



INDIAN NOTICES TO MARINERS FOR 2007

(PUBLISHED ON NHO WEBSITE ON 1ST & 16TH OF EVERY MONTH)
EDITION No. 13 DATED 01 JUL 2007
(CONTAIN NOTICES 353 TO 378)

REACH US 24 HOURS A DAY



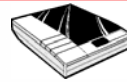
E-mail to

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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 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 publications. The Hydrographic Note [Form IH – 102] is a convenient form 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 ON INDIAN CHARTS AND
PUBLICATIONS
(Original, Authentic and Most Up-to-date)

EXPLANATORY NOTES

Corrections to Charts and Publications. Section I comprises List of Charts (both Indian and BA) affected by the notices contained in this edition. Where as sections II and III contain 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°. Bearings 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) respectively after the Notice number and are placed in Section III. Sl Nos. of those in force are published quarterly on 01 Jan, 01 Apr, 01 Jul and 01 Oct, and their text is published in Annual Edition of Indian Notices to Mariners. These corrections are not inserted on charts before they are issued to the users. They should be inserted in pencil, by the user, on receipt.

Source of Information. A star preceding the number of a Notice indicates that the notice is promulgated by INHO based on original information received.

Sailing Directions. Corrections for the Sailing Directions (Pilots) are given in Section VI.

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

- (a) these corrections should be incorporated as per instructions given on page XI of the list of Lights.
- (b) Such correction notices to list of lights 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.
- (d) A star indicates that the corresponding field is to be amended and all stars indicate that new light is to be inserted.

Radio Signals. The corrections in Section VIII should be cut and pasted in the appropriate volume 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 is 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 endeavor 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 dangers.

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.

Indian ENC's are now available in IHO's S-63 Data Protection Scheme also, in addition to CM-93 SENC format.

Contact Details:-

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INDIAN CHARTS, PUBLICATIONS AND ENC's NOW PUBLISHED AND AVAILABLE**(a) NEW INDIAN CHARTS**

Source: NHO, Dehradun

<i>Chart No.</i>	<i>Date of Publication</i>	<i>Title, Limits & Description</i>	<i>Scale</i>	<i>Folio</i>	<i>Price</i>
4039	31-05-2007	CAMPBELL BAY <u>Limits:</u> 06° 55'.15N; 93° 53'.83E. 07° 01'.80N; 93° 58'.17E.	12 500	6	Rs. 1360.00

(b) NEW EDITION INDIAN CHARTS

NIL

(c) INDIAN CHARTS PERMANENTLY WITHDRAWN

NIL

(d) CHARTS AFFECTED BY THE FOREGOING

NIL

(e) FORTHCOMING CHARTS AND PUBLICATIONS

Chart No	Title	Scale	Remarks
2020	Mormugao and Panaji	25 000	New Edition
2042	Approaches to Malvan	50 000	New Edition
4006	Port Blair	15 000	New Edition
4012	Port Blair – Inner Harbour	5 000	New Edition
3024	Kaligapatnam Anchorage	20 000	New Edition
201	Gora Chan Creek to Godia Creek	1 50 000	New Edition

(f) NEW INDIAN ELECTRONIC NAVIGATIONAL CHARTS

Sl. No.	Cell Name	Chart No.	Title	Publication Date
1	IN3210US	210	Umargam to Satpati	29-02-2004

(g) NEW EDITION ELECTRONIC NAVIGATIONAL CHARTS:

Sl. No.	Cell Name	Chart No.	Title	Publication Date
1	IN3209HU	209	Hazira to Umargam	30-06-2007

(h) ENCs PERMANENTLY WITHDRAWN:

Sl. No.	Cell Name	Chart No.	Title	Publication Date
1	IN3209HU	209	Hazira to Umargam	15-05-1988

AVAILABILITY OF ENCs:

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

The Chief Hydrographer to the Government of India National Hydrographic Office 107-A, Rajpur Road Dehradun- 248 001 Tele: +91 135 2747365 Fax: +91 135 2748373 Email: inho@dataone.in Web site: www.hydrobharat.nic.in	OR	Director C-Map India Private Limited 505, Raheja Arcade Sector 11 CBD, Belapur Navi Mumbai- 400 614 Tele: +91 22 65103668 Fax: +91 22 67939504 Email: info@c-map.co.in Website: www.c-map.co.in
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SECTION – I
List of charts affected by
The Notices 353 to 378 contained in this Edition

INDIAN H.O. Chart No.	Folio No.	Notice No.	ADMIRALTY Chart No.	Folio No.	Notice No.
215	3	354	158(INT 7008)	32	360
216	3	354	159(INT 7010)	32	360
225	4	365	616	36	359
289	1	362	648	36	357
301	5	373(T)	666	36	359
353 (INT 7413)	5	355	760	37	357
2008	3	354,372(T)	932	46	371
2010	3	372(T)	933	46	369,370,371
2067	4	365	941A	46	367
2097	1	361	1235(INT 7289)	40	364,375(P)
3006(INT 7423)	5	373(T)	1265(INT 7291)	40	364,375(P)
3011(INT 7421)	5	373(T)	1312	46	367, 368, 376(P), 377(P)
3013	5	373(T)	1788	46	377(P)
3024	5	356	2056	46	369,370
7508(INT 508)	7	367,377(P)	2137	46	377(P)
7704(INT 704)	1	360	2149	46	369,370,377(P)
8004	1	362	2403	45	376(P)
			2785	46	369, 370
			2884(INT 7278)	40	364,375(P)
			2889(INT 7211)	40	362
			2933	36	358
			3176(INT 7216)	40	362
			3713	40	363,374(P)
			3715	40	363,374(P)
			3721	46	376(P)
			3729	46	369,370,377(P)
			3758	46	368
			3773	40	364,375(P)
			3831	45	376(P)
			3833	45	376(P)
			3842(INT 7292)	40	364,375(P)
			3937	45	376(P)
			3949	46	376(P)
			4032	45	366
			4041	45	376(P)
			4042	45	376(P)

SECTION – II: PERMANENT NOTICES
INDIAN HYDROGRAPHIC CHARTS AND PUBLICATIONS

***353 (13/07) MISCELLANEOUS UPDATES TO CHARTS**

Source: NHO, Dehradun.

Chart No.	Previous Updates	Details
		(a) Refer to INM 11/07, Section VIII
-	-	(i) Page 26, Read, 78990 Mumbai Kanhoji Angre Island Lt. Racon instead of 79000 Khanderi Island Light House Racon.

*** 354(13/07) INDIA - West Coast – Karwar Harbour and approaches – Wreck.**

Source: ROS INS Nirdeshak D (N) 188

(HJ/1030/45)

Chart 215 [previous update 194/07]

Insert  Wk 14° 47'·27N., 74° 06'·39E.

Chart 216 [previous update 194/07]

Insert  Wk 14° 47'·27N., 74° 06'·39E.

Chart 2008 [previous update 194/07] (WGS 84 Datum)

Insert  Wk 14° 47'·27N., 74° 06'·39E.

*** 355(13/07) INDIA - East Coast – Kalingapatnam to Gopalpur – Lights.**

Indian List of Lights Vol. F&K, 2003: F 0980

Source: NHO Dehradun

(HJ/1029/86)

Refer to INM 072/07

Chart 353(INT 7413) [previous update 500/06]

Amend *Light to, Santhapalli Fl(2)10_s43m 23M for* 18° 03'·95N., 083° 38'·40E.
Chintapalli Fl(2)10_s42m 23M

***356 (13/07) INDIA – East Coast – Kalingapatnam Anchorage – Source data diagram.**

Source: NHO Dehradun

(HJ/1029/85)

Chart 3024 [previous update 554/06]

Delete “Minor Ports Survey Organisation Survey”
‘C 1983 1: 5000 ’ 18° 23'.1N., 084° 08'.5E.
from Source data centered on.

357(13/07) MOZAMBIQUE CHANNEL - Île Europa - Light.

Indian List of Lights Vol. D & E , 2003 ; D 7026.5

Source: BA Notice 2499/07

(HJ/633/79)

BA Chart 648 [*previous update 176/07*]

Amend light to, Fl.4s9M PA 22° 19'·3S., 40° 20'·2E.


BA Chart 760 [*previous update 332/05*]

Amend light to, Fl.4s9M PA 22° 19'·3S., 40° 20'·8E.

358(13/07) MOZAMBIQUE - Approaches to Angoche - Baixo de Santo Antonio West-south-westwards - Drying heights. Rock.

Source: BA Notice 2574/07

(HJ/733/39)

BA Chart 2933 [*previous update 328/07*] WGS84 DATUMInsert drying height \underline{Q}_6 enclosed by 0m contour (a) 16° 13'·5S., 40° 02'·6E.Delete  (\underline{Q}_2), close WSW of: (a) above**359(13/07) KENYA - Port Mombasa -Port Reitz - Lights.**

Indian List of Lights Vol. D & E , 2003 ; D 6812, 6814.5

Source: BA Notice 2702/07

(HJ/834/50)

BA Chart 616 [*previous update 527/05*]

Amend light to, Fl.10s 4° 04'·01S., 39° 34'·51E.

BA Chart 666 [*previous update 527/05*]

Amend light to, Q.2M 4° 02'·534S., 39° 38'·351E.

360(13/07) EGYPT - Red Sea Coast - Approaches to Berenice - Rocks.

Source: BA Notice 2518/07

(HJ/1134/34)

Chart 7704 (INT 704) [*previous update 177/07*]Insert  23° 56'·0N., 35° 49'·0E.**BA Chart 158 (INT 7008)** [*previous update 198/07*]Insert  23° 56'·0N., 35° 49'·0E.

ED

23° 49'·6N., 35° 45'·4E.

BA Chart 159 (INT 7010) [*previous update 236/07*]Insert  23° 56'·0N., 35° 49'·0E.

ED

23° 49'·6N., 35° 45'·4E.

361(13/07) OMAN - North East Coast - Bandar Jişşah - Al Brayik Northwards -Buoy.

Source: BA Notice 2508/07

(HJ/1132/31)

Chart 2097 [*previous update 097/07*] (WGS 84 Datum)Delete  FL.Y.5s No 5 23° 33'·60N., 58° 39'·70E.

**362(13/07) UNITED ARAB EMIRATES - Jebel Ali (Mina Jabal' Ali) Westwards - Buoyage. Restricted area.
Legend.**

Source: BA Notice 2553/07
(HJ/1132/45)

Chart 289 [*previous update 330/07*] (WGS84 DATUM)




Insert limit of restricted area, entry prohibited, , joining: 24° 54'·6N., 54° 53'·8E.(shore)
24° 55'·8N., 54° 52'·8E.
24° 58'·3N., 54° 51'·5E.
25° 03'·9N., 54° 50'·5E.
(a) 25° 03'·9N., 54° 58'·8E.
(existing limit)
legend, Works in progress (2007), centred on: 25° 20'·0N., 55° 15'·0E.

Chart 8004 [*previous update 234/07*] (WGS84 DATUM)

Insert legend, Works in progress (2007), centred on: 25° 20'·0N., 55° 15'·0E.

BA Chart 2889 (INT 7211)[*previous update 286/07*] WGS84 DATUM

Insert limit of restricted area, entry prohibited, , joining: (a) 25° 03'·9N., 54° 53'·4E.
(existing limit)
(b) 25° 03'·8N., 54° 58'·8E.
(existing limit)
legend, *Entry Prohibited*, centred on: 25° 01'·5N., 54° 55'·8E.
Delete former limit of restricted area, entry prohibited, , joining: (a) above
24° 57'·3N., 54° 57'·1E.(shore)
and
(b) above
25° 00'·3N., 54° 55'·1E.
24° 58'·0N., 54° 57'·7E.(shore)
legend, *Entry Prohibited*, centred on: 25° 00'·9N., 54° 58'·0E.

BA Chart 3176 (INT 7216)[*previous update 200/07*] WGS84 DATUM

Insert  *Q.G* 24° 55'·80N., 54° 52'·84E.
 *Fl.G* 24° 57'·04N., 54° 52'·15E.

363(13/07) UNITED ARAB EMIRATES - Abu Dhabi (Abu -Zaby) - Khawr al Bighal, Approaches to Umm an Nar, Khawr al Baṭīn - Legends.

Source: BA Notice 2666/07
(HJ/1132/45)

BA Chart 3713[*previous update 076/07*]

Amend legend to, *See INM 374(P)/07*, centred on: 24° 28'·78N., 54° 18'·30E.
24° 31'·70N., 54° 23'·95E.

BA Chart 3715 (plan, Mina' Zayid) [*previous update 248/06*]

Amend legend to, *See INM 374(P)/07*, centred on: 24° 31'·800N., 54° 23'·750E.

BA Chart 3715 [*previous update 248/06*]

Amend legend to, *See INM 374(P)/07*, centred on: 24° 26'·00N., 54° 21'·40E.
24° 31'·70N., 54° 23'·95E.
24° 27'·30N., 54° 29'·70E.

364(13/07) ARABIA - Approaches to the Shaṭṭal' Arab -Khawr al Amaya and Khawr al Kafka -Legends.

Source: BA Notice 2568/07
(HJ/1133/91)

BA Chart 1235 (INT 7289) [*previous update 332/07*]

Amend legend to, *See INM 375(P)/07*, centred on: 29° 45′·70N., 48° 47′·60E.
29° 36′·50N., 48° 52′·00E.

BA Chart 1265 (INT 7291) [*previous update 332/07*]

Amend legend to, *See INM 375(P)/07*, centred on: 29° 48′·10N., 48° 49′·00E.
29° 38′·60N., 48° 50′·80E.
29° 20′·50N., 49° 02′·00E.

BA Chart 2884 (INT 7278) [*previous update 333/07*]

Amend legend to, *See INM 375(P)/07*, centred on: 29° 41′·00N., 48° 55′·50E.

BA Chart 3773 [*previous update 333/07*]

Amend legend to, *See INM 375(P)/07*, centred on: 29° 35′·40N., 48° 50′·40E.

BA Chart 3842 (INT 7292) [*previous update 289/07*]

Amend legend to, *See INM 375(P)/07*, centred on: 29° 49′·85N., 48° 47′·00E.
29° 48′·50N., 48° 46′·30E.

365(13/07) SRI LANKA - South Coast - Approaches to Galle - Depths. Legend.

Source: BA Notice 2523/07
(HJ/929/69)

Former INM 329(P)/06 is cancelled.

Chart 225 [*previous update 335/07*] (CEYLON 1933 DATUM)

Insert depth 19₅ enclosed by 20m contour 6° 02′·97N., 80° 08′·07E.
depth 15₉ and extend 20m contour W to enclose (a) 6° 02′·53N., 80° 08′·40E.
Delete depth 22, close NW of: (a) *above*
legend, *See INM 329(P)/06*, centred on: 5° 56′·70N., 80° 12′·00E.

Chart 2067 [*previous update 101/07*] (CEYLON 1933 DATUM)

Insert depth 19₅ enclosed by 20m contour 6° 02′·97N., 80° 08′·07E.
depth 15₉ and extend 20m contour W to enclose (a) 6° 02′·53N., 80° 08′·40E.
Delete depth 22, close NW of: (a) *above*
legend, *See INM 329(P)/06*, centred on: 5° 56′·70N., 80° 12′·00E.

366(13/07) SINGAPORE - Sinki Fairway - Pulau Busing - Dredged depths.

Source: BA Notice 2643/07
(HJ/927/16)

BA Chart 4032 [*previous update 342/07*] WGS84 DATUM

Amend dredged depth to, 16·9m (2007), centred on: 1° 14′·363N., 103° 44′·773E.
dredged depth to, 17·0m (2007), centred on: 1° 14′·392N., 103° 44′·996E.
dredged depth to, 14·7m (2007), centred on: 1° 14′·318N., 103° 44′·944E.
dredged depth to, 13·5m (2007), centred on: 1° 14′·329N., 103° 45′·039E.
dredged depth to, 8·5m (2007), centred on: 1° 14′·245N., 103° 45′·002E.

367(13/07) SOUTH CHINA SEA - P.- P. Tambelan Westwards - Depth.

Source: BA Notice 2535/07
(HJ/927/03)

Chart 7508 (INT 508) [*previous update 048/07*] (WGS84 DATUM)

Insert  Rep (1986) PA 0° 52′·3N., 106° 19′·0E.

BA Chart 941A [*previous update 305/07*]

Insert depth 13 Rep (1986) PA 0° 52′·3N., 106° 19′·0E.

BA Chart 1312 [*previous update 300/07*]

Insert depth 23₅ Rep (1986) PA 0° 52′·3N., 106° 19′·0E.

368(13/07) INDONESIA - Kalimantan - South West Coast - Pulau Karimata South-westwards - Depth.

Source: BA Notice 2536/07

(HJ/827/81)

BA Chart 1312 [previous update 368/07]

Insert  Rep (2007) 1° 57'·27S., 108° 42'·72E.

BA Chart 3758 [previous update 067/07]


Insert  Rep (2007) 1° 57'·27S., 108° 42'·72E.

369(13/07) INDONESIA - Jawa - Jakarta - North-westwards - Submarine pipeline.


Source: BA Notice 2486/07

(HJ/827/43)


BA Chart 933[previous update 303/07]

Insert submarine pipeline,  joining: 5° 48'·50S., 106° 38'·40E.
(N border)
(a) 5° 48'·75S., 106° 39'·42E.
(b) 5° 58'·27S., 106° 49'·33E.
(c) 5° 58'·25S., 106° 56'·63E.
(d) 6° 00'·55S., 106° 58'·12E.
6° 01'·52S., 106° 58'·52E.
6° 02'·90S., 107° 00'·03E.(shore)
legend, *Gas (see Note)*, along:
(a)-(b)above
(b)-(c)above
(c)-(d)above


BA Chart 2056 previous update 302/07]

Insert submarine pipeline,  joining: 5° 17'·60S., 105° 50'·00E.(shore)
(a) 5° 20'·56S., 105° 55'·08E.
(b) 5° 42'·90S., 106° 15'·56E.
(c) 5° 48'·75S., 106° 39'·42E.
(d) 5° 58'·27S., 106° 49'·33E.
5° 58'·25S., 106° 56'·63E.
6° 00'·55S., 106° 58'·12E.
6° 01'·52S., 106° 58'·52E.
6° 02'·90S., 107° 00'·03E.(shore)
legend, *Gas (see Note)*, along:
(a)-(b)above
(c)-(d)above


BA Chart 2149 previous update 304/07]

Insert submarine pipeline,  joining: 5° 17'·6S., 105° 50'·00E.(shore)
(a) 5° 20'·6S., 105° 55'·1E.
(b) 5° 42'·9S., 106° 15'·6E.
(c) 5° 48'·7S., 106° 39'·4E.
(d) 5° 58'·3S., 106° 49'·3E.
(a)-(b)above
(c)-(d)above

BA Chart 2785 previous update 048/07]

Insert submarine pipeline,  joining: 5° 17'·6S., 105° 50'·00E.(shore)
(a) 5° 20'·6S., 105° 55'·1E.
(b) 5° 30'·0S., 106° 03'·7E.
(E border)
legend, *Gas (see Note)*, along:
(a)-(b)above

369(13/07) INDONESIA - Jawa - Jakarta - North-westwards - Submarine pipeline. (continued)**BA Chart 3729** *previous update 304/07*

Insert submarine pipeline,  joining: $5^{\circ} 46' 27\text{S}$, $106^{\circ} 30' 00\text{E}$.
 (W border)
 (a) $5^{\circ} 48' 75\text{S}$, $106^{\circ} 39' 42\text{E}$.
 (b) $5^{\circ} 58' 27\text{S}$, $106^{\circ} 49' 33\text{E}$.
 $5^{\circ} 58' 25\text{S}$, $106^{\circ} 56' 63\text{E}$.
 $6^{\circ} 00' 55\text{S}$, $106^{\circ} 58' 12\text{E}$.
 $6^{\circ} 01' 52\text{S}$, $106^{\circ} 58' 52\text{E}$.
 $6^{\circ} 02' 90\text{S}$, $107^{\circ} 00' 03\text{E}$.(shore)
 legend, *Gas (see Note)*, along: (a)-(b) above

370(13/07) INDONESIA -Jawa -Jakarta Northwards - Buoyage.

Source: BA Notice 2487/07

*(HJ/827/43)***BA Chart 933** [*previous update 369/07*]

Insert  *Fl.Y.4s* $5^{\circ} 48' 76\text{S}$, $106^{\circ} 40' 68\text{E}$.
 *Fl.Y.3s* $5^{\circ} 55' 00\text{S}$, $106^{\circ} 48' 00\text{E}$.
 $5^{\circ} 58' 50\text{S}$, $106^{\circ} 55' 91\text{E}$.

BA Chart 2056 [*previous update 369/07*]

Insert  *Fl.Y.3s* $5^{\circ} 27' 45\text{S}$, $106^{\circ} 01' 70\text{E}$.
 $5^{\circ} 32' 33\text{S}$, $106^{\circ} 05' 80\text{E}$.
 $5^{\circ} 55' 00\text{S}$, $106^{\circ} 48' 00\text{E}$.
 $5^{\circ} 58' 50\text{S}$, $106^{\circ} 55' 91\text{E}$.
 $5^{\circ} 41' 25\text{S}$, $106^{\circ} 10' 91\text{E}$.
 *Fl.Y.4s* $5^{\circ} 50' 75\text{S}$, $106^{\circ} 10' 25\text{E}$.
 $5^{\circ} 48' 76\text{S}$, $106^{\circ} 40' 68\text{E}$.
 $5^{\circ} 42' 00\text{S}$, $106^{\circ} 20' 00\text{E}$.

BA Chart 2149 *previous update 369/07*

Insert  *Fl.Y.3s* $5^{\circ} 27' 5\text{S}$, $106^{\circ} 01' 7\text{E}$.
 $5^{\circ} 32' 3\text{S}$, $106^{\circ} 05' 8\text{E}$.
 $5^{\circ} 55' 0\text{S}$, $106^{\circ} 48' 0\text{E}$.
 $5^{\circ} 41' 3\text{S}$, $106^{\circ} 10' 9\text{E}$.
 *Fl.Y.4s* $5^{\circ} 50' 8\text{S}$, $106^{\circ} 10' 3\text{E}$.
 $5^{\circ} 42' 0\text{S}$, $106^{\circ} 20' 0\text{E}$.
 $5^{\circ} 48' 8\text{S}$, $106^{\circ} 40' 7\text{E}$.

BA Chart 2785 *previous update 369/07*

Insert  *Fl.Y.3s* $5^{\circ} 27' 4\text{S}$, $106^{\circ} 01' 7\text{E}$.

BA Chart 3729 *previous update 369/07*

Insert  *Fl.Y.4s* $5^{\circ} 48' 76\text{S}$, $106^{\circ} 40' 68\text{E}$.
 *Fl.Y.3s* $5^{\circ} 55' 00\text{S}$, $106^{\circ} 48' 00\text{E}$.
 $5^{\circ} 58' 50\text{S}$, $106^{\circ} 55' 91\text{E}$.

371(13/07) INDONESIA - Jawa - North Coast - Pelabuhan Tanjungpriok - S. Japat Westwards - Light-beacon.

Indian Light List Vol. F & K, 2003; K 1073

Source: BA Notice 2485/07

(HJ/827/33)

BA Chart 932 (plan A, Pelabuhan Tanjungpriok) [*previous update 303/07*]

Delete  Fl.5s13m11M PA 6° 06'·80S., 106° 51'·68E.

BA Chart 932 (plan B, Approaches to Pelabuhan Tanjungpriok) [*previous update 303/07*]

Delete  Fl.5s13m11M PA 6° 06'·80S., 106° 51'·68E.

BA Chart 933 [*previous update 370/07*]

Delete  Fl.5s11M 6° 06'·81S., 106° 51'·68E.

SECTION – III: TEMPORARY AND PRELIMINARY NOTICES***372(T)(13/07) INDIA - WEST COAST –Karwar harbour – Buoy.**

Source: Hydrographic Note INS Investigator & Navarea 349/07
(HJ/1030/45)

1. Karwar harbour Port buoy(CB1) in position 14° 45'·012N., 74° 07'·392E was reported missing.
2. Mariners to Exercise caution.

Charts affected – 2008 – 2010.

***373(T)(13/07) INDIA - EAST COAST`- HUGLI RIVER -Haldia to Kukrahatti Reach – Depths.**

Source: Kolkata Port Trust
(HJ/1129/21)

1. The maximum & minimum soundings reports for Kolkata & Haldia channels are appended below:-

<u>Month</u>	<u>Kolkata</u>		<u>Haldia</u>	
	Max Depth	Min Depth	Max Depth	Min Depth
May 07	3.4 m	3.3 m	4.7 m	4.6 m

2. The above depths are below the chart datum ie, at zero level of tide.
3. Mariners are to exercise caution.
4. **Cancel former INM 311(T)/07.**

Chart affected – 301- 3011(INT 7421) – 3013- 3006(INT 7423)

374(P)(13/07) UNITED ARAB EMIRATES - Abu Dhabi (Abu -Zaby) -Khawr al Bighal, Approaches to Umman Nar, Khawr al Baḩin - Buoyage. Lights. Leading line. Depth information. Works.

Source: BA Notice 2665(P)/07
(HJ/1133/91)

1. Numerous changes have been made to the aids to navigation marking the approach channel to the Port of Umm an Nar.
2. The principal changes are as follows:
 - a) 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.)
 - b) Many of the existing channel buoys in the Khawr al Bighal have been renumbered and are no longer as charted.
 - c) 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.
 - d) * Construction work has begun on the bridge between Abu Dhabi Island to Jazirat As Sa 'Diyat Island at 24° 31'·34N., 54° 24'·15E., Part of the Khawr al Bighal dredged channel has been reduced in width to 115m and is marked by five buoys:

N5	Fl.R.3s	24° 31'·42N., 54° 24'·13E.
N5A	Fl.R.3s	24° 31'·27N., 54° 24'·26E.
N6	Fl.G.3s	24° 31'·51N., 54° 23'·95E.
N6A	Fl.G.3s	24° 31'·38N., 54° 24'·08E.
N6B	Fl.G.3s	24° 31'·23N., 54° 24'·21E.

No traffic is permitted outside of these buoys.

The Sea Wing Access Channel has been reclaimed and is no longer in use.

3. There have been recent reports of isolated depths less than 6·0m within the Khawr al Baḩin dredged channel between positions 24° 28'·60N., 54° 18'·20E. and 24° 21'·30N., 54° 27'·55E. The most significant are:

3 ₂ m	24° 28'·37N., 54° 18'·02E.
3 ₈ m	24° 28'·30N., 54° 17'·94E.
4 ₅ m	24° 26'·60N., 54° 20'·35E.
5 ₁ m	24° 25'·25N., 54° 23'·05E.
5 ₃ m	24° 24'·92N., 54° 23'·84E.
5 ₂ m	24° 23'·94N., 54° 27'·20E.
5m	24° 23'·50N., 54° 27'·91E.
1 ₆ m	24° 21'·47N., 54° 27'·65E.
0 ₉ m	24° 21'·38N., 54° 27'·61E.

4. Mariners are advised to navigate with caution and consult the local port authority for the latest information.
5. **Former Notice 254(P)/06 is cancelled.**

* Indicates new or revised entry

BA Charts affected -3713 -3715

375(P) (13/07) ARABIA - Approaches to the Shaṭṭ al .Arab -Khawr al Amaya and Khawr al Kafka -Depths. Wrecks. Obstructions. Buoyage. Beacon. Light.

Source: BA Notice 2567(P)/07
(HJ/1133/91)

1. Numerous depths less than charted around the Khawr al Amaya Terminal (29° 47'·00N., 48° 48'·50E.) and Al Baṣrah Terminal (29° 40'·90N., 48° 48'·50E.) have been reported. Changes to wrecks, obstructions and navigational aids were also reported. All positions are referred to WGS84 Datum.

2. The most significant depths are as follows:

8 ₈ m	29° 49'·07N., 48° 47'·41E.
6 ₉ m	29° 49'·04N., 48° 46'·93E.
10 ₈ m	29° 48'·78N., 48° 48'·16E.
2 ₇ m	29° 48'·62N., 48° 45'·43E.
16 ₉ m	29° 48'·40N., 48° 49'·65E.
14m	29° 48'·36N., 48° 49'·48E.
4m	29° 48'·31N., 48° 46'·07E.
10 ₉ m	29° 48'·22N., 48° 49'·20E.
9m	29° 48'·19N., 48° 47'·10E.
18 ₆ m	29° 48'·14N., 48° 49'·86E.
14 ₇ m	29° 48'·11N., 48° 49'·66E.
3 ₇ m	29° 48'·01N., 48° 44'·65E.
18 ₄ m	29° 47'·68N., 48° 50'·03E.
4 ₈ m	29° 47'·63N., 48° 44'·98E.
6 ₄ m	29° 47'·62N., 48° 46'·36E.
13 ₃ m	29° 47'·55N., 48° 49'·34E.
14 ₆ m	29° 47'·46N., 48° 49'·70E.
6 ₂ m	29° 47'·19N., 48° 45'·55E.
14 ₈ m	29° 47'·03N., 48° 50'·00E.
13 ₁ m	29° 46'·88N., 48° 47'·90E.
15 ₉ m	29° 46'·87N., 48° 50'·26E.
17 ₆ m	29° 46'·78N., 48° 48'·06E.
9 ₅ m	29° 46'·48N., 48° 47'·00E.
8 ₈ m	29° 46'·41N., 48° 45'·85E.
12 ₃ m	29° 46'·40N., 48° 48'·15E.
16 ₅ m	29° 46'·11N., 48° 48'·41E.
14 ₇ m	29° 45'·41N., 48° 46'·70E.
9 ₆ m	29° 41'·34N., 48° 44'·95E.

3. The Khawr al Kafka No 2 buoy, in position 29° 20'·60N., 49° 00'·60E. is now reported to be in position 29° 20'·47N., 49° 00'·47E.

4. The following charted buoys are reported to be missing:

<i>Name</i>	<i>Description</i>	<i>Charted position</i>
Kafka No 1	Green buoy	29° 50'·33N., 48° 46'·74E.
Kafka	Red and white buoy, Fl(4)	29° 50'·14N., 48° 46'·52E.
No 6	Red buoy	29° 23'·42N., 48° 57'·07E.
No 3	Red buoy	29° 21'·22N., 48° 59'·13E.

5. The No 2 light, Fl.G.6s, in position 29° 48'·22N., 48° 44'·65E. has been destroyed.

6. A black beacon with triangular topmark exists, marking the entrance to the Shaṭṭ al .Arab, in position 29° 50'·39N., 48° 46'·77E.

7. Several additional wrecks and obstructions have been reported. These are shown below:

obstruction, least depth 10m	29° 47'·17N., 48° 47'·61E.
*obstruction, least depth 10·2m	29° 46'·78N., 48° 47'·71E.
obstruction, least depth 9·6m	29° 46'·32N., 48° 49'·74E.
obstruction, least depth 22·5m	29° 41'·36N., 48° 47'·72E.

375(P)(13/07) ARABIA - Approaches to the Shaţţal . Arab -Khawr al Amaya and Khawr al Kafka -Depths. Wrecks. Obstructions. Buoyage. Beacon. Light. (continued)

obstruction, least depth 25·5m	29° 40'·94N., 48° 48'·34E.
obstruction, least depth 17·6m	29° 40'·69N., 48° 48'·06E.
obstruction, least depth 21·5m	29° 40'·53N., 48° 49'·92E.
wreck, least depth 13·5m	29° 40'·38N., 48° 47'·60E.
wreck, least depth 13·3m	29° 40'·36N., 48° 47'·78E.
obstruction, least depth 17·6m	29° 40'·12N., 48° 48'·43E.
obstruction, least depth 16·7m	29° 39'·81N., 48° 48'·43E.
obstruction, least depth 26·5m	29° 39'·29N., 48° 49'·38E.
obstruction, least depth 14·2m	29° 37'·82N., 48° 46'·64E.
wreck, least depth 13·7m	29° 37'·81N., 48° 46'·53E.

* Indicates new or revised entry

8. The following charted wrecks could not be found:

dangerous wreck, PA	29° 49'·00N., 48° 47'·50E.
obstruction, swept depth 9·1m	29° 47'·92N., 48° 48'·08E.
dangerous wreck (mast)	29° 47'·20N., 48° 46'·40E.
obstruction, least depth 11·2m, PA	29° 46'·04N., 48° 47'·13E.
dangerous wreck, Rep (1998), PA	29° 43'·97N., 48° 46'·01E.
dangerous wreck, Rep (1998), PA	29° 43'·65N., 48° 46'·16E.
dangerous wreck, Rep (1992), PA	29° 40'·05N., 48° 46'·38E.

9. The flare charted on the Al Başrah (Al Bakr) Terminal no longer exists.

10. **Former Notice 313(P)/07 is cancelled.**

BA Charts affected -1235(INT 7289) - 1265(INT 7291) - 2884(INT 7278) - 3773 - 3842 (INT 7292).

376(P)(13/07) INDONESIA - Kalimantan - West Coast - T. Saleh Westwards to Singapore Strait - Pulau Batam - T. Pinggir - Submarine cable.

Source: BA Notice 2438(P)/07

(HJ/827/90)

1. Submarine cable, Jasuka Segment 2, has been laid joining the following positions (WGS84 DATUM):

0° 02'·87S., 109° 09'·85E.(shore)	1° 18'·14N., 104° 28'·70E.
0° 02'·44S., 108° 54'·66E.	1° 17'·73N., 104° 27'·37E.
0° 01'·59S., 108° 30'·00E.	1° 14'·41N., 104° 22'·76E.
0° 00'·07S., 108° 00'·00E.	1° 14'·15N., 104° 21'·33E.
0° 22'·18N., 106° 45'·50E.	1° 13'·95N., 104° 21'·00E.
0° 28'·76N., 106° 29'·13E.	1° 13'·47N., 104° 19'·16E.
0° 37'·91N., 106° 07'·49E.	1° 13'·49N., 104° 17'·61E.
1° 10'·57N., 105° 08'·55E.	1° 13'·81N., 104° 16'·60E.
1° 10'·58N., 105° 07'·84E.	1° 13'·46N., 104° 11'·45E.
1° 09'·23N., 105° 05'·14E.	1° 13'·59N., 104° 06'·24E.
1° 09'·38N., 105° 04'·00E.	1° 13'·94N., 104° 05'·15E.
1° 16'·30N., 104° 52'·60E.	1° 13'·70N., 104° 04'·22E.
1° 18'·26N., 104° 44'·89E.	1° 12'·79N., 103° 58'·32E.
1° 18'·34N., 104° 43'·85E.	1° 10'·89N., 103° 54'·91E.
1° 18'·91N., 104° 43'·15E.	1° 10'·74N., 103° 54'·89E.
1° 19'·00N., 104° 42'·03E.	1° 09'·74N., 103° 55'·58E.
1° 20'·08N., 104° 37'·78E.	1° 08'·80N., 103° 55'·50E.
1° 20'·38N., 104° 34'·38E.	1° 08'·56N., 103° 55'·35E.(shore)

2. Mariners are requested to avoid anchoring or trawling in the vicinity of the cable route.

BA Charts affected 1312 -2403 -3721 -3831 -3833 -3937 -3949 - 4041 -4042

377(P)(13/07) INDONESIA - Sumatera - Pulau Belitung West Coast - Tanjungpandan to Jawa North Coast - Pakis - Submarine cable.

Source: BA Notice 2439(P)/07
(HJ/827/72)

1. Submarine cable, Jasuka Segment 1, has been laid joining the following positions (WGS84 DATUM):

2° 44'·53S., 107° 37'·49E.(shore)	3° 14'·32S., 107° 21'·00E.
2° 43'·40S., 107° 36'·41E.	3° 16'·50S., 107° 21'·49E.
2° 43'·29S., 107° 36'·22E.	3° 59'·91S., 107° 22'·28E.
2° 43'·32S., 107° 35'·96E.	4° 55'·05S., 107° 10'·01E.
2° 42'·51S., 107° 33'·31E.	4° 57'·50S., 107° 12'·65E.
2° 41'·75S., 107° 31'·11E.	5° 20'·00S., 107° 15'·36E.
2° 42'·17S., 107° 28'·53E.	5° 22'·22S., 107° 15'·46E.
2° 44'·65S., 107° 23'·29E.	5° 25'·00S., 107° 15'·00E.
2° 49'·30S., 107° 17'·41E.	5° 45'·01S., 107° 09'·83E.
2° 51'·02S., 107° 16'·83E.	5° 49'·64S., 107° 09'·03E.
2° 55'·00S., 107° 17'·79E.	5° 50'·63S., 107° 08'·98E.
3° 01'·70S., 107° 19'·24E.	5° 51'·41S., 107° 08'·65E.
3° 04'·69S., 107° 19'·63E.	5° 52'·95S., 107° 08'·50E.
3° 05'·80S., 107° 18'·90E.	5° 58'·31S., 107° 07'·56E.(shore)

2. Mariners are requested to avoid anchoring or trawling in the vicinity of the cable route.

Charts affected 7508(INT 508)

BA Charts affected 1312 -1788 -2137 -2149 -3729

***378 (T) (13/07) Temporary and Preliminary Notices (in force as on 01 Jul 2007)**

INM *191(T) (07/07) is cancelled.

1. AFRICA EAST COAST, MADAGASCAR, RED SEA, ARABIA, PERSIAN GULF, PAKISTAN

Notice No.	Charts Affected	Description
207 (T)/03	B.A. 671-2968 (INT7000)	SOMALIA – Muqdisho (Moghadishu) – Port development. Pilot boarding place.
172 (P)/04	B.A. 1358 -3933 - 3947-4041	SINGAPORE STRAIT – Malacca Strait – Indonesia – Pulau Batam. North Coast to Sumatra, East Coast, Dumai – Submarine Cable.
271 (P)/04	B.A. 724	INDIAN OCEAN – Seychelles – La Digue – La Passe – Breakwater.
448(T)/04	B.A. 1214	KUWAIT – Mina' ad Dawhah – Light.
481(P)/04	B.A. 3043	EGYPT – Red Sea Coast – Hurghada North-north-eastwards – Depths.
505(P)/04	B.A. 2886 3790	ARABIA – Bahrain Southwards – Dawhat Salwa – Beacons. Buoyage. Depths. Lights.
506(P)/04	20 8004 B.A. 3599	IRAN – Khuran (Clarence Strait) – Jetty. Buoyage. Depths. Drying height. Pilot boarding place. Lights. Moorings buoys.
398(P)/05	B.A. 11 2882 (INT 7264) 2884 (INT 7278)	IRAN–Jazireh–ye–Kharak Anchorage areas.
465(T)/05	20 288 289 B.A. 2442 2443 2444 2523 2886 2887 2889 (INT 7211) 3176 3177 3791 3950	QATAR - United Arab Emirates - Submarine pipelines.
466(P)/05	B.A. 3735 (INT 7259) 3736 (INT 7258) 3737 (INT 7255) 3738 (INT 7254) 3790 (INT 7252)	BAHRAIN – Mina' Salman and Approaches - Al Muharraq Westwards - Depths. Anchorage area. Breakwater. Obstruction. Wreck. Reclamation areas. Light.
516 (P) /05	BA 2375 3043	EGYPT - Red Sea Coast - Safaga - Leading line.Lights. Buoyage. Light-beacons.
565 (P)/05	BA 11	IRAN - Jazireh-ye Khark and Jazireh-ye Kharku - Depths.
592 (P)/05	BA 262 (INT 7115)	DJIBOUTI-Approaches to the Port of Djibouti –Buoyage .Jetty. Pilot boarding place.
55 (P)/06	BA 15 16	SAUDI ARABIA - Red Sea Coast - Jizan - Dredged areas. Channel. Reclamation areas. Harbour development.
56 (P)/06	BA 3782 3787 (INT 7245) 3950	QATAR - Approaches to Doha (Ad Dawhah) - Approaches to Mesaieed (Musay'id or Umm Said) - Dredging areas. Buoyage.

135 (P)/06	B.A. 2882(INT 7264)-2883 - 2886 -3719 -3776 -3777 - 3788 -3790 (INT 7252)-3812	SAUDI ARABIA - East Coast - - Buoyage
227 (P)/06	BA. 12	SAUDI ARABIA -Red Sea Coast -Port of Duba - Dredging area.Works.
292 (P)/06	BA. 3782 3787 (INT 7245)	QATAR - Approaches to Doha (Ad Dawhah) - Depths.
293 (P)/06	2444 3179 3413	UNITED ARAB EMIRATES - Jazirat Das South and Eastwards - Tanker mooring buoy. Restricted area. Submarine pipeline. Submarine cables. Reef. Pilot boarding place. Buoy. Fouls.
327 (P)/06	BA. 3043	EGYPT - Red Sea Coast - Approaches to Berenice - Jetty. Depths. Rocks. Buoyage.
409 (P)/06	B.A. 81 82	SUDAN - Sawakin - Light-beacons. Berths.
444 (T)/06	B.A. 563 2741 2756 2757	INDIAN OCEAN - Comores - Ile de Mayotte - Fish havens.
445 (P)/06	20 21 286 291 2088 2094 2095 2096 7703 (INT703) 7705 (INT 705) 8009 8010 B.A.12 15 81 82 143 (INT 7005) 157 (INT 7006) 158 (INT 7008) 159(INT 7010) 164 (INT 7124) 333 452 (INT 7117) 453 (INT 7116) 542 1925 1926 2133 (INT 7139) 2373 2374 2375 2599 2658 2659 2851 3661 (INT 7162) 3785.	ARABIAN SEA - RED SEA - Submarine cables.
446 (P)/06	20 21 22 (INT 752) 255(INT 7334) 291 292 (INT 7021) 2016 (INT 7336) 2088 2094 2095 2096 7705 (INT 705) 7706 (INT 706) B.A. 2851	ARABIAN SEA - Seeb to Mumbai (Bombay) - Submarine cable.
513 (P) /06	B.A. 3520 (INT 7200) – 3526	GULF OF OMAN - United Arab Emirates - Khawr Fakkan - Works. Breakwater. Buoyage. Anchorage areas
550 (T) /06	B.A. 1214 -1223 -1235 (INT 7289) -2882 (INT 7264) - 2884 (INT 7278) -3773	KUWAIT - - Measuring instruments. Buoyage
576 (T) /06	B.A. 3171 -3174 -3411 (INT 7218) -3713-3715-3951	UNITED ARAB EMIRATES - North and East Coasts - Data buoys
577 (P) /06	20 B.A.1224 -2858 -2882 (INT 7264) -2883 -2886 -3718 - 3719 -3773 -3774 -3775 - 3776 -3777 -3788 -3790 (INT 7252) -3812	SAUDI ARABIA - East Coast - - Buoyage. Restricted areas
578 (T) /06	B.A.1223 -3773	KUWAIT - Mina -Ash Shu'aybah South-eastwards and Mi-na -Al Ah,madi-North-eastwards - Dredging area. Mooring buoys. Works. Pier. Submarine pipelines
597 (P) /06	20 B.A. 2523 (INT 7250) - 2886 - 3735 (INT 7259) - 3737 (INT 7255) - 3738 (INT 7254) -3788 – 3790 (INT 7252) -3791 -3950	QATAR - Az Za'ayin to BAHRAIN, Al Manama - Submarine cable
598 (P) /06	20 B.A. 2882 (INT 7264) -2883 -2886 -3773 -3777 -3788 - 3790 (INT 7252) -3812	SAUDI ARABIA - East Coast - Al Khubar to Al Kuwayt, KUWAIT - Submarine cable
599 (P) /06	20 B.A. 2882 (INT 7264) - 2883 - 2886 - 3735 (INT 7259) - 3737 (INT 7255) - 3738 (INT 7254) -3777 -3788 -3790 (INT 7252) -3812	BAHRAIN - Al Manama to SAUDI ARABIA, Al Khubar - Submarine cable

600 (P) /06	20 – 8004 B.A. 1214 -2441 -2442 -2443 -2523 (INT 7250) -2882 (INT 7264) -2883 -2886 - 2889 (INT 7211) -3172 - 3173 -3599 -3773	KUWAIT -Al Kuwayt to Bandar 'Abbas, IRAN - Submarine cable
601 (P) /06	20 – 8004 B.A. 2442 -2443 -2886 -2889 (INT 7211) -3174 -3950	UNITED ARAB EMIRATES - QATAR - Submarine cables
070(P) /07	B.A. 2523 (INT 7250) - 3789 - 3791 - 3950	QATAR – Ra's Laffan - Works. Berths. Buoyage. Dredged areas. Reclamation areas.
107(P) /07	B.A. 2895 – 2896	OMAN-South East Coast-Port Salalah(Mina-Raysut)-Breakwaters. Buoyage.
108(P) /07	B.A. 2887 (INT 7232) - 2889 (INT 7211) -3175 (INT 7212) -3176 (INT 7216) - 3411(INT 7218)- 3412 (INT 7219) -3739 (INT 7220)	UNITED ARAB EMIRATES - Approaches to Dubai (Dubayy) - Approaches to Jebel Ali (Mina Jabal Ali) - Reclamation areas. Buoyage. Works. Restricted areas. Anchorage areas. Breakwaters.
221(T)/07	B.A. 2523 (INT 7250) - 3791 - 3950	QATAR - Ras Laffan - Anchorage areas.
249(P)/07	B.A. 3718 – 3719 – 3788	SAUDI ARABIA - East Coast - Jubail North-eastwards - Depths.
374(P)/07	B. A. 3713 -3715	UNITED ARAB EMIRATES - Abu Dhabi (Abu -Zaby) -Khawr al Bighal, Approaches to Umman Nar, Khawr al Baṭīn - Buoyage. Lights. Leading line. Depth information. Works.
375(P)/07	B.A. 1235(INT 7289) - 1265(INT 7291) - 2884(INT 7278) - 3773 - 3842 (INT 7292).	ARABIA - Approaches to the Shaṭṭal . Arab -Khawr al Amaya and Khawr al Kafka -Depths. Wrecks. Obstructions. Buoyage. Beacon. Light.

2. INDIA WEST COAST - INDIAN OCEAN

110(T)/92	2018 2080 203	INDIA –West Coast–Approaches to Kandla Light buoy amended.
302(T)/97	2001 2015 2016	INDIA –West Coast–Bombay Harbour – Cross Island – Mooring buoy
52(T)/98	2016 211	INDIA –West Coast–Bombay Harbour: Buoy
75(T)/98	256	INDIA –West Coast –Angria bank: Buoy
354(T)/98	2016 211	INDIA –West Coast –Bombay Harbour – Buoy
260(T)/99	255	INDIA West Coast – Approaches to Bombay – Bombay high, Oilfield development area – Platform
131(T)/00	2016 211 255	INDIA – West Coast – Bombay Harbour – Wreck
201(T)/00	2033 2060 2080 203	INDIA – West Coast – Gulf of Kachchh – Munde Reef – Lighterage area; Chemical and Gas anchorage area
270(P)/00	2008	INDIA – West Coast – Karwar Harbour – Works
330(P)/01	2076 2016	INDIA – West Coast – Mumbai Harbour – Jawahar Lal Nehru Port – Port Development
407(T)/01	2100 2056 2081	INDIA – West Coast – Pipavav Port – Prohibited Area, Leading Transit
102(P)/02	2044 2101	INDIA– West Coast – Approaches to Hazira – Submarine pipeline
294(P)/02	2008 2009 215	INDIA – West Coast – Off Karwar – Prohibited Area
337(T)/02	2045 (INT 7360) 2004 2029 (INT 7358) 220	INDIA – West Coast – Port of Cochin – Channel depths, buoys
372(P)/02	224 317 262	INDIA – South Coast – North of Gulf of Mannar – Depths
446 (T)/02	2025 217 258 (INT 7348)	INDIA – West Coast – Approaches to Mangalore Harbour– Sunken Pontoon
484 (T)/02	2040 204 205 252 (INT 7325)	INDIA – West Coast – Porbandar Harbour – Buoy
176 (P)/03	2076 2016	INDIA – West Coast – Jawaharlal Nehru Port – Jetty
197 (T)/03	211 255 292 21	INDIA West Coast – Approaches to Mumbai – Neelam Heera and Ratna Oilfield area
209 (T)/03	2040	INDIA – West Coast – Porbandar Anchorages – Depths
211 (T)/03	211 255 (INT 7334) 292 2016 2076	INDIA – West Coast – Mumbai Harbour – Buoy
233 (T)/03	21 292 7705 (INT 705)	INDIA – West Coast – Arabian Sea – Data buoy
270 (T)/03	2082 2039	INDIA – West Coast – Dahej Harbour – Breakwater

356 (T)/03	21 292	INDIA – West Coast – Dwaraka to Bombay – Buoy.
413 (P)/03	268 (INT 7353) 273 2007	INDIA – Lakshadweep – Androth Island – Breakwater. Beacon.
92 (T)/04	208 209 2019 2044	INDIA – West Coast – Approaches to Magdalla – Submarine Pipeline.
108 (T)/04	203 (INT 7319) 271 2031 2068 7705 (INT 705)	INDIA – West Coast – Gulf of Kachchh – Buoy.
121 (P)/04	208 209 254 2019 2044 2101	INDIA – West Coast – Approaches to Magdalla – Drilling.
137 (T)/04	21 203 2068 7705 (INT 705)	INDIA – West Coast – Gulf of Kachchh – Ballast Split.
195 (T)/04	292 (INT 7021)	ARABIAN SEA – Muscat to Bombay – Data Buoy.
234 (T)/04	2015 2016 211 255 292	INDIA – West Coast – Port of Mumbai – Prongs Reef – Buoys.
302 (T)/04	2013 2031 2055 2068	INDIA – West Coast – Gulf of Kachchh – Port of Okha – Buoy.
304 (T)/04	206	INDIA – West Coast – Veraval to Diu Head – Off Mul Dwaraka – Danger to Navigation.
407(T)/04	211 255 (INT 7334) 292 (INT 7021) 2016	INDIA – West Coast – Approaches to Mumbai – Restricted area.
449(T)/04	B.A. 1495 (INT 7736) 1497 (INT 7735)	INDIAN OCEAN – La Reunion – Approaches to La Reunion – Fish havens.
485(T)/04	211 255 (INT 7334)	INDIA – West Coast – Off Mumbai – Submarine Pipeline.
507(P)/04	2002 (INT 7351) 2052 (INT 7350)	INDIA – West Coast – Port of New Mangalore and Mangalore – Depth.
50(P)/05	2018 (INT 7321) 2059 (INT 7322) 2080	INDIA – West Coast – Kandla – Sogal Channel – Buoy. Jetty.
85(P)/05	2021 2068	INDIA – West coast –gulf of Kachchh –Mundra Port - Submarine pipeline.
86(T)/05	208 2019 2044 2101	INDIA – West Coast – Magdalla Port – Buoy.
102(P)/05	2021 2068 2080	INDIA – West Coast – Gulf of Kachchh – Mundra Port – Work.
105(T)/05	4011	INDIA –Andaman Sea –Nicobar Islands – Approaches to East Bay – Jetty.
106(T)/05	4005 4006 4008 4012 4016	INDIA – Andaman Sea – Andaman and Nicobar Islands – Beacon. Buoy.
129(P)/05	209 2019 2068 2101	INDIA – West Coast – Approaches to Hahira – Magdalla Port and approaches – Buoy. Light. Jetty. Mooring.
157(P)/05	209 2019 2068 2101	INDIA – West Coast – Approaches to Hazira – Hazira Port – Breakwater, Channel, Basin and Berth Pocket
277(T)/05	211 255 293 2015 2016.	INDIA – West Coast – Mumbai Docks - Buoy.
302(T)/05	2031	INDIA – West Coast–Gulf of Kachchh–Okha Harbour–Buoy.
343(T)/05	31 32 (INT 754) 33 313 315 356 3001 (INT 7402) 3028	INDIA – West and East Coast – Off Ratnagiri, Chennai, Ennore, Ramyapatnam, Machalipatnam, Paradip, Cuddalore, Mahabalipuram, Vishakhapatnam – Data Buoys.
365(T)/05	402 403 473 (INT 7031) 4003 4008	INDIA –Andaman Islands–Mayabandar and Port Cornwallis–Depths.
427(T)/05	211 255 2001 2015 (INT 7337) 2016 (INT 7336)	INDIA – West Coast – Mumbai Docks – Salvage operation.
541 (P)/05	BA 722 (INT 7742)	INDIAN OCEAN - Seychelles - Mahé - Victoria and approaches - Dredging areas. Works.
594 (T) /05	402 472 (INT 7032) 473 (INT 7031)	INDIA – WEST COAST – Andaman Sea – Data Buoy.
57 (P) /06	269	INDIAN OCEAN - British Indian Ocean Territory - Chagos Archipelago - Depths.
72 (P)/06	2003 2053.	INDIA –WEST COAST – Sacrifice Rock to Beypore – Sea Wall .
230 (P)/06	268(INT 7353) 2006 2007 2023 2047.	INDIA –Lakshdweep Islands– FAD.
231 (P)/06	203 2060 2068.	INDIA – West Coast – Pathfinder Inlets – Submarine Pipeline.
232 (P)/06	22(INT 752) 293(INT 7022) 257(INT 7343) 214 2022(INT 7345) 7706(INT 706).	INDIA – West Coast –Approaches to Mormugao- Wreck
256 (P)/06	21 22(INT 752) 211 255(INT 7334) 292 (INT 7021) 293 (INT7022) 2016 (INT 7336) 7705(INT705) 7706 (INT 706)	INDIA – West Coast – Inner Approaches to Mumbai.
325 (P)/06	257(INT 7343) 216 215 2008	INDIA-West Coast-Karwar harbour and approaches-wreck.
386 (P)/06	292(INT 7021) 254 (INT 7331) 209	INDIA WEST COAST – Hazira to Umargam – Eastern Bank - Wreck
407 (P)/06	273 268 (INT 7353).	INDIAN OCEAN – Central Lakshadweep – Chenyakara Island – Wreck.
424 (P)/06	252(INT 7325) 204 205 2040.	INDIA – West Coast – Porbandar Anchorage – Wreck.

425 (P)/06	255 (INT 7334).	INDIA – West Coast – Approaches to Mumbai – Bombay High Oilfield Development Area –Wreck.
441 (P)/06	213 256(INT 7340)	INDIA – West Coast – Ratnagiri to Vengurla – Wreck.
496 (T)/06	255 (INT 7334) – 211 – 2016 (INT 7336)	INDIA – West Coast – Inner approaches to Mumbai – Obstruction
510 (T)/06	2010	INDIA – West Coast – Karwar harbour – Transits.
511 (T)/06	2012	INDIA – West Coast – Alleppey Anchorage – Jetty
595 (T)/06	255 (INT 7334) - 293 (INT 7022) - 292 (INT 7021)	INDIA – West Coast – Approaches to Mumbai – Wreck
596 (T)/06	2011 - 212	INDIA – West Coast –Port Dabhol – Breakwater, Buoy, Dolphin
50 (T)/07	22(INT 752)- 23-32(INT 754) – 33-214 –217 – 224- 258 (INT 7348) – 262-268 (INT 7353) - 272 -273- 293 (INT 7022)- 2002(INT 7351)- 2020 -2022(INT 7345) - 2052(INT 7350)- 2075(INT 7366)- 2078 (INT 7346)-7705 (INT 705) - 7706(INT 706)	INDIA WEST COAST– ARABIAN SEA –New Mangalore Port, Off Mormugao Port – Data Buoys
090(T) /07	255(INT 7334) – 211 – 2016(INT 7336) – 2015 (INT 7337)	INDIA – West Coast –Port of Mumbai –Light.
105(T) /07	204 – 205 – 252 (INT 7325) – 2040	INDIA – West Coast –Porbandar Anchorage – Wreck.
167(T) /07	2016(INT 7336)-2015(INT 7337) - 2076-2001	INDIA – West Coast – Port of Mumbai – Buoys.
216(P) /07	2077 - 2028	INDIA – West Coast – Kochi (cochin) harbour – buoys.
275(T) /07	2031 - 2013	INDIA WEST COAST – Gulf of Kachchh – Port of Okha - Buoy.
306(T) /07	254(INT 7331) – 208 – 209 – 2044 – 2101 - 2019	INDIA - WEST COAST – Approaches to Magadalla -Tapi Channel – Buoys.
307(P) /07	260(INT 7362) - 259(INT 7356) – 220 - 2029(INT 7358) - 2004(INT 7359)	INDIA - WEST COAST – Kochi (Cochin harbour)- SPM- Pipe line.
346(T) /07	203(INT 7319) – 2060 – 2068.	INDIA - WEST COAST – GULF OF KACHCHH- Lightrage Operation
347(T) /07	21 - 292(INT 7021) - 252(INT 7325) – 204 - 205.	INDIA - WEST COAST –Navibandar to Veraval. Wreck.
348(T) /07	21- 291- 292 (INT 7021) - 271- 252 (INT 7325) -202- 204.	INDIA - WEST COAST –Dwaraka to Navibandar – Wreck.
349(T) /07	255(INT 7334) – 2016(INT 7336).	INDIA - WEST COAST –Inner Approaches to Mumbai – Buoy.
350(T) /07	2016(INT 7336).	INDIA - WEST COAST –Inner Approaches to Mumbai – Buoy.
351(T) /07	22(INT 752)-258(INT 7348)- 217-272-2052(INT 7350)- 2002(INT 7351)	INDIA WEST COAST– ARABIAN SEA –Off Mormugao Port – Data Buoys.
372(T) /07	2008 - 2010	INDIA - WEST COAST –Karwar harbour – Buoy.

3. INDIA EAST COAST - ANDAMAN NICOBAR, SRI LANKA

247(P)/95	4030 405 473	INDIA –Andaman Islands – Depth; Rocks
163(T)/99	41 451	INDIA – Andaman Sea – Gulf of Martaban – Oil Development Area
57(T)/00	2075	INDIA –Southeast Coast – Tuticorin Harbour – Buoy
81(T)/00	452 451 411 410 41	INDIA–Andaman Sea – Gulf of Martaban – Wreck
82(T)/01	2075	INDIA – Southeast Coast – Tuticorin Harbour – Buoy
122(T)/02	2075 224 262	INDIA – South East Coast – Tuticorin Harbour – OTEC Plant
209(T)/02	3004 (INT 7403) 3001	INDIA – East Coast – Chennai harbour – Madhusudan Dry Dock– Berth
63 (T)/03	4001 4014 403	INDIA – Bay of Bengal – Middle Andaman – Rangat Bay – Beacon
64 (T)/03	4004 4013 4015 404 409	INDIA – Andaman Sea – Campbell bay and Havelock Island – Lights, dolphins

162 (T)/03	2075 (INT 7366) 2037 263 262 224 32	INDIA – Southeast Coast – Tuticorin Harbour – Damaged Barge Shiva-2
252 (P)/03	3008 3026 355 (INT 7405) 356 31 32 (INT 754)	INDIA – East Coast – Vadarevu Anchorage – Light
269 (P)/03	4012 4006 4016	INDIA – South Andaman Islands – Port Blair – Jetty
343 (P)/03	4032	INDIA – Nicobar Islands – Sawai Bay and Malacca Anchorage – Breakwater, Beacon.
380 (T)/03	315 316 358	INDIA AND SRILANKA – Palk Strait – Wreck.
141 (T)/04	3013	INDIA – East Coast – Hugli River, Haldia to Kukrahati Reach – Buoy.
193 (T)/04	225 2064	SRILANKA – West Coast – Colombo, Weligama Bay and Beruwala Point Westwards – Depths. Wreck. Rocks. Harbour limit. Port development.
203 (T)/04	355 (INT 7405) 356	INDIA – East Coast – Bay of Bengal – Moorings.
287 (P)/04	3010	INDIA – East Coast – Paradip Port – Breakwater.
323 (T)/04	3028	INDIA – East Coast – Ports of Ennore – Jetty.
355 (P)/04	308 354 (INT 7408) 3002 (INT 7410) 3012 (INT 7411)	INDIA – East Coast – Vishakhapatnam Harbour – Berth.
387(T)/04	354 (INT 7408) 355 (INT 7405) 3009	INDIA – East Coast – Kakinada Port – Light.
389(T)/04	4013 4016	INDIA – Andaman Sea – Neill Island – Jetty.
390(T)/04	409 471 472 (INT 7032) 4036	INDIA-Andaman Sea -Nicobar Islands -Approaches to Pulo Millow-Light.
391(T)/04	409 472 (INT 7032) 4034	INDIA – Andaman Sea – Little Nicobar Islands – Kabra Island – Light.
52(T)/05	All charts of A & Is, Coast of A.P,Tamil Nadu, Kerala, Maldives & Srilanka	INDIAN OCEAN – Bay of Bengal – Changes in bathymetry and coastline
66(T)/05	355 (INT 7405)	INDIA – East Coast – Sacramento Shaol – Depths.
88(T)/05	4011 4017	INDIA -Nicobar Islands-Katchall Island –Approaches toEast Bay–Beacon.
104(T)/05	301 3011	INDIA -East Coast–Hugli River–Gasper Channel -Dredging area. Dumpin
133(T)/05	308 354 (INT 7410) 3012 (INT 7411)	INDIA – East Coast – Vishakapatnam Harbour – Wreck.
135(T)/05	4010	INDIA – Andaman Sea – Little Andaman Islands-Hut Bay-Coast line.Jetty.Light.
159(T)/05	301 351 7706 (INT 706)	INDIA – East Coast – Approaches to Sandheads – Wreck.
160(T)/05	409 471 472 (INT 7032) 4035	INDIA – Andaman Sea – Nicobar Island – Campbell Bay – Rock.
276(T)/05	4012.	INDIA – Andaman Island – Inner Harbour – Port Blair – Beacon.
364(P)/05	4019 B.A. Chart 833	MYANMAR - Rangoon River - Wreck. Depths. Port developments. Lights. Coastline. Bridge. Drying contour.
467(T)/05	22 23 32 263 (INT 7383)	India –Cape Comorin to Colombo – Buoy.
468(T)/05	317 358 (INT 7394) 3016	India –East Coast – Approaches to Mandapam – Landmark.
567 (P) /05	357 (INT 7397) 3007	INDIA – East Coast – Point Calimere to Chennai (Madras) – Jetty.
*59 (T) /06	22 23 32 33 263 41 407 471 472	INDIA – West and East coast – Andaman Sea and Gulf of Mannar – data buoy .
75 (T)/06	22 32(INT 754) 214 217 224 257 258 262 268 272 273 2002 2020 2022 2052 2075 (INT 7366) 2078	INDIA – East & West Coast – Tuticorin, Off Kavarati Island, Lakshadweep Sea, Port of Mormugoa and Port of New Mangalore – Data Buoys.
137 (T)/06	33 356 (INT 7400) 357 (INT 7397) 313 3001 (INT 7402) 3004 (INT 7403)	INDIA -East Coast – Madras (Chennai) Harbour – Data buoy.
180 (T) /06	214 257 293 313 356(INT 7400) 2020 2022 2078 (INT 7346) 3001	INDIA – East & West Coast – Ennore Port & Off Mormugao Port – Data Buoy.
258 (T)/06	21 32 313 356 357 3001 7703 (INT 703) 7706(INT 706).	INDIA – East Coast – Approaches to Chennai – Data buoys
428 (P)/06	351 301.	INDIA – East Coast – Ocean – Approaches to Hugli River – Obstruction
429 (P)/06	473 (INT 7031) 472(INT 7032) 406.	ANDAMAN SEA – India – Andaman Islands – Little Andaman Island to Ten Degree Channel – Wreck.
431 (T)/06	B.A. 817 (INT 7430)	BURMA - Sittwe South-westwards - Survey stations.
442 (P)/06	3010 (INT 7418) (Plan).	INDIA – East Coast – Paradip Port – Work in Progress.
443 (P)/06	4036 409	ANDAMAN SEA - India-Nicobar Islands -Approaches to Pulo Millow - Off Meroe Island -Wreck.

475 (T) /06	4005	ANDAMAN SEA – INDIA – Nicobar Islands –Nancowary harbour and approaches – Buoy.
512 (T) /06	356 (INT 7400) – 313 – 3001 (INT 7402)	INDIA – East Coast – Approaches to Chennai (Madras) – Data Buoy
548 (T) /06	3031.	INDIA – East Coast – Krishnapatnam Anchorage – Transits mark.
091(T) /07	31 – 371 – 321 – 322	BAY OF BENGAL – Coast of Burma –Mayu River to Kyaukpyu – Off Kyaukpyu harbour – Met observation.
106(T) /07	358(INT 7394) – 317	INDIA – SRILANKA – Palk Bay – Western Portion – Obstructions
143(P) /07	262 – 358 (INT 7394) - 317	INDIA and SRILANKA – Palk Bay – Western portion – Devils Point – Light House.
168(P) /07	3002(INT 7410)	INDIA – East Coast – Approaches to Visakhapatnam- Gangavaram Port – work in progress
169(T) /07	3012(INT 7411)	INDIA – East Coast –Vishakhapatnam Harbour – Mooring Buoy.
170(P) /07	41- 405 – 473(INT 7031) - 4030 – 7706 (INT 706)	INDIA – Andaman Sea- Manners Strait And Duncan Passage- Off Cinque Island – Wrecks.
171(T) /07	41- 7071(INT 71) – 7073 (INT 73) – 7706 (INT 706)	INDIA – Andaman Sea- Drilling Operations.
187(T) /07	31-32(INT 754)-33	INDIA EAST COAST– Off Chennai, Off Machillipatnam, Off Cuddalore and Off Vedarannyam – Data Buoys.
188(T) /07	321 – 322 – 371 – 3020	BAY OF BENGAL- Coast of Burma– Combermere Bay to Cheduba Strait – Kyaukpyu harbour – Met Observations.
189(T) /07	371 – 320 – 321 – 3019– 3022	BAY OF BENGAL- Coast of Burma– Approaches to Kaladan River – Met Observations.
217(P) /07	357(INT 7397)	INDIA - East Coast – Point Calimere to Chennai (Madras) – Karaikal – Work in progress.
218(P) /07	3031	INDIA – East Coast – Krishnapatnam Anchorages – Work in progress.
219(T) /07	4032	INDIA – Nicobar Islands Sawai Bay & Malacca Anchorage – Transit mark – Beacon.
222(T) /07	23 – 32(INT 754) – 33 – 226 –264– 358 – 359 – 2064 – 7704 (INT 704)	SRI LANKA - South Coast - Little Basses Reef - Light.
247(T) /07	4010.	ANDAMAN SEA - INDIA – Little Andaman Islands – Hut Bay – Beacon.
248(T) /07	33	INDIA – Off Car Nicobar – Tsunami Buoys.
276(T) /07	31 33	BAY OF BENGAL – Northern and Southern Portion – Data Buoys.
308(T) /07	32(INT 754) – 315 – 316 - 317 - 358(INT 7394)	INDIA - EAST COAST – Bay of Bengal- Dredging Operation
309(T) /07	33	INDIAN OCEAN - BAY OF BENGAL – Southern Portion – Tsunami Data Buoy.
310(T) /07	353(INT 7413)	INDIA – East Coast – Kalingapatnam to Gopalpur – Unexploded Charges
312(T) /07	23 -33 -7702 (INT 702) -7706 (INT 706) -7707 (INT 707)	INDIAN OCEAN - Data buoys.
352(T) /07	354(INT 7408)	INDIA - EAST COAST – Sacramento Shoal to Kalingapatnam – Unexploded Charges.
373(T) /07	301- 3011(INT 7421) – 3013- 3006(INT 7423)	INDIA - EAST COAST*- HUGLI RIVER -Haldia to Kukrahatti Reach – Depths.

4. MALACCA STRAIT, SINGAPORE STRAIT AND SUMATERA

345 (T)/03	B.A. 1311 1312 2403 2414 3543	MALAYSIA – Peninsular East Coast – Singapore Strait, Eastern Approaches –North Channel – Ramunia Shoals – Dredging area.
382 (T)/03	B.A. 4038 4034 4044	SINGAPORE – West Coast and Pulau Ubin, North Coast – Works.
383 (T)/03	33 41 B.A. 400 1353 2760 2777 2917 3574 3919 3920	INDONESIA –Sumatera – North and Northwest Coasts – Restricted area.
397(P)/05	B.A. 2056 3729	INDONESIA – Jawa – North Coast – Approaches to Tanjungpriok – Submarine pipeline. Submarine cable. Light-beacons.
426(P)/05	B.A. 2965	INDONESIA –Sumatera – West Coast – U. Jungutbatupati to U. Nibung – Depths. Jetty. Lights. Piers. Reclamation area. Beacons. Restricted area.
463(P)/05	B.A. 932 933	INDONESIA - Jawa -Tanjungpriok and Approaches - Coastline. Depths. Light-beacon. Buoyage. Platform. Wrecks. Maritime limit.
540 (P)/05	7708 (INT 708)	INDIAN OCEAN - Cocos Islands - Light-beacon.

619 (P) /05	B.A. 3949	INDONESIA - Sumatera - Selat Riau Southwards - Submarine cable.
179 (P) /06	BA 1141 3946 3947	MALAYSIA - Peninsular Malaysia, West Coast -Pelabuhan Sungai Udang and Approaches -Maintained channel. Anchorage areas. Berths.
071(P) /07	433-4025	THAILAND - West Coast - Ao Krabi - Approaches to Krabi and Approaches to Phuket - Leading lines. Buoyage. Light-beacons.
144(P) /07	B.A. 3833	SINGAPORE STRAIT - Western Part - The Brothers to Batuampar Northwards - Submarine cables.
145(P) /07	B.A. 3947	MALACCA STRAIT - T. Medang to Singapore Strait - Submarine cables.
146(P) /07	41 – 432	THAILAND - West Coast - Ko Surin South-westwards to Ko Phuket Westwards - Firing practice areas. Military practice area.
223(P) /07	BA 3941 4026 - 4027	MALAYSIA - Peninsular Malaysia, West Coast - Pinang Harbour - Coastline. Works. Lights. Beacons. Depths. Drying patch. Wrecks. Obstructions. Dredged areas. Marine farms.
376(P) /07	B. A. 1312 -2403 -3721 - 3831 -3833 -3937 -3949 - 4041 -4042	INDONESIA - Kalimantan - West Coast - T. Saleh Westwards to Singapore Strait - Pulau Batam - T. Pinggir - Submarine cable.
377(P) /07	7508(INT 508) B. A. 1312 -1788 -2137 - 2149 -3729	INDONESIA - Sumatera - Pulau Belitung West Coast - Tanjungpandan to Jawa North Coast - Pakis - Submarine cable.

Cancelled Notices

Area	Notice No.	Ref. No.
2	400(T)/00	319 /07
2	424(T)/00	320/07
2	195(T)/01	378(T)/07
3	318(T)/01	322/07
3	063(T)/04	327/07
2	093(T)/04	378(T)/07
3	175(T)/04	325 /07
4	276(P)/04	378(T)/07
2	484(T)/04	378(T)/07
2	051(P)/05	378(T)/07
3	134(T)/05	222(T)/07
3	228(T)/05	055/07
3	321(T)/05	324/07
2	399(T)/05	250/07
3	620(T)/05	326/07
4	178(P)/06	378(T)/07
1	254(P)/06	374(P)/07
3	299(P)/06	323/07
3	329(P)/06	365/07
3	354(T)/06	378(T)/07
1	387(P)/06	378(T)/07
2	406(T)/06	346(T)/07
3	427(P)/06	220(T)/07
2	579(T)/06	312(T)/07
3	069(T)/07	308(T)/07
2	142(P)/07	307(P)/07
-	185(T)/07	378(T)/07
3	190(T)/07	252/07
-	191(T)/07	378(T)/07
3	220(T)/07	276(T)/07
1	277(P)/07	313(P)/07
3	311(T)/07	373(T)/07
1	313(P)/07	375(P)/07

SECTION – IV: MARINE INFORMATION

The diligent reporting of dangers to Navigation by the following ships is worthy of appreciation.

Indian Naval/Coastguard ships. Sandhayak, Nirdeshak, Sutlej, Darshak, Nirupak., Jamuna, Investigator, Pralaya, Baratang, Shardul.

Crossing of Vessels through Pamban Channel

Source: Tamilnadu Maritime Board

The southern railway had informed that the lifting of Scherzer rolling lift span of the railway bridge in the Pamban Channel will be suspended for undertaking gauge conversion of the Manamadurai – Rameshwaram section of the railway line with effect from 15 Nov 2006. The ships, crafts etc will not be able to pass through the navigational span till completion. Further position shall be intimated depending upon the progress.

Charts affected: 3016 – 317 – 358 (INT 7394).

Closing of Kundapura Port – Removal of lighted Bar Buoys

Source: Kundapura Port

The Kundapura Port will be closed for monsoon w.e.f 16 May 2007 and re-open on 16 Sep 2007, as per the weather conditions prevailing at that time. The solar lighted buoys marked at the bar and channel will be withdrawn. Mariners are advised to exercise caution.

Charts affected: 2073 – 216 – 217-258 (INT 7348).

Distribution of Indian Paper Charts and Nautical Publications

Indian Nautical Charts and Publications from National Hydrographic Office, India are now available globally. Details of overseas chart agents are as follows:

C-Map India Pvt. Ltd. 505, Raheja Arcade, Sector-11, CBD Belapur, Navi Mumbai 400 614 Ph: 91 22 65103668 Fax: 91 22 67939504 Email: info@c-map.co.in	C-Map Norway AS Hovlandsveien 52, P.O. 212, N-4370, Egersund, Norway Ph: 0047 51 464700 Fax: 0047 51 464701 Email: market@c-map.no
C-Map US Commercial 133 Falmouth Road, Building 2, Postal Code: 02649, Mashpee, MA, America Ph: +1 (508) 477 8010 Fax: +1 (508) 539 4381 Email: info@c-map.com	C-Map (UK) Ltd. Systems House Delta Business Park Salterns Lane, Fareham, PO16 0QS, United Kingdom, Ph: +44 (0) 1329 517777 Fax: +44 (0) 1329 517778 Email: info@c-map.co.uk
Mari-Sys Pte Ltd. 20 Ayer Rajah Crescent, #08-21, SE 139964, Republic of Singapore Ph: +65 6776 1898 Email: info@mari-sys.com	

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)

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)

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

- | | |
|-------------------------------|----------------------------|
| (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***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. The Chosen 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

- For details of NAVAREA limits and organization/ coordination, please refer to Notice No. 12 of the Special edition of Indian Notice to Mariners – 2004.
- NAVAREA Warnings in force:** - The serial numbers of all the NAVAREA warnings in force as on 22 Jun 07, covering the entire world are listed below against the respective NAVAREA

<u>NAVAREA No.</u>	<u>LOCATION</u>	<u>LAST NAVAREA</u>	<u>NAVAREA IN FORCE</u>
I	N.E. Atlantic	138	2005 series: 402 468. 2006 series: 356. 2007 series: 019 035 050 097 099 101 112 114 116 121 122 124 128 133 134 135 137 138.
II	E. Atlantic	224	2007 series: 103 183 207 210 214 219 220 221 222 223 224.
III	Mediterranean	263	2007 series: 192 206 214 215 216 221 222 226 228 229 230 238 239 242 243 244 248 254 255 257 258 259 261 262 263.
IV	N.W. Atlantic	169	2007 series: 141
V	W. Atlantic	526	2007 series: Nil.
VI	S.W. Atlantic	206	2007 series: 031 033 149 153 206 211
VII	S.E. Atlantic	97	2007 series: 080 089 094 095 096 097 100
VIII	Indian Ocean	374	2006 series - 745 2007 series - 014 035 112 161 179 184 185 201 216 241 242 249 257 270 279 294 332 335 339 340 341 342 343 344 348 349 352 353 357 360 362 363 365 366 367 368 369 370 371 372 373 374

349. India West Coast – Karwar Harbour. Charts 22 215 216 257 293 2008 2010 INT 706. Port Buoy 14-45.01N., 74-07.39E Off station.
350 to 351. Cancelled.
352. India West Coast - Kochi. Charts 22 32 220 259 260 2004 2029 2045 INT 706. Firing exercise by Naval Coast Battery between 0330 UTC and 1530 UTC on 22 Jun 26 Jun 29 Jun and 03 Jul 2007. Danger area bounded by (a) 09-57.50N 075-59.50E (b) 09-57.70N 076-14.20E (c) 09-44.00N 076-17.50E (d) 09-42.50N 076-09.50E 2. Safe flying height 10000 metres. 3. Cancel this message on 04 Jul 2007.
353. India East Coast Bay of Bengal. Charts 31 32 355 INT 706. Drilling operation in progress by rig Deepsea Matdrill in position 16-24.90N., 082-02.20E. 2. Wide berth requested.
354 to 356. Cancelled.
357. Arabian Sea. Charts INT 72 INT 73 INT 703 INT 705. A Green colour 40 Feet Container adrift in approximate position 11-34.0N., 061-15.0E. 2. Mariners to exercise caution.
358. Cancelled
359. Cancelled
360. Bay of Bengal . Charts 31 321 371 INT 706. Met Ocean Survey instrument deployed in position 19-43.0N., 092-30.0E. 2. During survey unauthorized anchoring fishing trawling and navigation prohibited around 01NM of above mentioned position.
361. Cancelled.
362 India East Coast - Bay of Bengal . Charts 31 32 354 355 INT 706. Pre-Engineering and anchor clearance survey in progress by vessel Geo Prospector in area bounded by (a) 16-43.4N 082-40.0E (b) 16-41.0N 082-40.0E (c) 16-43.4N 082-44.0E (d) 16-41.0N 082-44.0E 2. All vessels operating in vicinity be kept well clear of the vessel and exercise caution.

<p>363. India West Coast - Mormugao. Charts 22 214 215 257 293 2009 INT 705 INT 706. Firing practice by Naval Aircraft between 0230 UTC and 1230 UTC from 01 Jul to 07 Jul 2007. Danger area bounded by:</p> <p>(a) 15-13.0N 073-57.0E (b) 15-13.0N 073-52.0E (c) 15-11.0N 073-57.0E (d) 15-11.0N 073-52.0E</p> <p>2. Safe flying height 3500 metres. 3. Cancel this message on 08 Jul 2007.</p>
364. Cancelled
<p>365. Bay of Bengal Andaman islands. Charts 33 41 402 474 INT 706. Abandoned and unlit Vessel MV John Richardson adrift in approximate position 13-16.85N., 092-25.90E at 231500 UTC.</p> <p>2. Mariners to exercise caution.</p>
<p>366. India West Coast – Approaches to port of New Mangalore. Charts 22 217 258 272 293 2002 INT 706. MV Denden grounded in approximate position 12-53.79N., 074-48.77E.</p> <p>2. Mariners to exercise caution.</p>
<p>367. India West Coast – Arabian Sea. Charts 22 218 219 258 259 272 INT 706. Tug Wimbo sunk in position 11-33.00N., 075-33.50E.</p> <p>2. Mariners to exercise caution.</p>
368. Cancelled
<p>369. India west coast – Porbandar. Charts 21 205 252 292 2040 INT 705. MV Arcadia progress grounded in position 21-38.62N., 069-34.23E.</p> <p>2. Mariners to exercise caution.</p>
<p>370. India East Coast – Gopalpur. Charts 31 352 353 3005 INT 706. Firing exercise between 2330 UTC and 1230 UTC from 01 Jul to 04 Jul 2007. Danger area bounded by:</p> <p>(a) 19-14.60N 084-53.70E (b) 19-37.05N 085-27.85E (c) 18-46.05N 085-22.86E and arc of 42 nm radius joining point (b) and (c).</p> <p>2. Safe flying height 6100 metres. 3. Cancel this message on 05 Jul 2007.</p>
<p>371. India West Coast – Porbandar. Charts 21 204 252 292 INT 705. MV Suja III grounded in position 21-44.59N., 069-27.80E.</p> <p>2. Mariners to exercise caution.</p>
<p>372. Andaman Sea – Nicobar Islands. Charts 41 INT 71 INT 706. Motor Tug Hazel/Aury reported accidental dropping of one 20 man liferaft in approximate position 07-57.3N., 095-36.3E at 251050UTC. Liferaft inflated and empty.</p> <p>2. Mariners to exercise caution.</p>
<p>373. Cancel Navarea Eight 368 of 2007. India West Coast – Approches to Mumbai. Charts 21 22 211 255 292 293 2015 2016 int 705. Tug Krishna I sunk in approximate position 18-42.5N., 072-49.0E.</p> <p>2. Tug Krishna II grounded south of Khanderi Island off Mumbai Coast. 3. Barge Radha I grounded in approximate position 18-52.77N., 072-54.54E. 4. Barge Radha IV grounded in approximate position 18-53.09N., 072-54.35E. 5. Mariners to exercise caution.</p>
<p>374. India West Coast – Kori Creek. Charts 21 201 251 271 291 INT 705. MV Sea Glory grounded in approximate position 23-34.0N., 068-13.0E</p> <p>2. Mariners to exercise caution.</p>

<u>NAVAREA No.</u>	<u>LOCATION</u>	<u>LAST NAVAREA</u>	<u>NAVAREA IN FORCE</u>
IX	Persian Gulf, Red Sea, NW Arabian Sea	140	2006 series: 106 116 147 177 200 203 216 230. 2007 series: 003 006 018 022 025 027 040 042 047 048 062 080 083 087 092 095 106 108 109 111 125 132 135 136 137 140.
X	Australia, New Guinea	137	2007 series: 063 076 080 085 090 091 096 104 106 108 119 121 124 127 128 130 132 134 135 136 137..

XI	Malacca Strait, China Sea, N. Pacific	248	1996 series: 0925 1998 series: 0655 1999 series: 0053 0187 0310 2000 series: 0677 2001 series: 0182 0775 2003 series: 0106 0303 0304 2004 series: 0246 0271 0361 0571 2005 series: 0271 0307 2006 series: 0005 0050 0052 0058 0075 0083 0090 0123 0224 0250 0251 0276 0303 0343 0561 0568 0580 0585. 2007 series: 0002 0003 0004 0008 0009 0093 0098 0130 0133 0148 0155 0183 0187 0189 0197 0215 0222 0223 0224 0225 0226 0227 0228 0230 0234 0237 0239 0240 0245 0246 0247 0248
XII	N.E. Pacific	145	2007 series: Nil
XIII	N.W. Pacific	028	2007 series: Nil
XIV	S.W. Pacific	025	2007 series: 005 010 025.
XV	S.E. Pacific	083	Nil
XVI	E. Pacific	146	Nil
Hydropacs	Pacific, Indian Ocean	1064	2006 series: 524 1049 1812. 2007 series: Nil
Hydrolants	Atlantic, Mediterranean	1048	2006 series: 1394.

SECTION – VI: CORRECTIONS TO SAILING DIRECTIONS (PILOTS)

**INP 2 Bay of Bengal Pilot (2007 Edition) INDIA- East Coast
– Machilipatnam – Beacon. Anchorage. Facilities. Supplies.
Communication and General Information.**

120

*Article 2.113, Para 5, line 3
Replace after **tower**.*

is tilted from the base approx 10° to 15° . The Beacon is approachable by a kaccha road.

120

*Article 2.113, Para 8
Replace by.*

Anchorage. Following are the recommended berths for anchorage off Machilipatnam with holding ground comprising fine sand and soft mud

- | | | |
|----|---------------|---------------|
| a) | 16° 09'.215 N | 81° 17'.137 E |
| b) | 16° 10'.300 N | 81° 17'.190 E |
| c) | 16° 07'.336 N | 81° 16'.263 E |
| d) | 16° 12'.530 N | 81° 18'.160 E |
| e) | 16° 08'.590 N | 81° 17'.180 E |

The river entrance light is disused and is on the verge of collapse. the entry into the creek is devoid of any transits/marks. The mouth also has a no. of sand banks and is only safe to navigate in high waters, for vessels up to 1.5 meters draught. Sea weeds were found floating up to six miles from the coast.

120

*Article 2.116, Para 1
Replace by.*

Facilities. The gates of the tidal lock have been closed and the wharves are not used. The Old wharves at Machilipatnam port are partially destroyed and are used by fishing trawlers for berthing. A New wharf east of the old wharf with 60 mtrs length has been constructed and is used for accommodating fishing trawlers. No facility of tugs, launches and lighters exist in the port due to shifting sand bars at the mouth of the creek and also due to inadequate depths. The new wharf with fishing shelters and godowns are under construction. The creek has been last dredged in 2003.

The shipping office, custom office and store houses are located in Bandar fort which is partially dilapidated and is declared to be a protected monument of national importance under the Archaeological Survey of India.

**INP 2 Bay of Bengal Pilot (2007 Edition) INDIA- East Coast
– Machilipatnam – Beacon. Anchorage. Facilities. Supplies.
Communication and General Information. (continued)**

120

Article 2.116, Para 5

Replace by.

Supplies. Not available

120

Article 2.116, Para 6

Replace, There is ----- Chennai (Madras), by

No communication exists with any other Indian ports. The Machilipatnam railway station is 10 Kms west of the new wharf and is connected by road.

120

Article 2.116, Para 7

Replace by.

A Port Signal Communication Centre is presently being setup at the Administrative office close to new wharf and MMB Channel 15 is manned during daytime.

119

Article 2.112,

Insert after Para 1

1a **Machilipatnam.** Town is well developed with an approximate population of two lakhs, and well connected by rail and road. Machilipatnam gets annual rainfall due to the southwest monsoons. The climate is tropical in nature with hot summers and moderate winters. Machilipatnam is frequently hit by cyclones due to low pressure created by the southwest monsoon. On 8 December 2004, a high capacity S-Band Doppler radar meant for cyclone warning was installed, commissioned and operationalised at the city. This facility will monitor 960 km long coastline of the state. Agriculture is the most important occupation and paddy being the main food crop produced. Machilipatnam has a high literacy rate and has 06 colleges and four well recognised schools.

D6774-1	- Ldg Lts 346°. Ras Kisauni. Rear. 490m from front	4 02:58 S 39 40:62 E	Fl W 2s	..	8	White column	Vis 256°-076°(180°)
							*
D6784	- Likoni. Ldg Lts 238°. Front	4 05:00 S 39 40:18 E	Q W	11	3	White obelisk, black stripe	Vis 148°-328°(180°)
							*
D6784-1	- Likoni. Ldg Lts 238°. Rear. 354m from front	4 05:10 S 39 40:02 E	Fl W 2s	16	3	White obelisk, black stripe	Vis 148°-328°(180°)
							*
D6794	- Mtongwe. Ldg Lts 309°. Front	4 03:66 S 39 38:48 E	Q W	21	6	White column	
							*
D6794-1	- Mtongwe. Ldg Lts 309°. Rear. 250m from front	4 03:58 S 39 38:37 E	Fl W 2s	28	6	White obelisk	Vis 220°-040°(180°)
							*
D6796	- Likoni Dir Lt 129°	4 05:00 S 39 40:10 E	Dir Iso WRG 5s	21	2	White obelisk 12	R122.5°-127.5°(5°), W127.5°-130.5°(3°), G130.5°-135.5°(5°)
							*
D6812	- Kipevu. Ras Mchangamwe. Ldg Lts 343°. Front	4 02:54 S 39 38:35 E	Q W	..	2	On roof of building	
							*
D6814-1	- PORT REITZ. Shimanzi. Ldg Lts 071°40'. Rear. 350m from front	4 02:61 S 39 38:71 E	Fl W 2s	..	..	White concrete column	Vis 061°-341°(280°)
							*
D6814-5	- PORT REITZ. West Ldg Lts 251°40'. Rear. 475m from front	4 04:01 S 39 34:51 E	Fl W 10s	..	..	White metal tower 15	
			*				
D6818	- Cannon Point	3 57:72 S 39 45:77 E	Fl W 10s	19	11	White square concrete tower, black bands 13	TE 2007
		*					*
D6821	- North Pass. Ldg Lts 272°. Front	3 39:31 S 39 52:07 E	F R	13	4	Red topmark on white concrete column 3	
	*	*				*	

D6821-1	- North Pass. Ldg Lts 272°. Rear. 181m from front *	3 39-31 S 39 51-97 E *	F R	13	4	White concrete column 5	
D6822	- Kilifi. Ldg Lts 328° *	3 38-17 S 39 51-67 E *	F R	..	..	White concrete column 2	Occas
D6822-1	- Kilifi. Ldg Lts 328°. Rear. 83m from front *	3 38-13 S 39 51-65 E *	F R	21	..	White concrete column 3	Occas
D6825	- Pillar Reef *	3 12-84 S 40 07-73 E *	Q R	6	9	White concrete column 5	Vis when bearing more than 240° *
D6828	Tana. Entrance. Kipini *	2 31-84 S 40 31-77 E *	Fl W 7s	29	10	White GRP tower 9	<i>fl 0-5</i> *
D6892	- Chissioua Mtsongoma. Ldg Lts 174°. Front - - Dir Lt 291° *	12 41-37 S 45 07-73 E .. *	Dir VQ W Dir VQ WRG *	28 .. *	13 W10 R7 G7 *	Beacon .. *	Intens 172-5°-175-5°(3°). Rear D6892-1 G279°-290°(11°), W290°- 292°(2°), R292°-296°(4°) *
D6919	- Cap Andranomody *	12 13-78 S 49 21-37 E *	F R	11	5	White 8-sided tower, red top 10	Vis 060°- 280°(220°).Occas. TE 2007 *
D6920	- Île des Aigrettes. Nosy Langoro *	12 13-20 S 49 18-96 E *	Oc(2)WR G 6s	18	W10 R7 G6	White building, black lantern 8	<i>ec 1, lt 1, ec 1, lt 3.</i> W033°- 038°(5°), R038°- 265°(227°), G265°- 272°(7°), W272°- 275°(3°), R275°-285°(10°), G285°-033°(108°). TE 2007 *
D6922	- PORT DE LA NIÈVRE. Antsiranana. Harbour Office *	12 16-06 S 49 17-32 E *	Iso WRG 4s	13	W13 R10 G9	Yellow tower on house, black cupola 12	W021-5°-207°(185-5°), G207°-220°(13°), W220°-227°(7°), R227°-237-5°(10-5°) *
D6924 DELETED	Remove from list						
D6925 DELETED	Remove from list						

D6926 DELETED	Remove from list							
D6926.1 DELETED	Remove from list							
D6930	-Nosy Ankao. Summit	12 48-44 S 49 50-05 E	Fl(4)W 20s	46	19	White 8-sided tower, black top 20	(fl 0-3, ec 3) x 3, fl 0-3, ec 9-8. Vis 115°-055°(300°). TE 2007	*
		*						*
D6938	- No 4. N part of S reef	13 21-00 S 50 00-80 E	F R	7	5	Red tower 6	On request. TE 2007	*
								*
D6939	- No 6	13 21-30 S 50 00-50 E	F R	5	3	Red and white chequered tower 4	On request. TE 2007	*
								*
D6942	- Beacon C. Ambohitrakongona	14 13-57 S 50 06-71 E	Oc(3)W 12s	76	10	White tower 12	(ec 1-5, lt 1-5) x 2, ec 1-5, lt 4-5. Vis 150°-060°(270°). TE 2007	*
		*						*
D6943 DELETED	Remove from list							
D6943.1 DELETED	Remove from list							
D6944	- Ldg Lts 276°30'. Front	14 53-70 S 50 16-80 E	F G	7	11	White beacon 7	Intens 274°-279°(5°). Occas. TE 2007	*
								*
D6945 DELETED	Remove from list							
D6960	- Lakaria	17 23-78 S 49 25-83 E	Oc W 6s	54	10	White tower 11	ec 1-5. Vis 122°-032°(270°). TE 2007	*
		*						*
D6973	- Grande Passe de L'Est. Ldg Lts 277°. Front	18 05-74 S 49 24-09 E	Q W	16	10	White ▽ on pyramidal tower 14		*
		*						*
D6973.1	-Grande Passe de L'Est. LdgLts 277°. Rear. 0-51M from front	18 05-67 S 49 23-56 E	Q W	23	18	Black and white pyramidal structure 16		*
		*			*	*		*

D7018	-Lohatanjona Itaperina (Evatra)	24 58-90 S 47 05-70 E *	Fl W 5s	103	18	White tower 10	<i>fl 0-5. TE 2007</i> *
D7019	-Fort Dauphin. Ldg Lts 239°30'. Front	25 01-40 S 46 59-50 E	Oc W 4s	25	18	White stepped beacon, black stripe and lantern 10	<i>ec 1. Intens 237.5°- 242.5°(5°). TE 2007</i> *
D7019-1	-Fort Dauphin. Ldg Lts 239°30'. Rear. 260m from front	25 01-50 S 46 59-40 E *	Oc W 4s	47	18	White beacon, black stripe and lantern 8	<i>Intens 237°-242°(5°). Synchronized with front. TE 2007</i> *
D7020	- Ldg Lts 155°. Front	25 01-50 S 47 00-00 E	F R	12	7	White square tower, red lantern 12	TE 2007 *
D7020-1	-Ldg Lts 155°. Rear. Flacourt. 40m from front *	25 01-50 S 47 00-00 E	Oc(2)W 6s	38	15	White 6-sided tower, red lantern 12	<i>ec 1, lt 1, ec 1, lt 3. Vis 084°-354°(270°). TE 2007</i> *
D7021	- Pier. Head	25 01-50 S 46 59-80 E *	F G	6	6	Black and white column 3	TE 2007 *
D7022	Tanjona Vohimena (Cap Sainte Marie)	25 35-26 S 45 08-43 E *	Fl(2)W 10s	193	20	Square masonry tower, white corners 18	<i>fl 0-4, ec 2-1, fl 0-4, ec 7-1. TE 2007</i> *
D7027	- Nosy Lava	21 43-96 S 43 17-58 E *	Oc W 6s	28	10	White square tower, black lantern 17	<i>ec 1-5. TE 2007</i> *
D7028	- Morombé. Ldg Lts 133°. Front	21 44-99 S 43 20-89 E *	F R	17	9 *	White beacon, black bands 10 *	<i>Intens 127°-139°(12°). TE 2007</i> *
D7028-1	- Morombé. Ldg Lts 133°. Rear. 640m from front	21 45-22 S 43 21-14 E *	F R	24	9	White beacon, black stripe 16	<i>Intens 127°-139°(12°). TE 2007</i> *

D7029	Betaolampia	20 25-12 S 44 13-77 E	Oc(2)WR G 9s	68	W10 R7 G6	2 White □ on wall 13	<i>ec 1-5, lt 1-5, ec 1-5, lt 4-5.</i> W088°-105°(17°), R105°- 114°(9°), W114°- 135°(21°), R135°- 162°(27°), W162°- 185°(23°), G185°- 200°(15°). TE 2007
		*					*
D7032	Maintirano	18 04-00 S 44 01-20 E	Iso W 4s	29	10	White 8-sided tower 12	TE 2007
			*				*
D7033-7	Tanjona Vilanandro (Cap Saint André)	16 11-50 S 44 27-30 E	Fl W 5s	31	W20	White metal pylon 24	TE 2007
			*	*	*	*	*
D7037	- Pointe de Sable	15 43-60 S 46 18-30 E	Oc(2+1)W 12s 11	11	12	White tower, black cupola 10	<i>ec 1, lt 1, (ec 1, lt 4) x 2.</i> Vis 328°-148°(180°). Partially obscured by trees
							*
D7042 DELETED	Remove from list						
D7049	Analalava. Jetty. Head	14 37-50 S 47 44-60 E	F R 4	4	3	White tower, grey lantern 4	TE 2007
							*
D7052	Nosy Lava. Summit	14 32-47 S 47 35-61 E	Fl(2)W 10s 122	122	20	Black and white tower 18	Aeromarine. <i>fl 0-3, ec 2-2,</i> <i>fl 0-3, ec 7-2.</i> Vis 325°-295°(330°). TE 2007
		*					*
D7056	Nosy Iranja. SE end	13 35-70 S 47 49-80 E	Fl W 5s	75	17	White metal tower, black top 20	<i>fl 0-6. Vis 348°-</i> <i>240°(252°).</i> TE 2007
						*	*
D7065-1	- Ldg Lts 017°. Rear. 600m from front	13 23-70 S 48 17-90 E	Q G	24	11	White beacon, black stripe 6	Intens 014-5°-019-5°(5°)
							*
D7068	Nosy Faly. Summit	13 19-32 S 48 28-50 E	Fl WR 4s	75	W8 R6	White 8-sided tower, black lantern 9	<i>fl 1. W026°-236°(210°),</i> <i>R236°-026°(150°).</i> TE 2007
		*	*				*

D7069	- Ldg Lts 110°. Front	13 05-00 S 48 49-00 E	Q R	11	6	White ▤, red stripe, on metal framework tower 11	Vis 020°-200°(180°). TE 2007	*
D7069-1	-Ldg Lts 110° . Rear. 0-9M from front	13 05-33 S 48 50-33 E	Q R	18	16	White ▤, red stripe, on metal framework tower 16	Intens 108°-112°(4°). TE 2007	*
D7360-7	MīnāJabal Ālī. FL1	25 01-70 N 55 02-46 E	Fl(2)R 10s	..	..	Beacon		*
*	*	*	*	*	*	*		*
D7360-71	MīnāJabal Ālī. FL2	25 02-39 N 55 03-66 E	Fl(3)G 10s	..	..	Beacon		*
*	*	*	*	*	*	*		*
D7360-72	MīnāJabal Ālī. FL3	25 02-92 N 55 03-45 E	Fl G 5s	..	..	Beacon		*
*	*	*	*	*	*	*		*
D7360-73	MīnāJabal Ālī. FL4	25 02-15 N 55 02-20 E	Fl(4)R 10s	..	..	Beacon		*
*	*	*	*	*	*	*		*
D7360-74	MīnāJabal Ālī. FL5	25 02-09 N 55 01-78 E	Fl(2)R 5s	..	..	Beacon		*
*	*	*	*	*	*	*		*
D7360-75	MīnāJabal Ālī. FL6	25 01-83 N 55 01-61 E	Fl(5)G 10s	..	..	Beacon		*
*	*	*	*	*	*	*		*
D7675 DELETED	Remove from list							
F1057	Saint Martin's Island . N end	20 37-87 N 92 19-40 E	Fl W 30s	39	20	Red and white ▢ on framework tower	Racon	*
			*		*			
F1214	Little Andaman	10 30-80 N 92 30-20 E	Fl W 10s	50	20	White tower, black Bands 46	<i>fl 0-2</i>	*
						*		*
F1224	- Indira Point (Pygmalion Point)	6 45-30 N 93 49-36 E	Fl(2)W 20s	35	10	White round metal tower, red diagonal stripes 35	<i>fl 0-5, ec 1, fl 0-5, ec 18.</i> Racon	*
		*						*
F1377	Kuala Tanjung	3 22-35 N 99 28-13 E	Q(3)W 9s	12	12	..	<i>(fl 0-5, ec 0-5) x 2, fl 0-5, ec 6-5.</i> Racon	*
			*					*

SECTION – VIII: CORRECTION TO LIST OF RADIO SIGNALS

INP 31(1), 2005

(Last correction: Edition No. 08 dated 16 Apr 2007)

NIL

INP 31(2), 1995

(Last correction: Edition No. 12 dated 16 Jun 2007)

NIL

BA, VOLUME 3 Part 1, NP 283(1), 2006/07

(Last correction: Edition No. 15 dated 01Aug 2006)

NIL

INP 31(5), 1997

(Last correction: Edition No.08 dated 16 Apr 2007)

NIL

INP 31, VOLUME 6, 2005

(Last correction: Edition No. 10 dated 16 May 2007)

NIL

BA, VOLUME 7, 1999/00-PART 2

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

NIL

INP 31(8), 1999

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

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; incho_marinesafety@dataone.in
incho_navwarnings@dataone.in; incho_helpdesk@dataone.in
Fax No.: (0135) 2748373
Web: www.hydrobharat.nic.in

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.nic.in

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 **E Mail:** incho@dataone.in / incho_marinesafety@dataone.in
 107 A, Rajpur Road incho_navwarnings@dataone.in /
 PO Box No. 75, incho_helpdesk@dataone.in
 Dehradun- 248001 **Fax No.:** 91- 0135- 2748373
 (UTTARANCHAL), INDIA **WEB:** www.hydrobharat.nic.in

Please Note:

1. Please see Section X 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						