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Display of Archipelagic Sea Lanes

Comments on proposals of UKHO from 13. Nov. 2003

<u>Attachment No 1</u>

Explanation of 'centred symbols'
(cited from IHO ECDIS Presentation Library Users' Manual Ed. 3.3)

and

Examples for existing symbology of
IHO S-52, Appendix 2 „ECDIS Presentation Library", Ed. 3.3 (2003)
for centred symbols and boundary line styles

Notes:
- the references to INT1 are currently under review and may not complete/fully correct,
- the black encircled cross marks the pivot point and is not displayed at the ECDIS screen.

7.4.3   Area Symbolization by a centred Symbol

7.4.3.1 Introduction

Centred symbols are used to reduce clutter in areas of heavy traffic. Since such areas may be large we use large symbols and since many restrictions may apply to a given area (e.g. traffic lane; precautionary area; no anchoring or fishing) the symbols have built-in offsets to prevent overwriting (see figure 4a).

7.4.3.2 Positioning centred symbols and text

A pivot point for centred symbols and text should be at the centre of the area, or close enough to the centre that it is evident which area the symbol applies to. The offsets for symbols and text are given with respect to the pivot point.

Multiple centred symbols are often used. For example, a traffic lane with restrictions on entry and on fishing will have a centred traffic arrow and an offset «entry restricted» symbol with a subscript «!» to indicate that other restrictions apply.

If, due to an offset built in by the Presentation Library, the whole of a symbol falls outside the area it applies to, it should not be drawn. Text may be allowed to extend beyond the boundary. The result should be that the mariner can clearly identify the area.
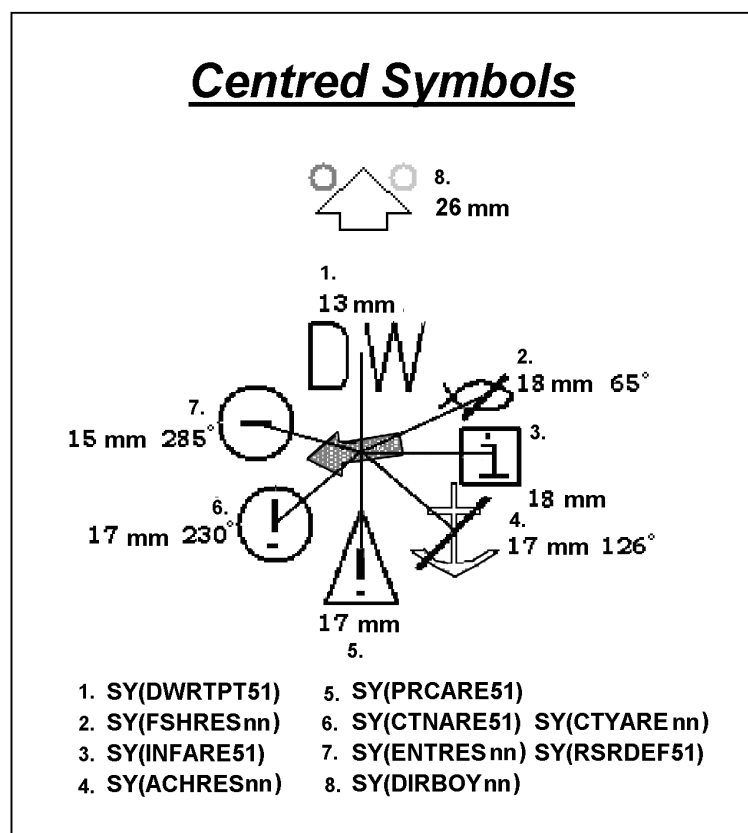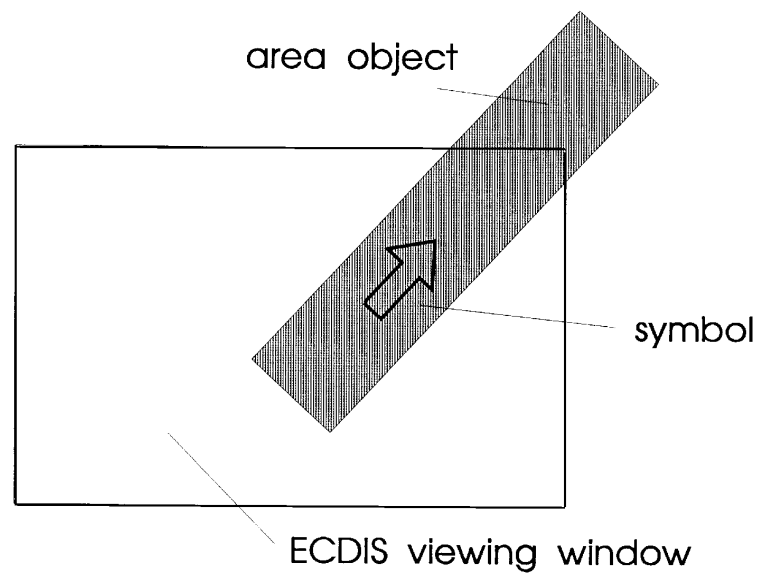
Fig. 4a - Centred symbol

Centred Symbols

8. 26 mm
1. 13 mm
2. 18 mm 65°
7. 15 mm 285°
3. 18 mm
6. 17 mm 230°
4. 17 mm 126°
17 mm
5.

1. SY(DWRTPT51)   5. SY(PRCARE51)
2. SY(FSHRESnn)   6. SY(CTNARE51) SY(CTYAREnn)
3. SY(INFARE51)   7. SY(ENTRESnn) SY(RSRDEF51)
4. SY(ACHRESnn)   8. SY(DIRBOYnn)

Fig. 4b - Centred symbol

area object

symbol

ECDIS viewing window

A centred symbol should remain within the area even when the border of the display progressively truncates the area at each chart re-draw. If this is done by repeatedly re-calculating the centre of gravity (c of G) of the area, make sure the symbol remains within the area if this should be concave (e.g. L shaped, or a disc). One method of doing this if the c of g falls outside the area is to subdivide the area by the x,y coordinates of the calculated c of g then recalculate the component areas recursively until a point within the object is found.

| Symbol Name: | SY(**INFARE51**) |
| | RN: 148 |

Symbol Explanation: area with minor restrictions or information notices

Look up table affected: area symbols with plain boundaries
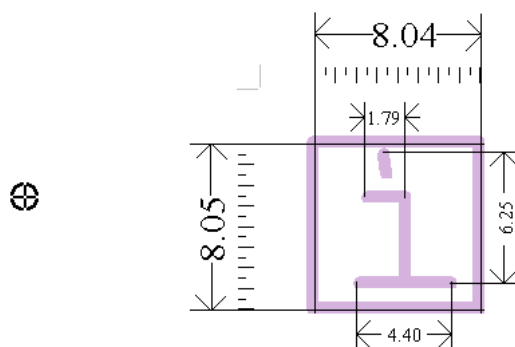area symbols with symbolized boundaries

Called by CSP etc.:   CSP RESARE03,
CSP RESARE03 Continuation E,
CSP RESCSP02

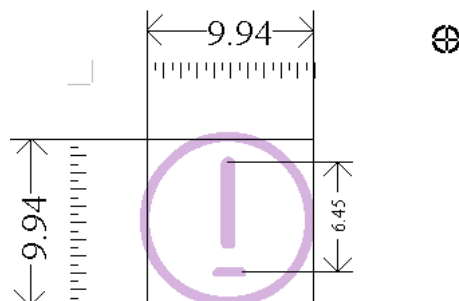Pivot Point Column: -13.96
Pivot Point Row: 2.55

Width of Bounding Box: 8.04
Height of Bounding Box: 8.05

Symbol Colours: ▢ CHMGF

Comments: Line weight 0.6 mm

Examples on ENC: N/A

References:

S57	INT 1	
CTSARE	IN 64	
DMPGRD	IN 23-24, 62.1-2	(IN 24)
ICNARE	IN 65	
PIPARE	IL 40.2, 41.2	(IL 40.2)
RESARE	IN 22, 26	

Symbol Name:	SY(**CTYARE51**)
	RN: 92

Symbol Explanation:	cautionary area (e.g. ferry area) navigate with caution
Look up table affected:	area symbols with plain boundaries
	area symbols with symbolized boundaries
Called by CSP etc.:	CSP RESARE03 Continuation D, E
	CSP RESCSP02 Continuation D
Pivot Point Column:	17.85
Pivot Point Row:	-6.00
Width of Bounding Box:	9.94
Height of Bounding Box:	9.94

Symbol Colours:	TRFCF
Comments:	Line weight 0.6 mm; circle diameter 9.94 mm
Examples on ENC:	N/A

References:

S57		INT 1	
MIPARE	IN 30-33	(IN 31)	
		Entry Prohibited	
OSPARE	IL 4		
RESARE	IN 25, 63		
SPLARE	IN 13		
SUBTLN	IN 33		

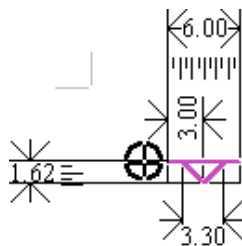| Symbol Name:	LC(**CTYARE51**)
	RN: 477

Symbol Explanation: boundary of area to be navigated with caution

Look up table affected: area symbols with symbolized boundaries

Called by CSP etc.:   CSP RESARE03,
CSP RESARE03 Continuation A, D, E

Pivot Point Column: -2.00
Pivot Point Row: 0.00

Width of Bounding Box: 6.00
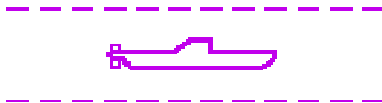Height of Bounding Box: 1.62

Symbol Colours: ■ CHMGD

Comments: Line weight 0.3 mm

Examples on ENC: N/A

References:

S57		INT 1	
CTSARE	IN 64;		*Cargo Transhipment Area*
DMPGRD	IN 23-24, 62.1-2;		*Explosives Dumping Ground*
ICNARE	IN 65;		
MIPARE	IN 30-33;	(IN 32)	
OSPARE	IL 4;		
PILBOP	IT 1.1- 4;		
SPLARE	IN 13;		
SUBTLN	IN 33;		
TWRTPT	IM 28.2;		

Symbol Name:	LC(**CTNARE51**)
	RN: 476

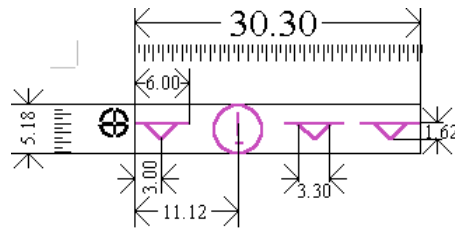Symbol Explanation: boundary of area with a specific caution

Look up table affected: area symbols with symbolized boundaries

Pivot Point Column: -1.98
Pivot Point Row: 1.86

Width of Bounding Box: 30.30
Height of Bounding Box: 5.18

Symbol Colours: CHMGD

Comments: Line weight 0.3 mm; circle diameter 5.18 mm;
Caution symbol dimensions like point symbol SY(CTNARE51)

Examples on ENC: N/A

References:

S57	INT 1	
CTNARE	IM 29.2;	