



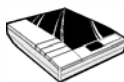
INDIAN NOTICES TO MARINERS FOR 2006

(PUBLISHED FORTNIGHTLY ON 1ST & 16TH OF EVERY MONTH)

EDITION No. 05 DATED 01 MAR 2006

(CONTAIN NOTICES 108 TO 137)

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Mariner's Obligation and A Chart maker's Plea: Observing Changes at sea proactively and reporting them promptly to the concerned charting agency, is an obligation that all mariners owe to the entire maritime community towards SOLAS. Mariners are, therefore, requested to notify the Chief Hydrographer to the Govt. of India at the following address/fax No, immediately on discovering new or suspected dangers to navigation, on observing changes/defects to navigational aids, and of short comings in Indian charts or publication. The Hydrographic Note [Form IH – 102] is a convenient form on which to notify such changes. Specimen form is attached at Section X with this notice.

**Chief Hydrographer
to the Government of India**

**National Hydrographic Office
Post Box No. 75
Dehradun 248 001
India**

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For the Indian Ocean Area
INSIST OF INDIAN CHARTS AND
PUBLICATIONS
(Original, Authentic and Most Up-to-date)

EXPLANATORY NOTES

Corrections to Charts and Publications The Notices in section I provide information on new Indian Charts and Publications where as section II and III contains information for correcting the charts and publications. Mariners should insist on corrected charts from their chart distributors/agents.

- (a) Geographical positions given are in the horizontal datum of the current edition of the chart, unless otherwise stated.
- (b) Bearings are True, reckoned clockwise from 000° to 359°. Bearing to lights are from seaward.
- (c) Symbols referred to are those shown on the chart INT 1 (5020).
- (d) Alterations to depth contours, deletion of depths to make way for new detail, etc; are not normally mentioned, unless they have some navigational significance.
- (e) Blocks and notes, if any, accompanying the Notices in Sections II and III are placed after Section X.

Temporary and Preliminary Notices These are indicated by (T) and (P) after the Notice number, and are placed in Section III. A SI Nos. of those in force published quarterly on 1st Jan, 01 Apr, 01 Jul and 01 Oct, and their text are published in Annual Edition of Indian Notices to Mariners. These corrections are not inserted on the charts before they are issued to the users. They should be inserted in pencil, by the user, on receipt.

Source of Information A star adjacent to the number of a Notice indicates that the notice is based on original source of information.

Sailing Directions Corrections for the Sailing Directions are given in Section VI. A summary of corrections in force will be issued in Section VI of the Edition dated 1st January, 1st April, 1st July and 1st October.

Lights Corrections to Light List is given in Section VII, where affected Light List number is quoted.

- (a) these corrections should be incorporated as per instructions given on page 11 of the list of Lights.
- (b) Such correction notices to light of list may be published in either an earlier or a later Edition of N to M than the Edition containing the Notice to the chart correction.
- (c) the range of a light given is its nominal range. Its geographical range is given in parenthesis only, if it is less than the nominal range.

Radio Signals The corrections in Section VIII should be cut and pasted in the appropriate volumes of the List of Radio Signals.

Radio Navigational Warnings (a) These are broadcast as serially numbered NAVAREA warnings by the concerned NAVAREA coordinator through GMDSS and Area Radio Broadcasts.

- (b) They contain important information affecting navigational safety, which cannot await the publication of the next edition of N to M.
- (c) It should be borne in mind that they may be based on reports which can not always be verified before promulgation.
- (d) It is therefore necessary to be selective, and promulgate only the more important warnings to avoid over loading users; the less important information should be included in the forthcoming edition of N to M or the Chart/publication concerned.

Laws and Regulations While in the interest of the safety of shipping, the Hydrographic Office makes every endeavour to include in its publications details of the laws and regulations of all countries pertaining to navigation, it must be clearly understood: -

- (a) that no liability whatsoever can be accepted for failure to publish details of any particular law or regulation, and
- (b) that publication of details of a law or regulation is solely for the safety and convenience of shipping and implies no recognition of the International validity of the law or regulation.

Correction of Charts and Publications by the users Notices to Mariners contain important information concerning safety of navigation at sea, hence, they should be used to keep the specified Charts and publications up to date.

Reliance on Charts and Associated Publications While every effort is made by the Hydrographic Office to ensure the accuracy of the information on Charts and Publications before they are published, it should be appreciated that it may not always be complete and up-to-date. The mariner must be the final judge for the reliance he can place on the information available, bearing in mind his particular circumstances, local pilotage guidance and judicious use of available navigational aids.

Use of Global Positioning System (WGS 84) positions

(a) The positions of Hydrographic objects shown on Indian charts and publications are in Everest datum. However, the positions of vessels obtained from Global Positioning System (GPS) are on World Geodetic System 1984 datum. There will always exist a difference in the position values obtained by visual fixing (Everest Datum) and GPS position (WGS 84 datum).

(b) Where ever these differences have been ascertained, their average values are published as a cautionary Note on the chart concerned, as shifts in Latitude and Longitude values whilst plotting GPS positions on charts, the shift values as given on the chart must be applied, before making any assessment of the navigational situation vis-à-vis the other charted information.

(c) These datum shift values are not uniform, particularly in areas off Andaman & Nicobar and Lakshadweep Islands, as these places are not linked to mainland network (Everest datum). Mariners are advised to use alternate source of position information such as Visual or Radar, particularly when closing the shore or navigating in the vicinity of danger.

Source Data on Charts All Indian charts contain specific information on their source of hydrographic data. In areas where the source data is very old, incomplete and less reliable, the mariner must use such Charts with prudence. Mariner should always use the largest scale charts available for the area. Apart from being the most detailed, the larger scale charts are usually corrected first.

Hydrographic information may be sparse on small scale charts. On such charts, a charted shoal may be in error as regards position, least depth and extent. Uncharted dangers may also exist, particularly in areas away from well-established routes. Mariners must exercise due caution.

Further Guidance The Mariner's Hand Book (NP 100) gives full explanation on the use of charts and the type of information contained on charts. In their own interest, all users of charts should refer to it.

SECTION – I
List of charts affected by
the Notices 108 to 137 contained in this Edition

| INDIAN H.O. Chart No. | Folio No. | Notice No. | INDIAN H.O. Chart No. | Folio No. | Notice No. |
|----------------------------------|----------------------|-------------------|----------------------------------|------------------|-------------------------|
| 33 | 5 | 137(P) | 253 | 32 | 125 |
| 288 | 1 | 127 | 262 (INT 7115) | 32 | 125 |
| 289 | 1 | 126, 127 | 460 | 32 | 130 |
| 308 | 5 | 134 | 933 | 46 | 122 |
| 313 | 5 | 137(P) | 941A | 46 | 118, 119, 120, 121, 132 |
| 354 (INT 7480) | 5 | 134 | 1066 | 46 | 120, 121 |
| 356 (INT 7400) | 5 | 137(P) | 1235 (INT 7289) | 40 | 123, 136(P) |
| 357 (INT 7397) | 5 | 137(P) | 1238 | 40 | 136(P) |
| 2027 | 2 | 133 | 1312 | 46 | 117, 119 |
| 3001 (INT 7402) | 5 | 137(P) | 1789 | 46 | 117 |
| 3004 (INT 7403) | 5 | 137(P) | 2149 | 46 | 118, 121, 122 |
| 3030 | 5 | 134 | 2577 | 32 | 128 |
| 7508 (INT 508) | 7 | 120 | 2599 | 32 | 128 |
| | | | 2882 | 40 | 135(P) |
| | | | 2883 | 40 | 135(P) |
| | | | 2886 | 40 | 127, 135(P) |
| | | | 2887 (INT 7232) | 40 | 126 |
| | | | 3174 | 40 | 124 |
| | | | 3482 (INT 550) | 46 | 119 |
| | | | 3719 | 40 | 135(P) |
| | | | 3730 | 42 | 121 |
| | | | 3737 (INT 7255) | 40 | 127 |
| | | | 3738 (INT 7254) | 40 | 127 |
| | | | 3776 | 40 | 135(P) |
| | | | 3777 | 40 | 135(P) |
| | | | 3782 | 40 | 129 |
| | | | 3787 (INT 7245) | 40 | 129 |
| | | | 3788 | 40 | 135(P) |
| | | | 3790 (INT 7252) | 40 | 127, 135(P) |
| | | | 3812 | 40 | 135(P) |
| | | | 3833 | 45 | 109, 110, 111, 114, 116 |
| | | | 3945 | 45 | 131 |
| | | | 3947 | 45 | 115 |
| | | | 3950 | 40 | 129 |
| | | | 4030 | 45 | 113 |
| | | | 4031 | 45 | 113 |
| | | | 4033 | 45 | 112 |
| | | | 4037 | 45 | 108 |
| | | | 4038 | 45 | 113 |
| | | | 4040 | 45 | 110, 113 |
| | | | 4041 | 45 | 109, 110 |

SECTION – II: PERMANENT NOTICES
INDIAN HYDROGRAPHIC CHARTS AND PUBLICATIONS

108 (05/06) SINGAPORE - Keppel Harbour - Brani Terminal - Dredged depth.

Source: BA Notice 498/06.

(HJ/927/16)

BA Chart 4037 [previous update 264/05]

Amend dredged depth to, 13.4m(2005) 1° 15'·841N., 103° 50'·082E.

109 (05/06) SINGAPORE STRAIT - Indonesia - Batu Berhanti Eastwards - Depths.

Source: BA Notice 505 /06.

(HJ/927/16)

BA Chart 3833 [previous update 81/06]

Insert depth 7_2 (a) 1° 11'·15N., 103° 53'·20E.

Delete depth 9_1 , close S of: (a) above

BA Chart 4041 [previous update 445/05]

Insert depth 7_2 and extend 10m contour N to enclose (a) 1° 11'·15N., 103° 53'·20E.

Delete depth 9_1 , close S of: (a) above

110 (05/06) SINGAPORE STRAIT - Indonesia -Pulau Lengkana North-westwards -Wreck. Obstruction.

Source: BA Notice 506/06.

(HJ/927/16)

BA Chart 3833 [previous update 109/06]

Insert  *Obstn* 1° 10'·66N., 103° 51'·50E.




1° 10'·67N., 103° 52'·01E.

BA Chart 4040 [previous update 587/05]

Insert  *Obstn* 1° 10'·66N., 103° 51'·50E.

BA Chart 4041 [previous update 109/06]

Insert  *Obstn* 1° 10'·66N., 103° 51'·50E.



1° 10'·67N., 103° 52'·01E.

111 (05/06) MALACCA STRAIT - Pulau Karimun Besar Northwards and North-westwards - Pulau Mudu South- eastwards - Buoyage.

Source: BA Notice 507/06.

(HJ/927/16)

BA Chart 3833 [previous update 110/06]

Substitute  *Fl(4)Y.12s* for  1° 09'·50N., 103° 21'·55E.



Fl(4)Y.12s for



1° 07'·43N., 103° 19'·26E.



Fl.R.4s for



1° 04'·98N., 103° 17'·75E.



Fl(2)G.4s for



112 (05/06) SINGAPORE - West Jurong Channel - East Samulun Basin - Tanjong Kling - Depths. Dredged depths. Obstructions. Rock.

Source: BA Notice 508/06.

(HJ/927/16)

BA Chart 4033 [previous update 505/05]

Insert depth I_4 1° 18'·443N., 103° 41'·783E.

depth I_6 1° 18'·406N., 103° 41'·833E.

 with seabed character, *R* (a) 1° 18'·005N., 103° 41'·676E.


Substitute  *Obstn* for  *Obstn* 1° 17'·902N., 103° 41'·404E.

Amend dredged depth to, 5.5m(2005) 1° 18'·374N., 103° 42'·513E.

dredged depth to, 5.0m(2005) 1° 18'·109N., 103° 42'·234E.

dredged depth to, 6.2m(2005) 1° 18'·114N., 103° 42'·388E.

112 (05/06) SINGAPORE - West Jurong Channel - East Samulun Basin - Tanjong Kling - Depths. Dredged depths. Obstructions. Rock(continued).

| | | |
|--------|--|------------------------------|
| Delete | depth 2 ₉ | 1° 18'·434N., 103° 41'·764E. |
| | depth 3 ₁ | 1° 18'·417N., 103° 41'·822E. |
| | depth 4 ₈ enclosed by 5m contour, adjacent to: | (a) above |
| |  <i>Obstm</i> | 1° 17'·940N., 103° 41'·870E. |

113 (05/06) SINGAPORE - Jurong Island South-westwards - Depth.

Source: BA Notice509/06.

(HJ/927/16)

BA Chart 4030 [previous update 578/05]

| | | |
|--------|-----------------------|------------------------------|
| Insert | depth 18 ₂ | 1° 13'·756N., 103° 39'·185E. |
| Delete | depth 18 ₄ | 1° 13'·760N., 103° 39'·179E. |

BA Chart 4031 [previous update 481/05]

| | | |
|--------|-----------------------|------------------------------|
| Insert | depth 18 ₂ | 1° 13'·756N., 103° 39'·185E. |
| Delete | depth 18 ₄ | 1° 13'·760N., 103° 39'·179E. |

BA Chart 4038 [previous update 505/15]

| | | |
|------------|---|----------------------------|
| Substitute | depth 18 ₂ for depth 18 ₄ | 1° 13'·76N., 103° 39'·18E. |
|------------|---|----------------------------|

BA Chart 4040 [previous update 110/06]

| | | |
|------------|---|----------------------------|
| Substitute | depth 18 ₂ for depth 18 ₄ | 1° 13'·76N., 103° 39'·18E. |
|------------|---|----------------------------|

114(05/06) MALACCA STRAIT - Pulau Karimun Besar - Pulau Assan North-north-eastwards - Buoy.

Source: BA Notice 510/06.

(HJ/927/17)

BA Chart 3833 [previous update 111/06]


| | | |
|------------|--|-----------------------------|
| Substitute |  <i>Fl.G.3s</i> for  | 1° 09'·17N., 103° 18'·725E. |
|------------|--|-----------------------------|

115 (05/06) INDONESIA - Sumatera - Sungaipakning Eastwards - Buoy.

Source: BA Notice511/06.

(HJ/927/16)

BA Chart 3947(plan A, Pelabuhan Sungaipakning) [previous update 82/06]

| | | |
|--------|---|----------------------------|
| Delete |  <i>LFl.7s</i> | 1° 20'·90N., 102° 10'·08E. |
|--------|---|----------------------------|

BA Chart 3947 [previous update 82/06]


| | | |
|--------|---|----------------------------|
| Delete |  <i>LFl.7s</i> | 1° 20'·90N., 102° 10'·08E. |
|--------|---|----------------------------|

116 (05/06) SINGAPORE STRAIT - Indonesia - Pulau Pemping Besar to Pulau Batam –submarine pipelines.

Source: BA Notice 512/06.

(HJ/927/16)

BA Chart 3833 [previous update 114/06]

| | | |
|--------|--|---------------------------------------|
| Insert | submarine pipeline,  , joining: | 1° 05'·32N., 103° 48'·86E. (shore) |
| | | 1° 05'·06N., 103° 49'·15E. |
| | | 1° 05'·14N., 103° 49'·68E. |
| | (a) | 1° 04'·98N., 103° 50'·18E. |
| | (b) | 1° 04'·14N., 103° 50'·63E. (shore) |
| | and | 1° 01'·06N., 103° 55'·00E. (shore) |
| | (c) | 1° 00'·74N., 103° 55'·78E. |
| | (d) | 1° 00'·27N., 103° 56'·75E. |
| | | 1° 00'·53N., 103° 57'·17E. (shore) |

legend, *Gas* (see Note), along:

(a)-(b) above

(c)-(d) above

117 (05/06) INDONESIA - Sumatera - East Coast - Tunjung Dato Southwards - Wreck.

Source: BA Notice 529/06.

(HJ/827/96)

BA Chart 1312 [previous update 83/06]

Insert



0° 10'·2S., 103° 48'·9E.

BA Chart 1789 [previous update 556/05]

Insert



0° 10'·15S., 103° 48'·90E.

118 (05/06) INDONESIA - Sumatera - Pulau Bangka Southwards - Wreck.

Source: BA Notice 531/06.

(HJ/827/63)

BA Chart 941A [previous update 83/06]

Insert



3° 24'·5S., 106° 22'·5E.

BA Chart 2149 [previous update 549/05]

Insert



3° 24'·7S., 106° 22'·5E.

119 (05/06) INDONESIA - Kalimantan - P. Pengikik Besar North-westwards and P. - P. Tambelan South-westwards - Depths.

Source: BA Notice 526 /06.

(HJ/927/03)

BA Chart 941A [previous update 118/06]


Insert

depth 22

0° 34'·0N., 106° 29'·0E.

0° 07'·5N., 106° 37'·3E.

0° 15'·7N., 107° 59'·0E.

Delete depth 7¾ enclosed by , *Repd***BA Chart 1312** [previous update 117/06]

Insert

depth 40 PA

0° 34'·0N., 106° 29'·0E.

0° 07'·5N., 106° 37'·3E.

BA Chart 3482 (INT 550) [previous update 80/06]

Insert

depth 40

0° 34'·0N., 106° 29'·0E.

0° 07'·5N., 106° 37'·3E.

120 (05/06) INDONESIA - Java Sea - Pulau-Pulau Karimunjawa North-westwards - Wreck.

Source: BA Notice 527 /06.

(HJ/827/40)

Chart 7508 (INT 508) [previous update 588/05]

Insert



5° 12'·0S., 109° 59'·0E.

BA Chart 941A [previous update 119/06]

Insert



5° 12'·0S., 109° 59'·0E.

BA Chart 1066 [previous update 559/05]

Insert



5° 12'·0S., 109° 59'·0E.

121 (05/06) INDONESIA - Jawa - North Coast - Ardjuna Oilfields and Pulau Rakit - Southwards - Wreck. Platforms. Well. Pile.

Source: BA Notice 528 /06.

Light List Vol. K, 1082, 1082.03, 1086.644

(HJ/827/31)

BA Chart 941A [previous update 120/06]

Substitute

for  *Obstm*

6° 09'·3S., 108° 15'·7E.

BA Chart 1066 [previous update 120/06]

Substitute

(lighted) for 

6° 19'·1S., 108° 37'·7E

BA Chart 2149 [previous update 118/06]

Insert









(lighted)


5° 52'·2S., 107° 41'·6E.

5° 56'·2S., 107° 46'·5E.

121 (05/06) INDONESIA - Jawa - North Coast - Ardjuna Oilfields and Pulau Rakit - Southwards - Wreck. Platforms. Well. Pile.(continued)

Substitute  Well for  Pile 5° 49'·5S., 107° 29'·8E.
 for  Obstn 6° 09'·3S., 108° 15'·7E.
 (lighted) for  6° 19'·1S., 108° 37'·7E.

BA Chart 3730 [previous update 215/04]

Substitute  (lighted) for  6° 19'·10S., 108° 37'·75E.

122 (05/06) INDONESIA - Jawa - North Coast - Teluk Jakarta - Pulau-Pulau Tidung Eastwards - Light-beacons.

Source: BA Notice 530/06.

Light List Vol. K, 1060, 1061.5, 1061.6
(HJ/827/43)

BA Chart 933 [previous update 572/05]

Insert  Q(6)+LFl.15s7m8M 5° 58'·59S., 106° 42'·04E.
 Amend light to, Fl(3)G.15s10m11M 5° 51'·15S., 106° 38'·73E.
 light to, Q(3)5s7m8M 6° 00'·31S., 106° 46'·93E

BA Chart 2149 [previous update 121/06]

Amend light to, Fl(3)G.11M 5° 51'·2S., 106° 38'·7E.

123 (05/06) SAUDI ARABIA – Khawr 'Abd Allah - Legend.

Source: BA Notice 601/06.

(HJ/1133/91)

BA Chart 1235 (INT 7289) [previous update 546/05]

Amend legend to, See NM 135(P)/06, centred on: 29° 43'·7N., 48° 39'·5E.


124 (05/06) UNITED ARAB EMIRATES – Mina' Saqr North-westwards - Obstruction. Buoy.

Source: BA Notice 607/06.

(HJ/1132/53)

BA Chart 3174 [previous update 89/06]

Insert  Obstn 25° 59'·94N., 56° 01'·10E.

Move  Q from: 26° 00'·02N., 56° 01'·10E.
to: 26° 00'·14N., 56° 01'·10E.

125 (05/06) GULF OF ADEN - Djibouti Westwards and Ile Moucha North-north-westwards - Beacon. Light-beacons. Lights.

Light List Vol. D, 7275.5, 7283.4, 7283.5, 7283.52

Source: BA Notice 611/06.

(HJ/1033/16)

BA Chart 253 (plan A, Golfe de Tadjoura) [previous update 90/06]

Insert  Q.5M (a) 11° 44'·64N., 43° 10'·21E.

Delete  , close SW of: (a) above

BA Chart 262 (INT 7115) [previous update 90/06]

Insert  VQ.R.6M 11° 36'·18N., 43° 04'·70E.
11° 36'·17N., 43° 04'·88E.

 Q.2M 11° 36'·07N., 43° 04'·65E.

 Q.5M (a) 11° 44'·66N., 43° 10'·19E.

Delete  , close SW of: (a)above

126 (05/06) IRAN - Jazhireh-ye Qeys South-eastwards - Wreck.

Source: BA Notice 623/06.

(HJ/1132/65)

Chart 289 [previous update 42/06]

Insert



26° 29'·8N., 54° 04'·4E.

BA Chart 2887 (INT 7232) [previous update 96/06]

Insert



26° 29'·8N., 54° 04'·4E.

127 (05/06) BAHRAIN - Port of Sitrah Northwards - Quassar Jurdi North-eastwards - Wreck.

Source: BA Notice 624/06.

(HJ/1132/69)

Chart 289 [previous update 126/06]

Insert



26° 19'·3N., 50° 43'·6E.

Chart 288 [previous update 68/06]

Insert



26° 19'·3N., 50° 43'·6E.

BA Chart 2886 [previous update 613/05]

Insert



26° 19'·3N., 50° 43'·6E.

BA Chart 3737 (INT 7255) [previous update 444/05]

Insert



26° 19'·28N., 50° 43'·59E.

BA Chart 3738 (INT 7254) [previous update 574/05]

Insert



26° 19'·28N., 50° 43'·59E.

BA Chart 3790 (INT 7252) [previous update 574/05]

Insert



26° 19'·28N., 50° 43'·59E.

128 (05/06) SAUDI ARABIA - Red Sea Coast - Jeddah – Shi'b Hammamah Eastwards - Works.

Source: BA Notice 625/06.

(HJ/1134/10)

BA Chart 2577 [previous update 34/04]

Insert

legend, Works in progress (2003), between:

21° 29'·51N., 39° 09'·71E.

21° 29'·30N., 39° 09'·75E.

BA Chart 2599 [previous update 453/04]

Insert

legend, Works in progress (2003), between:

21° 29'·50N., 39° 09'·72E.

21° 29'·18N., 39° 09'·75E.

129 (05/06) QATAR - Approaches to Doha - Depths.

Source: BA Notice 670/06.

(HJ/1132/58)

BA Chart 3782 [previous update 40/06]

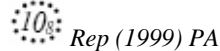
Delete



25° 16'·40N., 51° 45'·23E.



25° 16'·65N., 51° 44'·65E.



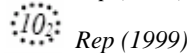
25° 16'·90N., 51° 43'·47E.

BA Chart 3787 (INT 7245) [previous update 40/06]

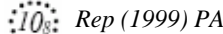
Delete



25° 16'·40N., 51° 45'·23E.



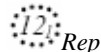
25° 16'·65N., 51° 44'·65E.



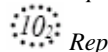
25° 16'·90N., 51° 43'·47E.

BA Chart 3950 [previous update 40/06]

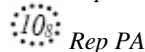
Delete



25° 16'·29N., 51° 45'·17E.



25° 16'·54N., 51° 44'·59E.



25° 16'·79N., 51° 43'·41E.

130 (05/06) ERITREA - North Massawa Channel - Harat Island Westwards - Depths. Danger line.

Source: BA Notice 703 /06.

(HJ/1034/60)

BA Chart 460 (plan A, Approaches to Massawa (Mits'iwa)) [previous update 438/05]

| | | | |
|--------|---|-----|----------------------------|
| Insert | depth 34 enclosed by 50m contour | | 16° 08'·44N., 39° 22'·93E. |
| | depth 41 and extend 50m contour E to enclose | (a) | 16° 06'·76N., 39° 23'·33E. |
| | depth 44 enclosed by 50m contour | | 16° 06'·08N., 39° 23'·53E. |
| | depth 19 ₆ and extend danger line W to enclose | (b) | 16° 03'·68N., 39° 22'·48E. |
| Delete | depth 50, adjacent to: | | (a) above |
| | depth 21, close E of: | | (b) above |

131 (05/06) MALAYSIA - Peninsular Malaysia, West Coast - Kuala Bernam South-eastwards - Fish havens.

Source: BA Notice 667 /06.

(HJ/927/38)

BA Chart 3945 [previous update 420/05]

| | | | |
|--------|---|--|--------------------------|
| Insert |  | | 3° 33'·0N., 101° 01'·0E. |
| | | | 3° 38'·9N., 100° 54'·5E. |

132 (05/06) INDONESIA - Java Sea - P.-P. Karimunjawa North-westwards - Depths.

Source: BA Notice 723 /06.

(HJ/827/40)

BA Chart 941A [previous update 121/06]

| | | | |
|--------|-----------------------|-----|--------------------------|
| Insert | depth 31 | (a) | 5° 04'·0S., 109° 40'·0E. |
| Delete | depth 3, adjacent to: | | (a) above |

***133 (05/06) INDIA – West Coast – Gulf of Kachchh – Rozi Anchorage – Source Data Digram.**

Source: NHO, Dehradun.

(HJ/1130/29)

Chart 2027 [previous update 101/06]

| | | | |
|------------|-------------------------------|--|----------------------------|
| Substitute | legend a & c for a: | | 22° 30'·47N., 70° 06'·26E. |
| Insert | 2m ring contour for depth 2m: | | 22° 35'·72N., 70° 05'·04E. |

***134 (05/06) INDIA – East Coast – Bhimunipatnam Anchorage – Light.**

Source: Port Office, Kakinada

(HJ/1029/76)

Chart 354 (INT 7480) [previous update 61/06]

| | | | |
|--------|-------------------------------------|--|----------------------------|
| Insert | legend, (<i>exting</i>), at light | | 17° 53'·39N., 83° 27'·47E. |
|--------|-------------------------------------|--|----------------------------|

Chart 308 [previous update 76/06]

| | | | |
|--------|-------------------------------------|--|----------------------------|
| Insert | legend, (<i>exting</i>), at light | | 17° 53'·39N., 83° 27'·47E. |
|--------|-------------------------------------|--|----------------------------|

Chart 3030 [previous update 198/05]

| | | | |
|--------|-------------------------------------|--|----------------------------|
| Insert | legend, (<i>exting</i>), at light | | 17° 53'·39N., 83° 27'·47E. |
|--------|-------------------------------------|--|----------------------------|

Chart 3030(plan, Bhimunipatnam Anchorage) [previous update 198/05]

| | | | |
|--------|-------------------------------------|--|----------------------------|
| Insert | legend, (<i>exting</i>), at light | | 17° 53'·39N., 83° 27'·47E. |
|--------|-------------------------------------|--|----------------------------|

SECTION – III: TEMPORARY AND PRELIMINARY NOTICES**135(P)/06 SAUDI ARABIA - East Coast - - Buoyage.**

Source: BA Notice 552(P)/06

(HJ/1132/62)

1. The following special purpose light-buoys have been established.

| <i>Position (WGS84 Datum)</i> | <i>Light description</i> | <i>Name</i> |
|-------------------------------|--------------------------|-------------|
| 26° 44'·37N., 50° 09'·87E. | Q.Y | RAST-1 |
| 26° 43'·50N., 50° 14'·29E. | Q.Y | RAST-2 |
| 26° 40'·14N., 50° 15'·94E. | Q.Y | RAST-3 |
| 26° 37'·62N., 50° 12'·94E. | Q.Y | RAST-4 |
| 26° 35'·12N., 50° 09'·93E. | Q.Y | RAST-5 |
| 26° 55'·81N., 49° 55'·11E. | Q.Y | QTIF-1 |
| 26° 58'·66N., 49° 58'·19E. | Q.Y | QTIF-2 |
| 27° 01'·50N., 50° 01'·24E. | Q.Y | QTIF-3 |
| 26° 49'·25N., 50° 07'·90E. | Q.Y | QTIF-4 |
| 26° 55'·30N., 50° 25'·70E. | Q.Y | ABSF-1 |
| 26° 58'·95N., 50° 28'·85E. | Q.Y | ABSF-2 |
| 27° 02'·62N., 50° 32'·00E. | Q.Y | ABSF-3 |
| 27° 01'·82N., 50° 37'·10E. | Q.Y | ABSF-4 |
| 26° 57'·52N., 50° 35'·41E. | Q.Y | ABSF-5 |
| 26° 53'·20N., 50° 33'·70E. | Q.Y | ABSF-6 |
| 26° 52'·70N., 50° 29'·20E. | Q.Y | ABSF-7 |

2. The following lateral mark light-buoys have been established.

| <i>Position (WGS84 Datum)</i> | <i>Buoy description</i> | <i>Light description</i> | <i>Name</i> |
|-------------------------------|-----------------------------|--------------------------|-------------|
| 26° 51'·99N., 49° 54'·64E. | Port-hand lateral mark | IQ.R.15s | JP |
| 26° 52'·25N., 49° 54'·70E. | Starboard-hand lateral mark | Fl.G.3s | JP-1 |
| 26° 52'·17N., 49° 54'·74E. | Port-hand lateral mark | Fl.R.3s | JP-2 |

BA Charts affected -2882(INT 7264)-2883 -2886 -3719 -3776 -3777 -3788 -3790 (INT 7252)-3812**136 (P) (05/06) SAUDI ARABIA - Approaches to Umm Qaşr and Az Zubayr - Depths. Wrecks. Obstructions. Dredged depths. Buoyage. Pilot boarding place.**

Source: BA Notice 600(P)/06.

(HJ/1133/91)

1. Recent surveys of the channel from No.5 light-buoy (29° 44'·4N., 48° 37'·8E.) to the Port of Az Zubayr (30° 12'·0N., 47° 53'·0E.) has revealed numerous depths less than charted.

2. Within the buoyed channel the most significant shoal depths are as follows:

| | |
|------------------|----------------------------|
| 7 ₈ m | 29° 47'·25N., 48° 31'·70E. |
| 7 ₈ m | 29° 49'·87N., 48° 26'·42E. |
| 7 ₆ m | 29° 50'·92N., 48° 23'·75E. |
| 8 ₈ m | 29° 52'·80N., 48° 20'·80E. |
| 7 ₇ m | 29° 55'·88N., 48° 17'·23E. |
| 7 ₈ m | 29° 58'·00N., 48° 14'·81E. |
| 6 ₉ m | 30° 00'·99N., 48° 02'·72E. |
| 4 ₁ m | 30° 00'·60N., 48° 02'·34E. |
| 9 ₃ m | 29° 59'·78N., 48° 00'·53E. |
| 4 ₄ m | 30° 01'·14N., 47° 57'·17E. |
| 3 ₃ m | 30° 12'·20N., 47° 52'·97E. |
| 7 ₃ m | 30° 00'·06N., 47° 58'·83E. |
| 3 ₆ m | 30° 00'·74N., 48° 02'·49E. |
| 5 ₅ m | 29° 41'·85N., 48° 43'·28E. |
| 6 ₉ m | 29° 45'·51N., 48° 34'·61E. |
| 3 ₆ m | 29° 44'·28N., 48° 35'·31E. |
| 5 ₆ m | 29° 45'·32N., 48° 34'·46E. |
| 6 ₆ m | 29° 50'·34N., 48° 24'·82E. |

136(P) (05/06) ARABIA - Approaches to Umm Qaşr and Az Zubayr - Depths. Wrecks. Obstructions. Dredged depths. Buoyage. Pilot boarding place.(continued)

Depths in this area are subject to frequent change.

3. *The main shipping channel in the Khawr Abd Allah has been dredged (2005). Details of channel widths and depths are shown in the table below:

| <i>Mid Channel Positions</i> | <i>Channel Width</i> | <i>Dredged Depth</i> |
|--|----------------------|----------------------|
| 29° 42'·54N., 48° 40'·55E. to 29° 53'·00N., 48° 19'·98E. | 200m | 11·0m |
| 29° 53'·00N., 48° 19'·98E. to 30° 00'·08N., 48° 12'·46E. | 200m | 12·5m |
| 30° 00'·08N., 48° 12'·46E. to 30° 00'·66E., 48° 11'·25E. | 200m | 12·5m |
| 30° 00'·66N., 48° 11'·25E. to 30° 01'·65N., 48° 09'·33E. | narrows to 100m | 12·3m |
| 30° 01'·65N., 48° 09'·33E. to 30° 02'·05N., 48° 06'·00E. | 200m | 12·3m |
| 30° 02'·05N., 48° 06'·00E. to 30° 01'·60N., 48° 03'·33E. | 200m | 12·3m |
| 30° 01'·60N., 48° 03'·33E. to 29° 59'·76N., 48° 01'·10E. | 200m | 12·3m |
| 29° 59'·76N., 48° 01'·10E. to 29° 59'·65N., 48° 00'·68E. | 200m | 12·3m |
| 29° 59'·65N., 48° 00'·68E. to 29° 59'·81N., 47° 59'·45E. | 200m | 12·3m |

4. *It is understood that the channel buoyage will be amended in due course.

5. An area that dries at low water exists alongside berth 9 in the Port of Az Zubayr.

6. Many new wrecks and obstructions have also been found along the entire length of the waterway. Although these fall mainly outside the buoyed channel, some do exist within it. New least depths have been recorded on the following wrecks:

| | |
|------------------|----------------------------|
| 3 ₇ m | 29° 48'·63N., 48° 29'·16E. |
| 0 ₅ m | 30° 08'·13N., 47° 54'·40E. |

7. At Umm Qaşr Port it has been reported that the stranded wreck at berth 1 and the wrecks at berths 9,14,15,17 and 18 have been removed.

8. At the Port of Az Zubayr wrecks in the vicinity of berths 2,3,4,9 and 10 have been removed. Furthermore, a new stranded wreck has been reported in the general vicinity of position 30° 12'·15N., 47° 53'·10E.

9. All channel buoyage between Umm Qaşr and Az Zubayr is reported missing.

10. The pilot boarding place (30° 00'·08N., 47° 58'·60E.) has moved and is now located in the vicinity of buoy No.36 (30° 00'·04N., 47° 58'·00E.)

11. Due to the existence of unexploded ordnance, mariners are strongly advised to anchor only where directed by the local authorities.

12. *Local reporting procedures have been established for all vessels.

13. Mariners are warned to navigate with extreme caution and to seek assistance and information from the local authorities.

14. These amendments will be included in a New Edition of Chart 1235 and a New Chart replacing existing Chart 1238, to be published in due course.

15. Former Notice 301(P)/05 is cancelled.

* Indicates new or revised entry.

BA Charts affected – 1235 (INT 7289) - 1238

***137 (T) (05/06) India East coast – Madras (Chennai) Harbour – Data buoy.**

Source: Navarea VIII(131/06).

(HJ/1029/39)

1. Following data collecting buoy fitted with radar reflector and beacon light will be on station in the position given below:-

| <u>Buoy</u> | <u>Lat</u> | <u>Long</u> | <u>Colour</u> | <u>Light</u> | <u>Charts Affected</u> |
|-------------|--------------|---------------|---------------|--------------|--|
| SW6A | 13° 05'·48N. | 080° 19'·20E. | Yellow | Fl 5s 4M | 33-356(INT 7400)– 357(INT 7397) 313–3001(INT 7402) 3004(INT 7403) |

2. Anchoring or trawling is strictly prohibited within 500m in the vicinity of the moored data buoy.

3. Mariners are advised to proceed with extreme caution whilst navigating in the area.

SECTION – IV: MARINE INFORMATION

Ship Reporting System (INDSAR)

A ship reporting system INDSAR has been activated w.e.f 01 Feb 2003 in the Indian Search and Rescue Region (ISRR), for timely position reporting which is critical for quick response and ensuring safety of life at sea. Mariners in the ISR Region are requested to pass relevant rescue information to the Maritime Rescue Coordinating Centre (MRCC) Mumbai on INMARSAT Code 43, or using any of the following Contact details:-

New E-mail ID'S

| National Hydrographic Office Dehradun (India) | E-Mail address |
|--|---|
| | (1.) in角度_marinesafety@dataone.in |
| | (2.) in角度_navwarnings@dataone.in |
| | (3.) in角度@dataone.in |
| | (4.) in角度_helpdesk@dataone.in |

Tsunami Notices

52 (T) (01/05) INDIAN OCEAN, BAY OF BENGAL – Changes in bathymetry and Coastline.

Source: NHO, Dehradun

(HJ/NM/Gen)

- Major changes likely to have occurred in topography of coastline and bathymetry in Andaman & Nicobar islands, coasts of Andhra Pradesh, Tamilnadu, Kerala, Maldives and Srilanka as a consequence of recent earthquakes followed by Tsunami waves in South Asia. Number of uncharted wrecks/obstructions may also be encountered. Mariners are advised to exercise utmost caution and contact local authorities while approaching these areas.

Charts affected: All Indian charts of Andaman & Nicobar Islands, coast of Andhra Pradesh, Tamilnadu, Kerala, Maldives and Srilanka

***88 (T) (03/05) INDIA – Nicobar Islands – Katchall Island – Approaches to East Bay – Beacon.**

Source: PMB A & N Islands

(HJ/928/76)

- It is informed that all the three sets of beacons/buoys in East Bay including the jetty and approach has been totally damaged and sunk.
- Mariners are advised to exercise caution and contact local port authorities for the latest information.
- Former INM 339 (P)/04 is cancelled.

Charts affected: 4011 - 4017

***105 (T) (03/05) INDIA – Andaman Sea – Nicobar islands – Approaches to East Bay – Jetty..**

Source: Hydrographic Note, INS Sandhayak

(HJ/928/76)

- It is reported that East Bay Jetty at approx position 07° 58'.68N., 93° 23'.73E. is destroyed due to Tsunami disaster.

Charts affected: 4011

***106 (T) (03/05) INDIA – Andaman Sea – Andaman and Nicobar islands – Beacon. Buoy.**

Source: Port Management Board, Andaman and Nicobar & Hydrographic Note, INS Sandhayak
(HJ/928/86)

1. Following buoys/beacons were reported totally damaged and sunk post Tsunami disaster:

Nancowry Island

- | | |
|-------------------------------|----------------------------|
| (a) Stbd hand mark No. 1 | 08° 01'.96N., 93° 32'.85E. |
| (b) Port hand mark No. 2 | 08° 01'.80N., 93° 32'.86E. |
| (c) Port hand mark No. 4 | 08° 01'.82N., 93° 32'.30E. |
| (d) North east lighted beacon | 08° 01'.60N., 93° 33'.80E. |
| (e) Reid Point beacon | 08° 01'.48N., 93° 33'.35E. |
| (f) Mayo Point beacon | 08° 01'.60N., 93° 32'.53E. |

Mayabundar Island

- | | |
|-----------------------|----------------------------|
| (g) Takla west beacon | 12° 55'.53N., 92° 53'.46E. |
|-----------------------|----------------------------|

Port Blair

- | | |
|------------------------|----------------------------|
| (h) Bamboo flat beacon | 11° 41'.33N., 92° 43'.20E. |
| (i) Range flat beacon | 11° 41'.21N., 92° 43'.06E. |

2. Mariners to exercise caution while navigating through this area.

Charts affected: 4005 – 4006 – 4008 – 4012 – 4016

134 (T) (05/05) SRILANKA – South Coast – Great Basses Reef and Little Basses Reef – Lights.

Source: B.A. notice 746(T)/05
(HJ/929/68)

1. The lights at Great Basses Reef (6° 10'.9N., 81° 28'.8E.) and Little Basses Reef (6° 24'.4N., 81° 43'.8E.) have been extinguished until further notice.

Charts affected: 23 – 32 (INT 754) – 33 – 264 – 359.

***135 (T) (05/05) ANDAMAN SEA – INDIA – Little Andaman Islands – Hut Bay – Coast line. Jetty. Light.**

Source: INS Sandhayak
(HJ/1028/07)

1. It is reported that the coastline in the area had undergone drastic changes. The Hut Bay breakwater has been breached at several places. The entire approach road and breakwater light at position 10° 35'.81N., 92° 33'.83E. has been destroyed. The passenger jetty is not safe to approach as the wreck of the fallen crane is a hazard to navigation.
2. Mariners are to exercise caution while navigating through this area.

Charts affected: 4010

***160 (T) (06/05) INDIA – Andaman Sea – Nicobar Island – Campbell Bay – Rock.**

Source: Hydrographic Note, INS Tillanchang, INS Sandhayak
(HJ/928/76)

1. It is reported that following rocks have been found at position
- | | |
|-----------------|-------------------------------|
| (a) New Rock | 07° 01'.370N., 093° 55'.310E. |
| (b) Sunken boat | 06° 59'.870N., 093° 55'.560E. |
2. The Leading transit mark 323° on the beach was broken and damaged. A portion of the approach arm to the jetty was collapsed and the jetty has been damaged and is not fit for use. The debris of the jetty was lying westwards of the approach arm. The breakwater light and the Chisen point light are non-operational. The seaward end of the breakwater is sunk.

Charts affected: 409 – 471 – 472 (INT 7032) – 4035.

SECTION – V: NAVIGATIONAL WARNINGS IN FORCE

1. For details of NAVAREA limits and organization/coordination, please refer to Notice No. 12 of the Special edition of Indian Notice to Mariners – 2004.
2. NAVAREA Warnings in force: - The serial numbers of all the NAVAREA warnings in force as on 01 Mar 2006, covering the entire world are listed below against the respective NAVAREA

| <u>NAVAREA No.</u> | <u>Location</u> | <u>Last NAVAREA Sl. received</u> | |
|---------------------------|---------------------------------------|---|--|
| I | N.E. Atlantic | 048 | 2005 series: 402 440 468 477 494 499 505 524. 2006 series: 020 022 023 029 032 034 039 040 041 045 046 047 048. |
| II | E. Atlantic | 068 | 2005 series: 329-397-402. 2006 series: 015 020 030 033 035 049 057 062 068. |
| III | Mediterranean | 097 | 2006 series: 08 18 30 37 39 45 46 48 49 50 51 54 56 58 59 74 75 79 80 81 86 87 88 93 94 95 96 97. |
| IV | N.W. Atlantic | Nil | 2004 series: 323. |
| V | W. Atlantic | Nil | 2006 series: Nil. |
| VI | S.W. Atlantic | Nil | 2006 series: Nil. |
| VII | S.E. Atlantic | 024 | 2005 series: 600 610 611 618 619 622 635 658. 2006 series: 015 018 020 024 027 036 045 049 052 053 054 055 063 065 068 069 070 079 089 091 095 096 101 102. |
| VIII | Indian Ocean | 118 | 2005 Series - 333 346 352 384 412 562 631 634 650 657 710 716 720 727 741 747 762 767 768 769 2006 Series -004 005 015 016 026 032 034 045 051061065 069 071 072 084 085 086 087 101 107 115 116 118 122 125 131 133 136 137 138 139 142 143 144 145 146 147 148 149 150 151 152 153 |
| IX | Persian Gulf, Red Sea, NW Arabian Sea | Nil | 2005 Series: 135 198. |
| X | Australia, New Guinea | Nil | 2005 Series: 003 2006 Series: 048 066 069 070. |
| XI | Malacca Strait, China Sea, N. Pacific | 044 | 1996- 0925 1998- 0655 1999- 0053 0187 0310 0613 2000 -0677 2001- 0182 0775 2002 -0839 2003- 0106 0303 0304 2004- 0246 0271 0361 0402 0555 0571 2005- 0005 0022 0024 0025 0026 0030 0051 0060 0062 0063 0271 0307 0322 0331 0332 0335 0345 0351 0395 0474 0481 0497 0522 0576 0583 2006 -0005 0006 0007 0008 0009 0023 0024 0025 0026 0027 0028 0029 0030 0036 0037 0039 0040 0042 0044. |

| | | | |
|------------|-------------------------|-----|---------------------------------------|
| XII | N.E. Pacific | Nil | 2006 series: Nil |
| XIII | N.W. Pacific | Nil | 2006 series: Nil |
| XIV | S.W. Pacific | Nil | 2005 series: 048 066 069 070. |
| XV | S.E. Pacific | Nil | Nil |
| XVI | E. Pacific | Nil | Nil |
| Hydropacs | Pacific, Indian Ocean | 041 | 2004 series: 694. 2006 series: NIL |
| Hydrolants | Atlantic, Mediterranean | Nil | 2005 series: NIL |

SECTION – VI: CORRECTIONS TO SAILING DIRECTION

NIL

SECTION – VII: CORRECTIONS TO INDIAN LIST OF LIGHTS

| <u>No</u> | <u>Name & Location</u> | <u>Position (Lat-Long)</u> | <u>Charact- eristics</u> | <u>Ht. mts.</u> | <u>Range miles</u> | <u>Structure & Height (mts)</u> | <u>Remarks</u> |
|------------------|---|---------------------------------------|-------------------------------------|----------------------------|-------------------------------|--|---|
| D 7275.5 | - | 11 44.7 43 10.2 | QW | ... | 5 | ⊠ on yellow beacon, black top | |
| * | * | * | * | * | * | * | * |
| D 7283.4 | PORT DE DORÂLÉ | 11 36.07 43 04.65 | QW | ... | 2 | ⊠ on yellow beacon, black top | |
| * | * | * | * | * | * | * | * |
| D 7283.5 | - | 11 36.2 43 04.8 | VQ R | ... | 6 | | |
| * | * | * | * | * | * | * | * |
| D 7283.52 | - | 11 36.2 43 04.9 | VQ R | ... | 6 | | |
| * | * | * | * | * | * | * | * |
| D 7317.8 | Al Ashkharah Fishery Harbour. Main Breakwater. Head | 21 51.39 59 34.61 | Fl R | | | | |
| * | * | * | * | * | * | * | * |
| D 7317.81 | -Lee Breakwater. Head | 21 51.38 59 34.52 | Fl G | | | | |
| * | * | * | * | * | * | * | * |
| D 7318.15 | Oman India Fertiliser Company. SE Limit beacon | 22 38.31 59 26.38 | Fl W 4s | 9 | | | |
| * | * | * | * | * | * | * | * |
| D 7318.16 | -NLimit beacon | 22 39.39 59 25.23 | Fl W 4s | 9 | | | |
| * | * | * | * | * | * | * | * |
| D 7321.72 | --SW corner (AMNAS) | 23 37.50 58 34.05 | FG | 2 | 2 | | |
| | | | | | | | * |
| D 7321.74 | -No11 Berth. SE corner (AMNAS) | 23 37.42 58 33.95 | FR | 2 | 2 | ... | Can be obscured by background shore lights. TE 2006 * |
| D 7321.76 | -Shiplift. SE corner | 23 37.37 58 33.88 | FG | 2 | 2 | ... | TE 2006 * |
| D 7321.78 | -NW corner | 23 37.39 58 33.86 | FG | 2 | 2 | ... | TE 2006 * |

| <u>No</u> | <u>Name & Location</u> | <u>Position (Lat-Long)</u> | <u>Charact- eristics</u> | <u>Ht. mts.</u> | <u>Range miles</u> | <u>Structure & Height (mts)</u> | <u>Remarks</u> |
|------------------------|----------------------------|--------------------------------|------------------------------|---------------------|------------------------|---|---------------------------|
| D 7679.3 * | Tombak * | 27 43-03 52 10-07 * | Fl(2) W 10s * | ... * | 12 * | * | * |
| E 6039.9 | Sharm El Sheikh | 27 51.00 34 17.16 | Oc G 5s | 7 | 3 | Green Beacon | <i>ec 2. TE 2006</i> * |
| F9522.015 | -- IRONG BARAT C | 5 31-63 104 45-48 | Lit | ... | ... | Platform | * |
| F 9526-303 * | -- E11 P-B * | 4 20-03 112 40-76 * | Lit * | ... * | ... * | Platform * | * |
| F 9526-307 * | -- E11 V-B * | 4 19-68 112 40-96 * | Lit * | ... * | ... * | Platform * | * |

SECTION – VIII: CORRECTION TO LIST OF RADIO SIGNALS**VOL. 1, 2005***(Last correction: Edition No. 02 dated 16Jan 2006)***NIL****VOL. 2, 1995***(Last correction: Edition No. 04 dated 16 Feb 2006)*Page 28, after **MAURITIUS** section insert:**DJIBOUTI****Doraleh Oil Terminal Approaches Racon**

11°39'·40N., 43°06'·20E.

74265**Météore Lt Buoy****D****BA Notice 06/06****05/06****BA, VOL. 3 Part 1, NP 283(1), 2002/03***(Last correction: Edition No. 24 dated 16 Dec2005)***NIL****VOL. 5, 1997/98***(Last correction: Edition No. 04 dated 16 Feb 2006)*Page 183, **DISTRESS, SEARCH AND RESCUE, PAKISTAN**, w.e.f. 28 February 2006, delete section and replace by:

National SAR Agency: Government of Pakistan, Ministry of Communications
Address: Ports and Shipping Wing, Plot No. 12, Misc Area, Mai Kolachi Bye Pass, Karachi – 74200, Pakistan
Tel: +92 21 9206405, 9206406 & 9204191
Fax: +92 21 9206407 & 9204191
or Mercantile Marine Department
Tel: +92 21 2851307, 2851306 & 2852703
Fax: +92 21 2861304

The Ports and Shipping Wing of the Ministry of Communications is responsible for co-ordinating Search and Rescue operations. Karachi (ASK) maintains a continuous listening watch on international distress frequencies.

| | Telephone +92 | Fax +92 | Others |
|--|--|--------------------------|---|
| MRCC PAKISTAN (MARITIME SECURITY AGENCY) | 21 9214624 21 9214964 21 9214965 21 9214966 21 9214967 | 21 9214625 21 9214621 | Inmarsat C (IOR) 463028101 E--mail mrccpmsa@cyber.net.pk |
| KARACHI RADIO (ASK) | 21 4591161 21 4592009 | 21 4591285 | |

BA Notice 06/06**05/06****VOL. 6, 2005***(Last correction: Edition No. 04 dated 16 Feb 2006)***NIL****BA, VOL. 7, 1997/98-PART 2***(Last correction: Edition No. 16 dated 15 Aug 2000)***NIL****VOL. 8, 1999***(Last correction: Edition No. 24 dated 16 Dec2005)*Sagar Island DGPS Station
(Off Air)

22° 28'·60N., 69° 04'·20E.

Navarea VIII (122/06)**(05/06)**

SECTION – IX: PLOTTING OF GPS POSITIONS IN INDIAN CHARTS

All mariners are advised to exercise extreme caution while using the Global Positioning System positions in WGS 84 datum on the Indian navigational charts produced in Everest datum. The variation in these parameters is considerable along the Indian coast and in Andaman & Nicobar and Lakshadweep islands (300 to 800 metres variations). Mariners are also advised to apply datum shift parameters (if available) on the Indian navigational charts before using Global Positioning System positions on Indian charts. These shift parameters are specified on the charts where observed, at a suitable position under legend note. Mariners are advised to use alternate methods of fixing while operating in restricted waters and in vicinity of dangers.

The Chief Hydrographer to the Govt. of India shall not be responsible for any marine accidents arising as a result of usage of GPS positions in WGS 84 datum in Indian navigational charts in Everest datum without the application of Datum Transformation Parameters/corrections where available or listed in the charts.

SECTION – X: REPORTING OF NAVIGATIONAL DANGERS

Instructions for raising Hydrographic Note (Form IH 102)

Appeal to all Mariners:

1. Mariners at sea whilst on passage, or whilst entering / leaving ports / harbours and other waterways, are requested to look out for new or suspected dangers to navigation, changes in aids to navigation, or corrections to published charts and Sailing Directions. Whenever any such changes / dangers are observed, mariners are requested to notify the same to the Chief Hydrographer to the Government of India at the following address: -

National Hydrographic Office
107-A, Rajpur Road,
Post Box No. 75, Dehradun - 248 001
(UTTARANCHAL), INDIA
e-mail: - incho@dataone.in - incho_marinesafety@dataone.in
incho_navwarnings@dataone.in - incho_helpdesk@dataone.in
Fax No.: (0135) 2748373
WEB: www.hydrobharat.org

Instructions for filling up Form IH 102 (Overleaf)

2. Kindly follow the instructions below in order to help the Hydrographic Office (the recipient) to quickly issue NAVAREA warning / Notice to Mariners for the benefit of all other mariners at sea.

Position Reporting

3. When a position is defined by bearings (true or magnetic to be specified) more than two bearings should be used in order to provide a check. Distances observed by Radar should be corrected for index errors. Latitude and Longitude obtained from GPS / DGPS should specify the datum (WGS 84 or other). A copy / tracing from the largest scale chart may be used for forwarding details, with the corrections and additions being shown thereon in red.

Depth Reporting

4. When soundings are obtained using Echo Sounders, the echo-gram should be duly annotated with date, time, position and depth, etc., before enclosing it with the Form IH 102. It is important to state whether echo sounder is set to register depths below the surface or below the keel; in the latter case the vessel's draught should be given. Time and date should be given in order that corrections for the height of the tide may be applied where necessary. The make, name and type of echo sounder should also be given. Care should be taken to set the echo sounder to the largest scale / phase, so as to obtain maximum details of echo of the feature. Efforts should be made to identify and negate false echoes if any.

5. Reports, which cannot be confirmed or are lacking in certain details should not be withheld. Limitations or shortcomings should be duly notified in the form.

6. Reports on shoal soundings, uncharted dangers and navigational aids out of order should be reported through fastest available means at the mariner's discretion, and also be made by radio to the nearest coast radio station. The draught of modern tankers is such that any uncharted depth under 50 metres should be of sufficient importance to justify a radio message.

7. Port information should be forwarded on form IH 102a together with IH 102. Form 102a contains the information required for Sailing Direction and should be used as an *aide memoir*. Where there is insufficient space on the form, additional sheet should be used.

Please Note: - The receipt of all Hydrographic Notes will be duly acknowledged by the Hydrographic Office. Normally, the sender's ship or name is quoted as the source when the Notices to Mariners reporting the change is issued, unless the information is received through a foreign Notices to Mariners. Further communication from the Hydrographic Office to the sender of the hydrographic note will only be necessary to verify unusual features or abnormal values reported.

I.H. 102a (Revised 2003)

HYDROGRAPHIC NOTE FOR PORT INFORMATION

(For Reporting Changes to Port Information)

(To accompanying Form I.H. 102)

Name and address of ship / sender:

_____ **Ref No.:** _____
 _____ **Date :** _____

Fax No.: _____, **E-mail:** _____

| | | |
|----|--|--|
| 1. | a) NAME OF THE PORT : b) Location : Lat: _____, Long: _____ c) Listing in Guide to Port Entry: Yes/No. Sl. No.: _____ | |
| 2. | NAME AND ADDRESS OF PORT AUTHORITIES a) Name b) Address c) Phone d) Fax e) E-mail | |
| 3. | GENERAL REMARKS a) Principal activities and trade b) Latest population figures and date c) Number of ships and tonnage handled per year d) Maximum size and draught of vessels handled. e) Copy of Port Handbook <i>if available</i> . | |
| 4. | ANCHORAGES a) Type / Purpose b) Minimum Depth at anchorage c) Shelter afforded d) Holding ground e) Recommended pilotage to the anchorage | |
| 5. | PILOTAGE a) Authority for requests. b) Embarkation position c) Regulations d) Documents to be provided | |
| 6. | DIRECTIONS a) Entry and berthing information. b) Tides (Height) c) Tidal Streams. d) Navigational aids. | |
| 7. | POLLUTION CONTROL a) Local regulations in force (if any) | |

| | |
|--|--|
| <p>8. TUGS</p> <ul style="list-style-type: none"> a) Number available b) Max. hp. c) Requesting authority d) Availability times e) Communication with Tugs f) Hiring Charges | |
| <p>9. BERTHING AND WHARVES</p> <ul style="list-style-type: none"> a) Number of berths available b) Length, c) Depth alongside d) Facilities available. e) Procedures for requesting berthing and hiring charges | |
| <p>10. CARGO HANDLING</p> <ul style="list-style-type: none"> a) Containers b) Lighters c) Roll on/ roll off, etc. | |
| <p>11. CRANES</p> <ul style="list-style-type: none"> a) Brief details and max. capacity. b) Container handling facilities | |
| <p>12. BRIDGES</p> <p>Vertical clearances</p> | |
| <p>13. REPAIRS</p> <ul style="list-style-type: none"> a) Hull, machinery and underwater b) Ship and boat yards c) Docking or Slipway facilities (Give size of vessels handled or dimensions) d) Hards and ramps. e) Divers / Diving Assistance | |
| <p>14. RESCUE AND DISTRESS</p> <p>Salvage, lifeboat, coastguard, etc.</p> | |
| <p>15. SUPPLIES</p> <ul style="list-style-type: none"> a) Fuel with type and quantities available. b) Freshwater and rate of supply. c) Provisions d) Chart Agents | |
| <p>16. SERVICES</p> <ul style="list-style-type: none"> a) Radio Telegrams/Telephony b) Medical. c) Quarantine d) Consuls. e) Ship chandlery and stevedores, f) Compass adjustment, g) Tank cleaning, h) Hull painting. j) Diving and underwater examination k) Police / Ambulance / Fire l) Navigational warnings and weather bulletins m) Garbage Disposal n) Telephones p) Waste oil disposal | |
| <p>17. COMMUNICATIONS</p> <ul style="list-style-type: none"> a) Road, rail and air services available b) Nearest airport or airfield. c) Port Radio and Information service (Frequencies and operating hours) | |

| | |
|--|--|
| 18. PORT AUTHORITY Designation, address and telephone number. | |
| 19. SMALL CRAFT FACILITIES a) Information and facilities for small craft /yachts visiting the port. b) Yacht clubs, berths etc. | |
| 20. SHORE LEAVE | |
| 21. CLUBS / RECREATION / INFORMATION KIOSKS – Their location. | |
| 22. VIEWS (duly annotated) Photographs (where permitted) of the approaches, leading marks, the entrance to the harbour, etc. (Picture postcards may also be useful). | |

Signature of Observer/Reporter.....

To

The Chief Hydrographer to the Government of India

**National Hydrographic Office
107 A, Rajpur Road**

PO Box No. 75,
Dehradun- 248001
(UTTARANCHAL), INDIA

E Mail : incho@dataone.in / incho_marinesafety@dataone.in
incho_navwarnings@dataone.in / incho_helpdesk@dataone.in

Fax No.: 91- 0135- 2748373

WEB: www.hydrobharat.org

I.H. 102 (Revised 2003)

HYDROGRAPHIC NOTE

(For Reporting Navigational Dangers/ Changes observed at Sea by Mariners)

Date :

Ref. No:

Details of the Sender / Originator

1. **Name of ship or sender:**
2. **Address of sender:**
.....
e-mail; Fax No.; Tel. No.:.....
.....
3. **General Locality:**
4. **Chart / Publication Affected:**
 - a) Chart published by INHO / UKHO / other (Specify):
 - b) Chart No.: Edition Date:
 - c) Latest Edition of Indian N to M held:.....

Details of Changes / Dangers Observed

- | 5. Object of Change: | Date/Time of
observation | Charted | Observed | Position/Area |
|--------------------------------------|-------------------------------------|----------------|-----------------|----------------------|
| (a) Bathymetry: | | | | |
| (i) Depth - | | | | |
| (ii) Depth Contour - | | | | |
| (iii) Channel Depth - | | | | |
| (b) Navigational Dangers: | | | | |
| (i) New Shoals..... | | | | |
| (ii) New Rocks..... | | | | |
| (iii) New Reefs..... | | | | |
| (iv) New Wrecks..... | | | | |
| (v) New Nav-aid (Specify) - | | | | |
| (c) Casualties to existing Nav-Aids: | | | | |
| (i) Buoys..... | | | | |
| (ii) Lights..... | | | | |
| (iii) Fog signals..... | | | | |
| (iv) Racons..... | | | | |
| (v) Transit Marks | | | | |
| (vi) Leading Lines..... | | | | |
| (vii) Clearance bearings..... | | | | |
| (d) Designated Areas: | | | | |
| (i) Exercise Areas | | | | |
| (ii) Prohibited Areas | | | | |
| (iii) Pilot Station | | | | |
| (iv) Anchorage | | | | |
| (v) Foul Ground | | | | |

- (e) Port Information:
- (i) Berthing
 - (ii) Cranage
 - (iii) Tugs
 - (iv) Dry Docks
 - (v) Repair Facilities
 - (vi) Pilotage
 - (vii) Fuel
 - (viii) Water
 - (ix) Any other (Specify) :.....
- (f) Environmental Data:
- (i) Met information
 - (ii) Tides and Tidal Stream
 - (iii) Pollutants
 - (iv) Effluents.....
 - (v) Marine Life / Habitats
- (g) Other changes, if any, with Details:
6. **Information on the Positions of Danger / Changes Reported above:**
- (a) Positioning System used:
 - (b) Datum (WGS/Everest/ Local (Specify) :
 - (c) Accompanying plots / photographs if any:
7. **Information on the Soundings / Depths Reported above:**
- a) Echo Sounder (Type) used:
 - b) Draught of Vessel set on Echo Sounder:
 - c) Observed water depth vis-à-vis charted depth:
 - d) Echo-gram accompanying this report: Yes / No
 - e) Whether voltage drop existed in equipment at observation time
 - f) Data and Time of depth observation
8. **Limitations if any in Reporting the changes above**

Signature of the Master / Reporter

Date:

To
The Chief Hydrographer to the Government of India
National Hydrographic Office
107 A, Rajpur Road
PO Box No. 75,
Dehradun- 248001
(UTTARANCHAL), INDIA

E Mail : incho@dataone.in / incho_marinesafety@dataone.in
incho_navwarnings@dataone.in / incho_helpdesk@dataone.in
Fax No.: 91- 0135- 2748373
WEB: www.hydrobharat.org

Please Note:

1. Please see over leaf for Instructions for filling up this form.
2. Photograph / Sketches / Diagram, etc duly annotated will be useful supporting document.
3. Please rush this information to the Chief Hydrographer to the Govt. of India at the address given above, by the fastest available means.

TABLE FOR CONVERTING FEET AND FATHOMS TO METRES

| Feet | Fms | Metres | Feet | Fms | Metres | Feet | Fms | Metres | Feet | Fms | Metres |
|------|-----|--------|------|-----|--------|------|-----|---------|---------------|---------------|---------|
| 1 | | 0.305 | 55 | | 16.764 | 162 | 27 | 49.378 | 498 | 83 | 151.790 |
| 1.5 | ¼ | 0.457 | 56 | | 17.069 | 168 | 28 | 51.206 | 504 | 84 | 153.619 |
| 2 | | 0.610 | 57 | 9½ | 17.374 | 174 | 29 | 53.035 | 510 | 85 | 155.448 |
| 3 | ½ | 0.914 | 58 | | 17.678 | 180 | 30 | 54.864 | 516 | 86 | 157.277 |
| 4 | | 1.219 | 59 | | 17.983 | 186 | 31 | 56.693 | 522 | 87 | 159.106 |
| 4.5 | ¾ | 1.372 | 60 | 10 | 18.288 | 192 | 32 | 58.522 | 528 | 88 | 160.934 |
| 5 | | 1.524 | 61 | | 18.593 | 198 | 33 | 60.350 | 534 | 89 | 162.763 |
| 6 | 1 | 1.829 | 62 | | 18.898 | 204 | 34 | 62.179 | 540 | 90 | 164.992 |
| 7 | | 2.134 | 63 | 10½ | 19.202 | 210 | 35 | 64.008 | 546 | 91 | 166.421 |
| 8 | | 2.438 | 64 | | 19.507 | 216 | 36 | 65.837 | 552 | 92 | 168.250 |
| 9 | 1½ | 2.743 | 65 | | 19.812 | 222 | 37 | 67.666 | 558 | 93 | 170.078 |
| 10 | | 3.048 | 66 | 11 | 20.117 | 228 | 38 | 69.494 | 564 | 94 | 171.907 |
| 11 | | 3.353 | 67 | | 20.422 | 234 | 39 | 71.323 | 570 | 95 | 173.736 |
| 12 | 2 | 3.658 | 68 | | 20.726 | 240 | 40 | 73.152 | 576 | 96 | 175.565 |
| 13 | | 3.962 | 69 | 11½ | 21.031 | 246 | 41 | 74.981 | 582 | 97 | 177.394 |
| 14 | | 4.267 | 70 | | 21.336 | 252 | 42 | 76.810 | 588 | 98 | 179.222 |
| 15 | 2½ | 4.572 | 71 | | 21.641 | 258 | 43 | 78.638 | 594 | 99 | 181.051 |
| 16 | | 4.877 | 72 | 12 | 21.946 | 264 | 44 | 80.467 | 600 | 100 | 182.880 |
| 17 | | 5.182 | 73 | | 22.250 | 270 | 45 | 82.296 | | | |
| 18 | 3 | 5.486 | 74 | | 22.555 | 276 | 46 | 84.125 | Metres | Inches | |
| 19 | | 5.791 | 75 | 12½ | 22.860 | 282 | 47 | 85.954 | | | |
| 20 | | 6.096 | 76 | | 23.165 | 288 | 48 | 87.782 | 0.10 | 3.937 | |
| 21 | 3½ | 6.401 | 77 | | 23.470 | 294 | 49 | 89.611 | 0.20 | 7.874 | |
| 22 | | 6.706 | 78 | 13 | 23.774 | 300 | 50 | 91.440 | 0.30 | 11.811 | |
| 23 | | 7.010 | 79 | | 24.079 | 306 | 51 | 93.469 | 0.40 | 15.748 | |
| 24 | 4 | 7.315 | 80 | | 24.384 | 312 | 52 | 95.098 | 0.50 | 19.685 | |
| 25 | | 7.620 | 81 | 13½ | 24.689 | 318 | 53 | 96.926 | 0.60 | 23.622 | |
| 26 | | 7.925 | 82 | | 24.994 | 324 | 54 | 98.755 | 0.70 | 27.559 | |
| 27 | 4½ | 8.230 | 83 | | 25.298 | 330 | 55 | 100.584 | 0.80 | 31.496 | |
| 28 | | 8.534 | 84 | 14 | 25.603 | 336 | 56 | 102.413 | 0.90 | 35.433 | |
| 29 | | 8.839 | 85 | | 25.908 | 342 | 57 | 104.242 | 1.00 | 39.370 | |
| 30 | 5 | 9.144 | 86 | | 26.213 | 348 | 58 | 106.070 | | | |
| 31 | | 9.449 | 87 | 14½ | 26.518 | 354 | 59 | 107.899 | | | |
| 32 | | 9.754 | 88 | | 26.822 | 360 | 60 | 109.728 | | | |
| 33 | 5½ | 10.058 | 89 | | 27.127 | 366 | 61 | 111.557 | | | |
| 34 | | 10.363 | 90 | 15 | 27.432 | 372 | 62 | 113.386 | | | |
| 35 | | 10.668 | 91 | | 27.737 | 378 | 63 | 115.214 | | | |
| 36 | 6 | 10.973 | 92 | | 28.042 | 384 | 64 | 117.043 | | | |
| 37 | | 11.278 | 93 | 15½ | 28.346 | 390 | 65 | 118.872 | | | |
| 38 | | 11.582 | 94 | | 28.651 | 396 | 66 | 120.701 | | | |
| 39 | 6½ | 11.887 | 95 | | 28.956 | 402 | 67 | 122.530 | | | |
| 40 | | 12.192 | 96 | 16 | 29.261 | 408 | 68 | 124.358 | | | |
| 41 | | 12.497 | 97 | | 29.566 | 414 | 69 | 126.187 | | | |
| 42 | 7 | 12.802 | 98 | | 29.870 | 420 | 70 | 128.016 | | | |
| 43 | | 13.106 | 99 | 16½ | 30.175 | 426 | 71 | 129.845 | | | |
| 44 | | 13.411 | 100 | | 30.480 | 432 | 72 | 131.674 | | | |
| 45 | 7½ | 13.716 | 102 | 17 | 31.090 | 438 | 73 | 133.502 | | | |
| 46 | | 14.021 | 108 | 18 | 32.918 | 444 | 74 | 135.381 | | | |
| 47 | | 14.326 | 114 | 19 | 34.747 | 450 | 75 | 137.160 | | | |
| 48 | | 14.630 | 120 | 20 | 36.576 | 456 | 76 | 138.989 | | | |
| 49 | | 14.935 | 126 | 21 | 38.405 | 462 | 77 | 140.818 | | | |
| 50 | | 15.240 | 132 | 22 | 40.234 | 468 | 78 | 142.646 | | | |
| 51 | 8½ | 15.545 | 138 | 23 | 42.062 | 474 | 79 | 144.475 | | | |
| 52 | | 15.850 | 144 | 24 | 43.891 | 480 | 80 | 146.304 | | | |
| 53 | | 16.154 | 150 | 25 | 45.720 | 486 | 81 | 148.133 | | | |
| 54 | 9 | 16.459 | 156 | 26 | 47.549 | 492 | 82 | 149.962 | | | |

TABLE FOR CONVERTING METRES TO FEET AND FATHOMS

| Mtrs | Feet | Fms | Metres | Feet | Fms | Metres | Feet | Fms | Metres | Feet | Fms |
|------|---------|--------|--------|----------|---------|--|---------------|---------------|-----------------|------|-----|
| 1 | 3.281 | 0.547 | 57 | 187.008 | 31.168 | | | | | | |
| 2 | 6.562 | 1.094 | 58 | 190.289 | 31.715 | 5000 | 16404.20 | 2734.03 | | | |
| 3 | 9.843 | 1.640 | 59 | 193.570 | 32.262 | 6000 | 19685.04 | 3280.84 | | | |
| 4 | 13.123 | 2.187 | 60 | 196.850 | 32.808 | 7000 | 22965.88 | 3827.65 | | | |
| 5 | 16.404 | 2.734 | 61 | 200.131 | 33.355 | 8000 | 26246.72 | 4374.45 | | | |
| 6 | 19.685 | 3.281 | 62 | 203.412 | 33.902 | 9000 | 29527.56 | 4921.26 | | | |
| 7 | 22.966 | 3.828 | 63 | 206.693 | 34.449 | 10000 | 32808.40 | 5468.07 | | | |
| 8 | 26.247 | 4.374 | 64 | 209.974 | 34.996 | | | | | | |
| 9 | 29.528 | 4.921 | 65 | 213.255 | 35.542 | Inches | Feet | Metres | Factors | | |
| 10 | 32.808 | 5.468 | 66 | 216.535 | 36.089 | | | | | | |
| 11 | 36.089 | 6.015 | 67 | 219.816 | 36.636 | 1 | 0.083 | 0.025 | 1 Inch=0.0254 m | | |
| 12 | 39.370 | 6.562 | 68 | 223.097 | 37.183 | 2 | 0.167 | 0.051 | 1 Foot=0.3048 m | | |
| 13 | 42.652 | 7.108 | 69 | 226.378 | 37.730 | 3 | 0.250 | 0.076 | 1 Fthm=1.8288 m | | |
| 14 | 45.932 | 7.655 | 70 | 229.659 | 38.276 | 4 | 0.333 | 0.102 | or 6 feet | | |
| 15 | 49.213 | 8.202 | 71 | 232.940 | 38.823 | 5 | 0.417 | 0.127 | | | |
| 16 | 52.493 | 8.749 | 72 | 236.220 | 39.370 | 6 | 0.500 | 0.152 | | | |
| 17 | 55.774 | 9.296 | 73 | 239.501 | 39.917 | 7 | 0.583 | 0.178 | | | |
| 18 | 59.055 | 9.843 | 74 | 242.782 | 40.464 | 8 | 0.667 | 0.203 | | | |
| 19 | 62.336 | 10.389 | 75 | 246.063 | 41.010 | 9 | 0.750 | 0.229 | | | |
| 20 | 65.617 | 10.936 | 76 | 249.344 | 41.557 | 10 | 0.833 | 0.254 | | | |
| 21 | 68.898 | 11.483 | 77 | 252.625 | 42.104 | 11 | 0.917 | 0.279 | | | |
| 22 | 72.178 | 12.030 | 78 | 255.906 | 42.651 | 12 | 1.000 | 0.305 | | | |
| 23 | 75.459 | 12.577 | 79 | 259.186 | 43.198 | | | | | | |
| 24 | 78.740 | 13.123 | 80 | 262.467 | 43.745 | Fthms | Metres | Feet | Metres | | |
| 25 | 82.021 | 13.670 | 81 | 265.748 | 44.291 | | | | | | |
| 26 | 85.302 | 14.217 | 82 | 269.029 | 44.838 | 200 | 365.760 | 700 | 213.360 | | |
| 27 | 88.583 | 14.764 | 83 | 272.310 | 45.385 | 300 | 548.640 | 800 | 243.840 | | |
| 28 | 91.864 | 15.311 | 84 | 275.591 | 45.932 | 400 | 731.520 | 900 | 274.320 | | |
| 29 | 95.144 | 15.857 | 85 | 278.871 | 46.479 | 500 | 914.400 | 1000 | 304.800 | | |
| 30 | 98.425 | 16.404 | 86 | 282.152 | 47.025 | 600 | 1097.280 | | | | |
| 31 | 101.706 | 16.951 | 87 | 285.433 | 47.572 | 700 | 1280.160 | | | | |
| 32 | 104.987 | 17.498 | 88 | 288.714 | 48.119 | 800 | 1463.040 | | | | |
| 33 | 108.268 | 18.045 | 89 | 291.995 | 48.666 | 900 | 1645.920 | | | | |
| 34 | 111.549 | 18.591 | 90 | 295.276 | 49.213 | 1000 | 1828.800 | | | | |
| 35 | 115.829 | 19.138 | 91 | 298.556 | 49.759 | | | | | | |
| 36 | 118.110 | 19.685 | 92 | 301.837 | 50.306 | Factor = 1 m = 3.280839895 feet or | | | | | |
| 37 | 121.391 | 20.232 | 93 | 305.118 | 50.853 | 39370078740 inches = 0.546806649 fthm | | | | | |
| 38 | 124.672 | 20.779 | 94 | 308.399 | 51.400 | | | | | | |
| 39 | 127.953 | 21.325 | 95 | 311.680 | 51.947 | | | | | | |
| 40 | 131.234 | 21.872 | 96 | 314.961 | 52.493 | | | | | | |
| 41 | 134.514 | 22.419 | 97 | 318.241 | 53.040 | | | | | | |
| 42 | 137.795 | 22.966 | 98 | 321.522 | 53.587 | | | | | | |
| 43 | 141.076 | 23.513 | 99 | 324.803 | 54.134 | | | | | | |
| 44 | 144.357 | 24.059 | 100 | 328.084 | 54.658 | | | | | | |
| 45 | 147.638 | 24.606 | 200 | 656.17 | 109.36 | | | | | | |
| 46 | 150.919 | 25.153 | 300 | 984.25 | 164.04 | | | | | | |
| 47 | 154.199 | 25.700 | 400 | 1312.34 | 218.72 | | | | | | |
| 48 | 157.480 | 26.247 | 500 | 1640.42 | 273.40 | | | | | | |
| 49 | 160.761 | 26.794 | 600 | 1968.50 | 328.08 | | | | | | |
| 50 | 164.042 | 27.340 | 700 | 2296.59 | 382.76 | | | | | | |
| 51 | 167.323 | 27.887 | 800 | 2624.67 | 437.45 | | | | | | |
| 52 | 170.604 | 28.434 | 900 | 2952.76 | 492.13 | | | | | | |
| 53 | 173.885 | 28.981 | 1000 | 3280.84 | 546.81 | | | | | | |
| 54 | 177.165 | 29.528 | 2000 | 6561.68 | 1093.61 | | | | | | |
| 55 | 180.446 | 30.074 | 3000 | 9842.52 | 1640.42 | | | | | | |
| 56 | 183.727 | 30.621 | 4000 | 13123.36 | 2187.23 | | | | | | |