



INDIAN NOTICES TO MARINERS FOR 2004

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

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(CONTAIN NOTICES 408 TO 423)

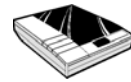
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Mariner's Obligation and A Chart maker's Plea: Observing Changes at sea proactively and reporting them promptly to the concerned charting agency, is an obligation that all mariners owe to the entire maritime community towards SOLAS. Mariners are, therefore,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

**Chief Hydrographer
to the Government of India**

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

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

EXPLANATORY NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Use of Global Positioning System (WGS 84) positions

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

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

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

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

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

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

SECTION – I

List of charts affected by
the Notices 408 to 423 contained in this Edition

INDIAN H.O. Chart No.	Folio No.	Notice No.	ADMIRALTY Chart No.	Folio No.	Notice No.
271	2	413	15	32	423(P)
288	1	408	792	45	416
435	7	415	1214	40	409
436	7	417, 418	1223	40	409
2088	1	412	1224	32	408
2097	1	412	1312	46	422
			1353	45	417
			1789	46	422
			2523	40	410
			2858	40	408
			2882	40	408
			2884 (INT 7278)	40	408, 409
			3409	40	411
			3584	45	414
			3789	40	410
			3790	40	410
			3791	40	410
			3833	45	419, 421
			3945	45	417
			3950	40	410
			4037	45	420, 421
			4040	46	419, 420
			4041	46	419, 420, 421

SECTION – II: PERMANENT NOTICES.**408 (21/04) SAUDI ARABIA – East Coast – Approaches to Ra’s al Khaf ji– Former mined area.**

Source: BA Notice 4720/04.

(HJ/1133/81)

Chart 288 [previous update 395/04]

Insert	limit of mined area, pecked line, joining:	(a)	28° 32'.0N., 48° 36'.5E. (existing limit) 28° 40'.5N., 48° 42'.6E.
		(b)	28° 40'.2N., 48° 51'.8E. (existing limit)
Delete	former limit of mined area, pecked line, and associated legend, <i>Limit of Former Mined Area (see Note)</i> , joining:	(a)	above
		(b)	above

B.A. Chart 1224 [previous update N.E. 29/01/04]

Insert	limit of mined area, pecked line, joining:	(a)	28° 32'.09N., 48° 36'.50E. (existing limit)
		(b)	28° 40'.50N., 48° 42'.60E.
		(c)	28° 40'.20N., 48° 51'.80E. (existing limit)
	legend, <i>Limit of Former Mined Area (see Note)</i> , along:	(b)-(c)	above
Delete	former limit of mined area, pecked line, and associated legend, <i>Limit of Former Mined Area (see Note)</i> , joining:	(a)	above
		(c)	above

B.A. Chart 2858 [previous update 97/03]

Insert	limit of mined area, pecked line, joining:	(a)	28° 32'.0N., 48° 36'.5E. (existing limit) 28° 40'.5N., 48° 42'.6E.
		(b)	28° 40'.2N., 48° 51'.8E. (existing limit)
Delete	former limit of mined area, pecked line, Joining:	(a)	above
		(b)	above

B.A Chart 2882 [previous update 395/04]

Insert	limit of mined area, pecked line, joining:	(a)	28° 32'.0N., 48° 36'.5E. (existing limit)
		(b)	28° 40'.5N., 48° 42'.6E.
		(c)	28° 40'.2N., 48° 51'.8E. (existing limit)
	legend, <i>Limit of Former Mined Area (see Note)</i> , along:	(a)–(b)	above
Delete	former limit of mined area, pecked line, and associated legend, <i>Limit of Former Mined Area (see Note)</i> , joining:	(a)	above
		(c)	above

408 (21/04) SAUDI ARABIA – East Coast – Approaches to Ra’s al Khaf ji– Former mined area (continued).**B.A Chart 2884 (INT 7278) [previous update 343/04]**

Insert	limit of mined area, pecked line, joining:	(a)	28° 32'.2N., 48° 36'.5E. (existing limit)
		(b)	28° 40'.5N., 48° 42'.6E.
		(c)	28° 40'.2N., 48° 51'.8E. (existing limit)
	legend, <i>Limit of Former Mined Area</i> (see Note), along:	(a) – (b)	above
Delete	former limit of mined area, pecked line, and associated legend, <i>Limit of Former Mined Area</i> (see Note), joining:	(a)	above
		(c)	above

409 (21/04) KUWAIT – Mina’ ad Dawhah, Mina’ ash Shuwaykh and Mina’ ash Shu‘aybah – Lights.

Light List Vol.D 7581.9, 7584.3, 7596.3, 7599.1, 7602.9

Source: BA Notice 4719/04.

(HJ/1133/92)

B. A. Chart 1214 (plan, Mina’ ash Shuwaykh) [previous update 320/03]

Insert	★ Fl (2)15s15M	29° 21'.480N., 47° 55'.906E. (A)
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Amend	light to, Fl.WRG.2s10M	29° 22'.200N., 47° 55'.960E.
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B.A. Chart 1223 (plan A, Mina’ ‘abd Allah, Mina’ ash Shu‘aybah and Mina’ al Ahmadi) [previous update 280/04]

Insert	★ Fl. WRG.10M	29° 02'.33N., 48° 09'.18E.
	★ Fl(3)15M	(a) 29° 02'.57N., 48° 09'.98E. (A)

Delete	★ F.R, close NW of:	(a) above
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	★ Fl.R.3s4M,close E of:	(a) above
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B.A. Chart 1223 (plan B, Mina’ ash Shu‘aybah and Mina’ al Ahmadi) [previous update 280/04]

Insert	★ Fl.WRG.2s10M	29° 02'.333N., 48° 09'.183E.
	★ Fl(3)15s15M	29° 02'.565N., 48° 09'.976E. (A)

B.A Chart 2884 (INT 7278) [previous update 408/04]

Delete	★ Fl(3)15M	29° 22'.84N., 47° 47'.99E.
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**410 (21/04) QATAR – Ra’s Laffan Port and Ra’s laffan North-westwards– Breakwaters. Drying patch.
Legend. Mooring buoys.**

Source: BA Notice 4540/04.

(HJ/1132/58)

B.A. Chart 2523 [previous update 371/04]

Insert breakwater, single firm line, joining:

25° 55'.91N., 51° 32'.32E. (shore)

25° 56'.52N., 51° 33'.04E.

and

25° 55'.72N., 51° 32'.80E. (shore)

25° 56'.36N., 51° 33'.03E.

Delete drying patch, centred on:

25° 56'.02N., 51° 32'.68E.

B.A. Chart 3789 [previous update 151/04]

Insert  *Coastguard*

25° 55'.780N., 51° 37'.270E.

25° 55'.810N., 51° 37'.150E.

B.A. Chart 3790 [previous update 396/04]

Insert breakwater, single firm line, joining:

25° 55'.81N., 51° 32'.26E. (shore)

25° 56'.42N., 51° 32'.98E.

and

25° 55'.62N., 51° 32'.74E. (shore)

25° 56'.26N., 51° 32'.97E.

B.A. Chart 3791 [previous update 292/04]

Insert breakwater, single firm line, joining:

25° 55'.91N., 51° 32'.32E. (shore)

25° 56'.19N., 51° 32'.62E.

25° 56'.42N., 51° 32'.81E.

25° 56'.52N., 51° 33'.04E.

and

25° 55'.72N., 51° 32'.80E. (shore)

25° 56'.07N., 51° 32'.89E.

25° 55'.36N., 51° 33'.03E.

legend, *water Intake Channel*, between:

25° 55'.83N., 51° 32'.60E.

25° 56'.40N., 51° 33'.01E.

Delete drying patch, centred on:

25° 56'.04N., 51° 32'.68E.



25° 56'.05N., 51° 35'.40E.

25° 56'.10N., 51° 35'.10E.

B.A. Chart 3950 [previous update 292/04]

Insert breakwater, single firm line, joining:

25° 55'.81N., 51° 32'.26E. (shore)

25° 56'.42N., 51° 32'.98E.

and

25° 55'.62N., 51° 32'.74E. (shore)

25° 56'.26N., 51° 32'.97E.

Delete drying patch, centred on:

25° 55'.93N., 51° 32'.65E.

411 (21/04) OMAN – Khawr Al Quway‘ – Ra’s Musandam Base – Light-beacon.

Light List Vol.D, 7340.2
 Source: BA Notice 4544/04.
 (HJ/1132/63)

B.A. Chart 3409 (plan F, Khawr Al Quway‘ Anchorage) [previous update 38/02]

Amend light-beacon to, Fl.3s2m3M 26° 22'.04N., 56° 21'.75E.

412 (21/04) OMAN – North East Coast– Sayh al Malih – Mina’ al Fahl North-eastwards–Tanker mooring buoys.

Light List Vol. D, 9258, 9258.5
 Source: BA Notice 4591/04.
 (HJ/1132/31)

Chart 2088 [previous update 373/04]

Amend No 1 tanker mooring buoy to, Fl.3s 23° 39'.10N., 58° 32'.65E.

No 3 tanker mooring buoy to, ISO.10s 23° 39'.12N., 58° 31'.70E.

Chart 2097 (Masqat to Mina’ al Fahl) [previous update 373/04]

Amend No 1 tanker mooring buoy to, Fl.3s 23° 39'.10N., 58° 32'.65E.

No 3 tanker mooring buoy to, ISO.10s 23° 39'.12N., 58° 31'.70E.

***413 (21/04) INDIA – West Coast – Kori Creek Southwards – Wreck.**

Source: Navarea VIII 545/04
 (HJ/1131/31)

Chart 271 [previous update 374/04]

Insert  23° 20'.0N., 68° 18'.0E.

414 (21/04) INDONESIA – Sumatera – North East coast – Belawan – Kuala Deli – Light.

Light List Vol. F, 1362.1
 Source: BA Notice 4666/04.
 (HJ/928/31)

B.A. Chart 3584 (plan, Belawan) [previous update 110/03]

Amend No V light to, ISO.6s12m7M 3° 47'.37N., 98° 43'.00E.

B.A. Chart 3584 (plan, Approaches to Belawan) [previous update 110/04]

Amend No V light to, ISO.6s12m7M 3° 47'.37N., 98° 43'.00E.

415 (21/04) MALAYSIA – Peninsular Malaysia, West Coast– Pulau Langkawi – Approaches to Bass Harbour – Pulau Kentot Besar Northwards–Quarantine anchorage.

Source: BA Notice 4691/04.
(HJ/928/60)

Chart 435 [previous update 261/04]

Insert	limit of quarantine anchorage area, pecked line, joining:	6° 15'.2N., 99° 43'.5E. 6° 15'.2N., 99° 44'.0E. 6° 14'.9N., 99° 44'.0E. 6° 14'.9N., 99° 43'.5E.
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416 (21/04) MALAYSIA – Peninsular Malaysia, West Coast– Sungai Dinding – Lumut Port –Quarantine anchorage.

Source: BA Notice 4704/04.
(HJ/927/49)

B.A. Chart 792 (plan, Sungai Dinding) [previous update 475/01]

Insert	limit of quarantine anchorage area, pecked line, joining:	4° 15'.50N., 100° 39'.40E. 4° 15'.65N., 100° 39'.40E. 4° 15'.65N., 100° 39'.56E. 4° 15'.50N., 100° 39'.56E.
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417 (21/04) MALAYSIA – Peninsular Malaysia, West Coast – kepulauan Sembilan – P. Buluh South–eastwards – Depth.

Source: BA Notice 4703/04.
(HJ/927/39)

Chart 436 [previous update 284/04]

Substitute	depth 29 enclosed by 30m contour for depth 9 enclosed by 10m contour	3° 59'.00N., 100° 32'.60E.
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B.A. Chart 1353 [previous update 284/04]

Substitute	depth 29 for depth 9 enclosed by 10m contour	3° 59'.00N., 100° 32'.60E.
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B.A. Chart 3945 [previous update 73/04]

Substitute	depth 29 enclosed by 30m contour for depth 9 enclosed by 10m contour	3° 59'.00N., 100° 32'.60E.
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418 (21/04) MALAYSIA – Peninsular Malaysia, West Coast– Perak – Kuala Jarum Mas – Bagan Panchor–Light.

Light List Vol.F,155.2
Source: BA Notice 4702/04.
(HJ/927/49)

Chart 436 [previous update 417/04]

Amend	light to, Fl.4s10m 8M (occas)	4° 32'.10N., 100° 37'.80E.
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419 (21/04) SINGAPORE STRIGHT – Singapore– P Sakijang Benera (S John’s Island) South-eastwards – Depths.

Source: BA Notice 4525/04.

(HJ/927/16)

B.A. Chart 3833 [previous update 335/04]

Insert depth 40 (a) 1° 11'.91N., 103° 51'.59E.
Delete depth 46, close E of: (a) above

B.A. Chart 4040 [previous update 404/04]

Insert depth 40 1° 11'.91N., 103° 51'.59E.

B.A. Chart 4041 [previous update 404/04]

Insert depth 40 1° 11'.91N., 103° 51'.59E.

420 (21/04) SINGAPORE – Pulau Seringat and Pulau Seringat KI.– Light-beacons.

Light List Vol.F, 1716,1717,1718

Source: BA Notice 4721/04.


(HJ/927/16)

B.A. Chart 4037 [previous update 404/04]

Insert  Fl(2)R.10s6m3M Seringat (a) 1° 13'.941N., 103° 51'.495E.

 Fl.R10s5m3M Kias (b) 1° 13'.937N., 103° 50'.725E.

 Fl.R5s6m3M Renget (c) 1° 13'.595N., 103° 50'.803E.

Delete  Fl(2)R.10s5m3M Seringat, close SSW of: (a) above


 Fl.R10s4m3M Kias, close SE of: (b) above

 Fl.R5s5m3M Renget, close NE of: (c) above

B.A. Chart 4040 [previous update 419/04]

Insert  Fl(2)R.10s6m3M Seringat (a) 1° 13'.94N., 103° 51'.49E.

 Fl.R5s6m3M Renget (b) 1° 13'.59N., 103° 50'.80E.


Delete  Fl(2)R.10s5m3M Seringat, close S of: (a) above

 Fl.R5s5m3M Renget, close E of: (b) above

B.A. Chart 4041 [previous update 419/04]

Insert  Fl(2)R.10s6m3M Seringat (a) 1° 13'.94N., 103° 51'.49E.

 Fl.R5s6m3M Renget (b) 1° 13'.59N., 103° 50'.80E.

Delete  Fl(2)R.10s5m3M Seringat, close S of: (a) above

 Fl.R5s5m3M Renget, close E of: (b) above

421 (21/04) SINGAPORE STRAIT – Singapore– Outer Shoal Eastwards–Obstructions. Wreck. Depth.

Source: BA Notice 4526/04.

(HJ/927/16)

B.A. Chart 3833 [previous update 419/04]

Insert

⑳ Obstn

1° 16'.10N., 103° 54'.88E.

㉔ Obstn

1° 15'.95N., 103° 54'.82E.

㉗ Wk

1° 15'.84N., 103° 54'.71E.

B.A. Chart 4037 [previous update 420/04]

Insert

㉑ Obstn

1° 16'.097N., 103° 54'.879E.

㉔ Obstn

(a) 1° 15'.952N., 103° 54'.817E.

㉗ Wk

1° 15'.838N., 103° 54'.706E.

Delete

depth 25, close E of:

(a) above

B.A. Chart 4041 [previous update 420/04]

Insert

㉑ Obstn

1° 16'.10N., 103° 54'.88E.

㉔ Obstn

1° 15'.95N., 103° 54'.82E.

㉗ Wk

1° 15'.84N., 103° 54'.71E.

422 (21/04) INDONESIA – Sumatera – East Coast – Pulau-Pulau Lingga – Selat Berhala Westwards – Platform. Depth. Note.

Source: BA Notice 4537/04.

(HJ/927/05)

B.A. Chart 1312 [previous update 169/04]

Insert

□ (lighted)

0° 55'.1S., 104° 04'.1E.

B.A. Chart 1789 [previous update 169/04]

Insert

□ (lighted)

(a) 0° 55'.11S., 104° 04'.14E.

the accompanying note, PIPELINES, centred on:

1° 04'.00S., 103° 42'.00E.

Delete

depth 20, close E of:

(a) above

SECTION – III: TEMPORARY AND PRELIMINARY NOTICES**423 (P) (21/04) SAUDI ARABIA – Red Sea Coast - Jizan Harbour Westwards – Dredging area. Channel.**

Source: B.A. Notice 4660(P)/04.

(HJ/1033/67)

1. Major dredging work is currently being undertaken in Jizan Harbour and Approach Channel.
2. It has also been reported that there is a discrepancy of up to 2.5° in the charted alignment of Jizan Approach Channel.
3. Mariners should exercise extreme caution when entering the port of Jizan and seek advice from local authorities.
4. The relevant charts will be updated as more information becomes available.

B.A. Charts affected: 15

SECTION – IV: MARINE INFORMATION**Ship Reporting System (INDSAR)**

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

MRCC Mumbai contact details

Tel : 022-24376133
Fax : 022-24333727
INMARSAT : 00583 441 907 210
E-mail : indsar@vsnl.net

SECTION – V: NAVIGATIONAL WARNINGS IN FORCE

1. For details of NAVAREA limits and organization/coordination, please refer to Notice No. 12 of the Special edition of Indian Notice to Mariners – 2004.

2. NAVAREA Warnings in force :- The serial numbers of all the NAVAREAS warnings in force as on 01 Nov 2004, covering the entire world are listed below against the respective NAVAREA

<u>NAVAREA No.</u>	<u>Location</u>	<u>Last NAVAREA Sl. received</u>	
I	N.E. Atlantic	300	2001 series: 510 2003 series: 261 417. 2004 series: 220 222 240 242 255 257 281 303 317 325 327 332 338 349 355 356 359 360 361 362.
II	E. Atlantic	Nil	2002 series: 472 497.
III	Mediterranean	564	2004 series: 487 494 506 512 514 518 519 527 530 540 542 545 546 547 549 551 552 556 558 560 561 563 564.
IV	N.W. Atlantic	275	2003 series: 108. 2004 series: 128 198 226 232 243 265 270 271 272 273 274 275.
V	W. Atlantic	Nil	2004 series: 606
VI	S.W. Atlantic	Nil	Nil.
VII	S.E. Atlantic	135	2004 Series: 118 121 127 131 134.
VIII	Indian Ocean	667	2004 series: 551 556 561 562 588 594 599 601 606 607 608 612 616 617 618 621 622 623 630 631 632 635 644 645 646 647 648 656 657 659 660 661 662 663 664 665 666.
IX	Persian Gulf, Red Sea, NW Arabian Sea	211	2001 series : 312. 2003 series : 023 120 138 177 236 237 239 273. 2004 series : 025 036 070 079 088 107 109 134 135 151 156 167 184 187 194 196 206 207 224 231 232 233 235 239 243 248 249 250 251 254 255.
X	Australia, New Guinea	010	2004 series: 007 009 010.
XI	Malacca Strait, China Sea, N. Pacific	0475	1996 series: 0925. 1998 series: 0655 1999 series: 0053 0153 0187 0310 0613. 2000 series: 0555 0677 0687. 2001 series: 0182 0775 0863. 2002 series: 0839. 2003 series: 0106 0273 0303 0304 0566 0568 2004 series: 0026 0037 0083 0091 0246 0267 0271 0272 0283 0285 0321 0331 0338 0339 0361 0366 0380 0402 0442 0443 0444 0445 0446 0447 0448 0449 0450 0454 0457 0463

			0468 0470 0471 0472 0473 0474 0475.
XII	N.E. Pacific	219	2004 series: 186 197 218 225 226 227.
XIII	N.W. Pacific	Nil	Nil
XIV	S.W. Pacific	068	2004 series: 052 054 059 062 063.
XV	S.E. Pacific	Nil	Nil
XVI	E. Pacific	Nil	1998 series: 151 2004 series: 166
Hydropacs	Pacific, Indian Ocean	1316	2001 series: 1976. 2002 series: 205 206 2330. 2003 series: 207 506 993 998 1041 1330 1395 1699 1911 1982 2265. 2004 series: 23 278 329 402 455 694 727 754 763 776 778 779 795 801 817 840 842 843 890 891 904 910 932 940 948 967 981 988 996 1000 1011 1025 1033 1044 1049 1050 1052 1066 1076 1081 1082 1084 1089 1090 1092 1096 1101 1107 1112 1113 1115 1122 1123 1124 1127 1128 1135 1138 1139 1143 1146 1151 1152 1153 1155 1156 1157 1167 1177 1180 1182 1192 1193 1214 1215 1216 1218 1219 1220 1221 1222 1225 1227 1229 1232 1233 1238 1239 1244 1254 1263 1265 1266 1268 1271 1272 1273 1274 1275 1278 1281 1282 1284 1285 1286 1288 1289 1293 1295 1297 1298 1305 1306 1309 1310 1311 1312 1313 1314 1316.
Hydrolants	Atlantic, Mediterranean	1340	2002 series: 245 246 . 2003 series: 604 1422 1472 1999 2203 2297 2406 2407 2408 2409 2410 2413 2414 2416 2418 2419 2420. 2004 series: 224 272 631 649 650 668 805 850 952 1018 1019 1033 1042 1051 1077 1084 1087 1092 1103 1104 1105 1121 1130 1136 1141 1146 1162 1174 1195 1199 1214 1219 1220 1231 1235 1240 1241 1250 1251 1252 1256 1265 1266 1269 1271 1272 1274 1276 1279 1280 1286 1290 1297 1298 1300 1303 1308 1311 1314 1320 1323 1325 1326 1330 1331 1332 1333 1334 1335 1336 1337 1338 1339 1340.

SECTION – VI: CORRECTIONS TO SAILING DIRECTION

NIL

SECTION – VII: CORRECTIONS TO INDIAN LIST OF LIGHTS

<u>No.</u>	<u>Name & Location</u>	<u>Position (Lat-Long)</u>	<u>Charact- eristics</u>	<u>Ht. mts.</u>	<u>Range miles</u>	<u>Structure & Height (mts)</u>	<u>Remarks</u>
D 7314.5	-Container Berth. W end	16 56.57 54 00.03 *	Q (6)+LF1 Y 15s *	2	5	Yellow beacon	
D 7400.191	-- 0.5 M W	25 48.54 50 40.38 *	Fl W 4s *	5	---	White beacon	*
D 7400.3	<i>Remove from List</i>						
D 7400.33	-Rubud ash Sharqiyah. 2.25M NNE	25 47.54 50 47.82 *	Fl Y 3s *	White beacon	*
D 7400.35	- Rubud al Gharbiyah. 1.2 M W	25 45.04 50 44.30 *	Fl Y 5s *	---	7	White beacon	*
D 7400.4	-Jazirat Hawar. 0.5 M E	25 44.00 50 48.63 *	Fl W *	---	---	Red and white beacon	*
D 7400.45	-- 0.9 M NE	25 44.65 50 48.68 *	Fl W *	---	---	Red and white beacon	*
D 7400.46	--1.2 M NE	25 44.88 50 48.84 *	Fl W *	---	---	Red and white beacon	*
D 7400.5	-- 0.2 M N	25 43.51 50 46.96 *	Fl Y *	---	---	White beacon	*
D 7400.55	<i>Remove from List</i>						
D 7400.58	-- 0.4 M N W	25 43.63 50 46.53	Fl Y	---	---	White beacon	
D 7400.6	--2.8 M W	25 41.05 50 41.60 *	Fl W	6	---	Black beacon	*
D 7400.65	--I M W	25 41.45 50 43.62 *	Fl W 5s *	---	---	White beacon	*
D 7400.7	--I M W	25 39.17 50 43.13 *	Fl W 5s *	---	---	White beacon	*
D 7400.8	-- 1.6 M W	25 38.5 50 43.2 *	Fl W 4s *	*	*	*	*
D 7400.81	-- 1.6 M W	25 38.45 50 43.20 *	Fl W 5s *	*	*	*	*
D 7750.5	<i>Remove from List</i>						
D 7750.7	<i>Remove from List</i>						

<u>No.</u>	<u>Name & Location</u>	<u>Position (Lat-Long)</u>	<u>Charact- eristics</u>	<u>Ht. mts.</u>	<u>Range miles</u>	<u>Structure & Height (mts)</u>	<u>Remarks</u>
E 6049.49	-No 36	23 50.39 38 08.07	Q(9)W 15s	7	4	∇ on yellow beacon, black band	
*	*	*	*	*	*	*	*
E 6142.5	Jabal Zuqar Island	13 54.7 42 47.2	Fl W 7s	35	9	Framework tower 10	Destroyed (T) 2004
							*
E 6142.7	Hanish as Sughra (Low Island)	13 52.4 42 49.2	Fl(3)W 15s	---	10	White metal structure 8	TE 2004
							*
E 6142.9	Hanish al kubra.NE end	13 46.31 42 47.11	Fl (2) W 12s	---	14	Red framework tower, White top 10	PA. Destroyed (T) 2004
	*	*					*
E 6142.92	Hanish al Lubra. SW end	13 39.96 42 40.62	Fl W 5s	200	16	White round GRP tower, red bands 6	<i>fl 0.1. Vis 010°-070°(60°).</i> AIS.LED emergency light Fl W 5s, <i>fl 1, 10M</i>
*	*	*	*	*	*	*	*
F 1164	Ko Chi (Stork Island)	9 28.67 97 54.50	Fl W 10s	112	15	White metal framework tower 15	<i>fl 1</i>
		*					
F 1192.4	Ko Palai	6 29.8 99 11.0	Fl(2) W 12s	48	16	White metal framework tower 20	<i>fl 1.5, ec 2, fl 1.5, ec 7.</i> TE 2004
							*
F 1400	-Dumai	1 37.64 101 25.97	Fl R 3s	134	8	Radio Mast	
	--	---	4 F R (vert)	89	4	Same structure	
		*	*	*	*		
F 1403.9	- Lts in line 200°. Rear. B	1 31.10 101 54.53	Iso W 4s	29	12	White metal framework tower 28	
		*					*
K 0943.4	-Borang	2 56.93 104 52.03	LF1 W 5s	16	6	White beacon 15	<i>fl 2. TE 2004</i>
		*					*
K 0945	-No 3	2 57.0 104 53.0	LF1 W 8s	14	8	White metal framework tower on concrete tower 11	<i>fl 3. TE 2004</i>
		*					*
K 1074	-W Mole. Head	6 04.83 106 52.80	Fl G 5s	22	12	Green ∆ on green beacon 20	<i>fl 1</i>
		*				*	*

SECTION – VIII: CORRECTION TO LIST OF RADIO SIGNALS

VOL. 1, 1987

(Last correction: Edition No. 17 dated 01 Sep 2004)

NIL

VOL. 2, 1995

(Last correction: Edition No.19 dated 01 Oct 2004)

NIL

B.A. VOL. 3 Part 1, NP 283(1), 2002/03

(Last correction: Edition No. 19 dated 01 Oct 2003)

NIL

VOL. 5, 1997/98

(Last correction: Edition No. 20 dated 15 Oct 2004)

NIL

VOL. 6, 1987

(Last correction: Edition No. 18 dated 15 Sep 2003)

NIL

B.A. VOL. 7, 1997/98-PART 2

(Last correction: Edition No. 16 dated 15 Aug 2000)

NIL

VOL. 8, 1999

(Last correction: Edition No. 19 dated 01 Oct 2004)

NIL

SECTION – IX: PLOTTING OF GPS POSITIONS IN INDIAN CHARTS

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

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

SECTION – X: REPORTING OF NAVIGATIONAL DANGERS

Instructions for raising Hydrographic Note (Form IH 102)

Appeal to all Mariners:

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

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

Instructions for filling up Form IH 102 (Overleaf)

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

Position Reporting

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

Depth Reporting

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

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

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

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

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

I.H. 102a (Revised 2003)

HYDROGRAPHIC NOTE FOR PORT INFORMATION

(For Reporting Changes to Port Information)

(To accompanying Form I.H. 102)

Name and address of ship / sender:

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

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

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

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

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

Signature of Observer/Reporter.....

To

The Chief Hydrographer to the Government of India

National Hydrographic Office

107 A, Rajpur Road

PO Box No. 75,

Dehradun- 248001

(UTTARANCHAL), INDIA

E Mail : nho@sancharnet.com

Fax No.: 91- 0135- 2748373

WEB: www.hydrobharat.org

I.H. 102 (Revised 2003)

HYDROGRAPHIC NOTE

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

Date :
Ref. No:

Details of the Sender / Originator

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

Details of Changes / Dangers Observed

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

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

Signature of the Master / Reporter

Date:

To

The Chief Hydrographer
National Hydrographic Office
107-A, Rajpur Road,
Post Box No. 75, Dehradun - 248 001
(UTTARANCHAL), INDIA

E-mail: - nho@sancharnet.in
Fax No.: (0135) 2748373
WEB: - www.hydrobharat.org

Please Note:

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

TABLE FOR CONVERTING FEET AND FATHOMS TO METRES

Feet	Fmt	Mtrs	Feet	Fmt	Mtrs	Feet	Fmt	Mtrs	Feet	Fmt	Mtrs
1		0.305	55		16.764	162	27	49.378	498	83	151.790
1.5		0.457	56		17.069	168	28	51.206	504	84	153.619
2		0.610	57	9	17.374	174	29	53.035	510	85	155.448
3		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		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	10	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	1	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	11	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	2	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	12	22.860	282	47	85.954			
20		6.096	76		23.165	288	48	87.782	0.10	3.937	
21	3	6.401	77		23.470	294	49	89.611	0.20	7.874	
22		6.706	78	13	23.774	300	50	91.440	0.30	11.811	
23		7.010	79		24.079	306	51	93.469	0.40	15.748	
24	4	7.315	80		24.384	312	52	95.098	0.50	19.685	
25		7.620	81	13	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	4	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	14	26.518	354	59	107.899			
32		9.754	88		26.822	360	60	109.728			
33	5	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	15	28.346	390	65	118.872			
38		11.582	94		28.651	396	66	120.701			
39	6	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	16	30.175	426	71	129.845			
44		13.411	100		30.480	432	72	131.674			
45	7	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	8	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	Mtrs	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 mtr		
12	39.370	6.562	68	223.097	37.183	2	0.167	0.051	1 Foot=0.3048 mtr		
13	42.652	7.108	69	226.378	37.730	3	0.250	0.076	1 Fthm=1.8288 mtr		
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 mtr = 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	54.681						
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						

To accompany Notice to Mariners (422/04)

On. B.A. Chart 1789

PIPELINES

Mariners are advised not to anchor or trawl in the vicinity of pipelines. Gas from a damaged oil or gas pipeline could cause an explosion, loss of a vessel's buoyancy or other serious hazard.