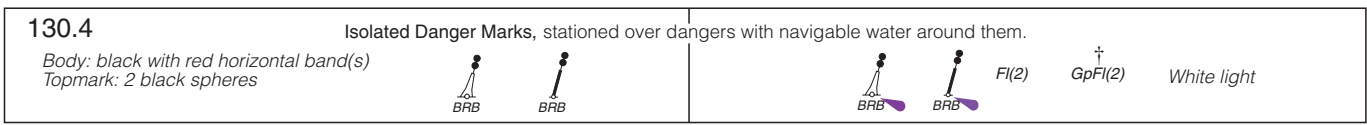
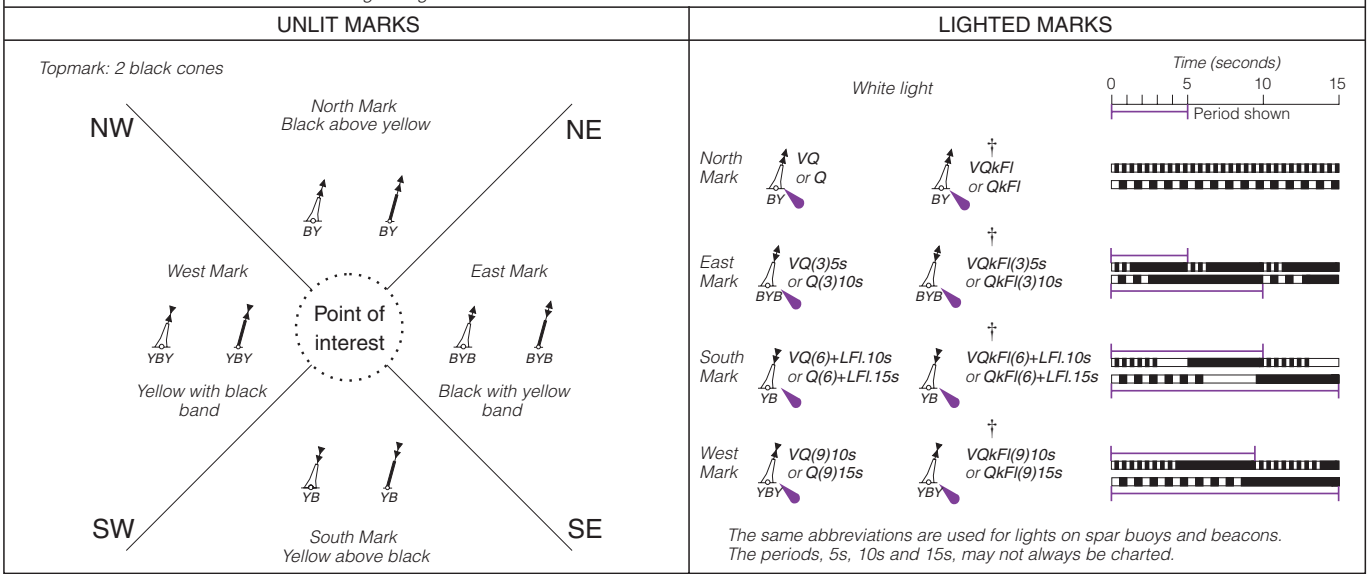
**130.1 Lateral marks** are generally for well-defined channels. There are two international Buoyage Regions - A and B - where Lateral marks differ.






A preferred channel buoy may also be a pillar or a spar. All preferred channel marks have three horizontal bands of colour.






**130.3 Cardinal Marks** indicating navigable water to the named side of the marks. Cardinal marks have the same meaning in Regions A and B






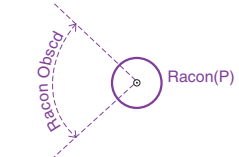
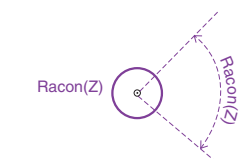







	<i>Fog Detector Light</i> → P	<i>Fog Light</i> → P	General
1	  	<i>Position of fog signal. Type of fog signal not stated</i>	† Fog Sig  451 451.2 452.8















Types of Fog Signals, Abbreviations				
10	Explos	<i>Explosive</i>	† Gun	452.1
11	Dia	<i>Diaphone</i>		452.2
12	Siren	<i>Siren</i>		452.3
13	Horn	<i>Horn (nautophone, reed, tyfon)</i>	† Nauto   † E.F. Horn   † Tyfon   † Reed	452.4
14	Bell	<i>Bell</i>		452.5
15	Whis	<i>Whistle</i>		452.6
16	Gong	<i>Gong</i>		452.7


Examples of Fog Signal Descriptions				
20	 Fl.3s70m29M Siren Mo(N)60s	<i>Siren at a lighthouse, giving a long blast followed by a short one (N), repeated every 60 seconds</i>		452.3 453.3
21	 Bell	<i>Wave-actuated bell buoy. The provision of a legend indicating number of emissions, and sometimes the period, distinguishes automatic bell or whistle buoys from those actuated by waves</i>		452.5 453 454.1
22	 Q(θ)+LFl.15s Horn(1)15sWhis YB	<i>Light buoy, with horn giving a single blast every 15 seconds, in conjunction with a wave-actuated whistle</i>	Reserve fog signals are fitted to certain buoys Only those actuated by waves are charted	452.4 453.1 454.3
‡ The Fog Signal symbol (R1) will usually be omitted when associated with another navigation aid (e.g. light or buoy) when a description of the signal is given				

# S Radar, Radio, Satellite Navigation Systems










Radar	Radar Structures Forming Landmarks → E	Radar Surveillance Systems → M	
1	 Ra	Coast radar station providing range and bearing from station on request	485.1
2	 Ramark	Ramark, radar beacon transmitting continuously	486.1
3.1	 Racon(Z) (3cm)	Radar transponder beacon, with morse identification, responding within the 3cm (X) band	486.2 486.3
3.2	 Racon(Z) (10cm)	Radar transponder beacon, with morse identification, responding within the 10cm (S) band	486.3
3.3	 Racon(Z)	Radar transponder beacon, with morse identification, responding within the 3cm (X) and the 10cm (S) bands (or band unknown)	
3.4	 Racon(P)	Radar transponder beacon with sector of obscured reception	486.4
	 Racon(Z)	Radar transponder beacon with sector of reception	
3.5	 Racon Racon Racons # 270	Leading radar transponder beacons (‡ and † mean "in line")	486.5 433.3
	 Racon Racon Lts # 270 Racons # 270	Leading radar transponder beacons coincident with leading lights	
3.6	 Racon Racon	Radar transponder beacons on floating marks (examples)	486.2
4		Radar reflector (not usually charted on IALA System buoys and buoyant beacons)	460.3 465
5		Radar conspicuous feature	485.2















# Radar, Radio, Satellite Navigation Systems



Radio Structures Forming Landmarks → E		Radio Reporting (Calling-in or Way) Points → M		Radio
10	 Name RC	Non-directional marine or aeromarine radiobeacon		481.1 480.1
11	 RD	Directional radiobeacon with bearing line	 Dir.Ro.Bn Dir.Ro.Bn 269°30'	481.2
	 RD	Directional radiobeacon coincident with leading lights		
12	 RW	Rotating pattern radiobeacon		481.1
13	 Consol	Consol beacon		481.3
14	 RG	Radio direction-finding station	 Ro.D.F	483
15	 R	Coast radio station providing QTG service	 Ro.	484
16	 Aero RC	Aeronautical radiobeacon		482
17.1	 AIS	Automatic Identification System transmitter		489.1
17.2	 AIS  AIS	Automatic Identification System transmitters on floating marks (examples)		489.1

Satellite Navigation Systems					
50	WGS	WGS72	WGS84	World Geodetic System, 1972 or 1984	201
				<i>Note:</i> A note may be shown to indicate the shifts of latitude and longitude, to one, two or three decimal places of a minute, depending on the scale of the chart, which should be made to satellite-derived positions (which are referred to WGS84) to relate them to the chart. See Annual Notice to Mariners No. 19.	202
51	 DGPS			Station providing Differential Global Positioning System corrections	481.5













# T Services

Pilotage					
1.1		<i>Pilot boarding place, position of pilot cruising vessel</i>	 Pilots	 Pilots	
1.2	 Name	<i>Pilot boarding place, position of pilot cruising vessel, with name (e.g. District, Port)</i>			491.1 491.2 491.6
1.3	 Note	<i>Pilot boarding place, position of pilot cruising vessel, with note (e.g. Tanker, Disembarkation)</i>			
1.4	 H	<i>Pilots transferred by helicopter</i>			491.2
2	 Pilot lookout	<i>Pilot office with Pilot lookout, Pilot lookout station</i>			491.3
3	 Pilots	<i>Pilot office</i>			491.4
4	 Port Name (Pilots)	<i>Port with pilotage service (boarding place not shown)</i>			491.5

Coastguard, Rescue					
10	 CG  CG  CG	<i>Coastguard station</i>	 CGFS		492 492.1 492.2
11	 CG ↓  CG ↓  CG ↓	<i>Coastguard station with Rescue station</i>	 CGFS ↓		493.3
12	 ↓	<i>Rescue station, Lifeboat station, Rocket station</i>	 ↑	 LB	493 493.1
13	 ↓  ↓	<i>Lifeboat lying at a mooring</i>			493.2
14	 Ref	<i>Refuge for shipwrecked mariners</i>			456.4










Stations					
20	⊙SS	Signal station in general	† Sig Sta	† Sig Stn	490.3
21	⊙SS(INT)	Signal station showing International Port Traffic Signals			495.5
22	⊙SS(Traffic)	Traffic signal station, Port entry and departure signals			495.1
23	⊙SS(Port Control)	Port control signal station			495.1
24	⊙SS(Lock)	Lock signal station			495.2
25.1	⊙SS(Bridge)	Bridge passage signal station			495.3
25.2	 Traffic Sig	Bridge lights including traffic signals			495.4
26	⊙SS	Distress signal station			497
27	⊙SS	Telegraph station			497.1
28	⊙SS(Storm)	Storm signal station	† Storm Sig	† Stm. Sig. Sm.	494.1
29	⊙SS(Weather)	Weather signal station, Wind signal station			494.1
30	⊙SS(Ice)	Ice signal station			494.1
31	⊙SS(Time)	Time signal station			494.2
32.1		Tide scale or gauge	⊙Tide gauge		496.1
32.2	# ⊙Tide gauge	Automatically recording tide gauge			
33	⊙SS(Tide)	Tide signal station			496.2
34	⊙SS(Stream)	Tidal stream signal station			496.3
35	⊙SS(Danger)	Danger signal station			490.1
36	⊙SS(Firing)	Firing practice signal station			490.1

# U Small Craft (Leisure) Facilities

Small Craft (Leisure) Facilities		Transport Features, Bridges →D Public Buildings, Cranes →F	Pilots, Coastguard, Rescue, Signal Stations →T	
1.1		Yacht harbour, Marina		320.2
1.2		Yacht berths without facilities		
2		Visitors' berth		
3		Visitors' mooring		
4		Yacht club, Sailing club		
5		Public slipway		
6		Boat hoist		
7		Public landing, Steps, Ladder		
8		Sailmaker		
9		Boatyard		
10		Public house, Inn		
11		Restaurant		
12		Chandler		
13		Provisions		
14		Bank, Bureau de change		
15		Physician, Doctor		
16		Pharmacy, Chemist		
17		Water tap		
18		Fuel station (Petrol, Diesel)		
19		Electricity		



# Small Craft (Leisure) Facilities **U**

20		Bottled gas																																																																														
21		Showers																																																																														
22		Laundrette																																																																														
23		Public toilets																																																																														
24		Post box																																																																														
25		Public telephone																																																																														
26		Refuse bin																																																																														
27		Public car park																																																																														
28		Parking for boats and trailers																																																																														
29		Caravan site																																																																														
30		Camping site																																																																														
31		Water police																																																																														
32	<p style="text-align: center;"><b>MARINA FACILITIES</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">HARBOUR / MARINA FACILITIES</th> <th>Diesel</th> <th>Petrol</th> <th>Bottled Gas</th> <th>Electricity</th> <th>Holding Tank Disposal</th> <th>Repairs</th> <th>Crane/Boat Hoist</th> <th>Scrubbing Berth</th> <th>Launching Slip</th> <th>Pontoon Berthing</th> <th>Swinging Moorings</th> <th>Chandlery</th> <th>Laundrette</th> <th>Showers</th> <th>VHF Radio Channels</th> <th>Telephone Area Code</th> <th>Telephone Number</th> <th>Fax Number</th> </tr> </thead> <tbody> <tr> <td>FALMOUTH - Falmouth Visitors Yacht Haven</td> <td></td> <td></td> <td></td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>12</td> <td>+44 (0) 1326</td> <td>312285</td> <td>211352</td> </tr> <tr> <td>- Mylor Yacht Harbour</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>80/M</td> <td>+44 (0) 1326</td> <td>372121</td> <td>372120</td> </tr> <tr> <td>HELFDORD - Helford Moorings Officer</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>●</td> <td>●</td> <td>●</td> <td>-</td> <td>+44 (0) 1326</td> <td>250749</td> <td>-</td> </tr> </tbody> </table> <p><i>Marina Facilities may be tabulated on harbour charts and large scale coastal charts.</i></p> <p><i>● indicates that the facility is available at the marina itself. Laundrettes etc. located outside the marina are not included. The facilities may not be available outside normal working hours. All marinas have water, toilets and rubbish disposal.</i></p> <p><b>Corrections</b>  <i>Information on small craft (leisure) facilities will be updated as charts are revised by New Edition. The United Kingdom Hydrographic Office would be pleased to receive reports of alterations or additions to small craft facilities.</i></p>				HARBOUR / MARINA FACILITIES	Diesel	Petrol	Bottled Gas	Electricity	Holding Tank Disposal	Repairs	Crane/Boat Hoist	Scrubbing Berth	Launching Slip	Pontoon Berthing	Swinging Moorings	Chandlery	Laundrette	Showers	VHF Radio Channels	Telephone Area Code	Telephone Number	Fax Number	FALMOUTH - Falmouth Visitors Yacht Haven					●						●	●	●	●	12	+44 (0) 1326	312285	211352	- Mylor Yacht Harbour	●	●	●	●	●	●	●	●	●	●	●	●	●	●	80/M	+44 (0) 1326	372121	372120	HELFDORD - Helford Moorings Officer												●	●	●	-	+44 (0) 1326	250749	-
HARBOUR / MARINA FACILITIES	Diesel	Petrol	Bottled Gas	Electricity	Holding Tank Disposal	Repairs	Crane/Boat Hoist	Scrubbing Berth	Launching Slip	Pontoon Berthing	Swinging Moorings	Chandlery	Laundrette	Showers	VHF Radio Channels	Telephone Area Code	Telephone Number	Fax Number																																																														
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# V Abbreviations of Principal Non-English Terms

Glossaries of non-English terms will be found in the volumes of Admiralty Sailing Directions.

On metric Admiralty charts, non-English terms are generally given in full wherever space and information permits. Where abbreviations are used on metric charts they accord with the following list, apart from those on charts published before 1980 where full stops are omitted. Obsolescent forms of abbreviations may also be found on these charts and on reproductions of other nations' charts.

CURRENT FORM	OBSOLESCE FORM(S)	TERM	ENGLISH MEANING	CURRENT FORM	OBSOLESCE FORM(S)	TERM	ENGLISH MEANING
<b>ALBANIAN</b>				<b>FRENCH (continued)</b>			
	K	Kodër, Kodra	<i>Hill</i>	F.	Fl	Fleuve	<i>Large river</i>
<b>ARABIC</b>				Ft.	F <sup>t</sup>	Fort	<i>Fort</i>
Geb.	Djeb, Dj	Djebel	<i>Mountain, Hill</i>	G.		Golfe	<i>Gulf</i>
J.	G	Gebel	<i>Mountain, Hill</i>	Ht.Fd.	Gd, G <sup>d</sup> , Gde, G <sup>d</sup> e	Grand, Grande	<i>Great</i>
Jab.	Jab, J <sup>l</sup>	Jabal, Jibāl, Jebel	<i>Mountain(s), Hill(s)</i>	H.F., Ht fd, H <sup>fd</sup> , H <sup>t</sup> fond		Haut-fond	<i>Shoal</i>
Jaz.	Jazt	Jazīrat, Jazā'ir Jazīreh	<i>Island(s), Peninsula</i>	Î.	I, I <sup>t</sup>	Île, îles, îlot	<i>Island(s), Islet</i>
Jeb.	J, J <sup>l</sup>	Jebel	<i>Mountain, Hill</i>	L.		Lac	<i>Lake</i>
Jez.	Jez <sup>t</sup>	Jezīrat	<i>Island, Peninsula</i>	Mg.	Mn, M <sup>in</sup>	Moulin	<i>Mill</i>
Kh.	K	Khawr, Khōr	<i>Inlet, Channel</i>	Mt.	Mge, M <sup>age</sup> , Mou	Mouillage	<i>Anchorage</i>
W.	Si, S <sup>i</sup>	Sidi	<i>Tomb</i>	N.D.	N <sup>t</sup>	Mont	<i>Mount, Mountain</i>
		Wād, Wādi	<i>Valley, River, River bed</i>	P.		Notre Dame	<i>Our Lady</i>
				Pit.	Pet, P <sup>it</sup> , P <sup>ite</sup> , P <sup>t</sup>	Port	<i>Port</i>
<b>CHINESE</b>				Pl.	Pn, P <sup>on</sup>	Piton	<i>Peak</i>
Chg.	Ch <sup>g</sup>	Chiang	<i>River, Shoal, Harbour, Inlet, Channel, Sound</i>	Plat.		Plage	<i>Beach</i>
					Pla, Plat <sup>u</sup>	Plateau	<i>Tableland, Sunken flat</i>
<b>DANISH</b>				Pte.	P <sup>te</sup>	Pointe	<i>Point</i>
B.		Bugt	<i>Bay, Bight</i>	Qu.	Q	Quai	<i>Quay</i>
Bk.	B <sup>k</sup>	Banke	<i>Bank</i>	R.	Rau, Riv, R <sup>au</sup>	Rivière, Ruisseau	<i>River, Stream</i>
Fj.	F <sup>d</sup>	Fjord	<i>Inlet</i>	Rav.	R <sup>av</sup> , R <sup>ne</sup>	Ravine	<i>Ravine</i>
Gr.	Grd, Gr <sup>d</sup> , G <sup>d</sup>	Grund	<i>Shoal</i>	Rf.		Récif	<i>Reef</i>
H.	Hm, H <sup>m</sup> , Hne, H <sup>ne</sup>	Holm, Holmene	<i>Islet(s)</i>	Roc.	Re, R <sup>e</sup> , Rer, R <sup>er</sup>	Roche, Rocher	<i>Rock</i>
Hd.	H <sup>d</sup>	Hoved	<i>Headland</i>	S.	St, S <sup>t</sup> , Ste, S <sup>te</sup>	Saint, Sainte	<i>Saint, Holy</i>
Hn.	H <sup>n</sup>	Havn, Havnen	<i>Harbour</i>	Som.	Som.	Sommet	<i>Summit</i>
L.		Lille	<i>Little</i>	Tr.	T <sup>r</sup>	Tour	<i>Tower</i>
N.		Nord, Nordre	<i>North, Northern</i>	Vi, V <sup>x</sup>		Vieux, Vieil, Vielle	<i>Old</i>
Ø.		Øst, Østre	<i>East, Eastern</i>	<b>GAELIC</b>			
Øy.	Øne, Ø <sup>ne</sup> , Öne, Ö <sup>ne</sup>	Øyane, Øyene, Öyane	<i>Islands</i>	Bo.		Bogha	<i>Below water rock</i>
Pt.	P <sup>t</sup>	Pynt	<i>Point</i>	Eil.	E, En, E <sup>n</sup>	Eilean, Eileanan	<i>Island(s), Islet(s)</i>
S.		Sønder, Søndre	<i>South, Southern</i>	Ru.	R <sup>u</sup>	Rubha	<i>Point</i>
Sd.	S <sup>d</sup>	Sund, Sundet	<i>Sound</i>	Sg.	Sgr, Sg <sup>r</sup>	Sgeir	<i>Rock</i>
Sk.	Skr, Sk <sup>r</sup>	Skær, Skjær	<i>Rock above water</i>	<b>GERMAN</b>			
St.		Stor	<i>Great</i>	B.		Bucht	<i>Bay</i>
V.		Vest, Vestre	<i>West</i>	Bg.	B <sup>g</sup>	Berg	<i>Mountain</i>
<b>DUTCH</b>				Gr.	Grd, Gr <sup>d</sup> , G <sup>d</sup>	Grund	<i>Shoal</i>
B.	B <sup>i</sup>	Baai	<i>Bay</i>	Hn.	H <sup>n</sup>	Hafen	<i>Harbour</i>
Bg.	B <sup>g</sup>	Berg	<i>Mountain</i>	K.		Kap	<i>Cape</i>
Bk.	B <sup>k</sup>	Bank	<i>Bank</i>	Rf.	R <sup>f</sup>	Riff	<i>Reef</i>
Eil.	Eiln, Eil <sup>n</sup>	Eiland, Eilanden	<i>Island(s)</i>	Schl		Schloss	<i>Castle</i>
G.		Golf	<i>Gulf</i>	<b>GREEK</b>			
	Gt, Grt, G <sup>t</sup> , G <sup>t</sup>	Groot, Groote	<i>Great</i>	Ág., Ag.	Áy., Ay.	Ágios, Ágia	<i>Saint, Holy</i>
H.		Hoek	<i>Cape, Hook</i>	Ágk.	Ang.	Agkáli	<i>Bight, Open bay</i>
Pt.	P <sup>t</sup>	Punt	<i>Point</i>	Ágky.	Angir., Ang	Agkyrovólio	<i>Anchorage</i>
R.		Rivier	<i>River</i>	Ák., Ak.		Ákra, Akrotírio	<i>Cape</i>
Rf.	R <sup>f</sup>	Rif	<i>Reef</i>	Kól.	Kol	Kólpos	<i>Gulf</i>
Str.	Strn, St <sup>r</sup> , St <sup>n</sup>	Straat, Straten	<i>Strait(s)</i>	Lim.		Limín, Liménas	<i>Harbour</i>
<b>FINNISH</b>				N.		Nísos, Nísoi	<i>Island(s)</i>
K.		Kari, Kallio, Kivi	<i>Rock, Reef</i>	N.	N	Nísida, Nisídes	<i>Islet(s)</i>
Lu.		Luoto, Luodet	<i>Rock(s)</i>	Ó.	O	Órmos	<i>Bay</i>
Ma.		Matala	<i>Shoal</i>	Or.		Órmískos	<i>Cove</i>
	P	Pieni, Pikku	<i>Small</i>	Ór.	Or	Óros, Óroi	<i>Mountain(s)</i>
Sa.	S <sup>a</sup>	Saari, Saaret	<i>Island(s)</i>	Pot.		Potámós	<i>River</i>
Tr.	T <sup>r</sup>	Torni	<i>Tower</i>	Prof		Profítis	<i>Prophet</i>
<b>FRENCH</b>				Sk.		Skópelos, Skópeloí	<i>Reef(s), Drying rock(s)</i>
B.	B <sup>e</sup>	Baie	<i>Bay</i>	Vrach.	Vrak	Vrachonisída, Vrachonisídes	<i>Rocky islets</i>
Bas.	B	Basse	<i>Shoal</i>	Vrach.	Vrák	Vráchos, Vráchol	<i>Rock(s)</i>
Bc.	B <sup>c</sup>	Banc	<i>Bank</i>	Ýf.	Íf.	Ýfalos, Ýfaloi	<i>Reef(s)</i>
	Bssn, Bn, B <sup>n</sup>	Bassin	<i>Basin</i>	<b>ICELANDIC</b>			
C.		Cap	<i>Cape</i>	Fj.	Fjr, F <sup>dr</sup>	Fjörður	<i>Fjord</i>
Cal.	Ch <sup>al</sup> , Chen	Chenal	<i>Channel</i>	Gr.		Grunn	<i>Shoal</i>
Ch.	Chap, Chap <sup>e</sup>	Chapelle	<i>Chapel</i>				
Chât.	Chât <sup>u</sup> , Châ <sup>au</sup>	Château	<i>Castle</i>				

# Abbreviations of Principal Non-English Terms V

CURRENT FORM	OBSOLESCENT FORM(S)	TERM	ENGLISH MEANING	CURRENT FORM	OBSOLESCENT FORM(S)	TERM	ENGLISH MEANING
<b>INDONESIAN and MALAY</b>				<b>JAPANESE (continued)</b>			
A.		Air, Ajer, Ayer	<i>Stream</i>	J.	Ja <sup>a</sup>	Jima	<i>Island</i>
B.	Bu, B <sup>u</sup>	Batu	<i>Rock</i>	K.	Ka, K <sup>a</sup>	Kawa	<i>River</i>
Bat.	Btg, B <sup>tg</sup> Bdr, B <sup>dr</sup>	Batang Bandar, Bendar	<i>River</i> <i>Port</i>	M.	Kaik, Ko, K <sup>o</sup>	Kaikyō	<i>Strait</i>
Buk.	Br, B <sup>r</sup>	Besar	<i>Great</i>		Mki, M <sup>ki</sup> , M <sup>i</sup>	Misaki	<i>Cape</i>
G.	Bt, B <sup>t</sup> Gg, G <sup>g</sup>	Bukit Gosong, Gosung, Gusong, Gusung	<i>Hill</i> <i>Shoal, Reef, Islet</i>		Ma, M <sup>a</sup>	Mura	<i>Village</i>
Gun.	Gg, G <sup>g</sup>	Gunong, Gunung	<i>Mountain</i>		Mi, M <sup>i</sup>	Machi	<i>Town</i>
K.	Ki, K <sup>i</sup>	Kali	<i>River</i>	S.	Si, S <sup>i</sup>	Saki	<i>Cape, Point</i>
K.	Kr	Kroeng, Krueng	<i>River</i>	Sh.	Sa, S <sup>a</sup>	Shima	<i>Island</i>
Kam.	Kg, K <sup>g</sup>	Kampong, Kampung	<i>Village</i>		Sn, S <sup>n</sup>	San	<i>Mountain</i>
Kar.	Kg, K <sup>g</sup>	Karang	<i>Coral reef, Reef</i>	Su.	So, S <sup>o</sup>	Seto	<i>Strait</i>
Kep.	Kpn, K <sup>pn</sup>	Kepulauan	<i>Archipelago</i>		Sdo, S <sup>do</sup>	Suidē	<i>Channel</i>
Kl.	K <sup>l</sup>	Kachil, Kechil, Ketjil, Kecil	<i>Small</i>		Te, T <sup>e</sup>	Take	<i>Hill, Mountain</i>
Ku.	Kla, K <sup>la</sup>	Kuala	<i>River mouth</i>	Z.	Ya, Y <sup>a</sup>	Yama	<i>Mountain</i>
Lab.	Labn, Lab <sup>n</sup>	Labuan, Labuhan	<i>Anchorage, Harbour</i>		Z <sup>i</sup>	Zaki	<i>Cape, Point</i>
Mu.	Ma, M <sup>a</sup>	Muara	<i>River mouth</i>		Z <sup>n</sup>	Zan	<i>Mountain</i>
P.	Pu, P <sup>u</sup> , P <sup>o</sup>	Pulau, Pulu, Pulo	<i>Island</i>	<b>MALAY (see INDONESIAN)</b>			
Peg.		Pegunungan	<i>Mountain range</i>	<b>NORWEGIAN</b>			
Pel.	Pln, P <sup>ln</sup>	Pelabuan, Pelabuhan	<i>Roadstead, Anchorage</i>	B.	B, B <sup>kt</sup>	Bukt, Bukta	<i>Bay, Bight</i>
P.-P.	P.P. Prt, P <sup>rt</sup>	Pulau-pulau Parit	<i>Group of islands Stream, Canal, Ditch</i>	Bg.	B <sup>g</sup>	Berg, Bierg, Bjerg	<i>Mountain, Hill</i>
S.	Si, S <sup>i</sup>	Sungai, Sungei	<i>River</i>	Fd.	F <sup>d</sup> , Fj	Fjord, Fjorden	<i>Fjord</i>
Sel.	Slt, S <sup>lt</sup>	Selat	<i>Strait</i>	Fjel.	Fj	Fjell, Fjellet, Fjeld, Fjeldet	<i>Mountain</i>
T.	Tg, T <sup>g</sup>	Tandjong, Tandjung, Tanjong, Tanjung Tanjing	<i>Cape</i>	Fl.	F <sup>lne</sup> , F <sup>lne</sup>	Flu, Flua, Fluen, Fluane, Fluene	<i>Below water rock(s)</i>
Tel.	Tal, Tk, T <sup>k</sup>	Taluk, Telok, Teluk	<i>Bay</i>	Gr.	Gr <sup>ne</sup> , Gr <sup>ne</sup>	Grunn, Grunnen, Grunnane	<i>Shoal(s)</i>
U.	Ug, U <sup>g</sup>	Udjung, Ujung	<i>Cape</i>	H.	H <sup>m</sup> , H <sup>m</sup> , H <sup>ne</sup> , H <sup>ne</sup>	Holm, Holmen, Holmane	<i>Islet(s)</i>
W.		Wai	<i>River</i>	Hn.	H <sup>n</sup>	Hamn, Havn	<i>Harbour</i>
<b>ITALIAN</b>				in.	In <sup>f</sup> , I	Indre, Inre, Inste	<i>Inner</i>
Anc.		Ancoraggio	<i>Anchorage</i>	L.		Lille, Liten, Litta, Litle	<i>Little</i>
B.		Baia	<i>Bay</i>	Lag.	La, L <sup>a</sup>	Laguna	<i>Lagoon</i>
Banch.	Bna, B <sup>na</sup>	Banchina	<i>Quay</i>	N.		Nord, Nordre	<i>North, Northern</i>
Bco.	B <sup>co</sup>	Banco	<i>Bank</i>	Ø.	Ø	Øst, Østre, Øst, Østre	<i>East, Eastern</i>
C.		Capo	<i>Cape</i>	Od.	O	Odde, Odden	<i>Point</i>
Cal.		Calata	<i>Wharf</i>	Øy.	Ø, Ø, O	Øy, Øya, Øy, Øya	<i>Island</i>
Can.		Canale	<i>Channel</i>	Øy.	Øne, Ø <sup>ne</sup> , Øne, Ø <sup>ne</sup>	Øyane, Øyene, Øyane, Øyene	<i>Islands</i>
Cas.		Castello	<i>Castle</i>	Pt.	P <sup>t</sup>	Pynt, Pynten	<i>Point</i>
F.		Fiume	<i>River</i>	S.		Syd, Søre, Søndre	<i>South, Southern</i>
Fte.	F <sup>te</sup>	Forte	<i>Fort</i>	Sd.	S <sup>d</sup>	Sund, Sundet	<i>Sound</i>
G.		Golfo	<i>Gulf</i>	Sk.	Skr, Sk <sup>r</sup>	Skjær, Skjer, Skjeret	<i>Rock above water</i>
I.	Gde, G <sup>de</sup>	Grande	<i>Great</i>	Sk.	Skne, Sk <sup>ne</sup>	Skjerane, Skjærane	<i>Rocks above water</i>
I.	I <sup>a</sup> , I <sup>e</sup>	Isola, Isole	<i>Island(s)</i>	St.		Stor, Stora, Store	<i>Great</i>
I.	I <sup>to</sup> , I <sup>ti</sup>	Isolotto, Isolotti	<i>Islet(s)</i>	Tar.	Tn, T <sup>n</sup>	Taren	<i>Below water rock</i>
L.		Lago	<i>Lake</i>	V.		Vest, Vestre	<i>West</i>
Lag.	La, L <sup>e</sup>	Laguna	<i>Lagoon</i>	Vag.	Vg, V <sup>g</sup> Vd, V <sup>d</sup>	Våg, Vågen	<i>Bay, Cove</i>
Mda, Mad, Mad <sup>a</sup> , Mad <sup>na</sup>		Madonna	<i>Our Lady</i>	Vik.	Vk, V <sup>k</sup> Vnn, V <sup>n</sup>	Vik, Vika, Viken	<i>Bay, Inlet</i>
Mte.	M <sup>te</sup>	Monte	<i>Mount, Mountain</i>	Y.	Y <sup>t</sup>	Ytre, Ytter, Yttre	<i>Lake</i>
P.	Pto, P <sup>to</sup>	Porto	<i>Port</i>	<b>PERSIAN</b>			
P.	Portlo, Port <sup>lo</sup>	Porticciolo	<i>Small port</i>	B.		Bandar	<i>Harbour</i>
Pco.	P <sup>co</sup>	Picco	<i>Peak</i>	Jab.		Jabal	<i>Mountain, Hill</i>
Pog.	Pgio, P <sup>gio</sup>	Poggio	<i>Mound, Small hill</i>	Jaz.	Jazh, Jaz <sup>h</sup>	Jazireh	<i>Island, Peninsu/a</i>
Pta.	P <sup>ta</sup>	Punta	<i>Point, Summit</i>	Kh.	K	Khowr	<i>Inlet, Channel</i>
	Pte, P <sup>te</sup>	Ponte	<i>Bridge</i>	R.		Rūd	<i>River</i>
	Pzo, P <sup>zo</sup>	Pizzo	<i>Peak</i>	<b>POLISH</b>			
S.	Sto, S <sup>to</sup> , Sta, S <sup>ta</sup>	San, Santo, Santa	<i>Saint, Ho/y</i>	Jez.		Jeziro	<i>Lake</i>
S.	SS, S.S.	Santi	<i>Saints</i>	Kan.		Kanal	<i>Channel</i>
Scog.	Sco, Sci, Sc, Sc <sup>i</sup>	Scoglio, Scogli	<i>Rock(s), Reef(s)</i>	Miel.		Mielizna	<i>Shoal</i>
Scog.	Sc, Scra	Scogliera	<i>Ridge of rocks, Breakwater</i>	R.		Rzeka	<i>River</i>
Sec.	Se	Secca, Secche	<i>Shoal(s)</i>	W.	Wys, Wa, W <sup>a</sup>	Wyspa	<i>Island</i>
	T, T <sup>te</sup>	Torrente	<i>Intermittent stream</i>	Zat.		Zatoka	<i>Gulf, Bay</i>
Tr.	Tre, T <sup>re</sup> Va, V <sup>la</sup>	Torre Villa	<i>Tower Villa</i>	<b>PORTUGUESE</b>			
<b>JAPANESE</b>				Anc.		Ancoradouro	<i>Anchorage</i>
B.	B <sup>a</sup>	Bana	<i>Cape, Point</i>	Arq.	Arqu <sup>o</sup>	Arquipélago	<i>Archipelago</i>
By.	Bi, B <sup>i</sup> D <sup>e</sup>	Byōchi Dake	<i>Anchorage Mountain, Hill</i>	B.		Baía	<i>Bay</i>
G.	G <sup>a</sup>	Gawa	<i>River</i>	Bco.	B <sup>co</sup>	Banco	<i>Bank</i>
H.	Ha, H <sup>a</sup>	Hana	<i>Cape, Point</i>	Bxo.	Ba, B <sup>xo</sup> , Bxa, B <sup>xa</sup>	Baixo, Baixa, Baixia, Baixio	<i>Shoal</i>
Hak.	Hi, H <sup>i</sup>	Hakuchi	<i>Roadstead</i>	Co.	C.	Cabo	<i>Cape</i>

# V Abbreviations of Principal Non-English Terms

CURRENT FORM	OBSOLESCENT FORM(S)	TERM	ENGLISH MEANING	CURRENT FORM	OBSOLESCENT FORM(S)	TERM	ENGLISH MEANING
<b>PORTUGUESE (continued)</b>				<b>SPANISH</b>			
Can.		Canal	Channel	A.	Arro, Arr <sup>o</sup>	Arroyo	Stream
Ens.	Ens <sup>a</sup>	Enseada	Bay, Creek	Arch.	Arch <sup>o</sup>	Archipiélago	Archipelago
Est.	Est <sup>o</sup>	Esteiro	Creek, Inlet	Arrf.	Arr <sup>e</sup> , Arr <sup>fe</sup> , Arr	Arrecife	Reef
Estr.		Estreito	Strait	Ba.	B <sup>a</sup>	Bahía	Bay
Estu.	Est, Est <sup>o</sup>	Estuario	Estuary	Bo.	B <sup>o</sup>	Bajo	Shoal
Fte.	Fte	Forte	Fort	Bco.	B <sup>co</sup>	Banco	Bank
Fte.	Ftza, Ftza	Fortaleza	Fortress	Br.	Bzo, Bz <sup>o</sup>	Rompientes	Breakers
Fund.		Fundeadoiro	Anchorage	C.		Cabo	Cape
G.		Golfo	Gulf	Cal.	Cta	Caleta	Cove
	Gde, G <sup>de</sup>	Grande	Great	Can.		Canal	Channel
I.		Ilhéu, Ilhéus, Ilhota	Islet(s)	Cer.	Co, C <sup>o</sup>	Cerro	Hill
I.		Ilha, Ilhas	Island(s)	Cre.		Cumbre, Cima	Summit
L.		Lago	Lake		Cy	Cayo	Cay, Key
L.		Lagoa	Small lake, Marsh	Ens.	Ens <sup>a</sup>	Ensenada	Bay, Creek
La.	Le, L <sup>e</sup>	Laje	Flat-topped rock	Est.	Est <sup>o</sup>	Estero	Creek, Inlet
Lag.	La, L <sup>a</sup>	Laguna	Lagoon	Estr.		Estrecho	Strait
Mol.	Me, M <sup>e</sup>	Molhe	Mole	Estu.	Est, Est <sup>o</sup>	Estuario	Estuary
Mor.	Mo, M <sup>o</sup>	Morro	Headland, Hill	Fond.	Fond <sup>o</sup>	Fondeadero	Anchorage
Mt.	M <sup>te</sup> , Mte	Monte, Montanha	Mount, Mountain	Fte.	Fte	Fuerte	Fort
NS.	Na.Sa, N <sup>a</sup> S <sup>a</sup>	Nosso Senhor, Nossa Senhora	Our Lord, Our Lady	G.		Golfo	Gulf
					Gde, G <sup>de</sup>	Grande	Great
P.	Pto, P <sup>to</sup>	Porto	Port	I.	ja	Isla, Islas	Island(s)
Pal.	Pals, Pal <sup>s</sup>	Palheiros	Fishing village	I.	ite	Islote, Isleta	Islet
Par.	PeI, P <sup>el</sup>	Parcel	Shoal, Reef	L.		Lago	Lake
Pass.	Pas	Passagem, Passo	Passage, Pass	Lag.	La, L <sup>a</sup>	Laguna	Lagoon
	Pco, P <sup>co</sup> , P <sup>o</sup>	Pico	Peak	Mor.	Mo, M <sup>o</sup>	Morro	Headland, Hill
Pda.	pda	Pedra	Rock	Mte.	M <sup>te</sup>	Monte	Mount, Mountain
	Peq	Pequeno, Pequena	Small	Mu.	Me, M <sup>e</sup> , M <sup>le</sup>	Muelle	Mole
Pr.	Pa, P <sup>a</sup>	Praia	Beach		Na. Sa, N <sup>a</sup> S <sup>a</sup>	Nuestra Señora	Our Lady
Pta.	pta	Ponta	Point	P.	Pto, P <sup>to</sup>	Puerto	Port
Queb.		Quebrada, Quebrado	Cut, Ravine	Pco.	P <sup>co</sup> , P <sup>o</sup>	Pico	Peak
Rch.		Riacho, Ribeira, Ribeirão	Creek, Stream, River	Pda.	pda	Piedra	Rock
		Recife	Reef	Pen.	Pen <sup>la</sup>	Península	Peninsula
Rf.		Rio	River	Peq.	Peq, Pa, P <sup>a</sup>	Pequeño, Pequeña	Small
Ro.	R	Rocha, Rochedo	Rock	Pl.	Pa, P <sup>a</sup>	Playa	Beach
Roc.	Ra, R <sup>a</sup>	Rocha, Rochedo	Rock	Prom.	Prom <sup>to</sup>	Promontorio	Promontory
S.	Sto, S <sup>to</sup> , Sta, S <sup>ta</sup>	São, Santo, Santa	Saint, Holy	Pta.	pta	Punta	Point
Sa.	Sa, S <sup>a</sup> , Sr	Serra, Cordilheira	Mountain range	Queb.		Quebrada	Cut, Ravine
	Va, V <sup>a</sup>	Vila	Town, Village, Villa	R.		Río	River
				Rga.		Restinga	Shoal, Sandbank
				Roc.	Ra, R <sup>a</sup>	Roca	Rock
				S.	Sn, S <sup>n</sup> , Sto, S <sup>to</sup> , Sta, S <sup>ta</sup>	San, Santo, Santa	Saint, Holy
				Sr.	Sa, S <sup>a</sup>	Sierra	Mountain range
				Surg.	Surgo, Surg <sup>o</sup>	Surgidero	Anchorage, Roadstead
				Tr.	T <sup>re</sup>	Torre	Tower
					Va, V <sup>a</sup>	Villa	Villa, Small town
<b>ROMANIAN</b>				<b>SWEDISH</b>			
A.		Ansă, Ansa	Cove	B.		Bukt	Bay, Bight
B.		Baie, Baia	Bay	Bg.	Bgt, B <sup>g</sup>	Berg, Berget	Mountain
Br.		Braț, Brațul, Brațu	Branch, Arm (of the sea)	Bk, B <sup>k</sup>		Bank	Bank
				Fj.	F <sup>d</sup>	Fjård, Fjord	Fjord
C.		Cap, Capul, Capu	Cape	Gla, G <sup>la</sup>		Gamla	Old
Di., D-le.		Deal, Dealul, Dealuri, Dealurile	Hill(s)	Gr.	Grn, Grd, G <sup>rd</sup> , G <sup>d</sup>	Grund	Shoal
Fd.mic		Fund mic	Shoal	H.	Hm, H <sup>m</sup>	Holme, Holmarna	Islet
I.		Insulă, Insula	Island	Hd, H <sup>d</sup>		Huvud	Headland
L.		Lac, Lacul, Lacu	Lake	Hn, H <sup>n</sup>		Hamn, Hamnen	Harbour
Mt., M-ții.		Munte, Muntele, Munți, Muntii	Mountain, Mounts	I.		Inre	Inner
O.		Ostrov, Ostrovul, Ostrovu	Island	L.		Lilla, Liten	Little, Small
S.		Stîncă, Stînca	Rock	N.		Nord., Norra	North, Northern
Sf.		Sfînt, Sfîntu, Sfîntul, Sfînta	Saint, Holy	Ö.		Öst, Östra	East, Eastern
				S.		Syd, Södra	South, Southern
Str.		Strîmtoare, Strîmtoarea	Pass, Strait	Sk.	Sk <sup>r</sup>	Skär, Skäret, Skären	Rock above water
				St.		Stor	Great, Large
				V.		Väst, Västra	West, Western
				Y.	Y <sup>t</sup>	Yttre	Outer
<b>RUSSIAN</b>				<b>THAI</b>			
B		Bukhta	Bay, Inlet	Kh.		Khao	Hill, Mountain
b-ka.	Bka, B <sup>ka</sup> , Bki, B <sup>ki</sup> , Bk	Banka, Banki	Bank(s)	L.	Lm, L <sup>m</sup>	Laem	Cape, Point
Bol.		Bol'shoy, Bol'shaya, Bol'shoye	Great, Large	M.N.		Mae Nam	River
Gb.	G, Ga, G <sup>a</sup>	Guba	Gulf, Bay, Inlet				
G.		Gora	Mountain, Hill				
Gav.	G	Gavan'	Harbour, Basin				
Kam.		Kamen'	Rock				
M.		Mys	Cape, Headland				
	Mal	Maly, Malaya, Maloye	Little				
O.	O <sup>va</sup>	Ostrov, Ostrova	Island(s)				
Oz.		Ozero	Lake				
P-ov.	Po <sup>ov</sup> , P <sup>ov</sup> , Pol	Poluostrov	Peninsula				
Pr.	Pr <sup>v</sup> , Pr <sup>v</sup>	Proliv	Channel, Strait				
R.		Reka	River				
Zal.		Zaliv	Gulf, Bay				
				<b>TURKISH</b>			
				Ad.		Ada, Adası	Island
				Aşp		Takimadalar	Archipelago
				Adc.	Ad	Adacık	Islet
				Boğ.		Boğaz, Boğazi	Strait
				Br.	Bn, Bu	Burun, Burnu	Point, Cape
				Ç.	Ça	Çay, Çayı	Stream, River

# Abbreviations of Principal Non-English Terms **V**

CURRENT FORM	OBSOLESCENT FORM(S)	TERM	ENGLISH MEANING	CURRENT FORM	OBSOLESCENT FORM(S)	TERM	ENGLISH MEANING
TURKISH ( <i>continued</i> )							
D.	Da	Dağ, Dağı	<i>Mountain</i>	Br.		Brdo, Brda	<i>Mountain(s)</i>
Dz.	De	Dere, Deresi	<i>Valley, Stream</i>	Gr.		Greben, Grebeni	<i>Rock, Reef, Cliff, Ridge</i>
G.		Deniz	<i>Sea</i>	Hr.		Hrid, Hridi	<i>Rock</i>
Isk.		Göl, Gölü	<i>Lake</i>	L.		Luka	<i>Harbour, Port</i>
Kf. Krf.		İskele, İskelesi	<i>Jetty</i>	M.		Mali, Mala, Malo, Malen	<i>Small</i>
Ky.	Kyl.	Körfez, Körfezi	<i>Gulf</i>	O.		Otočić, Otočići	<i>Islet(s)</i>
Lim. Lm.	Li	Kaya, Kayası	<i>Rock</i>	O.		Otok, Otoci	<i>Island(s)</i>
N.		Liman, Limanı	<i>Harbour</i>	Pl.		Pličina	<i>Shoal</i>
		Nehir, Nehri, Irmak, Irmağı	<i>River</i>	Pr.		Prolaz	<i>Passage</i>
T.	Te, T <sup>e</sup>	Tepe, Tepesi	<i>Hill, Peak</i>	S.	Sv	Sveti, Sveta, Sveto	<i>Saint, Holy</i>
Yad.		Yarımada, Yarımadası	<i>Peninsula</i>	Šk.		Školj, Školjić	<i>Island, Reef</i>
				U.		Uvala, Uvalica	<i>Inlet</i>
				V.		Veli, Vela, Velo, Velik, Veliki, Velika, Veliko	<i>Great</i>
				Z.	Zal	Zaliv, Zaljev, Zaton	<i>Gulf, Bay</i>
Languages of the former YUGOSLAVIA							

# V Abbreviations of Principal English Terms

CURRENT FORM	OBSOLETE FORM(S)	TERM	REFERENCES	CURRENT FORM	OBSOLETE FORM(S)	TERM	REFERENCES
abt	ab <sup>t</sup>	About	O a	Dir	Dir <sup>n</sup>	Direction	—
Aero		Aeronautical	P 60, 61	Dir Lt		Directional light	P 30-31
Al.	Al	Algae	J t	Discol	Discol <sup>d</sup>	Discoloured water	K e
ALC	Alt	Alternating light	P 10.11	discont	discont <sup>d</sup> , discont <sup>d</sup>	Discontinued	O b
ALL		Articulated Loading Column	L 12	dist	Dist	Distant	O 85
ALRS		Admiralty List of Lights and Fog Signals	—	Dk	D <sup>k</sup>	Dock	G c
Am		Admiralty List of Radio Signals	—	dm	dm.	Decimetre(s)	B 42
Anch.	Anch <sup>e</sup>	Amber	P 11.8	Dn, Dns	D <sup>n</sup>	Dolphin(s)	F 20
Anch.	Anct, Anc <sup>t</sup>	Anchorage	O 21	dr	dr., Dr.	Dries	K b
ANM		Ancient	O 84	DW		Deep-water, Deep-draught	M 27, N 12.4
		Annual Summary of Admiralty Notices to Mariners	—	dwt		Deadweight tonnage	—
Anny	Ann <sup>ly</sup>	Annually	—	DZ		Danger Zone	Q 50
Appr.	Apprs, Appr <sup>s</sup>	Approaches	O 22	E	E.	East	B 10
approx	Approx	Approximate	O 89	ED	(ED), (E.D.)	Existence doubtful	I 1
Apr		April	—	EEZ		Exclusive Economic Zone	N 47
Arch.	Archo, Arch <sup>o</sup>	Archipelago	G 5	Ent.	E.F. Horn	Electric fog horn	R 13
ASD		Admiralty Sailing Directions	—	Equin <sup>l</sup>	Entce, Ent <sup>ce</sup>	Entrance	O 16
ASL		Archipelagic Sea Lane	M17	ESSA	Equin <sup>l</sup>	Equinoctial	—
	Astr, Astrl, Astr <sup>l</sup>	Astronomical	—			Environmentally Sensitive Sea Area	N 22
ATBA		Area to be Avoided	M14, 29	Est.	Est <sup>y</sup>	Estuary	O 17
ATT		Admiralty Tide Tables	—	Estab <sup>t</sup>		Establishment	—
Aug		August	—	ev.		Every	—
Aus		Australia	—	exper	exper <sup>l</sup> , Exper <sup>l</sup>	Experimental	O 92
Ave	Av <sup>e</sup>	Avenue	G 111	explos	explos.	Explosive	R 10
				(exting)	(exting <sup>d</sup> )	Extinguished	P 55
B.		Bay	O 4	f		Fine	J 30
B	bl, blk	Black	J af, Q 2	F		Fixed light	P 10.1
	Ba	Basalt	J i	FAD		Fish Aggregating Device	—
	Batt, Baty, Bat <sup>y</sup>	Battery	E 34.3	F Racon		Fixed frequency radar transponder beacon	S 3.4
Bk.	B <sup>k</sup>	Bank	O 23	Feb		February	—
bk	brk	Broken	J 33	FFL		Fixed and flashing light	P 10.10
Bldg	B <sup>ldg</sup>	Building	D 5	Fj.	Fd, F <sup>d</sup>	Fjord	O 5
	BM, B.M.	Bench Mark	B 23	Fl.	(fish <sup>g</sup> )	Fishing light	P 50
Bn, Bns		Beacon(s)	M 1-2, P 4-5, Q 80-81	Fl.	fl.	Flashing light	P 10.4
			P 3, Q 110	Fl., fl		Flood	—
BnTr	Bn Tower	Beacon Tower	J e	Fla	Fm, F <sup>m</sup>	Flare stack (at sea)	L 11
Bo	Bo	Boulders	F a, G 181	fm, fms	f <sup>m</sup> , f <sup>ms</sup>	Farm	G 53
Bol	Boll.	Bollard	K 17	Fog Det Lt		Fathom, fathoms	B 48
Br		Breakers	J ak		Fog Sig.	Fog detector light	P 62
	br	Brown	J ag, P 11.4, Q a		Fog W/T	Fog signal station	R 1
Bu	Bl, Bl., b	Blue	—	FPSO		Radio fog signal	—
						Floating Production and Storage Offtake Vessel	L17
C.		Cape	G 7	Fr, for		Foraminifera	J u
c		Coarse	J 32	FS	F.S.	Flagstaff, Flagpole	E 27
ca	cal	Calcareous	J 38	FSO		Floating Storage and Offtake Vessel	L17
CALM		Catenary Anchor Leg Mooring	L 16		Ft, F <sup>t</sup>	Fort	E 34.2
Cas	Cas.	Castle	E 34.2, G 64	ft	f <sup>t</sup>	Foot, feet	B 47, P 13
	Cath, Cath.	Cathedral	E 10.1, G 75	G	g	Gravel	J 6
Cb		Cobbles	J 8	G	gn	Green	J ah, P 11.3, Q 2
cd		Candela	B 54	G.		Gulf	O 3
CD		Chart Datum	H 1		ga, glac	Glacial	J ac
	Cemy, Cem <sup>y</sup>	Cemetery	E 19		Gc	Glauconite	J p
CG	C.G.	Coastguard station	T 10-11		Gd, grd	Ground	J a
Ch	Ch.	Church, chapel	E 10.1, E 11		Gl, gl	Globigerina	J v
	ch, choc	Chocolate	J al	Gp.	Govt Ho, Gov <sup>t</sup> Ho	Government House	—
Chan.		Channel	O 14		GpFl, Gp.Fl.	Group (of islands)	—
Chem		Chemical	L 40		GpOcc, Gp.Occ.	Group-flashing light	P 10.4
	chk, Ck	Chalk	J f			Group-occulting light	P 10.2
Chy	Ch <sup>y</sup>	Chimney	E 22	GPS		Global Positioning System	—
	cin, Cn	Cinders	J n	grt	Gt, Grt, G <sup>t</sup> , Gr <sup>t</sup>	Gross Register Tonnage	—
cm	cm.	Centimetre(s)	B 43		G.T.S.	Great	—
Co	crl	Coral	J 10, K 16			Great Trigonometrical Survey Station (India)	—
	Col	Column, pillar, obelisk	E 24, G 66	GT	Gy, gy	Grey	J am, Q a
	conspic	Conspicuous	E 2			Gross Tonnage	—
const	constn, constr <sup>n</sup>	Construction	F 32			Hard	J 39
cov	cov.	Covers	K c			Headway	D 20, D 26-27
Cr.		Creek	O 7			Helicopter transfer (Pilots)	T 1.4
Cup	Cup.	Cupola	E 10.4			Hour	B 49
Cy	cl	Clay	J 3			Highest Astronomical Tide	H 3
	(D)	Doubtful	—			Headland	G 8
	d	Dark	J ao			Haven	G 139
Dec		December	—	HAT		House	G 61
decr	decr <sup>g</sup>	Decreasing	B 64	Hd.	H <sup>d</sup>	Horizontally disposed	P 15
dest	dest <sup>d</sup> , Dest <sup>d</sup>	Destroyed	O 93	Hn.	H <sup>n</sup>	Hospital	F 62.2
Det		(see Fog Det Lt)	—	Ho		Harbour	G 138
DG, DG Range	D. G. Range	Degaussing Range	N 25, Q 54	(hor)	(hor <sup>l</sup> )	Higher	—
DGPS		Differential Global Positioning System	S 51	Hosp	Hosp <sup>l</sup> , Hosp <sup>l</sup>	Harbour Master	F 60
	Di, di	Diatoms	J w	Hr.	H <sup>r</sup>	Height	—
Dia		Diaphone	R 11	Hr Mr	Hr, H <sup>r</sup>		—
					Ht, H <sup>t</sup>		—

# Abbreviations of Principal English Terms

V

CURRENT FORM	OBSOLESCENT FORM(S)	TERM	REFERENCES	MHW	M.H.W.N.	Mean High Water	H 5
HW	H.W.	High Water	H a	MHWN	M.H.W.N.	Mean High Water Neaps	H 11
	H.W.F. & C.	High Water Full and Change	—	MHWS	M.H.W.S.	Mean High Water Springs	H 9
	H.W.O.S.	High Water Ordinary Springs	—	min	Mid, Mid.	Middle	—
I.	It	Island, islet	G 1-2	Mk	min., m.	Minute(s) of time	B 50
		International Association of Lighthouse Authorities	Q 130			Mark	Q 101
IALA		International Hydrographic Organization	—			Marl	J c
IHO		International Maritime Organization	—			Marl	J c
(illum)	Illum., (lit)	Illuminated	P 63			Marl	J c
IMO		International Maritime Organization	—			Marl	J c
incrg	in., ins.	Inch, inches	—			Marl	J c
	incr <sup>g</sup>	Increasing	B 65			Marl	J c
INT		International	A 3, T 21			Marl	J c
Intens	(intens)	Intensified	P 46			Marl	J c
IQ	IntQkFI, Int.Qk.FI.	Interrupted quick-flashing light	P 10.6			Marl	J c
Iso	(irreg.)	Irregular	—			Marl	J c
	ISLW, I.S.L.W.	Indian Spring Low Water	—			Marl	J c
	It	Isophase light	P 10.3			Marl	J c
ITZ		Inshore Traffic Zone	—			Marl	J c
IUQ		Interrupted ultra quick-flashing light	P 10.8			Marl	J c
IVQ	IntVQkFI, Int.V.Qk.FI	Interrupted very quick-flashing light	P 10.7			Marl	J c
Jan		January	—			Marl	J c
Jul		July	—			Marl	J c
km	km.	Kilometre(s)	B 40, F 40			Marl	J c
kn	kn.	Knot(s)	B 52, H 40-41			Marl	J c
L.		Lake, Loch, Lough	O 6			Marl	J c
Lag.	I	Large	J ab			Marl	J c
	Lagn, Lag <sup>n</sup>	Lagoon	G 13, O 8			Marl	J c
LANBY		Large Automatic Navigational Buoy	P 6			Marl	J c
LASH		Lighter Aboard Ship	G 184			Marl	J c
LAT		Lowest Astronomical Tide	H 2			Marl	J c
Lat	Lat.	Latitude	B 1			Marl	J c
Ldg	LB, L.B.	Lifeboat station	T 12			Marl	J c
	L <sup>dg</sup>	Leading	P 20.3			Marl	J c
Le.	L <sup>e</sup>	Ledge	O 28			Marl	J c
LFI		Long-flashing light	P 10.5			Marl	J c
LL	Lit, Lit. (lit)	Little	—			Marl	J c
	L.L.	Floodlit	P 63			Marl	J c
Lndg.	L.L.	List of Lights	G 6			Marl	J c
LNG	L <sup>dg</sup>	Landing place	F 17			Marl	J c
LOA		Liquefied Natural Gas	G 185			Marl	J c
LoLo		Length overall	—			Marl	J c
Long		Load-on, Load-off	—			Marl	J c
LPG	Long.	Longitude	B 2			Marl	J c
Lt	Lr, L <sup>r</sup>	Liquefied Petroleum Gas	G 186			Marl	J c
	L.S.S.	Lower	P 23			Marl	J c
Lts	L <sup>t</sup> , It	Lifesaving station	—			Marl	J c
LtHo	L <sup>t</sup> Ho	Light	J an, P 1			Marl	J c
Lt V	L <sup>t</sup> V	Lights	P 20.1, 61.2			Marl	J c
LW	Lv, lv	Lighthouse	P 1			Marl	J c
	L.W.	Light-vessel	P 6			Marl	J c
Mag	L.W.F. & C.	Lava	J j			Marl	J c
	L.W.O.S.	Low Water	H b			Marl	J c
		Low Water Full and Change	—			Marl	J c
M	m	Low Water Ordinary Springs	—			Marl	J c
M	M.	Mud	J 2			Marl	J c
m	m.	Sea Mile(s)	B 45, P 14			Marl	J c
Mag	mad, Md	Medium	J 31			Marl	J c
	Mag.	Metre(s)	B 41, P 13			Marl	J c
Mar	Magz, Magz <sup>z</sup>	Madrepore	J h			Marl	J c
	man, Mn	Magnetic	B 61			Marl	J c
MHHW	M.H.H.W.	Magazine	—			Marl	J c
MHLW	M.H.L.W.	Manganese	J o			Marl	J c
		March	—			Marl	J c
		Mean Higher High Water	H 13			Marl	J c
		Mean Higher Low Water	H 14			Marl	J c

# V Abbreviations of Principal English Terms

				CURRENT FORM	OBSOLESCENT FORM(S)	TERM	REFERENCES
R	r	Rock	J 9, K 15				
R	R <sup>o</sup>	Coast Radio Station providing QTG service	S 15				
Ra		Radar Range, Radar Reference Line, Coast Radar Station	M 31-32, S 1	TSS TV Tr	T.V. T <sup>r</sup>	Traffic Separation Scheme Television Tower	— E 28-29
	Ra (conspic), OBSOLESCENT FORM(S)	Radar conspicuous object	S 5		(U)	Unwatched, unmanned (light)	P 53
	Ra. (conspic)			ULCC uncov unexam	uncov. unexam <sup>d</sup> unexam <sup>d</sup>	Ultra Large Crude Carrier Uncovers Unexamined	— K d I a
Racon	Ra. Refl.	Radar Reflector Radar Transponder Beacon	Q 10-11, S 4 S 3	Unintens	Up <sup>r</sup>	Unintensified Upper	P a P 22
Ramark RC	rad, Rd	Radiolaria Radar Beacon Non-directional Radio-beacon	J x S 2 S 10	UQ UTC		Ultra quick-flashing light Co-ordinated Universal Time	P 10.8 —
RD Rds.	Dir.Ro.Bn R <sup>ds</sup>	Directional Radiobeacon Roads, Roadstead	S 11 O 20	UTM		Universal Transverse Mercator	—
Ref		Refuge	Q 124, T 14	v	vol Va, V <sup>a</sup>	Volcanic Villa	J 37 —
Refl	Refl. Rem <sup>ble</sup>	Retroreflecting material Remarkable	Q 6 —	Var	Var <sup>n</sup>	Variation	B 60
Rep	Repd., Rep <sup>d</sup>	Reported	I 3		var	Varying	—
Rf.	R <sup>f</sup>	Reef	O 26	Vel	Vel.	Velocity	—
RG	R <sup>o</sup> D.F.	Radio Direction-Finding Station	S 14	(vert) Vi	(vert <sup>l</sup> )	Vertically disposed Violet Visible	P 15 P 11.5 —
Rk. (R Lts)	R <sup>k</sup> (Red Lts)	Rock Air Obstruction Lights (low intensity)	G 11 P 61.2	VLCC Vol. VQ VTS	VQKFI, V.Qk.FI	Very Large Crude Carrier Volcano Very quick-flashing light Vessel Traffic Service	G 187 G 26 P 10.7 —
	Rly, Ry, R <sup>y</sup> R <sup>o</sup> B <sup>n</sup>	Railway Radiobeacon in general	D 13 S 10	W	W.	West	B 12
RoRo	Ro-Ro	Roll-on Roll-off ferry terminal	F 50	W	w	White	J ae, P 11.1, Q a
	R.S. Ru.	Rocket station Ruins	— D 8, E 25.2, F 33	Water Tr Wd WGS	Water T <sup>r</sup> wd	Water tower Weed World Geodetic System	E 21 J 13.1 S 50
RW		Rotating Pattern Radiobeacon	S 12	Whf Whis Wk	Wh <sup>f</sup> Whis. W <sup>k</sup>	Wharf Whistle Wreck	F 13, G d R 15 K 20-30
S.	St, S <sup>t</sup>	Saint	G 54	W/T	W/T	Radio (Wireless/Telegraphy)	—
S	s	Sand	J 1	Y	y	Yellow, amber, orange	J ai, P 11, IQ 3
S	S.	South	B 11	YC	Y.C. y <sup>d</sup> , y <sup>ds</sup>	Yacht Club Yard(s)	U 4 —
s	sec, sec.	Second(s) of time	B 51, P 12				
SALM		Single Anchor Leg Mooring	L 12				
SBM		Single Buoy Mooring	L 16				
SC	S.C.	Sailing Club	U 4				
	Sc, sc	Scoriæ	J m				
Sc	Sc.	Scanner	E 30.3				
Sch	Sch.	School	G b				
SD	S.D.	Sailing Directions	—				
SD		Sounding of doubtful depth	I 2				
Sd.	S <sup>d</sup>	Sound	O 12				
SE	S.E.	South-east	B 14				
	Sem, Sem.	Semaphore	—				
Sep		September	—				
sf	stf	Stiff	J 36				
Sh	sh	Shells	J 11				
Sh.		Shoal	O 25				
Si		Silt	J 4				
Sig	Sig.	Signal	R 1, T 25.2				
	sk, spk	Speckled	J ad				
	sm	Small	J aa				
SMT	SM <sup>t</sup>	Seamount	O 33				
	Sn, shin	Shingle	J d				
	sft	Soft	J 35				
Sp	Sp.	Spire	E 10.3				
	Sp, sp	Sponge	J s				
Sp	Sp, Spr.	Spring Tides	H 16				
SPM		Single Point Mooring	L 12				
SS	Sig Sta, Sig Stn	Signal Station	T 20-36				
St	st	Stones	J 5				
St	St.	Street	G 110				
Sta	Sta., Stn, St <sup>n</sup>	Station	D 13				
	Strm.Sig.Stn.	Storm Signal Station	T 28				
Str.		Strait	O 11				
subm	submd, Subm <sup>d</sup>	Submerged	O 90				
SW	S.W.	South-west	B 16				
SWOPS		Single Well Oil Production System	L c				
sy	stk	Sticky	J 34				
	T, t	Tufa	J 1				
(T)		Temporary (NM)	—				
t		Ton, tonne	B 53, F 53				
	t	Elevation of top of trees	C 14				
Tel	Tel.	Telephone, Telegraph	G 95				
(temp)	(tempy), (temp <sup>y</sup> )	Temporary	N b, P 54				
Tr	T <sup>r</sup>	Tower	E 10.2, E 20				



# International Abbreviations **W**

<b>A</b>			<b>G</b>		
Aero	Aeronautical light	P 60, 61.1	G	Gravel	J 6
† Aero RC	Aeronautical radiobeacon	S 16	G	Green	P 11.3, Q 2
AIS	Automatic Identification System	S 17	GPS	Global Positioning System	
Al	Alternating	P 10.11	grt	Gross Register Tonnage	
ALC	Articulated Loading Column	L 12	GT	Gross Tonnage	
Am	Amber	P 11.8			
ASL	Archipelagic Sea Lane	M 17			
<b>B</b>			<b>H</b>		
B	Black	Q 2, 81	h	Hard	J 39
bk	Broken	J 33	h	Hour	B 49
Bn	Beacon	P 4, 5, Q 80	H	Helicopter	T 1.4
BnTr	Beacon tower	P 3, Q 110	hor	Horizontally disposed	P 15
Bo	Boulder(s)	J 9.2			
Br	Breakers	K 17			
Bu	Blue	P 11.4			
<b>C</b>			<b>I</b>		
c	Coarse	J 32	INT	International	A 2, T 21
ca	Calcareous	J 38	Intens	Intensified	P 46
CALM	Catenary Anchor Leg Mooring	L 16	IQ	Interrupted quick	P 10.6
Cb	Cobbles	J 8	Iso	Isophase	P 10.3
cd	Candela	B 54	IUQ	Interrupted ultra quick	P 10.8
CG	Coastguard	T 10, 11	IVQ	Interrupted very quick	P 10.7
Ch	Church	E 10.1			
Chy	Chimney	E 22			
cm	Centimetre(s)	B 43			
Co	Coral	J 10, K 16			
† Consol	Consol Beacon	S 13			
Cy	Clay	J 3			
<b>D</b>			<b>K</b>		
DGPS	Differential Global Positioning System	S 51	km	Kilometre(s)	B 40
Dia	Diaphone	R 11	kn	Knot(s)	B 52
Dir	Direction light	P 30, 31			
dm	Decimetre(s)	B 42			
Dn, Dns	Dolphin(s)	F 20			
DW	Deep Water route	M 27, N 12.4			
dwt	Dead Weight Tonnage				
DZ	Danger Zone	Q 50			
<b>E</b>			<b>L</b>		
E	East	B 10	LANBY	Large Automatic Navigational Buoy	P 6, Q 26
ED	Existence Doubtful	I 1	LASH	Lighter Aboard Ship	G 184
Explos	Explosive	R 10	Lat	Latitude	B 1
exting	Extinguished	P 55	Ldg	Leading	P 20.3
			LFI	Long-flashing	P 10.5
			Lndg	Landing for boats	F 17
			LNG	Liquefied Natural Gas	G 185
			Long	Longitude	B 2
			LPG	Liquefied Petroleum Gas	G 186
			Lt	Light	P 1
<b>F</b>			<b>M</b>		
f	Fine	J 30	m	Medium	J 31
F	Fixed	P 10.1	m	Metre(s)	B 41
FFI	Fixed and Flashing	P 10.10	m	Minute(s) of time	B 50
Fl	Flashing	P 10.4	M	Mud	J 2
Fla	Flare stack	L 11	M	International Nautical mile(s) (1852 m) or sea mile(s)	B 45
Fog Det Lt	Fog detector light	P 62	min	Minute(s) of time	B 50
FS	Flagstaff, flagpole	E 27	Mk	Mark	Q 101
ft	Foot/feet	B 47	mm	Millimetre(s)	B 44
			Mo	Morse Code	P 10.9, R 20
			Mon	Monument	E 24
			MR	Marine Reserve	N 22.3
			<b>N</b>		
			N	North	B 9
			NE	North-east	B 13
			No	Number	N 12.2
			NT	Net Tonnage	
			NW	North-west	B 15

# W International Abbreviations

<b>O</b>			<b>T</b>		
Obscd	Obscured	P 43	t	Ton(s), Tonne(s) or tonnage	B 53, F 53
Obstn	Obstruction	K 40-43, L 43	temp	Temporary	P 54
Oc	Occulting	P 10.2	Tr	Tower	E 10.2, 20
occas	Occasional	P 50	<b>U</b>		
ODAS	Ocean Data Acquisition System	Q 58	ULCC	Ultra Large Crude Carrier	G 188
Or	Orange	P 11.7, Q 3	UQ	Ultra Quick	P 10.8
<b>P</b>			UTC	Universal Time Co-ordinated	
P	Pebbles	J 7	UTM	Universal Transverse Mercator	
PA	Position approximate	B 7	<b>V</b>		
PD	Position doubtful	B 8	v	Volcanic	J 37
priv	Private	P 65, Q 70	vert	Vertically disposed	P 15
Prod Well	Submerged production well	L 20	Vi	Violet	P 11.5
PSSA	Particularly Sensitive Sea Area	N 22.4	VLCC	Very Large Crude Carrier	G 187
Pyl	Pylon	D 26	VQ	Very Quick	P 10.7
<b>Q</b>			VTS	Vessel Traffic Service	
Q	Quick	P 10.6	<b>W</b>		
<b>R</b>			W	West	B 12
R	Coast radio stations QTG service	S 15	W	White	P 11.1, Q 130.5
R	Red	P 11.2, Q 3	Wd	Weed	J 13.1
R	Rock	J 9, K 15	Well	Wellhead	L 21
Ra	Radar	M 31, 32, S 1	WGS	World Geodetic System	S 50
Racon	Radar transponder beacon	S 3.1-3.6	Whis	Whistle	R 15
† RC	Circular marine radiobeacon	S 10	Wk; Wks	Wreck(s)	K 20-30
† RD	Directional radiobeacon	S 11	<b>Y</b>		
Ref	Refuge	Q 124, T 14	Y	Amber	P 11.8
Rep	Reported, but not confirmed	I 3.1	Y	Orange	P 11.7
RG	Radio direction-finding station	S 14	Y	Yellow	P 11.6, Q 3
RoRo	Roll-on, Roll-off Ferry (RoRo Terminal)	F 50			
Ru	Ruin	D 8, E 25.2, F 33			
† RW	Rotating-pattern radiobeacon	S 12			
<b>S</b>					
S	Sand	J 1			
s	Second(s) of time	B 51, P 12			
S	South	B 11			
SALM	Single Anchor Leg Mooring	L 12			
SBM	Single Buoy Mooring	L 16			
SD	Sounding doubtful	I 2			
SE	South-east	B 14			
sec	Second(s) of time	B 51			
sf	Stiff	J 36			
Sh	Shells (skeletal remains)	J 11			
Si	Silt	J 4			
Sig	Signal	T 25.2			
SMt	Seamount	O 33			
so	Soft	J 35			
Sp	(Church) spire	E 10.3			
SPM	Single Point Mooring	L 12			
SS	Signal station	T 20-36			
St	Stones	J 5			
SW	South-west	B 16			
sy	Sticky	J 34			

See also Section V for Abbreviations of principal English and non-English terms, and Section W for International Abbreviations.

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**Abysal plain** ..... O 49  
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**Aerial cableway** ..... D 25  
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