



INDIAN NOTICES TO MARINERS FOR 2009

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

EDITION No. 07 DATED 01 APR 2009

(CONTAINS NOTICES 135 TO 155)

REACH US 24 HOURS A DAY



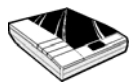
E-mail to

in的角度@dataone.in
in的角度_navwarnings@dataone.in
in的角度_marinesafety@dataone.in
in的角度_helpdesk@dataone.in



Write to

National Hydrographic Office +91- 135 - 2748373
107-A, Rajpur Road
Dehradun – 248 001
INDIA



Fax to

+91- 135 - 2748373



Contact Person

Joint Director of
Hydrography (JDOH)
Maritime Safety Services
+91- 135 - 2747360-65



visit

www.hydrobharat.nic.in

CONTENTS

<u>Section No.</u>	<u>Title</u>	<u>Page No.</u>
I.	List of Charts Affected	11
II.	Permanent Notices	12
III.	Temporary and Preliminary Notices	20
IV.	Marine Information	23
V.	Radio Navigational Warnings in force	26
VI.	Corrections to Sailing Directions	30
VII.	Corrections to List of Lights	44
VIII.	Corrections to List of Radio Signals	48
IX.	Reporting of Navigational Dangers.	50

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 above mentioned address/fax number/ E mail ID immediately on discovering new or suspected dangers to navigation, changes/defects pertaining to navigational aids, and short comings in Indian charts/publications. The Hydrographic Note [Form IH – 102] is a convenient form to notify such changes. Specimen form is attached at Section IX with this notice.

**Chief Hydrographer
to the Government of India**

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

Govt. of India Copyright

No permission is required to make copies of these Notices. However, such copies are not to be commercially sold.



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 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 IX.

Temporary and Preliminary Notices. These are indicated by (T) and (P) respectively after the Notice number and are placed in Section III . SI 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 most of the 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. 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 CHARTS AND PUBLICATIONS NOW PUBLISHED AND AVAILABLE**(a) NEW INDIAN CHART**

<i>Chart No.</i>	<i>Date of Publication</i>	<i>Title, Limits & Description</i>	<i>Scale</i>	<i>Folio</i>	<i>Price</i>
2502	28-02-2009	<p>WESTERN APPROACHES TO MAHE ISLAND</p> <p><u>Limits</u> 04° 45'.00S; 55° 08'.00E. 04° 32'.00S; 55° 28'.00E.</p>	37,500	1	Rs. 1360.00

(b) NEW EDITION INDIAN CHARTS

<i>Chart No.</i>	<i>Date of Publication</i>	<i>Title, Limits & Description</i>	<i>Scale</i>	<i>Folio</i>	<i>Price</i>
2055	31-03-2009	<p>MULDWARKA PORT</p> <p><u>Limits</u> 20° 43'.00N; 70° 38'.00E. 20° 46'.00N; 70° 40'.70E.</p> <p>MULDWARKA NORTH JETTY</p> <p><u>Limits</u> 20° 45'.50N; 70° 39'.60E. 20° 45'.80N; 70° 40'.00E.</p>	10,000 5,000	2	Rs. 1360.00

(c) INDIAN CHARTS PERMANENTLY WITHDRAWN

<i>Chart No.</i>	<i>Date of Publication</i>	<i>Title, Limits & Description</i>	<i>On Publication of New Chart / Edition</i>	<i>Date of Publication</i>
2055	31-12-2005	MULDWARKA PORT	2055 (NE)	31-03-2009

(d) FORTHCOMING CHARTS

<i>Chart No</i>	<i>Title</i>	<i>Scale</i>	<i>Remarks</i>
2051	SALAYA HARBOUR	25,000	New Chart
354 (INT 7408)	SACRAMENTO SHOAL TO KALINGAPATNAM	300,000	New Edition
2100	APPROACHES TO PORT PIPAVAV PORT PIPAVAV	50,000 10,000	New Edition
2056	JAFARABAD HARBOUR	25,000	New Chart
2503	APPROACHES TO CARGADOS CARAJUS SHOALS	75,000	New Chart

(e) **NEW INDIAN ELECTRONIC NAVIGATIONAL CHART**

<i>Sl. No.</i>	<i>Cell Name</i>	<i>Chart No.</i>	<i>Title</i>	<i>Publication Date</i>
1	IN64005N	4005	NANCOWARY HARBOUR AND APPROACHES	31-12-2007

(f) **NEW EDITION ELECTRONIC NAVIGATIONAL CHART**

<i>Sl. No.</i>	<i>Cell Name</i>	<i>Chart No.</i>	<i>Title</i>	<i>Publication Date</i>
NIL				

(g) **ENCs PERMANENTLY WITHDRAWN**

<i>Sl. No.</i>	<i>Cell Name</i>	<i>Chart No.</i>	<i>Title</i>	<i>Publication Date</i>
1	IN54005N	4005	NANCOWARY HARBOUR AND APPROACHES	30-11-2003

AVAILABILITY OF ENCs:

The complete folios of Official Indian ENCs are distributed worldwide through JEPPESEN MARINE (formerly C-MAP) and UKHO. UKHO distributes Indian ENCs through the world wide net work of their agents and distributors. Details of UKHO agents / distributors may be obtained from UKHO web site www.ukho.gov.uk Updates are also made available as per the existing policy of the distributor. Mariners and other ENC users may contact the under mentioned for further details:

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 Website: www.hydrobharat.nic.in	Director, JEPPESEN MARINE Jeppesen 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 Website: www.c-map.co.in	United Kingdom Hydrographic Office Admiralty Way, Taunton, Somerset TA1 2DN, UK Tel: +44 (0) 1823 337900 Fax: +44 (0) 1823 330561, 1823 284077 Telex: 46274 Email: helpdesk@ukho.gov.uk Web site: www.ukho.gov.uk
--	--	--

TEMPORARY AND PRELIMINARY NOTICES

In Force 01 April 2009

(Former In Force List dated 01 January 2009 is cancelled)

Cancelled Notices

Area	Notice No.
1	207/03, 398/05, 55/06, 56/06, 135/06, 227/06, 293/06, 550/06, 576/06, 108/07, 221/07, 421/07, 422/07, 470/07, 668/07, 248/08, 284/08, 333/08, 355/08, 406/08, 497/08, 499/08, 500/08, 583/08, 617/08
2	167/07, 055/08, 199/08, 217/08, 247/08, 314/08, 551/08, 581/08, 060/09, 062/09, 081/09, 096/09, 104/09, 119/09, 153/09
3	445/07, 650/07, 283/08, 407/08, 554/08, 556/08, 616/08, 641/08, 087/09, 088/09, 107/09,
4	172/04, 179/06, 144/07, 446/07, 546/07, 058/08, 250/08, 285/08, 477/08, 478/08, 584/08, 597/08, 598/08, 618/08

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

Notice	Charts Affected	Description
506/04	20 – 8004.	IRAN – Khuran (Clarence Strait) – Jetty. Buoyage. Depths. Drying height. Pilot boarding place. Lights. Moorings buoys.
445/06	20 – 21 – 286 – 291 – 2088 – 2094 – 2095 – 2096 – 7703 (INT703) – 7705(INT 705) – 8009 – 8010.	ARABIAN SEA - RED SEA - Submarine cables.
446/06	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)	ARABIAN SEA - Seeb to Mumbai (Bombay) - Submarine cable.
577/06	20.	SAUDI ARABIA - EAST COAST - - Buoyage. Restricted areas
598/06	20.	SAUDI ARABIA - EAST COAST - Al Khubar to Al Kuwayt, KUWAIT - Submarine cable
599/06	20.	BAHRAIN - Al Manama to SAUDI ARABIA, Al Khubar - Submarine cable
600/06	20 – 8004.	KUWAIT -Al Kuwayt to Bandar 'Abbas, IRAN - Submarine cable
621/07	7071 (INT 71) – 7072 (INT 72) – 7704 (INT 704).	RED SEA – Jazirat at Tair - Light.

249/08	20 – 288 – 289 – 8004.	UNITED ARAB EMIRATES - QATAR - Submarine cables.
354/08	20 – 289.	UNITED ARAB EMIRATES - Jazirat Das to Ras al Qila -- Submarine pipeline.
498/08	245 – 289 – 290.	GULF OF OMAN - United Arab Emirates - Fujairah (Fujayrah) and Khawr Fakkan – Anchorage areas. Breakwater. Buoyage. Works.
110/09	8008.	INDIAN OCEAN – Cabo Delgado to Lamu Bay – United Republic of Tanzania – Met Ocean Buoys.

2. INDIA WEST COAST - INDIAN OCEAN

330/01	2076 – 2016.	INDIA – WEST COAST – Mumbai Harbour – Jawahar Lal Nehru Port – Port Development
176/03	2076 – 2016.	INDIA – WEST COAST – Jawaharlal Nehru Port – Jetty
137/04	21– 203 – 2068 – 7705 (INT 705)	INDIA – WEST COAST – Gulf of Kachchh – Ballast Split.
102/05	2021 – 2068 – 2080	INDIA – WEST COAST – Gulf of Kachchh – Mundra Port – Work.
72/06	2003 – 2053.	INDIA –WEST COAST – Sacrifice Rock to Beypore – Sea Wall.
230/06	268 (INT 7353) – 2006 – 2007 – 2023 – 2047.	INDIA –LAKSHDWEEP ISLANDS– FAD.
256/06	21 – 22 (INT 752) – 211 – 255 (INT 7334) – 292 (INT 7021) – 293 (INT 7022) – 2016 (INT 7336) – 7705(INT 705) – 7706 (INT 706)	INDIA – WEST COAST – Inner Approaches to Mumbai.
496/06	255 (INT 7334) – 211 – 2016 (INT 7336)	INDIA – WEST COAST – Inner approaches to Mumbai – Obstruction
306/07	254(INT 7331) – 208 – 209 – 2044 – 2101 – 2019	INDIA - WEST COAST – Approaches to Magadalla -Tapi Channel – Buoys.
544/07	2016(INT 7336) - 2076	INDIA – WEST COAST – Inner approaches to Mumbai – Jawahar lal Nehru Port & Trombay – Depths.
582/07	2008.	INDIA – WEST COAST – Karwar harbour and approaches – Channel .Depth.
171/08	2040	INDIA - WEST COAST – Porbandar Anchorage – Depth.
216/08	273 – 2006	INDIA – LAKSHADWEEP – Minicoy Island – Construction work.
400/08	21 – 203(INT 7319) – 2080 – 2027.	INDIA – WEST COAST - Gulf of Kachchh – Rozi Anchorage – Wreck.
401/08	22 (INT 752) – 214 – 257 (INT 7343) – 293 (INT 7022) – 2020 – 2022 (INT 7345) – 2078 (INT 7346).	INDIA - WEST COAST – Approaches to Mormugao - Construction Work.

439/08	2080 – 2018 (INT 7321) – 2059 (INT 7322).	INDIA – WEST COAST – Kandla – Sogal channel – Buoy.Jetty
524/08	212 – 2011.	INDIA – WEST COAST – Port Dabhol – Buoys.Lights.
550/08	292(INT 7021) – 254(INT 7331) – 208 – 2039.	INDIA – WEST COAST – Gulf of Khambhat Northern Portion – Obstruction.
553/08	2004 (INT 7359).	INDIA – WEST COAST – Kochi (Cochin) Harbour - Buoys.
595/08	2008 – 2010.	INDIA – WEST COAST – Karwar Harbour and Approaches – Transit Marks. Buoy.
596/08	21– 22(INT 752) – 214 – 215– 257 – 256(INT 7340) –259(INT 7356) – 272 – 293 (INT 7022) – 7705 (INT 705).	INDIA – WEST COAST – Arabian Sea – Mooring Deployed.
639/08	21 – 292(INT 7021) – 253(INT 7328).	INDIA – WEST COAST – Veraval to Pipavav – Seismic Survey.
082/09	2016(INT 7336).	INDIA – WEST COAST – Inner Approaches to Mumbai – Obstruction.
083/09	2073.	INDIA – WEST COAST – Approaches to Kundapura (Coondapoor) – Experimental / Demonstration Cage.
084/09	2053.	INDIA – WEST COAST – Sacrifice Rock to Beypore – Breakwater.
085/09	2047.	INDIA – LAKSHADWEEP – Plans in Lakshadweep – Kalpitti to Parali Island – Agatti – Jetty.
086/09	2023.	INDIA – LAKSHADWEEP – Kavaratti Island – Jetty.
097/09	211 – 2016(INT 7336) – 2015(INT 7337) – 2076.	INDIA – WEST COAST – Port of Mumbai – Buoys.
105/09	2100.	INDIA – WEST COAST – Approaches to Port Pipavav – Port Pipavav – Dredging.
106/09	2016(INT 7336).	INDIA – WEST COAST – Inner approaches to Mumbai – Obstruction.
120/09	2011.	INDIA – WEST COAST – Jaigarh Harbour – Works.
130/09	22(INT 752) – 23 – 268 (INT 7353) – 272 – 273 – 292 (INT 7021) – 293 (INT 7022) – 7071 (INT 71) – 7072(INT 72) – 7073 (INT73) – 7705 (INT 705)	INDIAN OCEAN – INDIA - WEST COAST-Arabian Sea — Data Buoys.
132/09	21 – 33 – 271 – 292 (INT 7021)	INDIA - WEST COAST & INDIAN OCEAN - Tsunami Data Buoys.
133/09	203(INT 7319) – 2068	INDIA – WEST COAST – Gulf of Kachchh – Deep water route – Buoy.

3. INDIA EAST COAST - ANDAMAN NICOBAR, SRI LANKA, MAYANMAR

63/03	4001 – 4014 – 403.	INDIA – BAY Of BENGAL – Middle Andaman – Rangat Bay – Beacon
343/03	4032.	INDIA – NICOBAR ISLANDS – Sawai Bay and Malacca Anchorage – Breakwater, Beacon.
193/04	225 – 2064.	SRILANKA – WEST COAST – Colombo, Weligama Bay and Beruwala Point Westwards – Depths. Wreck. Rocks. Harbour limit. Port development.
389/04	4013 – 4016.	INDIA – ANDAMAN SEA – Neill Island – Jetty.
88/05	4011 – 4017.	INDIA -NICOBAR ISLANDS-Katchall Island –Approaches toEast Bay–Beacon.
135/05	4010.	INDIA – ANDAMAN SEA – Little Andaman Islands-Hut Bay-Coast line. Jetty. Light.
276/05	4012.	INDIA – ANDAMAN ISLAND – Inner Harbour – Port Blair – Beacon.
540/05	7708 (INT 708).	INDIAN OCEAN - Cocos Islands - Light-beacon.
428/06	351 – 301.	INDIA – EAST COAST – Ocean – Approaches to Hugli River – Obstruction
548/06	3031.	INDIA – EAST COAST – Krishnapatnam Anchorage – Transits mark.
106/07	358(INT 7394) – 317.	INDIA – SRILANKA – Palk Bay – Western Portion – Obstructions
219/07	4032.	INDIA – NICOBAR ISLANDS Sawai Bay & Malacca Anchorage – Transit mark – Beacon.
222/07	23 – 32(INT 754) – 33 – 226 – 264– 358 – 359 – 2064 – 7704 (INT 704).	SRILANKA - South Coast - Little Basses Reef - Light.
419/07	406 – 4010.	ANDAMAN SEA – INDIA - Little Andaman Islands – Hut Bay – Light.
586/07	356(INT 7400) – 3031.	INDIA – EAST COAST – Krishnapatnam Anchorage – Construction Work. Dredging.
109/08	301– 351 – 3011(INT 7421) – 3013 – 3006(INT 7423).	INDIA - EAST COAST- Hugli River -Haldia to Kukrahatti Reach – Depths.
200/08	32 (INT 754) –33 – 357 (INT 7397) – 3007 – 3033.	INDIA – EAST COAST – Chemplast Karaikal Terminal – Construction Work. Dredging.
201/08	41 – 473(INT 7031) – 405 – 4030.	INDIA – ANDAMAN SEA – Manners Strait and Duncan Passage – Wreck.
220/08	31 – 351 – 3017.	INDIA – EAST – COAST – Approaches to Dhamra River – Construction Work.
246/08	33 – 41 – 471 – 472(INT 7032) – 409 – 4035 – 4039.	ANDAMAN SEA – INDIA Nicobar Island – Campbell Bay – Jetty Construction.
331/08	23 – 32 – 225 – 263 – 264 – 2063.	SRILANKA – WEST COAST – Approaches to Colombo – Construction Work.

332/08	23 – 31 – 33 – 7702 (INT 702) – 7706 (INT 706) – 7707 (INT 707).	INDIAN OCEAN - Data buoys.
373/08	3003	INDIA – EAST COAST – Pondicherry Anchorage – Light.
404/08	33 – 41 – 473(INT 7031) – 405.	INDIA – ANDAMAN ISLANDS – Port Blair to Little Andaman I – FAD.
555/08	3002 (INT 7410) – 3012(INT 7411).	INDIA – EAST COAST – Approaches to Vishakhapatnam - Obstruction.
582/08	3028	INDIA – EAST COAST – Ports of Ennore – Jetty. Construction Work.
614/08	31 – 352(INT 7416) – 353 (INT 7413) – 7706(INT 706).	INDIA – EAST COAST– Bay of Bengal - Seismic Survey.
640/08	3029.	INDIA – EAST COAST – Approaches to Tirukkadaiyur Port – Buoy.
061/09	31 – 32(INT 754) – 301 – 351.	INDIA – EAST COAST – Bay of Bengal – Approaches to Sand heads - Seismic Survey.
098/09	31 – 32(INT 754) – 354 (INT 7400) – 355 (INT 7405).	INDIA – EAST COAST – Ramaypatnam to Sacramento Shoal – Seismic Survey.
108/09	32(INT 754) – 33 – 357(INT 7397).	INDIA – EAST COAST – Point Calimere to Chennai (Madras) – Seismic Survey.
109/09	31 – 32(INT 754) – 356 (INT 7400) – 313.	INDIA – EAST COAST – Mamallapuram (Mahabalipuram) to Point Pudi –Seismic Survey.
121/09	357(INT 7397) – 3025 –	INDIA – EAST COAST – Approaches to Tirukkadaiyur Port – Tirukkadaiyur Port – Pipe laying.
122/09	3010.	INDIA – EAST COAST – Approaches to Paradip – Paradip Port – Dumping Ground.
131/09	31 – 32 (INT 754) – 33 – 41 – 356 (INT 7400) – 391 – 407 – 472(INT 7032) – 473 (INT 7031)	INDIA-EAST COAST – Bay of Bengal - Andaman Sea – Data Buoys.
134/09	31 – 32 (INT 752) – 354 (INT 7408)	INDIA – EAST COAST – Sacramento Shoal to Kalingapatnam – Unexploded Charges.
154/09	4019	BURMA - Rangoon river - Channel. Depths. Recommended route. Buoyage. Wrecks. Port Developments. Coastline. Drying contour. Bridge.
155/09	225 – 2063.	SRI LANKA - West Coast - Colombo Harbour and Approaches – Depths.

4. MALACCA STRAIT, SINGAPORE STRAIT AND SUMATERA

383/03	33 – 41	INDONESIA –Sumatera – North and Northwest Coasts – Restricted area.
223/07	4026 – 4027	MALAYSIA - Peninsular Malaysia, West Coast - Pinang Harbour - Coastline. Works. Lights. Beacons. Depths. Drying patch. Wrecks. Obstructions. Dredged areas. Marine farms.
377/07	7508(INT 508)	INDONESIA - Sumatera - Pulau Belitung West Coast - Tanjungpandan to Jawa North Coast - Pakis - Submarine cable.

SECTION – I**List of charts affected by****The Notices 135 to 155 contained in this Edition**

CHART NUMBER	FOLIO NO.	NOTICE NO.
20	1	150
21	2	135
31	5	144, 145,146 , 147
32(INT 754)	5	144, 146, 147
41	6	149
202	2	138
204	2	139
215	3	141
216	3	141, 142, 143
217	3	143
225	4	155(P)
245	1	150
252(INT 7325)	2	138, 139
257(INT 7343)	3	141, 142
290	1	150
291	2	138
292(INT 7021)	2	139
354(INT 7408)	5	147
355(INT 7405)	5	146
356(INT 7400)	5	144
391	5	144, 145, 146, 147
434	7	152
435	7	152
2013	2	137
2021	2	136
2024	3	141, 142
2039	2	140
2063	4	155(P)
2068	2	136
2073	3	143
2079	2	136
2080	2	136
2082	2	140
2083	2	136
2089	1	150
2090	1	150
3008	5	146
3009	5	147
3026	5	146
4018	6	148
4019	7	151, 154(T)


SECTION – II: PERMANENT NOTICES
INDIAN HYDROGRAPHIC CHARTS AND PUBLICATIONS

*** 135/(07/09) INDIA -WEST COAST – Gulf of Kachchh - Approaches to Mundra Port – Light.**

Source: NHO Dehradun.

(HJ/1131/20)

Chart 21 [previous update 035/09]

Insert		Racon(C), at light	(a)	22° 43'.9N., 69° 42'.4E.
Amend		Range of light to,19M	(a)	above

*** 136/(07/09) INDIA – WEST COAST – Gulf of Kachchh – Mundra Port – Anchorage area.**

Source: Gujarat Maritime Board

(HJ/1131/20)

Chart 2068 [previous update 090/09]

Insert	anchorage area,  , Joining;	22° 39'.11N., 69° 44'.70E. (E Border)
		22° 37'.96N., 69° 42'.84E.
		22° 40'.99N., 69° 42'.86E.
		22° 40'.99N., 69° 44'.70E. (E Border)





Delete	circular limit of anchorage area, radius 1.2 NM,  , centred on:	22° 41'.00N., 69° 43'.45E.
--------	---	----------------------------


Chart 2079 [previous update 099/09] (WGS 84 Datum)

Insert	anchorage area,  , Joining;	22° 41'.03N., 69° 42'.85E.
		22° 41'.02N., 69° 47'.12E.
		22° 40'.63N., 69° 47'.12E.
		22° 38'.00N., 69° 42'.83E.

Delete	circular limit of anchorage area, radius 1.2 NM,  , centred on:	22° 41'.04N., 69° 43'.46E.
		22° 40'.95N., 69° 43'.50E.

* 136/(07/09) INDIA – WEST COAST – Gulf of Kachchh – Mundra Port – Anchorage area.(Continued)

Chart 2080 [previous update 124/09]

Insert anchorage area, , Joining; 22° 40'.99N., 69° 42'.86E.
 22° 40'.98N., 69° 47'.13E.
 22° 40'.59N., 69° 47'.13E.
 22° 37'.96N., 69° 42'.84E.



Delete circular limit of anchorage area, radius 1.2 NM,
, centred on: 22° 41'.00N., 69° 43'.45E.

Chart 2083 [previous update 124/09] (WGS 84 Datum)

Insert anchorage area, , Joining; 22° 41'.02N., 69° 44'.00E.(W Border)
 22° 41'.02N., 69° 47'.12E.
 22° 40'.63N., 69° 47'.12E.
 22° 38'.70N., 69° 44'.00E.(W Border)


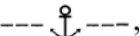


Delete Semicircular limit of anchorage area, ,
 Joining 22° 42'.11N., 69° 44'.00E.(W Border)
 22° 39'.94N., 69° 44'.00E.(W Border)

Chart 2021 [previous update 089/09] (WGS 84 Datum)

Insert anchorage area, , Joining; 22° 40'.30N., 69° 42'.85E.(S Border)
 22° 41'.03N., 69° 42'.85E.
 22° 41'.03N., 69° 43'.70E.(E Border)

Delete Semicircular limit of anchorage area, radius 1.2 NM,
, centred on: 22° 41'.04N., 69° 43'.46E.
 22° 40'.95N., 69° 43'.50E.

* 137/(07/09) INDIA -WEST COAST – Gulf of Kachchh – Port of Okha - Buoy.

Source: Okha port

(HJ/1131/20)

Chart 2013 [previous update NE 31 Dec 08]

Insert  22° 28'.236N., 69° 05'.212E.

* **138/(07/09) INDIA -WEST COAST – Gulf of Kachchh – Deep Water Route - Buoy.**

Source: NHO Dehradun

(HJ/1131/21)


Chart 291 [previous update 599/08]

Amend Mithapur light buoy to; Fl.G.5s 22° 24'.7N., 68° 51'.9E.

Chart 252(INT 7325) [previous update 111/09]

Amend light buoy to; Fl.G.5s 22° 24'.7N., 68° 51'.9E.

Chart 202 [previous update 599/08]

Insert  Fl.G.5s(Mithapur) 22° 24'.72N., 68° 51'.85E.

Delete  Fl.5s(Mithapur) 22° 24'.70N., 68° 51'.80E.

* **139/(07/09) INDIA – WEST COAST – Dwarka to Navibandar – Light.**

Indian List of Lights Vol F & K- 2003; F:- 0398

Source: Hydrographic Note INS Sutlej

(HJ/1131/10)

Chart 292(INT 7021) [previous update 035/09]

Insert  Fl(3)18M 21° 57'.02N., 69° 14'.11E.

Delete  Fl(3)18M 21° 56'.50N., 69° 13'.90E.

Chart 252(INT 7325) [previous update 138/09]

Insert  Fl(3)10s55m18M 21° 57'.02N., 69° 14'.11E.

Delete  Fl(3)10s55m18M 21° 56'.50N., 69° 13'.90E.

Chart 204 [previous update 111/09]

Insert  Fl(3)10s55m18M 21° 57'.02N., 69° 14'.11E.

Delete  Fl(3)10s55m18M 21° 56'.50N., 69° 13'.90E.

* **140/(07/09) INDIA -WEST COAST – Gulf of Khambat – Dahej Harbour - Legend.**

Source: Petronet LNG

(HJ/1130/17)

Chart 2039 [previous update 537/05]

Insert legend, 'Petronet LNG', along Pier centered on; 21° 40'.50N., 72° 31'.30E.

Chart 2082 [previous update NC 30 Sep 05]

Insert legend, 'Petronet LNG', along Pier centered on; 21° 40'.50N., 72° 31'.60E.

Chart 2082(Plan Dahej Harbour) [previous update NC 30 Sep 05]

Insert legend, 'Petronet LNG', along Pier centered on; 21° 40'.50N., 72° 31'.60E.

* 141/(07/09) INDIA – WEST COAST – Tadri Anchorage – Light.

Indian List of Lights Vol F & K 2003; F:- 0638

Source: DLL Mumbai

(HJ/1030/45)

Chart 257(INT 7343) [previous update 341/08]

Substitute ★ Fl(3)20s38m18M for ⊙ (disused) Lt.House 14° 30'.80N., 74° 20'.50E.

Chart 215 [previous update 100/09]

Substitute ★ Fl(3)20s38m18M for ⊙ (disused) Lt.House 14° 30'.80N., 74° 20'.50E.

Chart 216 [previous update 341/08]

Substitute ★ Fl(3)20s38m18M for ⊙ (disused) Lt.House 14° 30'.80N., 74° 20'.50E.

Chart 2024 [previous update 118/08]

Substitute ★ Fl(3)20s38m18M for ⊙ (disused) Lt.House 14° 30'.80N., 74° 20'.50E.

* 142/(07/09) INDIA – WEST COAST – Honavar Anchorage – Light.

Indian List of Lights Vol F & K 2003; F:- 0644

Source: DLL Mumbai

(HJ/1030/45)

Chart 257(INT 7343) [previous update 141/09]

Insert ★ Fl.15s41m18M 14° 16'.58N., 74° 26'.61E.

Delete ★ Fl.1.5s32m8M (Sep to Jun) 14° 16'.50N., 74° 26'.60E.

Chart 216 [previous update 141/09]

Insert ★ Fl.15s41m18M 14° 16'.58N., 74° 26'.61E.

Delete ★ Fl.1.5s32m8M (Sep to Jun) 14° 16'.48N., 74° 26'.51E.

Chart 2024 [previous update 141/09]

Substitute ★ Fl.15s41m18M for ★ Fl1.5s32m8M SS (Storm) (Sep to Jun) 14° 16'.58N., 74° 26'.61E.

Delete ⊙ (disused) Lt.House 14° 16'.45N., 74° 26'.54E.

*** 143/(07/09) INDIA – WEST COAST – Approaches to Kundapura (Coondapoor) – Light.**

Indian List of Lights Vol F & K 2003; F:- 0652

Source: DLL Mumbai

(HJ/1030/35)

Chart 216 [previous update 142/09]

Substitute	light to; Fl(2)10s35m18M	For	F.15m4M (Sep to May)	13° 37'.39N., 74° 40'.23E.
------------	--------------------------	-----	-------------------------	----------------------------

Chart 217 [previous update 504/08]

Substitute	light to; Fl(2)10s35m18M	For	F.15m4M (Sep to May)	13° 37'.39N., 74° 40'.23E.
------------	--------------------------	-----	-------------------------	----------------------------

Chart 2073 [previous update 341/08]

Substitute	light to; Fl(2)10s35m18M	For	F.15m4M (Sep to May)	13° 37'.45N., 74° 40'.18E.
------------	--------------------------	-----	-------------------------	----------------------------

*** 144/(07/09) INDIA -EAST COAST – Chennai (Madras) to Ramayapatnam – Isakapalle - Light.**

Indian List of Lights Vol F & K 2003; F:- 0952.3

Source: DLL Vishakhapatnam

(HJ/1029/49)

Chart 31 [previous update 304/08]

Insert	 Fl(2)15M	14° 44'.0N., 80° 06'.0E.
--------	--	--------------------------

Chart 32(INT 754) [previous update 052/09]

Insert	 Fl(2)15M	14° 44'.0N., 80° 06'.0E.
--------	--	--------------------------

Chart 391 [previous update 102/09]

Insert	 Fl(2)10s34m15M	14° 44'.08N., 80° 05'.91E.
--------	--	----------------------------

Chart 356(INT 7400) [previous update 129/09]

Insert	 Fl(2)10s34m15M	14° 44'.00N., 80° 06'.00E.
--------	--	----------------------------

Cancel former INM 283(P)/08.

* 145/(07/09) INDIA -EAST COAST – Chennai to Kalingapatnam - Nizampatnam Anchorage – Lights.

Indian List of Lights Vol F & K 2003; F:- 0952.95

Source: DLL Vishakhapatnam

(HJ/1029/50)

Chart 31 [previous update 144/09]

Delete  Fl.R5s8M 15° 52'.7N., 80° 38'.5E.

Chart 391 [previous update 144/09]

Amend light to; Fl.5s36m23M 15° 53'.02N., 80° 38'.30E.

* 146/(07/09) INDIA -EAST COAST – Chennai to Kalingapatnam - Vadarevu Anchorage – Light.

Indian List of Lights Vol F & K 2003; F:- 0952.9

Source: DLL Vishakhapatnam

(HJ/1029/50)

Chart 31 [previous update 145/09]

Amend Light to Fl(2)25M 15° 47'.7N., 80° 24'.7E.

Chart 32 (INT 754) [previous update 144/09]

Amend Light to Fl(2)25M 15° 47'.7N., 80° 24'.7E.

Chart 391 [previous update 145/09]

Amend light to; Fl(2)15s34m25M 15° 47'.73N., 80° 24'.61E.

Chart 355(INT 7405) [previous update 102/09]

Amend light to; Fl(2)15s34m25M 15° 47'.66N., 80° 24'.71E.

Chart 3026 [previous update 556/07]

Amend light to; Fl(2)15s34m25M 15° 47'.66N., 80° 24'.71E.

Chart 3008 (Plan – Vadarevu Anchorage)[previous update NE 31 Oct 07]

Insert  Fl(2)15s34m25M 15° 47'.73N., 80° 24'.61E.

*** 147/(07/09) INDIA -EAST COAST – Chennai to Kalingapatnam - Kakinada Port – Light.**

Indian List of Lights Vol F & K 2003; F:- 0964

Source: DLL Vishakhapatnam

(HJ/1029/77)

Chart 31 [previous update 146/09]

Amend Range of light to, 22M 17° 00'.8N., 82° 17'.1E.

Chart 32 (INT 754) [previous update 146/09]

Amend Range of light to, 22M 17° 00'.8N., 82° 17'.1E.

Chart 391 [previous update 146/09]

Substitute light to; Fl(3)15s54m22M for Fl(3)15s28m20M
SS(Storm) 17° 00'.9N., 82° 17'.0E.

Chart 354(INT 7408) [previous update 102/09]

Amend Range of light to, 22M 17° 00'.82N., 82° 17'.06E.

Chart 3009 [previous update 036/08]

Amend Range of light to, 22M 17° 00'.82N., 82° 17'.06E.

Chart 3009 (Plan – Kakinada Anchorage)[previous update 036/08]

Amend Range of light to, 22M 17° 00'.82N., 82° 17'.06E.

*** 148/(07/09) INDIA –ANDAMAN SEA – Andaman Islands - Port Anson -- Depth.**

Source: ROS M(N) 129(I)

(HJ/1028/27)

Chart 4018 [previous update NE 15 Sep 08]

Insert Depth 31 12° 17.388N., 92° 44'.846E.

*** 149/(07/09) INDIA –ANDAMAN ISLANDS – Port Blair -- Light.**

Source: NHO Dehradun.

(HJ/1028/17)

Chart 41 [previous update 054/09]

Amend Light to; Fl(2)20M (a) 11° 42'.2N., 92° 45'.4E.

Substitute Racon (K) for Racon (G), at light (a) above

150/(07/09) OMAN - Said bin Sultan Naval Base - Light. Radar beacon.

Indian List of Light Vol D & E 2003; D:- 7324.4

ILRS Vol 2 , 2007:- 76440

Source: BA Notice 1145/09

(HJ/1132/32)

Chart 20 [previous update 118/09] (WGS 84 Datum)

Amend light to, Iso.7M (a) 23° 49′.8N., 57° 32′.0E.

Delete radar beacon, Racon (N)(3cm), at light (a) above

Chart 245 [previous update 487/08] (WGS 84 Datum)

Amend light to, Iso.4s7M (a) 23° 49′.8N., 57° 32′.1E.

Delete radar beacon, Racon (N)(3cm), at light (b) above

Chart 290 [previous update 510/08] (WGS 84 Datum)

Amend light to, Iso.7M (a) 23° 49′.8N., 57° 32′.0E.

Delete radar beacon, Racon (N), at light (a) above

Chart 2089 [previous update 508/08] (WGS 84 Datum)

Amend light to, Iso.4s10m7M (a) 23° 49′.8N., 57° 32′.1E.

Delete radar beacon, Racon (N)(3cm), at light (a) above

Chart 2090 [previous update 231/08] (WGS 84 Datum)

Amend light to, Iso.4s10m7M (a) 23° 49′.85N., 57° 32′.07E.

Delete radar beacon, Racon (N)(3cm), at light (a) above

Chart 2090(Plan) [previous update 231/08] (WGS 84 Datum)

Amend light to, Iso.4s10m7M (a) 23° 49′.85N., 57° 32′.07E.

Delete radar beacon, Racon (N)(3cm), at light (a) above

151/(07/09) BURMA - Rangoon river - Western Channel - Legend.

Source: BA Notice 1264/09

(HJ/1028/63)

Chart 4019 [previous update 635/07]Amend legend to, *Channel Depths* (see INM 154(P)/09), centred on: 16° 22′.6N., 96° 20′.7E.**152/(07/09) THAILAND - West Coast - Ko Tarutao Eastwards and Pulau Langkawi Northwards - Reported anchorages.**

Source: BA Notice 1185/09

(HJ/928/60)

Chart 434 [previous update 426/08]Delete  6° 32′.0N., 99° 42′.8E.

6° 28′.2N., 99° 48′.3E.

Chart 435 [previous update 071/09]Delete  6° 32′.0N., 99° 42′.8E.

6° 28′.2N., 99° 48′.3E.

SECTION – III: TEMPORARY AND PRELIMINARY NOTICES

***153(T)/(07/09) INDIA – WEST COAST – Gulf of Khambat – Narmada Channel – Buoys.**

Source: DLL Jamnagar.

(HJ/1130/08)

1. Fairway Buoy No. 1 at position 20°35'.55N 071°56'.33E, Fl.10s has been relaid and lit.
2. Buoy No. 3 at position 20°40'.58N 071°59'.06E, Fl.5s has been relaid and lit.
3. ***Former INM 551(T)/08 is cancelled.***

154(T)/(07/09) BURMA - Rangoon river - Channel. Depths. Recommended route. Buoyage. Wrecks. Port Developments. Coastline. Drying contour. Bridge.

Source: BA Notice 1263(P)/09

(HJ/1028/63)

1. The Western Channel has moved up to 1 mile westwards from its charted position. Numerous depths less than charted now exist in this area. The most significant are as follows :

1 ₅ m	16° 22'·65N., 96° 21'·13E.
0 ₂ m	16° 23'·14N., 96° 21'·42E.
0 ₂ m	16° 23'·86N., 96° 21'·61E.
1 ₇ m	16° 23'·90N., 96° 21'·15E.
0 ₄ m	16° 24'·02N., 96° 21'·81E.
2 ₅ m	16° 24'·10N., 96° 21'·41E.
2 ₅ m	16° 24'·49N., 96° 21'·53E.
4 ₃ m	16° 24'·73N., 96° 21'·54E.

2. The recommended route in the Western Channel joins the following positions:

16° 20'·00N., 96° 18'·61E.
 16° 24'·56N., 96° 20'·34E.
 16° 27'·20N., 96° 20'·87E.

The least depth along this route is 47m in position 16° 28'·81N., 96° 20'·84E. The channel between 16° 24'·0N. and 16° 26'·8N. is marked by red and green light-buoys.

3. Depths less than charted exist throughout Rangoon River. The most significant are as follows:

1 ₄ m	16° 46'·55N., 96° 12'·97E.
7 ₈ m	16° 43'·97N., 96° 13'·52E.
7 ₃ m	16° 42'·98N., 96° 13'·65E.
8 ₂ m	16° 42'·68N., 96° 13'·59E.
7 ₄ m	16° 42'·30N., 96° 13'·52E.
4 ₃ m	16° 40'·59N., 96° 14'·07E.

154(T)/(07/09) BURMA - Rangoon River - Channel. Depths. Recommended route. Buoyage. Wrecks. Port Developments. Coastline. Drying contour. Bridge.(Continued)

1 ₂ m (ED)	16° 40'·40N., 96° 14'·33E.
6 ₄ m	16° 40'·15N., 96° 14'·60E.
4 ₆ m	16° 39'·70N., 96° 14'·79E.
7 m	16° 39'·65N., 96° 15'·09E.
5 m	16° 39'·59N., 96° 14'·66E.
4 ₉ m	16° 39'·56N., 96° 14'·75E.
12 ₈ m	16° 37'·96N., 96° 15'·72E.
15 ₂ m	16° 37'·32N., 96° 15'·59E.
10 ₇ m	16° 36'·33N., 96° 15'·33E.
6 ₄ m	16° 35'·99N., 96° 15'·44E.
4 ₆ m	16° 35'·28N., 96° 15'·21E.
0 ₉ m	16° 35'·28N., 96° 15'·70E.
3 ₂ m	16° 32'·36N., 96° 15'·85E.
3 ₄ m	16° 28'·85N., 96° 18'·49E.

4. Wrecks are reported to exist in the following positions:

*16° 47'·79N., 96° 07'·38E.

*16° 45'·47N., 96° 10'·31E.

16° 40'·12N., 96° 14'·42E.

5. Myanmar International Terminal Thilawa (MITT) has been developed on the eastern bank of the Rangoon River near Thilawa (16° 39'·58N., 96° 15'·85E.). The new MITT wharf has been constructed between positions 16° 40'·03N., 96° 14'·95E. and 16° 39'·55N., 96° 15'·40E.

6. The East bank of the Pegu River (16° 46'·30N., 96° 13'·70E.) has extended about 4 cables seawards from its charted position.

7. A new wharf for container ships has been constructed between positions 16° 46'·37N., 96° 07'·90E. and 16° 46'·33N., 96° 08'·06E.

8. The bridge under construction in position 16° 46'·55N., 96° 11'·14E. is now complete.

9. The coastline between Tazaung (16° 20'·20N., 96° 10'·20E.) and Elephant Point (16° 27'·90N., 96° 19'·40E.) has extended up to one mile seawards.

10. A new island has been formed on Middle Bank. It extends from position 16° 31'·60N., 96° 17'·10E. to position 16° 33'·10N., 96° 16'·10E. and is about six cables wide.

11. North East Middle Bank (16° 30'·40N., 96° 20'·00E.) is extending south-eastwards.

12. Mariners are advised to navigate with caution and consult the local authorities for the latest information.

* Indicates new or revised entry

(All positions are referred to Indian Datum)

14. *Former Notice 650(P)/07 is cancelled.*

Chart affected -4019

155(P)/(07/09) SRI LANKA - West Coast - Colombo Harbour and Approaches – Depths.

Source: BA Notice 3317(P)/08

(HJ/930/70)

1. Numerous depths less than charted exist in Colombo Harbour and its approaches. The most significant are as follows (positions are referred to WGS84 Datum):

19 ₄ m	7° 02′.27N., 79° 46′.02E.
12 ₂ m	7° 02′.21N., 79° 49′.25E.
13 ₁ m	7° 01′.38N., 79° 48′.44E.
12 ₃ m	7° 01′.05N., 79° 49′.31E.
28 ₈ m	7° 00′.89N., 79° 42′.17E.
13 ₈ m	7° 00′.84N., 79° 48′.23E.
24 ₆ m	7° 00′.17N., 79° 45′.17E.
6 ₃ m	6° 59′.91N., 79° 50′.20E.
27 ₄ m	6° 59′.42N., 79° 43′.09E.
25 ₈ m	6° 59′.29N., 79° 45′.54E.
28 ₇ m	6° 58′.98N., 79° 43′.13E.
28 ₈ m	6° 58′.44N., 79° 43′.30E.
15 ₈ m	6° 57′.82N., 79° 48′.79E.
27 ₆ m	6° 57′.80N., 79° 43′.74E.
25 ₇ m	6° 57′.51N., 79° 45′.68E.
15 ₇ m	6° 57′.27N., 79° 48′.72E.
26 ₃ m	6° 56′.55N., 79° 44′.81E.
24 ₂ m	6° 56′.05N., 79° 45′.31E.
21 ₉ m	6° 55′.51N., 79° 45′.66E.
9 ₇ m	6° 54′.96N., 79° 50′.23E.
22 ₈ m	6° 54′.64N., 79° 46′.13E.
23 ₇ m	6° 54′.01N., 79° 46′.60E.
7 ₄ m	6° 53′.23N., 79° 50′.79E.
21 ₁ m	6° 52′.78N., 79° 47′.35E.
26 ₄ m	6° 52′.49N., 79° 42′.70E.

2. *Former Notice 407(P)/08 is cancelled.*

Charts Affected – 225 – 2063.

SECTION – IV: MARINE INFORMATION

MUMBAI NAVTEX COAST STATION

MSI Promulgation by Mumbai NAVTEX Coast Station position 19° 05'00 N, 072° 50'00 E is closed for maintenance.

(Source - NAVAREA VIII Warning 305/08)

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:-

<p>*JEPPESEN MARINE Jeppesen 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</p>	<p>*JEPPESEN MARINE Jeppesen Norway AS P.O. 212, N-4379, Egersund, Norway Ph: 0047 51 464700 Fax: 0047 51 464701 Email: info@c-map.no Site: www.c-map.no</p>	<p>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</p>
<p>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</p>	<p>Mari-Sys Pte Ltd. 20 Ayer Rajah Crescent, 08-21, SE 139964, Republic of Singapore Ph: +65 6776 1898 Email: info@mari-sys.com</p>	<p>Bogerd Martin NV, Oude Leeuwenrui 37 2000 Antwerp, Belgium Ph: +32 (3) 2134170 Fax: +32 (3) 2326167 Email: sales@martin.be Site: www.martin.be</p>
<p>Bogerd Martin Tianjin(China Branch) 2-B101 FTZ Hi-Tech Development Centre 131 Haibin 9 Road 300461 Tianjin China Ph: +86 22 257 62 721 Fax: +86 22 257 62 722 Email: charts-tj@martincn.com</p>	<p>C-Map Holland Paleiskade100 PO Box 7 1781 AR Den Helder, Holland Ph: +31 223 616 700 E Mail: CorMallie cor@chartworx.nl</p>	
<p>* Indicates C Map Norway AS has changed name to Jeppesen Marine Norway AS. Indicates C Map India has changed name to Jeppesen India.</p>		

CHANGE OF ADDRESS

Address of Chart Agent M/s Bogerd Martin (India) Pvt Ltd is now changed to **GLOBAL CHARTS AND NAVAIDS PVT. LTD.** New Details is as follows:

M/s GLOBAL CHARTS AND NAVAIDS PVT. LTD.
 1-A, GOA MANSION, GROUND FLOOR
 58, DR. SUNDERLAL BAHL PATH,
 NEAR GPO FORT,
 MUMBAI-400 001
 TEL: +91-22-22626318, 22626380, FAX: 91-22-22621488
 Email: sales@globalcharts.in

TSUNAMI NOTICE

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.

SHIP REPORTING SYSTEM (INDSAR)

1. In compliance to the provisions of international convention of Maritime Search and Rescue, 1979 (SAR convention 1979), and to provide/coordinate effective search and rescue operation in a possible event of unfortunate Marine causality the Indian Coast Guard brought in to operations the ship position reporting system w.e.f. 01 feb 2003 under the name “Indian Ship Reporting System” (INDSAR). The INDSAR is an advanced computerized system designed to contribute to safety of life at sea and is operated and maintained by the Indian Coast Guard through Maritime Rescue Coordinate centre in Mumbai. **All vessels transiting in the Indian Search and Rescue Region are requested to follow the guide lines as promulgated in Indian Notices to mariners “Special Edition to Notices to Mariners Notice no. 8 (Para 21 through 51)” for prompt action.**

2. INDSAR is a mandatory reporting by all Indian registered ships of 100 GRT or more including sailing and fishing vessels engaged in international and domestic coastal routes. The Indian Govt. encourages foreign ships of 100 GRT and above to participate in the INDSAR voluntarily for effective SAR co ordination and safety of life at sea. However position reporting is mandatory for all the vessels carrying dangerous goods, disabled vessels/ vessels of more than 20 years and those which require assistance due to urgency/distress.

3. With a view to encourage position reporting by merchant vessels transiting in ISRR to the Indian Ship Reporting System (INDSAR), INMARSAT – C Special access Toll free 43 code through LES PUNE is activated.

4. Procedure to send INDSAR ship report through INMARSAT – C Toll free Special Access code – 43 is as follows:

(a) **Header Part**

- (a.i) Enter the header in following format in your message
- (a.ii) m:indsar?vsnl.net
- (a.iii) Where m stands for “Mail”
- (a.iv) Always enter “:” after the service category m
- (a.v) Kindly see that “@” sign is entered as “?”
- (a.vi) Kindly see the following example where indsar@vsnl.net is entered as:
m:indsar?vsnl.net

(b) Message Part

(b.i) After header is finished type “BT” (Begin text) and then press enter in next line start typing your text messages

(b.ii) Then dial two digit codes “43” and sent the message. Transmit the message by selecting the LES ID 306 and special Access code “43” in the transmit menu with 7 bit format (for INDSAR toll free 43 special Access Code please use LES ID 306)

5. The complete message

The complete message looks like as shown below

M:indsar?vsnl.net
 BT
 (.....your message.....

)

6. The above INDSAR position report can also be send the following mode:

E mail : indsar@vsnl.net, icgmrcc_mumbai@mtnl.net.in
 Telefax : 0091 – 22- 24316558
 INMARSAT – C : 441907210

For any Technical Support for toll free 43 Special Access code Contact details:

Pune LES
 Tata Communication Limited
 Alandi Road, Dighi,
 Pune – 411 015
 Maharashtra - India

Telephone: 020 66153308/65343751
 Fax: 020 66153342
 E mail: puneles@tatacommunications.com

**ANTIPIRACY MEASURES BY SHIPS IN
 INDIAN SEARCH AND RESCUE AND RESCUE REGION**

1. Masters of ships are advised to immediately report any incident of piracy /armed robbery/petty theft or unauthorised boarding whilst in the Indian Search and Rescue Region to the nearest Maritime Rescue Coordination Centre of the Indian Coast Guard/ nearest Port authority.
2. The contact details of the MRCCs/MRSCs are available in following publications:
 - (i) Indian Special Edition 2008 Notice No. 7 page no. 48 , para 76
 - (ii) List of Radio Signals Volume I, INP 31(1), 2005, Page No. 29 to 35.

SECTION – V: RADIO NAVIGATIONAL WARNINGS IN FORCE

1. For details of NAVAREA limits and organization/ coordination, please refer to Notice No. 12 of the Special edition of Indian Notice to Mariners – 2008.
2. **NAVAREA Warnings in force:** - The serial numbers of all the NAVAREA warnings in force as on 30 Mar 09, 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	064	2007 Series: 019 050 247 293. 2008 Series: 341 377 387 . 2009 Series: 033 034 039 050 051 052 055 057 064.
II	E. Atlantic	070	2009 Series: 007 017 021 030 058 060 068 069 070.
III	Mediterranean	140	2008 Series: 412 512. 2009 Series: 051 069 071 080 091 093 094 095 100 101 109 115 116 117 118 119 120 125 129 130 135 137 140.
IV	N.W. Atlantic	104	2009 Series: Nil
V	W. Atlantic	637	2007 Series: 1078. 2009 Series: Nil.
VI	S.W. Atlantic	102	2009 Series: Nil.
VII	S.E. Atlantic	068	2009 Series: 028 035 040 041 051 054 055 057 059
VIII	Indian Ocean	159	2009 Series: - 099 120 121 122 128 133 136 140 143 145 151 152 153 154 155 158

3. NAVAREA Warnings issued during the period from 14 Mar 09 to 30 Mar 09 (both dates inclusive) are as tabulated below:-

137.	Cancelled.
138.	Cancelled.
139.	Cancelled.
140.	Refer NAVAREA VIII message 122 of 2009. Cancel NAVAREA VIII message 130 of 2009. India East Coast – Bay of Bengal. Charts 31 32 355 INT 706. Rig Deepwater Frontier moved to new position 16-32.45 N., 082-31.75 E. 2. Wide berth requested.

141.	Cancelled.																														
142.	Cancelled.																														
143.	<p>Cancel NAVAREA Eight message 116 of 2009. Bay of Bengal – Southern Portion. Charts 33 INT 706. 3D Seismic survey in progress by Osprey Explorer till 31 Mar 2009 in area bounded by</p> <table> <tr> <td>(a)</td> <td>14-30.00N</td> <td>081-15.00E</td> <td>(b)</td> <td>13-30.00N</td> <td>082-00.00E</td> </tr> <tr> <td>(c)</td> <td>13-30.00N</td> <td>083-40.00E</td> <td>(d)</td> <td>13-00.00N</td> <td>083-40.00E</td> </tr> <tr> <td>(e)</td> <td>12-15.00N</td> <td>083-30.00E</td> <td>(f)</td> <td>12-00.00N</td> <td>083-30.00E</td> </tr> <tr> <td>(g)</td> <td>11-30.00N</td> <td>083-15.00E</td> <td>(h)</td> <td>11-15.00N</td> <td>082-15.00E</td> </tr> <tr> <td>(j)</td> <td>11-10.00N</td> <td>081-45.00E</td> <td>(k)</td> <td>11-00.00N</td> <td>081-15.00E</td> </tr> </table> <p>2. Vessel is towing a single streamer of 8500 meters length attached to a yellow colored buoy with white flashing light.</p> <p>3. All vessels operating in vicinity are to maintain a clearance of 06 NM and exercise caution.</p> <p>4. Cancel this message on 01 Apr 2009.</p>	(a)	14-30.00N	081-15.00E	(b)	13-30.00N	082-00.00E	(c)	13-30.00N	083-40.00E	(d)	13-00.00N	083-40.00E	(e)	12-15.00N	083-30.00E	(f)	12-00.00N	083-30.00E	(g)	11-30.00N	083-15.00E	(h)	11-15.00N	082-15.00E	(j)	11-10.00N	081-45.00E	(k)	11-00.00N	081-15.00E
(a)	14-30.00N	081-15.00E	(b)	13-30.00N	082-00.00E																										
(c)	13-30.00N	083-40.00E	(d)	13-00.00N	083-40.00E																										
(e)	12-15.00N	083-30.00E	(f)	12-00.00N	083-30.00E																										
(g)	11-30.00N	083-15.00E	(h)	11-15.00N	082-15.00E																										
(j)	11-10.00N	081-45.00E	(k)	11-00.00N	081-15.00E																										
144.	Cancelled.																														
145.	<p>India West Coast - Kochi. Charts 22 32 220 259 260 2004 2029 2045 INT 706. Firing exercise by Naval Coast Battery from 0900 UTC to 1200 UTC on 27 Mar and 31 Mar 2009 respectively. Danger area bounded by</p> <table> <tr> <td>(a)</td> <td>09-58.08N</td> <td>076-13.94E</td> <td>(b)</td> <td>09-58.08N</td> <td>075-59.94E</td> </tr> <tr> <td>(c)</td> <td>09-43.08N</td> <td>075-59.94E</td> <td>(d)</td> <td>09-44.08N</td> <td>076-17.94E</td> </tr> </table> <p>2. Safe flying height 10000 metres.</p> <p>3. Cancel this message on 01 Apr 2009.</p>	(a)	09-58.08N	076-13.94E	(b)	09-58.08N	075-59.94E	(c)	09-43.08N	075-59.94E	(d)	09-44.08N	076-17.94E																		
(a)	09-58.08N	076-13.94E	(b)	09-58.08N	075-59.94E																										
(c)	09-43.08N	075-59.94E	(d)	09-44.08N	076-17.94E																										
146.	Cancelled.																														
147.	Cancelled.																														
148.	Cancelled.																														
149.	Cancelled.																														
150.	Cancelled.																														
151.	<p>India West Coast - Kochi. Charts 22 32 220 259 260 2004 2029 2045 INT 706. Firing exercise by Naval Coast Battery from 0900 UTC to 1200 UTC on 03 Apr and 07 Apr 2009 respectively. Danger area bounded by</p> <table> <tr> <td>(a)</td> <td>09-58.08N</td> <td>076-13.94E</td> <td>(b)</td> <td>09-58.08N</td> <td>075-59.94E</td> </tr> <tr> <td>(c)</td> <td>09-43.08N</td> <td>075-59.94E</td> <td>(d)</td> <td>09-44.08N</td> <td>076-17.94E</td> </tr> </table> <p>2. Safe flying height 10000 meters.</p> <p>3. Cancel this message on 08 Apr 2009.</p>	(a)	09-58.08N	076-13.94E	(b)	09-58.08N	075-59.94E	(c)	09-43.08N	075-59.94E	(d)	09-44.08N	076-17.94E																		
(a)	09-58.08N	076-13.94E	(b)	09-58.08N	075-59.94E																										
(c)	09-43.08N	075-59.94E	(d)	09-44.08N	076-17.94E																										
152.	<p>India West Coast – Mormugao. Charts 22 257 INT 705 INT 706. Firing practice by Naval Aircraft between 0230 UTC to 1230 UTC from 01 Apr to 07 Apr and 14 Apr to 21 Apr 2009. Danger area bounded by:</p> <table> <tr> <td>(a)</td> <td>15-13.0N</td> <td>073-57.0E</td> <td>(b)</td> <td>15-13.0N</td> <td>073-52.0E</td> </tr> <tr> <td>(c)</td> <td>15-11.0N</td> <td>073-57.0E</td> <td>(d)</td> <td>15-11.0N</td> <td>073-52.0E</td> </tr> </table> <p>2. Safe flying height 3500 metres.</p> <p>3. Cancel this message on 22 Apr 2009.</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																		
(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>153. India East Coast- Visakhapatnam. Charts 31 32 308 354 3002 3012 INT 706. Seaward firing exercise by Naval Coast Battery from 0001 UTC to 0200 UTC and from 1500 UTC to 1700 UTC on 01 Apr and 15 Apr 2009. Danger area bounded by:</p> <table> <tr> <td>(a)</td> <td>17-42.0N</td> <td>083-18.0E</td> <td>(b)</td> <td>17-47.0N</td> <td>083-32.0E</td> </tr> <tr> <td>(c)</td> <td>17-34.0N</td> <td>083-30.0E</td> <td>(d)</td> <td>17-28.0N</td> <td>083-18.0E</td> </tr> </table> <p>2. Safe flying height 13000 metres. 3. Cancel this message on 16 Apr 2009.</p>	(a)	17-42.0N	083-18.0E	(b)	17-47.0N	083-32.0E	(c)	17-34.0N	083-30.0E	(d)	17-28.0N	083-18.0E																																																													
(a)	17-42.0N	083-18.0E	(b)	17-47.0N	083-32.0E																																																																				
(c)	17-34.0N	083-30.0E	(d)	17-28.0N	083-18.0E																																																																				
<p>154. India West Coast – Pigeon Island. Charts 22 216 257 2072 INT 706. Firing practice by Naval Ships and Air Craft on Pigeon Island between 0230 UTC to 0930 UTC from 01 Apr to 07 Apr and 15 Apr to 21 Apr 2009. Danger area 10 NM around pigeon island: 2. Safe flying height 12000 metres. 3. Cancel this message on 22 Apr 2009.</p>																																																																									
<p>155. Cancel NAVAREA VIII Message 144 of 2009. India East Coast – Off Visakhapatnam. Charts 31 308 354 INT 706. Underwater firing practice by Naval Units between 0330 UTC and 0630 UTC on 30 Mar 2009 in area bounded by:</p> <table> <tr> <td>(a)</td> <td>17-33.5N</td> <td>083-42.6E</td> <td>(b)</td> <td>17-12.5N</td> <td>084-05.0E</td> </tr> <tr> <td>(c)</td> <td>17-33.5N</td> <td>084-27.4E</td> <td>(d)</td> <td>17-54.9N</td> <td>084-05.0E</td> </tr> </table> <p>2. Cancel this message on 31 Mar 2009.</p>	(a)	17-33.5N	083-42.6E	(b)	17-12.5N	084-05.0E	(c)	17-33.5N	084-27.4E	(d)	17-54.9N	084-05.0E																																																													
(a)	17-33.5N	083-42.6E	(b)	17-12.5N	084-05.0E																																																																				
(c)	17-33.5N	084-27.4E	(d)	17-54.9N	084-05.0E																																																																				
<p>156. Cancelled.</p>																																																																									
<p>157. Cancelled.</p>																																																																									
<p>158. Cancel NAVAREA VIII 150 of 2009. Indian Ocean – Bay of Bengal. Charts 32 33 41 313 356 357 INT 71 INT 706. PSLV-C 12 Rocket launching scheduled from launch pad 13-43.2N 080-13.8E between 0115 UTC to 0345 UTC from 05 Apr to 30 Apr 2009</p> <p>2. Danger area as follows</p> <table> <tr> <td>(a)</td> <td colspan="4">Danger Zone–1. Circle of 10 NM around the launcher</td> </tr> <tr> <td>(b)</td> <td colspan="4">Danger Zone–2. Area bounded by following points</td> </tr> <tr> <td></td> <td>(i)</td> <td>12-55.0N</td> <td>081-40.0E</td> <td>(ii) 12-55.0N</td> <td>083-40.0E</td> </tr> <tr> <td></td> <td>(iii)</td> <td>13-55.0N</td> <td>083-40.0E</td> <td>(iv) 13-55.0N</td> <td>081-40.0E</td> </tr> <tr> <td>(C)</td> <td colspan="4">Danger Zone -3. Area bounded by following points</td> </tr> <tr> <td></td> <td>(i)</td> <td>12-00.0N</td> <td>086-50.0E</td> <td>(ii) 12-00.0N</td> <td>087-20.0E</td> </tr> <tr> <td></td> <td>(iii)</td> <td>12-45.0N</td> <td>087-20.0E</td> <td>(iv) 12-45.0N</td> <td>086-50.0E</td> </tr> <tr> <td>(D)</td> <td colspan="4">Danger Zone – 4. Area bounded by following points</td> </tr> <tr> <td></td> <td>(i)</td> <td>10-00.0N</td> <td>095-00.0E</td> <td>(ii) 10-00.0N</td> <td>095-30.0E</td> </tr> <tr> <td></td> <td>(iii)</td> <td>11-00.0N</td> <td>095-30.0E</td> <td>(iv) 11-00.0N</td> <td>095-00.0E</td> </tr> <tr> <td>(E)</td> <td colspan="4">Danger Zone – 5. Area bounded by following points</td> </tr> <tr> <td></td> <td>(i)</td> <td>20-20.0S</td> <td>127-00.0W</td> <td>(ii) 22-20.0S</td> <td>127-00.0W</td> </tr> <tr> <td></td> <td>(iii)</td> <td>23-15.0S</td> <td>112-00.0W</td> <td>(iv) 21-15.0S</td> <td>112-00.0W</td> </tr> </table> <p>3. Mariners to exercise caution 4. Cancel this message on 01 May 2009.</p>	(a)	Danger Zone–1. Circle of 10 NM around the launcher				(b)	Danger Zone–2. Area bounded by following points					(i)	12-55.0N	081-40.0E	(ii) 12-55.0N	083-40.0E		(iii)	13-55.0N	083-40.0E	(iv) 13-55.0N	081-40.0E	(C)	Danger Zone -3. Area bounded by following points					(i)	12-00.0N	086-50.0E	(ii) 12-00.0N	087-20.0E		(iii)	12-45.0N	087-20.0E	(iv) 12-45.0N	086-50.0E	(D)	Danger Zone – 4. Area bounded by following points					(i)	10-00.0N	095-00.0E	(ii) 10-00.0N	095-30.0E		(iii)	11-00.0N	095-30.0E	(iv) 11-00.0N	095-00.0E	(E)	Danger Zone – 5. Area bounded by following points					(i)	20-20.0S	127-00.0W	(ii) 22-20.0S	127-00.0W		(iii)	23-15.0S	112-00.0W	(iv) 21-15.0S	112-00.0W
(a)	Danger Zone–1. Circle of 10 NM around the launcher																																																																								
(b)	Danger Zone–2. Area bounded by following points																																																																								
	(i)	12-55.0N	081-40.0E	(ii) 12-55.0N	083-40.0E																																																																				
	(iii)	13-55.0N	083-40.0E	(iv) 13-55.0N	081-40.0E																																																																				
(C)	Danger Zone -3. Area bounded by following points																																																																								
	(i)	12-00.0N	086-50.0E	(ii) 12-00.0N	087-20.0E																																																																				
	(iii)	12-45.0N	087-20.0E	(iv) 12-45.0N	086-50.0E																																																																				
(D)	Danger Zone – 4. Area bounded by following points																																																																								
	(i)	10-00.0N	095-00.0E	(ii) 10-00.0N	095-30.0E																																																																				
	(iii)	11-00.0N	095-30.0E	(iv) 11-00.0N	095-00.0E																																																																				
(E)	Danger Zone – 5. Area bounded by following points																																																																								
	(i)	20-20.0S	127-00.0W	(ii) 22-20.0S	127-00.0W																																																																				
	(iii)	23-15.0S	112-00.0W	(iv) 21-15.0S	112-00.0W																																																																				
<p>159. Cancelled.</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	072	2007 Series: 062 095 155 172 200 212. 2008 Series: 022 027 044 045 046 051 061 069 089 105 107 128 176 179 182 191 202 207 211 213 216 244. 2009 Series: 001 002 009 010 024 035 040 043 047 048 053 060 061 062 067 068 070 072.
X	Australia, New Guinea	079	2009 Series: 027 044 048 056 058 059 060 061 063 064 066 067 068 070 072 075 076 077 078 079.
XI	Malacca Strait, China Sea, N. Pacific	0180	2001 Series: 0775. 2003 Series: 0106. 2004 Series: 0361. 2005 Series: 0307. 2007 Series: 0002 0093 0133 0309 0344 0366 0513 0519 0523 0557 2008 Series: 0004 0006 0011 0018 0054 0113 0160 0210 0219 0322 0336 0347 0348 0349 0350 0352 0375 0380 0384 0398 0411 0412 0475 0618 0675 0677. 2009 Series: 0078 0079 0120 0121 0122 0125 0135 0140 0151 0155 0158 0167 0169 0170 0171 0172 0173 0174 0175 0176 0177 0178 0179 0180
XII	N.E. Pacific	148	2009 Series: Nil
XIII	N.W. Pacific	053 of 08	2009 Series: Nil
XIV	S.W. Pacific	003	2008 Series: 085. 2009 Series: 002 003
XV	S.E. Pacific	017	2009 Series: Nil
XVI	E. Pacific	001	2009 Series: Nil
Hydropacs	Pacific, Indian Ocean	606	2008 Series: 1140 1141 1473 2198. 2009 Series: 247 601
Hydroplants	Atlantic, Mediterranean	572	2008 Series: 300. 2009 Series: 327

SECTION – VI: CORRECTIONS TO SAILING DIRECTIONS (PILOTS)

Indian Notices to Mariners, Special Edition-2008
Special Notice No-19 (Information about Radar Beacons)

Page 150, (a) Mitha Port, Section (i),

Delete object name 'Humani Point Lighthouse' and replace by 'Jakhau Lighthouse'.

Page 150, (C) Mundra Port SPM, Section (ii)

Delete position 22° 49'.67N 69° 20'.85E and replace by 22° 40'.65N 69° 39'.28E.

Page 151, (h) Vadinar Offshore Oil Terminal, Section (v),

Delete Morse Code 'B' (- . .) and replace by Morse Code 'U' (. . -).

Page 152, (r) Savaibet Lighthouse, Section (v),

Delete Morse Code 'M' (- -) and replace by Morse Code 'N' (- .).

Page 154, (ae) New Mangalore (New Mangalore Lighthouse),

Delete entire paragraph.

Page 155, (ar) Muttum Point, Section (v),

Delete Morse Code 'K' (- . -) and replace by Morse Code 'M' (- - -).

Page 156, (ax) Tirukkadaiyur, Section (v),

Delete Morse Code 'K' (- . -) and replace by Morse Code 'O' (- - -).

Page 157, (bf) Vakalapudi, Section (i),

Delete object name 'Indira Point Lighthouse' and replace by 'Vakalapudi Lighthouse'.

Page 154, Insert after Beypore:

(ah1)	<u>Kiltan</u>		
	(i)	Object	Kiltan Island South Lighthouse
	(ii)	Position	11° 28'.17N., 73° 00'.50E.
	(iii)	Sector	-
	(iv)	Service	Continuous
	(v)	Identification Signal	Morse Code 'O' (- - -)

(ah2)	<u>Kadmat</u>		
	(i)	Object	Kadmat Island Lighthouse
	(ii)	Position	11° 15'.20N., 72° 47'.42E.
	(iii)	Sector	-
	(iv)	Service	Continuous
	(v)	Identification Signal	Morse Code 'G' (- - .)

(ah3)	<u>Agatti</u>		
	(i)	Object	Agatti Island Lighthouse
	(ii)	Position	10° 52'.51N., 72° 12'.43E.
	(iii)	Sector	-
	(iv)	Service	Continuous
	(v)	Identification Signal	Morse Code 'B' (- . .)

Page 157, Insert after Dariapur:

(bl)	<u>East Island</u>		
	(i)	Object	East Island Lighthouse
	(ii)	Position	13° 37'.73N., 93° 03'.05E.
	(iii)	Sector	-
	(iv)	Service	Continuous
	(v)	Identification Signal	Morse Code 'D' (- . .)

(bm)	<u>Port Blair</u>		
	(i)	Object	North Point Lighthouse
	(ii)	Position	11° 42'.19N., 92° 45'.41E.
	(iii)	Sector	-
	(iv)	Service	Continuous
	(v)	Identification Signal	Morse Code 'K' (- . -)

(bn)	<u>Keating Point</u>		
	(i)	Object	Keating Point Lighthouse
	(ii)	Position	09° 15'.40N., 92° 46'.33E.
	(iii)	Sector	052° - 319°
	(iv)	Service	Continuous
	(v)	Identification Signal	Morse Code 'O' (- - -)

(bo)	<u>Chowra Island</u>	
(i)	Object	Chowra Island Lighthouse
(ii)	Position	08° 27'.40N., 93° 02'.90E.
(iii)	Sector	-
(iv)	Service	Continuous
(v)	Identification Signal	Morse Code 'B' (- . .)

(bp)	<u>Indira Point</u>	
(i)	Object	Indira Point Lighthouse
(ii)	Position	06° 45'.21N., 93° 49'.51E.
(iii)	Sector	244 °- 103 °
(iv)	Service	Continuous
(v)	Identification Signal	Morse Code 'G' (- - .)

Page 157, Delete Krishnapatnam and Insert before Ramayapatnam:

(bc1)	<u>Krishnapatnam</u>	
(i)	Object	Krishnapatnam Light House
(ii)	Position	14° 15'.20N., 80° 07'.70E.
(iii)	Sector	-
(iv)	Service	Continuous
(v)	Identification Signal	Morse Code C (- . -)

Source: NHO Dehradun

07/09

Indian Notices to Mariners, Special Edition-2008
Special Notice No-19

Information about Radar Beacons
Page 156, Insert after Porto Novo:

(ay1)	<u>Cuddalore Chemplast Sanmar Marine Terminal</u>	
(i)	Object	Marine Terminal
(ii)	Position	11° 38'.40N., 79° 46'.35E.
(iii)	Sector	-
(iv)	Service	Continuous
(v)	Identification Signal	Morse Code 'C' (-.-.)

Source: Chemplast Sanmar Ltd

07/09

Indian Notices to Mariners, Special Edition-2008
Special Notice No-28

Change of address

Page 199, Address of Chart Agent M/s Bogerd Martin (India) Pvt Ltd is now changed to

M/s GLOBAL CHARTS AND NAVAIDS PVT. LTD.
1-A, Goa Mansion, Ground Floor
58, DR. Sunderlal Bahl Path,
Near GPO Fort,
Mumbai-400 001
Tel: +91-22-22626318, 22626380, FAX: 91-22-22621488
Email: sales@globalcharts.in

Indian Notices to Mariners, Annual Edition-2009
Section V, Page No. 94

Change of address

Page 94, Address of Chart Agent M/s Bogerd Martin (India) Pvt Ltd is now changed to

M/s GLOBAL CHARTS AND NAVAIDS PVT. LTD.
1-A, Goa Mansion, Ground Floor
58, DR. Sunderlal Bahl Path,
Near GPO Fort,
Mumbai-400 001
Tel: +91-22-22626318, 22626380, FAX: 91-22-22621488
Email: sales@globalcharts.in

West Coast of India Pilot (INP-1)
Chapter – 8 (Page-260 & 261)

Article 8.194, Para 3, Line 2:

Delete text 'Bhirbhanjan' and replace by 'Bhid Bhanjan'.

Article 8.195:

Delete Para 3

Article 8.196, Para 1, Line 3 & Line 5:

Delete text 'Bhirbhanjan' and replace by 'Bhid Bhanjan'.

Article 8.198, Para 1, Line 3:

Delete text 'Bhirbhanjan' and replace by 'Bhid Bhanjan'.

Source: INS Jamuna ROS A(N) - 249

07/09

West Coast of India Pilot (INP-1)
Chapter-8 (Page-252)

Article 8.113,

Insert text at the end of Para 5:

(For details refer to Article 8.115a).

Article 8.114,

Delete and replace by:

Rail, Road and Air Services.

8.114

<i>1</i>	Nearest Highway –	NH-8E
	Nearest Railhead –	Bhavnagar (150km)
	Nearest Airport –	Bhavnagar (150km)
		Diu (80km)

Source: NHO Dehradun

07/09

West Coast of India Pilot (INP-1)
Chapter-8 (Page-252)

(Source: Ultra Tech Cement Limited, Aditya Birla Group)
Insert after Pipavav Port:

Ultra Tech Cement Jetty (Refer to Article-8.113, Para-5 of Pipavav Port)

8.115a

Chart 2056, 2100 (ENC-IN52056P, IN62100P)

1 **General Information.** The Aditya Birla Group is the 11th largest cement producer of the world. The UltraTech Cement Limited (UTCL) has an annual contribution of 17 million tones to the Aditya Birla Group. The Gujarat Cement Works (GCW) a plant of the UTCL , at village Kovaya, alone accounts for 30% contribution to the UTCL.

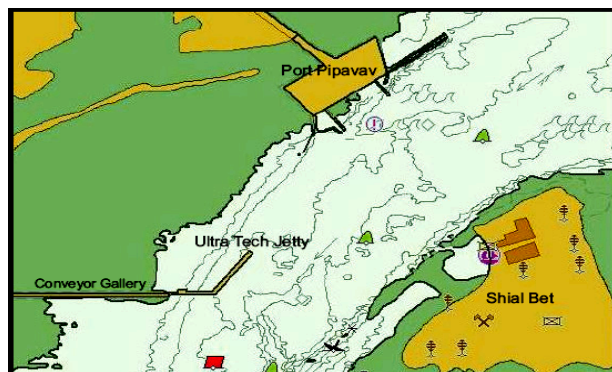
2 The Ultra Tech Cement limited's jetty is a captive jetty at village Kovaya & this jetty is within the Port limits of the Port of Pipavav, for use by UTCL's, cement plants (primarily by the Gujarat Cement Works, at Kovaya & Jafrabad). The marine service for the terminal is provided by Pipavav Port Ltd.

3 The GCW plant and the jetty is connected by an approach conveyor gallery/bund. The main conveyor connecting jetty and the plant is about 4 kms long , has provision for handling clinker / cement in bulk to the jetty from the plant by using Ship loader at Jetty , on forward side and Coal / other raw materials by using Jetty's hoppers and Ship's cranes , in return side from jetty to the plant.



Ultra Tech Cement Limited (UTCL) Jetty

4 **Position.** This UTCL's jetty is strategically located within the Port limits of the Port of Pipavav in position (20° 54'N, 71° 30'E).



Extract of ENC- IN62100P (Port Pipavav)

5 **Function.** The UTCL captive jetty handles:

Principle Export Cargos: cement, cement clinker
Principle Import Cargos: coal, gypsum, iron ore, limestone etc all raw material for a cement plant

6 **Arrival Information & notice of ETA.** As per Pipavav port instructions & to UTCL as per charter party, addressed to:

- (a) Suhas.pohonerkar@adityabirla.com
- (b) Dharam.singh@adityabirla.com
- (c) Dpkulkarni@adityabirla.com

6 **Port Radio.** Pipavav Port Radio on VHF Ch 16/71.

7 **Anchorage.** Refer to Pipavav Port orders/instructions (given above).

8 **Pilotage.** As per Pipavav Port orders/instructions (given above).

9 **Pilot Embarkation Position.** As per Pipavav Port orders/instructions (given above).

10 **Approach Information.** As per Pipavav Port orders/instructions (given above).

11 **Tides & Tidal Streams.** As per Pipavav Port orders/instructions (given above).

12 **Navigational Aids.** Refer to Pipavav Port.

13 **Tugs.** As per Pipavav Port orders/instructions (given above).

14 **Berthing and Wharves.** UTCL's captive jetty is 337m long and there is only one loading or discharging system on jetty. Only one ship can be berthed at one time. The jetty is situated next to the buoy No.6 (red) of the Pipavav entrance channel & is facing the Island of Shial Bet, lie in line 035-215°. The jetty is designed to accommodate ships of up to LOA 190m, with sailing draft (Max) of 11.0m & DWT not exceeding 45000 MT. The distance between the North end of UTCL's jetty & the Bollard No.1 of the Pipavav Port is about 800m.

Ultra Tech Cement Captive Jetty:

North End	20° 54'.56 N	071° 30'.13 E
South End	20° 54'.43 N	071° 30'.03 E

15 **Pollution Control.** As per prevailing rules & regulations of Govt of India & Gujarat State Pollution Control.

16 **Facilities at Terminal (Captive Jetty).** There is no facility for placing Grabs on board as well as for landing Grabs on Jetty. Crane facility is also not available.

17 **Cargo Handling Equipment:** Clinker/Cement is loaded by Ship Loader, traveling on rails on jetty. All other inward raw material is discharged into the hoppers (4 No.s on jetty), placed against and in line with the Ship's Cranes. The ship uses its cranes for discharging material into the hoppers.

18 **Designed Capacity:**

Sl.No.	Material	Rated Capacity
1	Clinker	0-1650
2	Bulk Cement	0-750
3	Coal/Other Raw Materials	0-900

19 **Repairs & Hot Work.** No repairs or maintenance is to be carried out on the main engines or other essential machinery without prior permission from Captain of the jetty. Hot work is prohibited on board the vessel unless approval has been obtained from the captain of the jetty and the requisite fire permit issued accordingly.

20 No immobilization will be granted during monsoon or in case of vessel's short stay. However, if unavoidable, a prior permission of HM & captain of the jetty be sought.

21 **Diving Assistance.** Diving assistance is not available.

22 **Supplies.** Supply of stores/fresh water & or bunkers in dire emergency (a limited qty not exceeding 10 to 20 tons of HSD only could be allowed & be arranged through agents with prior permission of the captain of the jetty). Stores supplies can be arranged through local suppliers with prior notice and customs approval.

23 **Medical Services.** Medical services are available through the CHA at local trust hospital and Port medical centre.

24 **Waste Disposal.** Mandatory minimum facilities have been provided on cost recovery basis to receive waste oil, dirty water, and segregated garbage for authorised disposal. Arrangements could be made through agent and with prior approval/permission from the captain of the jetty

25 **Search & Rescue.** Not available.

26 **Shore Leave.** Shore leave is permitted subject to immigration clearance.

27 **Crew Change.** Vessel Agent can arrange crew change with prior intimation and permission from captain of the jetty, subject to custom and immigrations rules and regulations.

28 **Rail, Road and Air Services.**

Nearest Highway – NH-8E
Nearest Railhead – Bhavnagar (150km)
Nearest Airport – Bhavnagar (150km)
Diu (80km)

29 **Port Authority.** Gujarat Maritime Board (GMB), Jafrabad.

Captain of the Jetty:
Capt. Dharam Pal Singh
Mobile - +91 9824442201
Email - dharam.singh@adityabirla.com

Bay of Bengal Pilot (Chapter-2, Page-102)

Insert text as new Article:

2.33a

Chart 357, 3036 (ENC-IN3357CM)



Extract of ENC IN3357CM
(Point Calimere to Chennai)

1 Chemplast Sanmar Marine Terminal Cuddalore (11° 38'.38N, 79° 46'.38E). The Cuddalore Marine Terminal is built and operated by M/s Chemplast Sanmar Ltd.

2 Function. The Marine Terminal is a special purpose terminal designed exclusively for the import 'Liquid Vinyl Chloromonomer' as raw material for the production of 'Poly Vinyl Chloride'.

3 Port Limit. The Port limits of Chemplast Sanmar Marine Terminal Cuddalore are as follows:

- a) 11° 44' 24"N, 079° 47' 18"E
- b) 11° 44' 24"N, 079° 50' 48"E
- c) 11° 38' 10"N, 079° 50' 48"E
- d) 11° 38' 10"N, 079° 45' 50"E

4 Port Radio. The approaching/leaving vessels should contact Port Control on VHF Ch-16/67. The control room manned 24x7 is fully equipped with communication equipment, Radar and AIS.

5 Anchorage. Safe anchorages may be obtained 3.5nm SE of the terminal. It provides for good holding ground for the anchorage in 15m water depth.

6 Pilotage. Pilotage is compulsory and will be provided by the Port Authorities.

7 Approach. The Marine Terminal is an open sea berth (no breakwaters) with no demarcated navigational channel. The approach to the berth from the seaward side is clear from all directions.

8 Maximum size of vessel handled. Maximum size of vessels handled is 20,000 DWT.

9 Tidal Streams. Tidal range is very less (about 0.6m) and hence the tidal stream is very weak. The currents near Cuddalore are predominantly NNW with rates ranging from 0.2 to 0.7kn. Alongside the berth the currents are lesser and measure upto 0.5kn. Tidal flows in the area are semi diurnal with two highs and lows during the day.

Levels	Height in metres above CD
MHWS	+1.00
MHWN	+0.79
MSL	+0.56
MLWN	+0.49
MLWS	+0.27

10 Weather. The Port experiences SW monsoon from Jun to Sep and NE monsoon from Nov to Jan. The transition period between monsoons in Feb to May & in Oct. Average wind conditions at the terminal are shown in the table below:

Month	Direction	Average Speed KPH
Jan	N, NE	9.3
Feb	Variable	7.9
Mar	E, SE	8.8
Apr	E, SE	11.2
May	S-SW, SE	11.8
Jun	SW-W, SE	10.9
Jul	S-SW, SE	9.8
Aug	S-SW, SE	9.0
Sep	S-SW, SE	8.7
Oct	Variable	8.8
Nov	N-NE	8.8
Dec	N-NE	10.8

11 Weather Parameters. The operating weather parameters for the Terminal shall in general depend upon the circumstances prevailing at the time. The Terminal shall take these into account in making any decision to suspend operations.

12 The operational guidelines for the terminal are:
(a) Berthing shall be suspended in conditions where mean wind speeds are in excess of 25 kn, or when significant swell/wave height exceeds 1.2m.

- 13 (b) Whilst moored alongside operation limits for the VCM arm are set at mean wind speeds of 30kn and shall be disconnected when the mean wind speed exceeds this limit.
- 14 (c) When swell/wave conditions cause significant movement of the vessel that exceeds the operation envelope of the loading arm it must be disconnected.
- 15 (d) Resumption of cargo operations shall take place after the mean wind speed falls under 30kn for a period of at least 30 mins.
- 16 (e) In rising winds and exceeding a mean wind speed of 35kn or swell /wave conditions exceed 1.75m serious consideration must be given to leaving the berth.

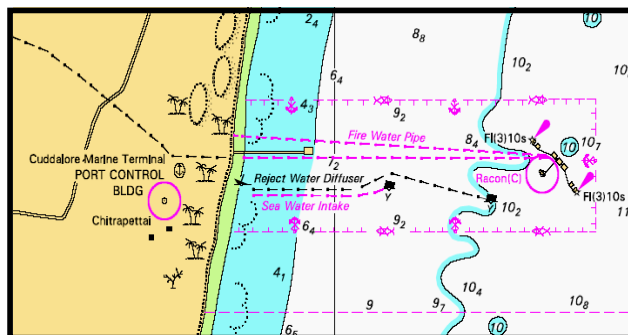
Wind Speed (Knots)	Wave/Swell Height (Meters)	Action
>25	1.2	Berthing suspended
>30	Significant movement of arm	Disconnect arm
>35	>1.75	Consider leaving berth

17 **Storm Warnings.** All vessels and the Terminal Operator shall observe the requirements of Storm Signals when hoisted. The Port Officer at Cuddalore in the event of a severe storm or cyclone promulgates announcements at the Storm Signal station, Cuddalore.

18 **Navigational Aids.** The following lights are displayed at the terminal:

(a) Cuddalore Chemplast Sanmar MT Jetty South End (11° 38'.33N, 79° 46'.41E)-Fl(3)10s (ILL No.- F0919.1, Page-28).

(b) Cuddalore Chemplast Sanmar MT Jetty North End (11° 38'.41N, 79° 46'.33E)-Fl(3)10s (ILL No.- F0919.2, Page-28).



Extract of Chart 3036 (Chemplast Sanmar Cuddalore Terminal)

19 **Signal Station.** The Signal Station is located at position 11° 38'.40N, 79° 46'.35E and is fitted with a Racon "C" (ILRS Vol 2 Station – 79128, Page-33).

20 **Tugs.** Two tugs of 30 tons capacity will be available. Boarding area will be advised by pilot prior to approach.

21 **Berth.** The berth is an offshore set of dolphins designed to berth ships of length 138m to 164m. The maintained depth alongside is 10.5m and is designed to handle vessels upto a Max DWT of 20,000 tons with drafts of 9.0m.

22 **Supplies.** Provision of port of refuge and facilities to effect emergency repairs and basic repairs not available. Water, bunkers, supplies and crew change facilities is available at Cuddalore Port.

23 **Facilities.** The port has no facilities except for the handling of VCM which is discharged through Chicksun arm 1x8" with an average discharge rate of about 450 Cum/hr. All port formalities are to be completed through the local agents at Cuddalore.

24 **Communications.**

- (a) Nearest Highway – NH 45A (6km)
- (b) Nearest Railhead – Cuddalore (5km)
- (c) Nearest Airport – Pondicherry (22km)

25 **Regulation.** The Cuddalore Marine Terminal has strict Environmental regulations and follows the Tamilnadu Pollution Control Board regulations.

26 **Port Authority.**

Tamilnadu Maritime Board
Port Officer
Cuddalore Port
Phone: +91 4142 238025.

27 **Terminal Owners**

M/s Chemplast Sanmar Ltd
Mr MN Ravi Kumar
Vice President
PVC Division, Semmankuppam
Cuddalore – 607 005, Tamilnadu
Tel : +91 4142 293 917
Fax: +91 4142 293 920
Email: mnr2@sanmargroup.com
Web: www.sanmargroup.com

Source: Chemplast Sanmar Limited 07/09

Bay of Bengal Pilot (INP-2)
Chapter-2 (Page-116)
Source: INS Nirupak ROS [I(N)-121]

Article 2.102, Para 2, Line 1:

Delete text 'Iskapalli' and replace by 'Isakapalle'.

Article 2.102,

Add text at the end of Para 2:

Isakapalle Light Fl(2)W10s (ILL No.- F0952.3, Page-30) is exhibited from a white circular concrete tower with red bands, 30m in height at position (14° 44'.87N, 80° 06'.54E).

Article 2.102,

Insert new Para after Para 3:

4 Nagarjuna Sea Water Intake Pier. A 350m cemented concrete platform extends from shore to sea at position (14° 46'.55N, 80° 05'.91E).



Nagarjuna Sea Water Intake Pier

Article 2.103, Para 1, Line 1:

Delete text 'Iskapalli' and replace by 'Isakapalle'.

Bay of Bengal Pilot (INP-2)
Chapter-2 (Page-122)

Insert After Article 2.121:

FPSO “Dhirubhai-1” Off Kakinada

2.121a

Chart 354, 355, 391 (ENC-IN3354SK, IN3355RS)



Extract of Chart - 391

1 **General Information.** Reliance Industries Ltd. is the field operator of the MA-D26 oil field. The Terminal consists of the FPSO ‘Dhirubhai-1’ (weather vane). ‘Dhirubhai-1’ has a storage capacity of approximately 1,300,000 Bbls of crude oil and off take parcel size will generally be between 60,000-1,000,000 Bbls. The oil would be transferred to the offtake Tanker (OT) through a single offtake hose system at up to 38,000 Bbls /hr.

2 **Position.** Dhirubhai-1 FPSO is moored at position (16° 42'.5N, 82° 41'.1E) in depths of 1138m approximately 20nm off the India East Coast. The nearest port is Kakinada at distance of about 28nm.

3 **Port Radio.** The following are monitored on a 24-hour basis.

- (i) FPSO Dhirubhai – 1 Call Sign C6VZ8
- (ii) VHF: Listening - VHF Channel 16
Working - VHF Channel 72, 68.
- (iii) Inmarsat‘C’ Telex only 430894410 and 430894411
- (iv) Telephone : +91 47 35542355

(v) Fax : +91 47 35542356
 (vi)E-mail : captain1@akerborgestad.com

4 OT arriving at the Terminal should make contact in the first instance on VHF Ch 16 and then on the working channel 68 and 72 for final instructions.

5 **Restricted Zone.** A radius of 3nm around the FPSO Dhirubhai-1 is demarkated as a restricted area. Only OT approaching and vessels providing services to the terminal would be permitted to enter the Restricted Zone subject to access control.

6 **Pilot Boarding Point.** Pilot boards approximately 5nm SE of FPSO Dhirubhai1 at position 16° 39’N, 82° 45’E.

7 **Anchoring/Drifting.** The Terminal is located in depths of 1100-1400m. Vessels would be unable to anchor and may drift at a distance at least 10nm from the terminal if waiting for berthing, but always within VHF range. Prior to arrival, the Master of the OT should contact Dhirubhai-1 for information concerning berthing prospects.

8 OT entering the Terminal’s 3nm Restricted Zone should have both anchors hauled firmly ‘home’ in the hawse pipe and securely fastened by chains. The pawls on both anchors to be in place. The OT is not to drift inside a circle of 10 nautical miles of the Terminal.

9 **Berthing/Unberthing.** The FPSO is a weather vaning vessel attached to a buoy. Depending on wind and currents, the buoy can move around 180m from its mean position. The FPSO will accept to moor and load OT upto 150,000 DWT. However those of more than 150,000 DWT may be accepted on individual basis by the operators. The moorings would be in tandem with FPSO.

10 Berthing of OT will only take place during ‘daylight’ hours from 0600hrs up to 1500hrs local time. Those not tendered a valid NOR by 1500hrs will be berthed the following day and NOR time will be considered as 0600hrs next day.

11 **Berthing Operation.** The Loading Master and the OT Master information exchange will take place prior to the mooring operation commencement. Support crafts will be provided by the terminal to assist OT mooring to the FPSO. When the OT is secured and the Master/Loading Master are satisfied that the vessel is lying safely to the mooring, the tugboat will gradually take the strain so as to keep the mooring hawser permanently stretched. The ‘work boat’ will be instructed by the Loading Master to bring the cargo hose to the port manifold on the OT for connection. The Vessels to ensure compliance of following:

- 12 (a) Bollard strength as per OCIMF recommendations.
 (b) To provide 2 x 220 mtrs rope of at least 85 MT MBL for pull back tug.
 (c) Spooling drum capable of storing hawser of 150m x 108mm dia + hawser of 25m x 80 mm+messenger line 100m x 32mm dia on winches at bow for FPSO pick up hawser and chain.
 (d) To be fitted with bow stoppers (Chain stoppers) to accommodate 76mm chafe chain and in compliance with OCIMF mooring arrangements.
 (e) To have crane/derrick on port side of SWL 10T to lift Cargo hose. (for suez max-15T and VLCC-20T)
 (f) To have 16 inch 150 ASA flange meeting OCIMF standard.

13 **Restrictions.** The OT shall be instructed to prepare for disconnection if one of the following conditions occurs:

- (a) Three occurrences of peak mooring hawser tension greater than 100 tonnes force within one hour.
 (b) One single occurrence of a peak mooring hawser tension greater than 150 tonnes force.
 (c) If the OT is unable to maintain station due to adverse conditions of wind or weather or current.

14 **Limiting Weather Conditions.**

(a) **Berthing:** Significant Wave Height of <3.0m, and/or a wind speed of <30 knots are the upper limiting criteria for berthing operations. Visibility of at least 1nm.

15 (b) **Terminal Closure:** Weather conditions are Significant Wave Height >4.0m and/or a wind speed >the 35.0 knots.

16 **Arrival Documents.** The OT must present the following documents on arrival:

- (a) Last port clearance and certificates
 (b) P&I Club (in original),
 (c) CLC,
 (d) ISPS,
 (e) IOPP,
 (f) ITOPF,
 (g) IMO Crew list,
 (h) IMO Maritime Declaration of Health, etc.
 (i) Any other documents which may be reasonably demanded by the Terminal.

17 **Emergency Disconnect.** In the case of an emergency on the OT or failure of mooring hawser(s), the loading will cease immediately, and the vessel shall initiate its own Emergency Response Plan.

18 The hawser quick release system may be activated. Where possible the off take hose will be disconnected first, but if this is not possible the quick disconnect coupling will be activated from the FPSO hose reel. In such a situation the hose will remain attached to the OT and the operator will arrange to retrieve the hose to be returned to the terminal. The quick disconnect coupling is fitted with shut-off valves to minimize oil spill risk.

19 **Repairs and Maintenance.** The Master of the OT at the Terminal are advised that the Terminal is located in open and unsheltered waters, and under no circumstances engines be shut down for repairs while the OT is at the Terminal. Repairs and maintenance to the OT's equipment shall not impair the safe operation of the vessel, and the repairs and maintenance shall be limited to those items which do not impair the following:

- 20 (a) The safe and efficient use and operation of the Inert Gas System.
 (b) The safe and efficient use and operation of the pump room lighting and ventilation.
 (c) The safe and efficient handling of slops.
 (d) The propulsive power or maneuverability.
 (e) The fire fighting or fire detection capability.
 (f) The safe and efficient handling of cargo, ballast, bunkers and slops.
 (g) The safe operation and integrity of the mooring system.
 (h) The safe operation of electrical equipment in hazardous zones.
 (i) The safe operation and integrity of communications equipment.
 (j) The safe and efficient operation of the lifting equipment.
 (k) The safe and efficient operation of the main deck lighting.

21 **Safety of Subsea Facilities.** Dhirubhai-1 is connected via turret to production riser, gas export risers & gas injection riser to Production Manifold & Gas Export Manifold. Flow lines from X mas Trees are connected to Production Manifold. The berthing OT's are to ensure that no objects are dropped in Restricted Zone wherein these facilities are located.

22 **Tank Entry.** Tank entry is strictly prohibited within the Terminal's Safety Zone.

23 **Cargo Tank Washing.** Cargo tank washing within the Terminal's Safety Zone is strictly prohibited without prior approval of the Terminal.

24 **Pollution Control.** The Terminal has limited ability to provide assistance in case of an oil/or chemical spill from an OT. Any hydrocarbon spill will be managed under the Terminal's Oil Spill Contingency Plan, and emergency response procedures. The support vessel has onboard a limited amount of oil dispersant chemical. No chemicals such as dispersants are to be applied to the hydrocarbon spill without the explicit permission of the Terminal authorities.

25 Without derogating from the Terminal Conditions, liability for any pollution caused by oil which has passed the OT's permanent hose connection, will be for the account of, and recoverable from, the OT Owners (as defined in the Terminal Conditions).

26 The OT shall comply fully with all the relevant provisions of the MARPOL Convention. Chemical discharge to the environment within the 'Reporting Zone' is prohibited.

27 **Fire Fighting.** The Terminal only has fire-fighting equipment required for its own purpose. However one vessel with fire fighting facilities shall be available in the field for providing necessary assistance. The carrying of matches and lighters by personnel on the OT's open deck is strictly prohibited within the Safety Zone

28 **Refuse/Garbage.** The Terminal has no reception facilities for refuse or garbage of any description for others. No refuse or garbage of any description is to be dumped in the sea under International/Indian Legislation. Incinerators are not to be used within the Safety Zone.

29 **Dirty Ballast and Slops.** The Terminal has no provision for accepting dirty ballast or slops, and under no circumstances can dirty ballast or slops be discharged to the sea.

30 **Fishing/ Swimming.** Personnel are not allowed to swim or dive or engage in fishing of any description whatsoever from the OT anywhere within the Safety Zone.

31 **Photography/Electronic Equipment.** Use of non-hazardous area rated electronic cameras, video equipment, mobile phones or any other portable electronic device on the berthed vessels open deck is strictly prohibited within the Terminal's Safety Zone.

32 **Soot Blowing.** Vessels shall not blow soot causing 'soot' to be released whilst within the Terminal's Safety Zone.

33 **Stores, Supplies, and Services.** The remote, deep-sea location of the Terminal severely limits the storing of provision and supplies, and services. Bunker fuels and fresh water are not available from the Terminal. Medical/ Dental services are not available.

34 **Crew Changes.** Crew changes are not permitted for the berthing vessels personnel.

35 **Shore Leave.** Shore leave for the personnel is not possible.

36 **Visitors Facility.** Due to the isolated position of the Terminal and the difficulty of arranging helicopters, it is not normally possible for non-operations personnel to visit the Terminal or the OT.

Source: Reliance Industries Ltd

07/09

Bay of Bengal Pilot (INP-2)
Chapter-2 (Page-122)

Insert After Article 2.121a:

Control & Riser Platform

2.121b

1 **The CRP (Control & Riser Platform)** at position (16° 39'.6N, 82° 27'.7E) in depths 98m provides transition between mid water pipelines (600-1000m) from sub-sea system and shallow water pipelines to the onshore terminal of Reliance.

Source: Reliance Industries Ltd

07/09

SECTION – VII: CORRECTIONS TO LIST OF LIGHTS

No	Name & Location	Position (Lat-Long)	Characteristics	Ht. mts	Range miles	Structure & Height (mts)	Remarks
D7400-94	- Entrance. <i>Sitrah Light Buoy</i>	26 10.4 N 50 43.3 E	Q(6)+LFl 15s	..	11	▽ on black beacon, yellow top	
---	---	..	Racon	..	..	..	ILRS Vol 2 Station 77640
---	---	..	AIS				
*	*	*	*	*	*	*	*
D7401-2	Remove from list						
D7406-52	- Khawr Al Qulay'ah. Cable Beacon	26 13.5 N 50 37.5 E	Fl Y *	..	..	□ on yellow beacon	Marks power cable
D7407-3	- Dowhat Al Qudaybiyah. Al Manāma	26 14.3 N 50 36.2 E	Fl R 5s *	..	..	Red beacon	
D7407-85	- Al Muḥarraq	26 14.4 N 50 36.9 E	Fl R 3s *	..	..	□ on red and white beacon	
*	*	*	*	*	*	*	*
D7411-58	Remove from list						
D7411-59	Remove from list						
D7411-6	Remove from list						
D7411-61	Remove from list						
D7411-62	Remove from list						
D7411-63	Remove from list						
D8741	Remove from list						

E6019	Sha'b Atāqah	29 53.1 N 32 29.4 E	Oc G 3s *	11	3	White framework tower, black bands	TE 2009 *
F0398	Navadra	21 57.0N 69 14.1E *	Fl(3) W 10s	55	18	White round concrete tower red bands 35	(fl 0.4, ec 1.5)x2, fl 0.4, ec 5.8.
F 0413 *	Muldwarka Port. Breakwater Head *	20 45.2 N 70 39.9 E *	Fl R *	*	*	*	*
F 0413.1	-S Jetty Head *	20 45.2 N 70 40.0 E	Oc R				
F 0413.2 *	-N Jetty Head *	20 45.6 N 70 39.8 E *	Fl G *	*	*	*	*
F 0413.4 *	-Ldg Lts 341° Front *	20 45.8 N 70 39.8 E *	Fl W *	22	*	*	*
F 0413.41 *	--Rear (310m from front) *	20 46.0 N 70 39.8 E *	F W *	22	*	*	*
F 0413.5	-Ldg Lts 343° Front	20 45.8 N 70 39.9 E	Oc R	22 *			
F 0413.51 *	--Rear (280m from front) *	20 46.0 N 70 39.8 E *	F R *	22	*	*	*
F0638	Tadri.	14 30.8N 74 20.5E	Fl(3)W 20s	38	18	Hexagonal, black and white band stone masonry tower 8 *	*



F0644	- Honavar	14 16.5N 74 26.6E	Fl W 15s	41	18	Octagonal tower, red and white bands 24	
			*	*			*
F0652	- S side of river entrance	13 37.3N 74 40.4E	F(2)W10s	35	18	Circular RCC tower Red and White Bands 32	
			*	*	*	*	*
F0919.1	Cuddalore Chemplast Sanmar Terminal Jetty. S End	11 38.3 N 79 46.4 E	Fl (3)10s				
*	*	*	*	*	*	*	*
F0919.2	Cuddalore Chemplast Sanmar Terminal Jetty. N End	11 38.4 N 79 46.3 E	Fl (3)10s				
*	*	*	*	*	*	*	*
F0952.3	Isakapalle	14 44.0N 80 06.0E	Fl(2)W 10s	34	15	White Round concrete tower red strips 30	
	*			*		*	*
F0952.8	Nizampatnam	15 53.0N 80 38.3E	Fl W 5s	36	23	White round tower, red Bands 31	<i>fl 0.5</i>
*	*	*	*	*	*	*	*
F 0952.9	Vodarevu	15 47.7N 80 24.7E	Fl(2)W 15s	34	25	Circular RCC tower Black & White Bands 30	<i>fl 0.6,ec1.9 fl 0.6,ec 11.9</i>
			*	*	*		
F0952.95	Remove from list, renumbered as 0952.8						
F0964	Vakalapudi	17 00.8N 82 17.1E	Fl(3)W 15s	54	22	Circular RCC tower Red & White bands 45	
-	-	-	Racon	-	-	-	ILRS Vol 2 Station 79175
			*		*		*

F1205	- North Point	11 42.2N 92 45.4E	Fl(2)W 12s	72	20	White round metal tower, red diagonal stripes 35	<i>fl 0.3, ec 2.7, fl 0.3, ec 8.7.</i>
--	--	..	Racon *	..	..	..	ILRS Vol 2 Station 79570 *
F1476	Pulau Enggang. Summit	6 14.6 N 99 52.6 E	Fl W 8s	60	15	Red metal framework tower, white bands, concrete base 11	TE 2009 *
		*					
F1557-4	Alur Barat Laut (NW Channel). NW1	4 15.7 N 100 33.8 E	Oc R 3s	9	5	White tower	TE; Light buoy Oc R in situ (T) 2009 *
*	*	*	*	*	*	*	*
F1616	Permatang Sedepa (One Fathom Bank)	2 53.3 N 100 59.7 E	Fl(4)W 20s	43	23	White round metal tower, red bands on concrete piles. Dome shaped roof at base of tower	ILRS Vol 2 Station 79880 *
-	-	..	Racon	..	..	..	..
F1669	Permatang Alur Mudah. Mudah Selatan	1 25.1 N 103 11.1 E	Fl(3)W 15s	26	16	White round GRP tower on piled platform	ILRS Vol 2 Station 79950 *
--	--	..	Racon	..	..	..	..
		*			*		*
K0914	Tanjung Cukubalimbing Balimbing Pamancasa (I)	5 55.5 S 104 33.5 E	Fl(2)W 10s	63	20	White metal tower and dwelling 61	<i>fl 0.5, ec 2, fl 0.5, ec 7.</i> Obscured 105°-108°(3°) by Pulau Batukecil ILRS Vol 2 Station 86390. TD 2009 *
--	--	..	Racon	..	..	..	..
	*				*		*
K1068	- Sunda Kelapa (I)	6 07.3 S 106 48.5 E	Fl(3)W 12.5s	21	11	Beacon 19	ILRS Vol 2 Station 86390. *
			*				*

SECTION – VIII: CORRECTION TO LIST OF RADIO SIGNALS**INP 31(1), 2005***(Last correction: Edition No. 06 dated 16 Mar 2009)***PAGE 18, QATAR, DOHA (AD DAWHAH) QATAR PUBLIC TELECOM.**

Delete row and replace by:

DOHA RADIO (A7D) QATAR TELECOMMUNICATION

25° 42' N 51° 35' E	MMSI 004661010	DSC VHF MF HF	OBS
 Doha Radio: +974 4404088 & 4864444 Doha Port (SAR): +974 4414287, 4457300 & 4457294	 Doha Radio: +974 4433063 & 4980360 Doha Port (SAR): +974 4413994 & 4457295		
TELEX: +497 5063 DOH RD Sel call: NBDP: 6314	E--MAIL: Doha Radio : a7d@qtel.com.qa Doha Port Radio (SAR) : pcdohaport@qatar.net.qa Doha Port Security : pfsodohaport@qatar.net.qa		
NOTE: Station accepts Ships' Weather Reports addressed METEO DOHA			

VHF

	Ch 16 24 26 81 82 87 88	H24
--	-------------------------	-----

RT (MF)

	Transmits	Receives	Hours of Watch
	2182 2601 2768 3673	2182	H24

BA 10/09**07/09****INP 31(2), 2007***(Last correction: Edition No. 06 dated 16 Mar 2009)*

Page 32, India Section,
79095, Muttam Point Lt Racon
Delete Morse Identification '**K**' and replace by: '**M**'

DGLL**07/09**

Page 33, India Section,
Insert before Pondicherry Lt Racon:
Cuddalore Chemplast Sanmar MT Racon - 11° 38'.40N 79°46'.35E 79128
C

Chemplast Sanmar Ltd**07/09****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. 06 dated 16 Mar 2009)***PAGE 178, YEMEN, contacts table, row 1, RCC SANAA.**

Delete entry and replace by:

RCC SANA'A	1 344671 1 344672 1 344673 1 345402 (morning period) 777 214088 (mobile)	1 345916 1 344047 (morning period)	AFTN OYSYNCYX E--mail moh.ali001@yahoo.com
------------	--	---------------------------------------	---

BA 10/09**07/09****INP 31(6), 2005***(Last correction: Edition No. 06 dated 16 Mar 2009)**Page 85, India Section**Insert after Cuddalore:***Chemplast Sanmar Marine Terminal- Cuddalore
Pilots and Terminals**

11°38'N 79°46'E

CALL: Chemplast Sanmar Port Control

TEL: +91 4142 293917

FAX: +91 4142 293920

EMAIL: mnr2 @sanmargroup.com

WEB: www.sanmargroup.com

FREQUENCY: Ch 16; 67

HOURS: H 24

PROCEDURE:

(1) Pilotage is compulsory.

(2) The approaching /leaving vessels should contact Port Control on VHF Ch-16/67.

Note: The terminal is owned and operated by Chemplast Sanmar Ltd.

Chemplast Sanmar Ltd**07/09**

SECTION – IX: 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
(UTTARAKHAND), 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)**

(I.H. 102 is also to accompany this note)

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 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 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**

Post Box No. 75,
Dehradun- 248001
(UTTARAKHAND), 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
107 A, Rajpur Road

Post Box No. 75,

Dehradun- 248001

(UTTARAKHAND), 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

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	93.269	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						