

# SÍMBOLOS, ABREVIATURAS Y TÉRMINOS USADOS EN LAS CARTAS NÁUTICAS

SYMBOLS, ABBREVIATIONS AND  
TERMS IN USE ON NAUTICAL CHARTS





SERVICIO HIDROGRÁFICO Y OCEANOGRÁFICO  
DE LA ARMADA DE CHILE



SYMBOLS, ABBREVIATIONS AND TERMS  
IN USE ON NAUTICAL CHARTS

CHART No. 1



SÍMBOLOS, ABREVIATURAS Y TÉRMINOS USADOS  
EN LAS CARTAS NÁUTICAS

CARTA N° 1



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## CHART No. 1

SYMBOLS, ABBREVIATIONS AND TERMS  
IN USE ON NAUTICAL CHARTS

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## CARTA Nº 1

SÍMBOLOS, ABREVIATURAS Y TÉRMINOS  
USADOS EN LAS CARTAS NÁUTICAS

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## Introduction

### Chart No. 1

This edition of "Symbols, Abbreviations and Terms Used in Nautical Charts" is based upon the "Regulations for International Charts and Chart Specifications of the IHO" (International Hydrographic Organization), which came into force at the XIIth International Hydrographic Conference, 1982 in Monaco.

This publication contains symbols, abbreviations and terms used in nautical charts published by the Servicio Hidrográfico y Oceanográfico de la Armada de Chile (SHOA), whether or not they belong to the international series. All new edition charts by SHOA are in accordance with this publication.

### Nautical Charts

The "Catálogo de Cartas y Publicaciones Náuticas" lists all nautical charts published by SHOA. This publication includes also definitions of types of charts and their use. Where a given chart contains the boundaries of another at a bigger scale, this one must be used, as it contains a more detailed information.

### Nautical Publications

Data displayed in nautical charts is supplemented by "Derrotero de la Costa de Chile", "Lista de Faros" and "Radioayudas a la Navegación", etc. the SHOA "Noticias a los Navegantes", monthly edition, allows the update of all nautical charts and publications.

### Projection

Charts are graduated on the Mercator projection.

### Copyright

Reproductions any kind, including partial ones, of any nautical chart are allowed only with the express permission of SHOA.

### Depths

Depths are given in meters and decimeters from 0.1 to 19.9 m, and in meters from 20 and higher. The geographical position of a sounding is the center of the depth figure. Depths are also referred to datum for sounding reduction.

### Heights

Those heights not indicating security passage are referred to Mean Sea Level (MSL), and are expressed in meters.

### Vertical Clearance

Clearance height for vessel passage referred to higher high water, and are expressed in meters.

### Bearings

Bearings are represented, in degrees and tenths degree, or in degrees and minutes.

## Introducción

### Carta N° 1

La publicación “Símbolos, Abreviaturas y Términos Usados en las Cartas Náuticas” está basada en el “Reglamento para Cartas Internacionales y Especificaciones Cartográficas de la OHI” (Organización Hidrográfica Internacional), que fue aprobada en la XII Conferencia Hidrográfica Internacional, celebrada en Mónaco en 1982.

Esta publicación contiene los símbolos, abreviaturas y términos utilizados en las cartas publicadas por el Servicio Hidrográfico y Oceanográfico de la Armada de Chile (SHOA), sean o no de la serie internacional. Todas las cartas nuevas ediciones que publica el SHOA están realizadas conforme a esta publicación.

### Cartas Náuticas

Todas las cartas náuticas publicadas por el SHOA se encuentran en el “Catálogo de Cartas y Publicaciones Náuticas”. En dicha publicación figuran asimismo definiciones sobre los diversos tipos de cartas y su utilización. Cuando una determinada carta contenga los límites de otra de mayor escala, esta última debe ser la utilizada, ya que es la que contiene la información más detallada.

### Publicaciones Náuticas

La información representada en las cartas náuticas se complementa con la contenida en las publicaciones del SHOA: “Derroteros de la Costa de Chile”, “Lista de Faros”, “Radioayudas a la Navegación”, etc. Este Servicio publica mensualmente un boletín de “Noticias a los Navegantes”, que permite la actualización de sus cartas y publicaciones náuticas.

### Proyección

Las cartas están trazadas en la proyección Mercator.

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### Profundidades

Las profundidades se representan en metros y decímetros desde 0,1 hasta 19,9 m; en metros desde 20 y mayores. La posición geográfica de una sonda es la del centro de las cifras que indican la profundidad. Las profundidades están referidas al Nivel de Reducción de Sondas (NRS).

### Alturas

Aquellas alturas que no indiquen paso de seguridad, están referidas al Nivel Medio del Mar (NMM) y se expresan en metros.

### Espacio Libre Mínimo en Puentes y Cables Aéreos

Altura de seguridad para el paso de las embarcaciones referida a la pleamar máxima del lugar, y están expresadas en metros.

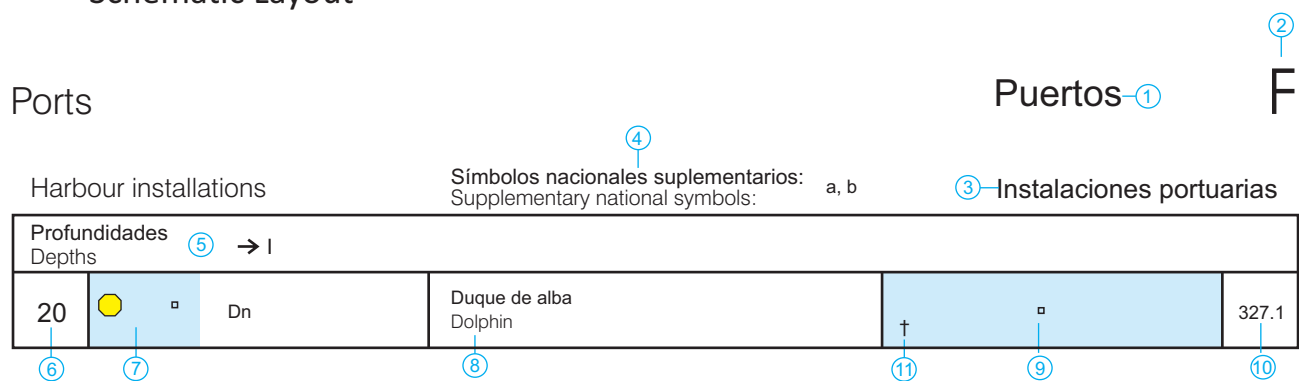
### Demarcaciones

Las demarcaciones se representan en grados y décimas de grados, o en grados y minutos.



# Esquema del contenido de esta publicación

## Schematic Layout



- ① Sección.  
Section.
- ② Designación de la sección.  
Section designation.
- ③ Subsección.  
Sub-section.
- ④ Referencia a los “Símbolos nacionales suplementarios” que figuran al final de cada sección.  
Reference to “Supplementary national symbols” at the end of each section.
- ⑤ Referencia a otras secciones.  
Cross-reference to terms in other sections.
- ⑥ Columna 1: Numeración según las “Especificaciones Cartográficas de la OHI”. Una letra en esta columna, por ej., a, indica un símbolo nacional suplementario para el cual no existe equivalente internacional.  
Column 1: Numbering following the “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.
- ⑦ Columna 2: Representación según las “Especificaciones Cartográficas de la OHI”.  
Column 2: Representation following the “Chart Specifications of the IHO”.
- ⑧ Columna 3: Descripción del símbolo, término o abreviación, en español e inglés.  
Column 3: Description of symbol, term or abbreviation, in the spanish and english language.
- ⑨ Columna 4: Representación siguiendo las normas usadas en cartas nacionales cuando ésta es diferente a la dada en la columna 2.  
Column 4: Representation following national specification if not shown in column 2.
- ⑩ Columna 5: Numeración siguiendo las “Especificaciones Cartográficas de la OHI”, publicación S-4.  
Column 5: Numbering following the “Chart Specifications of the IHO”, publication S-4.
- ⑪ †: Esta representación indica que el símbolo se encuentra en desuso.  
This representation indicates that the symbol is disuse.



# A Chart Number, Title, Marginal Notes

# Numeración de la Carta, Título, Notas Marginales

|   | Características magnéticas<br>Magnetic feature   | → B | Datos de marea<br>Tidal Data | → H |                  |
|---|--|-----|------------------------------|-----|------------------|
| ① | Número de la carta en la serie de cartas nacionales.<br>Chart number in national chart series.   |     |                              |     | 251              |
| ② | Número de la carta en la serie de cartas internacionales (si tuviera).<br>Chart number in international chart series (if any).   |     |                              |     | 251.1            |
| ③ | Elipsoide de referencia de la carta.<br>Reference ellipsoid of the chart.  |     |                              |     | 201-202<br>241.7 |
| ④ | Pie de Imprenta: Datos del editor, ejemplo: Valparaíso, impreso y publicado por el Servicio Hidrográfico y Oceanográfico de la Armada de Chile. © SHOA: 2005.<br>Publication note (imprint). In the example: Published and printed by the Hydrographic and Oceanographic Service of the Chilean Navy, Valparaíso. © SHOA: 2005.  |     |                              |     | 252.1<br>252.4   |
| ⑤ | Derecho de propiedad.<br>Copyright.  |     |                              |     | 253              |
| ⑥ | Fecha de Edición.<br>Edition note.   |     |                              |     | 252.2            |
| ⑦ | Noticias a los Navegantes.<br>Notices to Mariners.   |     |                              |     | 252.3            |
| ⑧ | Dimensiones de los bordes interiores.<br>Dimensions of inner borders.  |     |                              |     | 222.3<br>222.4   |
| ⑨ | Coordenadas geográficas de las esquinas.<br>Geographic coordinates of the corners.   |     |                              |     | 232              |
| ⑩ | Título de la carta.<br>Chart title.  |     |                              |     | 241<br>241.3     |
| ⑪ | Notas explicativas sobre la construcción de la carta, que deben ser leídas antes de ser utilizada.<br>Explanatory notes on chart construction, to be read before using chart.  |     |                              |     | 242              |
| ⑫ | Sellos: en el ejemplo, los sellos de la oficina hidrográfica nacional y de la Organización Hidrográfica Internacional, indican que esta carta es también una carta internacional. Las cartas nacionales únicamente llevan el sello de la oficina hidrográfica nacional. Las reproducciones de cartas internacionales de otras naciones llevan los sellos del país productor (izquierda), del reproductor (centro) y el de la OHI (derecha).<br>Seals: in the example, the national and International Hydrographic Organization seals show that this national chart is also an international one of the Hydrographic Office. National charts have the national seal only. Reproductions of charts of other nations (facsimile) have the seals of the original producer (left), publisher (center), and the IHO (right). |     |                              |     | 241.1<br>241.2   |
| ⑬ | Escala de la carta en la latitud media. La escala es exacta solamente en esa latitud.<br>Scale of chart at stated latitude. The scale is precisely as stated only at the latitude quoted.  |     |                              |     | 211<br>241.4     |
| ⑭ | Escala gráfica en cartas de gran escala.<br>Linear (graphical) scale on large-scale charts.  |     |                              |     | 221.2            |
| ⑮ | Escala gráfica marginal en cartas de gran escala<br>Linear (graphical) border scale on large-scale charts  |     |                              |     | 221.1            |
| ⑯ | Notas de precaución. Información sobre determinadas particularidades, que debe ser leída antes de utilizar la carta.<br>Cautionary notes. Information on particular features, to be read before using chart.   |     |                              |     | 242              |
| ⑰ | Diagrama de origen de datos. Los navegantes deben extremar la precaución en zonas donde los levantamientos hidrográficos son inadecuados.<br>Source data diagram. For attention of navigators: be cautious where surveys are inadequate.   |     |                              |     | 290              |
| ⑱ | Referencia a una carta o a un plano inserto de mayor escala.<br>Reference to a larger-scale chart.   |     |                              |     | 254              |
| ⑲ | Referencia a una carta traslapada.<br>Reference to an adjoining chart.   |     |                              |     | 254              |
| ⑳ | Identificación del país productor de la carta (si ella existiese).<br>Identification of the chart-producing country (if any).  |     |                              |     |                  |

Esquema del contenido de una carta Internacional (INT) (tamaño reducido)  
Schematic layout of an INT chart (reduced in size)

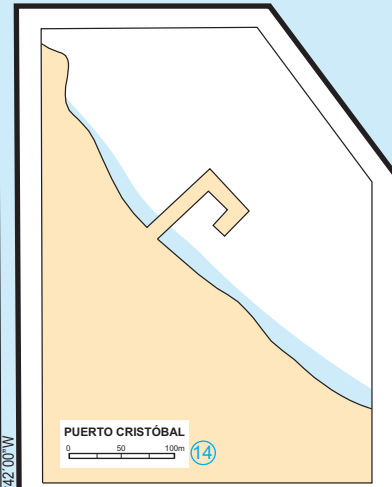
**CARTA DE LA SERIE INTERNACIONAL**

12   **CHILE** 20

BAHÍA REAL Y PUERTO CRISTÓBAL 10

1 INT 9122 14270

Ver Carta 19



PUERTO CRISTÓBAL 14

**BAHÍA REAL**  
Escala 1:20.000 13  
EN LATITUD MEDIA 62°27'30"S  
PROYECCIÓN MERCATOR  
3 SISTEMA DE REFERENCIA: SIRGAS (WGS-84)

11 NOTAS:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

16 ADVERTENCIA  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOTES:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CAUTION  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

18 Plano

5 DERECHOS DE PROPIEDAD COPYRIGHT

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8 Dimensiones internas: mm N-S x mm E-W

62°27'51"S 9

M.000.63.65

# B






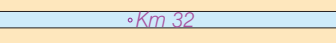
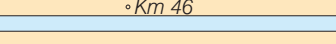
## Positions, Distances, Directions, Compass

## Posiciones, Distancias, Direcciones, Rosas







Geographical Positions      Símbolos nacionales suplementarios:      d, e      Posiciones Geográficas  
Supplementary national symbols:

|    |      |   |  |              |
|----|------|---|--|--------------|
| 1  | Lat  | Latitud<br>Latitude   |  |              |
| 2  | Long | Longitud<br>Longitude   |  |              |
| 3  |      | Meridiano internacional (Greenwich)<br>International meridian (Greenwich) |  |              |
| 4  | °    | Grado(s)<br>Degree(s)   |  | 130          |
| 5  | '    | Minuto(s) de arco<br>Minute(s) of arc                                     |  | 130          |
| 6  | "    | Segundo(s) de arco<br>Second(s) of arc                                    |  | 130          |
| 7  | PA   | Posición aproximada<br>Position approximate                               |  | 417<br>424.1 |
| 8  | PD   | Posición dudosa<br>Position doubtful                                      |  | 417<br>424.2 |
| 9  | N    | Norte<br>North  |  | 131.1        |
| 10 | E    | Este<br>East  |  | 131.1        |
| 11 | S    | Sur<br>South  |  | 131.1        |
| 12 | W    | Oeste<br>West   |  | 131.1        |
| 13 | NE   | Noreste<br>Northeast  |  |              |
| 14 | SE   | Sureste<br>Southeast  |  |              |
| 15 | NW   | Noroeste<br>Northwest   |  |              |
| 16 | SW   | Suroeste<br>Southwest   |  |              |

Control Points      Símbolos nacionales suplementarios:      a, b, c      Puntos de Referencia  
Supplementary national symbols:

|      |   |  |   |       |
|------|---|--|---|-------|
| 20   |  | Vértice de triangulación<br>Triangulation point  |   | 304.1 |
| 21   |  | Punto o pilar de observación<br>Observation spot   |   | 304.2 |
| 22   |  | Punto de posición determinada<br>Fixed point   |   | 305.1 |
| 23   |  | Referencia de nivelación o de altura<br>Benchmark  |   | 304.3 |
| 24   |   | Hito de frontera o mojón<br>Boundary mark  |  | 306   |
| 25.1 |  | Distancias en un canal, sin marcas visibles<br>Distance along waterway, no visible marker    |   | 307   |
| 25.2 |  | Distancias en un canal señalizadas con marcas<br>Distance along waterway with visible marker |   |       |

Symbolised Positions (examples)      Posiciones de los Símbolos (ejemplos)

|    |   |   |  |       |
|----|---|---|--|-------|
| 30 |    | Representación plana: la posición es el centro del símbolo<br>Symbols in plan: position is centre of primary symbol               |  | 305.1 |
| 31 |    | Representación en perfil: la posición es el centro de la base del símbolo.<br>Symbols in profile: position is at bottom of symbol |  | 305.1 |



Positions, Distances,  
Directions, Compass

Posiciones, Distancias,  
Direcciones, Rosas **B**

|    |                       |  |                |
|----|-----------------------|--|----------------|
| 32 | ◦ Mast    ○ MAST    ★ | Símbolo con posición exacta<br>Point symbols (accurate positions)      | 305.1<br>340.5 |
| 33 | ◦ Mast PA             | Símbolo con posición aproximada<br>Point symbol (approximate position) | 305.1          |

Units

Símbolos nacionales suplementarios:      f  
Supplementary national symbols:

Unidades

|    |                            |   |       |
|----|----------------------------|---|-------|
| 40 | km                         | Kilómetro(s)<br>Kilometer(s)  |       |
| 41 | m                          | Metro(s)<br>Meter(s)  | 130   |
| 42 | dm                         | Decímetro(s)<br>Decimeter(s)  | 130   |
| 43 | cm                         | Centímetro(s)<br>Centimeter(s)  |       |
| 44 | mm                         | Milímetro(s)<br>Millimeter(s)   | 130   |
| 45 | M                          | Milla(s) náutica(s)<br>International Nautical Mile (s), Sea Mile (s) (1852 m) | 130   |
| 46 |                            | Cable(s)<br>Cable   | 130   |
| 47 | ft                         | Pie(s)<br>Foot/feet   |       |
| 48 |                            | Braza(s)<br>Fathom(s)   |       |
| 49 | h                          | Hora(s)<br>Hour(s)  | 130   |
| 50 | m                  min     | Minuto(s) de tiempo<br>Minute(s) of time                                      | 130   |
| 51 | s                      sec | Segundo(s) de tiempo<br>Second(s) of time                                     | 130   |
| 52 | kn                         | Nudo(s)<br>Knot(s)  | 130   |
| 53 | t                          | Tonelada(s)<br>Ton(s)   | 328.3 |
| 54 | cd                         | Candela<br>Candela  |       |

Magnetic Variation

Variación Magnética

|    |  |                                     |      |
|----|--|-------------------------------------|------|
| 60 |  | Variación, Declinación<br>Variation | Var. |
| 61 |  | Magnético<br>Magnetic               | Mag. |
| 62 |  | Demarcación<br>Bearing              | 263  |
| 63 |  | Verdadero<br>True                   |      |
| 64 |  | Disminuyendo<br>Decreasing          |      |
| 65 |  | Aumentando<br>Increasing            |      |
| 66 |  | Cambio anual<br>Annual change       |      |
| 67 |  | Desviación<br>Deviation             |      |


# B Positions, Distances, Directions, Compass

# Posiciones, Distancias, Direcciones, Rosas

|      |   |  |  |       |
|------|---|--|--|-------|
| 68.1 | Magnetic Variation<br>4° 31' W 2011 (8' E)            | Valor de la variación magnética en su posición<br>Note of magnetic variation, in position        | Variación Magnética<br>4° 31' W 2011 (8' E)            | 272.2 |
| 68.2 | Magnetic Variation<br>55° N 8° W 4° 31' W 2011 (8' E) | Valor de la variación magnética fuera de posición<br>Note of magnetic variation, out of position | Variación Magnética<br>55° N 8° W 4° 31' W 2011 (8' E) |       |

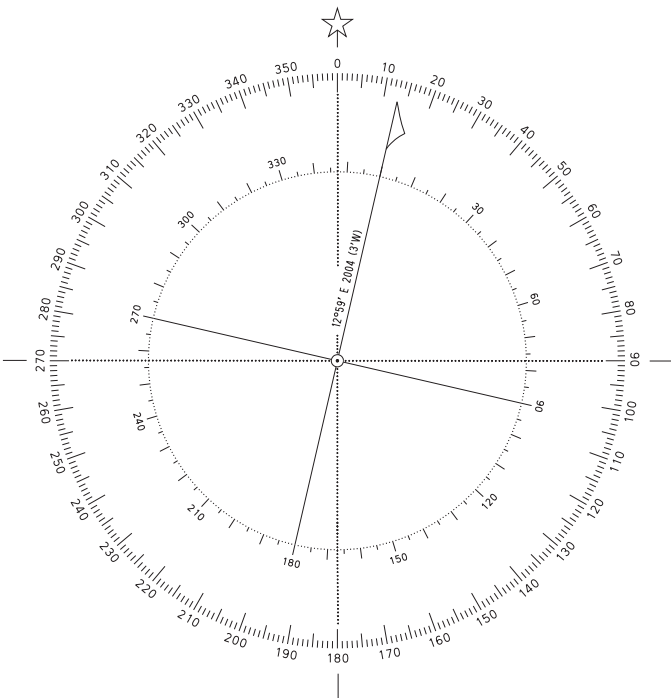
Símbolos nacionales suplementarios: g

|    |   |                       |
|----|---|-----------------------|
| 70 | <p>Rosa de variación magnética.<br/>Compass rose, normal pattern.<br/>Variación magnética (ejemplo):</p> <p>Magnetic variation (example):</p> <p>12° 59' E 2006 (3' W) sobre la flecha que indica el Norte magnético significa que el valor de la variación magnética en 2006 es de 12° 59' E y su cambio anual 3' W. (Es decir que la variación magnética disminuye en 3' cada año, siendo 12° 59' E en 2006).</p> <p>12° 59' E 2006 (3' W) on Magnetic North arrow means magnetic variation 12° 59' E in 2006, annual change 3' W. (Magnetic variation decreasing 3' annually become 12° 59' E in 2006).</p>  | 260<br>262.2<br>272.3 |
| 71 | <p>Isógonas</p> <p>Las curvas de variación magnética corresponden al año 2011</p> <p>El valor de la variación magnética se expresa en grados, seguido de la letra W o E, según corresponda, y se coloca en determinadas posiciones de las curvas. El valor del cambio anual se expresa en minutos seguido de la letra W o E y se coloca entre paréntesis inmediatamente después de la variación.</p> <p>Isogonals</p> <p>Magnetic variation lines are for 2011</p> <p>The magnetic variation is shown in degrees, followed by the letter W or E, as appropriate, at certain positions on the lines. The annual change is expressed in minutes with the letter W or E and is given in brackets, immediately following the variation.</p> | 272.1                 |

|      |   |   |  |     |
|------|---|---|--|-----|
| 82.1 |  | <p>Anomalía magnética local.<br/>En el interior del área limitada por la línea ondulada, el valor de la declinación magnética puede desviarse del normal en la cantidad indicada<br/>Local magnetic anomaly.<br/>Within the enclosed area the magnetic variation may deviate from the normal by the value shown</p> |  | 274 |
| 82.2 | <p>Local Magnetic Anomaly<br/>(See note)</p>                                      | <p>Cuando alguna área afectada en una carta no puede delimitarse fácilmente, se insertará solamente una leyenda<br/>Where some area affected cannot be easily defined, a legend only is shown at the position</p>   | <p>Anomalía Magnética Local<br/>(Ver nota)</p> |     |

Supplementary National Symbols

Símbolos Nacionales Suplementarios


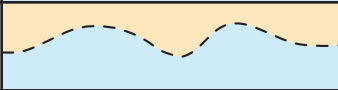

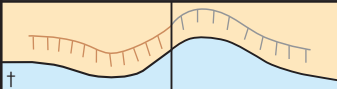
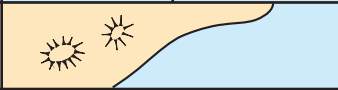
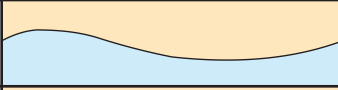
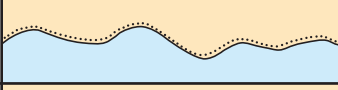
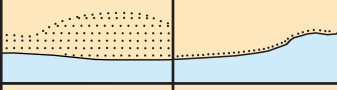
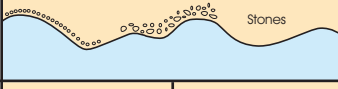
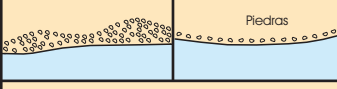
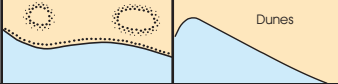
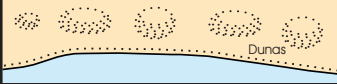
|   |  |   |                      |  |
|---|--|---|----------------------|--|
| a |  | <p>Punto de toma de vista de costa<br/>Coastal view point</p> | <p>Vista A<br/>⊙</p> |  |
| b |  | <p>Punto de observación<br/>Observation point</p>             | <p>P. de O.</p>      |  |
| c |  | <p>Punto de referencia<br/>Reference point</p>                | <p>P. de R.</p>      |  |
| d |  | <p>Ver carta<br/>See chart</p>                                | <p>V. C.</p>         |  |
| e |  | <p>Ver plano<br/>See plane</p>                                | <p>V. P.</p>         |  |
| f |  | <p>Yarda<br/>Yard</p>   | <p>yd.</p>           |  |
| g |  |   |                      |  |

# C Natural Features

# Características Naturales

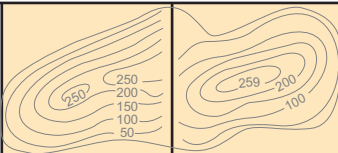
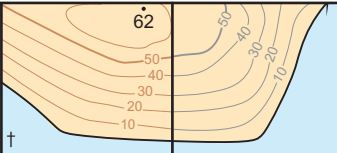

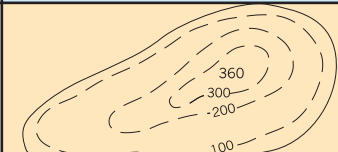
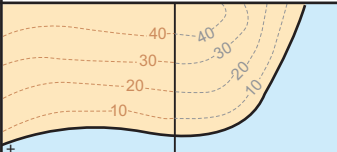
## Coastline

## Línea de Costa

| Bajamar<br>Foreshore → I, J |   |   |   |                |
|-----------------------------|---|---|---|----------------|
| 1                           |    | Línea de costa hidrografiada<br>Coastline surveyed                          |   | 310.1<br>310.2 |
| 2                           |    | Línea de costa levantada deficientemente<br>Coastline inadequately surveyed |   | 311            |
| 3                           |    | Acantilado, Costa escarpada<br>Cliffs, Steep coast                          |    | 312.1          |
| 4                           |    | Colinas costeras<br>Coastal hillocks  |   | 312.1          |
| 5                           |    | Costa baja<br>Flat coast  |   | 312.2          |
| 6                           |    | Playa<br>Sandy shore  |    | 312.2          |
| 7                           |   | Costa pedregosa o de guijarro<br>Stony shore, Shingly shore                 |   | 312.2          |
| 8                           |  | Colinas arenosas, Dunas<br>Sandhills, Dunes                                 |  | 312.3          |


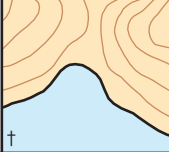
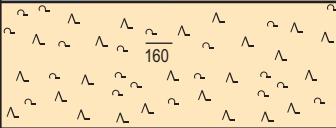
## Relief

## Relieve

| Plano de referencia de las alturas<br>Plane of Reference to Heights → H |   |  |   |   |
|---|---|--|---|---|
| 10  |  | Curvas de nivel con cota<br>Contour lines with spot height   |  | 351.3<br>351.4<br>351.5<br>351.6<br>352.2 |
| 11  |  | Cotas<br>Spot heights  |   | 352.1<br>352.2                            |
| 12  |  | Curvas de nivel aproximada con altitud aproximada<br>Approximate contour lines with approximate height |  | 351.3<br>351.4<br>351.5<br>351.6<br>352.3 |

Natural Features

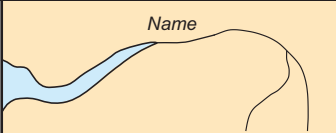
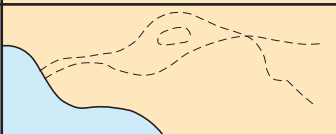
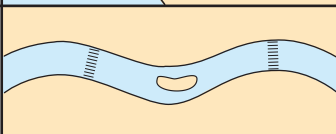
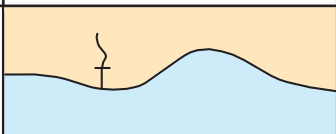
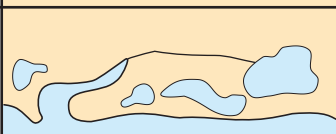
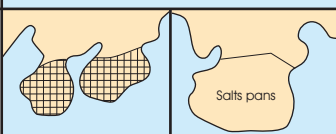
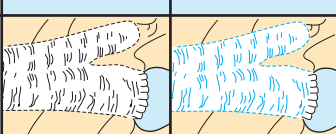
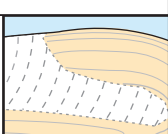

Características Naturales **C**

|    |   |  |   |                                  |
|----|---|--|---|----------------------------------|
| 13 |  | Líneas de forma con cota<br>Form lines with spot height  |  | 351.2<br>351.3<br>351.7<br>352.2 |
| 14 |  | Cota aproximada de la cima de los árboles<br>(referida al NMM)<br>Approximate height of top of trees<br>(above height datum) |   | 352.4                            |

Water Features

Símbolos nacionales suplementarios:  
Supplementary national symbols: a, b

Características Hidrográficas

|    |   |   |  |                         |
|----|---|---|--|-------------------------|
| 20 |   | Río, Estero<br>River, Stream            |  | 353.1<br>353.2<br>353.4 |
| 21 |  | Río intermitente<br>Intermittent river  |  | 353.3                   |
| 22 |  | Rápidos, Cascadas<br>Rapids, Waterfalls |         | 353.5                   |
| 23 |  | Lagos<br>Lakes                          |  | 353.6                   |
| 24 |  | Salinas<br>Salts pans                   |  | 353.7                   |
| 25 |  | Glaciar, Ventisquero<br>Glacier         | Nombre  | 353.8                   |
| 26 |  | Corriente de lava<br>Lava flow          |  | 355                     |

# C Natural Features

# Características Naturales

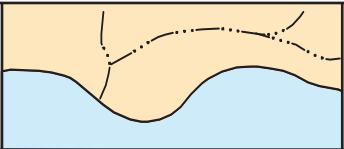
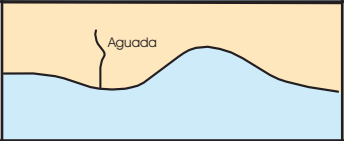
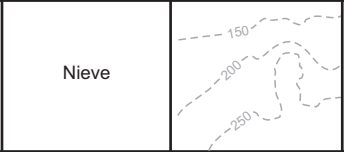
Vegetation

Vegetación

|      |  |        |   |  |         |       |
|------|--|--------|---|--|---------|-------|
| 30   |  | Wooded | Bosque en general<br>Woods in general   |  |         | 354.1 |
| 31   |  |        | Árboles prominentes (en grupos o aislados)<br>Prominent trees (in groups or isolated) |  |         | 354.2 |
| 31.1 |  |        | Árbol de hoja caduca<br>Deciduous tree  |  |         |       |
| 31.2 |  |        | Árbol de hoja perenne (excepto coníferas)<br>Evergreen (except conifer)               |  |         |       |
| 31.3 |  |        | Conifera<br>Conifer   |  |         |       |
| 31.4 |  |        | Palmera<br>Palm   |  |         |       |
| 31.5 |  |        | Nipa<br>Nipa palm   |  |         |       |
| 31.6 |  |        | Casuarina<br>Casuarina  |  |         |       |
| 31.7 |  |        | Filao<br>Filao  |  |         |       |
| 31.8 |  |        | Eucalipto<br>Eucalypt   |  |         |       |
| 32   |  |        | Manglares<br>Mangroves  |  |         | 312.4 |
| 33   |  | Marsh  | Terreno pantanoso<br>Marsh  |  | Pantano | 312.2 |

Supplementary National Symbols

Símbolos Nacionales Suplementarios

|   |  |                        |  |  |
|---|--|------------------------|--|--|
| a |  | Quebrada<br>Gorge      |           |  |
| b |  | Aguada<br>Water supply |           |  |
| c |  | Nieve<br>Snow          | Nieve<br> |  |

# D Cultural Features

# Características Artificiales

Settlements, Buildings

Símbolos nacionales suplementarios:  
Supplementary national symbols: a, c

Áreas Urbanas, Edificios

| Alturas de los edificios<br>Heights of objects → E |  | Referencias Terrestres → E<br>Landmarks |   |  |                |       |
|--|--|---|---|--|----------------|-------|
| 1  |  |   | Área urbana<br>Urban area   |  | 370.3<br>370.4 |       |
| 2  |  |   | Área urbana con edificios aislados<br>Settlement with scattered buildings                       |  | 370.5          |       |
| 3  |  |   | Área urbana (cartas de media y pequeña escala)<br>Settlement (on medium and small scale charts) |  |                | 370.7 |
| 4  |  |   | Pueblo del Interior<br>Inland village   |  |                | 370.6 |
| 5  |  |   | Edificio aislado<br>Building  |  |                | 370.5 |
| 6  |  |   | Edificio importante en área urbana<br>Important building in built-up area                       |  |                | 370.3 |
| 7  |  |   | Nombre de calle, de una carretera<br>Street name, Road name                                     |  |                | 371   |
| 8  |  |   | Edificio o marca en ruinas<br>Ruin, Ruined landmark   |  | 378<br>378.2   |       |

Roads, Railways, Airfields

Carreteras, Ferrocarriles,  
Campos de Aterrizajes

|    |  |  |  |                         |
|----|--|--|--|-------------------------|
| 10 |  | Autopista<br>Motorway  |  | 365.1                   |
| 11 |  | Carretera (asfaltada)<br>Road (hard surfaced)                                      |  | 365.2                   |
| 12 |  | Camino, Sendero (mal definido o no asfaltado)<br>Track, Path (loose-or unsurfaced) |  | 365.3                   |
| 13 |  | Ferrocarril, con estación<br>Railway, with station                                 |  | 328.4<br>362.1<br>362.2 |
| 14 |  | Zanja<br>Cutting   |  | 363.2                   |
| 15 |  | Terraplén<br>Embankment  |  | 364.1                   |
| 16 |  | Túnel<br>Tunnel  |  | 363.1                   |



|    |  |          |  |  |            |                |
|----|--|----------|--|--|------------|----------------|
| 17 |  | Airfield | Aeropuerto. Campo de aterrizaje<br>Airport. Airfield |  | Aeropuerto | 366.1<br>366.2 |
|----|--|----------|--|--|------------|----------------|

Other Cultural Features

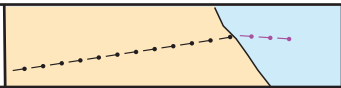
Símbolos nacionales suplementarios:  
Supplementary national symbols: **b**

Otras Construcciones

|      |  |  |  |                      |                               |
|------|--|--|--|----------------------|-------------------------------|
| 20   |  | Espacio libre mínimo en puentes y cables aéreos referidos a la pleamar máxima del lugar.<br>Vertical clearance above Mean High Water Springs                                 |  | 380.1<br>380.2       |                               |
| 21   |  | Ancho libre mínimo (entre pilares)<br>Horizontal clearance (between pillars)   |  | 380.3                |                               |
| 22   |  | Puente fijo con indicación de espacio libre mínimo vertical<br>Fixed bridge with vertical clearance  |  | 381.1                |                               |
| 23.1 |  | Puente móvil (en general) con indicación de espacio libre mínimo vertical<br>Opening bridge (in general) with vertical clearance   |  | 381.3                |                               |
| 23.2 |  | Puente giratorio con indicación de espacio libre mínimo vertical<br>Swing bridge with vertical clearance   |  |                      | Puente Giratorio              |
| 23.3 |  | Puente levadizo con indicación de espacio libre mínimo vertical (cerrado y abierto)<br>Lifting bridge with vertical clearance (closed and open)                              |  |                      | Puente Levadizo (abierto 1.2) |
| 23.4 |  | Puente basculante con indicación de espacio libre mínimo vertical<br>Bascule bridge with vertical clearance  |  |                      | Puente Basculante             |
| 23.5 |  | Puente de pontones o flotante<br>Pontoon bridge  |  |                      |                               |
| 23.6 |  | Puente levadizo con indicación de espacio libre mínimo vertical<br>Draw bridge with vertical clearance   |  |                      | Puente Levadizo               |
| 24   |  | Puente transportador con indicación de espacio libre mínimo vertical bajo la estructura<br>Transporter bridge with vertical clearance below fixed structure                  |  | Puente Transportador | 381.2                         |
| 25   |  | Teleférico con indicación de espacio libre mínimo vertical bajo la estructura<br>Overhead transporter, Telepheric with vertical clearance                                    |  |                      | 382.3                         |
| 26   |  | Línea de alta tensión aérea con torres de sustentación y espacio libre mínimo vertical bajo la estructura<br>Power transmission line with pylons and safe overhead clearance |  |                      | 382.1                         |
| 27   |  | Cable aéreo, línea telefónica o telegráfica, con indicación de espacio libre mínimo vertical<br>Overhead cable, Telephone line, Telegraph line with vertical clearance       |  |                      | 382<br>382.2                  |
| 28   |  | Tubería aérea con indicación de espacio libre mínimo vertical<br>Overhead pipe with vertical clearance   |  | Tubería Aérea        | 383                           |



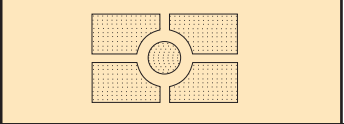
# D Cultural Features

# Características Artificiales

|   |   |                                       |  |     |
|---|---|---------------------------------------|--|-----|
| 29  |  | Tubería en tierra<br>Pipeline on land |  | 377 |
| Nota: La altura libre de seguridad por encima de la pleamar se representa en magenta cuando se conoce, en otro caso se indicará la altura disponible en negro como en D20.<br>Note: The safety clearance above high water is given in magenta where known, otherwise the physical vertical clearance is shown in black as in D20. |   |                                       |  |     |













## Supplementary National Symbols

## Símbolos Nacionales Suplementarios

|   |  |                                       |  |  |
|---|--|---------------------------------------|--|--|
| a |  | Helipuerto<br>Helicopter landing site |   |  |
| b |  | Pasarela<br>Footbridge                |   |  |
| c |  | Parque, Jardines<br>Park, gardens     |  |  |














General

Generalidades

| Plano de referencia de altitudes<br>Plane of reference for Heights |   | → H   | Faros<br>Lighthouses  | → P | Balizas<br>Beacons  | → Q   |   |
|--|---|---|---|-----|---|---|---|
| 1  |              |  HOTEL | Ejemplos de marcas<br>Examples of landmarks   |     |                |  HOTEL | 340.1<br>340.2<br>340.5                 |
| 2  |  WATER TOWER |  Hotel | Ejemplos de marcas conspicuas<br>Examples of conspicuous landmarks  |     |  TORRE DE AGUA |  Hotel | 340.1<br>340.2<br>340.3<br>340.5        |
| 3.1  |              |   | Símbolos gráficos (en su posición verdadera)<br>Pictorial symbols (in true position)                                |     |   |   | 340.7<br>373.1<br>390<br>456.5<br>457.3 |
| 3.2  |              |   | Vistas, Croquis (fuera de su posición)<br>Sketches, Views (out of position)   |     |   |   |   |
| 4  |  (30)        |   | Altura de la parte superior de una estructura respecto al NMM.<br>Height of top of a structure above mean sea level |     |   |   | 302.3                                   |
| 5  |  (30)       |   | Altura de una estructura sobre el terreno.<br>Height of structure above ground level (Elevation)                    |     |   |   | 303                                     |























Landmarks









Referencias Terrestres

|      |   |   |   |  |  |       |
|------|---|---|---|--|--|-------|
| 10.1 |  |  Ch  | Iglesia, Catedral<br>Church, Cathedral                    |  |  |       |
| 10.2 |  |  Tr  | Torre de una iglesia, de una catedral<br>Church tower     |  |  | 373.1 |
| 10.3 |  |  Sp  | Aguja, campanario de una iglesia<br>Church spire, Steeple |  |  | 373.2 |
| 10.4 |  |  Cup | Cúpula de una iglesia, Domo<br>Church cupola              |  |  |       |
| 11   |   |   | Capilla<br>Chapel   |  |  |       |
| 12   |   |   | Cruz, Calvario<br>Cross, Calvary                          |  |  |       |
| 13   |   |      | Templo<br>Temple  |  |  |       |
| 14   |   |      | Pagoda<br>Pagoda  |  |  |       |
| 15   |   |      | Santuario sintoísta<br>Shinto shrine, Josshouse           |  |  | 373.3 |
| 16   |  |      | Templo budista<br>Buddhist temple                         |  |  |       |

# E Landmarks

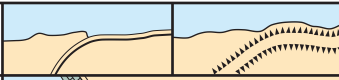
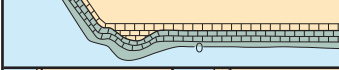



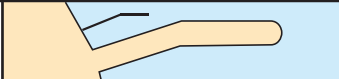
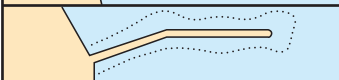
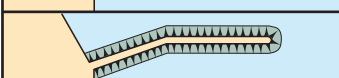
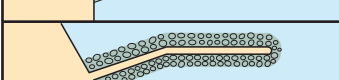
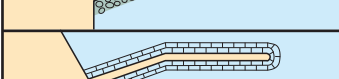


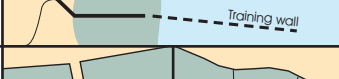


# Referencias Terrestres

|                              |  |   |   |                |
|------------------------------|--|---|---|----------------|
| 17                           |   | Mezquita, Minarete<br>Mosque, Minaret   |   | 373.4          |
| 18                           | ◉ Marabout   | Morabito<br>Marabout  | ◉ Morabito  | 373.5          |
| 19                           |   | Cementerio<br>Cemetery  |    | 373.6          |
| 20                           |  Tr   | Torre<br>Tower  |   | 374.3          |
| 21                           |   | Depósito elevado de agua<br>Water tower, Water tank on a tower  |   | 374.2<br>376   |
| 22                           |  Chy  | Chimenea<br>Chimney   |   | 374.1          |
| 23                           |   | Antorcha (en tierra)<br>Flare stack (on land)   |   | 374.1          |
| 24                           |  Mon  | Monumento<br>Monument   |   | 374.4          |
| 25.1                         | ⊗  | Molino de viento<br>Windmill  |   | 374.5<br>378.2 |
| 25.2                         | ⊗ Ru   | Molino de viento en ruina, sin aspas<br>Windmill (wingless)   |   |                |
| 26.1                         |  †  | Generador eólico<br>Windmotor   |   | 374.6          |
| 26.2                         |   | Área de generadores eólicos<br>Wind farm  |   |                |
| 27                           |  FS   | Asta de bandera<br>Flagstaff, Flagpole  | ◉ A. de Bda.  | 374.7          |
| 28                           |   | Antena de radio o televisión<br>Radio mast, Television mast   |    | 375.1          |
| 29                           |   | Torre de radio o televisión<br>Radio tower, Television tower  |  TV  | 375.2          |
| 30.1<br>30.2<br>30.3<br>30.4 | ◉ Radar mast  Radar<br>◉ Radar Tr  Radar<br>◉ Radar Sc<br>◉ Radome | Antena de radar, Torre de radar, Radar de exploración, Domo o Cúpula de radar<br>Radar mast, Radar tower, Radar scanner, Radar dome | ◉ Antena radar  Radar<br>◉ Torre radar  Radar<br>◉ Radar de exploración<br>◉ Cúpula radar | 487.3          |
| 31                           |   | Antena parabólica<br>Dish aerial  |   | 375.4          |
| 32                           | •  Tanks  | Estanques<br>Tanks  | •  Estanques   | 376.1<br>376.2 |
| 33                           | ○ Silo ◉ Silo  | Silo<br>Silo  |   | 376.3          |

|      |   |   |  |                |
|------|---|---|--|----------------|
| 34.1 |  | Estructura fortificada (en cartas de gran escala)<br>Fortified structure (on large-scale charts)                |  |                |
| 34.2 |  | Castillo, Fuerte, Fortaleza (en cartas de pequeña escala)<br>Castle, Fort, Blockhouse (on smaller-scale charts) |  | 379.1<br>379.2 |
| 34.3 |  | Batería, Fortín (en cartas de pequeña escala)<br>Battery, Small fort (on smaller-scale charts)                  |  |                |
| 35.1 |  | Cantera (en cartas de gran escala)<br>Quarry (on large scale-charts)  |  | 367.1<br>367.2 |
| 35.2 |  | Cantera (en cartas de pequeña escala)<br>Quarry (on smaller-scale charts)                                       |  |                |
| 36   |  | Mina<br>Mine  |  | 367.2          |
| 37.1 |  | Sitios para caravanas<br>Caravan site   |  | 368            |
| 37.2 |  | Sitios para acampar (Camping)<br>Camping site (including caravans)  |  |                |





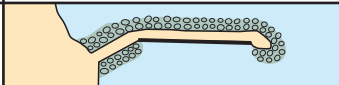
Coast, Cultural Features

Costa, Generalidades Artificiales

|     |   |  |   |              |
|-----|---|--|---|--------------|
| 1   |    | Dique de contención, Terraplén<br>Dyke, Berm   |   | 313.1        |
| 2.1 |    | Muro de defensa (en cartas de gran escala)<br>Seawall (on large-scale charts)                            |   | 313.2        |
| 2.2 |    | Muro de defensa (en cartas de pequeña escala)<br>Seawall (on smaller-scale charts)                       |   |              |
| 3   |    | Carretera elevada<br>Causeway  |    | 313.3        |
| 4.1 |    | Rompeolas (en general)<br>Breakwater (in general)  |   | 322.1        |
|     |    |  |   |              |
|     |    |  |   |              |
| 4.2 |    | Rompeolas (piedras sueltas, tetrápodos, etc.)<br>Breakwater (loose boulders, tetrapods, etc.)            |   |              |
| 4.3 |   | Rompeolas (pendiente de hormigón o mampostería)<br>Breakwater (slope of concrete or masonry)             |   |              |
| 5   |  | Muro de contención (parcialmente sumergido en pleamar)<br>Training wall (partly submerged at high water) |  | 322.2        |
| 6.1 |  | Espigón (siempre descubierto)<br>Groyne (always dry)   |   | 313.4<br>324 |
| 6.2 |  | Espigón (que cubre y descubre con la marea)<br>Groyne (intertidal)                                       |   |              |
| 6.3 |  | Espigón (siempre sumergido)<br>Groyne (always under water)   |   |              |

Harbour Installations

Instalaciones Portuarias

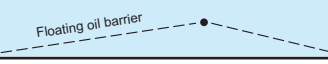
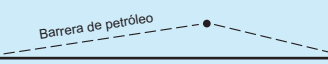
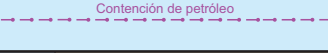
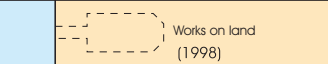




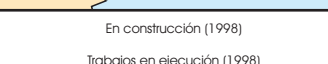






| Profundidades<br>Depths | → I | Fondeaderos<br>Anchorages, Limits   | → N | Baliza y otras marcas fijas<br>Beacons and other fixed marks                 | → Q | Puerto Deportivo<br>Marina | → U   |
|-------------------------|-----|---|-----|--|-----|----------------------------|-------|
| 10                      |     |  |     | Puerto pesquero<br>Fishing Harbour   |     |                            | 320.1 |
| 11.1                    |     |  |     | Puerto deportivo<br>Boat harbour, Marina                                     |     |                            | 320.2 |
| 11.2                    |     |  |     | Amarradero de yates sin servicio<br>Yacht berths without facilities          |     |                            |       |
| 11.3                    |     |  |     | Club náutico<br>Yacht club, Sailing club                                     |     |                            |       |
| 12                      |     |  |     | Molo de abrigo (con posibilidad de atraque)<br>Mole (with berthing facility) |     |                            | 321.3 |

Símbolos nacionales suplementarios: a  
 Supplementary national symbols: a

|      |  |  |  |                |
|------|--|--|--|----------------|
| 13   |  | Malecón<br>Quay, Wharf   |  | 321.1          |
| 14   |  | Espigón, Muelle<br>Pier, Jetty   |  | 321.2<br>321.4 |
| 15   |  | Espigón de paseo<br>Promenade pier                                       |  | 321.2          |
| 16   |  | Pontón<br>Pontoon  |  | 326.9          |
| 17   |  | Área de desembarco para botes<br>Landing for boats                       |  | 324.2          |
| 18   |  | Escala de desembarco<br>Steps, Landing stairs                            |  |                |
| 19.1 |  | Designación de amarradero<br>Designation of berth                        |  | 323.1          |
| 19.2 |  | Amarradero para visitantes<br>Visitors berth                             |  | 323.2          |
| 20   |  | Duque de alba<br>Dolphin   |  | 327.1          |
| 21   |  | Duque de alba para compensación de compás magnético<br>Deviation dolphin |  | 327.2          |
| 22   |  | Pilar, Pilote, Poste menor<br>Minor post or pile                         |  | 327.3          |
| 23   |  | Varadero, Grada, Rampa<br>Slipway, Patent slip, Ramp                     |  | 324.1          |
| 24   |  | Dique dentado o de peine<br>Gridiron, Scrubbing grid                     |  | 326.8          |
| 25   |  | Dique seco, Dique de carena<br>Dry dock, Graving dock                    |  | 326.1          |
| 26   |  | Dique flotante<br>Floating dock  |  | 326.2          |
| 27   |  | Dársena de nivel constante<br>Non-tidal basin, Wet dock                  |  | 326.3          |
| 28   |  | Dársena de mareas<br>Tidal basin, Tidal harbour                          |  | 326.4          |

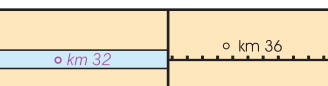
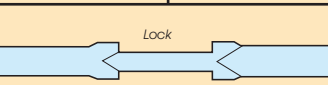
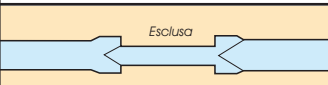

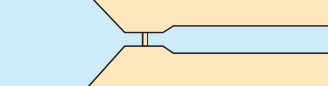
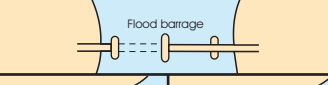



# F Ports

# Puertos

|      |   |   |   |              |
|------|---|---|---|--------------|
| 29.1 |  | Barrera flotante antipolución<br>Floating oil barrier   |  | 449.2        |
| 29.2 |   | Contención de petróleo (tubería de alta presión)<br>Oil retention (high pressure pipe)                                |  |              |
| 30   |  | Trabajos en tierra (con el año de referencia)<br>Works on land (with year date)                                       |  | 329.1        |
| 31   |  | Trabajos en la mar, área en reclamación (con el año de referencia)<br>Works at sea under reclamation (with year date) |  | 329.2        |
| 32   |  | Trabajos en ejecución (con el año de referencia)<br>Works under construction (with year date)                         |  | 329<br>329.4 |
| 33.1 |  | Ruinas<br>Ruins   |  | 378.1        |
| 33.2 |  | Espigón en ruinas, parcialmente sumergido en pleamar<br>Ruined pier, partly submerged at high water                   |  |              |
| 34   |  | Pontón, Buque-pontón<br>Hulk  |  |              |

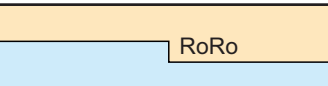

## Canals, Barrages, Dams

## Canales, Esclusas, Represas

| Disponibilidad de paso<br>Clearances | → D   | Estaciones de señales<br>Signal stations  | → T   |                       |
|--------------------------------------|---|---|---|-----------------------|
| 40                                   |  | Canal con marca de distancia<br>Canal with distance mark  |   | 307<br>361.3<br>361.6 |
| 41.1                                 |  | Esclusa (en cartas de gran escala) "<" indica la dirección de la corriente<br>Lock (on large-scale charts) "<" indicates direction of flow      |  | 326.6<br>361.6        |
| 41.2                                 |  | Esclusa (en cartas de pequeña escala) "<" indica la dirección de la corriente<br>Lock (on smaller-scale charts) "<" indicates direction of flow |   |                       |
| 42                                   |  | Compuerta<br>Caisson  |   | 326.5                 |
| 43                                   |  | Represa de inundación<br>Flood barrage  |  | 326.7                 |
| 44                                   |  | Represa ("<" dirección de la corriente)<br>Dam ("<" direction of flow)  |  | 364.2                 |

## Transshipment Facilities

## Servicios de Embarque y Desembarque

| Carreteras<br>Roads | → D   | Ferrocarriles<br>Railway   | → D | Estanques<br>Tanks | → E |       |
|---------------------|---|--|-----|--------------------|-----|-------|
| 50                  |  | Terminal de buques Roll-on Roll-off<br>Roll-on, Roll-off Ferry (Ro Ro Terminal)      |     |                    |     | 321.5 |
| 51                  |  | Almacén de tránsito con identificación<br>Transit shed, Warehouse (with designation) |     |                    |     | 328.1 |



|      |  |   |  |       |
|------|--|---|--|-------|
| 52   |  | Almacenamiento de madera<br>Timber yard   |  | 328.2 |
| 53.1 |  | Grúa elevadora (con indicación de la capacidad de levante), Grúa móvil (sobre rieles)<br>Crane (with lifting capacity), Travelling crane (on railway) |  | 328.3 |
| 53.2 |  | Grúa elevadora de contenedores (con indicación de la potencia de elevación)<br>Container crane (with lifting capacity)                                |  |       |
| 53.3 |  | Grúa de Tijeras de grandes dimensiones (conspicua)<br>Sheerlegs (conspicuous)   |  |       |

Public Buildings

Simbolos nacionales suplementarios:  
Supplementary national symbols: **b**

Edificios Públicos

|      |  |   |  |       |
|------|--|---|--|-------|
| 60   |  | Autoridad Marítima (Gobernación Marítima, Capitanía de Puerto y Alcaldía de Mar)<br>Harbour master's office |  | 325.1 |
| 61   |  | Oficina de aduana<br>Custom office  |  | 325.2 |
| 62.1 |  | Consultorio<br>Health office  |  | 325.3 |
| 62.2 |  | Hospital<br>Hospital  |  |       |
| 63   |  | Correos<br>Post office  |  | 372.1 |

Supplementary National Symbols

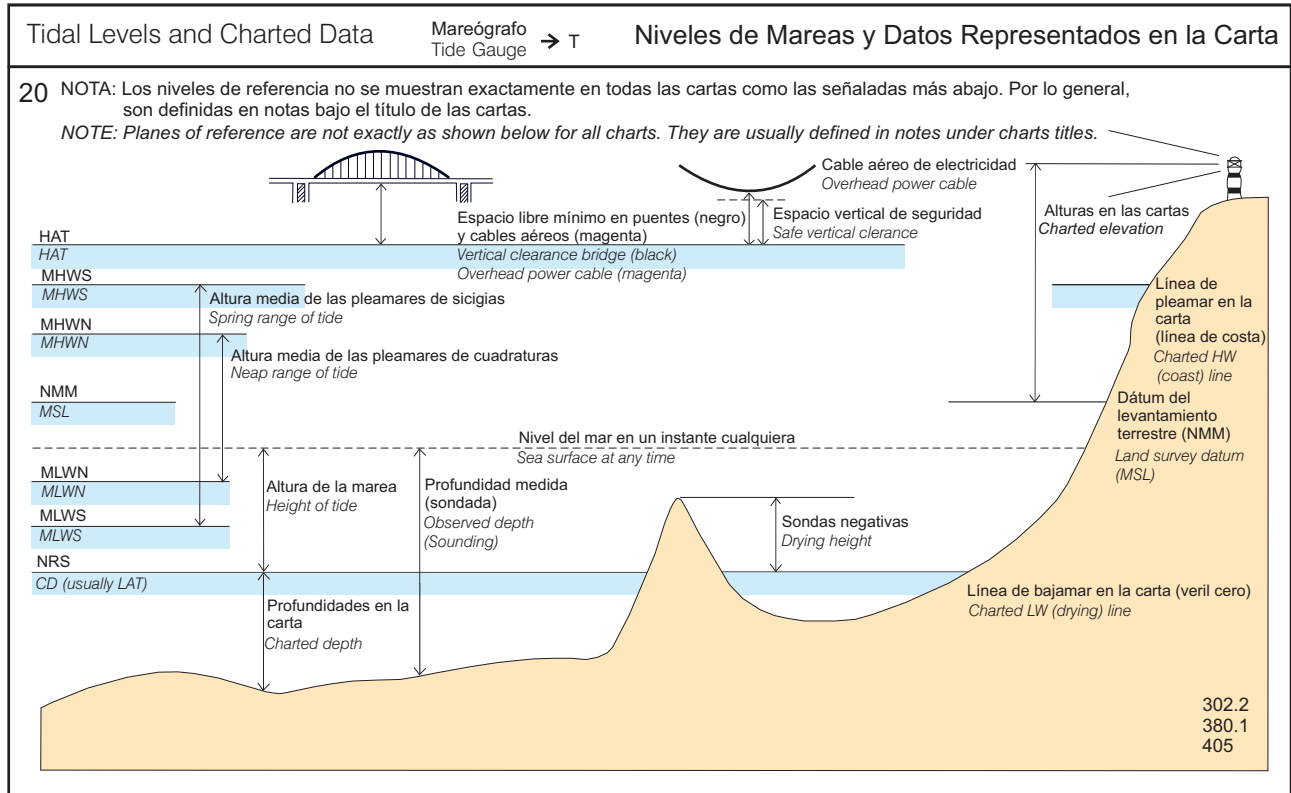
Simbolos Nacionales Suplementarios

|   |  |                               |  |  |
|---|--|-------------------------------|--|--|
| a |  | Bitá, Noray<br>Bitte, Bollard |  |  |
| b |  | Cuarentena<br>Quarantine      |  |  |

## Terms Relating to Tidal Levels

## Términos Relacionados con los Niveles de Marea






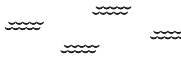




| Símbolos nacionales suplementarios<br>Supplementary national symbols: a, b, c |      |   |           |       |
|---|------|---|-----------|-------|
| 1   | CD   | Dátum de la carta. Nivel de reducción de sondas<br>Chart Datum. Datum for sounding reduction            | NRS       | 405   |
| 2   | LAT  | Mínima bajamar astronómica<br>Lowest Astronomical Tide  |           | 405.3 |
| 3   | HAT  | Máxima pleamar astronómica<br>Highest Astronomical Tide   |           |       |
| 4   | MLW  | Bajamar media<br>Mean Low Water   |           |       |
| 5   | MHW  | Pleamar media<br>Mean High Water  |           |       |
| 6   | MSL  | Nivel medio del mar<br>Mean Sea Level   | NMM       |       |
| 7   |      | Dátum de nivelación topográfica.<br>Nivel de referencia de altitudes<br>Height datum. Land survey datum |           |       |
| 8   | MLWS | Altura media de las bajamares de sicigias<br>Mean Low Water Springs                                     | Bm.M.sic. |       |
| 9   | MHWS | Altura media de las pleamares de sicigias<br>Mean High Water Springs                                    | Pm.M.sic. |       |
| 10  | MLWN | Altura media de las bajamares de cuadraturas<br>Mean Low Water Neaps                                    | Bm.M.C.   |       |
| 11  | MHWN | Altura media de las pleamares de cuadraturas<br>Mean High Water Neaps                                   | Pm.M.C.   |       |
| 12  | MLLW | Altura media de las bajamares mínimas<br>Mean Lower Low Water   | Bm.M.Inf. |       |
| 13  | MHHW | Altura media de las pleamares máximas<br>Mean Higher High Water   | Pm.M.Sup. |       |
| 14  | MHLW | Media Bajamares Máximas<br>Mean Higher Low Water  | Bm.M.Sup. |       |
| 15  | MLHW | Media Pleamares Mínimas<br>Mean Lower High Water  | Pm.M.Inf. |       |
| 16  | Sp   | Mareas de sicigias<br>Spring tide   | M de sic. |       |
| 17  | Np   | Mareas de cuadratura<br>Neap tide   | M de C.   |       |



|                       | Tide Tables   | Tablas de Marea         |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
|-----------------------|---|-------------------------|---|-------------------------|-------------------------------------|-------------------------------------|----|---|------|------|------|------|----|---|----|---|----|---------|---|-------|-----------|------------|---|----|---|----|----------|----|-------------|----|-----------------------|--|---------|---------|------------------|---------|---------|------|------|------|------|---|----|-------|-----------------------|-------------------------|-------------------|--------------------------------|----|---|----|---|----|---|----|---|----|---|----|------------|-------------------------------|---|---|----|---|----|---|----|---|----|---|----|------------------|-----------------------------|----|---|----|---|----|---|----|---|----|---|----|---|
| 30                    | <p style="text-align: center;">Tide Tables</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Place</th> <th rowspan="2">Lat.<br/>N/S</th> <th rowspan="2">Long.<br/>E/W</th> <th colspan="4">Heights in metres above Chart Datum</th> </tr> <tr> <th>MHWS</th> <th>MLWS</th> <th>MHWN</th> <th>MLWN</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p style="text-align: center;">DATOS DE MAREA</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="3">LUGAR</th> <th rowspan="3">Lat.<br/>S</th> <th rowspan="3">Long.<br/>W</th> <th colspan="4">Alturas medias en metros, sobre el dátum de sondaje (NRS)</th> </tr> <tr> <th colspan="2">SICIGIAS</th> <th colspan="2">CUADRATURAS</th> </tr> <tr> <th>PLEAMAR</th> <th>BAJAMAR</th> <th>PLEAMAR</th> <th>BAJAMAR</th> </tr> </thead> <tbody> <tr> <td>ESTERO QUITRALCO</td> <td>45° 38'</td> <td>73° 27'</td> <td>2,91</td> <td>0,36</td> <td>2,20</td> <td>1,21</td> </tr> </tbody> </table>   | Place                   | Lat.<br>N/S   | Long.<br>E/W            | Heights in metres above Chart Datum |                                     |    |   | MHWS | MLWS | MHWN | MLWN |    |   |    |   |    |         |   | LUGAR | Lat.<br>S | Long.<br>W | Alturas medias en metros, sobre el dátum de sondaje (NRS) |    |   |    | SICIGIAS |    | CUADRATURAS |    | PLEAMAR               | BAJAMAR                                    | PLEAMAR | BAJAMAR | ESTERO QUITRALCO | 45° 38' | 73° 27' | 2,91 | 0,36 | 2,20 | 1,21 | <p>Diagrama tabular de mareas diurnas o semidiurnas<br/>Tabular statement of diurnal or semidiurnal tides</p> <p>Nota:<br/>El orden de las columnas tabuladas no es el mismo que el del Anuario<br/>Note:<br/>The order of columns in the tabular statement of tides does not correspond to that in the national tide tables.</p> <p style="text-align: right;">406.2<br/>406.3<br/>406.4</p> |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| Place                 | Lat.<br>N/S   |                         |   |                         | Long.<br>E/W                        | Heights in metres above Chart Datum |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
|                       |   | MHWS                    | MLWS  | MHWN                    |                                     | MLWN                                |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
|                       |   |                         |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| LUGAR                 | Lat.<br>S   | Long.<br>W              | Alturas medias en metros, sobre el dátum de sondaje (NRS) |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
|                       |   |                         | SICIGIAS  |                         | CUADRATURAS                         |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
|                       |   |                         | PLEAMAR   | BAJAMAR                 | PLEAMAR                             | BAJAMAR                             |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| ESTERO QUITRALCO      | 45° 38'   | 73° 27'                 | 2,91  | 0,36                    | 2,20                                | 1,21                                |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 31                    | <p>Corrientes de mareas referidas a...</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Horas</th> <th>Posición Geográfica</th> <th>51° 21.2'N<br/>0° 55.6'E</th> </tr> </thead> <tbody> <tr> <td>Antes de la Pleamar</td> <td rowspan="6">Dirección de la corriente (grados)</td> <td>-6</td> </tr> <tr> <td>5</td> <td>-5</td> </tr> <tr> <td>4</td> <td>-4</td> </tr> <tr> <td>3</td> <td>-3</td> </tr> <tr> <td>2</td> <td>-2</td> </tr> <tr> <td>1</td> <td>-1</td> </tr> <tr> <td>Pleamar</td> <td rowspan="6">Velocidad en mareas de sicigias (Nudos)</td> <td>0</td> </tr> <tr> <td>1</td> <td>+1</td> </tr> <tr> <td>2</td> <td>+2</td> </tr> <tr> <td>3</td> <td>+3</td> </tr> <tr> <td>4</td> <td>+4</td> </tr> <tr> <td>5</td> <td>+5</td> </tr> <tr> <td>Después de la Pleamar</td> <td rowspan="6">Velocidad en mareas de cuadraturas (Nudos)</td> <td>+6</td> </tr> <tr> <td>6</td> <td>+5</td> </tr> <tr> <td>5</td> <td>+4</td> </tr> <tr> <td>4</td> <td>+3</td> </tr> <tr> <td>3</td> <td>+2</td> </tr> <tr> <td>2</td> <td>+1</td> </tr> </tbody> </table> <p>Tidal streams referred to...</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Hours</th> <th>Geographical Position</th> <th>51° 21.2'N<br/>0° 55.6'E</th> </tr> </thead> <tbody> <tr> <td>Before High Water</td> <td rowspan="6">Directions of streams(degrees)</td> <td>-6</td> </tr> <tr> <td>5</td> <td>-5</td> </tr> <tr> <td>4</td> <td>-4</td> </tr> <tr> <td>3</td> <td>-3</td> </tr> <tr> <td>2</td> <td>-2</td> </tr> <tr> <td>1</td> <td>-1</td> </tr> <tr> <td>High Water</td> <td rowspan="6">Rates at spring tides (knots)</td> <td>0</td> </tr> <tr> <td>1</td> <td>+1</td> </tr> <tr> <td>2</td> <td>+2</td> </tr> <tr> <td>3</td> <td>+3</td> </tr> <tr> <td>4</td> <td>+4</td> </tr> <tr> <td>5</td> <td>+5</td> </tr> <tr> <td>After High Water</td> <td rowspan="6">Rates at neap tides (knots)</td> <td>+6</td> </tr> <tr> <td>6</td> <td>+5</td> </tr> <tr> <td>5</td> <td>+4</td> </tr> <tr> <td>4</td> <td>+3</td> </tr> <tr> <td>3</td> <td>+2</td> </tr> <tr> <td>2</td> <td>+1</td> </tr> </tbody> </table> | Horas                   | Posición Geográfica                                       | 51° 21.2'N<br>0° 55.6'E | Antes de la Pleamar                 | Dirección de la corriente (grados)  | -6 | 5 | -5   | 4    | -4   | 3    | -3 | 2 | -2 | 1 | -1 | Pleamar | Velocidad en mareas de sicigias (Nudos) | 0     | 1         | +1         | 2   | +2 | 3 | +3 | 4        | +4 | 5           | +5 | Después de la Pleamar | Velocidad en mareas de cuadraturas (Nudos) | +6      | 6       | +5               | 5       | +4      | 4    | +3   | 3    | +2   | 2   | +1 | Hours | Geographical Position | 51° 21.2'N<br>0° 55.6'E | Before High Water | Directions of streams(degrees) | -6 | 5 | -5 | 4 | -4 | 3 | -3 | 2 | -2 | 1 | -1 | High Water | Rates at spring tides (knots) | 0 | 1 | +1 | 2 | +2 | 3 | +3 | 4 | +4 | 5 | +5 | After High Water | Rates at neap tides (knots) | +6 | 6 | +5 | 5 | +4 | 4 | +3 | 3 | +2 | 2 | +1 | <p>Tabla de corrientes de mareas<br/>Tidal stream table</p> <p style="text-align: right;">407.2<br/>407.3</p> |
| Horas                 | Posición Geográfica   | 51° 21.2'N<br>0° 55.6'E |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| Antes de la Pleamar   | Dirección de la corriente (grados)  | -6                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 5                     |   | -5                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 4                     |   | -4                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 3                     |   | -3                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 2                     |   | -2                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 1                     |   | -1                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| Pleamar               | Velocidad en mareas de sicigias (Nudos)   | 0                       |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 1                     |   | +1                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 2                     |   | +2                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 3                     |   | +3                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 4                     |   | +4                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 5                     |   | +5                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| Después de la Pleamar | Velocidad en mareas de cuadraturas (Nudos)  | +6                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 6                     |   | +5                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 5                     |   | +4                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 4                     |   | +3                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 3                     |   | +2                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 2                     |   | +1                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| Hours                 | Geographical Position   | 51° 21.2'N<br>0° 55.6'E |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| Before High Water     | Directions of streams(degrees)  | -6                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 5                     |   | -5                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 4                     |   | -4                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 3                     |   | -3                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 2                     |   | -2                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 1                     |   | -1                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| High Water            | Rates at spring tides (knots)   | 0                       |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 1                     |   | +1                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 2                     |   | +2                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 3                     |   | +3                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 4                     |   | +4                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 5                     |   | +5                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| After High Water      | Rates at neap tides (knots)   | +6                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 6                     |   | +5                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 5                     |   | +4                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 4                     |   | +3                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 3                     |   | +2                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |
| 2                     |   | +1                      |   |                         |                                     |                                     |    |   |      |      |      |      |    |   |    |   |    |         |   |       |           |            |   |    |   |    |          |    |             |    |                       |  |         |         |                  |         |         |      |      |      |      |   |    |       |                       |                         |                   |                                |    |   |    |   |    |   |    |   |    |   |    |            |                               |   |   |    |   |    |   |    |   |    |   |    |                  |                             |    |   |    |   |    |   |    |   |    |   |    |   |

## Tidal Streams and Currents

## Corrientes de Mareas y Corrientes

| Rompientes<br>Breakers | → K   | Mareógrafo<br>Tide Gauge  | → T   |       |
|------------------------|---|---|---|-------|
| 40                     |    | Corriente de flujo, marea llenante<br>(con indicación de velocidad)<br>Flood tide stream (with rate)  |   | 407.4 |
| 41                     |    | Corriente de reflujo, marea vaciante<br>(con indicación de velocidad)<br>Ebb tide stream (with rate)  |   | 407.4 |
| 42                     |    | Corriente en aguas restringidas (donde las mareas<br>no ejercen mayor influencia sobre la corriente)<br>Current in restricted waters        |   | 408.2 |
| 43                     |    | Corrientes oceánicas permanentes o estacionales<br>(con indicación de velocidad)<br>Ocean current are permanent or seasonal<br>(with rates) |  | 408.3 |
| 44                     |    | Escarceos, Rizos, Correntadas<br>Overfalls, Tide rips, Races  |  | 423.1 |
| 45                     |    | Remolinos<br>Eddies   |   | 423.3 |
| 46                     |  | Posición de datos tabulados de corrientes de marea<br>con designación<br>Position of tabulated tidal stream data with designation           |   | 407.2 |
| 47                     |  | Posición en la mar de la que se dan datos tabulados<br>de Marea<br>Offshore position for which tidal levels are tabulated                   |   | 406.5 |

## Supplementary National Symbols

## Símbolos Nacionales Suplementarios




|   |  |  |                     |   |
|---|--|--|---------------------|---|
| a |  | Establecimiento del Puerto<br>Establishment of the Port,<br>High water full and change | E. del P.           | † |
| b |  | Rango de la Marea en Sicgia<br>Spring tide range                                       | R. de la M. en sic. | † |
| c |  | Amplitud de la Marea en Sicgia<br>Spring tide range                                    | A. de la M. en sic. | † |

# Depths

# Profundidades

## General


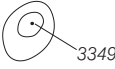

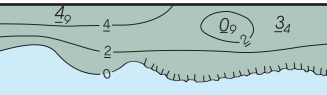
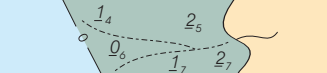
## Generalidades

|     |   |  |   |                        |
|-----|---|--|---|------------------------|
| 1   | ED  | Existencia dudosa, normalmente asociado a veril de advertencia<br>Existence doubtful, mainly associated to a warning depth contour                 |   | 417<br>424.3           |
| 2   | SD  | Sonda de profundidad dudosa, normalmente asociado a veril de advertencia<br>Doubtful sounding, mainly associated to a warning depth contour        |   | 417<br>424.4           |
| 3.1 | Rep   | Información no confirmada por levantamientos hidrográficos<br>Reported, but not confirmed  |   | 417<br>424.5           |
| 3.2 | Rep (2003)  | Información sin confirmar, con año de la misma<br>Reported with year of report, but not confirmed  |   |                        |
| 4   |   | Denuncio de profundidad o peligro sin confirmar (cartas de pequeña escala)<br>Reported, but not confirmed, sounding or danger (small scale charts) |  | S-4<br>Part.C<br>404.3 |

## Soundings

Símbolos nacionales suplementarios: b, c  
Supplementary national symbols:

## Sondas

| Plano de referencia de profundidades<br>Plane of reference for Depths → H |  | Plano de referencia de alturas<br>Plane of reference for Heights → H  |                              |
|---|--|---|------------------------------|
| 10  | 12                      9,   | Sondas en su posición verdadera<br>Sounding in true position  | 403.1<br>410<br>412<br>412.1 |
| 11  |  + (12)  | Sondas fuera de posición<br>Sounding out of position  | 412<br>412.1<br>412.2        |
| 12  |   | Mínima profundidad en un canal estrecho<br>Least depth in narrow channel  | 412<br>412.1<br>412.2        |
| 13  | $\frac{\cdot}{330}$  | A la profundidad indicada, no se encontró fondo<br>No bottom found at depth shown   | 412.3                        |
| 14  | 12                      9,   | Sondas de poca fiabilidad o sacadas de documentos de menor escala o levantamientos antiguos<br>Sounding which are unreliable or taken from a smaller scale source | 412.4<br>417.3               |
| 15  |   | Sondas negativas (por encima del cero hidrográfico)<br>Drying heights (above chart datum)   | 413<br>413.1<br>413.2        |
| 16  |   | Cauce de un río (en una zona intermareal)<br>Natural watercourse (in intertidal area)   | 413.3                        |

# Depths

# Profundidades

Símbolos nacionales suplementarios: e  
 Supplementary national symbols:

## Depths in Fairways and Areas

## Profundidades en Canales y Áreas

Plano de referencia de profundidades → H  
 Plane of reference for Depths

|    |              |  |              |                                     |
|----|--------------|--|--------------|-------------------------------------|
| 20 |              | Límite de área dragada<br>Limit of dredged area  |              | 414.3                               |
| 21 |              | Canal o área dragada con profundidad indicada en metros o decímetros<br>Dredged channel or area with depth of dredging in metres and decimetres  |              | 414                                 |
| 22 |              | Área sin mantenimiento regular<br>Canal o área dragada con indicación de la profundidad y año del último levantamiento de control<br>Areas not regularly maintained<br>Dredged channel or area with depth of dredging and year of the latest control survey  |              | 414.1                               |
| 23 |              | Área con mantenimiento regular<br>Canal o área dragada con profundidad mantenida<br>Areas regularly maintained<br>Dredged channel or area with maintained depth  |              | 414.2                               |
| 24 |              | Área barrida con rastra hidrográfica con indicación de la profundidad. La fecha del último rastreo se indica entre paréntesis<br>Depth at chart datum, to which an area has been swept by wire drag. The latest date of sweeping may be shown in parentheses |              | 415<br>415.1                        |
| 25 | <br><br><br> | Zona no hidrografiada o hidrografiada insuficientemente<br>Unsurveyed or inadequately surveyed area; area with inadequate depth information  | <br><br><br> | 410<br>417<br>417.6<br>417.7<br>418 |

Depth Contours

Símbolos nacionales suplementarios:  
Supplementary national symbols: a, d

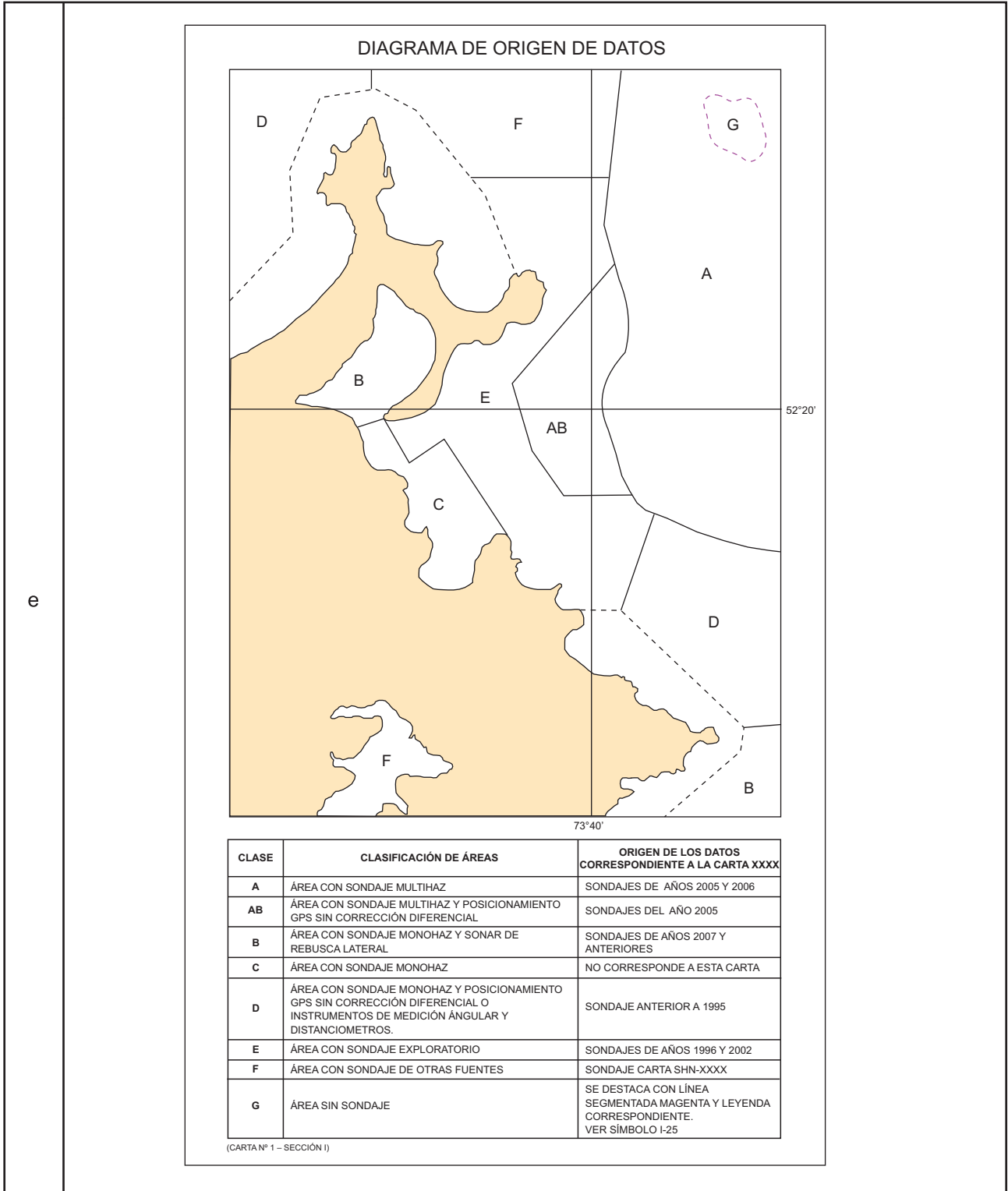
Veriles

|    |   |   |  |  |
|----|---|---|--|--|
| 30 | <p>2<br/>0<br/>2<br/>3<br/>5<br/>8<br/>10<br/>15<br/>20<br/>25<br/>30<br/>40<br/>50<br/>75<br/>100<br/>200<br/>300<br/>400<br/>500<br/>600<br/>700<br/>800<br/>900<br/>1000<br/>2000<br/>3000<br/>4000<br/>5000<br/>6000<br/>7000<br/>8000<br/>9000<br/>10000</p> | <p>← Línea de Bajamar<br/>Low Water line</p> <p>Pueden usarse uno o dos matices de color azul en vez de veriles con franja<br/>One or two lighter blue tints may be used instead of the "ribbons"</p> |  | <p>404.2<br/>410<br/>411<br/>411.6</p> |
|    | 31  | <p>Veriles aproximados<br/>Approximate depth contours</p>   |  | <p>411.2<br/>417.5</p>                 |

Supplementary National Symbols

Símbolos Nacionales Suplementarios

|   |  |    |  |
|---|--|----|--|
| a | <p>Veril de advertencia<br/>Warning depth contour</p>  |    |  |
| b | <p>Posición aproximada, normalmente asociada a veril de advertencia<br/>Approximate position, mainly associated to a warning depth contour</p> | PA |  |
| c | <p>Posición dudosa, normalmente asociada a veril de advertencia<br/>Doubtful position, mainly associated to a warning depth contour</p>        | PD |  |
| d | <p>Veril insidioso<br/>Hazardous depth contour</p>   |    |  |





Supplementary National Notes

Notas Nacionales Suplementarias

|   |   |
|---|---|
| <p>A.- AREA WITH MULTIBEAM SOUNDING. Controlled, Systematic survey of high position and depth accuracy achieved using real-time DGPS or Omnistar and a multibeam system.</p> <p>AB.- AREA WITH MULTIBEAM SOUNDING AND GLOBAL POSITIONING SYSTEM (GPS), NO DIFFERENTIAL CORRECTION. Controlled, Systematic survey using Global Positioning System (GPS) no differential correction.</p> <p>B.- AREA WITH SINGLE BEAM SOUNDING AND SIDE SCAN SONAR. Controlled, Systematic survey of high position and depth accuracy achieved using, Differential Global Positioning System (DGPS) (real time or post-process) and a single beam echo sounder used for depth determination, and side scan sonar for detection of navigational hazards.</p> <p>C.- AREA WITH SINGLE BEAM SOUNDING. Controlled, Systematic survey of high position and depth accuracy achieved using, Differential Global Positioning System (DGPS) (real time or post-process) or three angle methods and modern single beam echo sounder. Uncharted features and hazardous to navigation may exist.</p> <p>D.- AREA WITH SINGLE BEAM SOUNDING AND GLOBAL POSITIONING SYSTEM (GPS), NO DIFFERENTIAL CORRECTION OR ABSOLUTE MODE OR ANGLE MEASURING INSTRUMENTS AND DISTANCE METERS. Controlled, Systematic survey of lower position and depth accuracy achieved using a Global Positioning System no differential correction or an optical and mechanical measuring system (angle-angle, angle-distance, two distances).</p> <p>E.- AREA WITH EXPLORATORY SOUNDING. Non-systematic and non-controlled survey that responds to a preliminary surveying of the area without considering the standard established related to the spacing between lines of soundings.</p> <p>F.- AREA WITH SOUNDINGS FROM OTHER SOURCES. Bathymetric information obtained from another hydrographic office or directly from international charts in accordance with the IHO standards.</p> <p>G.- UNSURVEYED AREA. Area that does not have any kind of bathymetric information.</p> | <p>A.- <b>ÁREA CON SONDAJE MULTIBEAM.</b> Levantamiento controlado y sistemático, de gran exactitud en posición y profundidad, logrado a través del uso de sistemas DGPS Tiempo Real u Omnistar y un equipo Multibeam.</p> <p>AB.- <b>ÁREA CON SONDAJE MULTIBEAM Y POSICIONAMIENTO GPS SIN CORRECCIÓN DIFERENCIAL.</b> Levantamiento controlado y sistemático utilizando sistema de posicionamiento GPS sin corrección diferencial.</p> <p>B.- <b>ÁREA CON SONDAJE MONOBEAM Y SONAR DE REBUSCA LATERAL.</b> Levantamiento controlado y sistemático, de gran exactitud en posición y profundidad, logrado a través del uso de un sistema DGPS (tiempo real o post-proceso) y un ecosonda monobeam para la determinación de profundidades, complementado además, con un sonar de rebusca lateral para la detección de peligros a la navegación.</p> <p>C.- <b>ÁREA CON SONDAJE MONOBEAM.</b> Levantamiento controlado y sistemático, de gran exactitud en posición y profundidad, logrado a través del uso de un sistema DGPS (tiempo real o post-proceso) o metodología de tres ángulos y el empleo de un ecosonda de haz simple moderno. Pueden existir rasgos no cartografiados o peligros para la navegación.</p> <p>D.- <b>ÁREA CON SONDAJE MONOBEAM Y POSICIONAMIENTO GPS SIN CORRECCIÓN DIFERENCIAL O INSTRUMENTOS DE MEDICIÓN ANGULAR Y DISTANCIOMETROS.</b> Levantamiento controlado y sistemático de menor exactitud en posición y profundidad logrado a través del uso de un sistema de posicionamiento GPS sin corrección diferencial o de un sistema de medición óptico-mecánico (ángulo-ángulo, ángulo y distancia, dos distancias).</p> <p>E.- <b>ÁREA CON SONDAJE EXPLORATORIO.</b> Levantamiento no controlado y no sistemático que obedece a un reconocimiento preliminar del área no considerando la norma establecida en la separación entre corridas de sondas.</p> <p>F.- <b>ÁREA CON SONDAJES DE OTRAS FUENTES.</b> Información batimétrica obtenida de otras oficinas hidrográficas, o directamente de cartas internacionales conforme a la norma OHI.</p> <p>G.- <b>ÁREA SIN SONDAJE.</b> Área que no cuenta con información batimétrica de ningún tipo.</p> |
|---|---|

Types of Seabed

Tipos de Fondo

| Rocas<br>Rocks | → K              | Abreviaturas nacionales suplementarias<br>Supplementary national abbreviations:   | a - d |                |
|----------------|------------------|---|-------|----------------|
| 1              | S                | Arena<br>Sand   | A     | 425<br>427     |
| 2              | M                | Fango<br>Mud  | F     | 425<br>427     |
| 3              | Cy               | Arcilla<br>Clay   | Arc.  | 425<br>427     |
| 4              | Si               | Limo<br>Silt  |       | 425<br>427     |
| 5              | St               | Piedras<br>Stones   | P     | 425<br>427     |
| 6              | G                | Cascajo<br>Gravel   | C     | 425<br>427     |
| 7              | P                | Guijarro, Canto rodado<br>Pebbles   | G     | 425<br>427     |
| 8              | Cb               | Guijarro grueso<br>Cobbles  | Ggru  | 425<br>427     |
| 9              | R                | Roca<br>Rock  | R     | 425<br>427     |
| 10             | Co               | Coral y algas coralinas<br>Coral and Coralline algae  | Co    | 425<br>427     |
| 11             | Sh               | Conchuela (restos de conchuela)<br>Shells (skeletal remains)  | Cc    | 425<br>427     |
| 12.1           | S / M            | Dos calidades, p. ej. Arena sobre fango<br>Two layers, e. g. Sand over mud  | A / F |                |
| 12.2           | fS.M.Sh<br>fSMSh | En el caso de calidades múltiples, la calidad dominante está indicada en primer lugar, p. ej. Arena fina con fango y conchuela<br>Admixtures are shown behind main constituent of the deposits, e. g. fine sand with mud and shells | AfFc  | 425.8<br>425.9 |
| 13.1           | Wd               | Algas marinas<br>Weed (including Kelp)  | Alg.  | 425.5<br>428.2 |
| 13.2           |                  | Algas marinas<br>Kelps  |       |                |
| 14             |                  | Dunas submarinas<br>Sandwaves   |       | 428.1          |
| 15             |                  | Manantial en el fondo del mar<br>Spring in seabed   |       | 428.3          |

Types of Seabed, Intertidal Areas

Símbolos nacionales suplementarios:  
Supplementary national symbols: g

Tipos de fondo, Áreas Intermareales

|    |  |  |  |       |
|----|--|--|--|-------|
| 20 |  | Área con piedra o cascajo<br>Areas with stones or gravel                       |  | 426.1 |
| 21 |  | Arrecife de roca que cubre y descubre<br>Rocky area which covers and uncovers  |  | 426.2 |
| 22 |  | Arrecife de coral que cubre y descubre<br>Coral reef which covers and uncovers |  | 426.3 |

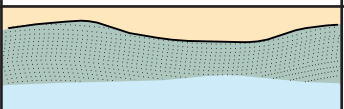
## Qualifying Terms

## Calificativos

| Abreviaturas nacionales suplementarias<br>Supplementary national abbreviations: e, f |           |                                |            |                |
|--|-----------|--------------------------------|------------|----------------|
| 30   | <i>f</i>  | Fino<br>Fine                   |            | 425<br>427     |
| 31   | <i>m</i>  | Medio<br>Medium                |            | 425<br>427     |
| 32   | <i>c</i>  | Grueso<br>Coarse               | <i>gru</i> | 425<br>427     |
| 33   | <i>bk</i> | Quebrado<br>Broken             |            | 425<br>427     |
| 34   | <i>sy</i> | Viscoso<br>Sticky              |            | 425<br>427     |
| 35   | <i>so</i> | Blando<br>Soft                 | <i>bo</i>  | 425<br>427     |
| 36   | <i>sf</i> | Rígido, firme<br>Stiff         |            | 425<br>427     |
| 37   | <i>v</i>  | Volcánico<br>Volcanic          |            | 425<br>427     |
| 38   | <i>ca</i> | Calcáreo, caliza<br>Calcareous | <i>cal</i> | 425<br>427     |
| 39   | <i>h</i>  | Duro<br>Hard                   | <i>d</i>   | 425.5<br>425.7 |

## Supplementary National Abbreviations, Symbol

## Símbolo, Abreviaturas Nacionales Suplementarias

|   |  |   |   |  |
|---|--|---|---|--|
| a |  | Greda<br>Chalk                                    | <i>Gr</i>   |  |
| b |  | Escoria<br>Scoria                                 | <i>Esc</i>  |  |
| c |  | Ostra<br>Oysters                                  | <i>Os</i>   |  |
| d |  | Esponja<br>Sponge                                 | <i>Esp</i>  |  |
| e |  | Pequeño<br>Small                                  | <i>peq</i>  |  |
| f |  | Grande<br>Large                                   | <i>gde</i>  |  |
| g |  | Área de arena, banco de arena<br>Sand area, Shoal |  |  |

# K Rocks, Wrecks, Obstructions

# Rocas, Naufragios, Obstrucciones

## General

## Generalidades

|   |  |   |                       |
|---|--|---|-----------------------|
| 1 |  | <p><b>Línea de peligro:</b> Una línea de peligro llama la atención sobre un peligro que no resaltaría claramente si estuviese representado sólo por su símbolo (por ejemplo: roca aislada); o delimita una zona peligrosa para la navegación por la existencia de diversos peligros</p> <p>Danger line: 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</p> | 411.4<br>420.1        |
| 2 |  | <p>Explorado con rastra hidrográfica o buzos</p> <p>Swept by wire drag or diver</p>   | 415<br>422.3<br>422.9 |
| 3 |  | <p>Sonda desconocida pero que se estima mayor que la sonda indicada</p> <p>Depth unknown, but estimated to have a safe clearance to the depth shown</p>   | 422.5<br>422.9        |

## Rocks

## Rocas

|      | Plano de referencia de las alturas<br>Plane of reference for Heights → H |   | Plano de referencia de profundidades<br>Plane of reference for Depths → H |       |
|------|--|---|---|-------|
| 10   |  | Roca (islote) que nunca cubre, altura referida al NMM     |   | 421.1 |
| 11   |  | Roca que cubre y descubre, altura referida al NRS         |   | 421.2 |
| 12   |  | Roca a flor de agua respecto al NRS                       |   | 421.3 |
| 13   |  | Roca siempre cubierta de profundidad dudosa               |   | 421.4 |
| 14.1 |  | Roca peligrosa, siempre cubierta con profundidad conocida |   | 421.4 |

|      |         |   |  |       |
|------|---------|---|--|-------|
| 14.2 |         | Fuera del área correspondiente a su profundidad<br>Outside the corresponding depth area, dangerous to surface navigation                          |  | 421.4 |
| 15   | 21<br>R | Roca siempre sumergida, no peligrosa para la navegación con profundidad conocida<br>Underwater rock, not dangerous to navigation with depth known |  | 421.4 |
| 16   |         | Arrecife de coral siempre sumergido<br>Coral reef which always covered  |  | 421.5 |
| 17   |         | Rompientes<br>Breakers  |  | 423.2 |

Wrecks

Naufragios

| Plano de referencias de profundidades<br>Plane of reference for Depths |  | → H | Naufragios históricos<br>Historic wreck   |       |
|--|--|-----|---|-------|
| 20   |  |     | Naufragio siempre visible, en cartas de gran escala<br>Wreck, hull always dry, on large-scale charts  | 422.1 |
| 21   |  |     | Naufragio que cubre y descubre, en cartas de gran escala<br>Wreck, covers and uncovers, on large-scale charts                               | 422.1 |
| 22   |  |     | Naufragio sumergido de profundidad conocida, en cartas de gran escala<br>Submerged wreck, of known depth, on large-scale charts             | 422.1 |
| 23   |  |     | Naufragio sumergido de profundidad desconocida, en cartas de gran escala<br>Submerged wreck, of unknown depth, on large-scale charts        | 422.1 |
| 24   |  |     | Naufragio siempre visible<br>Wreck showing any portion of hull or superstructure  | 422.2 |
| 25   |  |     | Naufragio con mástiles visibles<br>Wreck of which the masts only are visible at Chart Datum   | 422.2 |
| 26   |  |     | Naufragio de profundidad mínima conocida y obtenida por sondaje<br>Wreck, least depth known by sounding only                                | 422.4 |
| 27   |  |     | Naufragio de profundidad mínima conocida y obtenida por rastra hidrográfica o buzo<br>Wreck, least depth known, swept by wire drag or diver | 422.3 |

# K Rocks, Wrecks, Obstructions


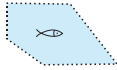

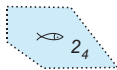




# Rocas, Naufragios, Obstrucciones

|    |    |  |   |       |
|----|----|--|---|-------|
| 28 |    | <b>Naufragio peligroso con profundidad desconocida</b><br>Dangerous wreck, depth unknown   |   | 422.5 |
| 29 | ++ | <b>Naufragio no peligroso con profundidad desconocida</b><br>Non-dangerous wreck, depth unknown  |   | 422.6 |
| 30 |    | <b>Naufragio no explorado cuya profundidad mínima se desconoce, pero que se considera superior a la indicada</b><br>Non-explored wreck, least depth unknown, but considered to have a safe clearance to the depth shown  |   | 422.7 |
| 31 | #  | <b>Área con restos de naufragios o fondos sucios no peligrosos para la navegación, que debe ser evitada para fondeo, pesca de arrastre, etc.</b><br>Remains of a wreck, or other foul area, non-dangerous to navigation but to be avoided by vessels anchoring, trawling, etc. | # | 422.8 |

## Obstructions








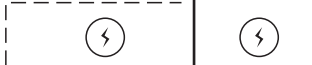
## Obstrucciones

| Plano de referencia de profundidades<br>Plane of reference for Depths → H |       | Algas, Hierbas marinas<br>Kelp, Sea Weed → J | Cabeza de pozo submarino<br>Well → L |   |                |
|---|-------|--|--------------------------------------|---|----------------|
| 40  |       |  |                                      | Obstrucción cuya profundidad se desconoce<br>Obstruction, depth unknown   | 422.9          |
| 41  |       |  |                                      | Obstrucción cuya profundidad mínima se conoce<br>Obstruction, least depth known   | 422.9          |
| 42  |       |  |                                      | Obstrucción de la que se conoce la mínima profundidad explorada por rastra o buzos<br>Obstruction, least depth known, swept by wire drag or diver | 422.9          |
| 43.1  | τ τ τ |  |                                      | Postes o pilotes sumergidos<br>Stumps of posts or piles wholly submerged  | 327.5          |
| 43.2  |       |  |                                      | Postes o pilotes sumergidos (situación conocida)<br>Submerged pile, stake snag, well or stump (with exact position)                               |                |
| 44.1  |       |  |                                      | Postes o estacas que delimitan áreas de pesca<br>Fishing stakes   | 447.1<br>447.2 |
| 44.2  |       |  |                                      | Balsas de cultivo de peces<br>Fish trap, Fish weirs, Tunny nets   |                |
| 45  |       |  |                                      | Área de pesca<br>Fish trap area, tunny nets area  | 447.3          |

|      |  |  |  |  |       |
|------|--|--|--|--|-------|
| 46.1 |   |   | Vivero o refugio de peces<br>Fish haven  |  | 447.5 |
| 46.2 |   |   | Vivero o refugio de peces cuya mínima profundidad se conoce<br>Fish haven with minimum depth known |  |       |
| 47   |   |  | Viveros<br>Shellfish beds  |  | 447.4 |
| 48.1 |   |  | Granja marina (en cartas de gran escala)<br>Marine farm (on large-scale charts)                    |  | 447.6 |
| 48.2 |  |  | Granja marina (en cartas de pequeña escala)<br>Marine farm (on small-scale charts)                 |  |       |









General

Generalidades

| Áreas, Límites<br>Areas, Limits |   | → N   |                            |
|---------------------------------|---|---|----------------------------|
| 1                               |    | OILFIELD<br>Nombre de campo petrolífero o de gas<br>Name of oilfield or gasfield                              | CAMPO PETROLÍFERO<br>445.3 |
| 2                               |    | Plataforma con su designación o nombre<br>Platform with designation/name                                      | 445.3                      |
| 3                               |    | Límite de área de seguridad alrededor de una instalación<br>Limit of safety zone around offshore installation | 439.2<br>445.3             |
| 4                               |    | Límite de área de explotación<br>Limit of development area  |                            |
| 5.1                             |    | Turbina eólica<br>Wind turbine  | 445.8<br>445.9             |
| 5.2                             |    | Campo de turbinas eólicas<br>Wind farm  |                            |
|                                 |   | Campo de turbinas eólicas con área restringida<br>Wind farm with restricted area                              |                            |
| 6                               |  | Parque de olas<br>Wave farm   | 445.12                     |

Platforms and Moorings

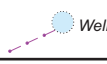





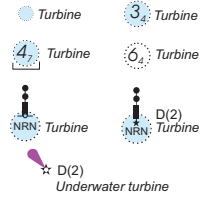
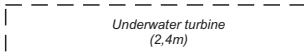


Plataformas y Atracaderos

| Boyas de Amarre<br>Mooring Buoys |   | → Q   |   |
|----------------------------------|---|---|---|
| 10                               |  | Plataforma de producción, Plataforma, Torre petrolífera<br>Production platform, Platform, Oil derrick   | 445.2   |
| 11                               |  | Antorcha (en el mar)<br>Flare stack (at sea)  | 445.6   |
| 12                               |  | Torre de amarre. Plataforma de amarre por un solo punto (SPM). Plataforma articulada de carga (ALC)<br>Single Point Mooring, (SPM) including Single Anchor Leg Mooring (SALM), Articulated Loading Column (ALC) | 445.4   |
| 13                               |   | Plataforma de observación o prospección (con nombre)<br>Observation/research platform (with name)   |  |
| 14                               |  | Plataforma abandonada<br>Disused platform   | 445.2   |
| 15                               |   | Isla artificial (con nombre)<br>Artificial Island (with name)   |   |
| 16                               |  | Boya para carga de buques cisterna<br>Oil or Gas installation buoy, Catenary Anchor Leg Mooring (CALM), Single Buoy Mooring (SBM)   | 445.4   |
| 17                               |  | Buque cisterna<br>Moored storage tanker   | 445.5   |
| 18                               |  | Aparejos de fondeo en el fondo<br>Mooring ground tackle   | 431.6   |








Underwater Installations

Instalaciones Submarinas

| Nivel de Referencia de Profundidades<br>Plane of Reference for Depths → H |   | Obstrucciones<br>Obstructions → K  |                  |
|---|---|--|------------------|
| 20  |    | Pozo de producción submarina<br>Submerged production well  | 445.5            |
| 21.1  |    | Pozo fuera de servicio de profundidad desconocida<br>Suspended well, depth over wellhead unknown | 445.1            |
| 21.2  |    | Pozo fuera de servicio de profundidad conocida<br>Suspended well, with depth over wellhead       |                  |
| 21.3  |    | Altitud de la cabeza de un pozo sobre el fondo<br>Wellhead with height above the bottom          |                  |
| 22  |    | Situación de plataforma abandonada<br>Site of cleared platform                                   | 422.8            |
| 23  |    | Cabeza de pozo que emerge con luz o sin ella<br>Above-water wellheads (lit or unlit)             | 445.7            |
| 24  |   | Turbina Submarina<br>Underwater turbine  | 445.10<br>445.11 |
|   |  | Campo de Turbinas<br>Current farm, Turbine field   |                  |
|   |  | Campo de Turbinas con área restringida<br>Current farm, Turbine field with restricted area       |                  |
| 25  |  | ODAS Sumergidas<br>Subsurface ODAS (Oceanographic Data Acquisition System)                       | 448.4            |

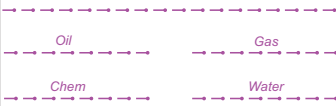
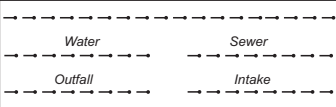
Submarine Cables

Cables Submarinos

|      |   |  |                         |
|------|---|--|-------------------------|
| 30.1 |  | Cable submarino<br>Submarine cable                                 | 439.3<br>443.1<br>443.3 |
| 30.2 |  | Área de cables submarinos<br>Submarine cable zone                  |                         |
| 31.1 |  | Cable eléctrico submarino<br>Submarine power cable                 | 443.2<br>443.3          |
| 31.2 |  | Área de cables eléctricos submarinos<br>Submarine power cable area |                         |
| 32   |  | Cable submarino abandonado<br>Disused submarine cable              | 443.7                   |

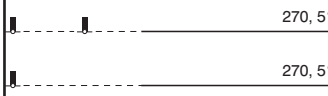
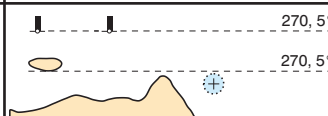
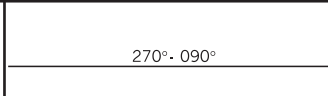
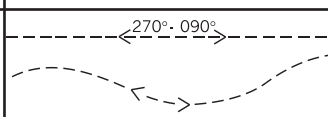
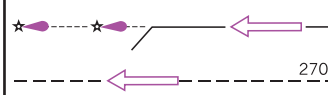
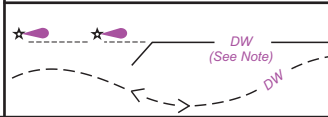
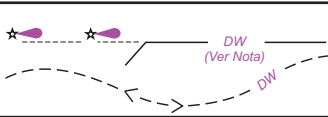
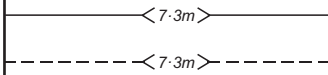
Submarine Pipelines

Cañerías Submarinas

|      |   |  |   |                                |
|------|---|--|---|--------------------------------|
| 40.1 |    | Oleoducto, gaseoducto, conducción para productos químicos, agua y sin especificación<br>Supply pipeline: unspecified, oil, gas, chemicals, water |   | 444<br>444.1<br>439.3<br>444.2 |
|      | 40.2  |   | Área de oleoductos, gaseoductos, conducción para productos químicos, agua y sin especificación<br>Supply pipeline area: unspecified, oil, gas, chemicals, water |                                |
| 41.1 |    | Cañería de agua, alcantarilla, emisario, cañería de admisión<br>Waterpipe, Sewer, Outfall pipe, Intake pipe                                      |   | 444<br>444.4<br>439.3<br>444.2 |
|      | 41.2  |   | Área de cañería de descargas submarinas<br>Area of submarine pipe   |                                |
| 42.1 |   | Tubería enterrada (con indicación de la profundidad a la que está enterrada)<br>Buried pipeline/pipe (with nominal depth to which buried)        |   | 444.5                          |
|      | 42.2  |   | Tunel de tubería<br>Pipeline Tunnel   |                                |
| 43   |  | Difusor en el extremo de un emisario<br>Diffuser, Crib   |   |                                |
| 44   |  | Tuberías submarinas abandonadas<br>Disused submarine pipeline/pipe   |   | 444.7                          |


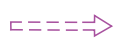






Tracks

Derrotas

| Derrota Balizada por Luces<br>Tracks Marked by Lights |   | → P | Balizas de Enfilación<br>Leading Beacons  | → Q   |                         |
|---|---|-----|---|---|-------------------------|
| 1   |    |     | Enfilación (la línea continua representa la parte navegable)<br>Leading line (firm line is the track to be followed)                      |   | 433.1<br>433.2<br>433.3 |
| 2   |    |     | Enfilación de seguridad<br>Transit, clearing line   |   | 433.4<br>433.5          |
| 3   |    |     | Derrota recomendada, basada en un sistema de marcas fijas<br>Recommended tracks based on a system of fixed marks                          |   | 434.1<br>434.2          |
| 4   |    |     | Derrota recomendada no basada en un sistema de marcas fijas<br>Recommended tracks not based on a system of fixed marks                    |   | 434.1<br>434.2          |
| 5.1   |   |     | Derrota de sentido único<br>One-way track combined with routing element   |   | 432.3                   |
| 5.2   |  |     | Derrota de doble dirección (incluyendo una nota que describe la regulación)<br>Two-way track (including a regulation described in a note) |  |                         |
| 6   |  |     | Derrota recomendada con indicación del máximo calado permitido<br>Recommended track with maximum authorised draught stated                |   | 432.4<br>434.3<br>434.4 |

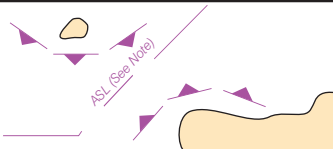

Routing Measures

Esquema de Separación de Tráfico

| Basic Symbols |   | Símbolos Básicos   |   |                         |
|---------------|---|--|---|-------------------------|
| 10            |  | Dirección obligatoria del tráfico<br>Established (mandatory) direction of traffic flow                                     |   | 435.1                   |
| 11            |  | Dirección recomendada para el tráfico<br>Recommended direction of traffic flow   |   | 435.5                   |
| 12            |  | Línea de separación (gran escala y pequeña escala)<br>Separation line (large-scale, small-scale)                           |   | 435.1<br>436.3          |
| 13            |  | Área de separación<br>Separation zone  |   | 435.1<br>436.3          |
| 14            |  | Límite de área restringida (ejemplo: zona de navegación costera)<br>Limit of restricted area (e. g.: Inshore Traffic Zone) |   | 435.1<br>436.3<br>439.2 |
| 15            |  | Límite de separación de tráfico<br>Limit of routing measure  |   | 435.1<br>436.3          |
| 16            |  | Área de precaución<br>Precautionary area   |  | 435.2                   |

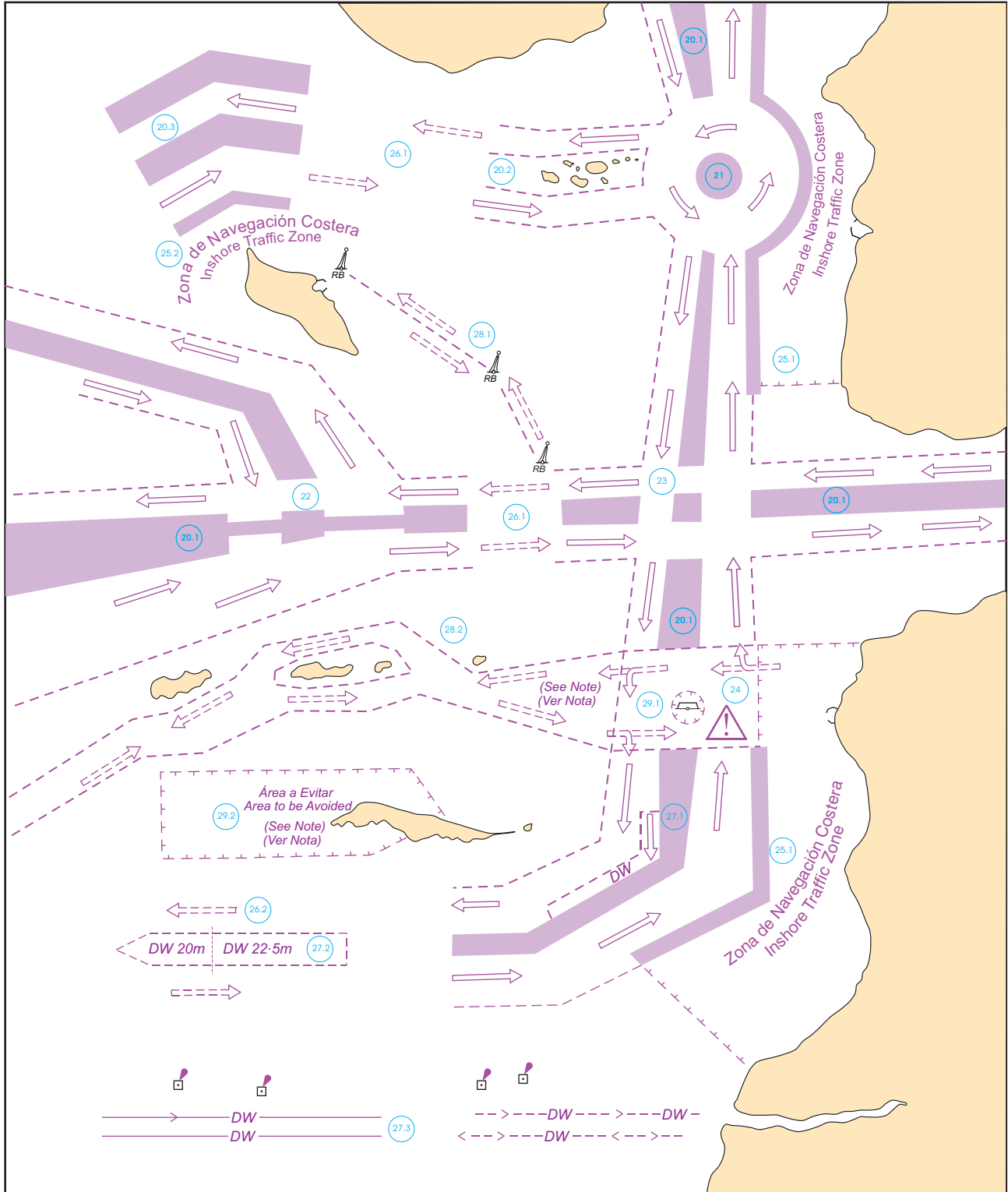
Routeing Measures

Esquema de Separación de Tráfico

| Basic Symbols |   | Símbolos Básicos   |        |
|---------------|---|--|--------|
| 17            |  <p>ASL (See Note)</p> | <p>Derrota archipelágica;<br/>línea axial y límite máximo por los cuales no deben navegar las embarcaciones<br/>Archipelagic Sea Lane;<br/>axis line and limit beyond which vessels shall not navigate</p> | 435.10 |
| 18            |  <p>FAIRWAY</p>        | <p>Canal de acceso (Fairway) designado por una autoridad o administración marítima<br/>Fairway designated by regulatory authority</p>  | 434.5  |

Examples of Routing Measures

Ejemplos de Esquema de Separación de Tráfico









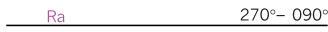

### Examples of Routing Measures

### Ejemplos de Esquemas de Separación de Tráfico

|      |  |       |
|------|--|-------|
| 20.1 | Dispositivo de separación de tráfico; con una zona de separación<br>Traffic separation scheme, with separation zone  | 435.1 |
| 20.2 | Dispositivo de separación de tráfico, pasillos de separación separado por obstrucciones naturales<br>Traffic separation scheme, traffic zones separated by natural obstructions  | 435.1 |
| 20.3 | Dispositivo de separación de tráfico, con zona de separación exterior, separando los buques que utilizan el dispositivo de los que no lo utilizan<br>Traffic separation scheme, with outer separation zone separating traffic using scheme from traffic not using it | 435.1 |
| 21   | Dispositivo de separación de tráfico, zona de giro<br>Traffic separation scheme, roundabout  | 435.1 |
| 22   | Dispositivo de separación de tráfico, con "cruce de rumbos"<br>Traffic separation scheme, with "crossing gates"  | 435.1 |
| 23   | Dispositivo de separación de tráfico en cruce, sin zona de precaución definida<br>Traffic separation scheme crossing without designated precautionary area   | 435.1 |
| 24   | Área de precaución<br>Precautionary area   | 435.2 |
| 25.1 | Zona de navegación costera, con límites extremos definidos<br>Inshore traffic zone, with defined end-limits  | 435.1 |
| 25.2 | Zona de navegación costera sin límites extremos definidos<br>Inshore traffic zone, without defined end-limits  | 435.1 |
| 26.1 | Dirección recomendada para el tráfico, entre dispositivos de separación de tráfico<br>Recommended direction of traffic flow, between traffic separation scheme   | 435.5 |
| 26.2 | Dirección recomendada para el tráfico, para buques que no necesitan una área de aguas profundas<br>Recommended direction of traffic flow, for ships not needing a deep water route   | 435.5 |
| 27.1 | Ruta de aguas profundas dentro de una calle de un dispositivo de sentido único<br>Deep water route, as part of one-way traffic lane  | 435.3 |
| 27.2 | Ruta de aguas profundas, de doble dirección, con indicación de la mínima profundidad establecida<br>Two-way deep water route, with minimum depth stated  | 435.3 |
| 27.3 | Ruta de aguas profundas. La línea axial indica una vía recomendada de sentido único o de doble sentido<br>Deep water route. Center line as recommended one-way or two-way track  | 435.3 |
| 28.1 | Ruta recomendada (su eje puede estar balizado con boyas)<br>Recommended route (often marked by centreline buoys)   | 435.4 |
| 28.2 | Ruta de doble dirección con tramos de dirección única<br>Two-way route with one-way sections   | 435.6 |
| 29.1 | Área a evitar, alrededor de una ayuda a la navegación<br>Area to be avoided, around navigational aid   | 435.7 |
| 29.2 | Área a evitar, a causa del peligro de encallar<br>Area to be avoided, because of danger of stranding   | 435.7 |



Radar Surveillance Systems

Sistemas de Control Radar

|      |   |  |   |  |              |
|------|---|--|---|--|--------------|
| 30   | <br>Radar surveillance station | Estación de control de radar<br>Radar surveillance station   |  | <br>Estación de control Radar | 487<br>487.3 |
| 31   |                                | Área de alcance del radar<br>Radar range   |  |  | 487          |
| 32.1 |                                | Línea de referencia del radar<br>Radar reference line  |   |  | 487.2        |
| 32.2 |                                | Línea de referencia del radar que coincide con una enfilación<br>Radar reference line coinciding with a leading line |  |  |              |



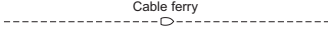
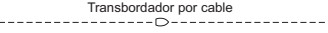
Radio Reporting Points

Puntos de Reporte Radial

|      |   |  |  |  |       |
|------|---|--|--|--|-------|
| 40.1 |   | Punto de información radial, con designación (si la tuviese) e indicación del sentido del tráfico marítimo<br>Radio reporting (calling-in or way) points showing direction(s) of vessel movement with designation (if any) |  |  | 488.1 |
| 40.2 |  | Línea de reporte radial<br>Radio reporting line  |  |  | 488.2 |

Ferries

Transbordadores

|    |   |   |   |  |       |
|----|---|---|---|--|-------|
| 50 |  | Transbordador<br>Ferry                              |  |  | 438.1 |
| 51 |  | Transbordador por cable (Teleférico)<br>Cable ferry |  |  | 438.2 |

General

Generalidades

|     | Áreas dragadas y rastreadas<br>Dredged and Swept Areas → I | Cables submarinos, Tuberías submarinas<br>Submarine Cables, Submarine Pipelines → L  | Derrotas, Rutas<br>Tracks, Routes → M |
|-----|--|--|---------------------------------------|
| 1.1 |  | Límite marítimo en general, normalmente implica obstrucciones permanentes<br>Maritime limit in general, usually implying permanent physical obstructions       | 439.1                                 |
| 1.2 |  | Límite marítimo en general, normalmente implica obstrucciones no permanentes<br>Maritime limit in general, usually implying no permanent physical obstructions |                                       |
| 2.1 |  | Límite de área restringida<br>Limit of restricted area   | 439.2<br>439.3<br>441.6               |
| 2.2 |  | Límite de área prohibida (acceso prohibido sin autorización)<br>Limit of prohibited area (unauthorised entry)  |                                       |

Anchorage, Anchorage Areas

Símbolos nacionales suplementarios:  
Supplementary national symbols: a, b



Fondeaderos, Área de Fondeo

|      |  |  |  |  |       |
|------|--|--|--|--|-------|
| 10   |  | Fondeadero recomendado (sin límites definidos)<br>Recommended anchorage (no defined limits)  |  |  | 431.1 |
| 11.1 |  | Fondeadero designado<br>Anchor berths  |  |  | 431.2 |
| 11.2 |  | Fondeadero designado con indicación del área de borneo<br>Anchor berths, swinging circle may be shown  |  |  |       |
| 12.1 |  | Área de fondeo en general<br>Anchorage area in general   |  |  | 431.3 |
| 12.2 |  | Área de fondeo numerada<br>Numbered anchorage area   |  |  |       |
| 12.3 |  | Área de fondeo con su nombre<br>Named anchorage area   |  |  |       |
| 12.4 |  | Área de fondeo de aguas profundas. Fondeadero para buques de gran calado<br>Deep water anchorage area. Anchorage area for deep draught vessels |  |  |       |
| 12.5 |  | Área de fondeo de petroleros<br>Tanker anchorage area  |  |  |       |
| 12.6 |  | Fondeadero para periodos de hasta 24 horas<br>Anchorage for periods up to 24 hours   |  |  |       |
| 12.7 |  | Área de fondeo para buques cargados con explosivos<br>Explosives anchorage area  |  |  |       |
| 12.8 |  | Área de fondeo de cuarentena<br>Quarantine anchorage area  |  |  |       |
| 12.9 |  | Fondeadero reservado<br>Reserved anchorage area  |  |  |       |

Nota: En pequeñas áreas no se representan las anclas como parte del símbolo de límite de fondeadero. También pueden representarse otros tipos de fondeaderos.

Note: Anchors as part of the limit symbols are not shown for small areas. Other types of anchorage area may be shown.

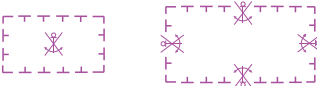


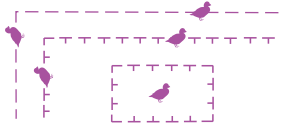
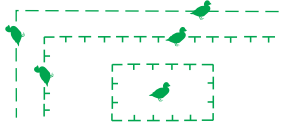
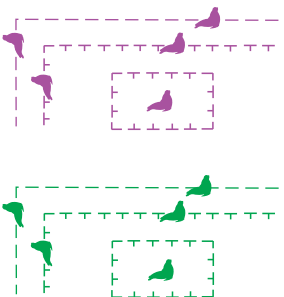
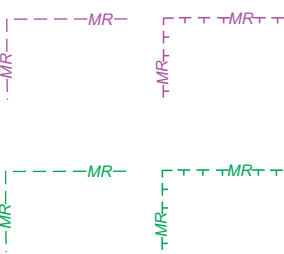












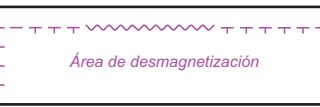
|    |   |  |       |
|----|---|--|-------|
| 13 |  | Área de amarizaje de hidroaviones<br>Seaplane landing area | 449.6 |
| 14 |  | Fondeadero de hidroaviones<br>Anchorage for sea-planes     | 449.6 |

Restricted Areas

Símbolos nacionales suplementarios: <sup>c</sup>  
Supplementary national symbols:

Áreas Restringidas

|      |   |   |   |                                   |
|------|---|---|---|-----------------------------------|
| 20   |    | Fondeadero prohibido<br>Anchorage prohibited  |  | 431.4<br>439.3<br>439.4<br>435.11 |
| 21   |    | Área prohibida de pesca<br>Fishing prohibited   |   | 439.3<br>439.4                    |
| 22   |   | Límite de reserva natural:<br>Limit of nature reserve:  |   | 437.3                             |
| 22.1 |  | Santuario de aves<br>Bird sanctuary   |   |                                   |
| 22.2 |  | Santuario marino<br>Seal sanctuary  |   |                                   |
| 22.3 |  | Reserva natural no especificada,<br>Parques nacionales, Reservas Marinas<br>Non-specific nature reserve,<br>National parks, Marine Reserves |   |                                   |

|   |  |   |   |                                  |
|---|--|---|---|----------------------------------|
| 22.4  |   | <p>Área Marítima Particularmente Sensible<br/>Particularly Sensitive Sea Area</p> <p>La banda de color verde o magenta, puede variar entre 1-5 mm<br/>The coloured tint band may vary in width between 1-5 mm</p> |   | 437.6                            |
| <p>Nota: Las siluetas de otros animales (ej. caballos de mar, pingüino, petrel) pueden ser usadas apropiadamente.<br/>Note: Other animal silhouettes (e.g. seahorse, penguin, petrel) may be used appropriately</p> |  |   |   |                                  |
| 23.1  |   |  <p>Vertedero de explosivos<br/>Explosives dumping ground</p>  |   | 442.1<br>442.2<br>442.3<br>442.4 |
| 23.2  |   | <p>Vertedero de explosivos (abandonado)<br/>Explosives dumping ground (disused)</p>   |    |                                  |
| 24  |   | <p>Vertedero de residuos químicos<br/>Dumping ground for chemical wastes</p>  |    | 442.1<br>442.2<br>442.3          |
| 25  |  | <p>Área de desmagnetización<br/>Degaussing range</p>  |   | 448.1<br>448.2                   |
| 27  | 5 kn   | <p>Velocidad máxima<br/>Maximum speed</p>   |   | 430.2                            |

Military Practice Areas

Áreas de Ejercicios Militares

|    |  |  |  |                         |
|----|--|--|--|-------------------------|
| 30 |  | Área de ejercicio de tiro<br>Firing practice area  |  | 441.1<br>441.2<br>441.3 |
| 31 |  | Área militar restringida, entrada prohibida<br>Military restricted area, entry prohibited  |  | 441.6                   |
| 32 |  | Área de ejercicios de fondeo de minas<br>Mine-laying practice area                         |  | 441.4                   |
| 33 |  | Área de ejercicios y de tránsito de submarinos<br>Submarine transit lane and exercise area |  | 441.5                   |
| 34 |  | Campo minado<br>Minefields   |  | 441.8                   |

International Boundaries and National Limits

Límites Nacionales y Fronteras Internacionales

|    |  |  |  |       |
|----|--|--|--|-------|
| 40 |  | Límite político internacional terrestre<br>International boundary on land          |  | 440.1 |
| 41 |  | Límite político internacional marítimo<br>International maritime boundary          |  | 440.3 |
| 42 |  | Líneas de base recta del mar territorial<br>Straight territorial sea baseline      |  | 440.4 |
| 43 |  | Límite exterior del mar territorial<br>Seaward limit of territorial sea            |  | 440.5 |
| 44 |  | Límite exterior de la zona contigua<br>Seaward limit of contiguous zone            |  | 440.6 |
| 45 |  | Límite de áreas de pesca<br>Limit of fishery zones                                 |  | 440.7 |
| 46 |  | Límite de plataforma continental<br>Limit of continental shelf                     |  | 440.8 |
| 47 |  | Límite de Zona Económica Exclusiva (ZEE)<br>Limit of Exclusive Economic Zone (EEZ) |  | 440-9 |
| 48 |  | Límite de Aduana<br>Customs limit  |  | 440.2 |
| 49 |  | Límite del puerto<br>Harbour limit   |  | 430.1 |

## Various Limits

## Límites Diversos

|      |  |   |  |                |
|------|--|---|--|----------------|
| 60.1 |  | Límite de hielo fijo<br>Limit of fast ice                                     |  | 449.1          |
| 60.2 |  | Límite de hielos flotantes estacional<br>Limit of sea ice (pack-ice) seasonal |  |                |
| 61   |  | Laguna de troncos<br>Log pond   |  | 449.2          |
| 62.1 |  | Vertedero de escombros<br>Spoil ground  |  | 446.1<br>446.2 |
| 62.2 |  | Vertedero de escombros (abandonado)<br>Spoil ground (disused)                 |  |                |
| 63   |  | Área dragada<br>Dredging area   |  | 446.4          |
| 64   |  | Área de transbordo de carga<br>Cargo transhipment area                        |  | 449.4          |
| 65   |  | Área de incineración<br>Incineration area                                     |  | 449.3          |

## Supplementary National Symbols

## Símbolos Nacionales Suplementarios

|   |  |  |  |  |
|---|--|--|--|--|
| a |  | Límite de área apropiada para el ejercicio de la acuicultura<br>Suitable Area Limits for Aquaculture |  |  |
| b |  | Fondeadero de pequeños buques<br>Anchorage for small vessels   |  |  |
| c |  | Área prohibida de fondeo y pesca<br>Anchorage and fishing prohibited                                 |  |  |

Light Structures. Major Floating Lights

Estructuras de las Luces. Luces Flotantes Principales

|   |  |         |   |   |                |
|---|--|---------|---|---|----------------|
| 1   |  | Lt LtHo | Luz principal, Luz secundaria. Luz, Faro<br>Mayor light, minor light. Light, Lighthouse   |   | 470.5          |
| 2   |  |         | Plataforma con luz en alta mar<br>Lighted offshore platform   |   | 445.2          |
| 3   |  |         | Torre baliza luminosa<br>Lighted beacon tower   |   | 456.4          |
| 4   |  |         | Baliza luminosa<br>Lighted beacon   | † | 457.1<br>457.2 |
| 5   |  |         | Baliza flotante con luz<br>Buoyant beacon, resilient beacon   |   | 459.1<br>459.2 |
| 6   |  |         | Luz flotante principal (buque-faro, buque-boya, boya-faro)<br>Major floating light (light vessel, major light float, Large Automatic Navigational Buoy LANBY) | † | 462.9<br>474   |
| <p>Las características de las luces secundarias, fijas y flotantes, se ajustan, normalmente, a lo especificado por la IALA<br/>Minor lights, fixed and floating, usually conform to IALA Maritime Buoyage Systems characteristics</p> |  |         |   |   |                |

## Lights Characters

Símbolos nacionales suplementarios: a-h  
Supplementary national symbols:

## Características de las Luces

| Características de las Luces de las boyas<br>Lights Characters on Light Buoys  |                             | → Q            |   | 471.2                   |                         |
|--|-----------------------------|----------------|---|-------------------------|-------------------------|
|  | Abbreviation                | Abreviaturas   | Clase de luz<br>Class of light  | Gráfico<br>Illustration | Período<br>Period shown |
|  | Internacional               | Nacional       |   |                         |                         |
| 10.1   | <b>F</b>                    | <b>F</b>       | Fija<br>Fixed   |                         |                         |
| De ocultación (duración total de la luz mayor que la de la oscuridad)<br>Occulting (total duration of light longer than total duration of darkness)                                      |                             |                |   |                         |                         |
| 10.2   | <b>Oc</b>                   | <b>Oc</b>      | Ocultación simple<br>Single-occulting   |                         |                         |
|  | <b>Oc(2)</b><br>Example     | <b>Gr Oc</b>   | Grupo de ocultaciones<br>Group-occulting  |                         |                         |
|  | <b>Oc(2 + 3)</b><br>Example | <b>Gr Oc C</b> | Grupos de ocultaciones combinadas<br>Composite group-occulting                      |                         |                         |
| Isófase (igual duración de luz y oscuridad)<br>Isophase (duration of light and darkness equal)   |                             |                |   |                         |                         |
| 10.3   | <b>Iso</b>                  | <b>Iso</b>     | Isófase<br>Isophase   |                         |                         |
| De destellos (duración total de la luz menor que la de la oscuridad)<br>Flashing (total duration of light shorter than total duration of darkness)                                       |                             |                |   |                         |                         |
|  | <b>Fl</b>                   | <b>D</b>       | Destellos simples<br>Single-flashing  |                         |                         |
|  | <b>Fl(3)</b><br>Example     | <b>Gr D</b>    | Grupo de destellos<br>Group-flashing  |                         |                         |
|  | <b>Oc(2 + 1)</b><br>Example | <b>Gr D C</b>  | Grupos de destellos combinados<br>Composite group-flashing                          |                         |                         |
| 10.5   | <b>LFI</b>                  | <b>DL</b>      | Destellos largos<br>(destellos de 2s o mayor)<br>Long-flashing (flash 2s or longer) |                         |                         |
| Centelleante (intervalo de repetición de 50 a 79 destellos por minuto, generalmente entre 50 a 60)<br>Quick (repetition rate of 50 to 79 - usually either 50 or 60 - flashes per minute) |                             |                |   |                         |                         |
| 10.6   | <b>Q</b>                    | <b>Ct</b>      | Centelleantes rápidas<br>Continuous quick   |                         |                         |
|  | <b>Q(3)</b><br>Example      | <b>Gr Ct</b>   | Grupo de centelleantes rápidas<br>Group quick                                       |                         |                         |
|  | <b>IQ</b>                   |                | Centelleantes interrumpidas<br>Interrupted quick                                    |                         |                         |

|       | Abbreviation  | Abreviaturas   | Clase de luz<br>Class of light                                    | Gráfico<br>Illustration | Período<br>Period shown |
|-------|---|----------------|---|-------------------------|-------------------------|
|       | Internacional   | Nacional       |   |                         |                         |
| 10.7  | Centelleante rápida (intervalo de repetición de 80 a 159 destellos por minuto, generalmente de 100 a 120)<br>Very quick (repetition rate of 80 to 159 - usually either 100 or 120 - flashes per min)    |                |   |                         |                         |
|       | <b>VQ</b>   | <b>Ct R</b>    | Centelleante rápida continua<br>Continuous very quick             |                         |                         |
|       | <b>VQ (3)</b><br>Example  | <b>Gr Ct R</b> | Grupo de centelleantes rápida continua<br>Group very quick        |                         |                         |
|       | <b>IVQ</b><br>Example   | <b>Ct R I</b>  | Centelleante rápida intermitente<br>Interrupted very quick        |                         |                         |
| 10.8  | Centelleante ultrarrápida (intervalo de repetición de 160 o más destellos por minuto, generalmente de 240 a 300)<br>Ultra quick (repetition rate of 160 or more - usually 240 to 300 - flashes per min) |                |   |                         |                         |
|       | <b>UQ</b>   | <b>U Ct U</b>  | Centelleante ultrarrápida continua<br>Continuous ultra quick      |                         |                         |
|       | <b>IUQ</b>  | <b>Ct U I</b>  | Centelleante ultrarrápida intermitente<br>Interrupted ultra quick |                         |                         |
| 10.9  | <b>Mo (k)</b><br>Example  | <b>Mo</b>      | Con código Morse<br>Morse Code                                    |                         |                         |
| 10.10 | <b>FFI</b>  | <b>FD</b>      | Fija y de destellos<br>Fixed and flashing                         |                         |                         |
| 10.11 | <b>AI.WR</b><br>Example   | <b>AI</b>      | Alternada<br>Alternating  |                         |                         |

Colours of Lights

Colores de las Luces

|      |           |           |   |  |                                  |
|------|-----------|-----------|---|--|----------------------------------|
| 11.1 | <b>W</b>  | <b>B</b>  | Blanco (solo en sectores y luces alternativas)<br>White (only on sector and alternating lights) |  |                                  |
| 11.2 | <b>R</b>  |           | Rojo<br>Red   |  |                                  |
| 11.3 | <b>G</b>  | <b>V</b>  | Verde<br>Green  |  |                                  |
| 11.4 | <b>Bu</b> | <b>Az</b> | Azul<br>Blue  |  | 450.2<br>450.3                   |
| 11.5 | <b>Vi</b> |           | Violeta<br>Violet   |  | 470.4<br>470.6<br>471.4<br>475.1 |
| 11.6 | <b>Y</b>  | <b>A</b>  | Amarillo<br>Yellow  |  |                                  |
| 11.7 | <b>Y</b>  | <b>Or</b> | <b>Nja</b><br>Naranja<br>Orange   |  |                                  |
| 11.8 | <b>Y</b>  | <b>Am</b> | Ámbar<br>Amber  |  |                                  |

# P Lights

# Luces

Period

Período

|    |     |      |  |       |
|----|-----|------|--|-------|
| 12 | 90s | 2,5s | Período en segundos y décimas de segundo<br>Period in seconds and tenths of a second | 471.5 |
|----|-----|------|--|-------|

Elevation

Elevación

|  |     |  |  |       |
|--|-----|--|--|-------|
| Plano de referencia de las alturas<br>Plane of reference for Heights → H |     | Niveles de mareas<br>Tidal Levels → H                            |  |       |
| 13   | 12m | Altura de la luz en metros<br>Elevation of light given in metres |  | 471.6 |

Range

Alcance

|   |        |  |  |                |
|---|--------|--|--|----------------|
| Nota: Los alcances representados son los nominales y se expresan en millas náuticas<br>Note: Charted ranges are nominal ranges given in sea miles |        |  |  |                |
| 14  | 15M    | Luz con alcance único<br>Light with single range                   |  | 471.7<br>471.9 |
|   | 15/10M | Luz con dos alcances diferentes<br>Light with two different ranges |  |                |
|   | 15-7M  | Luz con tres o más alcances<br>Light with three or more ranges     |  |                |



Disposition

Disposición

|    |        |   |  |       |
|----|--------|---|--|-------|
| 15 | (hor)  | Dispuestas horizontalmente<br>Horizontally disposed |  | 471.8 |
|    | (vert) | Dispuestas verticalmente<br>Vertically disposed     |  |       |
|    | (Δ)(∇) | Dispuestas triangularmente<br>Triangular disposed   |  |       |

Example of a full Light Description

Ejemplo de una descripción completa de las características de una luz

|    |   |  |       |
|----|---|--|-------|
| 16 | <p> <b>Name</b><br/>FI(3)WRG.15s21m15-11M</p> <p><b>FI(3)</b> Class of light: group flashing repeating a group of three flashes</p> <p><b>WRG.</b> Colours: white, red, green, exhibiting the different colours in defined sectors</p> <p><b>15s</b> Period of light: the time taken to exhibit one full sequence of 3 flashes and eclipses: 15 seconds</p> <p><b>21m</b> Elevation of local plane above datum: 21 meters</p> <p><b>15-11M</b> Nominal range: white 15M, green 11M, red between 15 and 11M</p> | <p> <b>Nombre</b><br/>D(3)RV15s21m15-11M</p> <p><b>D(3)</b> Clase de luz: grupo de tres destellos</p> <p><b>RV</b> Colores de la luz: blanco, rojo, verde, según los distintos sectores definidos</p> <p><b>15s</b> Período de la luz: tiempo empleado en mostrar una secuencia completa de 3 destellos y sus eclipses: 15 segundos</p> <p><b>21m</b> Altura de la luz sobre el nivel medio del mar: 21 metros</p> <p><b>15-11M</b> Alcance nominal: blanco 15M, verde 11 M, rojo entre 15 y 11M</p> <p><b>Nota:</b> Cuando la característica de la señal es de color blanco único, no se escribirá letra "B" para indicar este color.</p> | 471.9 |
|----|---|--|-------|



Lights Marking Fairways  
Leading Lights and Lights in Line

Luces que Balizan Derrotas Navegables  
Enfilaciones y Alineaciones

|      |                      |   |                      |  |
|------|----------------------|---|----------------------|--|
| 20.1 |                      | Luces de enfilación con línea de enfilación (la línea de trazo continuo es la derrota) y sectores de visibilidad.<br>Demarcación en grados y décimas de grado<br>Leading lights with leading line (firm line is fairway) and arcs of visibility.<br>Bearing given in degrees and tenths of a degree |                      | 433<br>475.1<br>475.6<br>433.2<br>433.3<br>433.1 |
| 20.2 |                      | Luces de enfilación.<br>Demarcación en grados y minutos<br>Leading lights.<br>Bearing given in degrees and minutes  |                      | 433.4<br>475.6                                   |
| 20.3 |                      | Luces de enfilación en cartas de pequeña escala<br>Leading lights on small-scale charts   |                      |  |
| 21   |                      | Luces alineadas que marcan los límites de un canal<br>Lights in line, marking the sides of a channel  |                      | 433.4<br>475.6                                   |
| 22   | Rear or upper light  | Luz posterior o superior<br>Rear or upper light   | Posterior o superior | 470.7  |
| 23   | Front or lower light | Luz anterior o inferior<br>Front or lower light   | Anterior o inferior  | 470.7  |

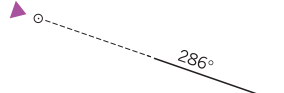
Direction Lights

Luces Direccionales

|      |  |  |  |  |
|------|--|--|--|--|
| 30.1 |  | Luz direccional con indicación de la derrota a seguir; el sector estrecho está delimitado por zonas de oscuridad o luz atenuada<br>Direction light with narrow sector and course to be followed, flanked by darkness or unintensified light              |  |  |
| 30.2 |  | Luz direccional con indicación de la derrota a seguir; el sector no representado, está delimitado por zonas de oscuridad o de luz atenuada<br>Direction light with course to be followed, uncharted sector is flanked by darkness or unintensified light |  | 475<br>475.7<br>471.3<br>471.9<br>475.1<br>475.5 |
| 30.3 |  | Luz direccional con sector estrecho navegable, delimitado por sectores de diferentes características<br>Direction light with narrow fairway sector flanked by light sectors of different character   |  |  |
| 30.4 |  | Luz direccional con sector estrecho flanqueado por sectores de luces de colores y características diferentes en cartas multicolor<br>Direction light with narrow fairway sector flanked by light sectors of different characters on multicoloured charts |  |  |

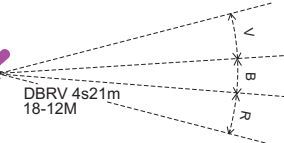
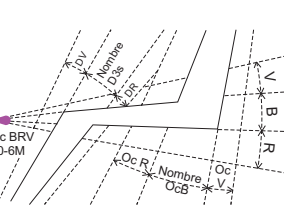
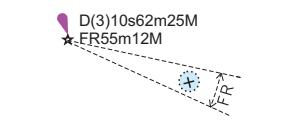

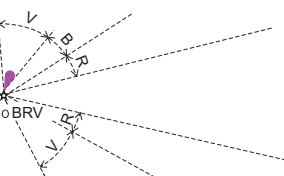

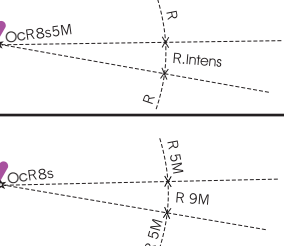
# P Lights

# Luces

|   |   |  |       |
|---|---|--|-------|
| 31  |  | Luz direccional con efecto muaré (día y noche). Las flechas indican cuando se necesita alterar el rumbo<br>Moire effect light (day and night). Arrows show when course alteration needed | 475.8 |
| Nota: Las demarcaciones representadas son siempre desde el mar.<br>Note: Quoted bearings are always from seaward. |   |  |       |






## Lights Sector

## Sectores de Luces

|    |   |  |   |
|----|---|--|---|
| 40 |    | Luz de sectores<br>Sector light on standard charts   | 470.4<br>475<br>475.1<br>475.2<br>475.5 |
| 41 |   | Luces de sectores: Los límites del sector blanco marcan los bordes del canal navegable<br>Sector lights on standard charts, the white sector limits marking the sides of the fairway | 470.4<br>475<br>475.1<br>475.5          |
| 42 |  | Luz principal visible en todo el horizonte con una luz roja auxiliar o secundaria marcando un peligro<br>Main light visible all-round with red subsidiary light seen over danger     | 471.8<br>475.4                          |
| 43 |  | Luz visible en todo el horizonte con sector oscurecido<br>All-round light with obscured sector   | 475.3                                   |
| 44 |  | Luz con sector de visibilidad deliberadamente restringido<br>Light with arc of visibility deliberately restricted  | 475.3                                   |
| 45 |  | Luz con un sector tenue<br>Light with faint sector   | 475.3                                   |
| 46 |  | Luz con sector intensificado<br>Light with intensified sector  | 475.5                                   |






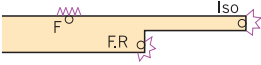

Lights with Limited Times of Exhibition

Luces con Tiempo Limitado de Exhibición

|    |  |  |  |       |
|----|--|--|--|-------|
| 50 |  FR(ocas)                 | Luces que se encienden únicamente cuando se necesitan (para pesqueros y transbordadores) y determinadas luces privadas<br>Lights exhibited only when specially needed (for fishing vessels, ferries) and some private lights |  | 473.2 |
| 51 |  F10s40m27M (F37m11M day) | Luces diurnas (representadas únicamente cuando sus características diurnas difieren de las nocturnas)<br>Daytime light (charted only where the character shown by day differs from that shown at night)                      |  D10s40m27M (F37m11M por día) | 473.4 |
| 52 |  QWRG5m10-3M D5s(fog)     | Luz de niebla (sólo se enciende con niebla o cambia sus características en caso de niebla)<br>Fog light (exhibited only in fog, or character changes in fog)   |  | 473.5 |
| 53 |  F15s(U)<br>†             | Luz no vigilada (sin guardia), sin servicio de emergencia<br>Unwatched (unmanned) light with no standby or emergency arrangements  |  | 473.1 |
| 54 | (temp)   | Temporal<br>Temporary  |  |       |
| 55 | (exting)   | Apagada<br>Extinguished  | (apagada)  |       |

Special Lights

Luces Especiales

| Antorcha (en el mar) → L<br>Flare Stack (at Sea) |   | Antorcha (en tierra) → E<br>Flare Stack (on Land)  |   | Estaciones de señales → T<br>Signal Stations |       |
|--|---|--|---|--|-------|
| 60   |  AeroAIFIWG7,5s11M | Aerofaro<br>Aero light   |   |  | 476.1 |
| 61.1   |  AeroFR353m11M     | Luz de obstrucción aérea de alta intensidad<br>Air obstruction lights of high intensity                    |   |  | 476.2 |
| 61.2   | (89)  (R Lts)      | Luces de obstrucción aérea de baja intensidad<br>Air obstruction lights of low intensity                   |   |  |       |
| 62   | <b>Fog Det Lt</b>   | Luz detectora de niebla<br>Fog detector light  |   |  | 477   |
| 63   |  illuminated       | Focos, iluminación de una estructura<br>Floodlights, floodlighting of a structure                          |  (iluminado) |  | 478.2 |
| 64   |                    | Luces de borde<br>Strip light  |   |  | 478.5 |
| 65   |  FR (priv.)        | Luz privada distinta de la encendida ocasionalmente<br>Private light other than one exhibited occasionally |   |  | 473.2 |

Supplementary National Terms

Términos Nacionales Suplementarios

|   |  |                                      |        |  |
|---|--|--------------------------------------|--------|--|
| a |  | Ocasional<br>Occasional              | Ocas.  |  |
| b |  | Eclipse<br>Eclipse                   | E.     |  |
| c |  | Sector<br>Sector                     | Sec.   |  |
| d |  | Oscuro<br>Lightless, obscured        | Osc.   |  |
| e |  | Luz irregular<br>Irregular light     | Irreg. |  |
| f |  | Provisoria<br>Temporary, provisional | Prov.  |  |
| g |  | Posición<br>Position                 | Posn.  |  |
| h |  | Con personal<br>With staff           | C.P.   |  |

Buoys and Beacons

Boyas y Balizas

|   |  |   |                         |
|---|--|---|-------------------------|
| Sistema de Balizamiento Marítimo IALA<br>IALA Maritime Buoyage System → Q 130 |  |   |                         |
| 1   |  | Posición de boya o baliza<br>Position of buoy or beacon | 455.3<br>460.1<br>462.1 |

Colours of Buoys and Beacon Topmarks

Colores de Boyas, Balizas y Marcas de Tope

|  |  |  |     |
|--|--|--|-----|
| Abreviaturas de colores<br>Abbreviations for Colours → P11   |  |  |     |
| 2  |  | Verde o negro (símbolos rellenos de negro)<br>Green or black (symbol filled black)   |     |
| 3  |  | Colores únicos distintos del verde y del negro<br>Single colours other than green and black  |     |
| 4  |  | Varios colores en bandas horizontales<br>El orden de los colores es de arriba hacia abajo<br>Multiple colours in horizontal bands, the colour sequence is from top to bottom           |     |
| 5  |  | Varios colores en franjas verticales o diagonales, el color más oscuro se coloca en primer lugar<br>Multiple colours in vertical or diagonal stripes, the darker colour is given first |     |
| 6  |  | Material retrorreflector<br>Retroreflecting material   | 464 |
| <p>Nota: Algunas marcas ciegas pueden estar provistas de material retrorreflector. Generalmente en las cartas no se representa. Según las recomendaciones del IALA, las bandas negras pueden parecer azules bajo la luz de un reflector</p> <p>Note: Retroreflecting material may be fitted to some unlit marks. Charts do not usually show it. Under IALA Recommendations, black bands will appear blue under a spotlight</p> |  |  |     |

Lighted Marks

Marcas Luminosas

|  |  |  |              |
|--|--|--|--------------|
| Marcas con señales de niebla<br>Marks with Fog Signals → R |  |  |              |
| 7  |  | Marcas luminosas en las cartas<br>Lighted marks on standard charts               | 457.1<br>466 |
| 8  |  | Marcas luminosas en cartas multicolores<br>Lighted marks on multicoloured charts | 466.1        |

Topmarks and Radar Reflectors

Marcas de Tope y Reflectores Radar













|  |            |  |                                  |
|--|------------|--|----------------------------------|
| Para aplicación de marcas de tope en el Sistema IALA<br>For Application of Topmarks within the IALA-System → Q 130   |            | Para otras marcas de tope (casos especiales de boyas y balizas)<br>For other Topmarks (Special purpose Buoys and Beacons) → Q  |                                  |
| 9  |            | Marcas de tope del Sistema de Balizamiento IALA<br>(las marcas de las balizas se representan verticales)<br>IALA Systems buoy topmarks (beacon topmarks shown upright) | <br>463<br>463.1                 |
| 10   | <br>Name 2 | Baliza con marca de tope, color, reflector de radar y designación<br>Beacon with topmark, colour, radar reflector and designation                                      | 450<br>455.2<br>455.7            |
| 11   | <br>Name 3 | Boya con marca de tope, color, reflector de radar y designación<br>Buoy with topmark, colour, radar reflector and designation  | 460.3<br>460.6<br>465.1<br>465.2 |
| <p>Nota: Los reflectores de radar en marcas flotantes, generalmente, no se representan en las cartas</p> <p>Note: Radar reflectors on floating marks are usually not charted</p> |            |  |                                  |

# Q Buoy and Beacons

# Boyas y Balizas



## Buoys, Shapes of Buoys

## Boyas, Formas de Boyas

| Características Comunes de Boyas y Balizas<br>Common features of Buoys and Beacons → Q 1-11 |   |  |   |   |                                |
|---|---|--|---|---|--------------------------------|
| 20  |  | Boya cónica<br>Conical buoy                | † |  | 462.2                          |
| 21  |  | Boya cilíndrica<br>Can or cylindrical buoy | † |  | 462.3                          |
| 22  |  | Boya esférica<br>Spherical buoy            |   |   | 462.4                          |
| 23  |  | Boya pilar<br>Pillar buoy                  | † |  | 462.5                          |
| 24  |  | Boya con mástil<br>Spar buoy, spindle buoy |   |   | 462.6                          |
| 25  |  | Boya de barril<br>Barrel buoy              | † |  | 462.7                          |
| 26  |  | Superboya<br>Super buoy                    | † |  | 462.9<br>445.4<br>460.4<br>474 |





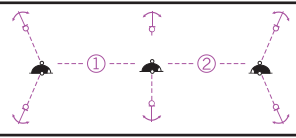

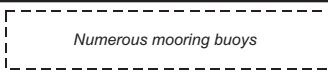
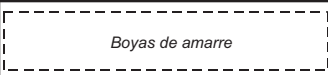

## Minor Light-Floats

## Luces Flotantes Secundarias

|    |   |   |  |  |       |
|----|---|---|--|--|-------|
| 30 |  | Luz flotante como parte del sistema IALA<br>Light-float as part of IALA System          |  |  | 462.8 |
| 31 |  | Luz flotante que no forma parte del sistema IALA<br>Light-float non part of IALA System |  |  | 462.8 |

## Mooring Buoys


























## Boyas de Amarre

| Boya de petróleo o instalación de gas<br>Oil or Gas Installation Buoy → L |   | Amarradero para visitantes (pequeñas embarcaciones)<br>Visitors Mooring (Small Craft) → U                                       |  |   |
|---|---|---|--|---|
| 40  |  | Boyas de amarre<br>Mooring buoys  | †<br> | 431.5                                     |
| 41  |  | Boya de amarre luminosa (ejemplo)<br>Lighted mooring buoy (example)   |       | 431.5<br>466.1<br>466.2<br>466.3<br>466.4 |
| 42  |  | Boyas de amarre con sistemas de anclaje al fondo y números de amarraderos<br>Mooring buoys with ground tackle and berth numbers |  | 323.1<br>431.6                            |
| 43  |  | Boya de amarre con comunicación telegráfica o telefónica<br>Mooring buoy with telegraphic or telephonic communication           |  | 431.5                                     |
| 44  |  | Área de boyas de amarre (ejemplo)<br>Numerous mooring buoys (example)   |       | 431.7                                     |
| 45  |  | Boya de amarre para visitantes<br>Visitors' mooring   |  | 431.5                                     |

## Special Purpose Buoys





Simbolos nacionales suplementarios:  
Supplementary national symbols: a, b,c

## Boyas para Usos Especiales

| Nota: Las formas de las boyas son variables. En algunas situaciones, se pueden usar boyas laterales o cardinales.<br>Note: Shapes of buoys are variable. Lateral or Cardinal buoys may be used in some situations. Use of the topmark is optional |   |   |   |                                       |
|---|---|---|---|---------------------------------------|
| 50  |    | Boya marcando una zona de tiro (Zona de peligro)<br>Firing danger area (Danger Zone) buoy   |    | 441.2                                 |
| 51  |    | Blanco para ejercicio de tiro<br>Target   |    |                                       |
| 52  |    | Buque baliza<br>Marker ship   |    |                                       |
| 53  |    | Barcaza<br>Barge  |    |                                       |
| 54  |    | Boya de zona de desmagnetización<br>Degaussing Range buoy   |    | 448.3                                 |
| 55  |    | Boya que señala cable submarino<br>Buoy marking cables  |    | 443.6                                 |
| 56  |    | Boya que señala área vertedero<br>Buoy marking spoil ground   |    | 446.3                                 |
| 57  |   | Boya que marca el extremo de un emisario<br>Buoy marking outfall  |   | 444.4                                 |
| 58  |  ODAS  ODAS                 | Boya ODAS (Sistema de Adquisición de Datos Oceanográficos). Boya recolectora de datos<br>ODAS buoy (Ocean Data Acquisition System),<br>Data Collecting buoy |   | 448.3<br>460.4<br>462.9               |
| 59  |    | Boya que señala correntómetro<br>Buoy marking wave recorder or current meter  |  |                                       |
| 60  |   | Boya de amarre de hidroaviones<br>Seaplane anchorage buoy   |  |                                       |
| 61  |   | Boya indicadora de esquema de separación de tráfico<br>Buoy marking traffic separation scheme   |   |                                       |
| 62  |    | Boya que señala área de recreación<br>Buoy marking recreation zone  |  |                                       |
| 63  |  BuY  BuY<br>Al. Oc. BuY,3s | Boya marcando un naufragio<br>Emergency wreck marking buoy  |   | 461.3<br>463<br>463.1<br>464<br>464.3 |

## Seasonal Buoys

## Boyas Estacionales

|    |   |   |   |       |
|----|---|---|---|-------|
| 70 |  | Boya de propiedad particular (ejemplo)<br>Buoy privately maintained (example)   |  |       |
| 71 |  | Boya temporal (Por ejemplo: durante los meses de abril a octubre)<br>Seasonal buoy (eg: during the months April to October) |  | 460.5 |

## Beacons, General

## Balizas, Generalidades

| Balizas luminosas<br>Lighted Beacons   |                     | → P                         | Características comunes de balizas y boyas<br>Common features of Beacons and Buoys   | → Q 1 - 11 |                              |
|--|---------------------|-----------------------------|--|------------|------------------------------|
| 80   |                     | ○ Bn                        | Baliza en general, de características desconocidas o que no se representan por ser muy pequeña la escala de la carta<br>Beacon in general, characteristic unknown or chart scale too small to show |            | 455.5                        |
| 81   |                     | ○ Bn<br>BW                  | Baliza con color y sin marca de tope distintiva<br>Beacon with colour, no distinctive topmark  | <br>       | 455.4<br>456<br>456.3        |
| 82   | <br><br>            |                             | Balizas con colores y marcas de tope (ejemplos)<br>Beacons with colours and topmarks (examples)  | <br><br>   | 455.4<br>456<br>463<br>463.1 |
| 83   | <br>                |                             | Baliza sobre roca sumergida (con marca de tope correspondiente en su caso)<br>Beacon on submerged rock (topmark as appropriate)  | <br>       | 455.6                        |
| Marcas secundarias no permanentes generalmente en zonas de bajamar (Marcas laterales de canales secundarios)<br>Minor impermanent marks usually in drying areas (lateral marks for minor channels) |                     |                             |  |            |                              |
| Postes menores<br>Minor Pile   |                     | → F                         |  |            |                              |
| 90   |                     |                             | Estaca, Pilote, Poste<br>Stake, Pole   |            | 456.1                        |
| 91   | Babor/Port Hand<br> | Estribor/Starboard Hand<br> | Percha, Estaca<br>Perch, Stake   |            | 456.1                        |
|  |                     |                             |  |            |                              |
| 92   |                     |                             | Rama<br>Withy  |            | 456.1                        |

## Minor Marks, Usually on Land

## Marcas Secundarias, Generalmente en Tierra

| Marcas en tierra<br>Landmarks |      | → E |  |       |
|-------------------------------|------|-----|--|-------|
| 100                           |      |     | Montículo de piedras<br>Cairn  | 456.2 |
| 101                           | □ Mk |     | Marca de colores o blanca<br>Coloured or white mark  | 456.2 |
| 102.1                         | <br> |     | Marca de tope coloreada (color conocido o desconocido) con función de baliza<br>Coloured topmark (colour known or unknown) with function of a beacon | 456.3 |
|                               | <br> |     |  |       |
| 102.2                         | <br> |     | Superficies pintadas con función de balizas de enfilaciones<br>Painted boards with function of leading beacons                                       | <br>  |

## Beacon Towers

## Torres de Balizamiento

|     |                      |  |  |                      |       |
|-----|----------------------|--|--|----------------------|-------|
| 110 | <br><br><br><br><br> |  | Torres de balizamiento sin y con marcas de tope y con colores (ejemplos)<br>Beacon towers without and with topmarks and colours (examples) | <br><br><br><br><br> | 456.4 |
| 111 |                      |  | Baliza de enrejado<br>Lattice beacon   |                      | 456.4 |



Special Purpose Beacons

Balizas para Usos Especiales

| Enfilaciones, Enfilaciones de seguridad<br>Leading Lines, Clearing Lines → M  |  |  |  |              |
|---|--|--|--|--------------|
| Nota: Las marcas de tope y los colores se indican cuando la escala lo permite<br>Note: Topmarks and colours shown where scale permits |  |  |  |              |
| 120   |  | Balizas de enfilación<br>Leading beacons   |  | 458          |
| 121   |  | Balizas que marcan una enfilación de seguridad<br>Beacon marking a clearing line   |  | 458          |
| 122   |  | Balizas que marcan una distancia medida con indicación de las demarcaciones<br>Beacon marking measured distance with quoted bearings |  | 458          |
| 123   |  | Baliza de amarre de cable en tierra (ejemplo)<br>Cable landing beacon (example)  |  | 443.5<br>458 |
| 124   |  | Baliza refugio<br>Refuge beacon  |  | 456.4        |
| 125   |  | Balizas de zona peligrosa de tiro<br>Firing danger area beacons  |  |              |
| 126   |  | Tablilla de aviso<br>Notice board  |  | 456.2        |

Supplementary National Symbols

Símbolos Nacionales Suplementarios

|   |  |                                 |  |  |
|---|--|---------------------------------|--|--|
| a |  | Boya de campana<br>Bell buoy    |  |  |
| b |  | Boya de silbato<br>Whistle buoy |  |  |
| c |  | Boya de naufragio<br>Wreck buoy |  |  |

130 IALA Maritime Buoyage System Sistema de Balizamiento Marítimo IALA

IALA Asociación Internacional de Señalización Marítima  
IALA International Association of Lighthouse Authorities

Donde está en vigor, el Sistema IALA se aplica para todo el balizamiento fijo y flotante, excepto luces de recalada, luces y marcas de enfilación, luces de sectores y las luces flotantes principales. Las formas normalizadas de las boyas son cilíndrica, cónica, esférica, pilar y de estaca, pero pueden haber excepciones (por ejemplo las luces flotantes secundarias). En las ilustraciones siguientes, sólo figuran las formas de boyas normalizadas. En el caso de balizas fijas (luminosas o ciegas), solamente la forma de las marcas de tope tienen importancia para la navegación.

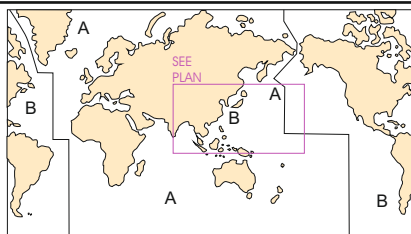
Where in force, the IALA System applies to all fixed and floating marks except landfall, light leading, lights and marks, sectored lights and major floating lights. The standard buoy shapes are cylindrical (can), conical, spherical, pillar, and spar but variations may occur, for example minor lights-floats. 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 Las marcas laterales son utilizadas, generalmente, en canales bien definidos. Hay dos regiones internacionales - A y B - en las que las marcas laterales son diferentes.  
Lateral marks are generally for well-defined channels. There are two international Buoyage Regions - A and B - where lateral marks differ.

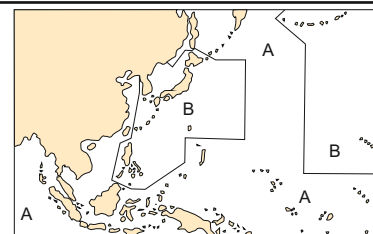
|  |  |
|--|--|
| <p>Las señales de babor son rojas con marcas de tope cilíndricas (si llevasen). Las luces son rojas y tienen cualquier intermitencia excepto D(2+1)R. Port-hand Marks are red with cylindrical topmarks (if any). Lights are red and have any rhythm except Fl(2+1)R.</p> <p style="text-align: center;"><b>REGIÓN A</b></p> | <p>Las señales de babor son verdes con marcas de tope cilíndricas (si llevasen). Las luces son verdes y tienen cualquier intermitencia excepto D(2+1)V. Port-hand Marks are green with cylindrical topmarks (if any). Lights are green and have any rhythm except Fl(2+1)V.</p> <p style="text-align: center;"><b>REGIÓN B</b></p> |
| <p>Las señales de estribor son verdes con marcas de tope cónicas (si llevasen). Las luces son verdes y tienen cualquier intermitencia excepto D(2+1)V. Starboard-hand Marks are green with conical topmarks (if any). Lights are green and have any rhythm except Fl(2+1)V.</p>  | <p>Las señales de estribor son rojas con marcas de tope cónicas (si llevasen). Las luces son rojas y tienen cualquier intermitencia excepto D(2+1)R. Starboard-hand Marks are red with conical topmarks (if any). Lights are red and have any rhythm except Fl(2+1)R.</p>  |

Una boya que baliza un canal principal puede ser también de pilar o de estaca. Todas las marcas de canal principal tienen bandas horizontales de color. En aquellas zonas en las que por razones excepcionales, una Autoridad considera que no es satisfactorio el color verde para boyas, se puede usar el negro.

Preferred channel buoy may also be a pillar or a spar. All preferred channel marks have horizontal bands of colour. Where for exceptional reasons an Authority considers that a green colour for buoys is not satisfactory, black may be used.



Regiones A y B de balizamiento IALA  
IALA Buoyage Regions A and B



130.2 Dirección del balizamiento

La dirección del balizamiento es la que se toma cuando aproximamos a puerto desde la mar o, a lo largo de la costa o la determinada por las autoridades de balizamiento. Normalmente es la de las agujas del reloj alrededor de la zona de tierra.

Direction of buoyage

The direction of buoyage is that taken when approaching a harbour from seaward. Along coasts, the direction is determined by buoyage authorities: normally clockwise around land masses.



Símbolo que indica la dirección del balizamiento, cuando no resulte obvio  
Symbol showing direction of buoyage where not obvious



Símbolo que indica la dirección del balizamiento, en cartas multicolor  
Symbol showing direction of buoyage multicoloured charts

Todas las señales descritas en las figuras siguientes son idénticas en las regiones A y B  
 In the illustrations below all marks are the same in Regions A and B

**130.3 Las señales cardinales** indican que las aguas navegables están en el cuadrante correspondiente al nombre de la marca.  
**Cardinal Marks** indicating navigable water to the named side of the marks.

| SEÑALES CIEGAS<br>UNLIT MARKS                                   | SEÑALES LUMINOSAS<br>LIGHTED MARKS  |
|---|---|
| <p>Marca de tope: 2 conos negros<br/>Topmark: 2 black cones</p> | <p style="text-align: right;">Tiempo (segundos)<br/>Time (seconds)</p><br><p>Luz blanca<br/>White light</p> <p>N<br/>NA<br/>BY<br/>CtR<br/>o<br/>Ct</p> <p>E<br/>NAN<br/>BYB<br/>CtR(3)5s<br/>o<br/>Ct(3)10s</p> <p>S<br/>AN<br/>YB<br/>CtR(6)+DL10s<br/>o<br/>Ct(6)+DL15s</p> <p>W<br/>ANA<br/>YBY<br/>CtR(9)10s<br/>o<br/>Ct(9)15s</p> <p>Para luces en boyas o balizas se usan las mismas abreviaturas.<br/>                 Los períodos 5s, 10s y 15s, puede no estar siempre indicados en las cartas.<br/>                 The same abbreviations are used for lights on spar buoys and beacons.<br/>                 The periods 5s, 10s and 15s, may not always be charted.</p> |

**130.4 Señales de peligro aislado** situadas sobre peligros con aguas navegables alrededor.  
**Isolated Danger Marks** stationed over dangers with navigable water around them.

Estructura: negro(s) con banda(s) horizontal(es) roja(s)  
 Marca de tope: 2 esferas negras superpuestas  
 Body: black with red horizontal band(s)  
 Topmark: 2 black spheres

Luz blanca  
White light

**130.5 Señales de aguas seguras** como las de centro de canal o recalada.  
**Safe Water Marks** such as mid-channel and landfall marks

Cuerpo: Roja con franjas verticales blancas  
 Marca de tope (si llevase): una esfera roja  
 Body: red and white vertical stripes  
 Topmark (if any): red spheres

Luz blanca  
White light

*Iso, Or Oc, or LFl, 10s, or Mo(A)*      *Iso, O Oc, o DL, 10s, o Mo(A)*

**130.6 Señales especiales** indican puntos o zonas particulares.  
**Special Marks** indicate special features.


Cuerpo (forma opcional): amarillo \*  
 Marca de tope (si llevase): amarillo X  
 Body (optional shape): yellow \*  
 Topmark (if any): yellow X

\* En casos especiales el color amarillo puede estar en conjunción con otro color.  
 \* In special cases yellow may be in conjunction with another colour.

Luz amarilla  
Yellow light

## General

## Generalidades

|   |   |   |  |                       |
|---|---|---|--|-----------------------|
| Luz detectora de niebla<br>Fog Detector Light → P |   | Luz de niebla<br>Fog Light → P  |  |                       |
| 1   |  | Posición de una señal de niebla<br>El tipo de señal de niebla no está indicado<br>Position of fog signal. Type of fog signal not stated |  | 451<br>451.2<br>452.8 |

## Type of Fog Signals, with Abbreviations







## Tipos de Señales de Niebla, con Abreviaturas

| Símbolos nacionales suplementarios: a, b, c<br>Supplementary national symbols: a, b, c |               |   |           |       |
|--|---------------|---|-----------|-------|
| 10   | <b>Explos</b> | Explosivo<br>Explosive                        |           | 452.1 |
| 11   | <b>Dia</b>    | Diáfono<br>Diaphone                           | † Diáf.   | 452.2 |
| 12   | <b>Siren</b>  | Sirena<br>Siren                               | † Sir.    | 452.3 |
| 13   | <b>Horn</b>   | Bocina (Nautófono)<br>Horn (nautophone, reed) | † Nautof. | 452.4 |
| 14   | <b>Bell</b>   | Campana<br>Bell                               |           | 452.5 |
| 15   | <b>Whis</b>   | Silbato<br>Whistle                            | † Silb.   | 452.6 |
| 16   | <b>Gong</b>   | Gong<br>Gong                                  |           | 452.7 |

## Examples of Fog Signal Descriptions




Símbolos nacionales suplementarios: d, e, f  
Supplementary national symbols: d, e, f

## Señales de Niebla (Ejemplos)

|   |   |   |   |                         |
|---|---|---|---|-------------------------|
| 20  |  Fl.3s70m29M<br>Siren Mo(N)60s   | Sirena situada en un faro, emitiendo la letra N en Morse (un sonido largo seguido de un sonido corto), repetido cada 60 segundos<br>Siren at a lighthouse, giving a long blast followed by a short one (N), repeated every 60 seconds |  D3s70m29M<br>Sir Mo(N)60s           | 452.3<br>453.3          |
| 21  |  Bell                            | Boya con campana accionada por las olas<br>Wave-actuated bell buoy  |  Campana                             | 452.5<br>454.1          |
| 22  |  Q(6)+LFl.15s<br>Horn(1)15s Whis | Boya luminosa con bocina que emite un único sonido cada 15 segundos, en conjunción con un silbato accionado por oleaje<br>Light buoy, with horn giving a single blast every 15 seconds, in conjunction with a wave-actuated whistle   |  Ct(6)+DL15s<br>Bocina(1)15s Silbato | 452.4<br>453.1<br>454.3 |
| <p>* El símbolo de señal de niebla puede omitirse cuando se describe la señal<br/>* The fog signal symbol is usually be omitted when a description of the signal is given</p> |   |   |   |                         |






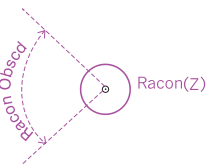
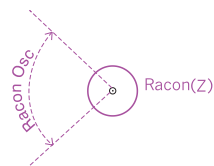
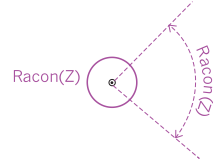
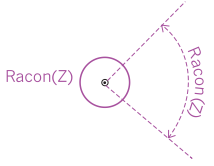

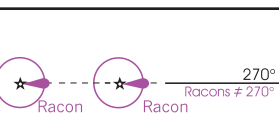




Supplementary National Symbols

Símbolos Nacionales Suplementarios











|   |  |  |   |  |
|---|--|--|---|--|
| a |  | Oscilador submarino<br>Submarine oscillator  | O. sub.   |  |
| b |  | Señal de niebla<br>Fog signal  | S.N.  |  |
| c |  | Señal submarina de niebla<br>Fog submarine signal  | S.S.N.  |  |
| d |  | Señal de niebla de campana para submarinos<br>(accionada por olas)<br>Fog signal bell's for submarines (wave-actuated) |  |  |
| e |  | Señal acústica submarina no conectada a costa<br>Submarine sound signal not connected to the shore                     |  |  |
| f |  | Señal acústica submarina conectada a costa<br>Submarine sound signal connected to the shore                            |  |  |

Radar


Radar

|     | Estructuras radar que constituyen marcas<br>Radar Structures Forming Landmarks → E  | Sistemas de control radar<br>Radar Surveillance Systems → M  |                                  |  |
|-----|---|--|----------------------------------|--|
| 1   |  Ra  | Estación radar costera que proporciona demarcación y distancia a petición<br>Coast radar station providing range and bearing service on request  | 485.1                            |  |
| 2   |  Ramark  | Ramark, baliza radar que transmite continuamente<br>Ramark, radar beacon transmitting continuously   | 486.1                            |  |
| 3.1 |  Racon(Z) (3cm)  | Baliza respondedora de radar, con identificación Morse en la banda de 3 cm (X)<br>Radar transponder beacon, with Morse identification, responding within the 3 cm (X) band                               | 486.2<br>486.3<br>486.4<br>486.5 |  |
| 3.2 |  Racon(Z) (10cm)   | Baliza respondedora de radar, con identificación Morse en la banda de 10 cm (S)<br>Radar transponder beacon, with Morse identification, responding within the 10 cm (S) band                             |                                  |  |
| 3.3 |  Racon(Z)  | Baliza respondedora de radar, con identificación Morse en la banda de 3 cm (X) y 10 cm (S)<br>Radar transponder beacon, with Morse identification, responding within the 3 cm (X) and the 10 cm (S) band |                                  |  |
| 3.4 |  Racon(Z)   | Baliza respondedora de radar, con sector de recepción oscurecida<br>Radar transponder beacon, with sector of obscured reception  |                                  |  Racon(Z)  |
|     |  Racon(Z)  | Baliza respondedora de radar, con sector de recepción<br>Radar transponder beacon, with sector of reception  |                                  |  Racon(Z) |
| 3.5 |  Racon Racon   | Balizas respondedoras de radar de enfilación<br>Leading radar transponder beacons  |                                  |  |
|     |  Racon Racon   | Balizas respondedoras de radar de enfilación coincidente con luces de enfilación<br>Leading radar transponder beacons coincident with leading lights   |                                  |  |
| 3.6 |  Racon  Racon | Marcas flotantes con balizas respondedoras de radar<br>Floating marks with radar transponder beacons   |                                  |  |
| 4   |    | Pantalla reflectora de radar<br>Radar reflector  | 465<br>460.3                     |  |
| 5   |    | Objeto sensible al radar<br>Radar conspicuous feature  | 485.2                            |  |

Radio Stations Símbolos nacionales suplementarios: a, b, c Estaciones de Radio




| Estaciones radio que constituyen marcas<br>Radio Structures Forming Landmarks → E |  | Puntos de llamada radio<br>Radio Reporting (Calling-in or Way) Points → M   |                |
|---|--|---|----------------|
| 10  |  Name<br>RC | Radiofaro marítimo circular (no direccional) o aeromarítimo<br>Circular (non-directional) marine or aeromarine radiobeacon                      | 480.1<br>481.1 |
| 11  |             | Radiofaros direccionales con línea de demarcación<br>Directional radiobeacon with bearing line  | 481.2          |
|   |             | Radiofaros direccionales coincidiendo con luces de enfílación<br>Directional radiobeacon coincident with leading light                          |                |
| 12  |             | Radiofaro giratorio<br>Rotating pattern radiobeacon   | 481.1          |
| 13  |             | Estación consol<br>Consol beacon  | 481.3          |
| 14  |             | Estación radiogoniométrica<br>Radio direction-finding station   | 483            |
| 15  |            | Estación radio costera con servicio de escucha internacional (QTG)<br>Coast radio station providing QTG service                                 | 484            |
| 16  |           | Radiofaro aeronáutico<br>Aeronautical radiobeacon   | 482            |
| 17.1  |           | Sistema de Identificación Automática<br>Automatic Identification System Transmitter   | 489.1          |
| 17.2  |           | Sistema de Identificación Automática en marcas flotantes (ejemplos)<br>Automatic Identification System Transmitter on floating marks (examples) | 489.1          |

Satellite Navigation System Símbolos nacionales suplementarios: d Sistema de Navegación por Satélite

|  |   |   |       |
|--|---|---|-------|
| 50   | WGS WGS 72 WGS 84   | Sistema Geodésico Mundial, 1972 o 1984<br>World Geodetic System, 1972 or 1984 | 201   |
| <p>Nota: Las correcciones en latitud y longitud, en centésima de minuto, que deben aplicarse a las posiciones obtenidas con satélite (referidas a WGS ) para representarlas correctamente en una carta se especificarán en una nota.</p> <p>Note: A note may be shown to indicate the shifts of latitude and longitude, in hundredths of a minute, which should be made to Satellite-derived position (which are referred to WGS) to relate them to the chart.</p> |   |   | 202   |
| 51   |  | Estación de Corrección DGPS<br>DGPS correction transmitter                    | 481.4 |

Supplementary National Symbols

Símbolos Nacionales Suplementarios

|   |  |  |   |   |  |
|---|--|--|---|---|--|
| a |  | Radiofaro<br>Radiobeacon   |   |  |  |
| b |  | Estación radiotelegráfica<br>Radiotelegraphic station  | † |  |  |
| c |  | Estación radiotelefónica<br>Radiotelephone station   |   |  |  |
| d |  | Sistema de Referencia Geocéntrico para<br>las Américas<br>Geocentric Reference System for the Americas |   | SIRGAS  |  |



Pilotage

Practicaje

|     |                       |   |                                  |                |
|-----|-----------------------|---|----------------------------------|----------------|
| 1.1 |                       | Lugar de embarque o situación de lancha de prácticos<br>Boarding place, position of a pilot boat  |                                  |                |
| 1.2 | Name                  | Lugar de embarque o posición de lancha de prácticos con nombre de la zona o del puerto<br>Boarding place, position of a pilot boat, with name (e. g. District, Port)  | Nombre                           |                |
| 1.3 | Note                  | Lugar de embarque o posición de lancha de prácticos con nota (por ejemplo: para petroleros o de desembarque de prácticos)<br>Boarding place, position of a pilot boat, with note (e. g. for Tanker, Disembarkation) | Nota                             | 491.1<br>491.2 |
| 1.4 | H                     | Recepción de prácticos con helicópteros<br>Pilots transferred by helicopter   |                                  |                |
| 2   | Pilot look out<br>†   | Caseta de práctico con vigía, vigía del servicio de prácticos<br>Pilot office with Pilot look-out, Pilot look-out   |                                  |                |
| 3   | Pilots                | Caseta de prácticos<br>Pilot office   | Prácticos                        | 491.3          |
| 4   | Port Name<br>(Pilots) | Puerto con servicio de prácticos<br>Port with pilotage-service  | Nombre del Puerto<br>(Prácticos) | 491.4          |

Coastguard, Rescue





Guardacostas, Salvamento

|    |              |   |  |                       |
|----|--------------|---|--|-----------------------|
| 10 | CG  CG  CG   | Puesto de Autoridad Marítima<br>Coastguard station  |  | 492<br>492.1<br>492.2 |
| 11 | CG   CG   CG | Puesto de Autoridad Marítima con estación de Auxilio<br>Coastguard station with Rescue station        |  | 493.3                 |
| 12 |              | Estación de auxilio, bote salvavidas con bengalas<br>Rescue station, Lifeboat station, Rocket station |  | 493<br>493.1          |
| 13 |              | Amarre de botes salvavidas<br>Lifeboat lying at a mooring   |  | 493.2                 |
| 14 | Ref          | Refugio de naufragos<br>Refuge for shipwrecked mariners   |  | 456.4                 |

## Signal Stations

Símbolos Nacionales Suplementarios  
Supplementary National Symbols: <sup>a</sup>

## Estaciones de Señales

|      |  |  |   |                |
|------|--|--|---|----------------|
| 20   | ⊙ SS   | Estación de señales en general<br>Signal station in general  | ⊙ ES  | 494.1          |
| 21   | ⊙ SS (INT)   | Estación de señales internacionales de tráfico portuario<br>Signal station, showing international Port Traffic Signals | ⊙ ES (INT)  | 495.4          |
| 22   | ⊙ SS (Traffic)   | Estación de señales de entrada y salida de puerto<br>Traffic signal station, Port entry and Departure signals          | ⊙ ES (Tráfico)  | 495<br>495.1   |
| 23   | ⊙ SS (Port control)  | Estación de señales de control portuario<br>Port control signal station  | ⊙ ES (Control de Puerto)  |                |
| 24   | ⊙ SS (Lock)  | Estación de señales de esclusas<br>Lock signal station   | ⊙ ES (Esclusa)  | 495.2          |
| 25.1 | ⊙ SS (Bridge)  | Estación de señales de paso de puente<br>Bridge passage signal station   | ⊙ ES (Puente)   | 495.3          |
| 25.2 |  F<br>(Traffic sig) | Puente con luces y señales de tráfico<br>Bridge lights including traffic signals                                       |  F<br>Señal de Tráfico |                |
| 26   | ⊙ SS   | Estación de señales de peligro<br>Distress signal station  | ⊙ ES  | 494.1<br>497   |
| 27   | ⊙ SS   | Estación telegráfica<br>Telegraph station  | ⊙ ES  | 497.1          |
| 28   | ⊙ SS (Storm)   | Estación de señales de temporal<br>Storm signal station  | ⊙ ES (Temporal)   | 494.1<br>497.1 |
| 29   | ⊙ SS (Weather)   | Estación de señales meteorológicas o de viento<br>Weather signal station, Wind signal station                          | ⊙ ES (Meteo.)   | 494.1<br>497.1 |
| 30   | ⊙ SS (Ice)   | Estación de señales de hielo<br>Ice signal station   | ⊙ ES (Hielo)  | 494.1<br>497.1 |
| 31   | ⊙ SS (Time)  | Estación de señales horarias<br>Time signal station  | ⊙ ES (Horaria)  |                |
| 32.1 |                   | Regla de mareas o mareógrafo<br>Tide scale or gauge  |                      | 496.1          |
| 32.2 | ⊙ Tide gauge   | Mareógrafo con registro automático de mareas<br>Automatically recording tide gauge                                     | ⊙ Mareógrafo  |                |
| 33   | ⊙ SS (Tide)  | Estación de señales de marea<br>Tidal signal station   | ⊙ ES (Mareas)   | 496.2          |
| 34   | ⊙ SS (Stream)  | Estación de señales de corriente<br>Tidal stream signal station  | ⊙ ES (Corrientes)   | 496.3          |
| 35   | ⊙ SS (Danger)  | Estación de señales de peligro<br>Danger signal station  | ⊙ ES (Peligro)  | 490.1<br>497.2 |
| 36   | ⊙ ES (Firing)  | Estación de señales de ejercicios de tiro<br>Firing practice signal station  | ⊙ ES (Tiro)   | 490.1<br>497.2 |








Supplementary National Symbols







Símbolos Nacionales Suplementarios


|   |  |                                  |        |  |
|---|--|----------------------------------|--------|--|
| a |  | Mástil de señales<br>Signal mast | ⊙ A.S. |  |
|---|--|----------------------------------|--------|--|

Small Craft Services

Servicios para Embarcaciones Menores

| Tráfico, puentes<br>Traffic, Features, Bridges → D |  | Edificios públicos, Grúas → F   |   | Prácticos, Guardacostas, Salvamento, Ests. de Señales → T                             |       |
|--|--|---|---|---|-------|
| 1  |  | Amarradero de yates sin servicios<br>Yacht berths without facilities          |   |   | 320.2 |
| 2  |  | Rampa<br>Slipway  |   |    |       |
| 3  |  | Pescante, Elevador para embarcaciones<br>Boat hoist                           |   |   |       |
| 4  |  | Embarcadero público, Escalerilla, Escala<br>Public landing, Steps, Ladder     |   |    |       |
| 5  |  | Velero<br>Sailmaker   |   |   |       |
| 6  |  | Astillero<br>Boatyard   |   |   |       |
| 7  |  | Hotel<br>Public Inn   | † |    |       |
| 8  |  | Restaurante<br>Restaurant   |   |    |       |
| 9  |  | Equipamiento náutico<br>Chandler  |   |   |       |
| 10   |  | Viveres<br>Provisions   |   |   |       |
| 11   |  | Banco, Oficina de cambio<br>Bank, Exchange office                             |   |   |       |
| 12   |  | Médico<br>Physician, Doctor   |   |   |       |
| 13   |  | Farmacia<br>Pharmacy, Chemist   |   |   |       |
| 14   |  | Toma de agua<br>Water tap   |   |  |       |
| 15   |  | Estación de combustible (Gasolina, Petróleo)<br>Fuel station (Petrol, Diesel) |   |  |       |
| 16   |  | Electricidad<br>Electricity   |   |  |       |

|    |  |  |   |  |
|----|--|--|---|--|
| 20 |  | Botellas de gas<br>Bottle gas  |   |  |
| 21 |  | Duchas<br>Showers  |   |  |
| 22 |  | Lavandería<br>Launderette  |  |  |
| 23 |  | Baños públicos<br>Public toilets   |  |  |
| 24 |  | Casilla Postal<br>Post box   |  |  |
| 25 |  | Teléfono público<br>Public telephone   |  |  |
| 26 |  | Contenedores de basura<br>Refuse bin   |   |  |
| 27 |  | Estacionamiento<br>Parking   |  |  |
| 28 |  | Estacionamiento de embarcaciones y remolques<br>Parking for boats and trailers |  |  |

|    |  |                                  |   |  |
|----|--|----------------------------------|---|--|
| 31 |  | Policía marítima<br>Water police |  |  |
|----|--|----------------------------------|---|--|

| 32           | <p>Servicios de los Puertos Deportivos<br/>Marina facilities</p> <p style="text-align: center;">SERVICIOS DE LOS PUERTOS DEPORTIVOS</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th>Gasolina</th> <th>Electricidad<br/>Petrol</th> <th>Duchas<br/>Shower</th> <th>Grúas<br/>Hoist</th> <th>Teléfonos públicos<br/>Public telephone</th> <th>Buzón de correos<br/>Post box</th> <th>Club náutico<br/>Yacht club</th> <th>Restaurante<br/>Restaurant</th> <th>Lavandería<br/>Launderette</th> <th>Radio VHF</th> <th>Canal</th> <th>Horario</th> <th>Teléfono</th> </tr> </thead> <tbody> <tr> <td>Viña del Mar</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>16</td> <td>0915-1315/1415-1815</td> <td>56-02-2353974</td> </tr> <tr> <td>Quintero</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>16</td> <td>0900-1300/1400-1800</td> <td>56-32-2930248</td> </tr> <tr> <td>Valdivia</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>68</td> <td>0930-1530/1430-1830</td> <td>56-63-213028</td> </tr> </tbody> </table> <p style="text-align: center;">MARINA FACILITIES</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th>Diesel</th> <th>Electricity<br/>Petrol</th> <th>Boat<br/>Shower</th> <th>Hoist</th> <th>Slipway</th> <th>Public telephone</th> <th>Post box</th> <th>Yacht club</th> <th>Restaurant</th> <th>Launderette</th> <th>Radio VHF</th> <th>Channel</th> <th>Hour</th> <th>Phone</th> </tr> </thead> <tbody> <tr> <td>Viña del Mar</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>16</td> <td>0915-1315/1415-1815</td> <td>56-02-2353974</td> </tr> <tr> <td>Quintero</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>16</td> <td>0900-1300/1400-1800</td> <td>56-32-2930248</td> </tr> <tr> <td>Valdivia</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>68</td> <td>0930-1530/1430-1830</td> <td>56-63-213028</td> </tr> </tbody> </table> <p>Las instalaciones de las Marinas pueden mostrarse en forma tabular en lugar de símbolos.</p> <ul style="list-style-type: none"> <li>• Esto indica que la instalación está disponible en la misma Marina. Las lavanderías, etc., fuera de la Marina no están incluidas. Las instalaciones no debieran estar disponibles fuera de las horas normales de trabajo. Todas las Marinas tienen agua, baños y depósitos de basura.</li> </ul> <p>Marina facilities may be shown in tabular form instead of symbols.</p> <ul style="list-style-type: none"> <li>• Indicates that the facility is available at the marina itself. Launderettes, 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.</li> </ul> |                       | Gasolina               | Electricidad<br>Petrol | Duchas<br>Shower | Grúas<br>Hoist                         | Teléfonos públicos<br>Public telephone | Buzón de correos<br>Post box | Club náutico<br>Yacht club | Restaurante<br>Restaurant | Lavandería<br>Launderette | Radio VHF           | Canal         | Horario  | Teléfono | Viña del Mar | • | • | • | • | • | • | • | • | • | 16 | 0915-1315/1415-1815 | 56-02-2353974 | Quintero | • | • | • | • | • | • | • | • | • | 16 | 0900-1300/1400-1800 | 56-32-2930248 | Valdivia | • | • | • | • | • | • | • | • | • | 68 | 0930-1530/1430-1830 | 56-63-213028 |  | Diesel | Electricity<br>Petrol | Boat<br>Shower | Hoist | Slipway | Public telephone | Post box | Yacht club | Restaurant | Launderette | Radio VHF | Channel | Hour | Phone | Viña del Mar | • | • | • | • | • | • | • | • | • | • | 16 | 0915-1315/1415-1815 | 56-02-2353974 | Quintero | • | • | • | • | • | • | • | • | • | • | 16 | 0900-1300/1400-1800 | 56-32-2930248 | Valdivia | • | • | • | • | • | • | • | • | • | • | 68 | 0930-1530/1430-1830 | 56-63-213028 |  |
|--------------|--|-----------------------|------------------------|------------------------|------------------|--|--|------------------------------|----------------------------|---------------------------|---------------------------|---------------------|---------------|----------|----------|--------------|---|---|---|---|---|---|---|---|---|----|---------------------|---------------|----------|---|---|---|---|---|---|---|---|---|----|---------------------|---------------|----------|---|---|---|---|---|---|---|---|---|----|---------------------|--------------|--|--------|-----------------------|----------------|-------|---------|------------------|----------|------------|------------|-------------|-----------|---------|------|-------|--------------|---|---|---|---|---|---|---|---|---|---|----|---------------------|---------------|----------|---|---|---|---|---|---|---|---|---|---|----|---------------------|---------------|----------|---|---|---|---|---|---|---|---|---|---|----|---------------------|--------------|--|
|              |  | Gasolina              | Electricidad<br>Petrol | Duchas<br>Shower       | Grúas<br>Hoist   | Teléfonos públicos<br>Public telephone | Buzón de correos<br>Post box           | Club náutico<br>Yacht club   | Restaurante<br>Restaurant  | Lavandería<br>Launderette | Radio VHF                 | Canal               | Horario       | Teléfono |          |              |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |              |  |        |                       |                |       |         |                  |          |            |            |             |           |         |      |       |              |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |              |  |
| Viña del Mar | •  | •                     | •                      | •                      | •                | •                                      | •                                      | •                            | •                          | 16                        | 0915-1315/1415-1815       | 56-02-2353974       |               |          |          |              |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |              |  |        |                       |                |       |         |                  |          |            |            |             |           |         |      |       |              |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |              |  |
| Quintero     | •  | •                     | •                      | •                      | •                | •                                      | •                                      | •                            | •                          | 16                        | 0900-1300/1400-1800       | 56-32-2930248       |               |          |          |              |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |              |  |        |                       |                |       |         |                  |          |            |            |             |           |         |      |       |              |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |              |  |
| Valdivia     | •  | •                     | •                      | •                      | •                | •                                      | •                                      | •                            | •                          | 68                        | 0930-1530/1430-1830       | 56-63-213028        |               |          |          |              |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |              |  |        |                       |                |       |         |                  |          |            |            |             |           |         |      |       |              |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |              |  |
|              | Diesel   | Electricity<br>Petrol | Boat<br>Shower         | Hoist                  | Slipway          | Public telephone                       | Post box                               | Yacht club                   | Restaurant                 | Launderette               | Radio VHF                 | Channel             | Hour          | Phone    |          |              |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |              |  |        |                       |                |       |         |                  |          |            |            |             |           |         |      |       |              |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |              |  |
| Viña del Mar | •  | •                     | •                      | •                      | •                | •                                      | •                                      | •                            | •                          | •                         | 16                        | 0915-1315/1415-1815 | 56-02-2353974 |          |          |              |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |              |  |        |                       |                |       |         |                  |          |            |            |             |           |         |      |       |              |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |              |  |
| Quintero     | •  | •                     | •                      | •                      | •                | •                                      | •                                      | •                            | •                          | •                         | 16                        | 0900-1300/1400-1800 | 56-32-2930248 |          |          |              |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |              |  |        |                       |                |       |         |                  |          |            |            |             |           |         |      |       |              |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |              |  |
| Valdivia     | •  | •                     | •                      | •                      | •                | •                                      | •                                      | •                            | •                          | •                         | 68                        | 0930-1530/1430-1830 | 56-63-213028  |          |          |              |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |    |                     |              |  |        |                       |                |       |         |                  |          |            |            |             |           |         |      |       |              |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |               |          |   |   |   |   |   |   |   |   |   |   |    |                     |              |  |

|                       |  |                          |          |
|-----------------------|--|--------------------------|----------|
| A                     | Amarillo                                     | Yellow                   | P11.6    |
| A                     | Arena  | Sand                     | J1       |
| Abr                   | Puerto natural                               | Haven (Hn)               |          |
| Al.                   | Alternada                                    | Alternating              | P10.11   |
| Alg.                  | Algas  | Kelps                    | J13.1    |
| Alm                   | Almacén                                      | Warehouse                | F51      |
| Am                    | Ámbar  | Amber                    | P11.8    |
| Anterior              | Anterior, Inferior                           | Front, Lower             | P23      |
| antg                  | antiguo                                      | ancient                  |          |
| aprox                 | aproximado                                   | approximate              |          |
| Arc                   | Arcilla                                      | Clay                     | J3       |
| Archo                 | Archipiélago                                 | Archipelago              |          |
| Arr.                  | Arrecife, Arrecife de coral                  | Reef, Coral reef         | J22, K16 |
| Av                    | Avenida                                      | Avenue                   |          |
| Az                    | Azul   | Blue                     | P11.4    |
| A.S.                  | Mástil de Señales                            | Signal mast              | Ta       |
| † Aero RC             | Radiofaro aeronáutico                        | Aeronautical radiobeacon | S16      |
| † A. de Bda           | Asta de bandera                              | Flagstaff                | E27      |
| † A. de la M. en sic. | Amplitud de la marea en sicigia              | Spring tide range        | Hc       |
| Ang                   | Angostura                                    | Narrows                  |          |
|                       |  |                          |          |
| B.                    | Blanco                                       | White                    | P11.1    |
| Ba.                   | Bahía  | Bay                      |          |
| Bco.                  | Banco  | Bank (Bk)                |          |
| Bco                   | Banco de arena                               | Shoal                    |          |
| bo.                   | blando                                       | soft                     | J35      |
| Bm.M.Sup.             | Media bajamares máximas                      | Mean Higher Low Water    | H14      |
| Bm.M.C.               | Altura media de las bajamares de cuadraturas | Mean Low Water Neaps     | H10      |
| Bm.M.Sic.             | Altura media de las bajamares de sicigias    | Mean Low Water Springs   | H8       |
| Bm.M.Inf.             | Altura media de las bajamares mínimas        | Mean Lower Low Water     | H12      |
| Bo.                   | Bajo   | Shoal (Sh)               |          |
|                       |  |                          |          |
| C                     | Cabo   | Cape                     |          |
| C                     | Cascajo                                      | Gravel                   | J6       |
| Cc                    | Conchuela                                    | Shells                   | J11      |
| cal                   | Calcáreo, Caliza                             | Calcareous               | J38      |
| Can                   | Canal (paso de mar)                          | Sound                    |          |
| Can                   | Canal  | Channel (Chan)           |          |
| Cta                   | Caleta                                       | Inlet                    |          |
| Cast.                 | Castillo                                     | Castle                   | E34.2    |
| Cat.                  | Catedral                                     | Cathedral                |          |
| cd                    | Candela                                      | Candela                  | B54      |
| Co                    | Coral  | Coral                    | J10      |
| Col.                  | Colina                                       | Hill                     |          |
| cm                    | Centímetro                                   | Centimeter               | B43      |
| Cra.                  | Cordillera                                   | Range                    |          |
| Cre.                  | Cumbre                                       | Summit                   |          |
| Ct                    | Centelleante rápida                          | Continuous quick         | P10.6    |
| Ct R                  | Centelleante rápida continua                 | Continuous very quick    | P10.7    |

|              |   |   |        |
|--------------|---|---|--------|
| D            | Destellos simples                                 | Single flashing                                     | P10.4  |
| <i>d</i>     | duro  | hard  | J39    |
| dest.        | destruido   | destroyed   |        |
| † Diáf.      | Diáfono   | Diaphone  | R11    |
| dist.        | distante  | distant   | O85    |
| DL           | Destellos largos                                  | Long-flashing                                       | P10.5  |
| dm           | Decímetro   | Decimetre   | B42    |
| <i>Esp</i>   | Esponja   | Sponge  | Jd     |
| E            | Este  | East  | B10    |
| E. del P.    | Establecimiento de Puerto                         | Establishment of the Port                           | Ha     |
| <i>ED</i>    | Existencia dudosa                                 | Existence doubtful                                  | I1     |
| <i>Ensa.</i> | Ensenada  | Cove  |        |
| <i>Entr.</i> | Entrada   | Entrance  |        |
| E.S.         | Estación de señales (en general)                  | Signal station (general)                            | T20    |
| <i>Esc</i>   | Escoria   | Scoria  | Jb     |
| <i>Est.</i>  | Estuario  | Estuary   |        |
| <i>Esto.</i> | Estero  | Stream  |        |
| <i>Estr.</i> | Estrecho  | Strait  |        |
| <i>F</i>     | Fango   | Mud   | J2     |
| F            | Fija  | Fixed   | P10.1  |
| <i>f</i>     | fino  | fine  | J30    |
| Fca.         | Fábrica   | Factory   |        |
| <i>Fd.</i>   | Fiordo  | Fiord   |        |
| FD           | Fija y de destellos                               | Fixed and flashing                                  | P10.10 |
| <i>Fond.</i> | Fondeadero  | Anchorage   | N10    |
| ft           | Pie   | Foot/Feet   | B47    |
| <i>G.</i>    | Golfo   | Gulf  |        |
| G            | Guijarro  | Pebbles   | J7     |
| <i>Ggru</i>  | Guijarro grueso                                   | Cobbles   | J8     |
| GrCt         | Grupo de centelleantes rápidas                    | Group quick   | P10.6  |
| GrOc         | Grupo de ocultaciones                             | Group occulting                                     | P10.2  |
| GrCtR        | Grupo de centelleantes rápidas continuas          | Group very quick                                    | P10.7  |
| <i>Gr</i>    | Greda   | Chalk   | Ja     |
| <i>gde</i>   | grande  | large   | Jf     |
| <i>gru</i>   | grueso  | coarse  | J32    |
| GrD          | Grupo de destellos                                | Group flashing                                      | P10.4  |
| h            | Hora  | Hour  | B49    |
| HAT          | Máxima pleamar astronómica                        | Highest Astronomical Tide                           | H3     |
| IALA         | Asociación Internacional de Señalización Marítima | International Association of Lighthouse Authorities | Q130   |
| I., Is.      | Isla (s)  | Island (s)  |        |
| Ins.         | Instituto   | Institute   |        |
| Iso          | Isofase   | Isophase  | P10,3  |
| Ite., ltes.  | Islote (s)  | Islet (s)   |        |
| km           | Kilómetro   | Kilometer   | B40    |
| Kn           | Nudo  | Knot  | B52    |

|            |  |                               |          |
|------------|--|-------------------------------|----------|
| L.         | Lago   | Lake                          | C23      |
| La.        | Laguna   | Lagoon                        |          |
| Lat        | Latitud  | Latitude                      | B1       |
| Long       | Longitud   | Longitude                     | B2       |
| lum.       | luminoso   | lighted                       |          |
| m          | metro  | meter                         | B41      |
| M          | Milla náutica                                    | Nautical mile                 | B45      |
| min, m     | Minuto de tiempo                                 | Minute of time                | B50      |
| Mag.       | magnético  | magnetic                      | B61      |
| M de C.    | Mareas de cuadratura                             | Neap tide                     | H17      |
| M de sic.  | Mareas de Sicigia                                | Spring tide                   | H16      |
| mm         | Milímetro  | Milimetre                     | B44      |
| Mo         | Señal Morse                                      | Morse code                    | P10.9    |
| Mo.        | Morro  | Head                          |          |
| Mon        | Monumento  | Monument                      | E24      |
| Mta.       | Meseta   | Table-land                    |          |
| Mte., Mña. | Monte, Montaña                                   | Mount, Mountain               |          |
| Mte.       | Monte  | Mount                         |          |
| N          | Norte  | North                         | B9       |
| † Nautóf   | Nautófono  | Nautophone                    | R13      |
| nav.       | Navegable  | Navigable                     |          |
| NE         | Noreste  | Northeast                     | B13      |
| NRS        | Nivel de reducción de sondas (Dátum de la carta) | Chart Datum                   | H1       |
| NMM        | Nivel Medio del Mar                              | Mean Sea Level                | H6       |
| NW         | Noroeste   | Northwest                     | B15      |
| Nja        | Naranja  | Orange                        | P11.7    |
| Obsv.      | Observatorio                                     | Observatory (obs.)            |          |
| Obstr      | Obstrucción                                      | Obstruction                   | K40-43.1 |
| Oc         | Ocultación simple                                | Single occulting              | P10.2    |
| ocas.      | Ocasional  | Ocasional                     | P50      |
| ODAS       | Sistema de Adquisición de Datos Oceanográficos   | Ocean Data Acquisition System | Q58      |
| † Of. Tel. | Oficinas de telégrafos                           | Telegraph Office              |          |
| O.Sub.     | Oscilador submarino                              | Submarine oscillator          | Ra       |
| Os         | Ostra  | Oysters                       | Jc       |
| P          | Piedra   | Stone                         | J5       |
| P.         | Pico   | Peak                          |          |
| P.         | Pico   | Peak                          |          |
| PA         | Posición aproximada                              | Position approximate          | B7       |
| PD         | Posición dudosa                                  | Position doubtful             | B8       |
| Po.        | Paso (de navegación)                             | Passage                       |          |
| part.      | particular, privada                              | private                       | P65, Q70 |
| Penla.     | Península  | Peninsula                     | G4       |
| peq        | pequeño  | small                         | Je       |
| peq        | pequeño, menor                                   | lesser                        |          |
| Pm.M.C.    | Altura media de las pleamares de cuadraturas     | Mean High Water Neaps         | H11      |
| Pm.M.Sic.  | Altura media de las pleamares de sicigias        | Mean High Water Springs       | H9       |
| Pm.M.Inf.  | Media pleamares mínimas                          | Mean Lower High Water         | H15      |
| Pm.M.Sup.  | Altura media de las pleamares máximas            | Mean Higher High Water        | H13      |
| Proh.      | prohibido  | prohibited                    | Od       |
| prom.      | prominente                                       | prominent                     |          |
| Prom.      | Promontorio                                      | Promontory                    |          |
| Pta        | Punta  | Point                         |          |
| Pto        | Puerto   | Harbour (Hr)                  |          |



|                     |   |  |                         |
|---------------------|---|--|-------------------------|
| Q.                  | Quebrada  | Gorge  |                         |
| R.                  | Río   | River  |                         |
| R                   | Estación radiocostera con servicio QTG              | Coast radiostation providing QTG service     | S15                     |
| † R                 | Estación radiotelegráfica                           | Radiotelegraphic station                     | Sb                      |
| R                   | Roca  | Rock   | J9.1                    |
| R                   | Rojo  | Red  | P11.2                   |
| Ra                  | Radar   | Radar  | M-30                    |
| Racon               | Baliza respondedora de radar                        | Radar transponder beacon                     | S3.1-3.6                |
| RC                  | Radiofaro marítimo circular                         | Circular radiobeacon                         | S10                     |
| RD                  | Radiofaro direccional                               | Directional radiobeacon                      | S11                     |
| Rda.                | Rada  | Roads. Roadstead                             |                         |
| R. de la M. en sic. | Rango de la marea en sicigia                        | Spring tide range                            | Hb                      |
| Rep                 | Reportado   | Reported                                     | I3                      |
| regl.               | reglamento  | Standard                                     |                         |
| RG                  | Estación radiogonométrica                           | Radio direction-finding station              | S14                     |
| Rga.                | Restinga  | Ledge  |                         |
| R.F.                | Radiofaro   | Radiobeacon                                  | Sa                      |
| RoRo                | Terminal de buques Roll-on Roll-off                 | Roll-on Roll-off ferry terminal              | F50                     |
| R.T.                | Estación radiotelefónica                            | Radiotelephone station                       | Sc                      |
| Ru                  | Ruinas  | Ruins  | D8, E25.2, F33.1        |
| RW                  | Radiofaro giratorio                                 | Rotating-pattern radiobeacon                 | S12                     |
| S                   | Sur   | South  | B11                     |
| S, Sn, Sta, Sto     | Santo (a)   | Saint  |                         |
| sec, s              | Segundo de tiempo                                   | Second of time                               | B51                     |
| †seg.               | Segundo de tiempo                                   | Second of time                               | B51                     |
| Sec. Osc.           | Sector de oscuridad                                 | Obscured sector                              | P43                     |
| SD                  | Sonda dudosa  | Sounding doubtful                            | I2                      |
| SE                  | Sureste   | Southeast                                    | B14                     |
| † Silb.             | Silbato   | Whistle                                      | R15                     |
| † Sir               | Sirena  | Siren  | R12                     |
| SIRGAS              | Sistema de Referencia Geocéntrico para las Américas | Geocentric Reference System for the Americas | Sd                      |
| subm.               | submarino   | submarine                                    |                         |
| sumg.               | sumergido   | submerged                                    |                         |
| SMt                 | Monte sumergido                                     | Seamount                                     |                         |
| S.N.                | Señal de niebla                                     | Fog signal                                   | Rb                      |
| S.S.N.              | Señal submarina de niebla                           | Fog submarine signal                         | Rc                      |
| SW                  | Suroeste  | Southwest                                    | B16                     |
| t                   | Tonelada  | Ton  | B53                     |
| TV                  | Televisión  | Television                                   | E29                     |
| V                   | Verde   | Green  | P11.3                   |
| V.                  | Volcán  | Volcano                                      |                         |
| V.                  | verdadero   | true   | B63                     |
| Var.                | Variación   | Variation                                    | B60                     |
| Vi                  | Violeta   | Violet                                       | P11.5                   |
| W                   | Oeste   | West   | B12                     |
| Wk                  | Nafragio  | Wreck  | K20-23, K26<br>K30, N26 |
| †yd.                | Yarda   | Yard   | Bb                      |
| ZEE                 | Zona Económica Exclusiva                            | Exclusive Economic Zone                      | N47                     |

|          |                             |                |            |  |             |
|----------|-----------------------------|----------------|------------|--|-------------|
| <b>A</b> |                             |                |            |  |             |
| Aero     | Aeronautical                | P 60-61.1      | Fog Det Lt | Fog detector light                                     | P 62        |
| Aero RC  | Aeronautical radio beacon   | S 16           | ft         | Foot/feet  | B 47        |
| Al       | Alternating                 | P 10.11        | <b>G</b>   |  |             |
| ALC      | Articulated Loading Column  | L12            | G          | Gravel   | J 6         |
| Am       | Amber                       | P 11.8         | G          | Green  | P 11.3, Q 2 |
| ASL      | Archipelagic Sea Lane       | M 17           | <b>H</b>   |  |             |
| <b>B</b> |                             |                |            |  |             |
| B        | Black                       | Q2,Q81         | h          | Hard   | J 39        |
| bk       | Broken                      | J 33           | h          | Hour   | B 49        |
| Bn       | Beacon                      | P 5, Q80       | H          | Helicopter   | T 1.4       |
| Br       | Breakers                    | K 17           | HAT        | Highest Astronomical Tide                              | H 3         |
| Bu       | Blue                        | P 11.4         | hor        | Horizontally disposed                                  | P 15        |
| <b>C</b> |                             |                | HW         | High Water   | H 20        |
| c        | Coarse                      | J 32           | <b>I</b>   |  |             |
| ca       | Calcareous                  | J 38           | IALA       | International Association<br>of Lighthouse Authorities | Q 130       |
| CALM     | Catenary Anchor Leg Mooring | L16            | INT        | International  | T 21        |
| Cb       | Cobbles                     | J 8            | Intens     | Intensified  | P 46        |
| cd       | Candela                     | B 54           | IQ         | Interrupted quick                                      | P 10.6      |
| CD       | Chart Datum                 | H 1            | Iso        | Isophase   | P 10.3      |
| CG       | Coastguard                  | T 10-11        | IUQ        | Interrupted Ultra Quick                                | P 10.8      |
| Ch       | Church                      | E 10.1         | IVQ        | Interrupted Very Quick                                 | P 10.7      |
| Chem     | Chemical(s)                 | L 40           | <b>K</b>   |  |             |
| Chy      | Chimney                     | E 22           | km         | Kilometre(s)   | B 40        |
| cm       | Centimetre(s)               | B 43           | kn         | Knot(s)  | B 52        |
| Co       | Coral                       | J 10, K 16     | <b>L</b>   |  |             |
| † Consol | Consol beacon               | S 13           | LANBY      | Large Automatic Navigational Buoy                      | P 6         |
| Cup      | (Church) cupola             | E 10.4         | Lat        | Latitude   | B 1         |
| Cy       | Clay                        | J 3            | LAT        | Lowest Astronomical Tide                               | H 2         |
| <b>D</b> |                             |                | Ldg        | Leading  | P 20.3      |
| day      | Daytime light               | P 51           | LFI        | Long-flashing  | P 10.5      |
| Dia      | Diaphone                    | R 11           | Lndg       | Landing for boats                                      | F 17        |
| Dir      | Direction light             | P 30-31        | Long       | Longitude  | B 2         |
| dm       | Decimetre(s)                | B 42           | Lt         | Light  | P 1         |
| Dn, Dns  | Dolphin(s)                  | F 20           | LtHo       | Lighthouse   | P 1         |
| DW       | Deep Water route            | M 27.1, N 12.4 | LW         | Low Water  | H 20        |
| DZ       | Danger Zone                 | Q 50           | <b>M</b>   |  |             |
| <b>E</b> |                             |                | m          | Medium   | J 31        |
| E        | East                        | B 10           | m          | Metre(s)   | B 41        |
| ED       | Existence doubtful          | I 1            | m, min     | Minute(s) of time                                      | B 50        |
| EEZ      | Exclusive Economic Zone     | N 47           | M          | Mud  | J 2         |
| Explos   | Explosive                   | R 10           | M          | International nautical mile(s)<br>or sea mile(s)       | B 45        |
| exting   | Extinguished                | P 55           | MHHW       | Mean Higher High Water                                 | H 13        |
| <b>F</b> |                             |                | MHLW       | Mean Higher Low Water                                  | H 14        |
| f        | Fine                        | J 30           | MHW        | Mean High Water  | H 5         |
| F        | Fixed                       | P 10.1         | MHWN       | Mean High Water Neaps                                  | H 11        |
| FFI      | Fixed and flashing          | P 10.10        |            |  |             |
| Fl       | Flashing                    | P 10.4         |            |  |             |
| Fla      | Flare stack                 | L 11           |            |  |             |

# International Abbreviations

# Abreviaturas Internacionales W

|             |   |                      |           |                           |                     |
|-------------|---|----------------------|-----------|---------------------------|---------------------|
| MHWS        | Mean High Water Springs                 | H 9                  | S         |                           |                     |
| Mk          | Mark                                    | Q 101                | S         | Sand                      | J 1                 |
| MLHW        | Mean Lower High Water                   | H 15                 | s         | Second(s) of time         | B 51, P 12          |
| MLLW        | Mean Lower Low Water                    | H 12                 | S         | South                     | B 11                |
| MLW         | Mean Low Water                          | H 4                  | SALM      | Single Anchor Leg Mooring | L 12                |
| MLWN        | Mean Low Water Neaps                    | H 10                 | SBM       | Single Buoy Mooring       | L 16                |
| MLWS        | Mean Low Water Springs                  | H 8                  | SD        | Sounding doubtful         | I 2                 |
| mm          | Millimetre(s)                           | B 44                 | SE        | Southeast                 | B 14                |
| Mo          | Morse code                              | P 10.9, R 20         | sec       | Second(s) of time         | B 51                |
| Mon         | Monument                                | E 24                 | <i>sf</i> | Stiff                     | J 36                |
| MR          | Marine Reserves                         | N 22.3               | <i>Sh</i> | Shells                    | J 11                |
| MSL         | Mean Sea Level                          | H 6                  | <i>Si</i> | Silt                      | J 4                 |
|             |   |                      | Sig       | Signal                    | T 25.2              |
| <b>N</b>    |   |                      | <i>so</i> | Soft                      | J 35                |
| N           | North                                   | B 9                  | Sp        | (Church) spire            | E 10.3              |
| NE          | Northeast                               | B 13                 | Sp        | Spring Tide               | H 16                |
| <i>No</i>   | Number                                  | N 12.2               | SPM       | Single Point Mooring      | L 12                |
| <i>Np</i>   | Neap Tide                               | H 17                 | SS        | Signal station            | T 20-25.1, T26-31   |
| NW          | Northwest                               | B 15                 |           |                           | T33-36              |
|             |   |                      | <i>St</i> | Stones                    | J 5                 |
| <b>O</b>    |   |                      | SW        | Southwest                 | B 16                |
| Obscd       | Obscured                                | P 43                 | sy        | Sticky                    | J 34                |
| Obstn       | Obstruction                             | K 40-43, L 43        |           |                           |                     |
| Oc          | Occulting                               | P10.2, P30, P41, P46 | <b>T</b>  |                           |                     |
| occas       | Occasional                              | P50                  | t         | Ton(s) or tonne(s)        | B 53, F 53.2        |
| ODAS        | Ocean Data Acquisition System           | Q58                  | temp      | Temporary                 | P 54                |
| Or          | Orange                                  | P11.7, Q 3           | Tr        | Tower                     | E 10.2, E 20        |
| <b>P</b>    |   |                      |           |                           |                     |
| <i>P</i>    | Pebbles                                 | J 7                  | <b>U</b>  |                           |                     |
| <i>PA</i>   | Position approximate                    | B 7                  | U         | Unwatched, unmanned       | P 53                |
| <i>PD</i>   | Position doubtful                       | B 8                  | UQ        | Continuous ultra quick    | P 10.8              |
| <i>priv</i> | Private                                 | P 65, Q 70           |           |                           |                     |
| Prod Well   | Submerged production well               | L 20                 | <b>V</b>  |                           |                     |
| PSSA        | Particularly Sensitive Sea Area         | N 22.4               | <i>v</i>  | Volcanic                  | J 37                |
| Pyl         | Pylon                                   | D 26                 | vert      | Vertically disposed       | P 15                |
|             |   |                      | <i>Vi</i> | Violet                    | P 11.5              |
| <b>Q</b>    |   |                      | VQ        | Group very quick          | P 10.7              |
| Q           | Quick                                   | P 10.6               |           |                           |                     |
| <b>R</b>    |   |                      | <b>W</b>  |                           |                     |
| R           | Coast radio stations QTG service        | S 15                 | W         | West                      | B 12                |
| R           | Red                                     | P 11.2, Q 3          | W         | White                     | P 11.1, Q 130.5     |
| R           | Rock                                    | J 9, K 15            | <i>Wd</i> | Weed                      | J 13.1              |
| Ra          | Radar                                   | M 31-32, S 1         | Well      | Wellhead                  | L 21, 21.2, 21.3    |
| Racon       | Radar transponder beacon                | S 3.1-3.6            | WGS       | World Geodetic System     | S 50                |
| Radar Sc    | Radar scanner                           | E 30.3               | Whis      | Whistle                   | R 15                |
| Radar Tr    | Radar tower                             | E 30.2               | Wk(s)     | Wreck(s)                  | K20-23, K26-27, K30 |
| RC          | Circular marine radiobeacon             | S 10                 |           |                           |                     |
| 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>A</b>   |             | <b>B</b>   |              |
|--|-------------|--|--------------|
| Acantilado   | C3          | Baliza flotante con luz                            | P5           |
| Aduana   | F61         | Baliza luminosa                                    | P4           |
| Aerofaro   | P60         | Balsas de cultivo de peces                         | K44.2        |
| Aeropuerto, Campo de aterrizaje                            | D17         | Boyas y Balizas                                    | Q            |
| Aguja  | E10.3       | - Colores  | Q2-5         |
| Almacenes  | F51-52      | - Generalidades                                    | Q80-83       |
| Altura de la parte superior                                | E4          | - Marcas de tope                                   | Q9           |
| Altura de una estructura                                   | E5          | - Marcas luminosas                                 | Q7           |
| Ancho libre mínimo   | D21         | - Posición   | Q1           |
| Anomalía magnética local                                   | B82.1-B82.2 | Balizas especiales                                 | Q120-126     |
| Antena de radio o televisión                               | E28         | Balizas que marcan una distancia<br>(milla medida) | Q122<br>S2-3 |
| Antorcha (en tierra)                                       | E23         | Balizas radar                                      | S2-3         |
| Antorcha (en la mar)                                       | L11         | Barrera flotante                                   | F29.1, G178  |
| Aparejos de fondeo en el fondo                             | L18         | Batería  | E34.3        |
| Árboles  | C31         | Bocina   | R13          |
| Árbol de hoja caduca                                       | C31.1       | Bosques  | C30, G38-39  |
| Árbol de hoja perenne                                      | C31.2       | Boya cilíndrica                                    | Q21          |
| Arrecifes  | J21-22, K16 | Boya con mástil                                    | Q24          |
| Asta de bandera  | E27         | Boya cónica  | Q20          |
| Autopista  | D10         | Boya de barril                                     | Q25          |
| Área urbana  | D1-3        | Boya pilar   | Q23          |
| Área a evitar  | M29.1-29.2  | Boya esférica                                      | Q22          |
| Área barrida con rastra hidrográfica                       | I24         | Boya para carga de buque tanque                    | L16          |
| Área con restos de naufragios                              | K31         | Boyas de amarre                                    | Q40-44       |
| Área de pesca  | K45         | Boyas especiales                                   | Q50-62       |
| Área de amarizaje de hidroaviones                          | N13         | Boyas estacionales                                 | Q70-71       |
| Área de cables submarinos                                  | L30.2, 31.2 | Buque cisterna                                     | L17          |
| Área de desmagnetización                                   | N25         | Buque-faro   | P6           |
| Área de ejercicios de fondeo de minas                      | N32         | Buque-pontón                                       | F34          |
| Área de ejercicios de tiro                                 | N30         |  |              |
| Área de ejercicios y tránsito de submarinos                | N33         |  |              |
| Área de fondeo con su nombre                               | N12.3       |  |              |
| Área de fondeo de aguas profundas                          | N12.4       |  |              |
| Área de fondeo de cuarentena                               | N12.8       |  |              |
| Área de fondeo de petroleros                               | N12.5       |  |              |
| Área de fondeo en general                                  | N12.1       |  |              |
| Área de fondeo numerada                                    | N12.2       |  |              |
| Área de fondeo para buques con explosivos                  | N12.7       |  |              |
| Área de incineración                                       | N65         |  |              |
| Área no hidrografiada o hidrografiada<br>insuficientemente | I25         |  |              |
| Área restringida de naufragios históricos                  | N26         |  |              |
| Área de desembarco para botes                              | F17         |  |              |
| Área de precaución   | M16, 24     |  |              |
| Área de separación   | M13         |  |              |
| Área de tuberías   | L40.2, 41.2 |  |              |
| Área dragada   | I21-23      |  |              |
| Área militar restringida                                   | N31         |  |              |
| Área restringida de pesca                                  | N21         |  |              |
| Área marítima particularmente sensible                     | N22.4       |  |              |
| Área de transbordo de carga                                | N64         |  |              |
| Autoridad Marítima   | F60         |  |              |
|  |             | <b>C</b>   |              |
|  |             | Cabeza de pozo                                     | L21.3,23     |
|  |             | Cable aéreo  | D26-27       |
|  |             | Cables submarinos                                  | L30.1,32     |
|  |             | Calvario   | E12          |
|  |             | Camino   | D12          |
|  |             | Campana  | R14          |
|  |             | Campo minado                                       | N34          |
|  |             | Canal con marca de distancia                       | F40          |
|  |             | Canal dragado                                      | I21-23       |
|  |             | Cantera  | E35.1, 35.2  |
|  |             | Capilla  | E11          |
|  |             | Carretera  | D11, G110    |
|  |             | Carretera elevada                                  | F3           |
|  |             | Cascadas   | C22          |
|  |             | Castillo   | E34.2-G64    |
|  |             | Cementerio   | E19          |
|  |             | Chimenea   | E22          |
|  |             | Choza  | G62          |
|  |             | Colinas arenosas                                   | C8           |

|  |                 |   |                                  |
|--|-----------------|---|----------------------------------|
| Colinas costeras                                     | C4              | Esclusa   | F41.1, 41.2                      |
| Compuerta  | F42             | Espigones   | F6.1, F6.2, F6.3<br>F14-15, 33.2 |
| Contención de petróleo                               | F29.2           | Espacio libre mínimo  | D20                              |
| Consultorio  | F62.1           | Estaca  | Q90                              |
| Correos  | F63             | Estación Consol   | S13                              |
| Corriente de lava                                    | C26             | Estaciones de señales   | T20-25.1, T26-31,<br>T33-36      |
| Corriente de marea                                   | H40-46          | Estación radar costera  | S1                               |
| Costa  | C1-8            | Estación radio costera con servicio de<br>escucha internacional (QTG) | S15                              |
| Costa baja   | C5              | Estación radiogoniométrica  | S14                              |
| Costa de guijarro                                    | C7              | Estación radiotelefónica  | Sc                               |
| Costa escarpada                                      | C3              | Estación radiotelegráfica   | Sb                               |
| Costa pedregosa                                      | C7              | Estanques   | E32                              |
| Costa rocosa   | C3              | Esterio   | C20                              |
| Cotas  | C11, 14         | Estructura fortificada  | E34.1                            |
| Cruz   | E12             | Explosivo   | R10                              |
| Cúpula de iglesia                                    | E10.4           | Edificio importante   | D6                               |
| Cúpula de radar                                      | E30.4           | Edificio en ruinas  | D8                               |
| Curvas de nivel                                      | C10, 12         |   |                                  |
| Características hidrográficas                        | C20-26          |   |                                  |
| <b>D</b>   |                 |   |                                  |
| Dársena de mareas                                    | F28             | <b>F</b>  |                                  |
| Dársena de nivel constante                           | F27             | Faro  | P1                               |
| Depósito elevado de agua                             | E21             | Ferrocarril   | D13                              |
| Derrotas   | M1-6            | Focos   | P63                              |
| Derrota de una dirección, sentido único              | M5.1            | Fondeadero de hidroaviones  | N14                              |
| Derrota de doble dirección                           | M5.2            | Fondeadero designado  | N11.1-11.2                       |
| Derrota recomendada                                  | M3-4, 6         | Fondeadero para buques de gran calado                                 | N12.4                            |
| Diáfono  | R11             | Fondeadero para períodos de hasta<br>24 horas                         | N12.6                            |
| Dique de contención                                  | F1              | Fondeadero prohibido  | N20                              |
| Dique dentado o de peine                             | F24             | Fondeadero recomendado  | N10                              |
| Dique flotante                                       | F26             | Fondeadero reservado  | N12.9                            |
| Dique seco   | F25             | Fondeaderos, Zona de fondeo   | N10-14                           |
| Derrotas, Rutas, Esquema de Separación<br>de Tráfico | M               | Fortín  | E34.3                            |
| - Dirección obligatoria para el tráfico              | M10             | Fuerte  | E34.2                            |
| - Dirección recomendada para el tráfico              | M11, 26.1, 26.2 | Fondeadero de pequeños buques   | Nb                               |
| - Línea de separación                                | M12             |   |                                  |
| - Área a evitar                                      | M29.1-29.2      | <b>G</b>  |                                  |
| - Zona de navegación costera                         | M25.1, 25.2     | Generador eólico  | E26.1                            |
| - Área de precaución                                 | M16, 24         | Guardacosta   | T10-14                           |
| - Área de separación                                 | M13             | Glaciar   | C25                              |
| Dunas  | C8              | Gong  | R16                              |
| Duque de alba  | F20-21          | Grada   | F23                              |
|  |                 | Grúas   | F53.1, 53.2                      |
|  |                 | Granja marina   | K48.1, 48.2                      |
| <b>E</b>   |                 |   |                                  |
| Edificio aislado                                     | D5              | <b>H</b>  |                                  |
| Edificios públicos                                   | F60-63          | Hospital  | F62.2                            |
| Embarcaciones menores, Servicios                     | U               | Helipuerto  | Da                               |
| Enfilación   | M1-2, Q120-121  |   |                                  |
| Escala de desembarco                                 | F18             |   |                                  |
| Escarceos  | H44             |   |                                  |

|   |                  |          |  |
|---|------------------|----------|--|
| <b>I</b>  |                  |          |  |
| Iglesia   | E10.1            |          |  |
| Iluminación de una estructura                             | P63              |          |  |
| Instalaciones en altamar. Generalidades                   | L1-5             |          |  |
| Instalaciones portuarias                                  | F10              |          |  |
| Isla artificial   | L15              |          |  |
| Isógonas  | B71              |          |  |
| <b>L</b>  |                  |          |  |
| Lagos   | C23              |          |  |
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| Post office                            | F63               | - Established direction of traffic flow | M10               |
| Power transmission line                | D26               | - Inshore traffic zone                  | M25               |
| Precautionary area                     | M16, 24           | - Precautionary area                    | M16, 24           |
| Private light                          | P65               | - Recommended direction of traffic flow | M11, 26           |
| Promenade pier                         | F15               | - Separation line                       | M12               |
| Public buildings                       | F60-63            | - Separation zone                       | M13               |
|  |                   | Ruin                                    | D8, F33           |
| <b>Q</b>                               |                   | <b>S</b>                                |                   |
| Qualifying Terms, Seabed               | J30-39            | Salt pans                               | C24               |
| Quarantine anchorage area              | N12.8             | Sandhills                               | C8                |
| Quarry                                 | E35               | Sandwaves                               | J14               |
| Quay                                   | F13               | Sandy shore                             | C6                |
|  |                   | Satellite navigation system             | S50               |
| <b>R</b>                               |                   | Scrubbing grid                          | F24               |
| Races                                  | H44               | Sea-plane landing area                  | N13               |
| Radar                                  | S                 | Seal sanctuary                          | N22.2             |
| - Beacon                               | S2-3              | Seasonal buoys                          | Q71               |
| - Coast radar station                  | S1                | Seaward limit of contiguous zone        | N44               |
| - Conspicuous feature                  | S5                | Seaward limit of territorial sea        | N43               |
| Range                                  | M31               | Separation zone                         | M13               |
| Reference line                         | M32               | Settlements                             | D1-4, 7           |
| Reflector                              | S4                | Sheerlegs                               | F53.3             |
| - Scanner                              | E30.3             | Shellfish beds                          | K47               |
| - Surveillance station                 | M30               | Shinto shrine                           | E15               |
| Radio direction-finding station        | S14               | Signal stations                         | T20-25.1, T26-31, |
| Radio reporting points                 | M40               |   | T33-36            |
| Railway                                | D13               | Silo                                    | E33               |
| Ramp                                   | F23               | Single mooring buoy                     | L16               |
| Rapids                                 | C22               | Single flashing light                   | P10.4             |
| Rear light                             | P22               | Single occulting light                  | P10.2             |
| Recommended anchorage                  | N10               | Siren                                   | R12               |
| Recommended route                      | M28.1             | Slipway                                 | F23               |
| Recommended track                      | M3-4, 6           | Small craft. Services                   | U1-32             |
| Reefs                                  | J22, K16          | Small fort                              | E34.3             |
| Relief                                 | C10-14            | Soundings                               | I10-15, b, c      |
| Rescue                                 | T10-14            | Spar buoy                               | Q24               |
| Reserved anchorage                     | N12.9             | Special lights                          | P60-65            |
| Restricted areas                       | N20-26            | Special purpose beacons                 | Q120-126          |
| River                                  | C20-21            | Special purpose buoys                   | Q50-62            |
| Road                                   | D11, G110         | Spherical buoy                          | Q22               |
| Rock awash at the level of chart datum | K12               | Spindle buoy                            | Q24               |
| Rocks                                  | K10-17            | Spoil ground                            | N62               |
| Rocks, General                         | K1-2              | Spot heights                            | C11, 14           |
| Rocks which covers and uncovers        | K11               | Spring in seabed                        | J15               |

|  |                    |   |             |
|--|--------------------|---|-------------|
| Steep coast                              | C3                 | Upper light   | P22         |
| Steps                                    | F18                | Unwatched light   | P53         |
| Straight territorial sea baseline        | N42                |   |             |
| Strip light                              | P64                | <b>V</b>  |             |
| Submarine cable area                     | L30.2, 31.2        | Vegetation  | C30-33      |
| Submarine cables                         | L30-32             | Vertical clearance  | D20         |
| Submarine pipelines                      | L40-44             |   |             |
| Submarine transit lane and exercise area | N33                | <b>W</b>  |             |
| Submerged wreck                          | K22, 23            | Warehouse   | F51         |
| Super buoy                               | Q26                | Waterfalls  | C22         |
| Supply pipeline, area                    | L40                | Water features  | C20-26      |
| Symbolised positions (examples)          | B30-33             | Water tower   | E21         |
|  |                    | Wellhead  | L21.3, 23   |
| <b>T</b>                                 |                    | Wells   | L20, 21.2   |
| Tanker anchorage area                    | N12.5              | Wet dock  | F27         |
| Tanks                                    | E32                | WGS   | S50         |
| Telegraph line                           | D27                | Wharf   | F13         |
| Telepheric                               | D25                | Whistle   | R15         |
| Telephone line                           | D27                | Wind motor  | E26         |
| Temple                                   | E13                | Woods   | C30, G38-39 |
| Temporary light                          | P54                | Works   | F30-32      |
| Terms relating to tidal levels           | H1-17              | Wrecks  | K20-31      |
| Tidal basin                              | F28                | Wreck, covers and uncovers                                  | K21         |
| Tidal harbour                            | F28                | Wreck, hull always dry                                      | K20, 24     |
| Tidal levels and charted data            | H20                | Wreck, least depth known by sounding only                   | K26         |
| Tidal streams and currents               | H40-46             | Wreck, least depth known swept by wire<br>drag or diver     | K27         |
| Tide gauge, scale                        | T32                | Wreck of which the masts only are visible<br>at Chart Datum | K25         |
| Tide rips                                | H44                |   |             |
| Tide stream tables                       | H30-31             |   |             |
| Timber yard                              | F52                |   |             |
| Tower                                    | E10.2, 20, 29-30.2 |   |             |
| Town hall                                | G71                |   |             |
| Track                                    | D12                |   |             |
| Tracks                                   | M1-6               |   |             |
| Training wall                            | F5                 |   |             |
| Transit shed                             | F51                |   |             |
| Trees                                    | C31                |   |             |
| Tunnel                                   | D16                |   |             |
| Tunny nets                               | K44.2              |   |             |
| Tunny nets area                          | K45                |   |             |
| Two-way track                            | M5.2               |   |             |
| Two-way route                            | M28, 2             |   |             |
| Types of seabed                          | J1-15              |   |             |
| Types of seabed, intertidal areas        | J20-22             |   |             |
|  |                    |   |             |
| <b>U</b>                                 |                    |   |             |
| Underwater rock                          | K15                |   |             |
| Units                                    | B40-54, f          |   |             |
| Unsurveyed area                          | I25                |   |             |



# Symbol Overview

# Visión General de Símbolos

|          |  |  |
|----------|--|--|
| <b>A</b> | Numeración de la Carta, Título, Notas Marginales<br>Chart Number, Title, Marginal Notes      |  |
| <b>B</b> | Posiciones, Distancias, Direcciones, Rosas<br>Positions, Distances, Directions, Compass      |  |
| <b>C</b> | Características Naturales<br>Natural Features  |  |
| <b>D</b> | Características Artificiales<br>Cultural Features  |  |
| <b>E</b> | Referencias Terrestres<br>Landmarks  |  |
| <b>F</b> | Puertos<br>Ports   |  |
| <b>H</b> | Mareas, Corrientes<br>Tides, Currents  |  |
| <b>I</b> | Profundidades<br>Depths  |  |
| <b>J</b> | Naturaleza del Fondo<br>Nature of the Seabed   |  |
| <b>K</b> | Rocas, Naufragios, Obstrucciones<br>Rocks, Wrecks, Obstructions                              |  |
| <b>L</b> | Instalaciones en Altamar<br>Offshore Installations   |  |
| <b>M</b> | Derrotas y Rutas<br>Tracks and Routes  |  |
| <b>N</b> | Áreas y Límites<br>Areas and Limits  |  |
| <b>P</b> | Luces<br>Lights  |  |
| <b>Q</b> | Boyas y Balizas<br>Buoys and Beacons   |  |
| <b>R</b> | Señales de Niebla<br>Fog Signals   |  |
| <b>S</b> | Radar, Radio, Sistemas de Navegación Satelital<br>Radar, Radio, Satellite Navigation Systems |  |
| <b>T</b> | Servicios<br>Services  |  |
| <b>U</b> | Embarcaciones Menores, Servicios<br>Small Craft Facilities                                   |  |



# SHOA

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