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IMO/IHO GUIDE TO DRAFTING RADIO NAVIGATIONAL WARNINGS FOR THE  
WORLD-WIDE NAVIGATIONAL WARNING SERVICE

1 The Sub-Committee on Radiocommunications, at its thirty-ninth session (29 November to 3 December 1993), noted an IMO/IHO Guide to Drafting Radio Navigational Warnings for the World-Wide Navigational Warning Service (WWNWS) prepared by the IHO Commission on the Promulgation of Radio Navigational Warnings (CPRNW) and considered that this standardized text, annexed hereto, will be of great value to those who draft navigational warnings and to mariners at sea who must understand the warnings they receive.

2 The Sub-Committee encouraged the widest possible use of this document and approved it for circulation to Governments.

3 Member Governments are invited to bring the annexed IMO/IHO Guide to the attention of mariners and those involved in the promulgation of navigational warnings.

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ANNEX

**IMO/IHO  
GUIDE TO DRAFTING  
RADIO NAVIGATIONAL WARNINGS  
FOR THE WORLD-WIDE NAVIGATIONAL  
WARNING SERVICE**

## 1 INTRODUCTION

1.1 This book provides a practical guide for anyone who is concerned with drafting radio navigational warnings. It is assumed throughout that the warnings are being issued under the auspices of the IHO/IMO World-Wide Navigational Warning Service (WWNWS) and in accordance with the requirement of IMO Resolution A.706(17). The WWNWS includes two major international radio warning services as components; namely, NAVAREA warnings and Coastal warnings.

1.2 It is particularly intended to provide the best form of words for use in all types of navigational warnings in the English language (See Note 1). Note has been taken of the Standard Marine Navigational Vocabulary, where appropriate.

1.3 This document cannot provide specimen texts for every type of event which may occur. However, the principles illustrated herein may be applied in general to drafting messages for every kind of navigational warning and covering all types of hazards.

## 2 GENERAL CONSIDERATIONS

2.1 Radio Navigational Warnings are essentially HAZARD WARNINGS (See Note 2.) As such they are issued in response to SOLAS V/2.b and carry information which may have a direct bearing on the safety of life at sea. It is the fundamental nature of navigation warnings that they will often be based on incomplete or unconfirmed information and mariners will need to take this into account when deciding what reliance to place on the information contained therein.

2.2 IMO Resolution A.706(17) requires the use of the English language for NAVAREA and Coastal Warnings of the WWNWS. It must always be remembered that the majority of mariners receiving radio navigational warnings are only professional users of English who do not speak or read it naturally. Warnings therefore must be written so as to be easily understood by all mariners.

2.3 In order to achieve maximum impact on the mariner it is necessary to present information so that it is CLEAR, UNAMBIGUOUS and BRIEF. This can be ensured by using structured messages which present the text in a standard format with key words to emphasize the most important features of the message.

2.4 The resources employed by administrations and the mariner are extremely limited. Thus only information which is vital to the safe conduct of vessels should be transmitted. Notices to Mariners and other means exist for passing less urgent information to ships after they have reached port. Information of a purely administrative nature should never be broadcast on the regular international navigational warning schedules.

- Notes:
1. See WWNWS Guidance Document, section 5.3
  2. See WWNWS Guidance Document, section 4.2.1.3

### 3 THE STRUCTURE OF RADIO NAVIGATIONAL WARNINGS

3.1 The minimum information which a mariner requires to avoid danger is:

#### HAZARD + POSITION

It is usual, however, to include sufficient extra detail to allow some freedom of action in the vicinity of the hazard. This means that the message must give enough extra data for the mariner to be able to RECOGNIZE the hazard and ASSESS its effect upon his navigation. In some cases it will be desirable to include an estimate of the DURATION of the event.

3.2 The text of any radio navigational warning will need to contain some or all of the STANDARD ELEMENTS, as indicated below:

STANDARD ELEMENTS		NAVAREA	COASTAL	LOCAL
Message ID*	Consecutive No.	*	*	
Preamble	1. General Area	*		
	2. Locality	*	*	*
	3. Chart Number	*	*	
Warning	4. Key Subject	*	*	*
	5. Geographical Position	*	*	*
	6. Amplifying Remarks	*	*	*
Postscript	7. Cancellations	*	*	*

\* See WWNWS Guidance Document, section 5.1

3.3 The remainder of this book is divided into three sections, which give guidance on the correct way of phrasing each part of the warning to achieve maximum impact with minimum broadcast time, as follows:

- Section A - Preamble
- Section B - Warning (by type of hazard, as described in detail in the WWNWS Guidance Document, section 4.2.1.3)
- Section C - Additional notes on Time and Position

**PREAMBLE**

**A1**

**IDENTIFIER, GENERAL AREA, LOCALITY, CHART NUMBER**

<b>MESSAGE IDENTIFIER</b>	<p>The first words of the text of every warning message must always be MESSAGE SERIES IDENTIFIER followed by the CONSECUTIVE NUMBER e.g. NAVAREA THREE 496; NAVAREA SEVEN 042; NITON RADIO WZ 229; OOSTENDE RADIO NAV WING 767.</p> <p>Note: 1) Message numbers re-start at 001 each year. 2) The Consecutive Number is not the same as the NAVTEX Number B3B4.</p>
<b>GENERAL AREA</b>	<p>The General Area should be sufficient to identify which broad sub-division of a NAVAREA the message affects. For instance 'NORTH SEA' or 'MALACCA STRAIT' would be correct; 'NORTH AMERICA, EAST COAST' is too general. NAVAREA-wide events, e.g. OMEGA or SATNAV warnings, use a NAVAID IDENTIFICATION ACRONYM instead of a General Area (See page B9).</p>
<b>LOCALITY</b>	<p>The Locality should be stated in terms which allow the mariner to identify warnings which affect his passage without having to plot them e.g. 'Thames Estuary' or 'Pinang Approach'. Locality will only need to be stated when it is desirable to refine the General Area.</p>
<b>CHART NUMBER</b>	<p>NAVAREA Warnings normally require reference to an International Chart if one exists. If not, they should preferably reference a chart of the locality (not necessarily the largest scale). The Chart Series should always be quoted, e.g. INT Chart 649, BA Chart 471, etc.</p> <p>Chart numbers are not normally required for Coastal and Local Warnings which are only broadcast in the vicinity of the hazard.</p>

## LIGHTS - Casualties

B1

LIGHTHOUSES, BEACONS, LIGHT VESSELS		
Key Subject	Remarks	Comments
MALABRIGO POINT LIGHT, 24-45N 033-56E	UNLIT	<u>Incorrect Terms</u> include: Out, Extinguished, Not Burning, Not Working.
SANDETTIE LIGHT VESSEL, 51-14N 002-33E		
PHILIP SHOAL BEACON, 18-21.5S 046-37.5W	LIGHT UNRELIABLE	<u>Incorrect Terms</u> include: Weak, Dim, Low Power, Fixed, Flashing Incorrectly, Out of Character.
	DESTROYED	Temporarily Destroyed is <u>incorrect</u> . Note: If temporary buoy established, see WRECKS page for additional phrases.
	FOG SIGNAL INOPERATIVE	Only for major fog signal stations. Generally, fog signal casualties will not need a broadcast.
<p><b>NOTES:</b></p> <ul style="list-style-type: none"> <li>A. Use CHARTED names, not LISTED names.</li> <li>B. LIGHT LIST number not required.</li> <li>C. POSITION normally quoted to nearest whole minute.</li> <li>D. If the report is unconfirmed, use LIGHT UNRELIABLE. Do NOT use 'REPORTED'.</li> <li>E. Temporary use of a listed reserve light is to be expected. It is not a change of character.</li> <li>F. Damage to DAYMARKS is not usually worth a navigational warning.</li> <li>G. Do not use a navigational warning to request reports on an unwatched light.</li> <li>H. International Chart Abbreviations for light characters are ONLY suitable for NAVTEX, Telex or Morse transmissions. Voice Broadcasts should be drafted using the Table of Equivalents - page. This is preferred for NAVTEX, Telex and Morse also.</li> </ul>		

NEW and CHANGED Lights - see page B2 and B3  
 Light Vessels OFF STATION - see page B5

**LIGHTS - CHANGED**

**B2**

LIGHTHOUSES, BEACONS, LIGHT VESSELS		
Key Subject	Remarks	Comments
ORFORDNESS LIGHT, 51-30N 000-20E  ST. ALBANS HEAD LIGHT, 51-00N 000-16E	CHANGED TO FLASH THREE 20 SECONDS 14 METRES 16 MILES	PERMANENT change of character.
	TEMPORARILY CHANGED TO QUICK FLASH YELLOW 12 MILES	Temporary change. Do not use for listed reserve light.
<p><b>NOTES:</b></p> <ul style="list-style-type: none"> <li>A. Always quote FULL LIGHT CHARACTERISTIC to avoid confusion over what has been changed.</li> <li>B. Use light descriptions as given on page B4.</li> <li>C. Position is normally quoted to nearest whole minute for existing lights. See page B3 for new or changed positions.</li> </ul>		

**LIGHTS - New, Moved or Re-established****B3**

LIGHTHOUSES, BEACONS, LIGHT VESSELS		
Key Subject	Remarks	Comments
FLAMBOROUGH HEAD LIGHT, FLASH THREE 20 SECONDS 22 METRES 21 MILES	ESTABLISHED 21-14.6N 000-16.3W	New Light.
NARESBORO LIGHT VESSEL, FLASH RED 5 SECONDS 14 MILES	MOVED 0.3 MILES NORTH TO 63-14.8N 022-15.6E	Do not quote former geographical position. Indicate former position by approximate direction and distance.
	RE-ESTABLISHED	For CHARTED or LISTED as DESTROYED. See NOTE A.
<p><b>NOTES:</b></p> <p>A. RE-ESTABLISHED is only appropriate for lights which have previously been CHARTED or LISTED AS DESTROYED. Navigational Warnings concerning such lights are merely Cancelled when the light is re-established. A new Navigational Warning is only required if the Character or Position is changed. See page B2 or above.</p> <p>B. Quote accurate CHARTED position; in Degrees, Minutes and Decimal Minutes (maximum 2 decimal places).</p> <p>C. Distances should be quoted in miles and decimal miles.</p>		

**LIGHTS - GLOSSARY OF DESCRIPTIVE TERMS****B4**

<b>CLASS OF LIGHT</b>	<b>Description for NAVAREA broadcasts</b>	<b>Description for Coastal or Local broadcasts</b>
<b>Fixed (steady light)</b>	<b>F</b>	<b>Fixed</b>
<b>Occulting (total duration of light more than dark)</b>  Single-occulting Group-occulting Composite group-occulting	<b>Oc</b> <b>Oc(2)</b> <b>Oc(2+3)</b>	<b>Occulting</b> <b>Occulting Two</b> <b>Occulting two plus three</b>
<b>Isophase (equal periods light and dark)</b>	<b>ISO</b>	<b>ISO</b>
<b>Flashing (total duration of light less than dark)</b>  Single-flashing Long-flashing Group-flashing Composite group-flashing	<b>FI</b> <b>LFI</b> <b>FI(3)</b> <b>FI(2+1)</b>	<b>Flash</b> <b>Long Flash</b> <b>Flash Three</b> <b>Flash two plus one</b>
<b>Quick (50 to 79-usually either 50 or 60 flashes per minute)</b>  Continuous quick Group quick Interrupted quick	<b>Q</b> <b>Q(3)</b> <b>IQ</b>	<b>Quick Flash</b> <b>Quick Flash Three</b> <b>Interrupted Quick Flash</b>
<b>Very Quick (80 to 159-usually either 100 or 120 flashes per minute)</b>  Continuous very quick Group very quick Interrupted very quick	<b>VQ</b> <b>VQ(3)</b> <b>IVQ</b>	<b>Very Quick Flash</b> <b>Very Quick Three</b> <b>Interrupted Very Quick Flash</b>
<b>Ultra Quick (160 or more-usually 240 or 300 flashes per minute)</b>  Continuous ultra quick Interrupted ultra quick	<b>UQ</b> <b>IUQ</b>	<b>Ultra Quick Flash</b> <b>Interrupted Ultra Quick Flash</b>
<b>Morse Code</b>	<b>Mo(K)</b>	<b>Morse Kilo</b>
<b>Fixed and Flashing</b>	<b>FFI</b>	<b>Fixed and Flashing</b>
<b>Alternating</b>	<b>ALWR</b>	<b>Alternating</b>

**LIGHTS - GLOSSARY OF DESCRIPTIVE TERMS****B4-2**

<b>COLOUR</b>	<b>ELEVATION in METRES or FEET, e.g. 14 METRES, 21 FEET</b>		
White Red Green Yellow Orange Blue Violet	<b>PERIOD in SECONDS, e.g. 15 SECONDS (NOT Sec or S)</b>		
<b>RANGE in sea miles</b>		<b>International abbrevia- tions</b>	<b>RANGE for broadcast</b>
Single range	e.g.	15M	15 MILES
2 ranges	e.g.	14/12M	14 AND 12 MILES
3 or more ranges	e.g.	22-18M	22 TO 18 MILES
			<div style="border: 1px solid black; padding: 5px; display: inline-block;">           Shortest Range only will often be sufficient.         </div>

## BUOYS

B5

BUOYS, LANBYS, SUPERBUOYS		
Key Subject	Remarks	Comments
SANDETTIE NORTH BUOY 51-18N 002-05E CORK LANBY 51-56N 001-29E SMITHS KNOLL LIGHT VESSEL	UNLIT	<u>Incorrect terms include:</u> Out, Extinguished, Not burning, Light unlit.
	LIGHT UNRELIABLE	<u>Incorrect terms include:</u> Weak, Dim, Low power, Fixed, Out of Character, Irregular, Reduced power.
	DAMAGED	No action for Topmark or Radar Reflectors. Use only for major damage, e.g. loss of superstructure.
	OFF STATION	Buoys not in charted position.
	MISSING	Completely absent from position.
EAST CARDINAL BUOY VERY QUICK FLASH THREE 5 SECONDS ESTABLISHED		New buoy. Quote position to 2 decimal minutes if possible.
NOTES: A. Do not use 'Reported' B. POSITION normally quoted to nearest whole minute. C. UNLIT may be used to amplify 'DAMAGED' as in 'DAMAGED and UNLIT'. D. 'LANBY' (Large Automated Navigational Buoy) or 'SUPERBUOY' may be used in lieu of 'BUOY' where appropriate. E. Do <u>NOT</u> describe the type of buoy, e.g. North Cardinal buoy, Wreck buoy, Port Hand buoy unless the buoy is unnamed.		

FOG SIGNALS - see page B1

## GLOSSARY OF BUOYAGE TERMS

B5-2

IALA BUOYAGE		Comments
PORT) STARBOARD)  NORTH) EAST) SOUTH) WEST)  ISOLATED DANGER BUOY  SAFE WATER BUOY  SPECIAL BUOY	HAND BUOY   CARDINAL BUOY	Full Description of light and colour not required for IALA standard buoys.  "Lightbuoy" may be used to indicate that the buoy is lit.
OTHER BUOYS		
<u>COLOURS</u>	<u>PATTERN</u>	<u>SHAPE/TYPE</u>
RED BLACK WHITE GREEN YELLOW	CHEQUERED HORIZONTALLY STRIPED VERTICALLY STRIPED	CAN CONICAL (not OGIVAL or NUN) SPAR SPHERICAL WRECK CABLE (not Telegraph) MOORING DANGER ZONE ODAS SINGLE POINT MOORING (not SPM)

**BOTTOM FEATURES**

**B6**

<b>WRECKS, REEFS, ROCKS</b>	
<b>Key Subject</b>	<b>Comments</b>
<b>UNCHARTED REEF REPORTED 03-42S 016-21W</b>	<b>Position unconfirmed</b>
<b>DANGEROUS WRECK LOCATED 34-15.2W 014-15.5W</b>	<b>Position confirmed usually by survey</b>
<b>VOLCANIC ACTIVITY REPORTED _____ CAUTION ADVISED</b>	
<b>ARTHUR ISLAND _____ reported to lie about two miles west of charted position.</b>	
<b>NOTES:</b> A. These reports may be amplified as follows: "..... marked by south cardinal buoy 0.2 miles southward." B. Position Approximate (PA) is not appropriate since all "reported" hazards will be of this nature by definition.	

## DRIFTING HAZARDS

B7

Key Subject	Comments
SUPERBUOY ADRIFT IN VICINITY _____ AT 231641 UTC  HAZARDOUS MINE ADRIFT IN VICINITY _____ AT _____ UTC  UNLIT DERELICT TANKER ADRIFT IN VICINITY _____ AT _____ UTC	The time of the position report should ALWAYS be included when known.
<b>NOTES:</b> A. Consideration should be given to cancelling the warning after sufficient time has elapsed for the position to have become degraded. B. Time is to be UTC. See page C1.	

## MISCELLANEOUS

B8

Key Subject	Comments
<p>CABLE OPERATIONS BY CABLESHIP "NAME" IN VICINITY _____. FROM ____ UTC TO ____ UTC. WIDE BERTH REQUESTED.</p>	<p>Use "requested" when wide berth is for benefit of cableship.</p>
<p>CABLE OPERATIONS BY CABLESHIP "NAME" OPERATING WITH SUBMERSIBLE AND GUARDSHIP BETWEEN _____ AND _____ FROM ____ UTC TO ____ UTC. CONTACT VHF CHANNEL 12. WIDE BERTH ADVISED.</p>	<p>Use "advised" when operations create a significant hazard.</p>
<p>LARGE UNWIELDY TOW FROM LE HAVRE _____ TO BOSTON _____. WIDE BERTH REQUESTED.</p>	
<p>FIRING EXERCISES FROM ANDOYA RANGE IN AREA BOUNDED BY _____, _____ AND _____. FROM ____ UTC * VHF CHANNEL 16 BEFORE TRANSITING AREA. CAUTION ADVISED.</p>	
<p>95 FOOT FISHING VESSEL "NAME" UNREPORTED ON VOYAGE FROM MIAMI TO GIBRALTAR. REPORT SIGHTINGS TO COAST GUARD MIAMI.</p>	
<p>SEISMIC SURVEY BY MV "FOX" TOWING 3000 METRE ARRAY IN AREA BOUNDED BY _____ _____ AND _____. FROM ____ _____ UTC TO ____ UTC. WIDE BETH REQUESTED.</p>	
<p>VESSEL IN DISTRESS. MV "PLUGLESS" SINKING IN VICINITY _____. ASSISTANCE REQUIRED. REPORTS TO COAST GUARD MIAMI.</p>	<p>Position known.</p>
<p>VESSEL IN DIFFICULTY. MV "GUY FAWKES" ON FIRE. ASSISTANCE REQUIRED. REPORT TO FALMOUTH COAST GUARD OR CROSS JOBURG.</p>	<p>Position Unknown. Reporting point may be "nearest/any Coast Guard station".</p>

\* After the third line insert the line missed:

TO \_\_\_\_ UTC. CONTACT RANGE CONTROL

## ELECTRONIC NAVAIDS

B9

Key Subject	Comments
<p>OMEGA. STATION F ARGENTINA OFF AIR            _____ UTC TO _____ UTC.            CANCEL THIS MESSAGE _____ UTC.</p>	<p>Cancel 1 hour after time of restoration            (if known).</p>
<p>GPS. SATELLITE PRN 13 UNUSABLE            _____ UTC to _____ UTC.            CANCEL THIS MESSAGE _____ UTC.</p>	<p>Messages concerning long range elec-            tronic navaids will not normally need a            General Area, Locality or Chart            Number.</p>
<p>SATNAV. TRANSIT. SATELLITE 30230-12            UNUSABLE.</p>	<p>Do not use "Until Further Notice" since            the fact that the event is complete will            always be apparent from the            cancellation message.</p>
<p>LORAN. STATION SAINT PAUL ISLAND            9990 MASTER OFF AIR _____ UTC TO            _____ UTC. CANCEL THIS MESSAGE            _____ UTC.</p>	
<p>DECCA. JAPAN SEA AND EASTERN CHINA SEA.            NORTHERN KYUSYU DECCA CHAIN 7C OFF AIR.</p>	
<p>DECCA. NORTHWEST BRITISH CHAIN 3B. RED            TRANSMISSION OFF AIR. CANCEL THIS MESSAGE            _____ UTC.</p>	<p>Message cancels 1 hour after event            completes.</p>
<p>OMEGA. POLAR CAP DISTURBANCE IN PROGRESS.            SIGNALS INVOLVING POLAR PATHS MAY HAVE            ERRORS AS GREAT AS ONE FIFTH A LANE OR            MORE.</p>	<p>Use "Disturbance" instead of "anomaly"            or "absorption".</p>

**PIRACY/ARMED ROBBERY****B10**

Key Subject	Comments
<p>CHART NR. _____  MV ALWAYS SAIL REPORTS ACT OF  PIRACY/ARMED ROBBERY IN VICINITY 17-40N  095-06E AT 0600 UTC.  TWO ZODIACS CARRYING 3 - 4 MEN EACH  APPROACHING FROM ASTERN AT 20 KNOTS AT  FIRST LIGHT. ATTEMPTED TO BOARD PORT SIDE  AFT. REPELLED. CAUTION ADVISED.</p> <p>PIRACY ATTACKS/ARMED ROBBERY  CONCENTRATED IN PHILLIP CHANNEL BETWEEN  _____ AND _____. REPORTED ATTACKS  ALWAYS OCCUR AT NIGHT. VESSELS ADVISED TO  MAINTAIN ANTI-PIRACY WATCHES. ALL  SUSPICIOUS OR UNEXPLAINED CRAFT  MOVEMENTS OR PIRACY ATTACKS SHOULD BE  REPORTED IMMEDIATELY TO THE (NEAREST RCC,  NATIONAL OR REGIONAL PIRACY CENTRE OR THE  NEAREST POINT ON THE COAST WITH WHICH  THEY CAN COMMUNICATE).</p>	<p>Broadcast as Safety message.</p> <p>Add amplifying information if available.</p> <p>( _____ ), for example, Regional  Piracy Centre, KUALA LUMPUR,  TEL: 60 3 2010014  FAX: 60 3 2385769  TELEX: MA 31880.</p>

**CANCELLATIONS****B11**

Key Subject	Comments
<p>A. CANCEL 123/92 AND THIS MESSAGE.</p> <p>B. SELF CANCELLING. CANCEL AUSCOAST 42. SURVEY COMPLETE.</p> <p>C. (MESSAGE TEXT - EVENT OF KNOWN DURATION). CANCEL THIS MESSAGE _____ UTC.</p>	<p>Stand alone cancellation messages may be in form A. or B.</p> <p>Only include a reason for the cancellation if it can be stated concisely and is not obvious.</p> <p>Choose a time for self cancelling messages (type C.) 1 hour after the event completes or 1 day later if time is not accurately know.</p>
<b>BULLETIN</b>	
<p>NAVAREA <u>XXX</u> WARNINGS IN FORCE. ONLY THOSE ISSUED IN THE LAST 42 DAYS ARE INCLUDED.</p> <p>XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX</p>	<p>Normally only includes those issued in previous 42 days.</p>

C1

### TIME

Time should always be quoted in UTC. The standard form is DDHHMM UTC MoMoMo YY; e.g. 231642 UTC JUN 92. The month and year need only be included when required for clarity.

### POSITION

Position should always be given in Degrees, Minutes and decimal minutes in the form:

DD - MM.mm N or S  
DDD - MM.mm E or W

Note that leading zeros should always be included. Three digits are used for reporting degrees Longitude.

Positions should only be quoted to the accuracy required. In many cases this will be less than the known accuracy. For example, it will often be sufficient to quote position to the nearest whole minute of Latitude and Longitude when indicating the location of a charted feature. The best accuracy available (to a maximum of 0.01 minutes) should be used when broadcasting the position of new hazards.

The same level of accuracy should always be quoted for both Latitude and Longitude.

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