

# 1. Reference Data

## 1.1 Abbreviations and Symbols

The following more common abbreviations and symbols feature in Reeds Almanacs and in some Admiralty charts and publications. See also Fig 1(1). Admiralty chart 5011 (a booklet) is the authority for Abbreviations and Symbols.

	Power transmission line with pylons and safe overhead clearance as defined by the responsible authority		Church, chapel		Drying contour LW line, Chart Datum
	Vertical clearance above HAT		Radio mast, television mast		Blue ribbon or differing blue tints may be shown
	Submarine cable		Monument (including column, pillar, obelisk, statue)		Anchoring prohibited
	Buried pipeline		Chimney		Marine Farm
	Overfalls, tide rips and races		Flare stack (on land)		Wreck, depth unknown, danger to navigation
	Flood stream Mean spring rate		Tanks		Wreck, depth unknown, no danger to navigation
	Ebb stream Mean spring rate		Crane		Wreck, depth obtained by sounding
	Designated position of tabulated tidal streams		Bird sanctuary		Wreck, swept by wire to the depth shown
	Examples: (a) fixed beacon; (b) buoy		Coastguard Station		Wreck showing any part at level of chart datum
	Limit of safety zone around offshore installation		Woods in general		Rock which covers and uncovers, height above chart datum
	Major light		Withy - starboard hand		Rock awash at level of chart datum
	Port hand light (PHM)		Withy - port hand		Dangerous underwater rock of unknown depth
	Fishing harbour		Floodlit		Dangerous underwater rock of known depth
	Fishing prohibited		Marsh		Recommended anchorage
	Visitor's berth		Kelp		Rescue station, lifeboat station, rocket station
	Fuel station (Petrol, Diesel)		Fog signal		Yacht harbour, Marina
	Public slipway		Yacht berths, no facilities		Harbourmaster's Office
	Water tap		Visitor's buoy		Customs office
	Public landing, steps, ladder		Mooring buoy		Hospital
			Laundrette		Post office
			Yacht Club, Sailing Club		

Fig 1(1) Admiralty chart symbols

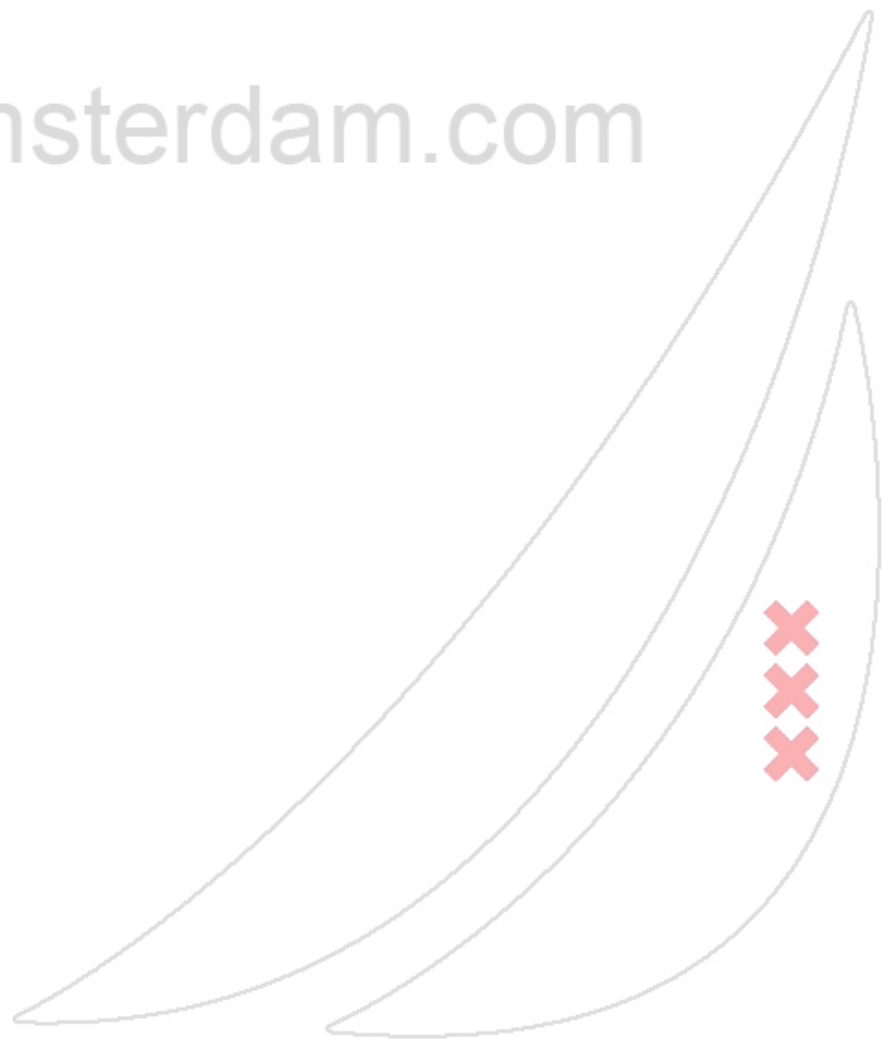
sterdam.com



WYPOIN

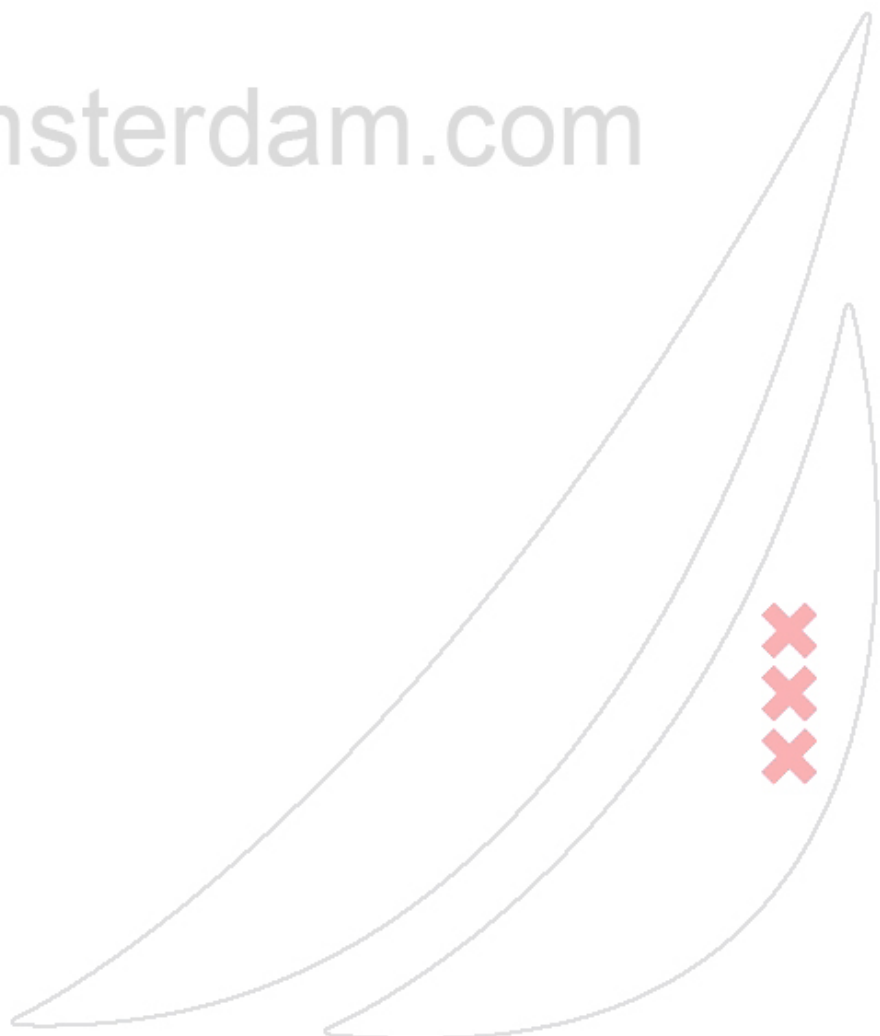
The following more common abbreviations and symbols feature in Reeds Almanacs and in some Admiralty charts and publications. See also Fig 1(1). Admiralty chart 5011 (a booklet) is the authority for Abbreviations and Symbols.

abm	Abeam
AB	Alongside berth
ABP	Associated British Ports
AC	Shore power (electrical)
AC, ACA	Admiralty Chart, AC Agent
ACN	Adlard Coles Nautical (Publisher)
Aff Mar	Affaires Maritimes
AIS	Automatic Identification System
aka	Also known as
ALL	Admiralty List of Lights
ALRS	Admiralty List of Radio Signals
AI	Alternating light
ANWB	Association of road & waterway users (Dutch)
ATM	Automatic telling machine, cashpoint
ATT	Admiralty Tide Tables
ATT	Atterisage (landfall/SWM) buoy
Auto	Météo Répondeur Automatique
B.	Bay, Black
	Bank. See also ATM
Bar, T	Licensed bar, Public house, Inn
BE	Belgian chart
BH	Boat Hoist (+ tons)
Bk	Broken (nature of seabed)
Bkwtr	Breakwater
BMS	Bulletin Météorologique Spécial (Strong wind/Gale warning)
Bn, bcn(s)	Beacon, beacon(s)
BSH	German Hydrographic Office/chart(s)
BST	British Summer Time (= DST)
Bu	Blue
BWB	British Waterways Board
By(s)	Buoy, buoys
BY	Boatyard
C.	Cape, Cabo, Cap
C	Crane (+ tons)
c	Coarse (sand; nature of seabed)
ca	Cable (approx 185m long)
Cas	Castle



CD	Chart datum (tidal)
CEVNI	Code Européen de Voies de la Navigation Intérieure (inland waterway signs etc)
cf	Compare, cross-refer to
CG	Coast Guard, HM Coastguard (in the UK)
CH, F	Chandlery
chan	Channel (navigational)
Ch	Channel (VHF)
Ch	Church
Chy	Chimney
Col	Column, pillar, obelisk
CPA	Closest Point of Approach
CROSS	Centre Régional Opérationnel de Surveillance et Sauvetage (= MRCC)
CRS	Coast Radio Station
C/S	COSPAS/SARSAT (satellite)
Cy	Clay (nature of seabed)
D	Diesel (supply by hose)
Dec	Declination (of the Sun)
Defib	Automated External Defibrillator
dest	Destroyed
DF, D/F	Radio Direction Finding
DG	De-gaussing (range)
DGPS	Differential GPS
Dia	Diaphone (fog signal)
Dir Lt	Directional light
discont	Discontinued
DLR	Dockland Light Railway
Dn(s)	Dolphin(s)
DR	Dead Reckoning
DSC	Digital Selective Calling
DST	Daylight Saving Time
DW	Deep Water (route)
DYC	Dutch Yacht Chart(s)
DZ	Danger Zone (buoy)
E	East
ECM	East cardinal mark (buoy/beacon)
ED	Existence doubtful. European Datum
EEA	European Economic Area
EI	Electrical repairs
T	Electronic repairs

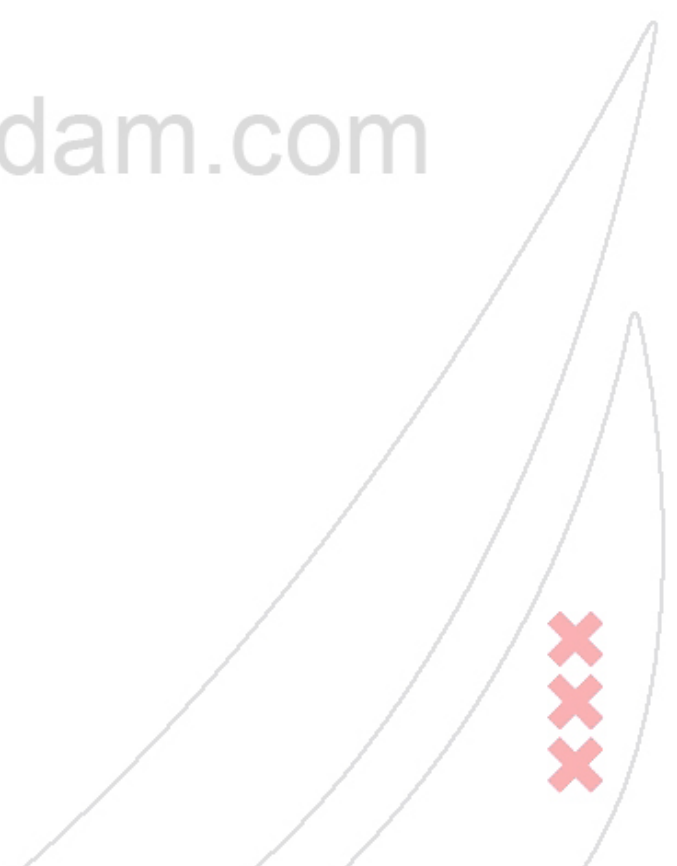
www.waypointamsterdam.com



Elev	Elevation
Ent	Entrance, entry, enter
EP	Estimated position
ETA	Estimated Time of Arrival
ETD	Estimated Time of Departure
F	Fixed light
f	Fine (eg sand; nature of seabed)
F&A	Fore and aft (berth/mooring)
FFL	Fixed and Flashing light
FI	Flashing light
FM	Frequency Modulation
Foc	Free of charge
Fog Det Lt	Fog Detector light
Freq, Fx	Frequency
FS	Flagstaff, Flagpole
ft	Foot, feet
Ft,	Fort
FV	Fishing vessel
FW	Fresh water supply
G	Gravel (nature of seabed), Green
Gas, Gaz	Calor Gas, Camping Gaz
GC	Great Circle
GDOP	Geometric Dilution of Precision (GPS)
GHA	Greenwich Hour Angle
GLA	General Lighthouse Authority
GMDSS	Global Maritime Distress & Safety System
grt	Gross Registered Tonnage
Gy	Grey
H, h, Hrs	Hour(s)
H-, H+	Minutes before, after the whole hour
H24	Continuous
HAT	Highest Astronomical Tide
HF	High Frequency
HFP	High Focal Plane (buoy)
HIE	Highlands & Islands Enterprise
HJ	Day service only, sunrise to sunset
HM	Harbour Master
HMRC	HM Revenue & Customs
HMSO	Her Majesty's Stationery Office

# WAYPOINT

[www.waypointamsterdam.com](http://www.waypointamsterdam.com)



HN	Night service only, sunset to sunrise
HO	Office hours, Hydrographic Office
(hor)	Horizontally disposed (lights)
hPa	Hectopascal (= 1millibar)
HT	High Tension (overhead electricity line)
HW	High Water
HX	No fixed hours
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
iaw	In accordance with
IDM	Isolated Danger Mark (buoy/beacon)
IHO	International Hydrographic Organisation
IMO	International Maritime Organisation
INMARSAT	International Maritime Satellite Organisation
intens	Intensified (light sector)
IPTS	International Port Traffic Signals
IQ	Interrupted quick flashing light
IRPCS	International Regulations for the Prevention of Collisions at Sea
Is, I	Island, Islet
ISAF	International Sailing Federation
Iso	Isophase light
ITU	International Telecommunications Union
ITZ	Inshore Traffic Zone (TSS)
IUQ	Interrupted ultra quick flashing light
IVQ	Interrupted very quick flashing light
kn	Knot(s)
Kos	Kosangas
kW	Kilowatts
L	Lake, Loch, Lough, Landing place
Lat	Latitude
LAT	Lowest Astronomical Tide
Lanby,	Large automatic navigational buoy
LB	Lifeboat, inshore lifeboat
Ldg	Leading (light)
LF	Low frequency
L FI	Long flash
LH	Left hand
LNG	Liquefied Natural Gas
LNTM	Local Notice To Mariners
LOA	Length overall

[www.waypointamsterdam.com](http://www.waypointamsterdam.com)

# WAYPOINT



Long, lng	Longitude
LPG	Liquefied Petroleum Gas
LT	Local time
Lt(s)	Light(s)
	Light float, minor
Lt V	Light vessel; Lt float, major; Lanby
M	Moorings. Nautical (sea) mile(s). Mud
m	Metre(s)
Mag	Magnetic. Magnitude (of star)
Mb, mb	Millibar (= 1 hectopascal, hPa)
MCA	Maritime and Coastguard Agency
ME	Marine engineering repairs
Met/Météo	Meteorology/Météorologie (weather)
MHWN	Mean High Water Neaps
MHWS	Mean High Water Springs
MHz	Megahertz
ML	Mean Level (tidal)
MLWN	Mean Low Water Neaps
MLWS	Mean Low Water Springs
MMSI	Maritime Mobile Service Identity
Mo	Morse
Mon	Monument. Monday
MRCC	Maritime Rescue Co-ordination Centre
MRSC	Maritime Rescue Sub-Centre (not in the UK)
MSI	Maritime Safety Information
N	North
Navi	Navicarte (French charts)
NB	Nota Bene. Notice Board
NCI, ©	National Coastwatch Institution
NCM	North Cardinal Mark (buoy/beacon)
NGS	Naval Gunfire Support (buoy)
NM	Notice(s) to Mariners
np	Neap tides
NP	Naval Publication (plus number)
NRT	Net registered tonnage
NT	National Trust (land/property)
Obscd	Obscured
Obstn	Obstruction
Oc	Occulting light



# WAYPOINT

[www.waypointamsterdam.com](http://www.waypointamsterdam.com)

ODAS	Ocean Data Acquisition System (buoy)
Or	Orange (see also Y)
OT	Other times
P	Petrol (supply by hose). Pebbles
(P)	Preliminary (NM)
PA	Position approximate
Pax	Passenger(s)
PC	Portuguese chart
PD	Position doubtful
PHM	Port-hand Mark (buoy/beacon)
PLA	Port of London Authority
PO	Post Office
Pos	Position
Prog	Prognosis (weather charts)
prom	Prominent
PSSA	Particularly Sensitive Sea Area
Pt(e).	Point(e)
	Pumpout facility
Pta	Punta (point)
Q	Quick flashing light
QHM	Queen's Harbour Master
qv	Refer to (quod vide)
R	Red. Restaurant Q. River.
Racon	Radar transponder beacon
Ramark	Radar beacon
RCD	Recreational Craft Directive
RDF	Radio Direction Finding
RG	Emergency RDF station
RH	Right hand
Rk, Rky	Rock, Rocky (nature of seabed)
RNLI	Royal National Lifeboat Institution
ROI	Republic of Ireland
R/T	Radiotelephony
Ru	Ruins
RYA	Royal Yachting Association
S	South, Sand (nature of seabed)
S, St, Ste	Saint(s)
SAMU	Service d'Aide Médicale Urgente (ambulance)
SAR	Search and Rescue

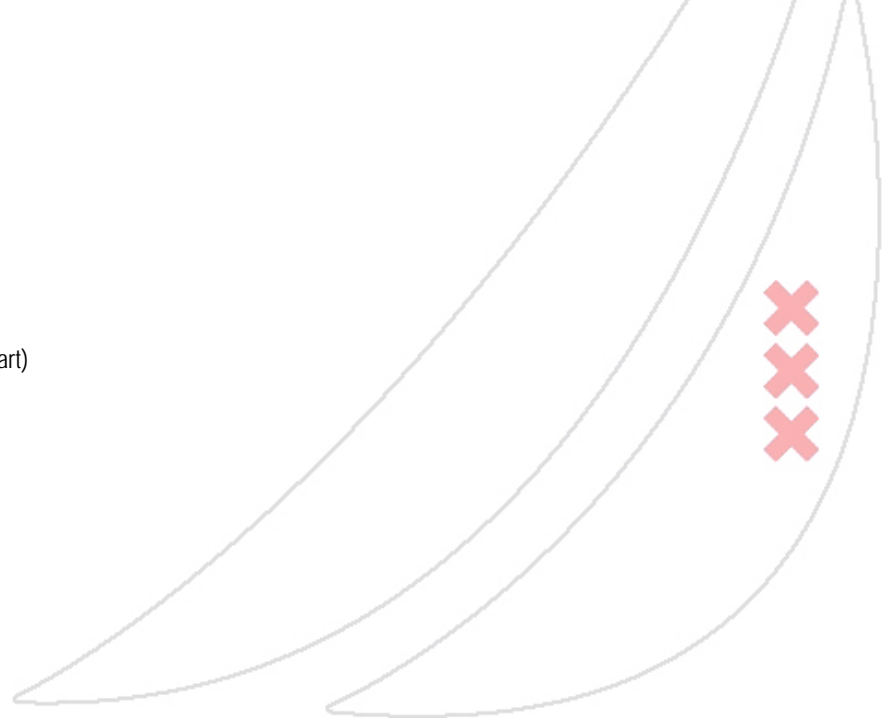


# WAYPOINT

www.waypointamsterdam.com



SBM	Single buoy mooring
SC	Sailing Club. Spanish chart
SCM	South Cardinal Mark (buoy/beacon)
SD	Sailing Directions. Semi-diameter (of sun)
SD	Sounding of doubtful depth
sf	Stiff (nature of seabed)
Sh	Shells (nature of seabed). Shoal
SHM	Simplified Harmonic Method (tides); Starboard-hand Mark (buoy/beacon)
SHOM	Service Hydrographique et Océanographique de la Marine (FrenchHO/Chart)
Si	Silt (nature of seabed)
SIGNI	Signalisation de la Navigation Intérieure
SM	Sailmaker
	Shipwright (esp wooden hulls)
SMS	Short Message Service (mobile texting)
SNSM	Société Nationale de Sauvetage en Mer
so	Soft (eg mud; nature of seabed)
SOLAS	Safety of Life at Sea (IMO Convention)
Sp	Spire
sp	Spring tides
SPM	Special Mark (buoy/beacon)
SR	Sunrise
SRR	Search and Rescue Region
SS	Sunset. Signal Station
SSB	Single Sideband (radio)
St	Stones (nature of seabed)
Stbd	Starboard
subm	Submerged
SWM	Safe Water Mark (buoy/beacon)
sy	Sticky (eg mud; nature of seabed)
(T), (Temp)	Temporary
tbc	To be confirmed
tbn	To be notified
TD	Temporarily Discontinued (fog signal)
TE	Temporarily Extinguished (light)
tfn	Till further notice
Tr, twr	Tower
T/R	Traffic Report (route notification)
TSS	Traffic Separation Scheme
	In transit with, ie ldg marks/lts



# WAYPOINT





uncov	Uncovers
UQ	Ultra Quick flashing light
UT	Universal Time (= approx GMT)
Var	Variation (magnetic)
(vert)	Vertically disposed (lights)
Vi	Violet
vis	Visibility, visible
VLCC	Very large crude carrier (Oil tanker)
VNF	Voie Navigable de France (canals)
VQ	Very Quick flashing light
VTS	Vessel Traffic Service
W	West. White
WCM	West Cardinal Mark (buoy/beacon)
Wd	Weed (nature of seabed)
	Wind turbine
wef	With effect from
WGS	World Geodetic System (GPS datum)
Wi-Fi	Wireless Fidelity (internet access)
WIP	Work in progress
Wk	Wreck (see also Fig 1(1))
WMO	World Meteorological Organisation
WPT	Waypoint
Wx	Weather
WZ	Code for UK coastal navigation warning
Y	Yellow, Amber, Orange
YC, B	Yacht Club



# WAYPOINT

## 1.2 Postal and E-mail Addresses with Websites

### BBC Radio

Broadcasting House, London W1A 1AA. . 020 7580 4468. [www.bbc.co.uk](http://www.bbc.co.uk)

### British Waterways

64 Clarendon Rd, Watford, Herts WD17 1DA. 01923 201120; 0800 47 999 47 (SOS).fax 201400. [www.britishwaterways.co.uk](http://www.britishwaterways.co.uk)

### British Waterways (Scotland)

Canal House, Applecross St, Glasgow G4 9SP. 0141 332 6936.fax 0141 331 1688. [www.britishwaterways.co.uk/scotland](http://www.britishwaterways.co.uk/scotland) enquiries.scotland@britishwaterways.co.uk

Coastguard, HM See Maritime & Coastguard Agency.

## Cruising Association (CA)

CA House, 1 Northey St, Limehouse Basin, London E14 8BT. 020 7537 2828.

(020 7537 2266 [www.cruising.org.uk](http://www.cruising.org.uk) [office@cruising.org.uk](mailto:office@cruising.org.uk))

ECMWF (European Centre for Medium-range Weather Forecasts) The Director, ecmwf, Shinfield Park, Reading RG2 9AX, UK. Telefax +44 118 986 9450. [www.ecmwf.int](http://www.ecmwf.int)

## Guernsey Tourist Board

PO Box 459, Longue Rue, St Martin's, Guernsey GY1 6AF. 01481 723552;

(714951. [www.visitguernsey.com](http://www.visitguernsey.com))

## HM Revenue and Customs (HMRC)

Helpline

(0845 010 9000; or [enquiries.estn@hmrc.gsi.gov.uk](mailto:enquiries.estn@hmrc.gsi.gov.uk) [www.hmrc.gov.uk](http://www.hmrc.gov.uk))

## Hydrographic Office, The United Kingdom

Admiralty Way, Taunton, Somerset TA1 2DN.

01823 337900.

(01823 284077. [www.ukho.gov.uk](http://www.ukho.gov.uk) [helpdesk@ukho.gov.uk](mailto:helpdesk@ukho.gov.uk))

## International Maritime Organisation (IMO)

4 Albert Embankment, London SE1 7SR.tel. 020 7735 7611.

(020 7587 3210. [www.imo.org](http://www.imo.org) [info@imo.org](mailto:info@imo.org))

## Jersey Tourist Office

Liberation Place, St Helier, Jersey JE1 1BB.tel. 01534 448800.

(01534 448898. [www.jersey.com](http://www.jersey.com) [info@jersey.com](mailto:info@jersey.com))

## Lloyd's

One Lime Street, London EC3M 7HA.tel. 020 73271000;

(020 7327 6827. [www.lloyds.com](http://www.lloyds.com) [helpdesk@lloyds.com](mailto:helpdesk@lloyds.com))

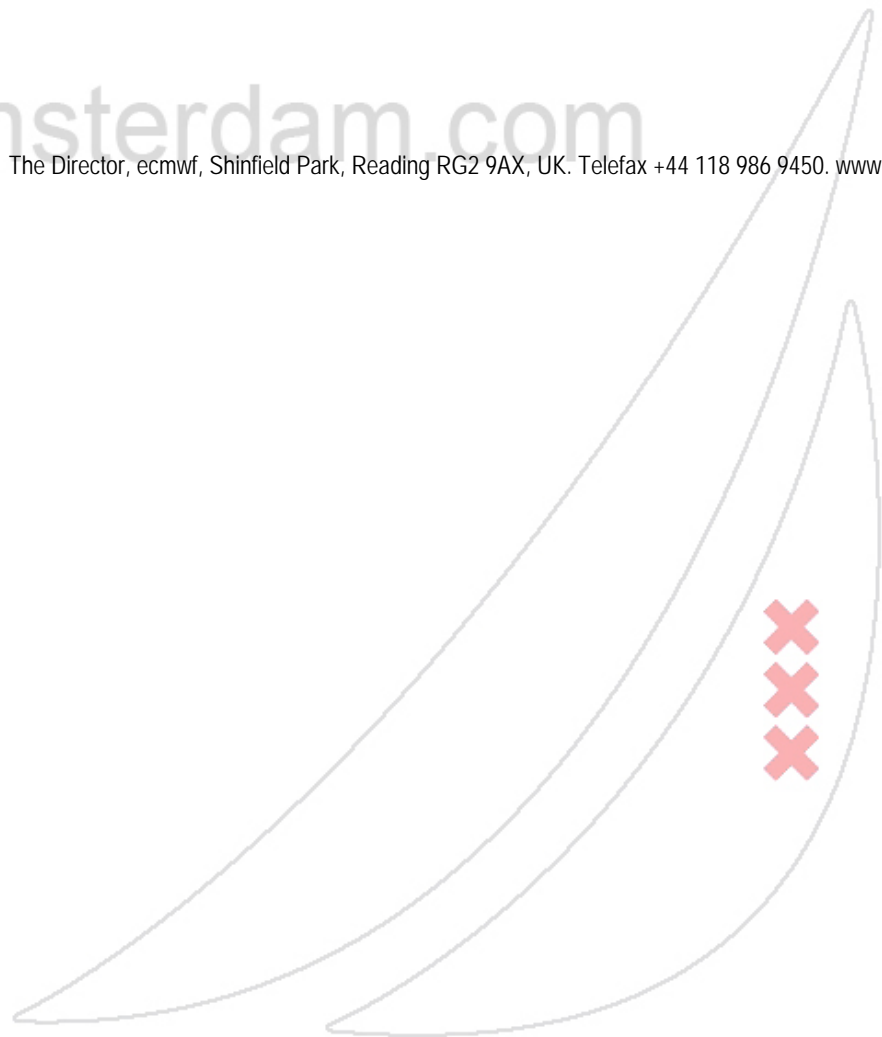
## Marine Accident Investigation Branch (MAIB)

Carlton House, Carlton Place, Southampton SO15 2DZ.tel. 023 8039 5500.

(023 8023 2459. [maib@dft.gsi.gov.uk](mailto:maib@dft.gsi.gov.uk) [www.maib.gov.uk](http://www.maib.gov.uk))

## Maritime and Coastguard Agency (MCA)

Spring Place, 105 Commercial Rd, Southampton SO15 1EG.tel. 023 8032 9100; Info 0870 6006 505.



# WAYPOINT

( 023 8032 9105. [www.mcga.gov.uk](http://www.mcga.gov.uk) [infoline@mcga.gov.uk](mailto:infoline@mcga.gov.uk)

## Meteorological Office

FitzRoy Road, Exeter EX1 3PB.tel. 0870 900 0100.

( 0870 900 5050,tel. +44 1392 885680.

( +44 1392 885681 from abroad. [www.metoffice.gov.uk](http://www.metoffice.gov.uk) [enquiries@metoffice.gov.uk](mailto:enquiries@metoffice.gov.uk)

## National Coastwatch Institution (NCI)

[www.nci.org.uk](http://www.nci.org.uk) Contact: Mr Nick Heath, e /fax 01548 580615. [n.heath279@btinternet.com](mailto:n.heath279@btinternet.com)

## Northern Lighthouse Board

84 George St, Edinburgh EH2 3DA.tel. 0131 4733100.

( 0131 220 2093. [www.nlb.org.uk](http://www.nlb.org.uk) [enquiries@nlb.org.uk](mailto:enquiries@nlb.org.uk)

## Registry of Shipping and Seamen (RSS)

UK Ship Register, Anchor Court, Keen Rd, Cardiff CF24 5JW;

tel. 02920 448 800;fax 029 20 448 820. [www.ukshipregister.co.uk](http://www.ukshipregister.co.uk) Part I (Pleasure vessels)tel. 02920 448 866.

Part III (SSR)tel. 02920 448 813.

## Royal Institute of Navigation (RIN)

1 Kensington Gore, London SW7 2AT.tel. 020 7591 3130.fax 020 7591 3131. [www.rin.org.uk](http://www.rin.org.uk) [info@rin.org.uk](mailto:info@rin.org.uk)

## Royal National Lifeboat Institution (RNLI)

West Quay Road, Poole, Dorset BH15 1HZ.tel. 01202 663000.fax 01202 663167. [info@rnli.org](mailto:info@rnli.org) [www.rnli.org](http://www.rnli.org)uk

## Royal Yachting Association (RYA)

RYA House, Ensign Way, Hamble, SO31 4YA.tel. 023 8060 4100.fax 023 8060 4299. [www.rya.org.uk](http://www.rya.org.uk) [admin@rya.org.uk](mailto:admin@rya.org.uk)

## Royal Yachting Association (Scotland)

Caledonia House, South Gyle, Edinburgh EH12 9DQ.tel. 0131 317 7388.fax 0131 317 8566. [www.ryascotland.org.uk](http://www.ryascotland.org.uk)

[admin@ryascotland.co.uk](mailto:admin@ryascotland.co.uk)

Small Ships Register See Registry of Shipping and Seamen.

## Trinity House, Corporation of

Tower Hill, London EC3N 4DH.tel. 020 7481 6900.fax 020 7480 7662. [www.trinityhouse.co.uk](http://www.trinityhouse.co.uk) [enquiries@thls.org](mailto:enquiries@thls.org)

## BELGIUM

Belgian Tourist Information Centre

Grasmart 63, B-1000 Brussels.tel. +32 2 504 0390fax +32 2 504 0270. [www.visitbelgium.com](http://www.visitbelgium.com)



WAYPOINT

## British Embassy

10 Oudergemlaan, 1040 Brussels.tel. +32 2 2876 211

( +32 2 287 62 70 (Consular).

## Vlaamse Hydrografie

Administratief Centrum, Vrijhavenstraat 3, B-8400 Oostende.tel. +32 3 222 0811.fax +32 3 231 2062

www.vlaamsehydrografie.be kust@vlaanderen.be.

## DENMARK

### British Embassy

Kastelsvej 36-40, DK-2100 København Ø.

tel. +45 35 44 52 00.fax +45 35 44 52 53 (Consular). info@britishembassy.dk

### Danish Hydrographic Office

Kort-og Matrikelstyrelsen, Rentemestervej 8, DK-2400 København.

tel. +45 35 87 50 50.fax +45 35 87 50 57. kms@kms.dk

### Søfartsstyrelsen (Danish Maritime Authority)

Søsportens Sikkerhedsråd (Safety for yachts)

Vermundsgade 38C, DK-2100 København Ø.

tel. +45 39 27 15 15.fax +45 39 17 44 01

www.dma.dk dma@dma.dk

## FRANCE

### British Embassy

35 rue du Faubourg St Honoré, 75383 Paris, Cedex 08,

tel. +33 1 44 51 31 00.fax +33 1 44 51 31 27 (Consular).

### Service Hydrographique et Océanographique de la Marine

13 rue du Chatellier, CS 92803, 29228 Brest Cedex 2.

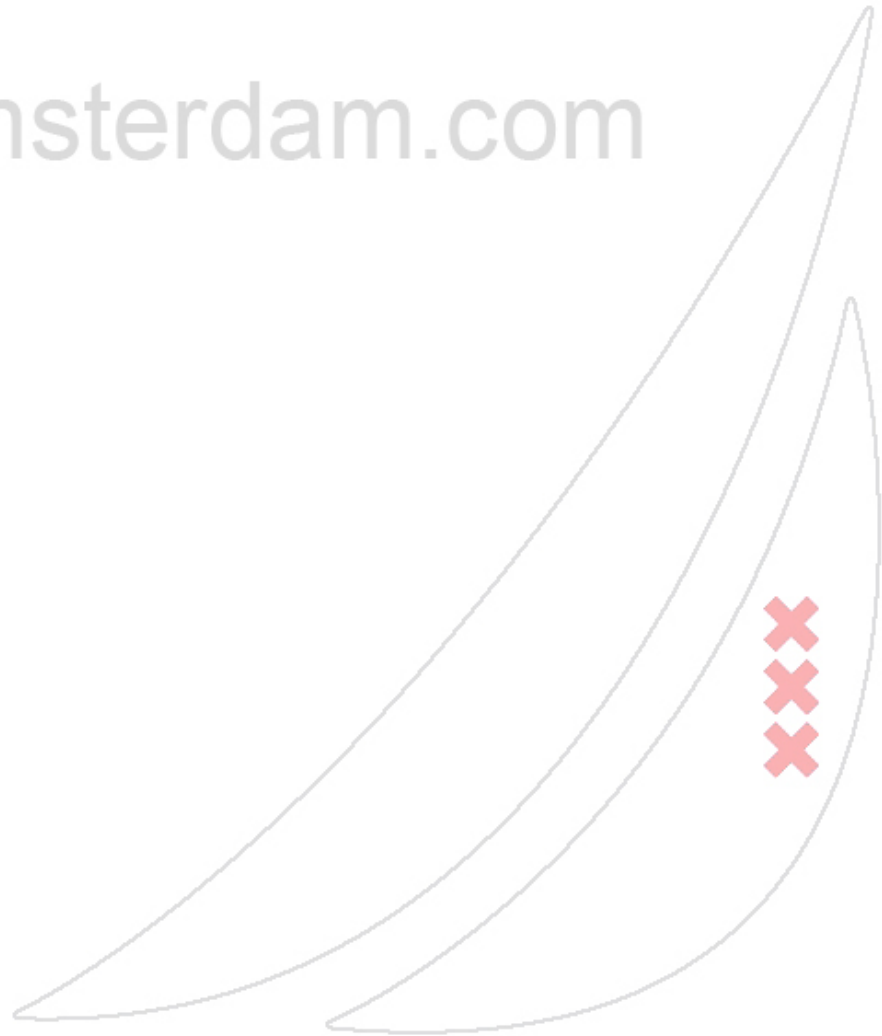
tel. +33 2 98 03 09 17.fax +33 2 98 47 11 42. www.shom.fr

### Société Nationale de Sauvetage en Mer (SNSM)

9 rue de Chaillot, 75116 Paris. tel. +33 1 56 89 30 00.fax +33 1 56 89 30 01.

## GERMANY

### British Embassy



Wilhelmstrasse 70, 10117 Berlin. tel. +49 30 2045 7-0.fax +49 30 2045 7594. www.ukingermany.fco.gov.uk info@requests@fco.gov.de

Bundesamt für Seeschifffahrt und Hydrographie (BSH).

(German HO) Bernhard-Nocht-Str 78, 20359 Hamburg. tel. +49 40 3190-0.fax +49 40 3190 50 00. www.bsh.de

Deutscher Gesellschaft zur Rettung Schiffbrüchiger (DGzRS = Rescue service). PO Box 10 63 40, 28063 Bremen. tel. +49 421 53707-0.fax +49 421 53707-690. www.dgzrs.deinfo@dgzrs.de

German National Tourist Board

Beethovenstrasse 69, D-60325 Frankfurt/Main.

tel. +49 0 6997 4640.fax +49 0 6975 1903.

info@d-z-t.com www.germany-tourism.de

IRELAND, REPUBLIC OF  
British Embassy

29 Merrion Road, Ballsbridge, Dublin 4.tel. +353 1 205 3700. www.britishembassy.ie consular.dubli@fco.gov.uk

Irish Coastguard (IRCG)

Department of Transport, Kildare Street, Dublin 2, Irl.

www.transport.ie info@transport.ie

Irish Lights, Commissioners of

Harbour Road, Dun Laoghaire, Co Dublin, Irl.tel. +353 1 2715400;fax +353 1 2715564. www.cil.ie info@cil.ie

Irish Tourist Board

103 Wigmore St, London W1U 1QS.tel. 0207 518 0800. www.discoverireland.com/gb

MOROCCO  
British Embassy

28 Avenue S.A.R. Sidi Mohammed, Soussi 10105 (BP 45), Rabat.tel. +212 537 63 33 33 Rabat.Consular@fco.gov.uk www.ukinmorocco.fco.gov.uk

Moroccan National Tourist Office

Angle Rue Oued Al Makhazine, Rue Zalaga-BP., 19-Agdal, Rabat.tel. +212 537 67 40 13 contact@onmt.org.ma www.visitmorocco.com

NETHERLANDS  
British Embassy

Lange Voorhout 10, 2514 ED Den Haag.

tel. +31 70 427 0427.fax +31 70 427 0345

www.ukinnl.fco.gov.uk ukinnl@fco.gov.uk

Dienst der Hydrografie



Van der Burchlaan 31, PO Box 90701, 2509 LS Den Haag.tel. +31 70 316 2800.fax +31 70 316 2843. info@hydro.nl www.hydro.nl

Stichting Classificatie Waterrecreatiebedrijven

PO Box 93345, 2509 AH Den Haag.tel. +31 70 328 3807.

PORTUGAL  
British Embassy

Rua de São Bernardo 33, 1249-082 Lisboa.tel. +351 21 3924 000.fax +351 21 3914 185. chancery@lisbon.mail.fco.gov.uk

Hydrographic Office

Instituto Hidrografico, Rua das Trinas 49, 1296 Lisboa.

tel. +351 21 3914 000.fax +351 21 3914 199. www.hidrografico.pt mail@hidrografico.pt

SPAIN  
British Embassy

Paseo de la Castellana 259D, 28046 Madrid.

e +34 91 714 63 00.fax +34 91 700 83 09.

Instituto Hidrografico de la Marina

Plaza de San Severiano No 3, 11007 CADIZ.

tel. +34 956 599 414. www.armada.mde.es/ihm.orpflota@fn.mde.es

Spanish Tourist Office

2nd floor, 79 New Cavendish St, London W1W 6xB;

tel. 020 7486 8077.fax 020 7186 8034. www.spain.info www.tourspain.uk [londres@tourspain.es](mailto:londres@tourspain.es)

## 1.3 2011 CALENDAR AND EPHEMERIS

### 1.3.1 UK public holidays 2011

Jan 3

Jan 4 (Scotland only)

Mar 17 (St Patrick, N Ireland only)

Apr 22 (Good Friday)

Apr 25 (Easter Monday, not Scotland)

May 2 (Early Spring)



May 30 (Spring)

Jul 12 (Battle of the Boyne, N Ireland only)

Aug 1 (Summer, Scotland only)

Aug 29 (Summer, Not Scotland)

Dec 26 (Boxing Day)

Dec 27 (25th is a Sunday)

Note: Clauses in the *Banking and Financial Dealings Act* allow the Government to alter dates at short notice

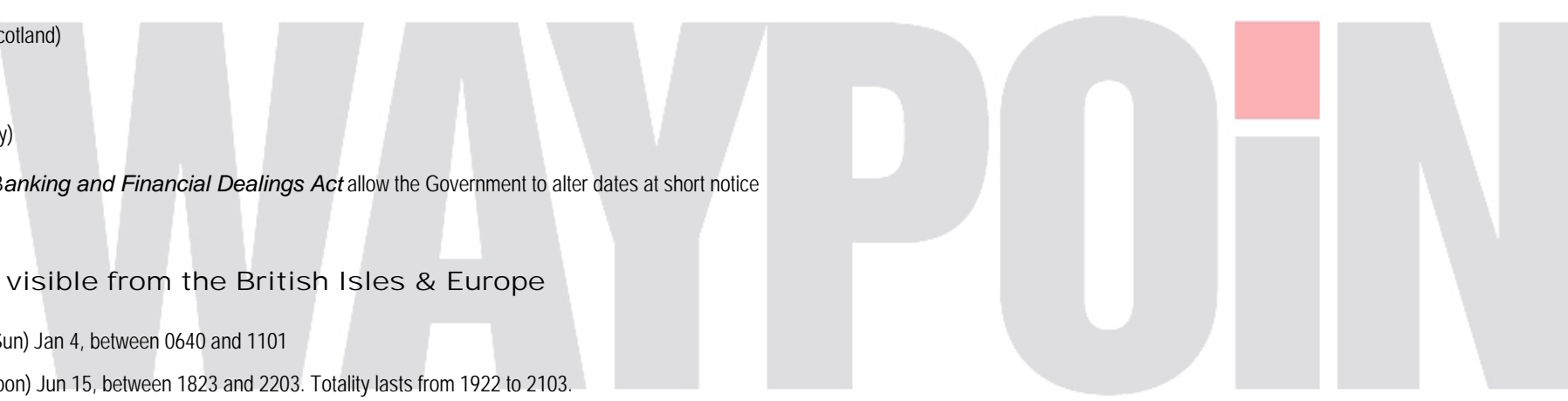
### 1.3.2 Eclipses visible from the British Isles & Europe

- Partial eclipse (Sun) Jan 4, between 0640 and 1101
- Total eclipse (Moon) Jun 15, between 1823 and 2203. Totality lasts from 1922 to 2103.

## 1.4 CONVERSION TABLES

### 1.4.1 Conversion factors

To convert	Multiply by	To convert	Multiply by
<b>Area</b>			
sq in to sq mm	645.16	sq mm to sq in	0.00155
sq ft to sq m	0.0929	sq m to sq ft	10.76
<b>Length (See 1.4.2 for Feet to metres, and vice versa)</b>			
in to mm	25.4	mm to in	0.0394
yds to m	0.914	m to yds	1.094
fathoms to m	1.8288	m to fathoms	0.5468
nautical miles (M) to kilometres	1.852	kilometres to nautical miles	0.539957
nautical miles to statute miles	1.1515	statute miles to nautical miles	0.8684
(1 cable equals 0.1 M, approx 185m)			
<b>Velocity (See also 6.1.1 Beaufort scale)</b>			
ft/sec to m/sec	0.3048	m/sec to ft/sec	3.281
ft/sec to miles/hr	0.682	miles/hr to ft/sec	1.467
ft/sec to knots	0.592	knots to ft/sec	1.689
ft/min to m/sec	0.0051	m/sec to ft/min	196.8
knots to miles/hr	1.1515	miles/hr to knots	0.868
knots to km/hr	1.852	km/hr to knots	0.54
knots to m/sec	0.5144	m/sec to knots	1.944
<b>Mass</b>			
oz to grams	28.35	grams to oz	0.0353



www.waypointsterdam.com



lb to kg	0.4536	kg to lb	2.205
tons to tonnes (1000 kg)	1.016	tonnes to tons (2240 lb)	0.9842
Pressure			
inches of mercury to millibars	33.86	millibars to inches of mercury	0.0295
lb/sq in to kg/sq cm	0.0703	kg/sq cm to lb/sq in	14.22
lb/sq in to atmospheres	0.068	atmospheres to lb/sq in	14.7
Volume			
cu in to cu cm (cc or ml)	16.387	cu cm (cc or ml) to cu in	0.061
cu ft to cu metres	0.0283	cu metres to cu ft	35.31
cu ft to galls	6.25	galls to cu ft	0.16
cu ft to litres	28.33	litres to cu ft	0.035
Capacity			
pints to litres	0.568	litres to pints	1.76
Imp galls to litres	4.546	litres to Imp galls	0.22
Imp galls to US galls	1.2	US galls to Imp galls	0.833
Torque			
lbf ft to Nm	1.3558	Nm to lbf ft	0.7376
kgf m to Nm	9.8066	Nm to kgf m	0.102
lbf ft to kgf m	0.1383	kgf m to lbf ft	7.233

# WAYPOINT

Explanation: The central columns of figures in bold type can be referred to the left to convert metres into feet, or to the right to convert feet into metres, eg, five lines down: 5 metres = 16.40 feet, or 5 feet = 1.52 metres. Alternatively multiply feet by 0.3048 for metres, or multiply metres by 3.2808 for feet.

Feet	Metres	Feet	Metres	Feet	Metres	Feet	Metres				
3-28	1	0.30	45.93	14	4.27	88.58	27	8.23	131.23	40	12.19
6-56	2	0.61	49.21	15	4.57	91.86	28	8.53	134.51	41	12.50
9-84	3	0.91	52.49	16	4.88	95.14	29	8.84	137.80	42	12.80
13-12	4	1.22	55.77	17	5.18	98.43	30	9.14	141.08	43	13.11
16-40	5	1.52	59.06	18	5.49	101.71	31	9.45	144.36	44	13.41
19-69	6	1.83	62.34	19	5.79	104.99	32	9.75	147.64	45	13.72
22-97	7	2.13	65.62	20	6.10	108.27	33	10.06	150.92	46	14.02
26-25	8	2.44	68.90	21	6.40	111.55	34	10.36	154.20	47	14.33
29-53	9	2.74	72.18	22	6.71	114.83	35	10.67	157.48	48	14.63
32-81	10	3.05	75.46	23	7.01	118.11	36	10.97	160.76	49	14.94
36-09	11	3.35	78.74	24	7.32	121.39	37	11.28	164.04	50	15.24
39-37	12	3.66	82.02	25	7.62	124.67	38	11.58	167.32	51	15.54
42-65	13	3.96	85.30	26	7.92	127.95	39	11.89	170.60	52	15.84

## 1.5 TIME

Zone Time For timekeeping purposes the world is divided into 24 Time Zones, each 15° of Longitude wide (like orange segments). Zone 0 (7½°E to 7½°W) straddles 0° longitude (the Greenwich Meridian). In



the marine world zones E of it (ahead in time, or earlier) are labelled Zone -1, -2 and so on to -11. Zones to the W (later in time) are +1, +2 etc to +11. **Caution: land-based time-zone charts often refer to zones the other way around – be careful which one you are using.**

### 1.5.1 Universal Time

(UT) is a datum to which broadcast times, times of sunrise/set, scientific data etc are referred. UT is the Standard Time kept in most countries in Zone 0, but some (France and Spain for example) keep UT -1.

For all practical purposes, Greenwich Mean Time (GMT) is the same as UT.

### 1.5.2 Standard Time

, also called legal time, is that kept in different countries but is modified by Daylight Saving Time in the summer (see 1.5.3).

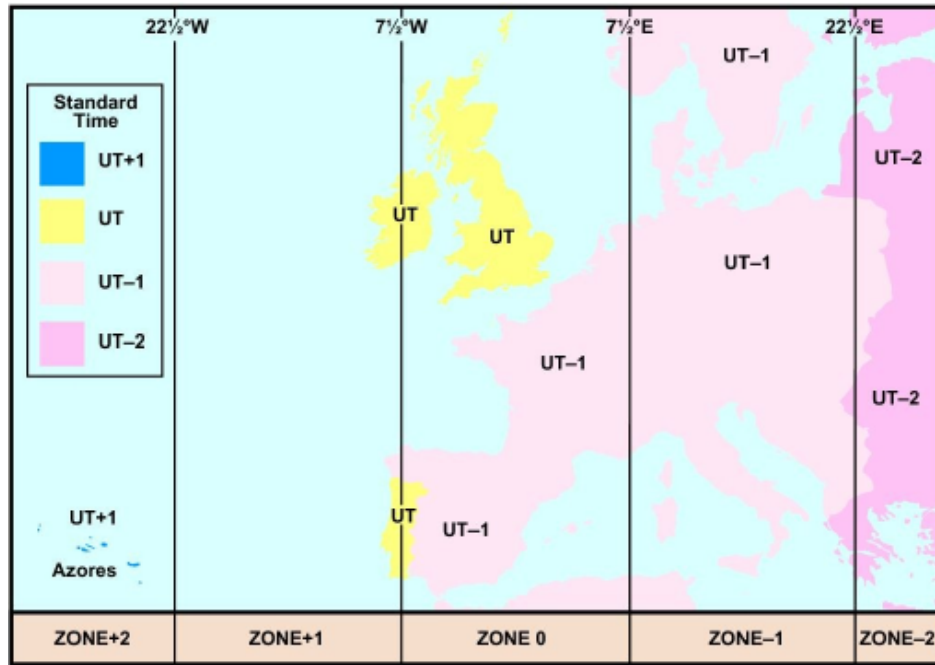


Fig 1(2) Zone Time and Standard Time zones

UT is the Standard Time in the UK, including the Channel Islands and Northern Ireland, the Irish Republic, Iceland, Faeroes, Portugal and Morocco.

UT -1 is the Standard Time in Denmark, Germany, The Netherlands, Belgium, France, Spain and Gibraltar. Subtract 1 hour from the local Standard Time to give UT, or add 1 hour to UT to give Standard Time.

UT +1 is the Standard Time in the Azores. Add 1 hour to the local Standard Time to give UT, or subtract 1 hour from UT to give Standard Time.

See also Special Notes for each country in Chapter 9.

### 1.5.3 Daylight Saving Time (DST), or BST in the UK,

is an artificial adjustment of 1 hour ahead of Standard Time made during the summer months in most European and many other countries.

In EU countries DST is kept from the last Sunday in March until the last Sunday in October.

## 1.5.4 Tide Tables

Zone Time is quoted at the top left corner of each page of tide tables. In countries whose Zone Time is called -0100 (merely a 4 digit connotation meaning -1 hour), subtract 1 hour from the printed tide times to give UT.

In the summer months (no tinted background) add 1 hour to the printed times to convert to local DST.

## RADIO TIME SIGNALS

### 1.5.5 BBC Radio time signals in the UK

are broadcast in clock time (ie, in DST during summer; UT in the winter).

BBC Radio 1	BBC Radio 2	BBC Radio 3	
Mainland	97.6-99.8 MHz	88-90.2 MHz	90.2-92.4 MHz
Channel Is	97.1 MHz	89.6 MHz	91.1 MHz
Mon-Thu	0630, 0900, 1000	0700, 0800, 1700	0700, 0800
Fri	0630, 0900, 1000, 1900	0700, 0800, 1700	0700, 0800
Sat	No info	0700, 0800	0700, 0800
Sun	No info	0800, 0900	0700

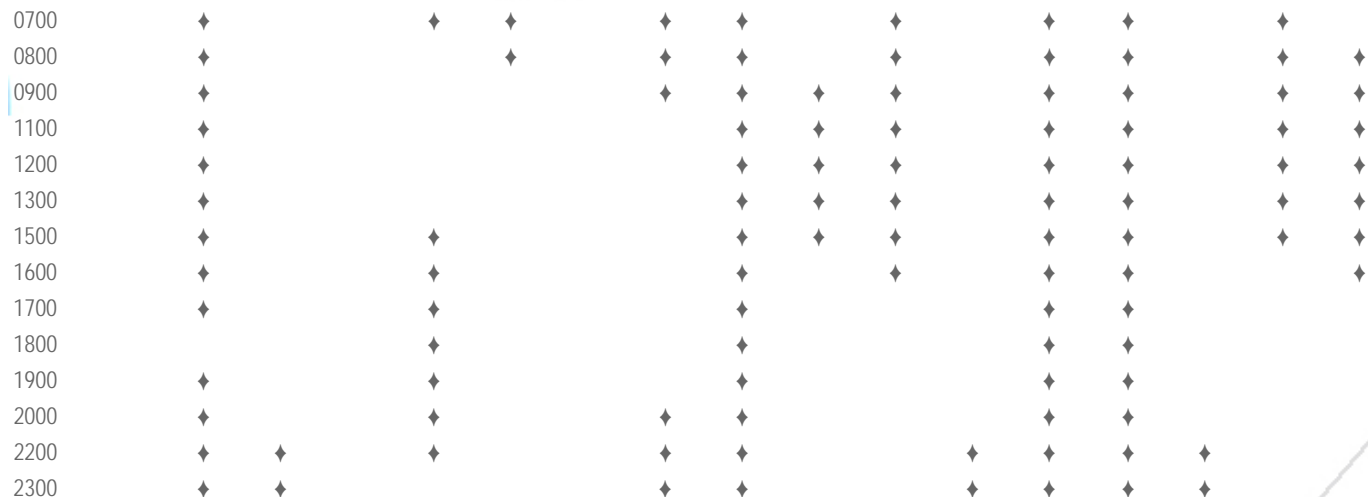
BBC Radio 4 time signals are broadcast on AM (long wave) 198 kHz every hour of every day except 0000 and Mon-Fri: 1800, 2200; Sat: 1500, 1800; Sun: 1000, 1100, 1800, 2200. See 6.10.1 for AM (medium wave) and FM frequencies.

### 1.5.6 The BBC World Service

provides time signals on the following frequencies (kHz) at the times shown below:

A:	198	B:	648	C:	1296	D:	3955
E:	6195	F:	7150	G:	7230	H:	7325
I:	9410	J:	9750	K:	9760	L:	9915
M:	12095	N:	15070	O:	15340	P:	17640
Q:	17705						

Time	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
0000	♦	♦						♦				♦	♦	♦			
0200	♦	♦	♦		♦			♦	♦			♦	♦				
0300	♦	♦	♦		♦		♦	♦	♦			♦	♦				
0400	♦			♦	♦		♦		♦				♦				
0500	♦			♦	♦				♦				♦	♦			
0600	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦



### 1.5.7 Worldwide time signals

Anthorn (54°54'N 03°16'W), UK (MSF) broadcasts UT signals continuously on 60 kHz. This station can be received widely in N and W Europe.

Fort Collins, Colorado (WWV) and Kekaha, Hawaii (WWVH) broadcast UT signals continuously on frequencies 2.5, 5, 10, 15 and 20 (not Kekaha) MHz. The station is identified by voice (English) at every H and H +30. The hour is signalled by a 1500 Hz tone and minutes and seconds by 1200 Hz tones. WWV also broadcasts Atlantic weather in two parts at H+08 and H+09 and weather in the Eastern N. Pacific at H+10.

### 1.6 VOCABULARIES

English, German, Dutch, French, Spanish and Portuguese vocabularies of useful words are listed, for easy reference, under broad subject headings on the following eight pages.

English	Deutsch	Nederlands	Français	Español	Português
on arrival	bei ankunft	bij aankomst	À l'arrivÉe	al llegar	chegada
Beam	Schiffsbreite	Breedte	Largeur	Manga	Boca
Certificate of competence	Befähigungszeugnis	Getuigschrift	Permis bateau	Titulo	Certificado de competência
Crew list	Besatzungsliste	Bemanningslijst	Liste d'équipage	Lista de tripulación	Lista da tripulação
Customs	Zoll	Douane	Douanes	Aduana	alfândega
Draught	Tiefgang	Diepgang	Tirant d'eau	Calado	calado
Insurance certificate	Versicherungspolice	Verzekeringsbewijs	Attestation d'assurance	Certificado de seguro	Certificado de seguro
Length over all (LOA)	Länge über Alles (LüA)	Lengte over alles (LOA)	Longeur hors-tout	Eslora total	comprimento fora a fora
Passport	Reisepaß	Paspoort	Passeport	Pasaporte	Passaporte
Port of registry	Heimathafen	Thuishaven	Quartier maritime	Puerto de matricula	Porto de registo
Port police	<b>Polizei</b>	<b>Haven politie</b>	<b>Police du port</b>	<b>Policia de puerto</b>	<b>Policia maritima</b>
Pratique	Frei Verkehrserlaubnis	Inklaren	Libre-pratique	Libre práctica	Livre prática
Registration certificate	Registrierungszertifikat	Zeebrief	Acte de francisation	Certificado de Registro	Certificado de Registro
Ship's logbook	Logbuch	Logboek	Livre de bord	Cuaderno de bitácora	Diário de bordo
Ship's papers	Schiffspapiere	Scheepspapieren	Papiers de bord	Documentación del barco	Documentação do barco
Surveyor	Gutachter	Opzichter, expert	Expert maritime	Inspector	Inspector

VAT certificate	Mehrwertsteuerbescheinigung	BTW-dokument	Attestation de TVA	Certificado IVA	Certificado de IVA
Ashore	An Land	Aan land	À terre	A tierra	A terra
Airport	Flughafen	Vliegveld	Aéroport	Aeropuerto	Aeroporto
Bakery	Bäckerei	Bakkerij	Boulangerie, pâtisserie	Panadería	padaria, pastelaria
Bank	Bank	Bank	Banque	Banco	Banco
Bus station	Busbahnhof	Busstation	Gare routière	Estación de autobuses	Estação do autocarro
Butcher	Fleischerei	Slagerij	Boucherie	Carnicería	Açougue
Chandlery	Yachtausrüster	Scheepswinkel	Shipchandler	Efectos navales	Aprestos
Chemist	Apotheke	Apotheek	Pharmacie	Farmacia	Farmácia
Dentist	Zahnarzt	Tandarts	Dentiste	Dentista	Dentista
Engineer	Motorenservice	Monteur	Mécanicien	Mecánico	Engenheiro
Exchange-(money)	Wechselstelle	Geldwisselkantoor	Bureau de change	Cambio	Cambio
Garage	Autowerkstatt	Garage	Garage	Garage	Oficina mecánica
Hospital	Krankenhaus	Ziekenhuis	Hôpital	Hospital	Hospital
Ironmongery	Eisenwarenhandlung	IJzerhandelaar	Quincaillerie	Quincallería	Loja de ferragens
Launderette	Waschsalon	Wasserette	Laverie	Lavandería	Lavandería
Market	Markt	Markt	Marché	mercado	Mercado
Post office	Postamt	Postkantoor	Bureau de poste, PTT	Correos	Correio, CTT
Railway station	Bahnhof	Station	Gare de chemin de fer	Estación de ferrocarril	Estação de comboios
Sailmaker	Segelmacher	Zeilmaker	Voilier	Velero, velería	Veleiro
Shops	Geschäfte	Winkels	Boutiques	Tiendas	Lojas
Stamps, postal	Marken	Postzegels	Timbres	Sellos	Selos
Supermarket	Supermarkt	Supermarkt	Supermarché	Supermercado	Supermercado
Harbour	Hafen	Haven	Port	Puerto	porto
Anchoring, anchorage	Ankern, Ankerplatz	Ankeren, ankerplaats	Mouiller l'ancre	Fondeadero	Fundeadoiro
Boathoist	Bootskran	Botenlift	Travelift	Travelift	Portico elevador
Boatyard	Bootswerft	Jachtwerf	Chantier naval	Astilleros	Estaleiro
Breakwater, mole	Außenmole	Pier	Brise-lame	Escollera	Quebra-mar, molhe
Bridge, pedestrian	Schlingel	Loopbrug	Passerelle	Pasarela	Ponte movediça
Bridge, swing	Drehbrücke	Draaibrug	Pont tournant	Puente giratorio	Ponte giratória
Cable (electrical)	Kabel	Kabel	Câble	Cable	Cabo (eléctrico)
Commercial port	Handelshafen	Commerciële haven	Port de commerce	Puerto comercial	Porto comercial
Crane	Kran	Kraan	Grue	Grua	Grua
Drying port	Trockenfallender Hafen	Droogvallende haven	Port d'échouage	Puerto seco	Porto secar
Dues, berthing tariff	Hafengebühren	Havengeld	Tarifs portuaire	derechos de puerto	Taxas
Ferry	Fähre	Veerboot	Ferry, bac, transbordeur	Ferry	ferry
Fishing harbour	Fischereihafen	Vissershaven	Port de pêche	Puerto de pesca	Porto de pesca
Fuel berth	Tankstelle	Bunkerplaats	Ponton à carburants	Surtidor	Estação de serviço
Harbour entrance	Hafeneinfahrt	Haveningang	Entrée du port	Entrada de puerto	Entrada
Harbour guide	Hafenhandbuch	Haven gids	Guide du port	Guía del puerto	Guía de Porto
Harbour master	Hafenmeister	Havenmeester	Capitaine du port	Capitán del puerto	capitão marítimo
Height, headroom	Höhe	Hoogte	Hauteur	Alturas	Altura

Jetty	Steg	Steiger	Jetée	Malecón	Molhe
Landing place	Anlegeplatz	Plaats om aan land te gaan	Débarcadère	Desembarcadero	Desembarcadouro
Lock	Schleuse	Sluis	Ecluse	Esclusa	Eclusa
Marina, yacht harbour,	Yachthafen	Jachthaven	Port de plaisance	Puerto deportivo	Doca de recreio
Mast crane	Mastenkran	Mastenkraan	Grue	Grúa	Guindaste (mastro)
Mooring (buoy)	Anlegen	Meerplaats	Coffre d'amarrage	Fondeadero	Bólia de atracação
Permitted	Erlaubt	Toegestaan	Autorisé	Permitido	Autorizado
Pier	Pier, Mole	Pier	Appontement/quai	Muelle	Molhe
Prohibited	Verboten	Verboden	Interdit	Prohibido	Proibido
Slip, slipway	Slip, Slipbahn	Helling	Cale	Varadero	Rampa
Water, fresh	Süßwasser	Zoet water	Eau douce	Agua dulce	Água doce
Yacht club	Yachtclub	Jachtclub	Club nautique	Club náutico	Clube nautico
Navigation	Navigation	Navigatie	Navigation	Navigacion	NavegaçãO
Abeam	Querab	Dwarsscheeps	Par le travers	Por el través	Por de través
Ahead	Voraus	Voor	Par l'avant	Avante	À proa
Astern	Achtersaus	Achter	Par l'arrière	Atrás	À popa
Buoy	Tonne	Boei/ton	Bouée	Boya	Bóia
Binoculars	Fernglas	Verrekijker	Jumelles	Prismáticos	Binóculos
Channel (navigational)	Kanal	Kanaal/geul	Chenal	Canal	Canal
Chart	Seekarte	Zeekaart	Carte	Carta náutica	Carta hidrográfica
Compass	Kompaß	Kompas	Compas	Compás	Agulha
Bearing	Peilung	Peiling	Relèvement	Marcación	Azimute
Compass course	Kompaßkurs	Kompaskoers	Cap du compas	Rumbo de aguja	Rumo do agulha
Course True	Wahrer Kurs	Ware Koers	Cap vrai	Rumbo verdadero	Rumo verdadeiro
Deviation	Missweisung	Deviatie	Déviation	Desvio	Desvíos
East	Ost	Oost	Est	Este	Este
Handbearing compass	Handpeilkompass	Handpeil kompas	Compas de relèvement	Compás de marcaciones	Agulha portátil
North	Nord	Noord	Nord	Norte	Norte
South	Süd	Zuid	Sud	Sur	Sul
Variation	Variation	Variatie	Déclinaison magnétique	Variación	Variação
West	West	West	Ouest	Oeste	Oeste
Current	Strömung	Stroom	Courant	Corriente	Corrente
Dead reckoning	Koppelnavigation	Gegist bestek	Navigation à l'estime	Estima	Navegação estimada
Degree	Grad	Graad	Degré	Grado	Grau
Depth	Wassertiefe	Diepte	Profondeur	Profundidad	Profundidade
Distance	Entfernung	Afstand, verheid	Distance	Distancia	Distância
Downstream	Flußabwärts	Stroomafwaarts	En aval	Río abajo	Jusante
Dredged (channel)	Baggerrinne	Gebaggerd (geul)	Dragué	Dragado	Dragado
Echosounder	Echolot	Dieptemeter	Sondeur	Sonda	Sondador acústica
Estimated position	Gegißte Position	Gegiste positie	Point estimé	Posición estimada	Posição estimada
Firing range	Schießgebiet	Schietoefeningen	Zone de tir	Zona de tiro	Zone de tiro
Hazard	Hindernis	Gevaar	Danger	Peligro	Perigo

Latitude	Geographische Breite	Breedte	Latitude	Latitud	Latitude
Leeway	Abdrift	Drift	Dérive	Sotavento	Abatimento
Lights list	Leuchtfeerverzeichnis	Lichtenlijst	Liste des feux	Libro de faros	Lista de faróis
Leading lights	Richtfeuer	Geleidelichten	Feux d'alignement	Luz de enfilación	Farol de enfiamento
Lighthouse	Leuchtturm	Vuurtoren	Phare	Faro	Farol
Lightship	Feuerschiff	Lichtschip	Bâteau-feu	Buque faro	Barco-farol
Log	Log	Log	Loch	Corredera	Odómetro
Longitude	Geographische Länge	Lengte	Longitude	Longitud	Longitude
Nautical mile	Seemeile	Zeemijl	Mille nautique	Milla marina	Milha marítima
Numbers	Nummern	Nummers	Nombres	Numeros	Números
One	Ein	Een	Un	Uno	Um
Two	Zwei	Twee	Deux	Dos	Dois
Three	Drei	Drie	Trois	Tres	Três
Four	Vier	Vier	Quatre	Cuatro	Quatro
Five	Fünf	Vijf	Cinq	Cinco	Cinco
Six	Sechs	Zes	Six	Seis	Seis
Seven	Sieben	Zeven	Sept	Siete	Sete
Eight	Acht	Acht	Huit	Ocho	Oito
Nine	Neun	Negen	Neuf	Nueve	Nove
Ten	Zehn	Tien	Dix	Diez	Dez
Pilot (guide)	Lotse	Loods, Gids	Pilote	Práctico	Roteiro da costa, Piloto
Port (side)	Backbord	Bakboord	Bâbord	Babor	Bombordo
Prohibited area	Sperrgebiet	Verboden gebied	Zone interdite	Zona de prohibida	Zonaproibida
River mouth	Flußmündung	Riviermond	Embouchure	Desembocadura	Foz
Starboard	Steuerbord	Stuurboord	Tribord	Estribor	Estibordo
Tide	Tide, Gezeiten	Getijde	Marée	Marea	Maré
Chart datum (CD)	Kartennull	Reductievlak	Zero des cartes	Datum	Zero hidrográfico
Covers	Deckt	Onderlopend	Couvre	Cubierto	Cobre
Dries	Trockenfallend	Droogvallend	Découvre	Descubierto	Fica em seco
Ebb	Ebbe	Eb	Jusant	Marea menguante	Corrente evasante
Flood	Flut	Vloed	Flot	Flujo de marea	Corrente de enchente
High water (HW)	Hochwasser	Hoogwater	Pleine mer (PM)	Pleamar	Praia mar
Low water (LW)	Niedrigwasser	Laagwater	Basse mer (BM)	Bajamar	Baixa-mar
Neaps	Nipptide	Doodtij	Morte-eau (ME)	Marea muerta	Mares mortas
Springs	Springtide	Springtij, springvloed	Vive-eau (VE)	Marea viva	Mares vivas
Tidal streams	Gezeitenströme	Getijstroom	Courants de marée	Corrientes de marea	Correntes de maré
Tide tables	Tidenkalender	Getijdetafel	Annuaire des marées	Anuario de mareas	Tabela de marés
Underwater	Unterwasser	Onderwater	Immergé	Debajo del agua	Submerso
Upstream	Flußaufwärts	Stroomopwaarts	En amont	Aguasarriba	Montante
Waypoint	Wegepunkt	Waypoint/Route punt	Point de destination	Waypoint	Ponto de chegada
Wreck	Wrack	Wrak	Epave	Naufragio	Naufágio
meteorology	meteorologie	meteorologie	mÉTÉo	meteorología	meteorologia

Area	Gebiet	Gebied	Zone	Zona	Área
Clouds, cloudy	Wolken	Wolken	Nuages, nuageux	Nublado	Nublado
Cold	Kalt	Koud	Froid	Frio	Frio
Direction	Richtung	Richting	Direction	Dirección	Indicação
Forecast	Vorhersage	Vooruitzicht	Prévision	Previsión	Previsão
Fresh, cool, chilly	Frisch	Fris	Frais	Fresco	Fresco, frio
Local	Örtlich	Plaatselijk	Local	Local	Local
Outlook	Aussichten	Vooruitzicht	Evolution probable	Evolución probable ulterior	Prospecto
Precipitation	Niederschlag	Neerslag	Précipitation	Precipitación	Precipitação
Drizzle	Niesel	Motregen	Bruine	Llovizna	Chuvisco
Frequent	Häufig	Veelvuldig	Fréquent	Frecuente	Frequente
Hail	Hagel	Hagel	Grêle	Granizo	Saraiva
Heavy	Schwer	Zwaar	Abondant	Abunante	Forte
Isolated	Vereinzelt	Geïsoleerd	Isolé	Aislado	Isolado
Lightning	Blitze	Bliksem	Eclair de foudre	Relampago	Relâmpago
Rain	Regen	Regen	Pluie	lluvia	Chuva
Scattered	Vereinzelt	Verspreid	Esparses	Difuso	Esporádico
Shower	Schauer	Bui	Averse	Chubasco	Aguaceiro
Sleet	Schneereggen	Natte sneeuw	Neige fondue	Aguanieve	Geáda miúda
Snow	Schnee	Sneeuw	Neige	Nieve	Neve
Thunder	Donner	Donder	Tonnerre	Trueno	Trovão
Thunderstorm	Gewitter	Onweer	Orage	Tormenta	Trovoada
Pressure systems	Luftdrucksysteme	Druk	Pression	Presión	Pressão
Air mass	Luftmasse	Luchtmassa	Masse d'air	Masa de aire	Massa de ar
Cold front	Kaltfront	Koufront	Front froid	Frente frio	Frente fria
Decrease	Abnahme	Afnemen	Affaiblissement	Disminuir	Enfraquecer
Deep	Tief	Diep	Profond	Profundo	Profundo
Deepening	Vertiefend	Verdiepend	Se creusant	Ahondamiento	Agravar-se
Disturbance	Störung	Storing	Perturbation	Perturbación	Perturbação
Extending	Ausdehnung	Uitstrekkend	S'étendant	Extendiendose	Alaistrando
Falling	Fallend	Dalend	Baissant	Bajando	Descendo
Filling	Auffüllend	Vullend	Se comblant	Rellenandose	Encher-se
Front	Front	Front	Front	Frente	Frente
Gradient	Druckgefälle	Gradiënt	Gradient	Gradiente	Gradiente
High (anticyclone)	Hoch	Hoog, Hogedrukgebied	Anticyclone	Alta presión, Anticiclón	Anticiclone
Isobar	Isobare	Isobaar	Isobare	Isobara	Isóbaro
Low (depression)	Tief, Sturmtief	Laag, Depressie	Dépression	Baja presión, Depresión	depressão
Moving	Bewegend	Bewegend	Se déplaçant	Movimiento, moviendose	Afastar-se
Occlusion, occluded	Okklusion	Occlusie	Occlus	Oclusión	Oclusão
Quickly	Schnell	Snel	Rapidement	Rápidamente	Rápidamente
Ridge	Hochdruckbrücke	Rug	Dorsale, crête	Cresta	Crista
Rising	Ansteigend	Stijgend	Montant	Subiendo	Subindo

Slowly	Langsam	Langzaam	Lentement	Lentamente	Lentamente
Steady	Gleichbleibend	Vast	Stable	Fijo	Constante
Trough	Trog, Tiefausläufer	Trog	Thalweg	Seno	Linha de baixa pressão
Warm front	Warmfront	Warmtefront	Front chaud	Frente calido	Frente quente
Sea/sea state	See/Seegang	Zee	Mer	Mar	Mar
Breakers	Brecher	Brekende zee	Lames déferlantes	Rompientes	Arrebentação
Calm	Flaute	Kalmte	Calme	Calma	Calma
Choppy	Kabbelig	Kort en steil	Croisée, hachée, clapot	Picada	mareta
Overfalls (tide race)	Stromkabbelung	Stroomkabbeling	Clapot, brisants	Escarceos, remolino	bailladeiras
Rough	Rauh	Ruw	Forte	Fuerte marejada	Agitado
Seaway	Seegang	Zeegang	Haute mer	Alta mar	Mare alta
Short, steep	Kurz, steil	Kort, steil	Vagues courtes, creuse	Mar corta, gruesa	Mar curta, cavado
Slight	Leicht	Licht	Legère, peu agitée	Marejadilla	Ligeiramente
Swell	Schwell	Deining	Houle	Mar de fondo	Ondulação
Sun	Sonne	Zon	Soleil	Sol	Sol
Sunrise	Sonnenaufgang	Zonsopgang	Lever du soleil	Orto	Nascer do sol
Sunset	Sonnenuntergang	Zonsondergang	Coucher du soleil	Ocaso	Pôr do sol
Synoptic situation	Wetterlage	Synoptische toestand	Situation générale	Situación sinoptica	Situação sinóptica
Visibility	Sichtweite	Zicht	Visibilité	Visibilidad	Visibilidade
Dispersing	Auflösend	Oplossend	Se dispersant	Disipación	Limpendo
Extensive	Ausgedehnt	Uitgebreid	Etendu	Extenso	Extenso
Fog	Nebel	Mist	Brouillard	Niebla	Nevoeiro
Fog bank	Nebelbank	Mistbank	Banc de brume	Banco de niebla	Banco do nevoeiro
Good	Gut	Goed	Bon	Bueno	Bom
Haze	Diesig	Nevelig	Brume	Calina	Cerração
Mist	Dunst	Nevel	Brume légère	Neblina	neblina
Moderate	Mäßig	Matig	Médiocre, reduite	Moderardo	Moderada
Poor	Schlecht	Slecht	Mauvais	Malo	fraca má
Weather	Wetter	Weerreport	Temps	Tiempo	Boletim meteorológico
Wind/Beaufort/direction	Wind	Wind	Vent	Viento	Vento
F0, Calm	Windstille	Stil	Calme	Calma	Calma
F1, Light airs	Leiser Zug	Flauw en stil	Très légère brise	Ventolina	Aragem
F2, Light breeze	Leichte Brise	Flauwe koelte	légère brise	Flojito	Fraco
F3, Gentle breeze	Schwache Brise	Lichte koelte	Petite brise	Flojo	Bonanzoso
F4, Moderate breeze	Mäßige Brise	Matige koelte	Jolie brise	Bonancible	Moderado
F5, Fresh breeze	Frische Brise	Frisse bries	Bonne brise	Fresquito	Frêsko
F6, Strong breeze	Starker Wind	Stijve bries	Vent frais	Fresco	Muito frêsko
F7, Near gale	Steifer Wind	Harde wind	Grand frais	Freschacón	Forte
F8, Gale	Stürmischer Wind	Stormachtig	Coup de vent	Duro	Muito forte
F9, Strong gale	Sturm	Storm	Fort coup de vent	Muy duro	Tempestuoso
F10, Storm	Schwerer Sturm	Zware storm	Tempête	Temporal	Temporal
Backing	Rückdrehender Wind	Krimpemde wind	Vent revenant	Rolar el viento	Sentido retrógrado



Gale warning	Sturmwarnung	Stormwaarschuwing	Avis de coup de vent	Aviso de viento duro	Aviso de vento muito forte
Gust	Windstoß	Windvlaag	Rafale	Ráfaga, racha	Rajada
Increasing	Zunehmend	Toenemend	Augmentant	Aumentar	Aumentando
Land breeze	Landbrise	Landbries	Brise de terre	Brisa de tierra	Brisa da terra
Moderating	Abnehmend	Afnemend	Décroissant	Disminuyendo	Decrescendo
Sea breeze	Seebrise	Zeebries	Brise de mer	Brisa de mar	Brisa do mar
Squall	Bö	Windbui	Grain	Turbonada	Borrasca
Variable	Umlaufend	Veranderlijk	Variable	Variable	Variável
Veering	Rechtdrehend	Ruimende wind	Virant	Cambiar	Sentido horário
safety/emergency	sicherheit/notfall	veiligheid/hoodgeval	securite/urgence	seguridad/Emergencias	segurança/Emergências
Aground	Aufgelaufen	Vastgelopen	Echoué	Encallado	Encalhar
Capsize	Kentern	Omslaan	Sancir, chavirer	Volcó	Virar-se
Coastguard	Küstenwache	Kustwacht	Gendarmerie maritime	Guarda costas	Policia marítima
Collision	Kollision	Aanvaring	Abordage	Colisión, abordaje	Colisão abaloamento
Dismasted	Mastbruch	Mastbreuk	Démâté	Desarbolar	Partir o mastro
Distress	Seenot	Nood	Détresse	Socorro	Distress
Distress flares	Signalraketen	Noodvuurwerk	Fusées de détresse	Bengalas	Fachos de socorro
Dragging anchor	Schlierender Anker	Krabbend anker	Chasser sur l'ancre	Ancla garreando	Ancora agarrar
EPIRB	Seenotfunkboje	EPIRB	Balise de détresse	Baliza	EPIRB
Fire extinguisher	Feuerlöscher	Brandblusser	Extincteur	Extintor	Extintor
Harness, safety	Sicherheitsgurt	Harnas	Harnais	Arnés de seguridad	Cinto de segurança
Help!	Hilfe!	Help!	Au secours!	¡Socorro!	Socorro!
Lifeboat	Rettungsboot	Reddingsboot	Canot de sauvetage	Lancha de salvamento	Barco salva-vidas
Lifejacket	Schwimmweste	Reddingsvest	Gilet de sauvetage	Chaleco salvavidas	Colete de salvação
Liferaft	Rettungsinsel	Reddingsvlot	Radeau de sauvetage	Balsa salvavidas	Jangada de salvação
Man overboard	Mann über Bord	Man over boord	Homme à la mer	Hombre al agua	Homem ao mar
Seacock	Seeventil	Afsluiter	Vanne	Grifos de fondo	Torneira de segurança
Seaworthy	Seetüchtig	Zeewaardig	Marin	Marinero	Condição de navegar
Sinking	Sinken	Zinkend	En train de couler	Hundiéndose	Afundate
Tow line	Schleppeleine	Sleeplijn	Filin de remorque	Cabo remolque	Cabo de rebocador
medical	medizinisches	medische	medicale	medico	médicas
Antibiotic	Antibiotika	Antibiotica	Antibiotique	Antibiótico	Antibiótico
Bandage	Verband	Verband	Pansement	Vendas	Ligadura
Bleeding	Blutend	Bloeden	Saignement	Sangrando	Sangrar
Burns	Verbrennung	Brandwonden	Brûlures	Quemadura	Queimadura
Concussion	Gehirnerschütterung	Hersenschudding	Traumatisme crânién	Conmoción	Traumatismo
Dehydration	Austrocknung	Uitdroging	Déshydratation	Deshidratación	Desidratação
Dentist	Zahnarzt	Tandarts	Dentiste	Dentista	Dentista
Doctor	Doktor	Dokter/arts	Médecin	Médico	Médico
Drown(ing)	Ertrinken	Verdrinken, (verdrinking)	Noyade, (se noyant)	Ahogarse	Afogar-se
Exhaustion	Erschöpfung	Uitputting	Epuisement	Agotamiento	Exausto
Fever	Fieber	Koorts	Fièvre	Fiebre	Febre

First aid	Erste Hilfe	Eerste hulp	Premier secours	Primeros auxilios	Primeiros socorros
Fracture	Fraktur	Breuk	Fracture	Fractura	Fractura
Headache	Kopfschmerz	Hoofdpijn	Mal à la tête	Dolor de cabeza	Dor de cabeça
Heart attack	Herzanfall	Hartaanval	Crise cardiaque	Ataque corazón	Ataque cardíaco
Hospital	Krankenhaus	Ziekenhuis	Hôpital	Hospital	Hospital
Hypothermia	Unterkühlung	Onderkoeling	Hypothermie	Hypotermia	Hipotermia
Illness	Krankheit	Ziekte	Maladie	Enfermo	Doença
Injury	Verletzung	Verwonding	Blessure	Lesión	Lesão
Pain	Schmerz	Pijn	Douleur	Dolor	Dôr
Painkiller(s)	Schmerztabletten	Pijnstillers	Analgésique	analgesico	Analgésico
Poisoning	Vergiftung	Vergiftiging	Empoisonnement	Envenenamiento	Envenenamento
Pulse	Puls	Hartslag	Pouls	Pulso	Pulso
Rest	Ruhen	Rust	Repos	Reposo	Descanso
Seasickness	Seekrankheit	Zeeziekte	Mal de mer	Mareo	Enjoar
Shock	Schock	Shock	Choc	Choque	Choque
Splint	Schiene	Spalk	Attelle	Tablilla	Colocar em talas
Sticking plaster	Heftpflaster	Pleister	Pansement adhésif	Esparadrapo	Adesivo
Stomach upset	Bauchbeschwerden	Maag van streek	Indigestion	Mal de estómago	Cólicas
Stretcher	Trage	Draagbaar	Brancard	Camilla	Maca
Sunburn	Sonnenbrand	Zonnebrand	Coup de soleil	Quemadura del sol	Queimadura de sol
Swelling	Schwellung	Zwelling	Enflure	Hinchazón	Inchaço
Toothache	Zahnschmerzen	Tandpijn	Rage de dents	Dolor de muelas	Dôr dos dentes
Unconscious	Bewußtlos	Bewusteloos	Inconscient	Inconsciente	Inconsciente
Wound	Wunde	Wond	Blessure	Herida	Ferida
the boat	Das boot	De boot	Le Bateau	el barco	do barco
Rigging and Sails	Rigg und Segel	Tuigage en Zeilen	Grément et Voiles	Jarcias y Velas	Massame e Velas
Babystay	Babystag	Baby stag	Bas-étai	Babystay	Babystay
Backstay	Achterstag	Achterstag	Pataras	Estay de popa	Brandal fixo da pôpa
Batten	Segellatte	Zeillat	Latte	Sables	Régua
Beating	Kreuzen	Kruisen	Au prés	Ciñendo	Bolinar
Boom	Baum	Giek	Bôme	Botavara	Retranca
Clevis pin	Schäkelbolzen	Borstbout	Axe à anneau brisé	Pasador de seguridad	Perno com troço de argola
Foresail	Vorsegel	Voorzeil	Voile avant/foc	Foque	Pana de proa
Forestay	Vorstag	Voorstag	Etai	Estay de proa	Estai real
Genoa	Genua	Genua	Génois	Génova	Genoa
Halyard	Fall	Val	Drisse	Driza	Adriça
Jib	Fock	Fok	Foc	Foque	Fiocco
Mainsail	Großsegel	Grootzeil	Grand' voile	Mayor	Vela grande
Mast	Mast	Mast	Mât	Mast	Mastro
Mast track	Mastschiene	Mastrail	Rail	Carril	Calha do mastro
Mizzen	Besan	Bezaan	Artimon	Mesana	Mezena
Reaching	Raumschots	Ruime wind	Au portant	Viento a través	A um largo

Rod kicker	Rod kicker	Giekophouder	Hale-bas rigide	Contra rigido	Rod kicker
Roller reefing foresail	Rollfock	Rolfock	Génois à enrouleur	Enrollador de génova	Genoa de enrolar
Running	Vorm Wind	Voor de wind	Vent arrière	Viento a favor	Vento à popa
Sheet	Schot	Schoot	Ecoute	Escota	Escota
Shrouds	Wanten	Wanten	Haubans	Obenques	Enxarcia
Spinnaker	Spinnaker	Spinnaker	Spi	Spi	Spinnaker
Spinnaker boom	Spinnakerbaum	Spinnaker boom	Tangon de spi	Tangon	Pau de spinnaker
Spreader, crosstree	Saling	Zaling	Barre de flèche	Crucetas	Vaus
Staysail	Stagegel	Stagzeil	Trinquette	Trinqueta	Estai
Storm jib	Sturmfock	Stormfok	Tourmentin	Tormentin	Estai de tempo
Topping lift	Dirk (for the boom)	Kraanlijn, Dirk	Balancine	Amantillo	Amantillo
Trysail	Trysegel	Stormzeil, Trysail	Voile de cape	Vela de capa	Cachapana
Upwind	Am Wind	Aan de wind/te loevert	Au vent	Vienta en contra	Bolinando
Whipping twine	Takelgarn	Takelgaren	Fil à surlier	Piolilla	Cordão de pequena bitola
Working jib	Arbeitsfock	Werkfok	Foc de route	Foque	Estai
On deck	An deck	Aan dek	Sur le pont	En cubierta	No convés
Aft	Achtern, achteraus	Achter, achteruit	En arrière	Atrás	À ré
Ahead	Voraus	Vooruit	Par l'avant	Avante	À proa
Anchor	Anker	Anker	Ancre	Ancla	Ferro
Anchor chain	Ankerkette	Ankerketting	Chaîne d'ancre	Cadena	Amarra
Anchor warp	Ankerleine	Ankerlijn	Orin	Cabo de fondeo	Espia do ferro
Astern	achtern	Achteruit, slaan	Par l'arrière	Hacia atrás	À popa
Block	Block	Blok	Poulie	Motón	Moitão
Bow	Bug	Boeg	Etrave	Proa	Proa
Bridgedeck	Brückendeck	Brugdek	Bridgedeck	Cubierta de puente	Pavimento da ponte
Cockpit	Cockpit	Cockpit	Cockpit	Bañera	Cockpit
Deck	Deck	Dek	Pont	Cubierta	Convés
Dinghy, Tender	Jolle, Beiboot	Bijboot	Annexe	Chinchorro, Bote	Escaler, Côco
Fender	Fender	Stootwil	Défense	Defensa	Defensa
Inflatable (dinghy)	Schlauchboot	Opblaasbare boot	Gonflable	Bote hinchable	Inflável
Ladder	Leiter	Ladder, Trap	Echelle	Escala	Escada
Pulpit	Bugkorb	Preekstoel	Balcon avant	Púlpito	Guarda proeiro
Pushpit	Heckkorb	Hekrailing	Balcon arrière	Balcón de popa	Varandim
Railing	Reling	Railing	Filières	Guardamencebos	Balaustrada
Rope	Tauwerk	Touw	Cordage	Cabo, Cuerda, Cabulleria	Cabo, Corda
Rudder	Ruder	Roer	Safran, Gouvernail	Pala de Timón	Leme
Shackle	Schäkel	Sluiting	Manille	Grillete	Manilha
Ship	Schiff	Schip	Navire	Buque	Navio
Stanchion	Seerelingsstütze	Scepter	Chandelier	Candelero	Balaustre
Stern	Heck	Spiegel/hek	Arrière	Popa	Popa
Superstructure	Aufbau	Opbouw	Superstructure	Superestructura	Super-estrutura
Tiller	Pinne	Helmstok	Barre franche	Caña	Cana de leme

Toe rail	Fußleiste	Voetrail	Rail de fargue	Regala	Amurada inferior
Topsides	Rumpfseiten	Bovenwaterschip	Oeuvres mortes	Obra muerta	Costada
Wheel, steering	Steuerrad	Stuurwiel	Barre à roue	Rueda	Roda do leme
Winch	Winsch	Lier	Winch	Winche	Molinete
Windlass, capstan	Ankerwansch	Ankerlier, Kaapstander	Guindeau	Molinete	Molinete do ferro
Yacht, sailing	Segelyacht	Zeilboot	Voilier	Velero	Veleiro
Below deck	Unter deck	Onderdeks	Sous le pont	Bajo cubierta	Abaixo do convés
Bilge	Bilge	Bilge	Galbord	Sentina	Esgôto
Bilge keel	Kimkiel	Kimkiel	Bi-quilles	Quillas	Quilha dupla
Bilge pump	Bilgepumpe	Bilge pomp	Pompe de cale	Bomba de achique	Bomba de esgoto
Cabin	Kajüte	Kajuit	Cabine	Cabina	Cabine
Calorifier	Wärmesponder	Verwarming	Echangeur de chaleur	Calentador	Calorífico
Companionway	Niedergang	Opgang	Descente	Entrada cámara	Escotilha de passagem
Deckhead	Kajütdach	Kajuitdak	Tête de pont	Techo de cabina	Cabeço do convés
Fin keel	Kurzkiel	Vinkiel	Quille courte	Quilla de aleta	Patilhão
Fresh water tank	Frischwassertank	Drinkwatertank	Réservoir d'eau douce	Tanque de agua dulce	Tanque de aguada
Galley	pantry/Kombüse	Kombuis	Cuisine	Cocina	Cozinha
Gas alarm	Gasmelder	Gasalarm	Alarme anti-gaz	Alarma de gas	Alarme de gás
Holding tank	Schmutzwassertank	Vuilwatertank	Réservoir à eaux usées	Tanque aguas negras	Deposito de esgotos
Hull	Rumpf	Romp	Coque	Carena	Casco
Keel	Kiel	Kiel	Quille	Quilla	Quilha
Long keel	Langkiel	Langkieler	Quille longue	Quilla corrida	Quilha corrida
Oven	Backofen	Oven	Four	Horno	Forno
Skeg	Skeg	Scheg	Talon	Skeg	Skeg
Underwater hull	Unterwasserschiff	Onderwaterschip	Oeuvres vives	Obra viva	Obras vivas
electrics	elektrotechnik	electriciteit	electricques	electricos	electrico
Alternator	Wechselstromgenerator	Generator	Alternateur	Alternador	Alternador
Battery	Batterie	Accu, batterij	Batterie/accumulateur	Batería	Bateria
Battery charger	Batterieladegerät	Acculader	Chargeur de batterie	Cargador debatería	Carregador debateria
Bulb	Glühbirne	Lamp	Ampoule	Bombilla	Lâmpada
Circuit breaker	Ausschalter	Automaat	Disjoncteur	Disyuntor	Interruptor
Coil	Spule	Spoel	Bobine	Bobina	Bobine
Dynamo	Lichtmaschine	Dynamo	Dynamo	Dinamo	Dinâmo
Electrical wiring	Elektrik	Elektrische bedrading	Réseau électrique	Circuito eléctrico	Circuito electrico
Fuse	Sicherung	(Hoofd)Zekering	Fusible	Fusible	Fusível
Invertor	Wechselrichter	Inverter	Convertisseur	Inverter	Inversor
Regulator (voltage)	Spannungsregler	Spanningsregelaar	Régulateur de tension	Regulador	Regulador
Shore power	Landanschluß	Walstroom	Courant de secteur	Corriente de tierra	Corrente alterna
Solar panel	Solarzellen	Zonnepaneel	Paneau solaire	Placa solar	Painel solar
Soldering iron	LötKolben	Soldeerbout	fer à souder	Soldador eléctrico	ferro de soldar
Switch	Schalter	Schakelaar	Interrupteur	Interruptor	Interruptor
the engine	der motor	de motor	le moteur	el motor	do motor

Air filter	Luffilter	Luchtfilter	Filtre à air	Filtro a aire	Filtro de ar
Carburettor	Vergaser	Carburateur	Carburateur	Carburador	Carburador
Cooling water	Kühlwasser	Koelwater	Eau de refroidissement	Agua refrigerado	Agua fresca
Diesel	Diesel	Dieselolie	Gazole	Gas-oil	Gasóleo
Drive belt	Treibriemen	Aandrijfriem	Courroie d'entraînement	Correa de transmisión	Correia
Engine mount	Motorfundament	Motorsteun	Support moteur	Bancada del motor	Fixe do motor
Engine oil	Motoröl	Motorolie	Huile de moteur	Aceite de motor	Óleo de motor
Exhaust pipe	Auspuff	Uitlaat	Tuyau d'échappement	Tubo de escape	Tubo de escape
Fuel filter	Kraftstofffilter	Brandstofffilter	Filtre de carburant	Filtro de combustible	Filtro de gasóleo
Fuel tank	Tank, Brennstofftank	Brandstof tank	Réservoir à carburant	Tanque de combustible	Tanque de combustivel
Gasket	Dichtung	Pakking	Joint	Empaquetadura junta	Junta
Gearbox	Getriebekasten	Keerkoppeling	Boîte de vitesses	Caja de cambio	Caixa de velocidades
Grease	Fett	Vet	Graisse	Grasa	Massa
Head gasket	Zylinderkopfdichtung	Koppakking	Joint de culasse	Junta de culata	Junta do cabeça
Injector	Einspritzdüse	Injector, Verstuiver	Injecteur	Inyector	Injector
Jubilee clip	Schlauchklemme	Slangklem	Collier de serrage	Abrazadera	Abraçadeira ajustável
Methylated spirits	Brennspiritus	Spiritus/Methylalcohol	Alcool à brûler	Alcohol desnaturalizada	Alcool metílico
Oil filter	Ölfilter	Oliefilter	Filtre à huile	Filtro de aceite	Filtro de óleo
Outboard motor	Außenbordmotor	Buitenboordmotor	Moteur hors-bord	Motor fuerabordas	Motor fora de borda
Paraffin	petroleum	Petroleum, Kerosine	Kérosène, Pétrole	Petróleo, Keroseno	Petróleo
P-bracket	Wellenlagerbock	Schroefas uithouder	Support d'hélice	Casquillo	Polée em P
Petrol	Benzin	Benzine	Essence	Gasolina	Gasolina
Propeller	Propeller, Schraube	Schroef	Hélice	Hélice	Hélice
Propeller shaft	Schraubenwelle	Schroefas	Arbre d'hélice	Eje de la hélice	Veio do hélice
Spark plug	Zündkerze	Bougie	Bougie	Bujia	Vela
Starter	Anlasser	Startmotor	Démarrreur	Motor de arranque	Motor de arranque
Stern gland	Stopfbuchse	Schroefasdoorvoer	Presse étoupe	Bocina	Bucim
Throttle	Gas	Gashendel	Accélérateur	Acelerador	Acelerador
Two-stroke	Zweitakt	Tweetakt	A deux temps	Dos tiempos	De dois tempos
Water pump	Wasserpumpe	Waterpomp	Pompe à eau	Bomba de agua	Bomba de água

WWW.AWPON