



# INDIAN NOTICES TO MARINERS FOR 2006

(PUBLISHED FORTNIGHTLY ON 1<sup>ST</sup> & 16<sup>TH</sup> OF EVERY MONTH)

EDITION No. 10 DATED 16 MAY 2006

(CONTAIN NOTICES 234 TO 258)

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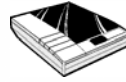
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**Mariner's Obligation and A Chart maker's Plea:** Observing Changes at sea proactively and reporting them promptly to the concerned charting agency, is an obligation that all mariners owe to the entire maritime community towards SOLAS. Mariners are, 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 01 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 234 to 258 contained in this Edition**

<b>INDIAN H.O. Chart No.</b>	<b>Folio No.</b>	<b>Notice No.</b>	<b>ADMIRALTY Chart No.</b>	<b>Folio No.</b>	<b>Notice No.</b>
20	1	251	158 (INT 7008)	32	239
21	2	255(T),256(P),258(T)	333	32	252
22 (INT 752)	3	255(T), 256(P)	563	36	240
32	5	257, 258(T)	1235 (INT 7289)	40	237
211	3	255(T), 256(P)	1265 (INT 7291)	40	237
255 (INT 7334)	3	255(T), 256(P)	1353	45	247
288	1	237	2374	32	252
289	1	251	2403	45	244
292 (INT 7021)	2	255(T), 256(P)	2523 (INT 7250)	40	236
293 (INT 7022)	3	255(T), 256(P)	2851	40	251
313	5	258(T)	2882 (INT 7264)	40	237
315	4	257(P)	2883	40	236
316	4	257(P)	2884 (INT 7278)	40	237
352	5	235	2886	40	236
356	5	258(T)	2887 (INT 7232)	40	238, 253(P)
357	5	258(T)	2888 (INT 7199)	40	238, 253(P)
358	4	257(P)	2889 (INT 7211)	40	238, 254(P)
2016 (INT 7336)	3	256(P)	3175	40	238, 253(P)
3001	5	258(T)	3176	40	238, 253(P)
3010 (INT 7418)	5	235	3411 (INT 7218)	40	238, 253(P)
7071 (INT 71)	1	239	3412 (INT 7219)	40	238, 253(P)
7072 (INT 72)	1	239	3713	40	248, 254(P)
7701 (INT 701)	1	240	3715	40	248, 254(P)
7702 (INT 702)	1	240	3739 (INT 7220)	40	238, 253(P)
7703 (INT 703)	1	258(T)	3773	40	237
7704 (INT 704)	1	239	3776	40	250
7705 (INT 705)	1	251,255(T),256(P)	3777	40	250
7706 (INT 706)	1	255(T),256(P),257(P),258(T)	3831	45	241, 243
			3833	45	241, 242, 243
			3846 (INT 7296)	40	249
			3877 (INT 7055)	36	240
			3937	45	242, 244
			3949	46	244, 245, 246
			4005	60	239
			4041	45	242, 243
			4042	45	243

**SECTION – II: PERMANENT NOTICES****INDIAN HYDROGRAPHIC CHARTS AND PUBLICATION****\*234 (10/06)****(a): NEW INDIAN ELECTRONIC NAVIGATIONAL CHARTS**Source: NHO, Dehradun  
(HJ/NM/Pub)

<b>LIST OF THE OFFICAL ENC'S PREPARED BY THE NATIONAL HYDROGRAPHIC OFFICE, INDIA</b>				
<b>Sl. No.</b>	<b>Cell Name</b>	<b>Chart No.</b>	<b>Title</b>	<b>Scale</b>
<b>COASTAL</b>				
1	IN3201GG	201	Gorachan Creek to Godia Creek	1:150 000
2	IN3219LT	219	Tellicheri to Tanur Nagaram	1:150 000
3`	IN3254GK	254	Approaches to Gulf of Khambhat (Cambay)	1:300 000
<b>APPROACH</b>				
4	IN42052M	2052	Approches to Port of New Mangalore	1:50 000
5	IN43017A	3017	Dharma Fishing Harbour	1:50 000
<b>HARBOUR</b>				
6	IN52021M	2021	Mundra Port	1:12 500
7	IN52026D	2026	Daman	1:25 000
8	IN52026R	2026	Revadanda Port	1:30 000
9	IN52027R	2027	rozi Anchorage	1:25 000
10	IN52047K	2047	Kadmat Island	1:25 000
11	IN52047A	2047	Amini Island	1:40 000
12	IN52047P	2047	Kalpitti to Parali Island	1:50 000
13	IN52047C	2047	Chetlat Island	1:35 000
14	IN52057M	2057	Mahuva Bandar	1:25 000
15	IN52047S	2057	Simar Anchorage	1:25 000
16	IN53003c	3003	Cuddalore Anchorage	1:25 000
17	IN53003p	3003	Pondicheri Anchorage	1:25 000
18	IN53007A	3007	Nagapattinam Anchorage	1:35 000
19	IN53008n	3008	Nizampatnam Anchorage	1:27 500
20	IN53008v	3008	Vadarevu Anchorage	1:25 000
21	IN53017d	3017	Dharma River	1:50 000
22	IN53031B	3031	Baleshwar Road (Balasore Roads)	1:30 000
<b>BIRTHING</b>				
23	IN62051S	2051	Salaya Harbour	1:20 000
24	IN63007N	3007	Nagore	1:10 000

**(b): ELECTRONIC NAVIGATIONAL CHARTS PERMANENTLY WITHDRAWN**

<b>Sl. No.</b>	<b>Cell Name</b>	<b>Chart No.</b>	<b>Title</b>	<b>On release of New ENC</b>
<b>COASTAL</b>				
1	IN3201GG	201	Gorachan Creek to Godia Creek	IN3201GG
2	IN3219LT	219	Tellicheri to Tanur Nagaram	IN3219LT
3`	IN3254GK	254	Approaches to Gulf of Khambhat (Cambay)	IN3254GK
<b>APPROACH</b>				
4	IN42052M	2052	Approches to Port of New Mangalore	IN42052M
5	IN43017a	3017	Dharma Fishing Harbour	IN43017a
<b>HARBOUR</b>				
6	IN53008n	3008	Nizampatnam Anchorage	IN53008n
7	IN53008v	3008	Vadarevu Anchorage	IN53008v

AVAILABILITY OF ENCs:

These Official Indian ENCs are being distributed worldwide through C-MAP. Updates will be available both through CDs and Real Time via satellites to allow fully automatic updating of ENC/SENC. Mariners and other ENC users may contact the under mentioned for further details:

Chief Hydrographer to the Government of India National Hydrographic Office 107-A Rajpur Road Dehra Dun – 248 001 Telephone: (0135) 2747365 Email: <a href="mailto:inho@dataone.in">inho@dataone.in</a>	<b>OR</b>	Director C-Map India Private Limited 505, Raheja Arcade Sector 11 CBD, Belapur Navi Mumbai – 400 614 Telephone: (22) 5610 3668 Fax: (22) 2770 4368 Email: <a href="mailto:info@c-map.co.in">info@c-map.co.in</a> Website: <a href="http://www.c-map.co.in">www.c-map.co.in</a>
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**235 (10/06) INDIA – East Coast – Off Paradip-Anchorage-SPM Buoy-Submarine Pipeline-Legend-Restricted area.**

Source: Paradip Port Trust

(HJ/1129/03)

Note: Former INM 593(P)/05 is canceled.

**Chart 352** [previous update 157/06]

Insert	VLCC ⚓ No.1	20° 00′-00N., 86° 41′-00E.
	VLCC ⚓ No.2	20° 07′-50N., 86° 46′-50E.
	SPM Buoy	(a) 20° 04′-70N., 86° 41′-51E.
	submarine pipeline, ⚓⚓⚓⚓, joining:	20° 14′-03N., 86° 36′-58E. (shore)
	circular limit of SPM operation area, radius 2M, centered on:	(a) above 20° 04′-70N., 86° 41′-51E.
	limit of restricted area, TTTT ✂ TTTT, joining:	20° 14′-32N., 86° 37′-61E. (shore) 20° 04′-10N., 86° 43′-01E. 20° 03′-10N., 86° 41′-01E. 20° 13′-45N., 86° 35′-71E. (shore)

**Chart 3010 (INT 7418) (plan , Approaches to Paradip)** [previous update 438/04]



Insert	VLCC ⚓ No.2	20° 07′-50N., 86° 46′-50E.
	submarine pipeline, ⚓⚓⚓⚓, joining:	20° 14′-03N., 86° 36′-58E. (shore) 20° 07′-00N., 86° 39′-50E. (S border)
	limit of restricted area, TTTT ✂ TTTT, joining:	20° 14′-32N., 86° 37′-61E. (shore) 20° 07′-00N., 86° 40′-60E. (S border) and 20° 07′-00N., 86° 38′-30E. (S border) 20° 13′-45N., 86° 35′-71E.(shore)

**236 (10/06) QATAR -Al Shaheen Oilfield - Moored storage tanker. Tanker mooring buoy.**

Source: BA Notice1811/06

(HJ/1132/67)



**BA Chart 2523 (INT 7250) [previous update 210/06]**

Substitute  Knock Nevis Mo(U)15s for symbol, single buoy mooring, Mo(U)15s No 2 26° 35'·40N., 52° 01'·95E  
 symbol, single buoy mooring, Mo(U)15s No1, for  
 Mo(U)15s 26° 34'·57N., 51° 58'·50E.

**BA Chart 2883 [previous update 147/06]**

Insert  Mo(U)15s 26° 35'·4N., 52° 01'·9E.

**BA Chart 2886 [previous update 127/06]**

Substitute  Mo(U)15s for symbol, single buoy mooring 26° 35'·4N., 52° 01'·9E.  
 symbol, lit single buoy mooring, for  Mo(U)15s 26° 34'·6N., 51° 58'·5E.

**237 (10/06) ARABIA - Approaches to Khawr Abd Allah - Al Başrah (Al Bakr) Terminal South-westwards and South-south-eastwards - Depths.**

Source: BA Notice1833/06

(HJ/1133/91)

**Chart 288 [previous update 147/06]**

Insert depth 7<sub>7</sub> enclosed by 10m contour 29° 38'·1N., 48° 44'·7E.

**BA Chart 1235 (INT 7289) [previous update 182/06]**

Insert depth 7<sub>7</sub> (a) 29° 38'·15N., 48° 44'·73E.  
 depth 9<sub>3</sub> (b) 29° 37'·85N., 48° 44'·67E.  
 10m contour to enclose (a) and (b) above

Delete depth 11<sub>3</sub>, close NW of: (a) above

**BA Chart 1265 (INT 7291) [previous update 139/06]**

Insert depth 9<sub>5</sub> enclosed by 10m contour 29° 23'·50N., 48° 56'·55E.  
 depth 14<sub>4</sub> enclosed by 15m contour (a) 29° 31'·05N., 48° 49'·82E.  
 depth 14<sub>5</sub> enclosed by 15m contour (b) 29° 30'·17N., 48° 50'·26E.  
 Delete depth 15<sub>3</sub>, adjacent to: (a) above  
 depth 15<sub>7</sub>, adjacent to: (b) above

**BA Chart 2882 (INT 7264) [previous update 68/06]**

Insert depth 9<sub>5</sub> enclosed by 10m contour 29° 23'·5N., 48° 56'·5E.

**BA Chart 2884 (INT 7278) [previous update 68/06]**

Insert depth 7<sub>7</sub> enclosed by 10m contour 29° 38'·1N., 48° 44'·7E.  
 depth 9<sub>5</sub> enclosed by 10m contour 29° 23'·5N., 48° 56'·5E.

**BA Chart 3773 [previous update 139/06]**

Insert depth 7<sub>7</sub> enclosed by 10m contour (a) 29° 38'·15N., 48° 44'·73E.  
 depth 14<sub>4</sub> enclosed by 15m contour (b) 29° 31'·05N., 48° 49'·82E.  
 depth 14<sub>5</sub> enclosed by 15m contour (c) 29° 30'·17N., 48° 50'·26E.  
 depth 9<sub>5</sub> enclosed by 10m contour 29° 23'·50N., 48° 56'·55E.  
 Delete depth 11<sub>3</sub>, adjacent to: (a) above  
 depth 15<sub>3</sub>, adjacent to: (b) above  
 depth 15<sub>7</sub>, adjacent to: (c) above

**238 (10/06) UNITED ARAB EMIRATES - OMAN - Approaches to Dubai (Dubayy) - Approaches to Jebel Ali (Mina Jabal Ali) - Musandam - Kachalu Northwards - Legends. Landmark. Depths.**

Source: BA Notice1835/06

(HJ/1132/54)

**BA Chart 2887 (INT 7232) [previous update 168/06]**

Amend legend to, OFFSHORE DEVELOPMENTS see INM 253(P)/06 for details, centred on: 25° 15'·0N., 55° 25'·5E.

**238 (10/06) UNITED ARAB EMIRATES - OMAN - Approaches to Dubai (Dubayy) - Approaches to Jebel Ali (Mina Jabal Ali) - Musandam - Kachalu Northwards - Legends. Landmark. Depths. (continued)**

**BA Chart 2888 (INT 7199) [previous update 96/06]**

Insert	depth 53	(a) 26° 24'·0N., 56° 31'·8E.
Amend	legend to, OFFSHORE DEVELOPMENTS see <i>INM 253(P)/06</i> for details, centred on:	25° 19'·0N., 55° 28'·5E.
Delete	depth 91, adjacent to:	(a) above

**BA Chart 2889 (INT 7211) [previous update 96/06]**

Amend	legend to, OFFSHORE DEVELOPMENTS see <i>INM 253(P)/06</i> for details, centred on:	25° 10'·0N., 55° 20'·5E.
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**BA Chart 3175 [previous update 96/06]**

Amend	legend to, see <i>INM 253(P)/06</i> , centred on:	25° 18'·40N., 55° 08'·20E.
	legend to, <i>Entry Prohibited</i> (see <i>INM 253(P)/06</i> ), centred on:	25° 14'·40N., 55° 12'·60E. 25° 21'·20N., 55° 14'·50E.

**BA Chart 3176 [previous update 437/05]**

Amend	legend to, see <i>INM 253(P)/06</i> , centred on:	25° 18'·40N., 55° 06'·40E.
	legend to, <i>Entry Prohibited</i> (see <i>INM 253(P)/06</i> ), centred on:	25° 21'·90N., 55° 14'·80E. 25° 14'·40N., 55° 12'·00E. 25° 07'·50N., 55° 07'·60E. 25° 02'·20N., 54° 57'·50E.

**BA Chart 3411 (INT 7218) [previous update 96/06]**

Insert	legend, see <i>INM 253(P)/06</i> , centred on:	25° 18'·200N., 55° 17'·600E.
Amend	legend to, see <i>INM 253(P)/06</i> , centred on:	25° 16'·830N., 55° 14'·300E.

**BA Chart 3412 (INT 7219) [previous update 96/06]**

Amend	legend to, see <i>INM 253(P)/06</i> , centred on:	25° 20'·50N., 55° 09'·60E. 25° 27'·70N., 55° 16'·80E.
Delete	⚠	25° 21'·60N., 55° 22'·60E.

**BA Chart 3739 (INT 7220) (plan, Jebel Ali (Mina. Jabal .Ali)) [previous update 143/06]**

Insert	legend, Works in progress (2006) (see Note), centred on:	25° 02'·03N., 55° 02'·85E. 25° 01'·70N., 55° 01'·90E.
Amend	legend to, see <i>INM 253(P)/06</i> , centred on:	25° 01'·90N., 55° 02'·15E.

**BA Chart 3739 (INT 7220) [previous update 143/06]**

Insert	legend, Works in progress (2006) (see Note), centred on:	25° 02'·00N., 55° 03'·10E. 25° 01'·82N., 55° 01'·70E.
Amend	legend to, see <i>INM 253(P)/06</i> , centred on:	25° 02'·80N., 55° 01'·60E.

**239 (10/06) RED SEA – Sha'ab Abu Fendera Southwards and Ra's Abu Shagrab North-north-eastwards and South-eastwards - Rocks. Depths.**

Source: BA Notice1850/06

(HJ/1134/12)

**Chart 7071 (INT 71) [previous update 562/005]**

Delete	19	21° 42'·0N., 37° 20'·0E.
	62	20° 11'·0N., 38° 39'·0E.

**Chart 7072 (INT 72) [previous update 562/05]**

Delete	19	21° 42'·0N., 37° 20'·0E.
	62	20° 11'·0N., 38° 39'·0E.



**239 (10/06) RED SEA – Sha’ab Abu Fendera Southwards and Ra’s Abu Shagrab North-north-eastwards and South-eastwards - Rocks. Depths. (continued)**

**Chart 7704 (INT 704)** [previous update 571/05]

Insert  49 21° 28′·0N., 37° 24′·0E.

Delete  119 21° 17′·0N., 37° 30′·0E.

 19 21° 42′·0N., 37° 26′·0E.

 62 20° 11′·0N., 38° 39′·0E.

depth 33and associated danger line 21° 26′·0N., 37° 25′·0E.

**BA Chart 158 (INT 7008)** [previous update 221/06]

Insert  + 22° 46′·8N., 30° 20′·5E.

22° 49′·9N., 36° 17′·7E.

22° 50′·7N., 36° 14′·0E.

Delete  119 Rep(1977) 21° 17′·5N., 37° 29′·9E.

 53 Rep(1977) 21° 23′·0N., 37° 26′·9E.

 33 Rep(1977) 21° 26′·0N., 37° 25′·2E.

 18<sub>3</sub> Rep(1977) 21° 42′·0N., 37° 25′·6E.

 62 Rep(1946)ED 20° 11′·5N., 38° 39′·5E.

**BA Chart 4005** [NE Sep 1993]

Delete depth 62and associated 100m contour 20° 11′·0N., 38° 39′·0E.

**240 (10/06) INDIAN OCEAN - Comores - Anjouan Eastwards - Rock.**

Source: BA Notice1857/06

(HJ/733/75)

Note: Former INM 228(T)/06 is cancelled.

**Chart 7701 (INT 701)** [previous update 279/05]

Insert  + ED 12° 13′·0S., 44° 46′·0E.

**Chart 7702(INT 702)** [previous update 279/05]

Insert  + ED 12° 13′·0S., 44° 46′·0E.

**BA Chart 563** [previous update 137/06]

Insert  + Rep (2006) ED 12° 12′·8S., 44° 46′·1E.

**BA Chart 3877 (INT 7055)** [NE Dec2002]

Insert  + Rep (2006) ED 12° 12′·8S., 44° 46′·1E.

**241 (10/06) SINGAPORE STRAIT - Indonesia - Pulau Batam - Batuampar - Buoyage.**

Source: BA Notice1820/06

(HJ/927/16)

**BA Chart 3831** [previous update 150/06]

Insert  Fl.G.3s 1° 09′·95N., 103° 59′·32E.

 Fl.R.3s 1° 10′·32N., 103° 59′·54E.

**241 (10/06) SINGAPORE STRAIT - Indonesia - Pulau Batam - Batuampar - Buoyage. (continued)****BA Chart 3833** [previous update 195/06]

Insert  Fl.G.3s 1° 09'·95N., 103° 59'·32E.  
 Fl.R.3s 1° 10'·32N., 103° 59'·54E.

**242 (10/06) SINGAPORE STRAIT - Indonesia - Pulau Belakangpadang South-eastwards - Depths.**

Source: BA Notice1821/06

(HJ/927/16)

**BA Chart 3833** [previous update 241/06]

Insert depth 7<sub>5</sub> enclosed by 10m contour (a) 1° 08'·45N., 103° 54'·12E.  
 Delete depth 14<sub>9</sub>, adjacent to: (a) above

**BA Chart 3937 (plan A, Sambu and Sekupang)** [previous update 194/06]

Insert depth 7<sub>5</sub> enclosed by 10m contour (a) 1° 08'·48N., 103° 54'·00E.  
 Delete depth 14<sub>9</sub>, close N of: (a) above

**BA Chart 4041** [previous update 150/06]



Insert depth 7<sub>5</sub> enclosed by 10m contour (a) 1° 08'·45N., 103° 54'·12E.  
 Delete depth 14<sub>9</sub>, close N of: (a) above

**243(10/06) SINGAPORE STRAIT - Indonesia - Pulau Batam - Teluk Tering to Teluk Jodoh - Works. Coral. Islet. Depth. Rock.**


Source: BA Notice1822/06

(HJ/927/15)


**BA Chart 3831** [previous update 241/06]

Insert legend, Works in progress (2004), centred on: 1° 11'·05N., 104° 00'·00E.  
 1° 08'·55N., 103° 59'·15E.  
 Co 1° 08'·80N., 103° 59'·16E.  
 islet 1° 08'·46N., 103° 58'·68E.  
 and extend danger line E to enclose 1° 11'·30N., 104° 02'·44E.

**BA Chart 3833** [previous update 241/06]

Insert legend, Works in progress (2004), centred on: 1° 11'·05N., 104° 00'·00E.  
 1° 08'·55N., 103° 59'·15E.  
 Co 1° 08'·80N., 103° 59'·16E.  
 islet 1° 08'·46N., 103° 58'·68E.

**BA Chart 4041** [previous update 242/06]

Insert legend, Works in progress (2004), orientated SW/NE, centred on: 1° 11'·02N., 104° 00'·25E.  
 legend, Works in progress (2004), centred on: 1° 08'·52N., 103° 59'·22E.  
 Co (a) 1° 11'·30N., 104° 02'·44E.  
 1° 08'·80N., 103° 59'·16E.  
 islet 1° 08'·46N., 103° 58'·68E.  
 Delete depth 0<sub>9</sub>, adjacent to: (a) above

**BA Chart 4042** [previous update 150/06]

Insert  Co (a) 1° 11'·30N., 104° 02'·44E.  
 Delete depth 0<sub>9</sub>, adjacent to: (a) above

**244(10/06) INDONESIA - Sumatera - Pulau Bintan - Selat Riau - Tanjungpinang Southwards -Light.**

Source: BA Notice1823/06

(HJ/927/05)

**BA Chart 2403** [previous update 222/06]

Amend light to, Iso.WR.2s13M 0° 54'·5N., 104° 26'·4E.

**BA Chart 3937 (plan C, Tanjungpinang)** [previous update 242/06]

Amend light to, Iso.WR.2s26m13M (a) 0° 54'·71N., 104° 26'·22E.

Insert sectors at light, as follows: (a) above

R shore - 59·5°

W 59·5°- shore

**BA Chart 3949** [previous update 194/06]

Amend light to, Iso.WR.2s26m13M (a) 0° 54'·5N., 104° 26'·3E.

Insert sectors at light, as follows: (a) above

R shore - 59·5°

W 59·5°- shore

**245 (10/06) INDONESIA - Sumatera - East Coast - Selat Riau - Tg Punggung North-westwards - Depths.**

Source: BA Notice1824/06

(HJ/927/05)

**BA Chart 3949** [previous update 244/06]Substitute depth 5 enclosed by 5m contour for depth 5<sub>5</sub> 0° 45'·81N., 104° 28'·37E.depth 1<sub>7</sub> for depth 2<sub>7</sub> 0° 46'·38N., 104° 29'·63E.**246 (10/06) INDONESIA - Sumatera - East Coast - Temiang Westwards - Coral.**

Source: BA Notice1825/06

(HJ/927/05)

**BA Chart 3949** [previous update 245/06]

Insert circular limit of coral reef, radius 0·1M, centred on: 0° 21'·62N., 104° 15'·63E.

**247(10/06) MALACCA STRAIT - Pulau Pinang South-westwards - Wreck.**

Source: BA Notice1866/06

(HJ/928/40)

**BA Chart 1353** [previous update 199/06]Insert  4° 50'·3N., 99° 41'·7E.**248 (10/06) UNITED ARAB EMIRATES - Abu Dhabi (Abu -Zaby) - Khawr al Bigha -I, Approaches to Umm an Nar -Khawr al Baḡin - Legends.**

Source: BA Notice 1892 /06.

(HJ/1132/45)

**BA Chart 3713** [previous update 545/05]

Insert legend, See INM 254(P)/ 06, centred on: 24° 28'·78N., 54° 18'·30E.

Amend legend to, See INM 254 (P)/ 06, centred on: 24° 31'·70N., 54° 23'·95E.

**BA Chart 3715(plan, Mina' Zayid)** [previous update 545/05]

Amend legend to, See INM 254(P)/ 06, centred on: 24° 31'·800N., 54° 23'·750E.

**BA Chart 3715** [previous update 545/05]

Insert legend, See INM 254(P)/ 06, centred on: 24° 26'·00N., 54° 21'·40E.

Amend legend to, See INM 254(P)/ 06, centred on: 24° 31'·70N., 54° 23'·95E.

24° 27'·30N., 54° 29'·70E.

**249 (10/06) IRAQ – Shaṭṭ Al ‘Arab - Al Başrah - Al ‘Ashshar and Al Jubaylah - Wrecks.**

Source: BA Notice 1931 /06.

(HJ/1133/02)

**BA Chart 3846 (INT 7296) (plan, Al Başrah, Al .Ashsha -r and Al Ma.Qil) [previous update 293/95]**

Insert  30° 33'·045N., 47° 48'·940E.  
 30° 31'·578N., 47° 50'·417E.

**BA Chart 3846 (INT 7296) [previous update 293/95]**

Insert  30° 33'·05N., 47° 48'·94E.  
 30° 31'·58N., 47° 50'·42E.

**250 (10/06) SAUDI ARABIA - East Coast - Ras al Juaymah Terminal South-eastwards - Hayr aş Şafra Northwards - Depth.**

Source: BA Notice 1966 /06.

(HJ/1132/69)

**BA Chart 3776 [previous update 120/98]**

Insert depth 3<sub>5</sub> and extend 5m approximate contour N to enclose (a) 26 ° 53'·78N., 50° 08'·25E.

Delete depth 3<sub>7</sub>, close S of: (a) above

**BA Chart 3777 [previous update 598/05]**

Insert depth 3<sub>5</sub> and extend 5m contour N to enclose (a) 26 ° 53'·92N., 50° 08'·30E.

Delete depth 3<sub>7</sub>, close S of: (a) above

**251 (10/06) OMAN - Gulf of Oman - Approaches to Port Sohar - Depths.**

Source: BA Notice 1980 /06.

(HJ/1132/42)

**Chart 20 [previous update 147/06]**

Insert depth 344 enclosed by 1000m contour E to enclose 24° 55'·3N., 57° 05'·7E.  
 depth 57 24° 31'·3N., 56° 51'·9E.

**Chart 245 [previous update 529/05]**

Insert depth 344 enclosed by 1000m contour E to enclose 24° 55'·3N., 57° 05'·7E.  
 depth 57 24° 31'·3N., 56° 51'·9E.

**Chart 289 [previous update 220/06]**

Insert depth 344 enclosed by 1000m contour E to enclose 24° 55'·3N., 57° 05'·7E.  
 depth 57 24° 31'·3N., 56° 51'·9E.

**Chart 290 [previous update 562/05]**

Insert depth 344 and extend the 1000m 24° 55'·3N., 57° 05'·7E.  
 depth 57 24° 31'·3N., 56° 51'·9E.

**Chart 7705 (INT 705) [previous update 193/06]**

Insert depth 344 and extend the 1000m contour E to enclose 24° 55'·3N., 57° 05'·7E.

**BA Chart 2851 [previous update 220/06]**


Insert depth 344 enclosed by 1000m contour 24° 55'·3N., 57° 05'·7E.  
 depth 57 (a) 24° 31'·3N., 56° 51'·9E.



Delete depth 95, close N of: (a) above

**252(10/06) EGYPT - Red Sea Coast - July Oilfield - Light-float. Platform.**

Source: BA Notice 1991 /06.

*(HJ/1134/86)***BA Chart 333** [*previous update 191/06*]

Insert  *Mo(U)15s4M Horn Mo(U)30s* (a) 28° 15'·80N., 33° 16'·01E.

Substitute  for  J-22, close WSW of: (a) above

**BA Chart 2374** [*previous update 191/06*]

Insert  *Mo(U)15s4M Horn Mo(U)30s* (a) 28° 15'·8N., 33° 16'·0E.

Delete  ,adjacent to: (a) above

**SECTION – III: TEMPORARY AND PRELIMINARY NOTICES**

**253 (P) (10/06) UNITED ARAB EMIRATES - Approaches to Dubai (Dubayy) - Approaches to Jebel Ali (Mina Jabal Ali) - Reclamation areas. Buoyage. Works. Restricted areas. Anchorage areas. Submarine cables. Breakwaters. Mole.**

Source: BA Notice 1834(P)/06  
(HJ/1132/54)

1. Work is in progress on six reclamation projects off the coast of Dubai. To maintain safety and to assist craft working on these projects each is surrounded by an exclusion zone. Appropriate warning lights will be exhibited and all vessels are warned to keep well clear of these areas.

2. Palm Island One, 'Palm Jumeirah' (25° 07'·00N., 55° 08'·00E.)

a) The exclusion zone surrounding 'Palm Jumeirah' is of 2.5M radius centred on position 25° 07'·86N., 55° 06'·97E. Mariners are to keep at least 3M seaward of this central position.

3. Palm Island Two, 'Palm Jebel Ali' (25° 01'·50N., 54° 58'·30E.)

a) An exclusion zone has been established and is marked by cardinal and lateral light-buoys. This is shown on BA Chart 3739.

b) Mariners are to exercise special care in the vicinity of position 25° 03'·30N., 55° 00'·60E. where barge and construction traffic cross the Jebel Ali Approach Channel.

c) The two submarine cables which leave the UAE coast in position 24° 59'·19N., 55° 01'·15E. have been relocated to avoid the 'Palm Jebel Ali' development. The new routes for these cables join the following positions:

Fibre Optic Gulf (FOG) Cable

24° 59'·19N., 55° 01'·15E.(shore)

24° 59'·30N., 55° 01'·09E.

24° 59'·78N., 55° 01'·45E.

25° 01'·21N., 55° 01'·91E.

25° 02'·12N., 55° 01'·36E.

25° 02'·60N., 55° 00'·36E.

25° 02'·70N., 54° 59'·20E.

25° 02'·37N., 54° 58'·12E.

25° 01'·17N., 54° 56'·34E.(existing cable)

Abu Dhabi - Dubai Diversity Cable

24° 59'·19N., 55° 01'·15E.(shore)

24° 59'·30N., 55° 01'·09E.

24° 59'·79N., 55° 01'·43E.

25° 01'·22N., 55° 01'·84E.

25° 02'·02N., 55° 01'·28E.

25° 02'·51N., 55° 00'·28E.

25° 02'·59N., 54° 59'·18E.

25° 02'·26N., 54° 58'·17E.

25° 01'·14N., 54° 56'·51E.

24° 59'·90N., 54° 55'·23E.(existing cable)

d) The replaced cables have been largely recovered and re-laid on the new routes above. Mariners are advised not to anchor or trawl in the vicinity of submarine cables.

4. The World Project (25° 13'·50N., 55° 10'·00E.)

a) An exclusion zone has been established and is marked by cardinal and lateral light-buoys. This zone is shown on BA Charts 3412 and 3739.

5. Dubai Maritime City

a) This project covers approximately 2,500,000 square metres and is to be located on reclaimed land between Mina' Rashid (25° 16'·70N., 55° 16'·70E.) and Dubai Dry Dock (25° 15'·20N., 55° 15'·80E.).

b) A restricted area has been established and is shown on BA Charts 3411 and 3412.

c) This restriction does not apply to vessels entering or leaving Mina -' Rashid under port control.

d) Phase One has seen the construction of new breakwaters forming a revised entrance to Dubai Dry Dock. These are shown on BA Charts 3411, 3412, 3175 and 3176.

e) These breakwaters are currently marked by light-buoys, flashing green and red every 4 seconds, positioned 50m sea-ward of each of the breakwater roundheads. Appropriate lights will soon be established to replace these buoys.

6. Palm Island Three, 'Palm Deira'

a) This project, extending 15km from the shore, will be located between Mina' Rashid (25° 16'·70N., 55° 16'·70E.) and Mina' Khalid (25° 21'·90N., 55° 22'·50E.).

b) An exclusion zone has been established and is marked by 19 cardinal and lateral light-buoys. This is shown on BA Chart 3412.

**253 (P) (10/06) UNITED ARAB EMIRATES - Approaches to Dubai (Dubayy) - Approaches to Jebel Ali (Mina Jabal Ali) - Reclamation areas. Buoyage. Works. Restricted areas. Anchorage areas. Submarine cables. Breakwaters. Mole. (Continued).**

c) All coastal traffic must steer to pass north of the exclusion zone.

d) Vessels for Mina ' Rashid/Dubai Dry Docks are required to anchor at least 6 Miles North of the Dubai Approach Buoy (25° 18'·50N., 55° 10'·00E.) and West of the charted pipeline. Mariners are reminded not to anchor or trawl in the vicinity of pipelines.

e) An Anchoring Prohibited Area has been established in the approaches to Dubai. This is bound by the following positions:

25° 23'·85N., 55° 07'·60E. (gas pipeline)

25° 23'·85N., 55° 11'·05E. (W limit of Palm Deira exclusion zone)

25° 20'·48N., 55° 11'·05E. (W limit of Palm Deira exclusion zone)

25° 18'·50N., 55° 13'·27E. (W limit of Palm Deira exclusion zone)

25° 18'·50N., 55° 06'·80E. (gas pipeline)

f) Construction of a detached mole has started, close North of the Port Rashid Lee Breakwater, extending between positions, 25° 18'·10N., 55° 17'·05E. and 25° 17'·20N., 55° 17'·45E.

g) As a result of this construction, traffic entering and leaving Khawr Dubai will be diverted eastwards. This diversion will be marked by lateral Starboard Hand buoys positioned close eastwards of the Mole and the relocation of the Khawr Dubai Fairway buoy Northwards.

h) Inward and outward traffic for Khawr Dubai must of necessity pass close to both the Dubai Approach buoy (25° 18'·50N., 55° 10'·00E.) and repositioned Khawr Dubai Fairway buoy. This involves crossing the fairway of a major port. Vessels must take effective action to avoid obstructing the fairway and must also keep radio watch for 'Dubai Port Control', see Admiralty List of Radio Signals for details.

i) To reduce the hazard of Khawr Dubai traffic to the Port Rashid fairway, a new North-South channel through the exclusion zone, is to be opened for Khawr Dubai traffic. This channel will be marked by buoys. Further details will be promulgated as they become available.

7. Jebel Ali Expansion, 'Megamax' Project (25° 02'·00N., 55° 03'·00E.)

a) An exclusion zone has been established seaward of the Jebel Ali East Breakwater. This is shown on BA Chart 3739. The exclusion zone is bound to the south-west by the Jebel Ali Approach Channel and to the north-east by the pipeline safety corridor. The northern limit is defined by a line joining the following positions:

25° 02'·30N., 55° 01'·90E. (NE side of Jebel Ali Approach Channel)

25° 03'·30N., 55° 03'·50E. (SW extent of pipeline safety corridor)

This zone is to be marked by light-buoys in the future.

b) A detached breakwater is under construction to the south-west of the Jebel Ali Approach Channel between No 12 and No 13 buoys. A small exclusion zone has been established to aid construction and is shown on BA Chart 3739. This zone is bound by the Approach Channel to the north-east and a semi circle radius 5 cables (1000m) centred on 25° 01'·96N., 55° 01'·90E. A port hand lateral light-buoy is also to be established in 25° 01'·60N., 55° 01'·46E.

c) As part of the 'Megamax' project, three measuring instrument platforms (about 5m high) are being established in the following positions:

25° 01'·44N., 55° 02'·02E.

25° 02'·08N., 55° 04'·48E.

25° 03'·66N., 55° 06'·24E.

Each will display flashing yellow lights.

8. For the latest information about all of these projects, mariners are advised to contact the local port authority and refer to Navigational Warnings issued by the Control and Maritime Guidance Office of the Ports, Customs and Free Zone Corporation, Dubai.

9. Further information will be promulgated as it becomes available.

10. Former INM 107(P)/06 is cancelled.

**BA Charts affected -2887 (INT 7232) -2888 (INT 7199) -2889 (INT 7211)-3175 -3176 -3411 (INT 7218) -3412 (INT7219) -3739 (INT 7220)**

**254 (P) (10/06) UNITED ARAB EMIRATES - Abu Dhabi (Abu Zaby) - Khawr al Bighal, Approaches to Umm an Nar - Khawr al Baṭīn - Buoyage. Lights. Leading line. Depth information.**

Source: BA Notice 1891(P)/06  
(HJ/1132/45)

- Numerous changes have been made to the aids to navigation marking the approach channel to the Port of Umm an Nar.
- The principal changes are as follows:
  - Additional channel buoys have been established either side of the dredged channel in Khawr al Bighal between the entrance to Mina -. Zayid (24° 32'·20N., 54° 23'·50E.) and the North Basin of the Port of Umm an Nar (24° 26'·80N., 54° 29'·90E.)
  - Many of the existing channel buoys in the Khawr al Bighal have been renumbered and are no longer as charted.
  - Two white leading lights, on a bearing of 164°, have been established in approximate position 24° 26'·50N., 54° 29'·98E. to lead mariners into the North Basin of the Port of Umm an Nar.
- There have been recent reports of isolated depths less than 6·0m within the Khawr al Baṭīn dredged channel between positions 24° 28'·60N., 54° 18'·20E. and 24° 21'·30N., 54° 27'·55E. The most significant are:

32m	24° 28'·37N., 54° 18'·02E.
38m	24° 28'·30N., 54° 17'·94E.
45m	24° 26'·60N., 54° 20'·35E.
51m	24° 25'·25N., 54° 23'·05E.
53m	24° 24'·92N., 54° 23'·84E.
52m	24° 23'·94N., 54° 27'·20E.
5m	24° 23'·50N., 54° 27'·91E.
16m	24° 21'·47N., 54° 27'·65E.
09m	24° 21'·38N., 54° 27'·61E.

- In the meantime mariners are advised to navigate with caution and consult the local port authority for the latest information.
- Former Notice 564(P)/05 is cancelled.

**BA Charts affected -3713 -3715**

**255 (T) (10/06) INDIA – West Coast-Off Mumbai – Crude Lighterage operations.**

Source: Navarea VIII 634/05  
(HJ/1030/87)

- STS Crude lighterage operations at LPO Mumbai is in progress around 02 NM of Mumbai lighterage point 18°56'·0N., 072°24'·0E.
- All Tankers at LPO Mumbai Would Maintain VHF Watch On Channel 06 / 05 US

**Charts affected -21- 22 ( INT 752)- 211- 255( INT 7334)- 292 ( INT 7021)- 293( INT 7022)- 7705 ( INT 705)- 7706( INT 706)**

**256 (P) (10/06) INDIA – West Coast – Inner Approaches to Mumbai.**

Source: Navarea VIII 767/05  
(HJ/1130/87)

- Six in number containers containing explosives fallen overboard from MV Eugenia in positions:
  - 18°46'·61N., 072°32'·88E.
  - 18°50'·0N., 072°40'·7E.
  - 18°46'·55N., 072°33'·82E.
- Dangerous for surface navigation.
- All mariners to keep a sharp lookout and exercise extreme caution.

**Charts affected – 21-22( INT 752)-211-255( INT 7334)-292( INT 7021)-293( INT 7022)-2016( INT 7336)-7705 (INT 705) - 7706( INT 706)**

**257 (P) (10/06) INDIA – South East Coast – Palk Strait.**

Source: Dredging Corporation of India.  
(HJ/1030/00)

- Dredging Corporation of India Tug-VI sunk in position 10°08'·4N., 079°58'·4E. (approx)
- Dangerous for surface navigation.
- All mariners to keep a sharp lookout and exercise extreme caution.

**Charts affected – 32-315-316-358-7706(INT 706).**



**258 (T) (10/06) INDIA – East Coast – Approaches to Chennai – Data buoys**

Source: Integrated Headquarters of MOD/NIOT.

*(HJ/1031/80)*

1. Following data buoys are being deployed by NIOT.

S No	Buoy No	Lat	Long
01.	-	13°05'.0 N	080°40'.0E
02.	OB1	18°00'.0 N	069°00'.0E.
03.	MB2	12°50'.0 N	067°50'.5E.
04.	MB3	07°50'.0 N	067°50'.5E.
05.	MB4	05°00'.0 N	070°00'.5E.

2. Mariners are advised to exercise caution.

**Charts affected – 21-32-313-356-357-3001-7703(INT 703)-7706(INT 706).**

## SECTION – IV: MARINE INFORMATION

### Tsunami Notices

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

Source: NHO, Dehradun

(HJ/NM/Gen)

1. 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)

1. 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.
2. Mariners are advised to exercise caution and contact local port authorities for the latest information.
3. 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)

1. 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 May 2006, covering the entire world are listed below against the respective NAVAREA

<b><u>NAVAREA No.</u></b>	<b><u>Location</u></b>	<b><u>Last NAVAREA Sl. received</u></b>	
I	N.E. Atlantic	115	2005 series: 402 440 468 499. 2006 series: 040 054 063 073 074 086 087 094 095 098 104 109 110 111 112 113 114 115.
II	E. Atlantic	119	2005 series: 329 397 . 2006 series: 015 020 049 071 092 103 106 107 110 112 114 115 116 118 119.
III	Mediterranean	210	2006 series: 132 134 160 161 171 175 179 183 189 193 194 195 197 199 201 202 205 208 210.
IV	N.W. Atlantic	Nil	2006 series: Nil.
V	W. Atlantic	Nil	2006 series: Nil.
VI	S.W. Atlantic	Nil	2006 series: Nil.
VII	S.E. Atlantic	Nil	2006 series: 013 055 063 064
VIII	Indian Ocean	324	2005 Series: 384 412 562 634 657 716 720 767 2006 Series: 004 005 015 026 032 034 051 071 085 136 137 174 175 192 216 219 259 260 264 266 268 269 274 280 288 291 293 294 298 299 301 303 304 305 306 308 314 317 318 319 320 321 322 323 324
IX	Persian Gulf, Red Sea, NW Arabian Sea	Nil	2006 series: Nil
X	Australia, New Guinea	Nil	2006 Series: 001.
XI	Malacca Strait, China Sea, N. Pacific	0128	1996- 0925 1998- 0655 1999- 0053 0187 0310 0613 2000 -0677 2001- 0182 0775 2003- 0106 0303 0304 2004- 0246 0271 03610555 0571 2005- 0005 0025 0271 0307 0322 0331 0332 0335 0345 0351 0395 0474 0481 0497 0522 0576 0583 2006 - 0005 0007 0008 0037 0050 0052 0057 0058 0060 0067 0069 0075 0083 0090 0110 0113 0114 0115 0116 0117 0118 0119 0122 0123 0124 0127 0128
XII	N.E. Pacific	Nil	2006 series: Nil
XIII	N.W. Pacific	Nil	2006 series: Nil

XIV	S.W. Pacific	Nil	2005 series: 066 070 2006 series: 006
XV	S.E. Pacific	Nil	Nil
XVI	E. Pacific	Nil	2006 series: 093
Hydropacs	Pacific, Indian Ocean	Nil	2006 series: 375 496 523 524 628 630
Hydrolants	Atlantic, Mediterranean	Nil	2006 series: 610

**SECTION – VI: CORRECTIONS TO SAILING DIRECTION**

**INP 1 West Coast of India Pilot (2003 Edition)**

**India –West Coast – Diu Head – Mul Dwaraka Port**

**260**

Paragraph 8.189 *Insert:*

1 Mul Dwaraka Port

**Contact Nos.**

(i)	Port Captain	09898506018
(ii)	Pilot	09898506015
(iii)	Manager (Logistics)	09898507115

**General Information:**

1. Position: 20° 43'35S., 70° 39'14E.
2. Function: The port is a captive port of Gujarat Ambuja Cement Ltd (GACL). It is exclusively used by GACL and is not open to any other agency/ trade.
3. Range of tide 1.5 to 2 metres.

**Information required 72 hrs prior to arrival in Port:**

1. Name, Official No., Call Sign & Flag.
2. GRT, NRT, DWT, LAO, Beam, Arrival Draft, Freeboard.
3. Last Port of Call & Port Clearance Number.
4. Port Health Details.
5. P&I Club/H&M Policy details and contact details of representative.
6. Cargo details including Cranes, Hatches etc.
7. ISPS Information including last 10 Ports of Call.
8. Crew list.
9. Validity of certificates.
10. Any Restrictions/Obstructions of concern.

**Port Services:**

1. Hours of Operarion- 24 Hrs.
2. VHF Channels in use for Port/Pilots – CH 15.
3. Two Tugs & Mooring boat available.
4. Pilot Compulsory for all foreign going vessels.

**Gujarat Ambuja Cement Ltd.**

**10/06**



**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. 09 dated 01May 2006)*

**NIL**

**BA, VOL. 3 Part 1, NP 283(1), 2002/03**

*(Last correction: Edition No. 08dated 16 Mar 2006)*

**NIL**

**VOL. 5, 1997/98**

*(Last correction: Edition No. 05 dated 01Mar 2006)*

**NIL**

**VOL. 6, 2005**

*(Last correction: Edition No. 09 dated 01 May 2006)*

**NIL**

**BA, VOL. 7, 1997/98-PART 2**

*(Last correction: Edition No. 16 dated 16 Aug 2000)*

**NIL**

**VOL. 8, 1999**

*(Last correction: Edition No. 05 dated 01 Mar2005)*

**NIL**



**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](mailto:incho@dataone.in) - [incho\\_marinesafety@dataone.in](mailto:incho_marinesafety@dataone.in)  
[incho\\_navwarnings@dataone.in](mailto:incho_navwarnings@dataone.in) - [incho\\_helpdesk@dataone.in](mailto:incho_helpdesk@dataone.in)  
Fax No.: (0135) 2748373  
WEB: [www.hydrobharat.org](http://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.	<b>a) NAME OF THE PORT</b> : <b>b) Location</b> : <b>Lat:</b> _____, <b>Long:</b> _____ <b>c) Listing in Guide to Port Entry: Yes/No.</b> <b>Sl. No.:</b> _____	
2.	<b>NAME AND ADDRESS OF PORT AUTHORITIES</b> a) Name b) Address c) Phone d) Fax e) E-mail	
3.	<b>GENERAL REMARKS</b> 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.	<b>ANCHORAGES</b> a) Type / Purpose b) Minimum Depth at anchorage c) Shelter afforded d) Holding ground e) Recommended pilotage to the anchorage	
5.	<b>PILOTAGE</b> a) Authority for requests. b) Embarkation position c) Regulations d) Documents to be provided	
6.	<b>DIRECTIONS</b> a) Entry and berthing information. b) Tides (Height) c) Tidal Streams. d) Navigational aids.	
7.	<b>POLLUTION CONTROL</b> a) Local regulations in force (if any)	

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

18. <b>PORT AUTHORITY</b> Designation, address and telephone number.	
19. <b>SMALL CRAFT FACILITIES</b> a) Information and facilities for small craft /yachts visiting the port. b) Yacht clubs, berths etc.	
20. <b>SHORE LEAVE</b>	
21. <b>CLUBS / RECREATION / INFORMATION KIOSKS</b> – Their location.	
22. <b>VIEWS</b> (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](mailto:incho@dataone.in) / [incho\\_marinesafety@dataone.in](mailto:incho_marinesafety@dataone.in)

[incho\\_navwarnings@dataone.in](mailto:incho_navwarnings@dataone.in) / [incho\\_helpdesk@dataone.in](mailto:incho_helpdesk@dataone.in)

Fax No.: 91- 0135- 2748373

WEB: [www.hydrobharat.org](http://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:**

	<b>Date/Time of observation</b>	<b>Charted</b>	<b>Observed</b>	<b>Position/Area</b>
<b>(a) Bathymetry:</b>				
(i) Depth - .....	.....	.....	.....	.....
(ii) Depth Contour - .....	.....	.....	.....	.....
(iii) Channel Depth - .....	.....	.....	.....	.....
<b>(b) Navigational Dangers:</b>				
(i) New Shoals.....	.....	.....	.....	.....
(ii) New Rocks.....	.....	.....	.....	.....
(iii) New Reefs.....	.....	.....	.....	.....
(iv) New Wrecks.....	.....	.....	.....	.....
(v) New Nav-aid (Specify) - .....	.....	.....	.....	.....
<b>(c) Casualties to existing Nav-Aids:</b>				
(i) Buoys.....	.....	.....	.....	.....
(ii) Lights.....	.....	.....	.....	.....
(iii) Fog signals.....	.....	.....	.....	.....
(iv) Racons.....	.....	.....	.....	.....
(v) Transit Marks .....	.....	.....	.....	.....
(vi) Leading Lines.....	.....	.....	.....	.....
(vii) Clearance bearings.....	.....	.....	.....	.....
<b>(d) Designated Areas:</b>				
(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](mailto:incho@dataone.in) / [incho\\_marinesafety@dataone.in](mailto:incho_marinesafety@dataone.in)  
[incho\\_navwarnings@dataone.in](mailto:incho_navwarnings@dataone.in) / [incho\\_helpdesk@dataone.in](mailto:incho_helpdesk@dataone.in)  
 Fax No.: 91- 0135- 2748373  
 WEB: [www.hydrobharat.org](http://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	<b>Metres</b>	<b>Inches</b>	
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	<b>Inches</b>	<b>Feet</b>	<b>Metres</b>	<b>Factors</b>		
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	<b>Fthms</b>	<b>Metres</b>	<b>Feet</b>	<b>Metres</b>		
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	<b>Factor = 1 m = 3.280839895 feet or</b>					
37	121.391	20.232	93	305.118	50.853	<b>39370078740 inches = 0.546806649 fthm</b>					
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						