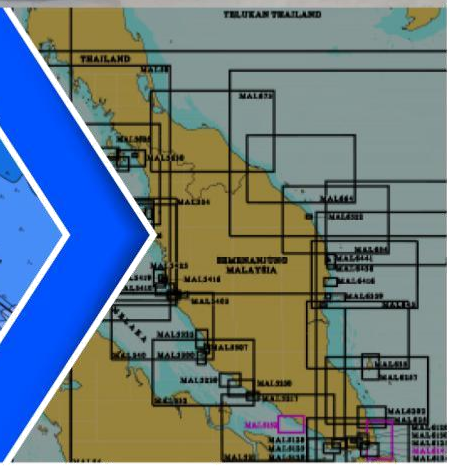
TENTERA LAUT DIRAJA MALAYSIA
HIDROGRAFI



2017

ANNUAL SUMMARY OF MALAYSIAN *Notices To Mariners*

NATIONAL HYDROGRAPHIC CENTRE

MALAYSIAN NOTICES TO MARINERS ANNUAL EDITION

2017

(Annual Edition 2016 is hereby cancelled)

CONTAINING

Annual Notice No. 1 – 25
Temporary and Preliminary Notices pg No. 56

Mariners are requested to inform The Hydrographer, National Hydrographic Centre, Bandar Armada Putra, Pulau Indah, 42009 PORT KLANG, Selangor Darul Ehsan, Malaysia. (Tel: +603 3169 4400), (Fax: +603 3101 3111), E-mail: **nhc@hydro.gov.my** immediately upon the discovery of new dangers, changes, or defects in aids to navigation and shortcoming in Malaysian charts or publications.

DATO' PAHLAWAN ZAAIM BIN HASAN
Rear Admiral
The Hydrographer

1. GENERAL INFORMATION

a. Notices to Mariners correcting MAL charts are issued by the National Hydrographic Centre (NHC) and should be inserted on the charts affected in water proof violet ink in case of Permanent Notice and in pencil in case of Temporary Notices.

b. The capital (P) or (T) included in number of any notice denotes „Preliminary" or „Temporary" respectively.

c. Geographical positions are referred to largest scale charts unless otherwise stated.

d. Bearing is referred to the true compass and is reckoned clockwise from 000° (North) to 359°. Those relating to light are from seaward.

e. Visibility of light is that of in clear weather.

f. Depth is with reference to largest scale chart.

g. Heights are above Mean High Water Spring.

h. Nothing in these notices is to be taken as over ruling such general or local regulation as may be issued by Port Authority etc. to meet dangers or situation, which may arise, or to cover local conditions. While in the interest of the safety of shipping, the NHC takes every endeavor to include in the Hydrographic Publication correct and up to date details of all information pertaining to navigation in the coastal and of lying Malaysian Waters. It must be clearly understood that no liability whatsoever can be accepted by it for errors or failure to publish detail of such information.

2. AVAILABILITY OF NOTICES TO MARINERS

Mariners are advised that Malaysian Notices to Mariners are available at National Hydrographic Centre, Bandar Armada Putra, Pulau Indah, 42009 PORT KLANG, Selangor Darul Ehsan, Malaysia or at Tel: +6 03 3169 4400, Fax: +6 03 3101 3111, Email: nhc@hydro.gov.my or can be downloaded from Website: www.hydro.gov.my & www.navy.mil.my.

Mariners, ship owners and others concerned are advised that Malaysian Notices to Mariners are also available at the following places:

Central Region Marine Department, P.O Box 268, Foreshore Road, 42007 Pelabuhan Klang, Selangor	Tel Fax E-mail Website	: : :	603-31695198 603-3165 3540 aki@marine.gov.my pjlwt@marine.gov.my
Harbour Master Office Nortern Region (Penang/ Kedah/ Perlis) P.O Box 765 Jalan Akuarium 11700 GELUGOR Pulau Pinang	Tel Fax E-mail	: : :	+6 04 657 9636 +6 04 657 5521 pjlwut@marine.gov.my
Harbour Master"s Office Central Region (Selangor/Melaka/N. Sembilan) 71000 PORT DICKSON N. Sembilan	Tel Fax E-mail	: : :	+6 06 647 7993 +6 06 647 7998 ppdks@marine.gov.my
Marine Department Km 3,Jalan Skudai 80200 JOHOR BAHRU, Johor	Tel Fax E-mail	: : :	+6 07 224 8093 +6 07 224 8092 ppjbh@marine.gov.my

INDEX OF ANNUAL NOTICES

Harbour Master"s Office East Region (Kelantan/ Terengganu/ Pahang) Jalan Hiliran 20300 KUALA TERENGGANU Terengganu	Tel Fax E-mail	: : :	+6 09 622 1471/9478 +6 09 623 3676 pjlwtm@marine.gov.my
Sarawak Marine Department Marine Department Complex Lot 683, Seksyen 66 Jalan Utama, Tanah Puteh 93619 KUCHING Sarawak	Tel Fax E-mail Website	: : :	+6 082 484159 +6 082 331 778 dickson@jls.gov.my www.marine.gov.my
Sabah Marine Department Complex No 2, Salut Bay Sepanggar Road 88450 KOTA KINABALU Sabah	Tel Fax E-mail Website	: : : :	+6 088 401 111 +6 088 401 182 azmanlatip@jlsbh.gov.my www.marine.gov.my
Marine Department Malaysia (Labuan Region) P.O Box 81005 87020 WILAYAH PERSEKUTUAN LABUAN	Tel Fax E-mail	: : :	+6 087 413 511 / 421 208 +6 087 413 515 benjamin@marine.gov.my

3. MALAYSIAN CHARTS AND PUBLICATIONS

The following charts and related publications have been published and available as follows:

a. <u>List of Malaysian Charts (MAL)</u>

NO	CHART NO	TITLE	PUBLISHED	NEW EDITION	SCALE
(a)	(b)	(c)	(d)	(e)	(f)
1.	**MAL 4508**	LAUT CHINA SELATAN	31 Dec 1991	31 Dec 2009	1 : 3 500 000
2.	**MAL 5**	SEMENANJUNG MALAYSIA	31 Jan 1989	01 Oct 2008	1 : 1 250 000
3.	**MAL 5123**	PELABUHAN TANJUNG PELEPAS	31 Dec 1999	31 Oct 2015	1 : 30 000
4.	**MAL 5128**	SELAT JOHOR BARAT	31 Oct 1992	31 Oct 2006	1 : 27 500
5.	**MAL 5129**	PULAU PISANG - RAFFLES LIGHTHOUSE	01 Apr 2008	-	1 : 75 000
6.	**MAL 515**	SELAT SINGAPURA	31 Mar 1993	31 Dec 2013	1 : 200 000
7.	**MAL 521**	TANJUNG KELING - IYU KECIL	15 Dec 1989	31 Dec 2012	1 : 200 000
8.	**MAL 5217**	PELABUHAN SUNGAI UDANG - MELAKA	31 Aug 1994	31 Dec 2016	1 : 25 000
9.	**MAL 5230**	PERAIRAN KUALA LINGGI	01 Nov 2016	-	1 : 50 000
10.	**MAL 5239**	SEKITAR PERAIRAN PORT DICKSON	31 Dec 2012	-	1 : 30 000
11.	**MAL 5257**	SEKITAR PERAIRAN TASIK PUTRAJAYA	01 Dec 2016	-	1 :7500
12.	**MAL 5300**	PELABUHAN KLANG - PELABUHAN BARAT (WEST PORT)	01 Jun 1998	30 Sep 2011	1 : 25 000

(a)	(b)	(c)	(d)	(e)	(f)
13.	**MAL 5307**	PELABUHAN UTARA DAN SELATAN - PELABUHAN KLANG	15 Nov 1998	31 Aug 2011	1 : 15 000
14.	**MAL 532**	PERMATANG SEDEPA - TANJUNG KELING	30 Jun 1989	31 Dec 2012	1 : 200 000
15.	**MAL 5322**	SEKITAR PERAIRAN UTARA - PELABUHAN KLANG	30 Aug 1991	31 Aug 2011	1 : 35 000
16.	**MAL 54**	PULAU JARAK -TANJUNG PIAI	01 Sep 2002	31 Oct 2006	1 : 500 000
17.	**MAL 540**	KEPULAUAN SEMBILAN - PELABUHAN KLANG	31 Dec 1993	15 Jul 2007	1 : 200 000
18.	**MAL 5403**	SUNGAI PERAK	30 Sep 1988	31 Dec 2012	1 : 25 000
19.	**MAL 5410**	SEKITAR PERAIRAN SUNGAI PERAK	15 Sep 1993	31 Dec 2012	1 : 35 000
20.	**MAL 5416**	TAMBATAN PANGKALAN LUMUT	01 Mar 1984	31 Dec 2015	1 : 10 000
21.	**MAL 5419**	SEKITAR PERAIRAN UTARA SELAT DINDING	01 Nov 1985	16 Sep 2016	1 : 12 500
22.	**MAL 5425**	SEKITAR PERAIRAN LUMUT	30 Dec 1991	31 Dec 2015	1 : 35 000
23.	**MAL 5529**	PELABUHAN PULAU PINANG	01 Mar 2006	31 Dec 2016	1 : 20 000
24.	**MAL 553**	PULAU PINANG - UJUNG TAMIANG	01 Sep 1992	15 Jul 2007	1 : 300 000
25.	**MAL 5536**	SEKITAR PERAIRAN PULAU PINANG	01 Dec 2016	-	1 : 60 000
26.	**MAL 554**	PULAU PINANG - KEPULAUAN SEMBILAN	15 Jun 1999	15 Aug 2005	1 : 200 000
27.	**MAL 5622**	SEKITAR PERAIRAN PELABUHAN LANGKAWI (KUAH)	30 Sep 1993	31 Dec 2010	1 : 40 000
28.	**MAL 5625**	SEKITAR PERAIRAN KUALA PERLIS	31 Oct 2015	-	1 : 10 000
29.	**MAL 5630**	KUAH - KUALA PERLIS	31 Dec 2010	-	1 : 50 000
30.	**MAL 5631**	SEKITAR PERAIRAN PELABUHAN LANGKAWI (TELUK EWA)	30 Sep 1991	31 Dec 2010	1 : 35 000
31.	**MAL 565**	KO TARUTAO - PULAU PINANG	31 Dec 1994	31 Dec 2009	1 : 300 000
32.	**MAL 58**	KO PHUKET - PULAU JARAK	31 Dec 1997	15 Jul 2004	1 : 500 000
33.	**MAL 6**	SABAH - SARAWAK	01 Oct 1991	30 Sep 2014	1 : 1 250 000
34.	**MAL 6124**	PERAIRAN PENGERANG	30 Sep 2014	-	1 : 30 000
35.	**MAL 6125**	SUNGAI SANTI - SUNGAI SEBINA	01 Sep 2002	15 Apr 2007	1 : 15 000
36.	**MAL 6128**	PELABUHAN JOHOR	01 Jun 1998	15 Jul 2016	1 : 10 000
37.	**MAL 6130**	SELAT JOHOR TIMUR	30 Nov 1992	01 Dec 2016	1 : 30 000
38.	**MAL 6134**	SEKITAR PERAIRAN TIMUR KUALA JOHOR	30 Nov 1992	01 Dec 16	1 : 30 000
39.	**MAL 6202**	SEKITAR PERAIRAN SEDILI	01 Aug 2014	-	1 : 50 000
40.	**MAL 625**	TELUK MAHKOTA - PULAU TIOMAN	01 Jun 1996	31 Dec 2010	1 : 200 000
41.	**MAL 6257**	SEKITAR PERAIRAN PULAU TIOMAN	31 Dec 1992	15 Jul 2007	1 : 50 000
42.	**MAL 635**	PULAU TIOMAN - KUANTAN	31 Dec 1996	15 Apr 2007	1 : 200 000
43.	**MAL 6359**	PELABUHAN KUANTAN DAN SUNGAI KUANTAN	31 Dec 1991	15 Apr 2007	1 : 35 000
44.	**MAL 6416**	SEKITAR PERAIRAN PELABUHAN KEMAMAN	30 Apr 1988	31 Oct 2007	1 : 25 000

(a)	(b)	(c)	(d)	(e)	(f)
45.	**MAL 6436**	PELABUHAN KERTIH	01 Oct 1999	31 Dec 2009	1 :5000
46.	**MAL 6441**	SEKITAR PERAIRAN PAKA - KERTIH	01 Jun 2000	01 Oct 2008	1 : 25 000
47.	**MAL 645**	KUANTAN - DUNGUN	30 Sep 2000	15 Apr 2007	1 : 200 000
48.	**MAL 65**	SELAT SINGAPURA - PULAU KAPAS	31 Dec 2008	-	1 : 500 000
49.	**MAL 6522**	KUALA TERENGGANU	01 Apr 2008	-	1 : 10 000
50.	**MAL 654**	DUNGUN - PULAU REDANG	15 Dec 2001	31 Oct 2006	1 : 200 000
51.	**MAL 655**	KERTIH - KAWASAN GALIAN MINYAK TAPIS	31 Dec 1993	15 Apr 2007	1 : 250 000
52.	**MAL 664**	PULAU REDANG - TUMPAT	15 Dec 2001	31 Dec 2010	1 : 200 000
53.	**MAL 673**	TUMPAT - SONGKHLA	15 Nov 1998	31 Dec 2009	1 : 240 000
54.	**MAL 68**	TERENGGANU - LAUT CHINA SELATAN	31 Dec 2008	-	1 : 500 000
55.	**MAL 7139**	TANJUNG BATU - PENDING	15 Nov 1998	31 Dec 2009	1 : 15 000
56.	**MAL 7150**	SEKITAR PERAIRAN TANJUNG PO	01 Dec 1989	31 Oct 2009	1 : 25 000
57.	**MAL 7212**	SARIKEI - BINTANGOR	30 Oct 1992	31 Dec 2009	1 : 20 000
58.	**MAL 7213**	TANJUNG MANIS - SARIKEI	30 Sep 1991	01 Oct 2008	1 : 20 000
59.	**MAL 7215**	KUALA RAJANG - TANJUNG MANIS	15 Apr 1989	01 Oct 2008	1 : 35 000
60.	**MAL 723**	TANJUNG BAYUNG - TANJUNG SIPANG	01 Dec 1996	30 Sep 2002	1 : 200 000
61.	**MAL 7257**	MUARA RAJANG	30 Oct 1989	15 Nov 2001	1 : 100 000
62.	**MAL 731**	TANJUNG SIPANG - TANJUNG SIRIK	15 Jul 1996	31 Dec 2007	1 : 200 000
63.	**MAL 7317**	PELABUHAN BINTULU	30 Sep 1988	31 Dec 2007	1 : 15 000
64.	**MAL 7332**	SEKITAR PERAIRAN PELABUHAN BINTULU	15 Aug 1989	01 Apr 2008	1 : 50 000
65.	**MAL 740**	KUALA RAJANG - KUALA MUKAH	15 Apr 1996	31 Dec 2008	1 : 200 000
66.	**MAL 741**	KUALA MUKAH - KUALA NIAH	01 Jun 1998	15 Nov 2002	1 : 200 000
67.	**MAL 750**	KUALA NIAH - MIRI	01 Oct 1998	31 Dec 2007	1 : 200 000
68.	**MAL 751**	KAWASAN GALIAN MINYAK BINTULU - GUGUSAN BETING PATINGGI ALI	31 Dec 1993	31 Oct 2009	1 : 250 000
69.	**MAL 752**	TG. BARAM - LABUAN	15 Dec 1997	31 Dec 2009	1 : 150 000
70.	**MAL 754**	KAWASAN GALIAN MINYAK TANJUNG BARAM - TANJUNG NOSONG	31 Dec 1993	15 Aug 2003	1 : 250 000
71.	**MAL 762**	GUGUSAN BETING PATINGGI ALI	31 Oct 2009	31 Dec 2015	1 : 250 000
72.	**MAL 7724**	PULAU LAYANG – LAYANG	30 Apr 1996	31 Dec 2010	1 : 12 500
73.	**MAL 781**	TERUMBU SEMARANG BARAT KECIL – TERUMBU PENINJAU	30 Oct 1988	31 Dec 2013	1 : 300 000
74.	**MAL 8421**	SEKITAR PERAIRAN SIPADAN – LIGITAN	01 Nov 1999	31 Dec 2009	1 : 50 000
75.	**MAL 8425**	SEKITAR PERAIRAN TAWAU	01 Nov 1999	15 Apr 2007	1 : 75 000
76.	**MAL 8433**	TERUSAN TANDO BULONG	01 Sep 2002	31 Dec 2007	1 : 25 000

(a)	(b)	(c)	(d)	(e)	(f)
77.	**MAL 8434**	TELUK SIBUKO UTARA	15 Dec 2001	31 Oct 2006	1 : 100 000
78.	**MAL 8502**	PELABUHAN LAHAD DATU	31 Jul 1996	01 Oct 2008	1 : 20 000
79.	**MAL 8503**	TELUKAN LAHAD DATU (DARVEL BAY)	15 Sep 1998	15 Jul 2016	1 : 100 000
80.	**MAL 8518**	PELABUHAN LABUAN (VICTORIA HARBOUR)	31 Dec 1993	31 Dec 2013	1 : 15 000
81.	**MAL 8523**	SEKITAR PERAIRAN LABUAN	30 Sep 2014	-	1 : 20 000
82.	**MAL 8553**	PELABUHAN SANDAKAN	15 Jul 2016	-	1 : 20 000
83.	**MAL 8608**	KOTA KINABALU – TELUK SAPANGAR	15 Nov 1992	31 Dec 2007	1 : 25 000
84.	**MAL 8617**	SEKITAR PERAIRAN SANDAKAN – TELUKAN LABUK	01 Feb 2006	-	1 : 100 000
85.	**MAL 8621**	PULAU TAGANAK – TERUMBU SEGAMA	31 Dec 2010	-	1 : 100 000
86.	**MAL 8645**	PULAU JAMBUNGAN – PULAU SILINGAAN	31 Dec 2008	-	1 : 100 000
87.	**MAL 860**	TERUMBU SEGAMA – PULAU LIGITAN	30 Sep 2014	-	1 : 200 000
88.	**MAL 864**	LABUAN – KOTA KINABALU	31 Aug 1993	31 Dec 2007	1 : 225 000
89.	**MAL 865**	KOTA KINABALU – KEPULAUAN MANTANANI	31 Dec 2007	-	1 : 150 000
90.	**MAL 871**	KEPULAUAN MATANANI – PULAU BANGGI	01 Jun 1998	30 Sep 2014	1 : 150 000
91.	**MAL 8715**	PULAU BANGGI – PULAU JAMBONGAN	01 Aug 2014	-	1 : 100 000
92.	**MAL 872**	KAW GALIAN MINYAK KOTA KINABALU – KEPULAUAN MANTANANI	31 Dec 1993	31 Dec 2010	1 : 250 000
93.	**MAL 880**	PULAU BALABAC – PULAU BANGGI	31 Aug 2011	-	1 : 150 000
94.	**MAL 884**	TERUMBU UBI – TERUMBU LAKSAMANA	30 Sep 2014	-	1: 250 000
95.	**MAL 885**	BETING MANTANANI – SELAT BALABAC	31 Dec 2013	-	1 : 250 000

b. <u>List of Malaysian Nautical Publications</u>

NO	PUBLICATIONS	TITLE	PUBLISHED & EDITION
1.	MAL 1	SYMBOLS AND ABBREVIATIONS USED ON MALAYSIAN CHARTS	Edition 2013
2.	MAL 2	MALAYSIAN CHARTS CATALOGUE	Edition 2017
3.	TIDE TABLE	MALAYSIAN, SINGAPORE AND BRUNEI DARUSSALAM TIDE TABLES	Edition 2017

C. List of Malaysian Electronic Navigational Charts (MYENC)

NO	CELL NO	TITLE	EDITION	PUBLISHED	SCALE
(a)	(b)	(c)	(d)	(e)	(f)
01	MY2C0054	PULAU JARAK – TANJUNG PIAI	7	29..09.2016	1: 350 000
02	MY2C0058	KO PHUKET – PULAU JARAK	6	03.03.2014	1: 350 000
03	MY3C0515	SELAT SINGAPURA	4	07.01.2013	1:180 000
04	MY3C0521	TANJUNG KELING – IYU KECIL	4	05.05.2010	1:180 000
05	MY3C0532	PERMATANG SEDEPA – TANJUNG KELING	10	19.11.2013	1:180 000
06	MY3C0540	KEPULAUAN SEMBILAN – PELABUHAN KLANG	5	28.04.2010	1:180 000
07	MY3C0553	PULAU PINANG – UJUNG TAMIANG	4	28.04.2010	1:180 000
08	MY3C0554	PULAU PINANG – KEPULAUAN SEMBILAN	6	14.07.2015	1:180 000
09	MY3C0565	KO TARUTAO – PULAU PINANG	5	28.04.2010	1:180 000
10	MY3C0625	TELUK MAHKOTA – PULAU TIOMAN	3	08.09.2016	1:180 000
11	MY3C0635	PULAU TIOMAN – KUANTAN	3	29..09.2016	1:180 000
12	MY3C0645	KUANTAN – DUNGUN	3	17.02.2014	1:180 000
13	MY3C0654	DUNGUN – PULAU REDANG	6	17.02.2014	1:180 000
14	MY3C0655	KERTIH – KAWASAN GALIAN MINYAK TAPIS	8	13.03.2014	1:180 000
15	MY3C0664	PULAU REDANG – TUMPAT	1	25.08.2015	1:180 000
16	MY3C0723	TANJUNG BAYUNG – TANJUNG SIPANG	1	13.07.2010	1:180 000
17	MY3C0731	TANJUNG SIPANG – TANJUNG SIRIK	2	09.04.2014	1:180 000
18	MY3C0740	KUALA RAJANG – KUALA MUKAH	3	18.08.2016	1:180 000
19	MY3C0741	KUALA MUKAH – KUALA NIAH	1	22.04.2011	1:180 000
20	MY3C0750	KUALA NIAH – MIRI	2	21.11.2013	1:180 000
21	MY3C0751	KAWASAN GALIAN MINYAK TANJUNG BARAM – GUGUSAN BETING PATINGGI ALI	5	09.04.2014	1:180 000
22	MY3C0754	KAW. GALIAN MINYAK TG. BARAM – TG. NOSONG	4	18.08.2016	1:180 000
23	MY3C0762	GUGUSAN BETING PATINGGI ALI	1	22.04.2011	1:180 000
24	MY3C0781	TERUMBU SEMARANG BARAT KECIL - TERUMBU PENINJAU	3	25.02.2015	1:180 000
25	MY3C0860	TERUMBU SEGAMA – PULAU LIGITAN	2	02.06.2016	1:180 000
26	MY3C0864	LABUAN – KOTA KINABALU	4	17.02.2014	1:180 000
27	MY3C0865	KOTA KINABALU – KEPULAUAN MANTANANI	4	09.04.2014	1:90 000
28	MY3C0871	KEPULAUAN MANTANANI – PULAU BANGGI	5	25.02.2016	1:90 000
29	MY3C0872	KAWASAN GALIAN MINYAK KOTA KINABALU – KEPULAUAN MANTANANI	2	02.08.2012	1:180 000
30	MY3C0880	PULAU BALABAC – PULAU BANGGI	4	27.07.2016	1: 90 000
31	MY3C0884	TERUMBU UBI-TERUMBU LAKSAMANA	2	30.12.2015	1: 180 000
32	MY3C8434	TELUK SIBUKO UTARA	3	03.03.2015	1:90 000
33	MY3C8503	TELUKAM LAHAD DATU	1	15.10.2015	1: 90 000
34	MY3C8617	SEKITAR PERAIRAN SANDAKAN – TELUK LABUK	2	25.08.2011	1: 90 000
35	MY3C8621	PULAU TAGANAK – TERUMBU SEGAMA	1	25.01.2012	1:90 000

(a)	(b)	(c)	(d)	(e)	(f)
36	MY3C8645	PULAU JAMBONGAN – PULAU SILINGAAN	1	09.01.2010	1:90 000
37	MY3C8715	PULAU BANGI – PULAU JAMBUNGAN	2	24.04.2016	1: 90 000
38	MY4A0673	SONGKHLA	1	31.08.2010	1: 22 000
39	MY4A5154	PERAIRAN BATU PAHAT JOHOR	1	02.03.2016	1: 22 000
40	MY4C5123	PELABUHAN TANJUNG PELEPAS	1	02.08.2012	1: 22 000
41	MY4C5217	SEKITAR PERAIRAN PELABUHAN SUNGAI UDANG - MELAKA	5	05.05.2014	1: 22 000
42	MY4C5239	SEKITAR PERAIRAN PORT DICKSON	2	21.04.2016	1: 22 000
43	MY4C5300	SEKITAR PERAIRAN PELABUHAN KLANG – PELABUHAN BARAT (WEST PORT)	3	02.06.2016	1: 22 000
44	MY4C5322	SEKITAR PERAIRAN UTARA PELABUHAN KLANG	2	21.10.2013	1: 22 000
45	MY4C5403	SUNGAI PERAK	2	05.05.2010	1: 22 000
46	MY4C5410	SEKITAR PERAIRAN SUNGAI PERAK	1	25.08.2015	1: 35 000
47	MY4C5425	SEKITAR PERAIRAN LUMUT	6	16.05.2014	1: 22 000
48	MY4C5622	SEKITAR PELABUHAN LANGKAWI (TELUK EWA)	1	25.02.2015	1: 40 000
49	MY4C5630	KUAH – KUALA PERLIS	1	13.04.2012	1: 45 000
50	MY4C5631	SEKITAR PERAIRAN PELABUHAN LANGKAWI (TELUK EWA)	3	13.04.2012	1: 22 000
51	MY4C6130	SELAT JOHOR TIMUR	2	22.10.2013	1: 22 000
52	MY4C8421	SEKITAR PERAIRAN SIPADAN – LIGITAN	1	20.01.2012	1: 45 000
53	MY4C8425	SEKITAR PERAIRAN TAWAU	2	20.02.2012	1: 45 000
54	MY4C8608	KOTA KINABALU – TELUK SEPANGGAR	5	18.07.2016	1: 22 000
55	MY5A5123	PELABUHAN TANJUNG PELEPAS	2	02.08.2012	1: 12 000
56	MY5A5217	PELABUHAN SUNGAI MELAKA	3	28.04.2010	1: 4 000
57	MY5A5300	PELABUHAN BARAT (WEST PORT)	2	15.01.2013	1: 12 000
58	MY5A5622	TANJUNG MALAI	1	17.11.2014	1: 12 000
59	MY5A5631	PELABUHAN TELUK EWA	3	13.04.2012	1: 12 000
60	MY5A6359	SUNGAI KUANTAN	3	09.04.2014	1: 12 000
61	MY5A6416	PELABUHAN KEMAMAN	1	30.08.2010	1: 8 000
62	MY5A7150	PULAU LAKEI	1	10.03.2010	1: 8 000
63	MY5A8425	TAWAU	1	23.01.2010	1: 12 000
64	MY5A8608	KOTA KINABALU	4	05.05.2014	1: 8 000
65	MY5B5631	TELAGA HARBOUR MARINA	3	13.04.2012	1: 12 000
66	MY5C5307	SEKITAR PERAIRAN PELABUHAN UTARA DAN SELATAN PELABUHAN KLANG	2	02.06.2016	1:12000
67	MY5C5403	SUNGAI PERAK (SAMBUNGAN)	2	05.05.2010	1: 22 000
68	MY5C5416	TAMBATAN PANGKALAN LUMUT	9	28.01.2014	1: 8 000
69	MY5C5419	SEKITAR PERAIRAN UTARA SELAT DINDING	4	29.07.2011	1: 12 000
70	MY5C5529	PELABUHAN PULAU PINANG	4	16.05.2014	1: 12 000
71	MY5C6359	PELABUHAN KUANTAN	3	28.04.2010	1: 12 000
72	MY5C6436	PELABUHAN KERTIH	1	02.10.2013	1: 4 000

(a)	(b)	(c)	(d)	(e)	(f)
73	MY5C7139	TANJUNG BATU – PENDING	2	29.04.2014	1: 12 000
74	MY5C7212	SARIKEI – BINTANGOR	1	04.04.2010	1: 12 000
75	MY5C7724	PULAU LAYANG – LAYANG	1	25.01.2012	1: 12 000
76	MY5C8502	PELABUHAN LAHAD DATU	1	02.10.2013	1: 12 000
77	MY6A6125	SEBANA COVE MARINA	1	25.01.2012	1: 4 000
78	MY6A7139	PENDING	1	25.01.2012	1: 4 000
79	MY6A7212	BINTANGOR	1	04.04.2010	1: 2 500
80	MY6A7724	TERUSAN TIMUR	1	25.01.2012	1: 4 000
81	MY6B5123	PELABUHAN TANJUNG PELEPAS	2	30.06.2016	1: 4 000
82	MY6B5411	JETI VALE, PERAK	1	03.03.2015	1: 4 000
83	MY6B5526	PELABUHAN PULAU PINANG	1	17.03.2014	1: 4 000
84	MY6B6122	PELABUHAN TANJUNG PENGERANG	1	27.03.2014	1: 4 000
85	MY6B6129	PELABUHAN TANJUNG LANGSAT	1	14.08.2014	1: 4 000
86	MY6B6130	SELAT TEBRAU – JOHOR TIMUR	1	14.08.2014	1: 4 000
87	MY6C6125	SUNGAI SANTI – SUNGAI SEBINA	2	14.04.2016	1: 12 000

4. CUMULATIVE LIST OF MALAYSIAN NOTICES TO MARINERS

List of charts published by National Hydrographic Centre and Permanent Correction to charts promulgated through Notices to Mariners up to date **31st Dec 2016 (NTM 12 of 2016)**.

No	Chart No	Edition	Notices to Mariners
(a)	(b)	(c)	(d)
1	MAL 4508	31 Dec 2009	**2010**-51-52-77-78-141-167-168-**2011**-51-75-88-89-90-92-104-105-106-143-144-**2012** -34-52-**2013**-78-97-116-126-149-175-176-**2014**-26-38-80-111-112-130-141-**2015**-26-39-54-106-107-108-167-207-**2016**-48(T)-87-123-175-206
2	MAL 5	01 Oct 2008	**2013**-43-79-98/(T)-99(T)-107-158-177-178-179-191-**2014**-27-28(T)-39-40-52(T)-64-83-84-88-101-102-131-132-146-**2015**-40-41-70-90-109-151-198(T)-213(T)-214-215(T)-**2016**-27(T)-28(T)-48(T)-88-107(T)-108(T)-124-138-186-192-207-208(T)-209-226-227-228
3	MAL 5123	31 Oct 2015	**2016**-46-139-157-158-167
4	MAL 5128	31 Oct 2006	**2013**-108-**2014**-133-**2015**-27-92-110-168-181-182(T)- **2016**-139
5	MAL 5129	01 Apr 2008	**2008**-113-115-117-**2009**-85(T)-141-143-178-189-**2010**-93-94-169(T)-170-184-**2011**-44-68-99(T)-107-109-131-146-147-148-151-**2012**-36-97-162-163-188-189-**2013**-30-80-108-117-151-**2014**-41-53-**2015**-27-42-111-112(T)-146(T)-169-181-208-**2016**-26(T)-71-109-125-139-159-160-167-210-211
6	MAL 515	31 Dec 2013	**2014**-29-41-42-53-54-66-89-103-124-**2015**-43-111-112(T)-113(T)-114(T)-144-146(T)-169-181-183-208-209-**2016**-26(T)-47-71-109-110-125-126-127-140-160-161-162-211-212-229-238
7	MAL 521	31 Dec 2012	**2013**-109-151-161-162-**2014**-82-**2015**-55-71-93-111-112(T)-147-148-**2016**-71-107(T)-109-125-159-192-211-223
8	MAL 5217	31 Dec 2016	**New Edition 2016**
9	MAL 5230	01 Nov 2016	**New Chart 2016**
10	MAL 5239	31 Dec 2012	**2015**-132-133-**2016**-72-223
11	MAL 5257	01 Dec 2016	**New Chart 2016**
12	MAL 5300	30 Sep 2011	**2016**-29-213-227
13	MAL 5307	31 Aug 2011	**2013**-68(T)-69-152-**2014**-149-**2015**-116(T)-**2016**-176-230(T)
14	MAL 532	31 Dec 2012	**2015**-132-133-149-150(T)-152-198(T)-212-215(T)- **2016**-26(T)-72-88-108(T)-209-214-223-227
15	MAL 5322	31 Aug 2011	**2012**-72-83-113-116-164-**2013**-31-68-69-**2015**-90-116(T)-199(T)-**2016**-88
16	MAL 54	31 Oct 2006	**2013**-119-151-161-162-180-193(T)-**2014**-28(T)-41-67-90(T)-150(T)-**2015**-41-55-71-72-90-93-94(T)-95-111-112(T)-147-148-149-150(T)-152-198(T)-199(T)-215(T)-**2016**-27(T)-71-88-108(T)-125-209-214-215
17	MAL 540	15 Jul 2007	**2014**-28(T)-**2015**-41-90-198(T)-199(T)-215(T)- **2016**-27(T)-30-49-88-108(T)-209-215
18	MAL 5403	31 Dec 2012	**2013**-180-**2016**-49-177(T)
19	MAL 5410	31 Dec 2012	**2014**-43-104-125-**2015**-56-96-153-**2016**-177(T)-231
20	MAL 5416	31 Dec 2015	**2016**-141-178(T)-179(T)
21	MAL 5419	16 Sep 2016	**2016**-141-178(T)-179(T)
22	MAL 5425	31 Dec 2015	**2016**-141-178(T)- 179(T)-180-231
23	MAL 5529	31 Dec 2016	**New Edition 2016**
24	MAL 553	15 Jul 2007	**2015**-56-57-58-118-145-184-**2016**-27(T)-30-49-182
25	MAL 5536	01 Dec 2016	**New Chart 2016**
26	MAL 554	15 Aug 2005	**2015**-56-96-184-**2016**-27(T)-30-49-178(T)-179(T)-183-231
27	MAL 5622	31 Dec 2010	**2011**-58-59-**2013**-33-153-182-**2014**-91-105-114(T)-**2016**-31-74-75-89-168
28	MAL 5625	31 Oct 2015	**2016**-184(T)
29	MAL 5630	31 Dec 2010	**2011**-59-165-153-**2016**-60-74-75-89-168-184(T)
30	MAL 5631	31 Dec 2010	**2013**-98(T)-177
31	MAL 565	31 Dec 2009	**2016**-184(T)-232
32	MAL 58	15 Jul 2004	**2013**-98(T)-111-177-180-**2014**-92-114(T)-135(T)-**2015**-39-41-57-58-118-145-**2016**-27(T)-30-60-75
33	MAL 6	30 Sep 2014	**2014**-126-127-136-137-**2015**-28-74-75-76-77-78-119-137-138-157-202-203-214-216-219(T)-**2016**-34(T)-35-50-51-128-129-206-216
34	MAL 6124	30 Sep 2014	**2015**-91(T)- 113(T)-114(T)-210-**2016**-26(T)-32(T)-76-110-111-127-130-139-185-217-233
35	MAL 6125	15 Apr 2007	**2008**-161-196
36	MAL 6128	15 Jul 2016	**New Edition 2016**
37	MAL 6130	01 Dec 2016	**New Edition 2016**
38	MAL 6134	01 Dec 2016	**New Edition 2016**
39	MAL 6202	01 Aug 2014	**New Edition 2014**
40	MAL 625	31 Dec 2010	**2011**-45(T)-70-**2012**-41(T)-96-118-125-**2013**-74-150-**2014**-131-142-**2015**-30(T)-73-98-120-121-134-186-200-**2016**-76
41	MAL 6257	15 Jul 2007	**2009**-132-**2012**-96-125-**2015**-30(T)-121-200
42	MAL 635	15 Apr 2007	**2007**-91-129-**2010**-117(T)-**2011**-45(T)-70-**2012**-41(T)-73-96-118-125-128-**2013**-34-**2015**-73-120-134-135-200-201-214-**2016**-33-163
43	MAL 6359	15 Apr 2007	**2007**-91-107-**2008**-40-101-197-**2011**-46(T)-70-203(T)-**2012**-85-168-**2013**-49-50-166-**2014**-47-48(T)-**2015**-45(T)-46(T)-59(T)-136-**2016**-77
44	MAL 6416	31 Oct 2007	**2009**-75-163-**2010**-125-**2011**-37-134-155-185(T)-186-**2012**-43(T)-62-**2013**-35-**2014**-30(T)-**2015**-217-**2016**-78
45	MAL 6436	31 Dec 2009	**2012**-103-**2016**-53
46	MAL 6441	01 Oct 2008	**2012**-42(T)-61(T)-103-**2013**-37-**2014**-70-**2016**-53-79
47	MAL 645	15 Apr 2007	**2007**-82-91-107-125-**2008**-40-197-**2010**-126-**2011**-184(T)-203(T)-209(T)-**2012**-42(T)-80-85-103-**2013**-26-49-50-**2014**-101-132-**2015**-213(T)-218-**2016**-28(T)-53-79
48	MAL 65	31 Dec 2008	**2010**-72-78-79-105-117(T)-152-182-**2011**-34-91-130-184(T)-**2012**-37-73-80-96-124-125-128-**2013**-26-27-28-43-99(T)-118-**2014**-39-42-64-101-103-131-132-142-**2015**-30(T)-73-98-120-122-134-135-201-213(T)-214-**2016**-28(T)-33-124-212
49	MAL 6522	01 Apr 2008	**2008**-227-**2009**-76-**2010**-144

(a)	(b)	(c)	(d)
50	**MAL 654**	31 Oct 2006	**2013**-120
51	**MAL 655**	15 Apr 2007	**2007**-166-**2008**-67-211(T)-183-**2010**-80-91-**2011**-184(T)-**2012**-42(T)-55-61(T)-71-80-**2013**-28-29-37-43-**2014**-27-39-52(T)-64-88-102-146-123-**2016**-79-124
52	**MAL 664**	31 Dec 2010	**2011**-204(T)-**2012**-176-179-**2013**-27-36-104-121-158-179-**2014**-31-40-**2015**-70-154-**2016**-48(T)-207-208(T)-218-228
53	**MAL 673**	31 Dec 2009	**2011**-204(T)-**2013**-121
54	**MAL 68**	31 Dec 2008	**2009**-183-191-**2010**-52-75-80-91-127-**2012**-55-71-127-176-179-**2013**-28-29-36-43-104-107-121-158-178-179-191-**2014**-27-31-39-40-52(T)-64-84-88-102-146-**2015**-40-70-109-123-**2016**-48(T)-80(T)-164-186-193-207-208(T)-228
55	**MAL 7139**	31 Dec 2009	**2010**-64-189-**2011**-38-39-189-**2012**-74-**2016**-81
56	**MAL 7150**	31 Oct 2009	**2009**-149(T)-166(T)-**2010**-44-189-**2011**-38-100(T)-169(T)-**2012**-63(T)-74-86-193-**2013**-38-39-105-114(T)-**2014**-49-57-**2015**-202
57	**MAL 7212**	31 Dec 2009	**2010**-108
58	**MAL 7213**	01 Oct 2008	**2016**-54
59	**MAL 7215**	01 Oct 2008	**2009**-42(T)-57(T)-58-59(T)-80-94-134(T)-**2010**-157-159-**2013**-76(T)-154-167-**2014**-57-71-**2016**-54-82(T)-90-194(T)-220(T)
60	**MAL 723**	30 Sept 2002	**2004**-68-80-95-111-124-**2005**-63-78-79-80-109-133-134-135-176-**2006**-41-61-82-83-154-155-156-**2007**-134-135-192-**2008**-52-74-121-143-163-201-**2009**-81(T)-92-93-95-106-107-148-149(T)-150-**2010**-36-**2011**-100(T)-**2012**-74-139-**2013**-75(T)-105-185-**2014**-49-57-**2015**-47-187-202-**2016**-34(T)-83(T)-91-112-195
61	**MAL 7257**	15 Nov 2001	**2003**-72-100-113-**2005**-82-177-206-**2006**-62-**2007**-45-66-**2008**-59-144-**2009**-42(T)-57(T)-58-59(T)-60(T)-80-94-134(T)-**2010**-157-159-173(T)-**2011**-61-116(T)-170(T)-**2013**-51-52-76(T)-113(T)-154-167-**2014**-57-139(T)-**2015**-60-74-202-219(T)-**2016**-35-54-90-113(T)-194(T)-196(T)
62	**MAL 731**	31 Dec 2007	**2008**-74-163-201-**2009**-42(T)-57(T)-58-60(T)-80-81(T)-92-93-107-149(T)-150-151-185(T)-**2010**-83-156-159-173(T)-**2011**-100(T)-116(T)-188-190(T)-**2012**-104-**2013**-53-75(T)-76-105-113(T)-124-**2014**-49-56(T)-57-71-139(T)-**2015**-47-61-74-187-202-219(T)- **2016**-34(T)-35-90-194(T)-196(T)
63	**MAL 7317**	31 Dec 2007	**2008**-75-88(T)-89-122-184-185-**2009**-43(T)-44(T)-61(T)-120(T)-121(T)-135-172(T)-173(T)-186(T)-**2010**-65-66-85-109-190-**2011**-40-47(T)-78(T)-82(T)-157-206-**2012**-44(T)-45(T)-106-**2013**-115-168-196(T)-**2014**-57-59-143-**2015**-31(T)-32(T)-79(T)-80-81-124(T)-155(T)-188-**2016**-36(T)-114(T)-115-165-187(T)-197
64	**MAL 7332**	01 Apr 2008	**2007**-193-**2008**-88(T)-122-164-184-185-**2009**-43(T)-44(T)-61(T)-62-120(T)-121(T)-173(T)-186(T)-**2010**-65-66-85-109-190-**2011**-40-77-82(T)-157-206-**2012**-44(T)-45(T)-106-**2013**-115-168-196(T)-**2014**-57-59-143-**2015**-31(T)-79(T)-80-81-124(T)-155(T)-188-202-**2016**-36(T)-112-115-197-219
65	**MAL 740**	31 Dec 2008	**2009**-42(T)-57(T)-58-59(T)-60(T)-80-94-134(T)-165-**2011**-61-79-170(T)-171(T)-**2012**-169-170-**2013**-47-51-52-70-76(T)-128-129-186(T)-**2014**-32-57-58-69-71-72(T)-139(T)-**2015**-28-60-74-75-202-219(T)-**2016**-35-90-194(T)-196(T)
66	**MAL 741**	15 Nov 2002	**2003**-37-86-122-132-150-**2004**-82-97-178-179-180-181-182-**2005**-36-64-83-85-86-168-178-208-**2007**-44-46-47-48-49-50-58-193-**2009**-62-79-164-165-**2010**-160-188-190-**2011**-77-82(T)-96-171(T)-187-206-**2012**-44(T)-45(T)-106-**2013**-70-112-113(T)-128-129-169-196(T)-**2014**-45-57-59-69-**2015**-48-75-202-**2016**-36(T)-115-116-197-198(T)
67	**MAL 750**	31 Dec 2007	**2013**-129-184-187(T)-**2014**-33-55-57-73-93-**2015**-33(T)-34-62-63-77-78-156(T)-202-**2016**-37-50-55(T)-188-199
68	**MAL 751**	31 Oct 2009	**2010**-38-110-160-188-190-**2011**-77-82(T)-156-187-206-**2012**-44(T)-45(T)-106-**2013**-70-101-112-128-129-169-184-**2014**-45-55-57-59-69-93-137-**2015**-48-75-77-202-**2016**-36(T)-115-116-188-197-198(T)
69	**MAL 752**	31 Dec 2009	**2010**-67-76-78-**2011**-62-172-191-205-207-**2012**-64(T)-84-105-119-129-130-140-192-**2013**-122-123-129-165-187(T)-194-**2014**-33-57-60-73-116-117-**2015**-33(T)-62-63-78-125-156(T)-170-202-214-**2016**-37-38-55(T)-56-166-199
70	**MAL 754**	15 Aug 2003	**2004**-39-48-112-128-129-138-139-140-142-158-183-184-185-210-**2005**-38-87-111-112-139-179-180-196-197-**2006**-51-71-84-106-113-136-**2007**-37-85-133-161-175-**2008**-41-42-53-90(T)-123-125-**2009**-63-78-108-136(T)-174-187-**2010**-39-76-78-86(T)-110-111-158-161-191-**2011**-62-71-117-172-191-205-207-**2012**-64(T)-84-105-119-129-130-138-140-192-**2013**-122-123-129-165-184-187(T)-194-**2014**-33-57-60-73-116-117-**2015**-33(T)-34-49-62-63-64(T)-125-126-156(T)-170-202-214-**2016**-37-38-39-50-55(T)-56-58-112-166-199-235
71	**MAL 762**	31 Dec 2015	**New Edition 2015**
72	**MAL 7724**	31 Dec 2010	**2011**-83(T)
73	**MAL 781**	31 Dec 2013	**2014**-106-**2015**-126-**2016**-51
74	**MAL 8421**	31 Dec 2009	**2010**-128-208-**2012**-13-131(T)- 221(T)
75	**MAL 8425**	15 Apr 2007	**2008**-55-92-103-**2009**-110-**2010**-84-**2011**-97-136-208-**2012**-47-156-**2013**-48
76	**MAL 8433**	31 Dec 2007	**2008**-199-**2016**-57(T)-92
77	**MAL 8434**	31 Oct 2006	**2016**-221(T)
78	**MAL 8502**	01 Oct 2008	**2008**-212
79	**MAL 8503**	15 Jul 2016	**2016**-221(T)
80	**MAL 8518**	31 Dec 2013	**2015**-125-171-**2016**-38-56
81	**MAL 8523**	30 Sep 2014	**2015**-125
82	**MAL 8553**	15 Jul 2016	**2016**-236
83	**MAL 860**	30 Sep 2014	**2015**-157-214-**2016**-40-59-221(T)
84	**MAL 8608**	31 Dec 2007	**2008**-54-**2009**-82(T)-**2010**-87-**2011**-84(T)-208-**2012**-132-133-180-**2013**-54-125-**2014**-50
85	**MAL 8617**	01 Feb 2006	**2013**-188-**2014**-126-**2015**-214-**2016**-41-131-144-221(T)-222
86	**MAL 8621**	31 Dec 2010	**2015**-214-**2016**-223
87	**MAL 864**	31 Dec 2007	**2015**-49-64(T)-125-126-214-**2016**-38-39-52(T)-56-58-93-169-200-235
88	**MAL 8645**	31 Dec 2008	**2011**-208-**2015**-214-**2016**-117
89	**MAL 865**	31 Dec 2007	**2010**-111-**2011**-208-**2012**-46-**2013**-55-123-**2014**-127-**2015**-139-214-93
90	**MAL 871**	30 Sep 2014	**2014**-152(T)- **2016**-145
91	**MAL 8715**	01 Aug 2014	**2014**-151-152(T)-**2015**-214-**2016**-145-237
92	**MAL 872**	31 Dec 2010	**2011**-71-208-**2012**-48-**2013**-54-55-83-**2014**-127-**2015**-125-139-214-**2016**-38-52(T)-56-93-200-235
93	**MAL 880**	31 Aug 2011	**2013**-197-**2015**-214-**2016**-118-119-132-145-237

(a)	(b)	(c)	(d)
94	**MAL 884**	30 Sep 2014	**2016**-206
95	**MAL 885**	31 Dec 2013	**2016**-206

5. NOTICES TO MARINERS – EXPLANATION OF TERMS

a. An explanation of the various commands used within Section II of monthly Notices to Mariners is summarized below. The main text of the update starts with one of the following five commands, usually in the order shown:

(i) **INSERT** is used for the insertion of all new data or, together with the **DELETE** command (see v. below), when feature has moved position sufficiently that the MOVE command (see iv. below) is not appropriate. For example: Delete feature and insert in a different position.

(ii) **AMEND** is used when a feature remains in its existing charted position but has a change of characteristic, for example:

Amendlight to Fl.3s25m10M 02º 23″.49N 101º 58″.31E.

When only the range of a light changes:

Amendrange of light to, 20M 02º 23″.49N 101º 58″.31E.

(iii) **SUBSTITUTE** is used when one feature replaces an existing feature and the position remains as charted. The new feature is always shown first, for example:

Substitute ◯ for (where ◯ is the **new** feature)

(iv) **MOVE** is used for feature whose characteristics or descriptions remain unchanged, but they are to be moved small distance, for example:

Move starboard-hand conical buoy from: 01º 07″.30N 103º 34″.30E.

to: 01º 06″.80N 103º 35″.00E.

(v) **DELETE** is used when features are to be removed from chart or, together with the **INSERT** command (see (i) above), when features are moved a significant distance such that the **MOVE** command is inappropriate.

b. Full details of chart updating methods can be found in NP294, “How to Keep Your Admiralty Charts Up-To-Date”.

6. LAW AND REGULATIONS PERTAINING TO NAVIGATIONS

a. Nothing in this notice is to be taken as over ruling local regulations as may be issued by Port Authority etc. to meet dangers or situations, which may arise or cover local conditions.

b. While in the interest of the safety of navigation, the National Hydrographic Centre makes every endeavor to include in its hydrographic publications a correct and up to date detail of all information pertaining to navigation in Malaysian waters. **It must be clearly understood that no liability whatsoever can be accepted by it for errors in, of failure to publish detail of such information.**

7. CONFUSION BETWEEN BRIGHT SHORE LIGHT AND NAVIGATIONAL LIGHTS

a. With the increasing use of brilliant shore lights for advertising etc, mariners are warned that these shore light may, at times, be mistaken for navigation light and that difficulty may be experienced in distinguishing navigation light particularly in the vicinity of harbours in the approaches to harbour, these brilliant shore light may be raised before the navigational light come into view.

b. Mariners are, therefore requested to report such cases with necessary details of the lights their characteristics and approximate positions to the appropriate Harbour Authority and to the National Hydrographic Centre, Bandar Armada Putra, Pulau Indah, 42009 PORT KLANG, Selangor.

8. PROHIBITION OF ANCHORING IN THE STRAITS OF MALACCA AND SINGAPORE

a. It is been observed vessels have been anchoring off the Traffic Separation Schemes (TSS) and Precautionary Areas in the Straits of Malacca and Singapore. These vessels are not only obstructing port approaches and traffic flow but also pose a risk to safety of navigation and the marine environment. There have been reported cases of incidents involving vessels maneuvering to anchor off the TSS and precautionary areas.

b. In view of the above, vessels is advised to not to anchor in all areas in the Straits of Malacca and Singapore between the landward limits of the TSS or precautionary areas, and adjacent port limits. Vessels are to anchor at the appropriate areas designated by the three littoral states (Malaysia, Indonesia and Singapore).

9. STRAITS OF MALACCA AND SINGAPORE – NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

a. The New and Amended Traffic Separation Schemes have been implemented at 0000 hours UTC on 1st Dec 1998.

b. The IMO Maritime Safety Committee, at its 69th session (11-20 May 1998), has adopted in accordance with the provisions of resolutions A. 858 (20), the following new and amended existing Traffic Separation Schemes and associated routing measures.

c. **AT ONE FATHOM BANK**

Description of the Traffic Separation Scheme.

i) A separation zone is bounded by a line connecting the following geographical positions:

1)	03º01".70N	100º47".40E
2)	02º54".70N	100º56".80E
3)	02º49".50N	100º59".50E
4)	02º44".90N	101º10".30E
5)	02º43".40N	101º10".00E
6)	02º49".00N	100º59".50E
7)	02º53".40N	100º55".40E
8)	03º00".30N	100º47".10E

ii) A traffic lane for northwest bound traffic is established between the separation zone and line connecting the following geographical positions:

9)	03º02".70N100º48".80E
10)	02º52".50N101º00".00E
11)	02º46".30N101º11".50E

iii) A traffic lane for southeast bound traffic is established between the separation zone and line connecting the following geographical positions:

12) 02º54".70N100º43".10E
13) 02º41".20N 101º08".80E

d. **OFF PORT KLANG**

Description of precautionary area.

i) A precautionary area established by a line connecting the following geographical positions:

14) 02º46".30N101º11".50E
15) 02º44".30N101º15".00E
16) 02º39".40N101º12".40E
17) 02º41".20N 101º08".80E

e. **PORT KLANG TO PORT DICKSON**

Description of the Traffic Separation Scheme.

i) A separation zone is bounded by a line connecting the following geographical positions:

18) 02º42".00N101º13".80E
19) 02º35".00N101º27".10E
20) 02º27".10N101º37".30E
21) 02º26".50N101º36".80E
22) 02º35".20N101º25".80E
23) 02º41".60N 101º13".60E

ii) A traffic lane for northwest bound traffic is established between the separation zone and a separation line connecting the following geographical positions:

24) 02º44".30N101º15".00E
25) 02º37".40N101º28".00E
26) 02º29".00N101º38".80E

iii) A traffic lane for southeast bound traffic is established between the separation zone and a separation line connecting the following geographical positions:

27) 02º39".40N101º12".40E
28) 02º34".00N101º23".30E
29) 02º24".60N 101º35".30E

f. **INSHORE TRAFFIC ZONE**

The area between the landward boundary of the Traffic Separation Scheme and the Malaysian coast between a line drawn from position (24) **02º44'.15N, 101º15'.00E** in a direction of **027º** to meet the coast and a line drawn from position (26) **02º29'.00N, 101º38'.80E** in a direction of **034º** to meet the Malaysian coast.

g. **OFF PORT DICKSON**

Description of the precautionary area.

i) A precautionary area is established by a line connecting the following geographical positions:

30) 02º29".00N101º38".80E
31) 02º25".80N101º42".90E
32) 02º21".40N101º39".40E
33) 02º26".60N 101º35".30E

h. **PORT DICKSON TO TANJUNG KELING**

Description of the Traffic Separation Scheme.

i) A separation zone is bounded by a line connecting the following geographical positions:

34) 02º23".90N101º41".40E
35) 02º09".70N101º59".60E
36) 02º09".00N101º59".00E
37) 02º23".20N 101º40".90E

ii) A traffic lane for north – west bound traffic is established between the separation zone and a separation line connecting the following geographical positions:

38) 02º25".80N101º42".90E
39) 02º11".60N101º01".00E

iii) A traffic lane for southeast bound traffic is established between the separation zone and a separation line connecting the following geographical positions:

40) 02º21".40N101º39".40E
41) 02º07".10N101º57".50E

iv) A deep – water route for southeast bound traffic is established by connecting the following geographical positions:

42) 02º21".40N101º39".40E
43) 02º13".80N101º39".30E
44) 02º05".10N101º55".90E
45) 02º03".00N101º54".20E
46) 02º12".30N101º36".80E
47) 02º22".20N101º36".80E
48) 02º24".00N 101º36".10E

i. **INSHORE TRAFFIC ZONE**

The area between the landward boundary of the Traffic Separation Scheme and the Malaysian coast between a line drawn from position (38) **02º25'.80N, 101º42'.90E** in a direction of **059°** to meet the Malaysian coast and a line drawn from position (39) **02º11'.60N, 102º01'.00E** in a direction of **034°** to meet the Malaysian coast.

j. **OFF MALACCA/DUMAI**

Description of the precautionary area.

i) A precautionary area is established by a line connecting the following geographical positions:

49) 02º11".60N102º01".00E
50) 02º07".20N102º06".20E
51) 02º00".00N102º59".80E
52) 02º03".00N 101º54".20E

k. **MALACCA TO IYU KECIL**

i) A separation zone is bounded by a line connecting the following geographical positions:

53) 02º05".40N102º04".60E
54) 01º55".70N102º15".40E
55) 01º40".00N102º48".30E
56) 01º23".20N103º12".40E
57) 01º13".80N103º24".00E
58) 01º12".20N103º28".50E
59) 01º10". 50N103º27".50E
60) 01º13".20N103º23".40E
61) 01º23".20N103º12".40E
62) 01º39".10N102º48".00E
63) 01º54".80N102º14". 80E
64) 02º04".60N 102º03".80E

ii) A traffic lane for northwest bound traffic is established between the separation zone and a separation line connecting the following geographical positions:

65) 02º07".20N102º06".20E
66) 01º57".90N102º16".60E
67) 01º38".40N103º00".00E
68) 01º25".50N103º15".00E
69) 01º15".20N103º25".30E
70) 01º14".30N103º29".70E

iii) A traffic lane for southeast bound traffic is established between the separation zone and a line connecting the following geographical positions:

71) 02º02".80N102º02".20E
72) 01º52".60N102º13".30E
73) 01º36".80N102º46".90E
74) 01º22".00N103º11".10E
75) 01º11".60N103º22".80E
76) 01º09".20N103º26".80E

iv) A deep-water route for southeast bound traffic established by connecting the following geographical positions:

77) 02º01".90N102º01".50E
78) 01º59".70N102º05".60E
79) 01º52".60N102º13".30E
80) 02º00".00N 101º59".80E

l. **INSHORE TRAFFIC ZONE**

The area between the landward boundary of the Traffic Separation Scheme and the Malaysia coast between a line drawn from position (65) **02º07'.20N, 102º06'.20E**, to Pulau Undan Lighthouse **(Lat 02º02'.90N, Long 102º20'.20E)** then in direction of **040º** to meet the Malaysian coast and a line drawn from position (70) **01º14'.30N, 103º29'.70E** in a direction of **038º** to meet the Malaysian coast.

m. **OFF SULTAN SHOAL LIGHTHOUSE**

Description of the precautionary area.

i) A precautionary area is established by a line connecting the following geographical positions:

81) 01º14".28N103º29".73E
82) 01º12".62N103º36".24E
83) 01º05".94N103º32".30E
84) 01º09".23N 103º26".76E

n. **IN THE SINGAPORE STRAITS (MAIN STRAIT)**

Description of the traffic separation scheme area.

i) A separation zone is bounded by a line connecting the following geographical positions:

85) 01º10".35N103º34".90E
86) 01º10".35N103º39".85E
87) 01º07".50N103º43".72E
88) 01º08".60N103º45".43E
89) 01º05".90N103º43".38E
90) 01º03".60N103º38".95E
91) 01º07".06N 103º32".96E

ii) A separation line connects the following geographical positions:

92) 01º08".60N103º45".43E
93) 01º10".26N103º47".91E
94) 01º10".81N103º49".30E

iii) A traffic lane for westbound traffic is established between the separation zone/line and a line connecting the following geographical positions:

95) 01º12".62N103º36".24E
96) 01º11".50N103º40".55E
97) 01º08".65N103º44".40E
98) 01º10".45N103º47".50E
99) 01º11".13N103º49".18E

iv) A traffic lane for eastbound traffic is established between the separation zone/line and a line connecting the following geographical positions:

100) 01º05".94N103º32".30E
101) 01º01".60N103º39".65E
102) 01º05".00N103º43".67E
103) 01º07".80N103º46".25E
104) 01º09".47N103º48".70E
105) 01º09".92N 103º49".65E

v) A deep-water route is established within the eastbound lane described in paragraph (d). A line connecting the following geographical positions bound the deep-water route:

i) 01º03".60N 103º38".95E
ii) 01º05".90N103º43".38E
iii) 01º08".61N103º45".44E
iv) 01º10".26N 103º47".91E
v) 01º10".81N103º49".30E
vi) 01º10".45N103º49".45E

vii) 01º09".95N103º48".28E
viii) 01º08".90N103º46".82E
ix) 01º04".95N 103º42".87E
x) 01º02".97N 103º39".10E

o. **SINGAPORE STRAIT (OFF PULAU SEBAROK/PULAU BELAKANG PADANG)** Description of the precautionary area.

i) A precautionary area is established by a line connecting the following geographical positions:

106) 01º11".13N103º49".18E
107) 01º11".59N103º50".31E
108) 01º10".45N103º50".75E
109) 01º09".92N 103º49".65E

p. **SINGAPORE STRAIT (OFF ST JOHN'S ISLAND)**

Description of the Traffic Separation Scheme.

i) A separation line connects the following geographical positions:

110) 01º11".27N103º50".43E
111) 01º12".21N 103º52".40E

ii) A traffic lane for westbound traffic is established between the separation line and a line connecting the following geographical positions:

112) 01º11".59N103º50".31E
113) 01º11".96N103º51".21E
114) 01º12".51N103º52".25E

iii) A traffic lane for eastbound traffic is established between the separation line and a line connecting the following geographical positions:

115) 01º10".45N103º50".75E
116) 01º11".41N103º52".76E

iv) A deep-water route is established within the eastbound lane described in paragraph (c). A line connecting the following geographical positions bound the deep-water route:

xi) 01º11".27N103º50".43E

xii) 01º12".21N103º52".40E

xiii) 01º11".78N103º52".58E

xiv) 01º10".92N 103º50".57E

q. **SINGAPORE STRAIT (OFF ST. JOHN'S ISLAND/PULAU SAMBU)** Description of the precautionary area.

i) A precautionary area is established by a line connecting the following geographical positions:

117) 01º12".51N103º52".25E
118) 01º13".38N103º53".85E
119) 01º12".11N103º54".40E
120) 01º11".41N103º52".76E

ii) The focal point of the precautionary area is located at the following geographical position:

121) 01º12".60N103º53".20E
Description of the area to be avoided.

A circular area to be avoided with a diameter of one cable is established around position 17.b (121).

r. **SINGAPORE STRAIT (OFF CHANGI/PULAU BATAM)**

Description of the Traffic Separation Scheme.

i) A separation line connects the following geographical positions:

122) 01º12".97N103º54".03E
123) 01º13".57N103º55".40E
124) 01º14".89N 103º59".01E

ii) A separation zone is bounded by a line connecting the following geographical positions:

125) 01º14".89N103º59".01E
126) 01º15".67N104º03".40E
127) 01º15".42N104º03".45E

iii) A traffic lane for westbound traffic is established between the separation zone/line and a line connecting the following geographical positions:

128) 01º13".38N103º53".85E
129) 01º14".07N103º55".18E
130) 01º16".02N104º00".00E
131) 01º16".60N104º03".32E

iv) A traffic lane for eastbound traffic is established between the separation zone/line and a line connecting the following geographical positions:

132) 01º12".11N103º54".40E
133) 01º13".50N103º57".67E
134) 01º14".05N 104º03".58E

s. **SINGAPORE STRAIT (OFF TANJUNG STAPA/PULAU BINTAN)**

Description of the precautionary area.

i) A precautionary area is established by a line connecting the following geographical positions:

135) 01º16".60N104º03".32E
136) 01º18".63N104º15".00E
137) 01º15".40N104º15".00E
138) 01º14".05N 104º03".58E

t. **AT HORSBURGH LIGHT AREA**

Description of the Traffic Separation Scheme.

i) A separation zone is bounded by line connecting the following geographical positions:

139) 01º17".32N104º15".00E
140) 01º18".00N104º19".70E
141) 01º24".55N104º27".05E
142) 01º24".30N104º27".25E
143) 01º17".80N104º19".85E
144) 01º17".10N 104º15".00E

ii) A traffic lane for southwest bound traffic is established between the separation zone and a line connecting the following geographical positions:

145) 01º18".63N103º15".00E
146) 01º19".40N104º19".50E
147) 01º25".40N104º26".32E

iii) A traffic lane for northeast bound traffic is established between the separation zone and a line connecting the following geographical positions:

148) 01º15".40N104º15".00E
149) 01º16".30N104º19".85E
150) 01º23".40N104º27".95E

10. STRAITS OF MALACCA AND SINGAPORE – RULES FOR VESSEL NAVIGATION

I. Definitions

For the purpose of these rules the following definition shall apply:

a. A vessel having a draught of 15 meters or more shall be deemed to be a deep draught vessel.

b. A tanker of 150,000 DWT and above shall be deemed to be a very large crude carrier (VLCC).

Note: The above definitions do not prejudice the definitions of "vessels constrained by her draught described in Rule 3 (h) of the International Regulations for Preventing Collisions at Sea, 1972.

II. General Provisions

a. Deep draught vessels and VLCCs shall allow for an under keel clearance of a least 3.5 meters at all times during the entire passage through the Strait of Malacca and Singapore and shall also take all necessary safety precaution, when navigating through the Traffic Separation Schemes.

b. Master of deep draught vessels and VLCCs shall have particular regard to navigational constraints when planning their passage through the Straits.

c. All deep draught vessels and VLCCs navigating within the Traffic Separation Schemes are recommended to use the pilotage service of the respective countries when they become available.

d. Vessels shall take into account the precautionary areas where crossing traffic may be encountered and be in a maximum state of maneuvering readiness in these areas.

III. Rules

Rule 1. Eastbound deep draught vessels shall use the designated deep-water routes.

Rule 2. Eastbound deep draught vessels navigating in the deep - water routes in Philip Channel and Singapore Strait shall as far as practicable, avoid overtaking.

Rule 3. All vessels navigating within the Traffic Separation Scheme shall proceed in the appropriate traffic lane in the general direction of traffic flow for that lane and maintain as steady a course as possible, consistent with safe navigation.

Rule 4. All vessels having defects, affecting operational safety shall take appropriate measure to overcome these defects before entering the Strait of Malacca and Singapore.

Rule 5. In the event an emergency or breakdown of a vessel in the traffic lane, the vessel shall as far as practicable and safe, leave the lane by pulling out to the starboard side.

Rule 6.

(a) Vessels proceeding in the westbound lane of the Traffic Separation Scheme "In the Singapore Strait" when approaching Raffles Lighthouse shall proceed with caution, taking note of the local warning system, and compliance with Rule 18(d) of the International Regulations for Preventing Collisions at Sea, 1972, avoid impeding the safe passage of a vessel constrained by her draught which is exhibiting the signals required by Rule 28 and which is obliged to cross the westbound lane of the scheme in order to approach the single point mooring facility (in approximate position **01º11'.42N,103º47'. 50E,** from Phillip Channel).

(b) Vessel proceeding in the Traffic Separation Schemes when approaching any of precautionary areas shall proceed with caution, taking note of the local warning system, and in compliance with 18(d) of the International Regulations for Preventing Collisions at Sea, 1972, avoid impeding the safe passage of vessel constrained by her draught which is exhibiting the signals required by Rule 28 and which is obliged to cross that precautionary area.

(c) Information relating to the movement of ships constrained by their draught as referred to in paragraphs (a) and (b) above will be given by radio broadcasts. The particulars of such broadcast are promulgated by Notices to Mariners. All vessels navigating in the Traffic Separation Scheme should monitor these radio broadcast and take the information received.

Rule 7. VLCCs and deep draught vessels navigating in the Straits of Malacca and Singapore shall, as far as it is safe and practicable, proceed at a speed of not more than 12 knots over the ground following areas:

(a) At One Fathom Bank Traffic Separation Scheme.

(b) Deep water routes in the Phillip Channel and Singapore Straits, and.

(c) Westbound lanes between positions **01º12'.51N, 103º52'.25E** and **01º11'.59N, 103º50'.31E** and between position **01º11'.13N, 103º49'.18E** and **01º08'.65N, 103º44'.40E**.

Rule 8. All vessels navigating in the requiting system of the Strait of Malacca and Singapore shall maintain at all times a safe speed consistent with safe navigation, shall proceed with caution, and shall be in a maximum state of manoeuvring readiness.

Rule 9. (a) Vessels that are fitted with VHF radio communication are to participate in the ship reporting system adopted by the Organization.

(i) Vessels of 300 GT and above.

(ii) Vessels of 50 meters or more in length.

(iii) Vessels engaged in towing or pushing with a combined GT of 300 and above, or with a combined length of 50 meters or more.

(iv) Vessels of any tonnage carrying hazardous and or potentially polluting cargo in accordance with the definitions in paragraph 1.4 of Resolution MSC 43(64).

(v) All passenger vessels that are fitted with VHF, regardless of length or GT and

(vi) Any category of vessels less than 50 meters in length or less than 300 GT which is fitted with VHF and in an emergency uses the appropriate traffic lane or separation zone, in order to avoid immediate danger.

(b) VLCCs and deep draught vessels navigating in the Straits of Malacca and Singapore are advised to broadcast, eight hours before entering the Traffic Separation Scheme, navigational information giving name, deadweight tonnage, draught, speed and times of passing One Fathom Bank Lighthouse, Raffles Lighthouse and Horsburgh Lighthouse, difficult and unwieldy tows are also advised to broadcast similar information.

Rule 10. All vessels navigating in the Straits of Malacca and Singapore are requested to report by radio to the nearest shore authority any damage to or malfunction of the aids to navigation in the Straits, or any aids out of position in the Straits.

Rule 11. Flag States, owners and operators should ensure that their vessels are adequately equipped in accordance with the appropriate international conventions/recommendations.

IV. Warning

Mariners are warned that local traffic could be unaware of the internationally agreed regulations and practices of seafarers and may be encountered in or near the Traffic Separation Scheme, and should take any precautions, which may be required by the ordinary practice of seaman or by the special circumstances of the case.

11. STRAITS OF MALACCA & SINGAPORE - DESCRIPTION OF THE MANDATORY SHIP REPORTING SYSTEM (STRAITREP)

1. Categories of ships required to participate in the system.

1.1Ships of the following categories are required to participate in the system.

1.1.1 Vessels of 300 GT and above.

1.1.2 Vessels of 50 metres or more in length.

1.1.3 Vessels engaged in towing or pushing with a combined GT of 300 and above, or with a combined length of 50 meters or more.

1.1.4 Vessels of any tonnage carrying hazardous cargo, as defined in paragraph 1.4 of resolution MSC.43 (64).

1.1.5 All passenger vessels that are fitted with VHF, regardless of length or GT and

1.1.6 Any category of vessels less than 50 meters in length or less than 300 GT which are fitted with VHF and emergency, uses the appropriate traffic lane or separation zone, in order to avoid immediate danger.

2. Geographical coverage of the system and the number and edition of the reference chart used for the delineation of the system.

2.1 The operational area of STRAITREP covers the Straits of Malacca and Singapore between longitudes **100º 40'E** and **104º 23'E** as shown in the chart lets attached as Appendix 1 and Appendix 2. The area includes the routing system in the Straits of Malacca and Singapore. The area is divided into nine sectors; each has an assigned VHF channel as shown in Appendix 3.

2.2 The reference chart which include the operational area STRAITREP are the Malaysian Chart Series MAL 515, 521, 532 and 54 published by the National Hydrographic Centre or the equivalent chart published by the competent Hydrographic Authority.

3. Format, content of report, times and geographical positions for submitting reports, authority to which report should be sent, available services. The ship report short title STRAITREP shall be made to the VTS authorities as follows: -

3.1 Format

The ship report shall be drafted in accordance with the format shown in Appendix 4. The information requested from ship is derived from the Standard Reporting Format given in paragraph 2 of the IMO resolution A.851 (20).

3.2 Content

The report required from a ship contains only information, which is essential to meet the objectives of the STRAITREP:

3.2.1 Information considered essential:

A -Name of ship, call sign, and IMO identification number (if available)

P -Hazardous cargo, class if applicable and
Q or R - Breakdown, damage and or deficiencies affecting the structure, cargo or equipment of the ship or any circumstances affecting normal navigation in accordance with the provisions of the SOLAS and MARPOL Conventions.

3.2.2 Information considered necessary when requested by VTS authority

E and F - Course and speed of ship.

Note: On receive of position message, operators of the VTS establish the relation between the ship"s position and information supplied by the facilities available to them. The information on heading and speed will facilitate the VTS operator"s task of identifying a ship within a group.

3.3 Geographical position for submitting report:

3.3.1 Ships entering the operational area shall report when crossing the limits mentioned in paragraph 2 or when crossing a line joining Tanjung Piai **01º15'.50N, 103º30'.75E** and Pulau Karimun Kecil **01º09'.20N, 103º24'.35E** or when leaving port a anchorage in the area or before joining the traffic lane of the TSS.

3.3.2 Ships entering the operational area shall also report when approaching from the south via Selat Riau, abeam of Karang Galang Lt **01º09'.58N, 104º11'.47E** or via Selat Durian, report when Pulau Jangkat Beacon **00º57'.89N, 103º42'.72E** is abeam and when approaching from the East Johor Strait, abeam of the Eastern Buoy **01º17'.87N, 104º05'.99E.**

3.3.3 A ship approaching from any direction other than those specified above shall on reaching sector 7, sector 8, or sector 9 as appropriate report by giving the vessel"s position in term of bearing and distance from one the following reference points:

i)	Pu Iyu Kechil Lt	(**01º11'.48N, 103º21'.23E**)
ii)	Sultan Shoal Lt	(**01º14'.38N, 103º38'.98E**)
iii)	Raffles Lt	(**01º09'.60N, 103º44'.55E**)
iv)	Sakijang Lt Bn	(**01º13'.30N, 103º51'.37E**)
v)	Bedok Lt	(**01º18'.54N, 103º56'.06E**)
vi)	Tg Stapa Lt	(**01º20'.57N, 104º08'.24E**)
vii)	Horsburgh Lt	(**01º19'.81N, 104º24'.44E**)

3.4 Authority

The VTS authorities for the STRAITREP are as follows:

i)	Sector 1 to Sector 5	-	Klang VTS
ii)	Sector 6	-	Johor VTS
iii)	Sector 7 to Sector 9	-	Singapore VTS

4. Information to be provided to ship and procedures to be followed:

4.1 STRAITREP also provides information to ships specific and critical situation that could cause conflicting traffic movement and other information concerning safety of navigation.

4.2 Depending on the sector that a ship is in, every ship shall also maintain a VHF radiotelephone listening watch on the appropriate VHF Channel. Information of general interest to ship will be broadcast on VHF channel 16 and any other channel, as may be the appropriate VTS authority. This broadcast will be preceded by an announcement on the appropriate VHF channel assigned to the sector.

5. Radio communications required for the system, frequencies on which reports should be transmitted and information to be reported. The radio communication required for the STRAITREP is as follows:

5.1 STRAITREP will be based on VHF voice radio communication and will be interactive. The call to the appropriate VTS authority shall be made on the VHF channel assigned to the particular sector in which the ship is located as indicated in appendix 3, and the report shall be transmitted on the channel or any other available channel as assigned by the appropriate VTS authorities.

5.2 The language used for communication shall, using the IMO “Standard Marine Communications Phrases” where necessary.

5.3 Information of commercial confidentiality may be transmitted by non-verbal means.

6. Rules and regulations in force in the area of the system.

6.1 The International Regulation for Preventing Collisions at Sea, 1972 are applicable throughout the operational area of STRAITREP.

6.2 The rules for vessel navigating through the Strait of Malacca and Singapore as approved by IMO are applicable throughout the area.

7. Shore based facilities to support operation of the system. The facilities of the STRAITREP are as follows:

7.1 Klang VTS

- Telephone, Facsimile and telex communication
- 6 set of VHF radio communication equipment
- 6 real time display console for “X” and “S” bands radar signals from remote radar stations.

7.2 Johor VTS

- Telephone, Facsimile and telex communication
- 4 set of VHF radio communication equipment
- 4 real time display console for “X” and “S” bands radar signals from remote radar stations.

7.3 Singapore VTS

- Telephone, Facsimile and telex communication
- 11 set of VHF radio communication equipment
- 4 real time display console for “X” band radar signals from remote radar stations.
- 4 radar of radio direction finder in marine bands.

7.4 Remote Stations:

7.4.1 Pulau Angsa

- 1 “X” band radar facility
- 1 “S” band radar facility
- VHF transmitters and receivers

7.4.2 Bukit Jugra

- 1 “X” band radar facility
- 1 “S” band radar facility
- VHF transmitters and receivers

7.4.3 Cape Rachado

- 1 “X” band radar facility
- 1 “S” band radar facility
- VHF transmitters and receivers

7.4.4 Pulau Undan

- 1 “X” band radar facility
- 1 “S” band radar facility
- VHF transmitters and receivers

7.4.5 Bukit Segenting

- 1 “X” band radar facility
- 1 “S” band radar facility
- VHF transmitters and receivers

7.4.6 Tanjung Piai

- 1 “X” band radar facility
- 1 “S” band radar facility
- VHF transmitters and receivers

7.4.7 Bukit Pengerang

- 1 “X” band radar facility
- 1 “S” band radar facility
- VHF transmitters and receivers

7.4.8 Sultan Shoal Lighthouse

- 1 “X” band radar facility
- VHF transmitters and receivers

7.4.9 Raffles Lighthouse

- 1 “X” band radar facility

7.4.10 St John"s Island

- 1 “X” band radar facility
- 1 “S” band radar facility
- VHF transmitters and receivers

7.4.11 Bedok Lighthouse

- 2 sets of VHF/DF radio direction finder.

7.4.12 Bedok

- 1 “X” band radar facility

7.4.13 Horsburgh Lighthouse

- 1 “X” band radar facility
- VHF transmitters and receivers

7.4.14 Jurong Control

- 2 sets of VHF/DF radio direction finder

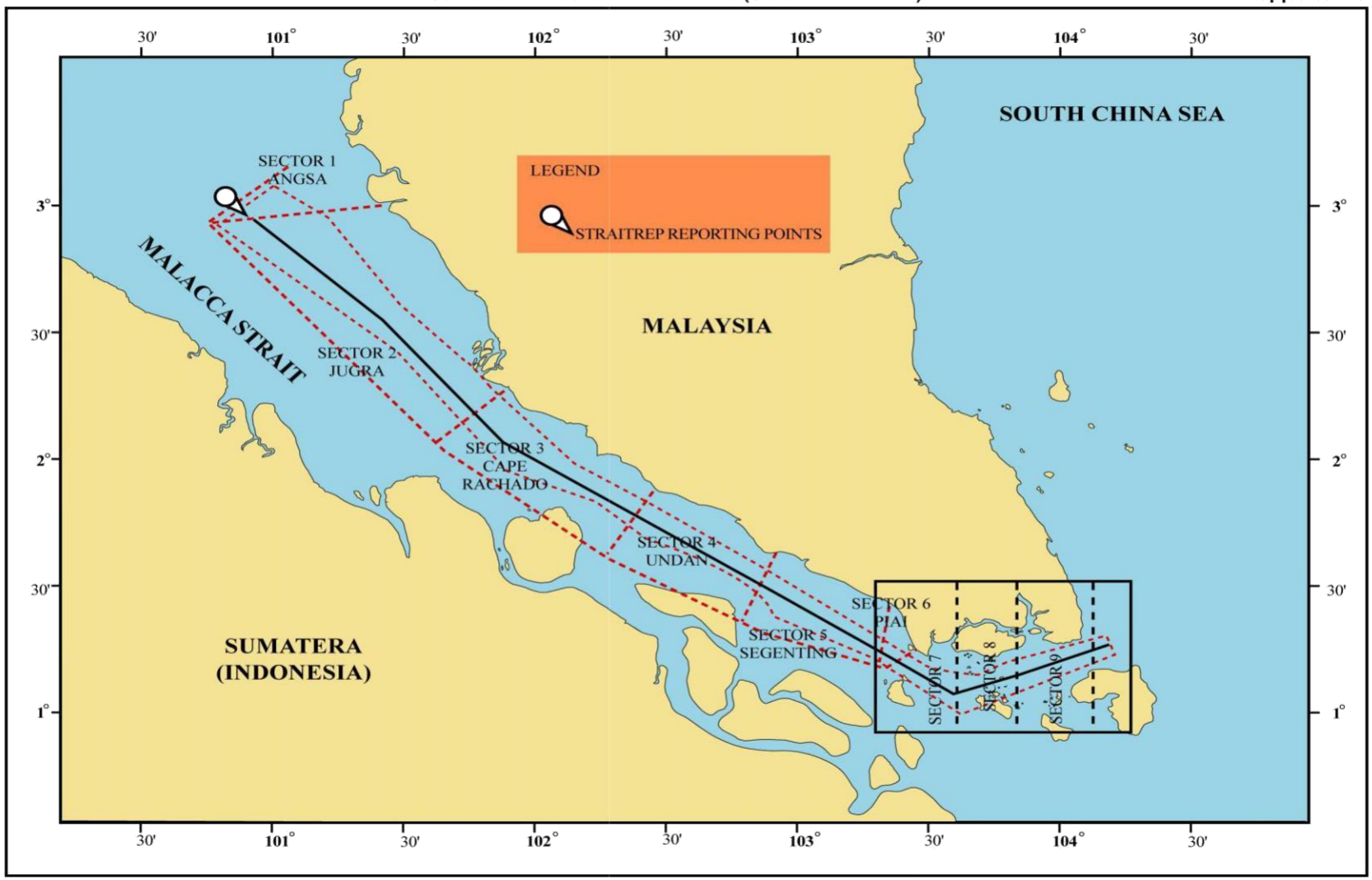
8. Alternative communication if the communication facilities of the shore based authority fails:

8.1 STRAITREP is designed to avoid, as far as possible, any irretrievable breakdown of equipment that would hinder the functioning of the services normally provided by the respective VTS authorities.

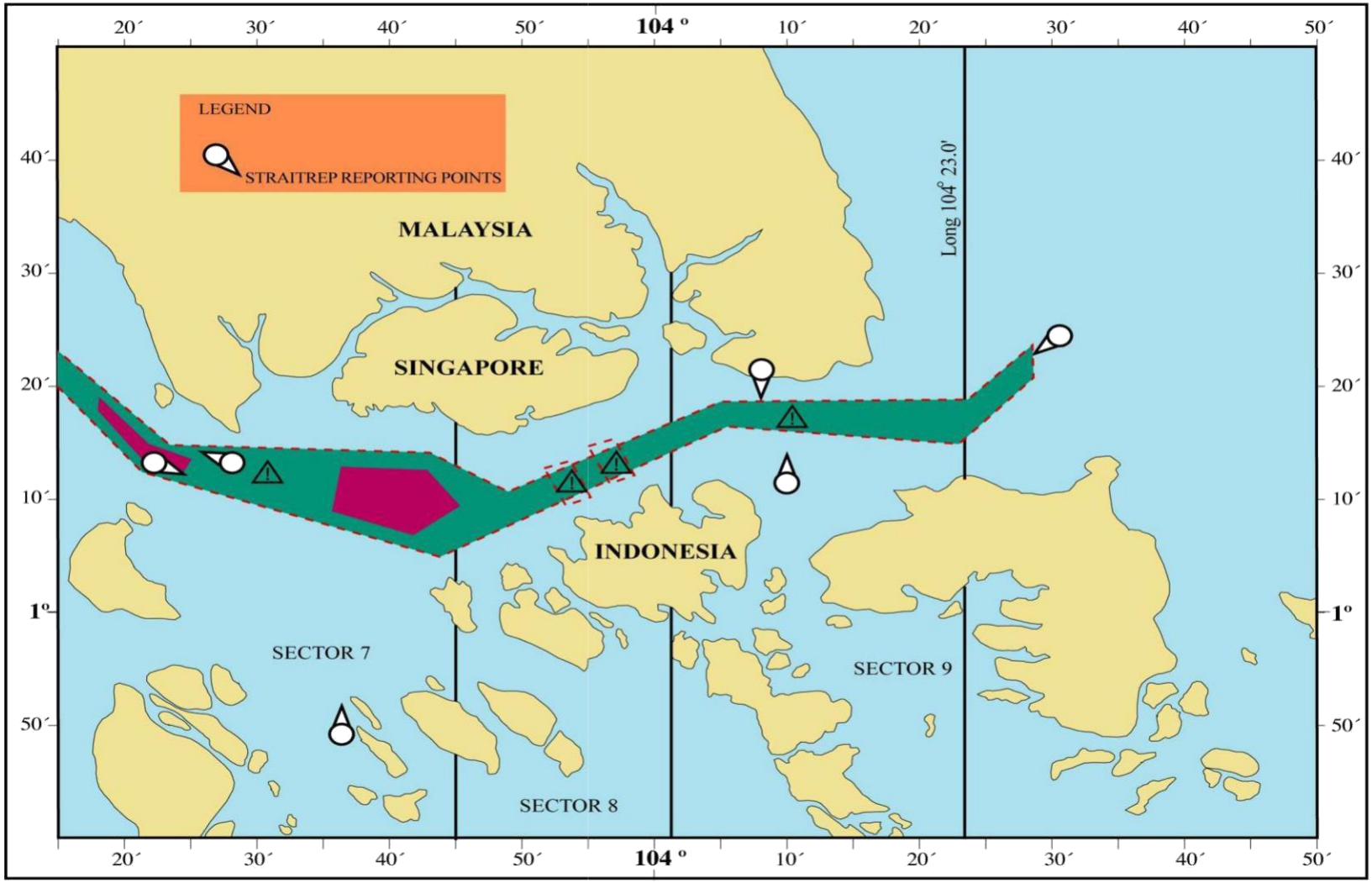
8.2 The most important items of equipment and power sources are duplicated and the facilities are provided with emergency generating sets as well as with Uninterruptible Power Supply (UPS) units. A maintenance team is available 24 hours a day to attend to any breakdown.

8.3 STRAITREP is also designed in such a manner that if one station fails, the adjacent station can provide the necessary coverage.

STRAITREP OPERATIONAL AREA (SECTORS 1 TO 6)



STRAITREP OPERATIONAL AREA (SECTORS 7 TO 9)



ASSIGNED VHF CHANNELS FOR SECTORS IN THE MANDATORY REPORTING SYSTEM IN THE STRAITS OF MALACCA AND SINGAPORE (STRAITREP)

SECTOR	VHF CHANNELS	VTS AUTHORITIES
Sector 1	VHF Channels 66	Klang VTS
Sector 2	VHF Channels 88	Klang VTS
Sector 3	VHF Channels 84	Klang VTS
Sector 4	VHF Channels 61	Klang VTS
Sector 5	VHF Channels 88	Klang VTS
Sector 6	VHF Channels 88	Johor VTS
Sector 7	VHF Channels 73	Singapore VTS
Sector 8	VHF Channels 14	Singapore VTS
Sector 9	VHF Channels 10	Singapore VTS

DRAFTING OF RADIO REPORTS TO THE MANDATORY SHIP REPORTING SYSTEM IN THE STRAITS OF MALACCA AND SINGAPORE (STRAITREP)

Designator	Function	Information Required
A	Ship	Name and call sign
C	Position	A 4 digit group giving latitudes in degrees and minutes suffixed with N (north) or S (south) and a 5 digit group giving longitudes in degrees in minutes suffixed with E(east) or W(west)
D	Position	True bearing (first 3 digits) and distance given in nautical miles from a clearly identifiable point (state landmark)
E	True course	A 3 digit group
F	Speed in knots and tenths of knots	A 3 digit group
P	Hazardous cargo on board	Indicate “Yes” or “No” to weather vessel is carrying hazardous cargo. If “Yes” the class if applicable.
Q	Defect/damage/deficiencies/other limitations	Brief detail of defects, deficiencies or other limitations
R	Description of pollution or dangerous goods lost overboard	Brief detail of type of pollution (oil, chemicals, etc) or dangerous good lost overboard position expressed as in (C) or (D)

12. INFORMATION ABOUT RADAR BEACONS

a. Racon (radar beacons) is being installed on the Malaysian Coast. These Racon are located on conspicuous objects like light house and etc. They operate in the „X" band marine radar (9300 MHz) and provide information on bearing as well as range by means of special codes signals displayed on the ships radar screen. Range is measured from the centre of the PPI to the innermost point of the special coded signal received from the Racon after applying a standard negative correction of 75 meters (246 feet), in order to take care of the delay between reception and transmission.

b. Racons have been installed at the following places and their details are as follow:

PENINSULAR MALAYSIA

1. **Batuan Penyu No. 1**

(i)	Object	:	Concrete framework tower square base
(ii)	Position	:	2° 13".80N 101° 12".80E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code P (·——·)

2. **One Fathom Bank**

(i)	Object	:	White round steel tower with red bands on concrete piles structure
(ii)	Position	:	2° 53".30N 100° 59".80E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code O (———)

3. **One Fathom Bank**

(i)	Object	:	Yellow buoyant beacon with North Cardinal top mark
(ii)	Position	:	2° 48".70N 100° 56".50E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code M (——)

4. **One Fathom Bank (N)**

(i)	Object	:	White beacon
(ii)	Position	:	3° 00".90N 100° 51".90E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code T (—)

5. **Sepat RLB**

(i)	Object	:	Black yellow horizontal stripes buoyant beacon
(ii)	Position	:	2° 34".10N 101° 23".40E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code C (—·—·)

6. **Mudah Selatan**

(i)	Object	:	White round GRP tower on piles platform
(ii)	Position	:	1° 25".20N 103° 11".20E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code O (———)

7. **Sungai Udang**

(i)	Object	:	SBM (Super Buoy Mooring)
(ii)	Position	:	2° 11".73N 102° 06".77E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code U (··—)

8. **Tanjung Piai**

(i)	Object	:	White round GRP tower on pile
(ii)	Position	:	1° 15".50N 103° 30".70E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code M (— —)

9. **Horsburgh Lighthouse**

(i)	Object	:	White round tower black bands
(ii)	Position	:	1° 19".82N 104° 24".40E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code O (— — —)

10. **Pulau Mungging**

(i)	Object	:	Metal framework tower
(ii)	Position	:	1° 21". 70N 104° 17". 80E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code N (—·)

11. **Belida Oilfield**

(i)	Object	:	Moored Storage Tanker
(ii)	Position	:	4° 07". 80N 105° 07". 80E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code T (—)

12. **Lawit A**

(i)	Object	:	On oil platform
(ii)	Position	:	6° 33". 00N 103° 21". 00E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code X (—··—)

13. **Jerneh A**

(i)	Object	:	On oil platform
(ii)	Position	:	6° 34". 50N 103° 44". 60E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code Y (—·——)

14. **Sungai Golok**

(i)	Object	:	White round GRP tower on pile
(ii)	Position	:	6° 14". 20N 102° 05". 50E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code A (·—)

EAST MALAYSIA (SABAH AND SARAWAK)

15. **Pulau Sipadan**

(i)	Object	:	On light beacon tower
(ii)	Position	:	4° 06". 60N 118° 37". 90E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code S (. . .)

16. **Pulau Mataking**

(i)	Object	:	On light beacon tower
(ii)	Position	:	4° 34".70N 118° 56". 80E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code M (——)

17. **Bintulu**

(i)	Object	:	At Fairway buoy
(ii)	Position	:	3°16". 42N 112° 57". 10E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code B (— · · ·)

18. **Central Luconia Gasfield**

(i)	Object	:	On gas platform
(ii)	Position	:	4°20". 06N 112°40". 72E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code L (· — · ·)

19. **Terumbu Peninjau**

(i)	Object	:	At buoy No. 2
(ii)	Position	:	8°07". 25N 114°47". 83E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code C (— · — ·)

20. **Permatang Ubi**

(i)	Object	:	At buoy No. 3
(ii)	Position	:	7°56". 70N 114°26". 13E
(iii)	Sector	:	360°
(iv)	Service	:	Continuous
(v)	Identification signal	:	Morse Code K (— · —)

13. SHIP IN DISTRESS

I. Statutory distress signals

1. Annex IV of the International Regulation for Preventing Collision at Sea 1972, lists the signal to be used or exhibited either together or separately to indicate distress and need of assistance.

a. These are:-

1) A gun or other explosive signal fired at interval of about a minute.
2) A continuous sounding with any fog signaling apparatus.
3) Rockets or shell, throwing red stars fired one at a time short intervals.
4) A signal made by radiotelegraphy or by any other signaling method consisting of the group · · · — — — · · · (SOS) in the Morse Code.
5) A signal sent by radiotelegraphy consisting of the spoken word "Mayday".
6) The International Code Signal of distress indicated by N.C.
7) A signal consisting of a square flag having above a below it a ball or anything resembling a ball.
8) Flames on the vessel (as from a burning tar barrel, oil barrel, etc)
9) A rocket parachute flare or a hand flares showing a red light.
10) A smoke signal giving off orange – colour smoke.
11) Slowly and repeatedly raising and lowering arms outstretched to each side.
12) The radiotelegraph alarm signal.
13) The radiotelephone alarm signal.
14) Signal transmitted by emergency position – indicating radio beacons.
15) Approved signal transmitted by radio communication system.
16) The digital selective calling distress signal.

b. The use or exhibition of any of the foregoing signals except for the purpose of indicating distress and need of assistance and the use of other signals that may be confused with any of the above signals are prohibited.

c. Attention is drawn to the relevant sections of the International Code of Signals, the Merchant Ship Search and Rescue Manual and the following signals:

1) A piece of orange – colour canvas white either a black square and circle or other appropriate symbol (for identification from the air)

2) A dye marker.

2. The requirement for the carriage of ship distress signals for all classes of ship including their associated survival craft, are contained in either:-

a. Regulation 5 – 11 and schedule 1 and 4 to the Merchant Shipping (Live Saving Appliances) Regulation 1986.

b. Regulation 36 and 51 to the Merchant Shipping (Live Saving Appliances) Regulation 1980.

Not less than twelve rocket parachute flares shall be carry by Classes I, II (A), III, IV, VII, VII (T), VIII, VIII (A), VIII (T). VIII (A) (A), IX, XI.

Classes VI, IX (A), IX (A) (T) and XII are allowed to carry alternative distress signals.

Survival craft generally required to carry, four rocket parachute flares, six hand flares and two buoyant smoke signals. Class V ships are not required to carry ships distress signal.

II. <u>Authority to use distress signals</u>

3. Rule 3-(1) of the Merchant Shipping (Signals of Distress) Rules, 1977, provides as follow:-

a. No signal of distress shall be used by any vessel unless the master of the vessel so orders.

b. The master of the vessel shall not order any signal of distress to be used by his vessel unless he is satisfied:

(1) That his vessel is in serious and imminent danger, or that another vessel or an aircraft is in serious and imminent danger and cannot of itself send that signal, and

(2) That the vessel in danger (whether his own vessel or another vessel) or the aircraft in danger, as the case maybe, requires immediate assistance in addition to any assistance than available to her.

c. The master of the vessel which has sent any signal of distress by means of radio or other means, shall cause that signal to be revoked by all appropriate means as soon as he is satisfied that the vessel or aircraft to which the signal relates is no longer in need of assistance as foresaid.

4. Master and others in charge afloat are reminded of the importance of making a properly authorized signal of distress whenever a ship is in grave and imminent danger, even when they believe that assistance has already been assured. Master are also reminded of the need to cancel a distress call if the ship is no longer in danger. Failure to do this has on occasions resulted in serious loss of the time to other ships and has in some instances caused needles anxiety to relatives and friends of those on board, because failure to find or establish communication with the ship sending the signal has led to the belief the she has foundered.

Ships have also on occasion used red flares to warn off other vessels, the flares have been sighted from a distance and extensive SARS operations has been mounted. This is illegal and it is also unnecessary. The use of warning signals is permitted provided that they are quite distinct from distress signals and for the purpose white flares are manufactured and are readily available through chandlers. A well-trained Aldis Lamp supplemented by the ship"s whistle is also often effective.

III. Need for care in the use of certain distress signals

5. Two of the statutory distress signal, namely “a continuous sounding with any fog-signaling apparatus” and “flames on the vessel” could on occasions be misunderstood and is recommended that where more easily recognized distress signals can be made the above mentioned signals not be used.

6. Distress signal should be as distinctive as possible, so that may be recognized at once and assistance dispatched without delay. Thus, instead of making an indefinite succession of blasts on the fog-signaling apparatus when in distress, mariners should make the “continuous sounding” by repeating the Morse Signal SOS (· · · — — — · · ·) on the whistle or other sound signaling equipment. If this is done there can be no mistake as to the meaning of the signal. Similarly, by the night, if signaling for helps by means of a lamp or flashing light the same signal SOS should always be used.

7. In the case of the “flame on the vessel” signal, unless the flames making the signal are sufficiently large to attract immediate attention, their chances of being recognized as a distress signal are very poor. The best signals are rocket parachute flares or hand flares showing red lights or rockets emitting red stars. Arrangements should be made to steady rockets to ensure their satisfactory flight when fired.

IV. Procedure when sending a radio distress or urgency signal

8. All the calls detailed below should be sent on one or other of the distress and calling frequencies, 500 kHz for radiotelegraph transmissions, 2182 kHz and VHF Ch 16 for radiotelephone transmissions. (Although ships in distress should normally transmit their distress calls on either 500 kHz, 2182 kHz or VHF Ch 16 any other frequency may also be used, AT ANY TIME, if it appears probable that assistance may thereby be obtained more quickly).

9. Descriptions of and the procedures for sending the Alarm Signal, Distress Signal and Distress Message by radiotelegraph or radiotelephone are contained in the “Manual for use by the Maritime Mobile and Maritime Mobile-Satellite Services” published by the ITU, Geneva. The information is also contained in the “Handbook for Marine Radio Communication”, published by Lloyds London Press.

10. The RADIOTELEGRAPH ALARM SIGNAL is intended to give preliminary warning to other ships and to Coast Radio Stations, either aurally or by activation of the auto-alarms of ship within range, of the impending transmission of the distress call and message, or to of announce (a) that an urgent cyclone warning is to be transmitted by a duly authorised coast station, (b) the loss of a person or persons overboard when the assistance of other ship is required and cannot be obtained satisfactorily by the used of urgency signal only. Since the timing accuracy of this signal of twelve dashes sent in one minute is important, all compulsorily fitted radiotelegraph ships are provided with an automatic keying device that should be used for the purpose (Appendix A draws attention to the used which can be made of the device in an emergency by unskilled person who receive suitable instruction beforehand). It should be immediately followed by the Radiotelegraph DISTRESS CALL which consists of: -

a. The DISTRESS SIGNAL SOS sent three times.

b. The word DE;

c. The call-sign of the mobile station in distress sent three times followed, when circumstances permit, by an interval of two minutes to enable radio officers and operators to reach their apparatus and bring it into operation. The radiotelegraph distress signal indicates that a ship is threatened by grave and imminent danger and request immediate assistance; it also gives absolute priority over all other transmissions and secures silence for the distress message. The distress call should be repeated with discretion until the distress message can be sent. Should radio officers on listening for a minute or two after being called by the auto alarm bell hear nothing further, they would be liable to tribute the alarm to false call. The DISTRESS

MESSAGE comprises the distress signal followed by the name of the ships in distress and information concerning her for position, the nature of distress and the kind of assistances desired. It is important that the position of vessel in distress should be given as accurately as possible in latitude and longitude. If the vessel is started to be in distress on a rock or shoal, or near a headland or the place, a precise geographical indication should be given of the position of the vessel, in order that the place may not be mistaken for another place with the same name on another part of the coast. In the case of a vessel in distress and underway or drifting, the Master should, after indicating his position, give the vessel"s course and speed or estimated direction and rate of drift, stating whether his vessel is in a "light" or "loaded" condition. The distress message should be immediately followed by the transmission of two dashes, each of approximately 10 to 15 second"s duration to permit direction-finding stations to determine position. In addition to the radio distress call, the appropriate visual and/or sound signals of distress should, of course, be made to indicate the position of the vessel during darkness, or when visibility is poor.

11. The RADIOTELEPHONE ALARM SIGNAL is also intended to give preliminary warning to other ships and to Coast Radio Stations, either aurally or by activation of radio telephone auto-alarms, of the impending transmission of a distress call and message or in certain cases a message prefixed by the Urgency Signal as indicated in paragraph 10. The signal consist of two tones transmitted alternately over a period of at least 30 seconds, and will normally be generated by an automatic device which is now available for use with ship"s radiotelephone transmitters. (See appendix B). When such a device is provided, the signal should be transmitted.

12. The RADIOTELEPHONE DISTRESS SIGNAL consists of the spoken word "MAYDAY". The RADIOTELEPHONE DISTRESS CALL consists of the distress signal "MAYDAY". Spoken three times, the words "THIS IS" and the name of the ship distress, repeated three times. All stations hearing it must cease all transmissions capable of interfering with the distress call or messages and must listen on the frequency used for the distress call. This call must not be addressed to a particular station. The composition of the DISTRESS MESSAGE is as described in paragraph 10.

13. THE RADIOTELEGRAPH URGENCY SIGNAL XXX (—··——··——··—) repeated three times, and the RADIOTELEPHONE URGENCY SIGNAL, which consists of the group of words, "PAN PAN" repeated three times, are provided for use in cases in which a ship making a call has a very urgent message to transmit concerning the safety of the ship or of some person on the board or within sight, but it does not necessarily imply that ship in imminent danger or requires immediate assistance. The call as priority over all other communications expect distress calls and it should be used in all cases in which the sending out of the SOS and MAYDAY signal is not fully justified. The urgency signal and message must, where practicable, be addressed to a specific station, i.e. to the nearest Coast Radio Station or to other ship known to be in the vicinity. The urgency signal may also be used when the Master of the ship desires to issue a warning that circumstances are such that it may become necessary for him to send out the distress signal at a large stage, but in any such case the signal need not be addressed to a specific station. If precautionary action ceases to be necessary, the message should be cancelled at once.

V. Radio watch for, and reception of, distress signal

14. In accordance with the Merchant Shipping (Radio Installations) Regulations 1980 (as amended) and the Merchant Shipping (Radio) (Fishing Vessels) Rules 1974 (as amended), all Malaysia passenger ships, cargo ships of 300 tons and upwards and fishing vessels of 12 metres or more in length must keep continuous radiotelephone watch on the frequency of 2182 kHz. Merchant ships are required to maintain this watch by mechanical means and this method of watch is also permitted on fishing vessels. Merchant ships and fishing vessels required by the Regulations and Rules to carry radiotelegraph equipment must also maintain a continuous watch on the frequency of 500 kHz. On Merchant ships the watch is to be maintained by human means during working hours. These hours are specified in the ITU Radio Regulation. Outside of these hours, and all times on fishing vessels, the 500 kHz watch may be maintained by mechanical means. Ships and fishing vessels should, where practicable, maintain watch on VHF Ch 16 when within the service area of a coast station providing international maritime mobile radiotelephone service in the band 156-174MHz.Ships

and fishing vessel fitted only with VHF radiotelephone equipment operating in the authorized bands between 156 and 174 MHz should maintain on Ch 16 when at sea.

15. Any ships which receive a distress message from a mobile station which is beyond any possible doubt in its vicinity must immediately acknowledge receipt. If however the mobile station in distress is beyond any possible doubt not in the immediate vicinity, a short interval of time must be allowed before acknowledging receipt, so that ships nearer to the station in distress can answer and acknowledge receipt without interference. The radio officer or operator is at once inform the Master of the ships that he has received the " Distress Message " and whether or not he has been able to acknowledge it; he is also to inform the Master whether he has heard other ships acknowledging the " Distress Message " and what their relative positions are, if they have given them. He will then receive the Master instructions on the action (if any) which he has taken with regard to the repetition of the Distress Message on 550 kHz, 2128 kHz or VHF Ch 16 as the case may be. All distress messages and distress traffic must be entered in full in radiotelegraph log or any radiotelephone log. Any ship which is not in a position to render assistance and which has heard a distress message which has not been immediately acknowledged, must take all possible steps to attract the attention of the ships that are in position to render assistance. For this purpose, on the authority of the Master, the distress call and message may be repeated on the distress frequency and on any other frequencies, which are known to be in use the neighbourhood at the time. Radio distress signals are, of course, also received by Coast Radio Station.

16. When it appears that a point has been reached at which no additional assistance is required by casualty in the distress situation, the Coast Radio Station, having consulted the Coastguard may ask the ship in distress if the SOS (Mayday) phase may be ended so that normal working could resumed with caution on the distress frequency and the subsequent communications from the casualty should be prefixed by URGENCY SIGNAL. The decision to make such a change is entirely the responsibility of the Master in Charge of the vessel in distress; his every urgent situation may persist. When complete radio silence is no longer necessary on frequency, which is being used for distress traffic the station, which has controlled the traffic, shall transmit:

(1) in radiotelegraph,

CQ DE
Call sign of station sending the message.
The time of handing in of the message.
The name and call sign of the ship in distress.
QUZ

(2) in radiotelephony

MAYDAY
HELLO ALL STATIONS THIS IS name of station sending the message.
The time of handing in of the message.
The name and call sign of the ship distress.
PRUDONCE

If distress working continues on other frequencies these will be identified in the transmission. For example:

(3) in radiotelegraphy,

QUZ on 500 kHz but QRT, 2182 kHz and VHF Ch 16.

(4) in radiotelegraphony,

PRUDONCE on 500 kHz and 2182 kHz but SEELONCE on VHF Ch 16.

Restricted working confined to calls related to the exchange of essential radio communications may then be made distress frequency concerned but great care must be exercised to avoid interference with a subsequent resumption of distress signals. The distress situation must not be considered to have ended until the signal for the resumption of normal

working, i.e. QUM (radiotelegraphy) or SEELONCE FEENEE (radiotelephony), has been given.

17. Many Malaysian ships are provided with radio equipment, portable or otherwise for use in the ship"s survival craft. This equipment is capable of transmitting signals on 500 kHz and 8364 kHz, and may also be capable of transmitting signals on 2182 kHz. It will be capable of receiving signals on 500 kHz, and may also be capable of receiving signals on 2182 kHz. The equipment includes an automatic keying device which can be set at will to key the radiotelegraph alarm signal on 500 kHz followed by the distress signal, or the distress on 8634 kHz without the radiotelegraph alarm signal. They may carry equipment capable of sending out the two-tone alarm signal on the radiotelephony frequency of 2128 kHz.

VI. Private distress message

18. It is understanding for a vessel in distress to send a private message, bearing a specific address, asking for assistance because, if not general distress message is sent out, the public authorities concerned will be unable to render assistance to the vessel in question or to take steps to make the need generally known in order that ships or persons may render assistance.

VII. Visual signals used between shore stations in Malaysia and ships in distress

19. In the event of a ship being in distress off or stranded on the coast of Malaysia, the following signals should be used by life-saving stations when communicating with her, and by the ship when communicating with life-saving stations.

a. Replies from life-saving stations or maritime rescue units to distress signals made by a ship or person:-

Signals	*Signification*
By day - Orange smoke signal or combined light and sound signal (thunder light) consisting of three single signals which are tired at interval of approximately one minute	"You are seen - assistance will be given as soon as possible
By night - White star rocket consisting of three single signals which are fired at interval of approximately one minute.	(Repetition of such signals shall have the same meaning)

If necessary the day signals may be given at night or the night signal by day

b. Landing signals for the guidance of small boats with crew or person in distress

Signals	*Signification*
By day - Vertical motion of a white flag or the arms or signalling the code letter " K " (— · —) give by light or sound signal apparatus	
By night - Vertical motion of a while light or flare or signalling the code letter "K" (— · —) given by light or sound signal apparatus. A range (indication of direction) may be given by placing a steady white light or flare at a lower level and in line with the observer.	"This is the best place to land"
By day - Horizontal motion of a white flag or arms extended horizontally or signalling the code letter "S" (· · ·) given by light or sound signal apparatus.	
By night - Horizontal motion of a white light or flare or signalling the code letter "S" (· · ·) given by light or sound-signal apparatus	"Landing here highly dangerous"

By day - Horizontal motion of a white flag, followed by the placing of the white flag in the ground and the carrying of another white flag in the direction to be indicated and or a white star signal in the direction towards the better landing place or signalling the code letter "S" (···) followed by the code letter "R" (· — ·) if a better landing place for a craft in distress is located more to right in the direction of approach or signalling the code letter "L" (· — · ·) if a better place for a craft in distress is located more to the left in the direction of approach	"Landing here highly dangerous. A more favourable location for landing is in the direction indicated"
By night - Horizontal motion of a white light or flare, followed by the placing of the white light or flare on the ground and the carrying of another white light or flare in the direction to be indicated and or a white star-signal in the direction towards the better landing place or signalling the code "S" (· · ·) followed by code letter "R" (· — ·) if a better landing place for the craft in distress is located more to the right in the direction of approach or signalling the code letter "L" (· — · ·) if a better landing place for the craft in distress is located more to the left in the direction of approach	"Landing here highly dangerous. A more favourable location for landing is in the direction indicated"

c. Signals to be employed in connection with the use of shore life-saving apparatus:-

Signals	Signification
By day - Vertical motion of a white flag or the arm	In general "Affirmative" Specially - -
By night - Vertical motion of a white flag or flare	"Rocket line is held" "Tail block is made fast" "Man is in the breeches buoy" "Haul away"
By day - Horizontal motion of a white flag or arms extended horizontally	In general "Negative"
By night - Horizontal motion of a white light or flare	Specifically - - "Slack away" "Avast hauling"

d. Signal to be used to warn a ship which is standing into danger:-

Signals	*Signification*
The international Code Signals U or NF The letter U (· · —) flashed by lamp or made by foghorn, or whistle, etc	"You are running into danger"

If it should prove necessary, the attention of the vessel is called to these signals by a white flare, a rocket showing white stars on bursting, or an explosive sound signal.

20. Should lives be a danger and your vessel is in position where rescue by the rocket rescue equipment is possible, a rocket with line attached will be fired from the shore across your vessel. Get hold of this line as soon as you can. When you have get hold of it, signal to the shore as indicated in paragraph 19(c).

21. Should your vessel carry a line-throwing appliance, it may be preferable to use this and fire a line ashore, but this should not be done without first consulting the rescue company on shore. If this method is used, the rocket line may not be of sufficient strength to haul out the whip and jackstay and those on shore will secure it to a stouter rocket line. When this is done, they will signal as indicated in paragraph 19(c). On seeing the signal, haul in the line that was fired from the vessel until the stouter line is on board.

22. Then, the rocket line is held, make the appropriate signal to the shore (paragraph 19(c)) and proceed as follows:-

a. When you see the appropriate signal, i.e “haul away” made from the shore haul upon the rocket line until you get a tail block with an endless fall rove through it (called the “whip”) and with a jackstay attached to the bracket of the tail block.

b. Cut or cast off the rocket line and make the tail block fast, close up to the mast or other convenient position, bearing in mind that the fall should be kept clear from chafing any part of the vessel. Before cutting or casting off the rocket line, make sure that you have the tail attached to the block well in hand. When the block is made fast, signal to shore again (paragraph 19(c)).

c. As soon as the signal is seen, the shore party will then set the jackstay taut, and by means of the whip will haul the breeches buoy out to the ship. The person to be rescued should get in to the breeches buoy and sit well down. When he is secure the should signal again to the shore as indicated in paragraph 19(c) and the men on shore will haul the person in the breeches buoy to the shore. When he is landed the empty breeches buoy will be hauled back to the ship. The operation will be repeated until all persons are landed.

d. During the course of the operations should it be necessary to signal, either from your ship to the shore or from the shore to your ship, to “Slack away” or “Avast hauling” this should be done as indicated as paragraph 19(c).

23. It may sometimes happen that the state of the weather and/or the condition or position of the ship will require the aforementioned procedures to be modified. Where this is the case, the rescue company will always attempt to advise you of the procedure to be followed.

24. Normally, all women, children, passengers and helpless persons should be landed before the crew of the vessel but that may be occasions when, perhaps because of the communication difficulties between the casualty and the rescue company ashore, it would be sensible it the first person to be landed were a responsible member of the ship"s crew.

VIII. Use of rocket line-throwing apparatus between ships

25. Where in assisting ship proposes to establish communication by means of the line throwing apparatus she should before making her final approach ascertain whether or not it is safe for her to fire the rocket, particularly if the other ship is a tanker. If it is safe she should manoeuvre to WINDWARD before firing over the other ship"s deck. If not, she should go to LEEWARD and prepare to receive a line. EXTREME CAUTION must be exercise when firing line-throwing rockets between ships when helicopters are in the vicinity.

26. When a vessel in distress is carrying petrol spirit or other highly inflammable liquid and is leaking, the following signals should be exhibited to show that is dangerous to fire a line-carrying rocket by reason of the risk of ignition:-

By day - Flag B of the International Code of hoisted at masthead.

By night - A red light hoisted at the masthead.

When visibility is bad the above signals should be supplemented by the use of the following International Code signal made by sound:-

GU (— —· · ·—) “It is not safe to fire a rocket.”

USE OF THE RADIOTELEGRAPH AUTOMATIC KEYING DEVICE BY UNSKILLED PERSON IN AN EMERGENCY

1. On many radiotelegraph ships only one radio officer is carried. If by chance he were to be incapacitated through an accident, illness or other serious mishap whilst his ship was at sea, it might well be that there would be no one else on board capable of operating the radio equipment to send a distress call if one were necessary. It is clearly desirable that some provision should be made, to the extent that it is practicable, for one or more other officers on such ships to be capable of sending distress call.

2. All ships which are fitted with radiotelegraph installations in compliance with the Merchant Shipping (Radio Installations) Regulation 1980, (as amended), and the Merchant Shipping (Radio) (Fishing Vessel) Rules, 1974, (as amended), are provided with an automatic keying device which, once it is set in operation, will first of all alert other ships by actuating their auto-alarms, and then transmit the distress call and also signals, repeated at interval, which would be invaluable in enabling other ships to home on to the distressed ship by means of their direction-finding apparatus.

3. Investigation has shown that it is possible to produce simple set of instruction which will enable the automatic keying device to be the emergency transmitter and set in operation by an intelligent person unskilled in radio operation, provided that he can easily identify the controls which he need to use. Moreover, the instructions need differ only slightly according to the types of equipment provided in the ship, the differences being in the description of the controls. A standard drill has been evolved, based on the operation of six controls on four pieces of equipment (the charging board, the aerial selector or switch unit, the emergency transmitter and the automatic keying device) and an outline of the instructions is given for information in the Appendix below. It is not intended for operational use.

4. A number of points arise from the use of the procedure outline. In particular, it is emphasized that:-

a. The marine radio companies have drawn up and can supply specific procedures for operational use with each of their various types of equipment, based on the outline in the Appendix, and supplementing the control numbers with the precise description which is given to each equipment.

b. It is an essential part of the procedure that the controls in question should be prominently identified on the equipment by means of coloured (preferably yellow) labels numbered (preferably in red) to correspond with the operation referred to in the instruction in the Appendix. In cases where any confusion between individual controls might still be possible (e.g.) in selecting the correct switch on an old-type charging board) the correct control knob or switch should be distinctively painted;

c. To ensure the best possible response from the transmission of the distress call it is important for the person operating the equipment to wait, two minutes after the completion of the transmission of the alarm signal, before sending the distress call. This will give time for the radio officers on other ships, if off duty, to man their equipment after being alerted. Even one minute"s delay is better than none at all.

d. To procedure will be of little value in an emergency unless the ships officers most likely to use it are practiced in it, and the instructions applicable to their particular ship are ready to hand in a known place.

5. It is strongly recommended to owners and masters that, in radiotelegraph ship which carry only one radio officer, arrangements should be made for:-

a. The detailed instructions referred to in paragraph 4(a) of this Appendix to be posted conspicuously in the radiotelegraph room, preferably where they can be read by the light of the emergency lamps as well as by that of the main lighting system;

b. Yellow labels with red numbers to be affixed to the equipments, and for the correct control to be suitably coloured wherever confusion might arise;

c. Deck officers subsequently to familiarize themselves with the procedure might well also necessitate the use the emergency lighting in the radiotelegraph room. Knowledge of the

position of the door switch for the emergency lamp would be an important factor under these conditions. The door switch should be clearly labelled to indicate its purpose and the fact that the emergency light should only be used when the main source of light has failed.

6. The emergency conditions which might involve the use of this procedure might well also necessitate the use of the emergency lighting in the radiotelegraph room. Knowledge of the position of the door switch for the emergency lamp would be an important factor under these conditions. The door switch should be clearly labelled to indicate its purpose and the fact that the emergency light should only be used when the main source of light has failed.

Outline of "INSTRUCTION TO ENABLE UNSKILED PERSONS TO SEND A DISTRESS CALL IN AN EMERGENCY".

First ensure that the auto-alarm supply switch (AA) is in the "OFF" position. Then:-

a. On the charging board	Set battery switch to "DISCHARGE" position (by means of CONTROL No 1)
b. On the aerial selector or switch unit	Connect emergency aerial to the emergency transmitter (by means of CONTROL No 2)
c. On the emergency transmitter	Switch on the emergency transmitter (by means of CONTROL No.3). CHECK whether transmitter is set for transmission on the DITRESS frequency (500 kHz), (and if not, adjust appropriate controls as indicated in the detailed instructions posted in the radiotelegraph room.
d. On the automatic keying device	Connect to the emergency transmitter (by means of CONTROL No.4). Set to "ALARM" (by means of CONTROL No.5). Start transmission (by means of CONTROL No.6)

The ALARM SIGNAL, consisting of a series of 12 dashes, will now be sent out, the transmission taking one minute to complete. If circumstances permit, wait a further two-minute or as near two minutes as possible to allow the radio equipment of the ships which have been alerted through their auto-alarms to be manned, then:

A DISTRESS CALL, consisting of the international distress signal (SOS repeated three times), the Morse characters for the word DE, the call sign of the ship repeated three times (if this facility has been provided in the automatic keying device), followed by a long dash or by two dashes each of 10 to 15 second"s duration which will be used by other ships for direction-finding purposes, will now be sent out.

If the equipment is left, this distress call will be repeated every twelve minutes until the battery is run down or the transmission is stopped (by setting CONTROL No. 4 at the "OFF" position) and the transmitter is switched off (by means of CONTROL No. 3).These repetitions will help searchers to fix the position of your ship and will provide radio beacon facilities for ships proceeding to your assistance.

Note*:* This is only an outline of the procedure to be followed. It is quoted for information and should not be used operationally. See paragraph 4(a) of Appendix A.

RADIO TELEPHONE ALARM SIGNAL GENERATING DEVICE

The radiotelephone alarm signal which consist of two tones transmitted alternately over a period of at least 30 seconds but not exceeding one minute, is intended primarily for used by ship in distress to give preliminary warning to other ships carrying radiotelephone equipment capable of receiving on the international radiotelephone distress frequency, 2128 kHz, and to coast radio station, of the impending transmission of a distress call message by means of radiotelephony. Like the radiotelegraph alarm signal its use is permitted only for this purpose or to announce the loss of a person overboard in circumstances where the assistance of other ships is required and cannot be satisfactorily obtained by the use of the urgency signal only. The signal may be generated automatically by an electronic device, which is used in conjunction with a radiotelephone transmitter set to emit signals on 2128 kHz.

Malaysia coast stations have been transmitting the signal as s prelude to distress broadcast on radiotelephony for several years, and so most radiotelephone operators will be aware of the alerting value of its distinctive warbling sound which can readily be recognized by ear through heavy interference.

The Merchant Shipping (Radio Installations) Regulation 1980, (as amended), and the Merchant Shipping (Radio) (Fishing Vessel) Rules, 1974 (as amended), require that ships which carry radiotelephone equipment in accordance with those Rules and Regulations shall carry the alarm signal generating device as part of the radio installation.

14. MARITIME RESCUE COORDINATING CENTRE (MRCC) MALAYSIA

a.	Coordinator	:	Cawangan Carilamat dan Bantuan Bencana Agensi Penguatkuasaan Maritim Malaysia Jabatan Perdana Menteri Tingkat 8, One IOI Square IOI Resort 62502 PUTRAJAYA Malaysia
b.	Primary function	:	Co-ordinating maritime search and rescue operations within the Malaysian area of responsibility
c.	Operation time	:	24 hours.
d.	Telephone No	:	+6 03 8941 3140 +6 03 8941 3129
e.	E - mail	:	mrccputrajaya@mmea.gov.my
f.	Web site	:	www. mrccputrajaya@mmea.gov.my
g.	Fax No	:	+6 03 8941 3129 (24 hours)
h.	Radio Communication: (SSB) HF1	:	8124 kHz (24 hours)
i.	(SSB) HF2	:	Used in SAR Operations 2182 kHz 5680 kHz 4077 kHz 3023 kHz
	VHS	:	Channel 16 (24 hours) TX : 156-075 MHz RX : 160-675 MHz
	CALLSIGN	:	LIMA KELANG

i. Secondary Function.

(1) Providing and co-ordinating medical evacuation of injured seaman from ship to shore.
(2) Detection of overdue vessel.
(3) Investigation of report regarding safety of navigation.
(4) Co-ordinating and assisting in salvage operations.
(5) Providing technical information on safety of navigation.
(6) Co-ordinating of operation to combat oil spill.
(7) Receiving/ promulgating navigational warning.
(8) Receiving vessel"s position report.
(9) Promotion of safety at sea.

j. Maritime Rescue Sub-Centre

(1)	MRSC Langkawi	Telephone No.	604-9665307/604-9609814
		Fax No.	604-9669543
		Call sign.	WILUTA
		E-mail.	Opsroomwiluta.mmea@1govuc.gov.my
		Radio:(GEN)	Chanel 201
		(HF)	6435 kHz
(2)	MRSC Johor Bahru	Telephone No.	607-2219231
		Fax No.	607-2224739/607-2279285
		Call sign.	WISEL
		E-mail.	pusupmarwilsel@govuc.gov.my
		Radio:(HF)	6435 kHz

(3)	MRSC Kuantan	Telephone No.	609-5734066/609-5735587
		Fax No.	609-5734177/609-5738476
		Call sign.	WILTIM
		E-mail.	pusupwiltim@yahoo.com
		Radio:(GEN)	Chanel 401,404
		(HF)	6435 kHz
(4)	MRSC Kuching	Telephone No.	6082-367943/6082-432544
		Fax No.	6082-364941/6082-432554
		Telex.	LAUT MA 70933
		Call sign.	LIMA KUCHING
		E-mail.	mrsc_kuc@jls.gov.my
		Radio:(GEN)	Chanel 401,404
		(HF)	6435 kHz
(5)	MRSC Kota Kinabalu	Telephone No.	6088-270165
		Fax No.	6088-270105
		Call sign.	MRSC KOTA KINABALU
		E-mail.	mrsc_kotakinabalu@gmail.com
		Radio:(GEN)	Chanel 401,404
		(HF)	6435 kHz

15. PIRACY AND ARMED ROBBERY REPORTS

I.Attacks when Underway

Attacks on ship when underway are most common in South Asian waters. A large proportion of attacks in this area have occurred in the Selat Philip (Phillip Channels) and other Channels used by vessels making passage via the Malacca Strait. Other attacks have taken place in the South China Sea and in waters adjacent to The Philippines. Attacks can take place in either international waters as piracy or, more commonly, as armed robbery in territorial waters of a coastal state. Hitherto attacks carried knives or swords but recent evidence indicates that it is not safe assume that they are not carrying firearms. In one recent incident firebombs were carried and oil tanker.

II. Reports on the increase in the frequency of attacks

The ICC International Maritime Bureau has recently noted an increase in the frequency of piracy attacks on shipping within Indonesian Waters. In all the reported attacks the vessels were boarded, left without navigation, the crew tied up and their personal effects stolen. It is urged that vessels report each and every attack, in the format given below, so that an accurate assessment of the situation can be obtained as quickly as possible.

III. Recommended Practices

The recommended practices outlined below are based on reports of incidents, advice published by commercial interests and organisations and measures developed to enhance ship security. The extents to the recommendations are followed or applied are matters solely for the owners or masters of vessels operating in areas where attacks may occur.

IV. The Anti Attack Plan

All ship operating in waters where attack occurs should have an anti attack plan. The anti attack plan should be prepared having regard to the risks that may be faced, the crew available, their capability and training. The ability to establish secure areas on board the ship and the surveillance and detection equipment that has been provided. The plan should, *Inter alia, cover:*

(a) The need for enhanced surveillance and the use lighting and surveillance or report detection equipment;

(b) Crew responses if a potential attack is underway;

(c) The radio and alarm procedures to be followed, and

(d) The reports that should be made after an attack, or an attempted attack.

V. Radio Procedures

(a) A suitably qualified Radio Operator should be on duty at all times when ships are in, or approaching, areas where attacks occur. The master should not perform this duty though, on occasions, this may be unavoidable.

(b) Prior to entering areas where attacks have occurred Radio Operators should practice and perfect all appropriate radio operational procedures and ensure all transmitters, including satellite ship earth station, are fully operational and available for immediate use on distress and safety frequencies. Where a GMDSS installation is provided and “ship" position” data is not automatically updated from an associated electronic navigation aid. Radio Operator is strongly recommended to enter ship"s position at regular interval into the appropriate communications equipment manually. Where an Inmarsat ship earth station is provided it may prove useful to draft and store ” standard massages ” (see paragraph 33) for ready use in an emergency in either the equipment"s memory or on computer disk. Master should ensure that all procedures to generate a distress alert on communications equipment are clearly marked on, or near, the equipment and all appropriate crew members brief on their operation.

(c) Master should bear in mind the possibility that attackers are monitoring ship to shore communications and using intercepted information to select their targets. Caution should, therefore, be exercised when transmitting information on cargo or valuable on board by radio in areas where attacks occur.

VI. Radio Watch keeping and Responses

(a) A constant radio watch should be maintained with the appropriate shore or naval authorities when in areas where attacks have occurred. Continuous watch should also be maintained on all distress and safety frequencies, particularly VHF Channel 16 and 2182 kHz. Ship should also ensure all maritime safety information broadcasts for the areas are monitored. As it is anticipated that Inmarsat"s Enhanced Group Calling system (EGC) will normally be used for such broadcast using the safety NET (SM) services, owner should ensure a suitably configured EGC receiver is continuously available when in, or approaching, areas where there is a risk of attacks. Owners should also consider fitting a dedicated receiver for this purpose, if one that is not incorporated into a Ship earth station used for commercial purposes, to ensure no urgent broadcast are missed.

(b) The International Maritime Organisation (IMO) recommends in MSC Circular 597, issued August 1992 that report concerning attacks by pirates or armed robbers should be made to the relevant Rescue Co-Ordination (RCC) for the area. MSC Circular 597 also recommends that governments should arrange for the RCCs to be able to pass reports of attacks to the appropriate law enforcement agencies or naval authorities.

(c) If suspicious movements are identified which may result in an imminent attack, the ship is advised to contact the relevant RCC. Where the master believes these movements could constitute a direct danger to navigation consideration should be given to the broadcasting an “All Stations (CQ)” “danger message” as a warning to other ships in the vicinity as well as appropriate RCC. A danger message should be transmitted in plain language on VHF working frequencies following and announcement on VHF Channel 16 and or transmission of a DSC call on VHF Channel 70 using the “safety” priority. All such message shall be preceded by the safety signal (Security).

(d) When, in his opinion, there is conclusive evidence that the safety of his ship is threatened, the master should immediately contact the relevant RCC and, if considered appropriate, authorise broadcast of an “All Station” “ Urgency Message ” on VHF Channel 16, 2182 kHz, or any other radio communications service he

considers appropriate; e.g. 500 kHz, Inmarsat, etc. All such message shall be preceded by the appropriate Urgency signal (PANPAN) and or a DSC call on VHF Channel 70 and or 2187.5 kHz using the “all ships urgency” category. If the Urgency signal has been used and an attack does not, in fact, develop the ship should cancel the message as soon as it knows that action is no longer necessary. This message of cancellation should likewise be addressed to “all station”.

(e) Should an attack occur and in the opinion of the master, the ship or crew are in grave and imminent danger requiring immediate assistance, he should immediately authorise the broadcasting of a Distress message, preceded by the appropriate distress alert (MAYDAY, SOS, DSC, etc), using all available radio communication systems. The appropriate RCC should acknowledge receipt and attempt to establish communications. To minimise delay, if using a ship earth station, ships should ensure the coast earth station with the RCC is used.

(f) Master should bear in mind that the distress signal is provided for use only in case of imminent danger and its use for less urgent purpose might result in insufficient attention being paid to calls from ship really in need of immediate. Care and discretion must be employed in its use, to prevent its devaluation in the future. Where the transmission of the Distress signal is not fully justified use should be made of the Urgency signal. The Urgency signal has priority over all communication other than distress.

V. Standard Message Format

The standard formats for:

(a) Initial message piracy attack alert, and

(b) Piracy attack/sighting/suspicious act report, which was agreed by the IMO Sub Committee on Radio Communications in January 1993, is set out in ANNEX 1.

VI. Secreted VHF Transceiver

If communications equipment has been damaged by attackers to prevent an early alarm being raised, particularly when attacks have take place off port owners and masters are recommended to secrete a VHF transceiver on the ship to allow contact to be established with the shore authorities if the main communications equipment is put of action.

VII. Action after an Attack and Reporting Incidents

(a) An immediate post attack report should be made to the relevant RCC and through them to the law enforcement agencies or naval authorities of the coastal State. As well as information on the identity and location of the ship, any injuries to crew members or damage to the ship should be reported as should the direction in which the attackers departed together with brief details of their numbers and, if possible a description at their craft. If the crew have apprehended an attacker, it should also be reported in this signal.

(b) If an attack has resulted in the death of the serious injury to any person on board the ship or serious damage to the ship itself, an immediate signal should also be sent to the ships maritime administration. There are in any event, statutory requirements covering the duty to report deaths, serious injuries or serious damage to a ship to the maritime administration. In any event a report of an attack is vital if follow up action is to be taken by the ships maritime administration. The text of this Merchant Shipping Notice may be amendment to reflect experience based on the reports submitted to maritime administrations and also on report submitted to the IMO by other flag State or by coastal States.

INITIAL MESSAGE – PIRACY ATTACK ALERT

1. Vessel‟s name and call sign/ Inmarsat ID (Plus ocean region code).

   MAYDAY (See Note)
   PIRACY ATTACK

2. Vessel‟s position (and time of position UTC)

3. Nature of event.

NOTE: It is expected that this message will be a Distress Message because the vessel or person will be in grave or imminent danger when under attack. Where this is not the case, the word MAYDAY is to be omitted.

Use of distress priority (3) in the Inmarsat system will not require MAYDAY to be included.

PIRACY ATTACK / SIGHTING / SUSPICIOUS ACT REPORT

1. Vessel‟s name and call sign.

2. Reference initial PIRACY ALERT.

3. Position of incident.

4. Date / time of incident (UTC).

5. Detail of incident, e.g.

   Method of attack
   Description of suspect craft
   Number and brief description of
   pirates Injuries to crew
   Damage to ship
   Brief details of stolen property/cargo.

6. Last observed movements of pirate / suspect vessel,
   e.g. Date/time/course position/cargo.

7. Assistance required.

8. Preferred communications with reporting vessel‟
   Appropriate Coast Radio Station.
   HF/MF/VHF. Inmarsat ID (plus ocean region code)

9. Date / time of report (UTC)

SOUTH EAST ASIA, REGIONAL PIRACY COUNTERMEASURES CENTRE (RPCC) – KUALA LUMPUR

The International Maritime Bureau (IMB) of the International Chamber of Commerce has established a Piracy Countermeasures Centre at Kuala Lumpur, Malaysia. This centre operates for the South East Asia Region and is able to receive reports from vessels about piracy attacks within this region and advise of danger areas where attacks have recently taken places. The services provided by the centre are free of charge to all vessels irrespective of their flag.

Piracy warning originated by the centre will be transmitted daily to NAVEREA XI, VIII and X through Enhanced Group Calling (EGC) using the International safety NET System (see GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS) section for details of the Safety NET System). At future date, messages will also be broadcast through the NAVTEX service.

The Centre operates 24/7, 365 days a year, and can be contacted as follows:

The Regional Piracy Countermeasures Centre
ICC International Maritime Bureau
16-03A Wisma Nusantara
Jalan Punchak
52050 KUALA LUMPUR
Malaysia

Anti-Piracy HELPLINE Numbers :
Telephone : + 60 3 2031 0014
Fax : + 60 3 2078 5769
E-Mail : imbkl@icc-ccs.org

16. RADIO NAVIGATIONAL WARNINGS

NAVAREA XI Warning

a. In the World Wide Navigational Service (WWNWS) network, Malaysian Waters are AREA XI and the Area Coordinator is Japan.

b. Details of NAVAREA XI Navigational Warning are as follows:

1. Matters of broadcast: Those concerning the waters where ocean going vessels navigational within the NAVAREA XI

2. Broadcast Schedules:

NAVAREA	COAST STATION	CALLSIGN	FREQUENCIES	EMISSION TIME (GMT)
NAVAREA XI	TOKYO (Maritime Safety Agency)	JNA	4676 8492 12942 17052.5 22398	AI 0005* 0805* 1205* 0405#

* Main Broadcast
# Repeat

Detail of Transmission

(1) Power: 5 km
(2) Broadcast will be made on the first three main schedules after receipt of information and thereafter at the requested time of 0405 GMT on days 2, 5, 8, 11, 14, 17, 20 and 23 counting day of the third main broadcast as day 1.
(3) A NAVAREA Warning Bulletin listing the numbers of in force warnings issued during the last 6 weeks will also be broadcast at 0005 GMT every Sunday.
(4) Simultaneous transmissions an all frequencies.

Coastal Navigation Warnings

c. Mariners engaging in coastal navigational warnings by the Malaysian National Coordinator:

Marine Department Peninsular Malaysia
P.O Box 12
Jalan Limbungan
Port Klang, Malaysia
(Telex: MA 39748)
(Telegraph Address: Marine, Port Klang)

d. Details of transmission are as follow:

Nation	Radio Station	Call sign	Emission & frequency (kHz)		Times (UTC)
Malaysia	Penang	9MGS	A1A	522.5	⊗
Malaysia	Klang	VHF 16 Ch.	-	-	#
Malaysia	Kuantan	VHF 16 Ch.	-	-	#

⊗ -Transmit at 0148, 0548, 0948, 1348, 1748 & 2148 hours.

e. Coastal navigation warning contain information relating to the principal aids to navigation and other important hydrographic matter in around Malaysian Waters, such as:

1. Casualties to major lights, light vessels and the more important buoys.

2. Drifting mines and derelicts in congested water when the information is recent and sufficiently accurate.

3. Large and unwieldy tows in congested waters.

4. Dangerous wrecks and new or amended shoal depths.

5. Establishment of salvage buoys in congested waters.

6. Areas where Search and Rescue (SAR) and anti-pollution operation are being carried out (for avoidance of such areas).

7. Radio beacons, VHS radio Lighthouse – significant casualties.

8. New position of mobile drilling rig (RIG MOVES).

f. Those warning are repeated at routine times as message so long as they remain in force. No serial numbers are given to the message and a cessation of broadcasting indicates that they are either cancelled for sufficiently promulgated in the Malaysia Notices to Mariners.

g. Coastal navigation warning can only be expected to give information to assist the mariner about immediate dangers and major alterations to important navigation aids. The purpose is to assist mariners in coastal navigation up to the subject of a Notices to Mariners or local warning, may not be broadcast. Attention is drawn to *Admiralty List of Radio Signal Volume 1* for details of radio broadcasts.

h. Masters are recommended to arrange, whenever possible, for a radio operator or an office to listen at scheduled times prior to sailing at which this information is broadcast, in the case any dangers affecting their routes are notified. Attention is however drawn to be caution on buoys in “General remarks relating to practical navigation in the *Mariners Hand Book* (NP 100). This caution especially applies to light buoys and buoys in expose positions which are liable to be operating in correctly or to break adrift without warning.

17. FIRING PRACTICE AND EXERCISE AREAS

a. Firing and bombing practices and military exercises usually take place in number of areas off the Malaysian Coast.

b. In view of the responsibility of range authorities to avoid accidents, limit of firing & bombing practice area will not as rule be shown on charts and description of such areas will not appear in Sailing Directions. Range beacons, lights and marking buoys as may be of assistance to the mariners or targets which might be a danger to navigation, will however be shown on charts and appropriate mention in Sailing Directions.

c. The principal types of practices carried out are:

1. **Bombing practice from aircraft**. Warning signals usually shown. This carried out by aircraft at a large white or red sleeve, banner, a winged target, or flag towed by another aircraft moving on a steady course.

2. **Air to air and air to sea ground firing**. This is carried out from aircraft at towed or stationary targets on sea or land, the firing normally takes place to seaward in the case of those on land. As a general rule, warning signals are shown when the targets are stationary, but not when towed target are used. All mariner crafts operating as range safety craft or target-towing vessels will display for identification purposes, while in vicinity of the danger area, a large red flag at the masthead.

3. **Anti aircraft firing**. This may be from Anti Aircraft (AA) guns or machine guns at a target towed by aircrafts as in Para b. above at Pilot less Target Aircraft (PTA). Practice may takes place from shore batteries or ships. Warning signal as rule is shown from shore batteries. Ships fly a red flag.

4. **Firing from shore batteries or ships at sea fixed or floating targets**. Warning signal usually shown as in above.

d. Warning signals when given usually consist of red flag by day and red fixed, or red flashing lights at night. The absence of any such signal cannot, however, be accepted as evidence that a practice area does not exist. Warning signals are shown from shortly before practice commences until it ceases. Ships and aircraft carrying out night exercise may illuminate with bright colour flares. To avoid confusion with international distress signals, red or orange flares will be used in emergency only.

e. **CAUTION.** A vessel may be aware of the existence of a practice area from Local Notices to Mariners or similar method of promulgation and by observing the warning signals or the practice. The Range Authorities are responsible for ensuring that there should be no risk of damage from failing shell-splinters, bullets, etc. to any vessel, which may be in practice area.

f. If however a vessel finds, herself in an area where practice is in progress, she should maintain her course and speed but, if she is prevented from doing this by the exigencies of navigation, it would assist the Range Authority if she would end endeavourer to clear the area at the earliest possible moment. Furthermore if projectiles or splinters are observed to be falling near the vessel, all person on board should take cover.

g. Fisherman operating in the vicinity of firing practice and exercise areas may occasionally bring unexploded missiles or portions of them to the surface in their nets or trawls. These objects may be dangerous and should be treated with great circumspection and jettisoned immediately, no attempt being made to tamper with them or bring them back for inspection by Naval Authorities.

h. Areas are only force intermittently or over limited periods and local promulgation of warning by radio, visual signals or Notices should be such that they will come to the attention of those whose cooperation or instruction is intended.

i. The fore going provision do not apply to Submarine Exercise Areas.

18. CAUTION WITH REGARD TO SHIP APPROACHING SQUADRON CONVOYS AND OTHER WARSHIPS AT SEA

Formation and Convoys

a. The attention of ship owners and mariners is called to danger to all concerned which is caused by single vessels approaching a formation of warships, or merchant vessels is convoy, so closely as to involved risk of collision, attempting to pass ahead of, or through such a formation or convoy.

b. Mariners are therefore warned that single vessels should adopt early measures to keep out of the way of a formation or convoy.

c. Although a single is advised to keep out of the way of a formation or convoy.

Ships Operating Aircraft

d. Attention is called to the uncertainty of movements of warships when aircraft or helicopters are operating to or from their decks. Such ships are required usually to steer a course, which in determined by the wind direction. While operating aircraft or helicopters from their decks, warship will show the light and shapes prescribed by *Rule 27 9b) of the Regulation for Preventing Collisions at Sea, 1972.* Aircraft carriers may display red or white deck lighting during night flying operations, and ships operating helicopters at night use red or white flood lighting.

e. Further more, mariners are warned that by night aircraft carriers have:

1. Their masthead lights place permanently of the centre line of the ship, and at considerably reduced horizontal separation.

2. Alternative positions for their side lights:

(a) On either side of the hull.

(b) On either side of the island structure, in which case the port side light may be as much as 30 meters from the port side of the ship.

f. Certain aircraft carriers when it anchors exhibit four white lights as follows:

1. In the forward of the vessel at the distance of hot more than 1.5 meters below the light deck, two light in the same horizontal plane, one on the starboard side.

2. In the after part of the vessel at a height of not less than 5 meters lower than the forward lights, two lights in same horizontal plane one on the starboard side.

3. Each light visible over an arc at least 180º. The forward lights visible over a minimum arc from one point on the opposite bow to one point from right astern on their own side, and the after lights from one point on the opposite quarter to one point from light ahead on their own side.

Replenishment at Sea

g. Warships in conjunction with auxiliaries frequently exercise *Replenishment at Sea.* While doing so, the two or more ships taking part are connected to jackstays and hoses. They display the signal prescribed by with *Rule 27(b)* of the above Regulations.

h. Mariners are warned that while carrying with auxiliaries frequently exercise; the ships are severely restricted, both in manoeuvrability and speed. Other vessels are therefore advised to keep well clear in accordance with *Rule 18(a)* of the above Regulations.

Certain Warships – Position of Steaming Lights

i. Certain warship, which, in accordance with *Rule 23 Annex and Annex 1* of the above Regulations, cannot comply fully with the requirements as to the positioning of lights, comply as closely as possible.

j. The principal departures from the Regulations are as follows:-

1. The height above the hull of the lower main masthead light is either less than the breadth of the vessel, or less than 12 metres and not always in the forwards quarter of the vessel.

2. The horizontal distances between masthead lights is less than half the length of the vessel.

Survey Vessels

k. Survey vessels while carrying out hydrographic or oceanographic surveys will display the signals prescribed in *Rule 27(b)* of the above Regulations. The ship may also show an international two-letter group stating – ***I am engaged in submarine survey work. You should keep clear of me*.**

l. Mariners are warned that while carrying out this work, which may often be run across the normal shipping lanes, survey ships may be towing instrument up to 300 metres astern. These will restrict their manoeuvrability and ability to change speed or stop quickly. Other vessels are therefore are advised to keep well clear in accordance with *Rule 18 (a)* of the above Regulations, giving a clearance of at least 0.5 miles if passing astern.

19. SUBMARINE CABLES AND PIPELINES

Caution against Anchoring and Trawling in Vicinity

a. Mariners are warned that every care should be taken to avoid anchoring or trawling in the vicinity of pipelines or submarine cables on account of the serious consequences which would result from fouling them.

Symbols

b. Cables, cable areas, pipelines and pipeline areas will eventually be shown on all charts in magenta; but some symbols still appear on older charts in black.

c. Submarine cables are shown as wavy lines, which may have accompanying legend "power". Submarine cable areas may be shown bounded by pecked lines with the legend "Cable Areas" (older charts) or by dashed T-shape lines interspersed with short section of the wavy cable symbol. Disused cable is shown by an interrupted wavy cable symbol.

d. Submarine pipelines have been shown by a pecked line carrying the legend "Pipe, or Pipeline", or in respect of those transporting natural gas, "Gas Pipeline" with an additional cautionary note. Pipeline areas are shown by pecked line, with the legend Pipeline Area (see publication MAL).

Danger Involved in Cutting to Clear Anchors or Fishing Gear

e. In the event of any vessel fouling a submarine cable, every effort should be made to clear the anchor or gear by normal method; should these efforts fail, the anchor or gear should be slipped and abandoned without attempting to cut the cable. High voltages are fed into certain submarine cables other than power transmission cables; serious risk exists of loss of life due to electric shock, or at least severe burns, if any attempt to cut the cable is made. No claim in respect of injury or damage sustained through such interference with a submarine cable will be entertained.

f. In the event of any vessel fouling a pipeline the anchor or gear should be slipped and abandoned without attempting to get it clear. Any excessive force applied could result in a

rupture; in the case of a gas pipeline the consequential sudden release of gas at high pressure – somewhat like an explosion – could cause serious damage or loss of the vessel, and there would be an accompanying severe and immediate fire hazard.

Damage to International Cables

g. The International Cable Protection Committee (ICPC) wishes to give wide dissemination to the notice, reprinted below, regarding prevention of damage to International Cables.

1. Modern high capacity repeater type submarine cables now cross the oceans and seas of the world. Cables of increasing capacity are being designed and will continue to be laid for many years to come. Activity on the sea bed could very easily damage cable, put it out of service and cause considerable disruption and interruption and world communications. Disruption of world telecommunications could be prolonged if repair is delayed due to disposition of cable ships at the time and weather hazards.

2. One of the main objectives of the ICPC and on eon, which they are continually working, is to make known the existence of and the location of submarine cables. Charts showing cable positions are available from many Hydrographic Offices and universal charting of cables has been endorsed by the International Hydrographic Organisation.

3. The ICPC has been asked to remain those interests are on or below the seabed to be sure that they are aware of submarine cable positions in their area of operation. Most of the leading companies and administrations in the telecommunication world are members ICPC and are ready and willing to furnish details of cable positions on request. If there is any difficulty in obtaining cable information, requests are to address to the Secretary ICPC, Mercury House, Theobalds Road, London WCIX 8 RX.

20. DEVELOPMENT OF OFFSHORE OIL AND GAS FIELDS

Seismic Surveys

a. Seismic surveys for offshore oil and mineral resource explorations are conducted in and around Malaysian Waters. Details of these surveys are generally broadcast to marines as a Radio Navigational Warning or by Notice to Mariners. It is seldom practicable to publish details of the areas of operation except in general terms and vessels carrying out seismic surveys may, therefore, be encountered without prior notice.

b. Two types of survey are practiced:

1.**Seismic reflection surveys**

This is by far the most common form of operation. The surveys vessel tows a multi channel receiver cable of up to 3kms in length, at a depth of a few metres, with the end marked by a tail buoy and radar reflector. The seismic energy source usually n array of air guns mounted below large marker buoys and towed immediately behind the vessel. The arrays may have lateral extent of a hundred metres or more.

2. **Seismic refraction surveys**

(i) **Single vessel operation**

The seismic vessel tows a conventional source array (e.g. air guns) away from a stationary sonobuoy. The buoy contains an amplifier and radio transmitter, which transmit the received signals to a shipboard recorder. In the rare case of long range (40 – 50 Km) experiments, explosive charges are used.

(ii) **Two vessels operation**

One vessel tows a conventional reflection acquisition system (24000m.cable) away from another vessel at a fixed location firing a source array. Survey vessels generally carry the signals described in Rules 23 (a), 24 (a) and 27 (b) and (c). They may also show the signals PO and IR (International Code). The shooting vessel may display signal B (International Code) or at night a single red light addition.

c. Survey vessels are unable to manoeuvre freely and masters should therefore give them a wide berth (approximately 4 to 5 KM).

d. Refraction survey vessel occasionally keeps radio silence if charges are fired by radio so as to avoid any uncontrolled firings. Vessel being called by light by a survey vessel should therefore answer by the same means and not by a radio or radiotelephone.

Oil Rigs and Production Platforms

e. There are two principal types of drilling rigs in use at present in Malaysian offshore fields:-

1. Jack-up Rigs: - These are propelled or towed in position where their steel legs are lowered to the seabed; the drilling platform is then jacked-up clear of the water. They are generally used in depths up to 100 metres.

2. Dynamic Positioning Drill Ship: - These are built with a tall drilling rig amidships and usually with a helicopter deck near the stern. A typical drill ship has a displacement of 14,000 tons, a length of 135m and maximum speed of 14 knots. For drilling in depth of less than 200 metres, 8 point anchoring system is used. When drilling in deep water, their position is maintained by dynamic positioning equipment which enables these drill ship to keep on station above the borehole. A feature of the drill ship with automated station keeping facilities is their ability to manoeuvre accurately, with the aid of thrusters fitted with controlled pitch propeller. These are used in depth above 2000 metres.

Wellheads

f. In the course of exploratory work, numerous wells are drilled to find extent of the field. Wells, which will not be required, again are sealed with cement below the seabed and abandoned.

g. Other wells, known as suspend wells, which may be required at a later date, have their wellheads capped and left with a pipe and other equipment projecting from the seabed. Such wellheads are sometimes marked by buoys to assist recovery and to warn the mariners that they are a hazard to navigation or fishing.

Production Platforms

h. These are massive structures carrying drilling and production equipment, oil and gas separation and treating plants, pump line stations, electricity generators, cranes and helicopter landing deck. They are marked by lights, fog signals, and on some platforms flares burn at time. Production Platform is charted. Platforms stand singly or in groups, linked to each other by pipelines. A trunk pipeline connects them to the shore, storage tanker, tanker loading buoy or a floating terminal.

Safety Zones (Legal Sanctions) – Other Areas

i. **Safety Zones : Under International Law** a coastal state may construct and maintain on the continental shelf, installations and other devices necessary for the exploration of its natural resources, established safety zones around such installations, and take within these zones measures for their protection. Safety zones may extend to a distance of 5000 metres around installations, measured from their outer edges. Ships of all nationalities are required to respect these safety zones.

j. **Safety Zones: In their National Law** many coastal states have made entry by unauthorized vessels into declared zones varies from states, mariners are advised always to assume the existence of a safety zones unless they have information to the contrary. Installations around which safety zone may have been established include fixed platform, mobile rigs (While on station), tanker loading moorings, and seabed installations such as submerged wellheads.

k. **Safety zones: Installations in the Malaysian Waters** are covered under the Exclusive Economic Zones (EEZ) Act 1984. Entry into safety zones by an unauthorized vessel makes the owner, master, and others who may have contributed to the offence, liable to a fine or imprisonment or both.

l. **Areas extending beyond 500 metres from installations:**

1. Certain fields which are being development, or are currently producing oil or gas, are designated Development Areas. Within these areas, the limits of which are charted, there are likely to be construction and maintenance vessels including submarine craft, divers and obstructions, possibly marked by buoys. Supply vessels, and in some cases tankers, frequently manoeuvre in these fields. Mariners are strongly advised to keep outside such areas.

2. Some coastal states have declared prohibitions on entry into, or on fishing and anchoring within, areas extending beyond 500 metres from installations.

21. CAUTION WITH REGARD TO REALIABILITY OF NAVIGATIONAL BUOYS

a. Navigational buoys operated by the Marine Department are intended to provide a general, rather than a precise means of marking hazards of turning points.

b. Most of these buoys are situated in exposed locations well away from port areas.

c. The actual buoy position may differ from the charted position for one or more reasons.

d. Mariners are therefore cautioned against using buoys as the sole means of establishing their position.

22. REPORT OF SHOAL OBTAINED BY ECHO SOUNDING: INSTRUCTIONS REGARDING RENDERING REPORTS

Depths Obtained by Echo Sounder

a. A several reports of depths obtained by echo sounder (E/S) are received in the National Hydrographic Centre, Royal Malaysian Navy, Port Klang and the Hydrographer RMN is appreciative of the time and effort spent in rendering them.

b. To assist in verifying the report the following details should be given where applicable:

1) Ship"s name

2) Date

3) Courses, speeds and positional information to allow the ship"s track to be plotted, or a tracing of portion of a chart showing the ship"s track and times.

4) Make, model and stylus speed/sound velocity setting of echo sounder.

5) Whether E/S set to read depth below the keel or below the sea surface.

6) Ship"s draught.

c. The E/S trace (which should always accompany the report) should be annotated to assist in reduction of the sounding, as follows:

1) Drawing a line across it (or making it by pressing the fix push, if fitted) each time a fix is taken and at a number of intermediate points at set time intervals. With a set having a rotating stylus, a fix line can be obtained by drawing a line across the curved edge of the scale, taking care not to foul the stylus.

2) Inserting the times of each fix and each line.

3) Inserting the recorded depth of all shoal (peak) soundings.

4) Marking the limits of the phase or scale range in which the set running noting particularly when a change is made, In cases where the E/S paper is not pre-printed with the scale of depths, a scale should be drawn in a convenient part of the E/S trace.

5) Marking if with the name of the ship, date and scale reading on the left hand edge of the transmission line.

d. It may not be generally realized that false sounding may be obtained from correctly adjust E/S set due to one the following causes.

1) The retuning echo being received after the transmission interval has been completed once or perhaps twice, e.g. with rotary type E/S set having a maximum scale reading of 1097.28 mts, a reading on the trace of 91.44 mts might in facts be a sounding of 92628.72 or even 2286.0 metres. (In the case of E/S sets fitted with transmitter ON/OFF switches such doubt can be resolved by breaking the transmission circuit, with the set still running and then re-making it, it is only necessary to note the number of the subsequent stylus revolutions occurring before the echo re-appears).

2) Dense shoals of fish or layers of plankton, which sometimes give an echo completely masking that from the bottom. Such a layer is usually known as a “deep scattering layer” and is often found to rise towards the surface at dusk and after remaining during the night close to the surface, descends again at dawn. The deep scattering layer is frequently encountered at or near the edge of the continental shelf and is frequently mistaken for shoal water.

3) Layer of water of different temperature density from that of the surrounding water can sometimes give false echoes.

4) Strong tidal stream or eddies with solid particles in suspension, which may give a feathery echo.

5) It is possible in the more powerful types of E/S sets now being developed that, double echoes may be obtained even in depths of several hundred metres. The second echo coursed by the rebounding ultrasonic waves will appear at twice the depth of the true echo. Care should be taken when phasing and using the on/off switch, as described above that in fact the echo is being recorded. The second echo is invariably weaker than the first and can be faded by turning down the sensitively of the recover.

e. When unexpected shoal sounding are obtained in waters where the charted depth gives no indication, even though discoloured water may be seen, the only certain method of confirmation of their existence is by taking a coast with the lead.

f. Where, however the charted depth is nowhere more than scale reading of the set and the shoal is seen to rise from the bottom on the trace, provide the speed and setting of the set are correct, the shoal sounding may be accepted unconditionally.

g. When report of shoal sounding not confirmed by a cast of the lead are received in the National Hydrographic Centre, unless there is other confirmatory evidence of their existence, the National Hydrographic Centre has no choice but to enter them on the charts affected with notation that the depth has not been verified and to take the first opportunity to investigate the area to verify or disprove them. Vessels passing the vicinity of such unverified shoals should when practicable take sounding to confirm their existence.

23. TEMPORARY AND PRELIMINARY NOTICES

NUMERICAL INDEX OF NOTICE IN FORCE AS 31ST DECEMBER 2016

59/2012(T)* Malaysia - West Coast - Tg. Katak - Light Beacon Unlit.

Source: National Hydrographic Centre.

Chart MAL 58 (Last Correction 54/2012) WGS 84 DATUM

Insert legend **(unlit)** for
Pulau Katak Beacon, Fl.4s7M 04° 09'. 38N, 100° 37'. 18E

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131/2012(T)* Malaysia - Sabah - Pulau Mabul - Mooring Buoys.

Source: Royal Malaysian Navy.

Chart MAL 8421 (Last Correction 208/2012) WGS 84 DATUM

Insert legend, (Missing) for
Pu Mabul, Mooring Buoy No. 2 04° 15'. 00N, 118° 36'.80E
Pu Mabul, Mooring Buoy No. 3 04° 15'. 30N, 118° 37'.80E

Chart MAL 8434 (Last Correction 208/2012) WGS 84 DATUM

Insert legend, (Missing) for
Pu Mabul, Mooring Buoy No. 2 04° 15'. 00N, 118° 36'.80E
Pu Mabul, Mooring Buoy No. 3 04° 15'. 30N, 118° 37'.80E

.....

153/2012(T) Malaysia - Pulau Pinang - Pulau Tikus - Light Beacon.

Source: Marine Department of Malaysia No.51(T)/2012.

Chart MAL 5529 (Last Correction 152/2012) WGS 84 DATUM

Insert legend, (**Unlit**) for
Pulau Tikus FI.3s15m10M 05° 28'.60N, 100° 17'.90E

Chart MAL 553 (Last Correction 152/2012) WGS 84 DATUM

Insert legend, (**Unlit**) for
Pulau Tikus FI.3s15m10M 05° 28'.60N, 100° 17'.90E

Chart MAL 554 (Last Correction 152/2012) WGS 84 DATUM

Insert legend, (**Unlit**) for
Pulau Tikus FI.3s15m10M 05° 28'.60N, 100° 17'.90E

Chart MAL 565 (Last Correction 152/2012) WGS 84 DATUM

Insert legend, (**Unlit**) for
Pulau Tikus FI.3s15m10M 05° 28'.60N, 100° 17'.90E

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48/2013(T) Malaysia - Sabah - Hand Rock - Light Beacon - Unlit.

Source: Sabah Marine Department No. 5/2013(T).

Chart MAL 6 (Last Correction 47/2013) WGS 84 DATUM

Insert legend, (***Unlit***) for
Hand Rock, FI.R.7s10M 04° 08‟.03N, 118° 10‟.73E

Chart MAL 8425 (Last Correction 156/2012) WGS 84 DATUM

Insert legend, (***Unlit***) for
Hand Rock, FI.R.7s15m10M 04° 08‟.03N, 118° 10‟.73E

Chart MAL 8434 (Last Correction 131/2012(T)) WGS 84 DATUM

Insert legend, (***Unlit***) for
Hand Rock, Fl.R.7s15m10M 04° 08‟.03N, 118° 10‟.73E

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98/2013(T)* Malaysia - Kedah - Pulau Langkawi - Tg Chinchin - Light Beacon.

Source: Royal Malaysian Navy.

Chart MAL 5 (Last Correction 79/2013) WGS 84 DATUM

Insert legend, (***Unlit***) for
Fl(3)15s11m10M 06° 26‟.29N, 099° 38‟.75E

Chart MAL 5631 (Last Correction 43/2010) WGS 84 DATUM

Insert legend, (***Unlit***) for
Fl(3)15s11m10M 06° 26‟.29N, 099° 38‟.75E

Chart MAL 565 (Last Correction 153(T)/2012) WGS 84 DATUM

Insert legend, (***Unlit***) for
Tg Chinchin, Fl(3)15s11m10M 06° 26‟.29N, 099° 38‟.75E

Chart MAL 58 (Last Correction 46/2013) WGS 84 DATUM

Insert legend, (***Unlit***) for
Fl(3)15s10M 06° 26‟.29N, 099° 38‟.75E

.....

75/2013(T) Malaysia - Sarawak - Kuala Santubong - Wreck.

Source: Sarawak Marine Department Notice No. 17/2013(T).

Chart MAL 723 (Last Correction 139/2012) WGS 84 DATUM

Insert PA 01° 45'.35N, 110° 16'.77E

Chart MAL 731 (Last Correction 53/2013) WGS 84 DATUM

Insert PA 01° 45'.35N, 110° 16'.77E

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76/2013(T) Malaysia - Sarawak - Kuala Rajang - Beacon Collapsed.

Source: Sarawak Marine Department No. 14/2013(T).

Chart MAL 731 (Last Correction 75/2013(T)) WGS 84 DATUM

Insert legend, (**Collapsed**) for
Jerijeh South, Beacon Q.R 02° 08'.22N, 111° 11'.02E

Chart MAL 740 (Last Correction 70/2013) WGS 84 DATUM

Insert legend, (**Collapsed**) for
Jerijeh South, Beacon Q.R.10m3M 02° 08'.22N, 111° 11'.02E

Chart MAL 7215 (Last Correction 159/2010) WGS 84 DATUM

Insert legend, (**Collapsed**) for
Jerijeh South, Beacon Q.R.10m3M 02° 08'.22N, 111° 11'.02E

Chart MAL 7257 (Last Correction 52/2013) TIMBALAI (1948) DATUM

Insert legend, (**Collapsed**) for
Jerijeh South, Beacon Q.R 02° 08'.26N, 111° 10'.89E

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166/2013(T) Malaysia - Pahang - Kuantan Port - Light Beacon - Light Buoy.

Source: Marine Department of Malaysia No. 97/2013(T) and No. 100/2013(T).

Chart MAL 6359 (Last Correction 50/2013) WGS 84 DATUM

Insert 

No.3
Fl(2)G.10s 03° 57‟.65N, 103° 27‟.46E

.....

167/2013(T) Malaysia - Sarawak - Tg. Manis - Batang Rajang - Wreck.

Source: Sarawak Marine Department No. 93/2013(T).

Chart MAL 7215 (Last Correction 154/2013) WGS 84 DATUM

Insert 02° 06'.20N, 111° 19'.70E

Chart MAL 7257 (Last Correction 154/2013) Timbalai 1948 DATUM

Insert 02° 06'.16N, 111° 19'.91E

.....

177/2013(T) Malaysia - Langkawi - Pulau Dangli - Light Beacon - Unlit.

Source: Marine Department of Malaysia No. 120/2013(T).

Chart MAL 5 (Last Correction 158/2013) WGS 84 DATUM

Insert legend, (**Unlit**) for
Beacon P.Dangil, Fl.10s86m15M 06° 26‟.85N, 099° 46‟.58E

Chart MAL 5631 (Last Correction 98/2013(T)) WGS 84 DATUM

Insert legend, (**Unlit**) for
Beacon P.Dangil, Fl.10s86m15M 06° 26‟.85N, 099° 46‟.58E

(See Plan, Pelabuhan Teluk Ewa)

Insert legend, (**Unlit**) for
Beacon P.Dangil, Fl.10s86m15M 06° 26‟.85N, 099° 46‟.58E

Chart MAL 565 (Last Correction 164/2013) WGS 84 DATUM

Insert legend, (**Unlit**) for
Beacon P.Dangil, Fl.10s86m15M 06° 26‟.85N, 099° 46‟.58E

Chart MAL 58 (Last Correction 111/2013) WGS 84 DATUM

Insert legend, (**Unlit**) for
Beacon, Fl.10s 06° 26‟.85N, 099° 46‟.58E

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186/2013(T) Malaysia - Sarawak - Kuala Igan - Beacon - Unlit.

Source: Sarawak Marine Department Notice No. 108/2013(T).

Chart MAL 740 (Last Correction 129/2013) WGS 84 DATUM

Insert legend, (**Unlit**) for
Beacon Kuala Igan, Fl.(2)10s 02° 50‟.49N, 111° 39‟.23E

.....

193/2013(T) Malaysia - Selangor - Kuala Bernam - Light Buoy - Unlit.

Source: Marine Department of Malaysia No. 126/2013(T).

Chart MAL 54 (Last Correction 180/2013) WGS 84 DATUM

Insert legend, (***Unlit***) for
Buoy Kuala Bernam*, LF.10s* 03° 49‟.00N, 100° 46‟.20E

Chart MAL 540 (Last Correction 180/2013) WGS 84 DATUM

Insert legend, (***Unlit***) for
Buoy Kuala Bernam*, LFl.10s* 03° 49‟.00N, 100° 46‟.20E

Chart MAL 553 (Last Correction 180/2013) WGS 84 DATUM

Insert legend, (***Unlit***) for
Buoy Kuala Bernam*, LFl* 03° 49‟.00N, 100° 46‟.20E

.....

30/2014(T) Malaysia - Terengganu - Sungai Kemaman - Bouy Missing.

Source: Marine Department of Malaysia No. 3/2014(T).

Chart MAL 6416 (Last Correction 35/2013) WGS 84 DATUM

Insert legend, (***Missing***) for
Buoy Outer, Fl.R.5s 04° 14'.36N, 103° 26'.15E

.....

48/2014(T) Malaysia - Pahang - Sg. Kuantan - Buoy Missing.

Source: Marine Department of Malaysia No. 9/2014(T).

Chart MAL 6359 (Last Correction 47/2014) WGS 84 DATUM

Insert legend, (***Missing***) for
Sg Kuantan Outer *buoy, Fl.G.10s* 03° 47'.22N, 103° 21'.30E

.....

52/2014(T) Malaysia - Terengganu - South China Sea - FPSO.

Source: Marine Department of Malaysia No. 20/2014(T).

Chart MAL 5 (Last Correction 40/2014) WGS 84 DATUM

Insert  *FPSO* 05° 34‟.07N, 104° 35‟.07E

Chart MAL 655 (Last Correction 39/2014) WGS 84 DATUM

Insert  *FPSO* 05° 34‟.07N, 104° 35‟.07E

Chart MAL 68 (Last Correction 40/2014) WGS 84 DATUM

Insert  *FPSO* 05° 34‟.07N, 104° 35‟.07E

.....

72/2014(T) Malaysia - Sarawak - Kuala Igan - Beacon - Collapsed.

Source: Sarawak Marine Department Notice No. 37/2014(T).

Chart MAL 740 (Last Correction 70/2014) WGS 84 DATUM

Insert	legend, (**Collapsed**) for Beacon Kuala Igan, Fl.(2)10s	02° 50‟.49N,	111° 39‟.23E

.....

89/2014* Malaysia - Johor - Selat Singapura - Buoy - Missing.

Source: Hydrographic Note H.102 from DZV Kreuz Installer dated 24 May 14.

Chart MAL 515 (Last Correction 66/2014) WGS 84 DATUM

Insert	legend, (***Missing***) for Bouy, *Fl.(2)10s*	01° 17‟.67N,	104° 11‟.10E

.....

90/2014(T) Malaysia - Selangor - Kuala Langat - Light Beacon.

Source: Marine Department of Malaysia No. 48/2014(T).

Chart MAL 532 (Last Correction 67/2014) WGS 84 DATUM

Delete	Fl.G.5s4m8M	02° 48'.07N,	101° 24'.10E

Chart MAL 54 (Last Correction 67/2014) WGS 84 DATUM

Delete	Fl.G.5s8M	02° 48'.07N,	101° 24'.10E

.....

91/2014* Malaysia - Kedah - Langkawi - Light Buoys - Unlit.

Source: Royal Malaysian Navy.

Chart MAL 5622 (Last Correction 182/2013) WGS 84 DATUM

Insert	legend, (***Unlit***) for Bouy Jerkom 1, *FL.R.5s*	06° 15‟.30N,	099° 45‟.54E
	legend, (***Unlit***) for Bouy Jerkom 2, *FL (2+1).R.12s*	06° 15‟.64N,	099° 45‟.89E

.....

96/2014(T) Malaysia - Terengganu - South China Sea - New FPSO.

Source: Marine Department of Malaysia No. 20/2014(T).

1. A NEW FPSO ESTABLISHED IN AREA OF SOUTH CHINA SEA, OFFSHORE TERENGGANU AT POSITION 05 34.07N 104 35.07E STARTING FROM 01 APR 2014 UNTIL 01 APR 2024 (10 YEARS).

2. DETAILS OF THE VESSEL ARE AS FOLLOWS:

A.	VESSEL NAME	:	FPSO CENDOR.
B.	CALL SIGN	:	9MLO7.
C.	IMO NUMBER	:	8818910.
D.	OFFICIAL NUMBER	:	334299.
E.	GROSS TONNAGE	:	58745.
F.	PORT OF REGISTRY	:	PORT KLANG.
G.	OWNER	:	MISC BERHAD.

3. MARINERS ARE ADVISED TO NAVIGATE WITH CAUTION WHEN IN THE VICINITY.

4. CHART AFFECTED : MAL 5, MAL 68 AND MAL 655.

.....

114/2014(T)* **Malaysia - Kedah - Langkawi - Pulau Rebak Besar - Beacon Missing.**

Source: National Hydrographic Centre.

Chart MAL 5622 (Last Correction 91/2014) WGS 84 DATUM

Insert legend, (**Missing**) for
Beacon, Oc.R 06° 17'.55N, 099° 41'.35E

Chart MAL 565 (Last Correction 44/2014) WGS 84 DATUM

Insert legend, (**Missing**) for
Beacon, Oc.R 06° 17'.55N, 099° 41'.35E

Chart MAL 58 (Last Correction 92/2014) WGS 84 DATUM

Insert legend, (**Missing**) for
Beacon, Occ.R 06° 17'.55N, 099° 41'.35E

.....

126/2014* **Malaysia - Sabah - Sandakan - Light Beacon - Light Buoy - Unlit.**

Source: National Hydrographic Centre.

Chart MAL 6 (Last Correction 117/2014) WGS 84 DATUM

Insert legend, (**Unlit**) for
Beacon, Fl.10s194m24M 05° 52‟.00N, 118° 09‟.00E

Chart MAL 8617 (Last Correction 188/2013) WGS 84 DATUM

Insert legend, (**Unlit**) for
Beacon, Fl.10s194m24M 05° 52‟.00N, 118° 09‟.00E

legend, (***Unlit***) for
Buoy, *LFl.10s* 05° 54‟.62N, 118° 11‟.81E

legend, (***Unlit***) for
Buoy, *LFl.10s* 05° 58‟.56N, 118° 14‟.28E

.....

133/2014(T) **Malaysia - Johor - Sungai Sekudai - Light Beacon.**

Source: Marine Department of Malaysia No. 81/2014(T).

Chart MAL 5128 (See Plan, Johor Bahru Last Correction 108/2013) WGS 84 DATUM

Delete NO.1 Q.R.5M 01° 28'.51N, 103° 43'.33E

.....

135/2014(T) **Malaysia - Kedah - Kuala Kedah - Light Beacon Unlit.**

Source: Marine Department of Malaysia No. 82/2014(T).

Chart MAL 565 (Last Correction 114/2014(T)) WGS 84 DATUM

Insert legend, (**Unlit**) for
Light Beacon, Q.R.5m5M 06° 05'.18N, 100° 14'.85E

Chart MAL 58 (Last Correction 114/2014(T)) WGS 84 DATUM

Insert legend, (**Unlit**) for
Light Beacon, Q.R.5M 06° 05'.18N, 100° 14'.85E

.....

150/2014(T)* Malaysia - Negeri Sembilan - Tg Tuan - Batuan Mandi - Buoy Unlit.

Source: National Hydrographic Centre.

Chart MAL 532 (Last Correction 134/2014) WGS 84 DATUM

Insert legend (***Unlit)*** for
Batuan Mandi buoy, *Fl(2)10s* 02° 21".96N, 101° 57".38E

Chart MAL 54 (Last Correction 90/2014(T)) WGS 84 DATUM

Insert legend (***Unlit)*** for
Batuan Mandi buoy, *Fl(2)10s* 02° 21".96N, 101° 57".38E

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152/2014(T)* Malaysia - Sabah - Selat Malawali - Light - Beacon.

Source: Royal Malaysian Navy.

Chart MAL 871 (Last Correction 197/2013) WGS 84 DATU

Insert legend, (**Unlit**) for

Pulau Bangi, Beacon Fl.G.5s10M 07° 04".38N, 117° 07".22E
legend, (**Unlit**) for

Pulau Bangi, Beacon Fl.R.5s7m 6M 07° 04".92N, 117° 08".78E

Chart MAL 8715 (Last Correction 151/2014) WGS 84 DATU

Insert legend, (**Unlit**) for

Pulau Bangi, Beacon Fl.G.5s10M 07° 04".38N, 117° 07".22E
legend, (**Unlit**) for
Pulau Bangi, Beacon Fl.R.5s7m 6M 07° 04".92N, 117° 08".78E

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30/2015(T)* Malaysia - Pahang - Pulau Tokong Bahara - Unlit.

Source: Royal Malaysian Navy.

Chart MAL 625 (Last Correction 142/2014) WGS 84 DATUM

Insert legend (**Unlit**) for
Pulau Tokong Bahara, LFl.15s14m8M 02° 40".00N, 104° 03".60E

Chart MAL 6257 (Last Correction 125/2012) WGS 84 DATUM

Insert legend (**Unlit**) for
Pulau Tokong Bahara, LFl.15s14m8M 02° 40".00N, 104° 03".60E

Chart MAL 65 (Last Correction 142/2014) WGS 84 DATUM

Insert legend (**Unlit**) for
Pulau Tokong Bahara, Fl.15s8M 02° 40".00N, 104° 03".60E

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45/2015(T) Malaysia - Pahang - Kuantan - Wreck Marking Buoy.

Source: Marine Department of Malaysia Notice No. 7/2015(T).

Chart MAL 6359 (Last Correction 48/2014(T)) WGS 84 DATUM

Insert	*Fl.Y 5s*	03° 57".74N,	103° 27".43E

Chart MAL 645 (Last Correction 132/2014) WGS 84 DATUM

Insert	*Fl.Y 5s*	03° 57".74N,	103° 27".43E

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46/2015(T) Malaysia - Pahang - Kuantan Port - Light Buoy. Source:

Marine Department of Malaysia No. 9/2015(T). Chart MAL

6359 (Last Correction 45/2015(T)) WGS 84 DATUM

Move	*No.3* *Fl.(2)G.10s*	03° 57".65N,	103° 27".46E
	to:	03° 57".44N,	103° 27".70E

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59/2015(T)* MALAYSIA - Pahang - Kuantan - Tanjung Gelang - Beacon Unlit.

Source: Royal Malaysia Navy.

Chart MAL 6359 (Last Correction 46/2015(T)) WGS 84 DATUM

Insert	legend (**Unlit**) for Tanjung Gelang, Fl.R.2s	03° 58".150N,	103° 26".210E

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60/2015(T) MALAYSIA - Sarawak - Muara Lassa - Inner Buoy Out Of Position.

Source: Sarawak Marine Department No. 34/2015(T).

Chart MAL 7257 (Last Correction 139/2014(T)) TIMBALAI 1948 DATUM

Insert	legend (***Out Of Position***) for *Muara Lassa Inner buoy*, *Fl.G.3s*	02° 49".05N,	111° 24".67E

Chart MAL 740 (Last Correction 28/2015) WGS 84 DATUM

Insert	legend (***Out Of Position***) for *Muara Lassa Inner buoy*, *Fl.G.3s*	02° 49".01N,	111° 24".88E

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63/2015(T)MALAYSIA - Sarawak - Miri - Kuala Baram - Wreck.

Source: Sarawak Marine Department No. 27/2015(T).

Chart MAL 750 (Last Correction 62/2015) WGS 84 DATUM

Insert		04° 36'.57N,	113° 56'.39E

Chart MAL 752 (Last Correction 62/2015) WGS 84 DATUM

Insert		04° 36'.57N,	113° 56'.39E

Chart MAL 754 (Last Correction 62/2015) WGS 84 DATUM

Insert 04° 36'.57N, 113° 56'.39E

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79/2015(T) MALAYSIA - Sarawak - Bintulu Port - Kuala Kemena - Missing Bouy.

Source: Sarawak Marine Department No. 42/2015(T).

Chart MAL 7317 (Last Correction32 /2015(T)) WGS 84 DATUM

Insert legend, (***Missing***) for
Fairway*, Fl.R.4s* 03°12'.46N, 113°00'.87E

Chart MAL 7332 (Last Correction 31/2015(T)) WGS 84 DATUM

Insert legend, (***Missing***) for
Fairway*, Fl.R.4s* 03°12'.46N, 113°00'.87E

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88/2015(T) MALAYSIA – Sarawak – Kuala Baram – Buoys.

Source: Sarawak Marine Department 47/2015.

1. NEW CARDINAL BUOYS MARK HAVE BEEN DEPLOYED BY MV PENDAMAR ON 21 MAR 2015. THESE BUOYS ARE MARKING THE WELLHEAD PLATFORM THAT HAS BEING CONSTRUCTED IN THE CENTER OF LOCATION MARKED BY THE BUOYS AND THE DETAILS OF THE BUOYS ARE AS FOLLOWS.

BUOYS NAME	CHARACTERISTICS	COORDINATES
A. NORTH CARDINAL MARKS	*Q.W*	04 34.01N 113 55.34E
B. EAST CARDINAL MARKS	*Q(3)W10S*	04 33.74N 113 55.99E
C. SOUTH CARDINAL MARKS	*Q(6) W+LFl 15 S*	04 33.46N 113 55.33E
D. WEST CARDINAL MARKS	*Q(9)W 15 S*	04 33.74N 113 55.06E

2. MARINERS ARE ADVISED TO TAKE EXTRA CAUTION WHEN NAVIGATING IN THE AREA.

3. CHARTS AFFECTED : MAL 6, MAL 750 AND MAL 752.

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91/2015(T) MALAYSIA – Johor – Tanjung Setapa – Bouy.

Source: Marine Department of Malaysia No. 25/2015(T).

Chart MAL 6134 (Last Correction 44/2015) WGS 84 DATUM

Insert legend, (***Off Station***) for
Setapa Buoy*, Fl.(3)G5s* 01° 20'.00N, 104° 07'.92E

Chart MAL6124 (Last Correction NE/2014) WGS 84 DATUM

Amend light to, *Fl.(3)G5s* 01° 20'.00N, 104° 07'.92E

Insert legend, (***Off Station***) for
Setapa Buoy*, Fl.(3)G5s* 01° 20'.00N, 104° 07'.92E

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94/2015(T) MALAYSIA – Malacca Strait – Light Buoys.

Source: Marine Department of Malaysia No. 39/2015(T)

Chart MAL 532 (Last Correction 90/2015) WGS 84 DATUM

Insert	*QW5m5M*	02° 43‟.30N,	101° 17‟.08E
	Q(6)+LFlW10s5m5M	02° 43'.10N,	101° 17'.08E

Chart MAL 54 (Last Correction 93/2015) WGS 84 DATUM

Insert	*QW5m5M*	02° 43‟.30N,	101° 17‟.08E
	Q(6)+LFlW10s5m5M	02° 43'.10N,	101° 17'.08E

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99/2015(P) MALAYSIA – Pahang – Kuantan – New Deep.

Source: Marine Department of Malaysia No. 47/2015(T).

1. RECLAMATION WORK FOR NEW DEEP WATER TERMINAL IS BEEN CARRIED OUT AT KUANTAN PORT, STARTED FROM 01 APR 2015 UNTIL 30 JUN 2017 . THE AREAS ARE AS FOLLOW:

A. WORKING AREA:
(1) 03 59.67N 103 25.35E.
(2) 03 59.64N 103 25.21E.
(3) 03 59.33N 103 25.21E.
(4) 03 58.87N 103 25.53E.
(5) 03 59.11N 103 25.78E.

B. DUMPING AREA:
(1) 03 55.16N 103 34.83E.
(2) 03 54.16N 103 36.50E.
(3) 03 55.83N 103 37.75E.
(4) 03 57.08N 103 35.83E.

C. SAND SOURCE AREA:
(1) 03 50.05N 103 35.05E.
(2) 03 52.00N 103 38.02E.
(3) 03 49.00N 103 40.00E.
(4) 03 47.07N 103 37.03E.

2. THE VESSELS INVOLVED AS FOLLOW:

NO.	NAME	TYPE
A.	MEISUN B1203.	CRANE BARGE
B.	MEISUN B1502.	CRANE BARGE
C.	VIVO SHIVA.	CUTTER SUCTION DREDGER
D.	MEISUN G5.	GRAB DREDGER
E.	MEISUN G6.	GRAB DREDGER
F.	MEISUN G8.	GRAB DREDGER
G.	MEISUN H10.	HOPPER BARGE
H.	MEISUN H11.	HOPPER BARGE
I.	MEISUN H12.	HOPPER BARGE

J. MEISUN H16. HOPPER BARGE
K. MEISUN H17. HOPPER BARGE
L. V41. HOPPER BARGE
M. KRESNA RAYA 1. TUG BOAT
N. MEISUN T36. TUG BOAT
O. MEISUN T35. TUG BOAT

3. MARINERS ARE ADVISED TO NAVIGATE WITH CAUTION WHEN APPROACHING THESE WORKING AREAS AND TO KEEP CLEAR OF THE WORKING VESSELS.

4. CHARTS AFFECTED : MAL 5, MAL 635, MAL 645 AND MAL 6359.

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102/2015(T) MALAYSIA – Johor – Pulau Mungging – Light.

Source: Marine Department of Malaysia No. 44/2015(T).

A. NAVSIG 46/2015.
B. PULAU MUNGGING .
C. 01 21.72N 104 17.88E.
D. RACON (N) FI.3s24m15M
E. RACON TEMPORARILY WITHDRAWN.
F. MAL 5, MAL 65, MAL 515, AND MAL 6124.

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103/2015(T)MALAYSIA – Johor – Pulau Pisang – Light.

Source: Marine Department of Malaysia No. 44/2015(T).

A. NAVSIG 44/2015.
B. PU PISANG, JOHOR.
C. 01 25.22N 103 11.22E.
D. RACON (O) FI(3)15S26m15M
E. RACON TEMPORARILY WITHDRAWN
F. MAL 5, MAL 54, MAL 521, MAL 515 AND MAL 5129

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104/2015(P)* MALAYSIA – Sabah – Semporna– Depths.

Source: National Hydrographic Centre.

A. NAVSIG 48/2015
B. SEMPORNA
C. AFFECTED AREA BOUNDED BY THE FOLLOWING COORDINATES:
(1) 04 25.56N 118 34.54E.
(2) 04 25.35N 118 34.52E.
(3) 04 25.26N 118 34.90E.
(4) 04 25.05N 118 35.53E.
(5) 04 24.62N 118 35.75E.
(6) 04 24.64N 118 35.87E.
(7) 04 25.07N 118 35.66E.
(8) 04 25.31N 118 34.91E.
D. CHARTED DEPTHS.
E. CHARTED DEPTHS SHALLOWING SIGNIFICANTY.
F. MAL 8434.
G. DEPTHS SHALLOWING TO BETWEEN 4.5 TO 5 METRES DUE TO SEDIMENTATION WITH THE AREA MENTIONED ABOVE. VESSEL ARE TO KEEP CLEAR OF THE AREA UNTIL FUTHER NOTICE.

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112/2015(T) MALAYSIA – Malacca Strait – Permatang Alur Mudah – Light Beacon Racon .

Source: Marine Department of Malaysia No 42/2015(T).

Chart MAL 5129 (Last Correction 111/2015) WGS 84 DATUM

Delete *Racon (o)* 01° 25'.22N, 103° 11'.22E Chart MAL 515 (Last Correction 111/2015) WGS 84 DATUM

Delete *Racon (o)* 01° 25'.22N, 103° 11'.22E Chart MAL 521 (Last Correction 111/2015) WGS 84 DATUM

Delete *Racon (o)* 01° 25'.22N, 103° 11'.22E

Chart MAL 54 (Last Correction 111/2015) WGS 84 DATUM

Delete *Racon (o)* 01° 25'.2N, 103° 11'.2E

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113/2015(T) MALAYSIA – Johor – Pulau Mungging – Light Buoy.

Source: Marine Department of Malaysia No 59/2015(T).

Chart MAL 515 (Last Correction 112/2015) WGS 84 DATUM

Insert *Fl(2)W5s3.5m5M* 01° 20'.86N, 104° 18'.93E

Chart MAL 6124 (Last Correction 91/2015) WGS 84 DATUM

Insert *Fl(2)W5s3.5m5M* 01° 20'.86N, 104° 18'.93E

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114/2015(T) MALAYSIA – Johor – Tg Setapa – Work in Progress.

Source: Marine Department of Malaysia No. 32/2015(T).

Chart MAL 515 (Last Correction 113/2015) WGS 84 DATUM

Insert working area for construction of jetty
pecked line joining
01° 20".52N, 104° 08".16E
01° 19".94N, 104° 07".80E
01° 19".65N, 104° 07".80E
01° 19".65N, 104° 08".30E
01° 20".49N, 104° 08".41E

legend *Works in Progress (2015)* 01° 20".00N, 104° 08".14E

Fl.Y

01° 19".65N, 104° 07".80E
01° 19".65N, 104° 08".30E
01° 19".94N, 104° 07".80E

Chart MAL 6124 (Last Correction 113/2015) WGS 84 DATUM

Insert working area for construction of jetty
pecked line joining 01° 20".52N, 104° 08".16E
01° 19".94N, 104° 07".80E
01° 19".65N, 104° 07".80E
01° 19".65N, 104° 08".30E
01° 20".49N, 104° 08".41E

legend *Works in Progress (2015)* 01° 20".00N, 104° 08".14E

Fl.Y
Y

01° 19".65N, 104° 07".80E
01° 19".65N, 104° 08".30E
01° 19".94N, 104° 07".80E

Chart MAL 6134 (Last Correction 91/2015) WGS 84 DATUM

Insert working area for construction of jetty
pecked line joining 01° 20".52N, 104° 08".16E
01° 19".94N, 104° 07".80E
01° 19".65N, 104° 07".80E
01° 19".65N, 104° 08".30E
01° 20".49N, 104° 08".41E

legend *Works in Progress (2015)* 01° 20".00N, 104° 08".14E

Fl.Y
Y

01° 19".65N, 104° 07".80E
01° 19".65N, 104° 08".30E
01° 19".94N, 104° 07".80E

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116/2015(T) MALAYSIA – Selangor – Pelabuhan Klang – Wrecks.

Source: Marine Department of Malaysia No. 57/2015(T).

Chart MAL 5307 (Last Correction 149/2014) WGS 84

DATUM **Insert** *MV Banga Biraj*

legend ***(Unlit)*** 03° 03".79N, 101° 21".43E
MV Banga Bodor

legend ***(Unlit)*** 03° 04".86N, 101° 20".33E

Chart MAL 5322 (Last Correction 90/2015) WGS 84 DATUM

Insert *MV Banga Biraj*

legend ***(Unlit)*** 03° 03".79N, 101° 21".43E
MV Banga Bodor

legend ***(Unlit)*** 03° 04".86N, 101° 20".33E

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124/2015(T) MALAYSIA – Sarawak – Tg Kidurong – Work in Progress.

Source: Sarawak Marine Department Notice No. 54/2015(T).

Chart MAL 7317 (Last Correction 81/2015) WGS 84 DATUM

Insert	working area for construction of jetty pecked line joining	03° 15‟.80N,	113° 03‟.06E
		03° 15‟.73N,	113° 03‟.13E
		03° 15‟.98N,	113° 03‟.39E
		03° 16‟.04N,	113° 03‟.32E
	legend *Works in Progress (2015)*	03° 15‟.90N,	113° 03‟.20E

Chart MAL 7332 (Last Correction 81/2015) WGS 84 DATUM

Insert	working area for construction of jetty pecked line joining	03° 15‟.80N,	113° 03‟.06E
		03° 15‟.73N,	113° 03‟.13E
		03° 15‟.98N,	113° 03‟.39E
		03° 16‟.04N,	113° 03‟.32E
	legend *Works in Progress (2015)*	03° 15‟.90N,	113° 03‟.20E

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133/2015(T)* MALAYSIA – Negeri Sembilan – Sekitar Perairan Port Dickson – Light Beacon.

Source: Royal Malaysian Navy.

Chart MAL 5239 (Last Correction 132/2015) WGS 84 DATUM

Insert	legend, (Unlit) for Port Dickson, Fl.G.2s15m7M	02° 32‟.86N,	101° 43‟.96E

Chart MAL 532 (Last Correction 132/2015) WGS 84 DATUM

Insert	legend, (Unlit) for Port Dickson, Fl.G.2s15.8m7M	02° 32‟.86N,	101° 43‟.96E

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141/2015(T)* MALAYSIA – Negeri Sembilan – Perairan Port Dickson – Partly Submerged Pipeline.

Source: Royal Malaysian Navy.

1. PARTLY SUBMERGED PIPELINE REPORTED AT 02° 34'.44N, 101° 43'.35E.

2. MARINERS ARE ADVISED TO NAVIGATE WITH EXTRA CAUTION.

CHART EFFECTED: MAL 5239 AND MAL 532.

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146/2015(T) MALAYSIA – Main Strait – Durian Strait – Light Buoy.

Source: Indonesian Notice No. 300/15(T).

Chart MAL 5129 (Last Correction 112/2015) WGS 84 DATUM

Amend	 RWVS	*LFl.W10s10M* for		
	 RW	*LFl.10s*	01° 03‟.00N,	103° 39‟.03E

Chart MAL 515 (Last Correction 144/2015) WGS 84 DATUM

Amend  *LFl.W10s10M* for

 *LFl.10s* 01° 03‟.00N, 103° 39‟.03E

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150/2015(T) MALAYSIA – Malacca Strait – Kuala Langat – Wreck.

Source: Marine Department of Malaysia No. 28/2015(T).

Chart MAL 532 (Last Correction 149/2015) WGS 84 DATUM

Insert M.V TJ9 02° 42'.97N, 101° 16'.63E

Chart MAL 54 (Last Correction 149/2015) WGS 84 DATUM

Insert M.V TJ9 02° 43'.0N, 101° 16'.6E

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155/2015(T) MALAYSIA – Sarawak – Pelabuhan Bintulu – Missing Bouy.

Source: Sarawak Marine Department No. 77/2015(T).

Chart MAL 7317 (Last Correction 124/2015) WGS 84 DATUM

Insert legend, (***Missing***) for
Buoy, *No.13 Fl.G.5s* 03°15'.37N, 113°02'.83E

Chart MAL 7332 (Last Correction 124/2015) WGS 84 DATUM

Insert legend, (***Missing***) for
Buoy, *No.13 Fl.G.5s* 03°15'.37N, 113°02'.83E

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168/2015(T) MALAYSIA – Johor Bahru – Tanjung Pelepas – Reclaimation Work.

Source: Earth Observation Center.

Chart MAL 5123 (Last Correction 110/2015) WGS 84 DATUM

Insert Reclaimation work limit
adjoining:
(a) 01° 19'.07N, 103° 34'.34E
(b) 01° 20'.20N, 103° 34'.26E
(c) 01° 20'.32N, 103° 35'.52E

legend work in progress (2015) (a)-(c) above

Chart MAL 5128 (Last Correction 110/2015) WGS 84 DATUM

Insert Reclaimation work limit
adjoining:
(a) 01° 27'.99N, 103°43'.44E(Border)
(b) 01° 27'.91N, 103° 43'.47E
(c) 01° 27'.59N, 103° 43'.45E
(d) 01° 27'.49N, 103° 43'.93E
(e) 01° 27'.12N, 103° 44'.76E
(f) 01° 27'.02N, 103° 45'.33E
(g) 01° 27'.28N, 103° 46'.12E

legend work in progress (2015) (a)-(g) above

Chart MAL 5128 (Plan, Johor Bharu) WGS 84 DATUM

Insert	Reclaimation work limit adjoining:	(a)	01° 28'.38N, 103° 43'.49E
		(b)	01° 28'.37N, 103° 43'.38E
		(c)	01° 27'.91N, 103° 43'.47E
		(d)	01° 27'.59N, 103° 43'.45E
		(e)	01° 27'.49N, 103° 43'.93E
		(f)	01° 27'.12N, 103° 44'.76E
		(g)	01° 27'.02N, 103° 45'.33E
		(h)	01° 27'.28N, 103° 46'.12E
	legend work in progress (2015)		(a)-(h) above

Chart MAL 6130 (Last Correction 44/2015) WGS 84 DATUM

Insert	Reclaimation work adjoining:	(a)	01° 27'.28N, 103° 46'.12E
		(b)	01° 27'.58N, 103° 46'.53E
		(c)	01° 27'.77N, 103° 46'.46E
	legend work in progress (2015)		(a)-(c) above

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182/2015(T) Corrigendum Notices to Mariners 9 of 2015.

<u>Replace Notices No. 168/2015(T)</u>.

Chart MAL 5128 (Last Correction 181/2015) WGS 84 DATUM

Delete	Reclaimation work limit	(c)	01° 27'.59N, 103° 43'.45E

Chart MAL 5128 (Plan, Johor Bharu) WGS 84 DATUM

Delete	Reclaimation work limit	(d)	01° 27'.59N, 103° 43'.45E

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190/2015(T) MALAYSIA – Pahang – Reclamation Work.

Source: Marine Department of Malaysia Notice No. NTM 89/2015(T).

1. RECLAIMATION WORK 01 APR 15 TO 30 JUN 17 AT AREA BOUNDED BY:
   (a) RECLAMATION WORK AREA:
      (1) 03° 59'.67N, 103° 25'.35E.
      (2) 03° 59'.64N, 103° 25'.21E.
      (3) 03° 59'.33N, 103° 25'.21E.
      (4) 03° 58'.87N, 103° 25'.53E.
      (5) 03° 59'.11N, 103° 25'.78E.
   (b) DUMPING AREA:
      (1) 03° 55'.16N, 103° 34'.83E.
      (2) 03° 54'.16N, 103° 36'.50E.
      (3) 03° 55'.83N, 103° 37'.75E.
      (4) 03° 57'.08N, 103° 35'.83E.
   (c) SAND SOURCE AREA:
      (1) 03° 50'.05N, 103° 35'.05E.
      (2) 03° 52'.00N, 103° 38'.02E.
      (3) 03° 49'.00N, 103° 40'.00E.
      (4) 03° 47'.07N, 103° 37'.03E.

2. MARINERS ARE ADVISED TO NAVIGATE WITH EXTRA CAUTION.
   CANCEL THIS NOTICE 01 JUL 17.
3. CHART AFFECTED: MAL 5, MAL 6359 AND MAL 645.

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199/2015(T)MALAYSIA – Selangor – Batuan Penyu – Light Beacon .

Source: Marine Department of Malaysia No. 101/2015(T).

Chart MAL 5322 (Last Correction 116/2015) WGS 84 DATUM

Amend range of light, 6M 03° 13'.80N, 101° 12'.71E

Chart MAL 54 (Last Correction 198/2015) WGS 84 DATUM

Amend range of light, 6M 03° 13'.80N, 101° 12'.71E

Chart MAL 540 (Last Correction 198/2015) WGS 84 DATUM

Amend range of light, 6M 03° 13'.80N, 101° 12'.71E

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26/2016(T) MALAYSIA – Malacca Strait and Singapore Strait – Racon - Cardinal Mark.

Source: NAVAREA XI No 15 - 0944.

Chart MAL 5129 (Last Correction 208/2015) WGS 84 DATUM

Delete Racon (D) 01° 03‟.60N, 103° 38‟.90E

Chart MAL 515 (Last Correction 209/2015) WGS 84 DATUM

Delete Racon (D) 01° 03‟.60N, 103° 38‟.90E

Insert legend, (**Off Air**) for
Radar Beacon At Helen Mar Reef Light 01°07'.40N, 103°46'.50E

Chart MAL 532 (Last Correction 215/2015) WGS 84 DATUM

Insert legend, (**Missing**) for
South Mark at One Fathom Bank
Q(6)+LF1. 15s 13m 12M 02°49'.30N, 100°56'.20E

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27/2016(T)* MALAYSIA – Perak – Pulau Jarak – Light Beacon.

Source: Royal Malaysian Navy.

Chart MAL 5 (Last Correction 215/2015) WGS 84 DATUM

Insert legend, (**Unlit**) for
Pulau Jarak, Fl(2)15s162m 20M 03° 58‟.60N, 100° 06‟.00E

Chart MAL 54 (Last Correction 26/2016) WGS 84 DATUM

Insert legend, (**Unlit**) for
Pulau Jarak, Fl(2)15s20M 03° 58‟.60N, 100° 06‟.00E

Chart MAL 540 (Last Correction 215/2015) WGS 84 DATUM

Insert legend, (**Unlit**) for
Pulau Jarak, Fl(2)15s162m 20M 03° 58‟.60N, 100° 06‟.00E

Chart MAL 553 (Last Correction 184/2015) WGS 84 DATUM

Insert legend, (**Unlit**) for
Pulau Jarak, Fl(2)15s162m 20M 03° 58‟.60N, 100° 06‟.00E

Chart MAL 554 (Last Correction 184/2015) WGS 84 DATUM

Insert legend, (**Unlit**) for
Pulau Jarak, Fl(2)15s162m 20M 03° 58‟.60N, 100° 06‟.00E

Chart MAL 58 (Last Correction 145/2015) WGS 84 DATUM

Insert legend, (**Unlit**) for
Pulau Jarak, Fl(2)15s162m 20M 03° 58‟.60N, 100° 06‟.00E

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28/2016(T) Corrigendum Notices to Mariners 12 of 2015.

Replace Notices No. 213/2015(T)

Chart MAL 5 (Last Correction 27/2016) WGS 84 DATUM

Replace

Dumping ground 1
Fl.10s.2M for

Fl.10s.2M 03° 55'.09N, 103° 34'. 51E

Dumping ground 2
Fl.10s.2M for

Fl.10s.2M 03° 54'.23N, 103° 36'. 50E

Dumping ground 3
Fl.10s.2M for

Fl.10s.2M 03° 55'.83N, 103° 37'. 69E

Dumping ground 4
Fl.10s.2M for

Fl.10s.2M 03° 57'.09N, 103° 35'. 84E

Chart MAL 645 (Last Correction 218/2015) WGS 84 DATUM

Replace

Dumping ground 1
Fl.10s.2M for

Fl.10s.2M 03° 55'.09N, 103° 34'. 51E

Dumping ground 2
Fl.10s.2M for

Fl.10s.2M 03° 54'.23N, 103° 36'. 50E

Dumping ground 3

 *Fl.10s.2M* for

 *Fl.10s.2M* 03° 55'.83N, 103° 37'. 69E

Dumping ground 4

 *Fl.10s.2M* for

 *Fl.10s.2M* 03° 57'.09N, 103° 35'. 84E

Chart MAL 65 (Last Correction 214/2015) WGS 84 DATUM

Replace

Dumping ground 1

 *Fl.10s.2M* for

 *Fl.10s.2M* 03° 55'.09N, 103° 34'. 51E

Dumping ground 2

 *Fl.10s.2M* for

 *Fl.10s.2M* 03° 54'.23N, 103° 36'. 50E

Dumping ground 3

 *Fl.10s.2M* for

 *Fl.10s.2M* 03° 55'.83N, 103° 37'. 69E

Dumping ground 4

 *Fl.10s.2M* for

 *Fl.10s.2M* 03° 57'.09N, 103° 35'. 84E

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32/2016(T)* MALAYSIA – Johor – Pulau Mungging – Radar Beacon.

Source: Source: National Hydrographic Centre.

Chart MAL 6124 (Last Correction 26/2016) WGS 84 DATUM

Insert  01° 21".70N, 104° 17".90E

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34/2016(T) Malaysia – Sarawak – Tg Po – Wreck.

Source: Sarawak Marine Department No. 117/2015(T).

Chart MAL 6 (Last Correction 219/2015) WGS 84 DATUM

Insert 01° 55'.41N, 110° 31'.60E

Chart MAL 723 (Last Correction 202/2015) WGS 84 DATUM

Insert ◯ 01° 55'.41N, 110° 31'.60E

Chart MAL 731 (Last Correction 219/2015) WGS 84 DATUM

Insert ◯ 01° 55'.41N, 110° 31'.60E

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36/2016(T) MALAYSIA – Sarawak – Kuala Kemena – Bintulu – Buoy.

Source: Sarawak Marine Department No. 116/2015(T).

Chart MAL 7317 (Last Correction 188/2015) WGS 84 DATUM

Insert legend (***Missing***) for
Kuala Kemena buoy, *Fl.R.4s* 03° 11".99N, 113° 01".59E

Chart MAL 7332 (Last Correction 202/2015) WGS 84 DATUM

Insert legend (***Missing***) for
Kuala Kemena buoy, *Fl.R.4s* 03° 11".99N, 113° 01".59E

Chart MAL 741 (Last Correction 202/2015) WGS 84 DATUM

Insert legend (***Missing***) for
Kuala Kemena buoy, *Fl.R.4s* 03° 11".99N, 113° 01".59E

Chart MAL 751 (Last Correction 202/2015) WGS 84 DATUM

Insert legend (***Missing***) for
Kuala Kemena buoy, *Fl.R.4s* 03° 11".99N, 113° 01".59E

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52/2016(T) MALAYSIA – Sabah – Pulau Tiga – Wreck.

Source: Sabah Marine Department No. 6/2016(T).

Chart MAL 864 (Last Correction 39/2016) WGS 84 DATUM

Insert ◯ *PA*
M.V Excellency 77 05° 50'.35N, 115° 35'.20E

Chart MAL 872 (Last Correction 38/2016) WGS 84 DATUM

Insert ◯ *PA*
M.V Excellency 77 05° 50'.35N, 115° 35'.20E

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57/2016(T) MALAYSIA – Sabah – Terusan Tando Bulong – Wreck.

Source: Sabah Marine Department No. 5/2016(T).

Chart MAL 8433 (Last Correction 199/2008) WGS 84 DATUM

Insert ◯ *M.V Zuhari* 04° 29'.70N, 118° 36'.90E

Chart MAL 8434 (Last Correction 48/2013) WGS 84 DATUM

Insert ◯ 04° 29'.70N, 118° 36'.90E

Chart MAL 8503 (Last Correction 157/2015) WGS 84 DATUM

Insert 04° 29'.70N, 118° 36'.90E

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73/2016(T) MALAYSIA – Pelabuhan Pulau Pinang – Light Buoys.

Source: Marine Department of Malaysia No. 30/2016.

Chart MAL 5529 (Last Correction 113/2014) WGS 84 DATUM

Insert	*Mo(O)12s*	05° 28".21N,	100° 19".00E
	Mo(O)12s	05° 28".22N,	100° 19".70E
	Mo(O)12s	05° 27".27N,	100° 20".01E
	Mo(O)12s	05° 26".24N,	100° 20".33E
	Mo(O)12s	05° 25".89N,	100° 19".90E

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82/2016(T) MALAYSIA – Sarawak – Tg. Sebubal – Wk Bouy.

Source: Sarawak Marine Department No. 20/2016(T).

Chart MAL 7215 (Last Correction 54/2016) WGS 84 DATUM

Delete	*Fl(2)10s* BRB	02°06'.38N,	111°19'.03E
Insert	*Fl(2)10s* BRB	02°08'.24N,	111°15'.41E

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83/2016(T) MALAYSIA – Sarawak – Kuala Sematan – Fairway Beacon.

Source: Sarawak Marine Department No. 21/2016(T).

Chart MAL 723 (Last Correction 34/2016) WGS 84 DATUM

Insert	legend, (**collapsed**) for Fairway Beacon*, Fl.10s*	01°50'.00N,	109°47'.57E

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95/2016(T)* MALAYSIA – Melaka – One Fathom Bank – Hydrographic Survey.

Source: National Hydrographic Centre.

1. HYDROGRAPHIC SURVEY - 1 MAC 16 TO 30 NOV 17 AT AREA BOUNDED BY:

(A) POSITION A.
- (1) 03 13.49N 100 38.00E
- (2) 02 53.16N 101 00.55E
- (3) 02 52.08N 100 59.49E

(4) 02 56.27N 100 55.12E
(5) 02 56.54N 100 55.43E
(6) 03 13.27N 100 37.37E

(B) POSITION B.
(1) 03 07.32N 100 54.56E
(2) 03 03.45N 100 58.14E
(3) 03 02.58N 100 57.05E
(4) 03 06.44N 100 53.51E

(C) POSITION C.
(1) 03 10.57N 100 58.21E
(2) 03 06.56N 101 00.54E
(3) 03 06.28N 101 00.09E
(4) 03 10.33N 100 57.36E

(D) POSITION D.
(1) 03 06.15N 101 04.19E
(2) 03 01.36N 101 06.34E
(3) 03 01.05N 101 05.00E
(4) 03 05.39N 101 02.51E

2. WIDE BERTH REQUESTED. CANCEL THIS NOTICE 1 DEC 17.
3. CHART AFFECTED: MAL 5, MAL 532, MAL 54 AND MAL 540.

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113/2016(T)MALAYSIA – Sarawak – Batang Paloh – Buoy – Missing.

Source: Sarawak Marine Department No. 51/2016(T).

Chart MAL 7257 (Last Correction 90/2016) TIMBALAI 1948 DATUM

Insert	legend (***Missing***) for *Starboard Hand Buoy, Fl.G.4s*	02°23'.05N,	111°20'.03E
	legend (***Missing***) for *Port Hand Buoy, Fl.R.4s*	02°27'.53N,	111°14'.94E

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114/2016(T) MALAYSIA – Sarawak – Pelabuhan Bintulu – Buoy.

Source: Sarawak Marine Department No. 49/2016(T).

Chart MAL 7317 (Last Correction 36/2016) WGS 84 DATUM

Insert	legend (***Missing***) for Pelabuhan Bintulu *Buoy Y2, Fl.Y.5s*	03°16'.02N,	113°03'.54E

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177/2016(T) MALAYSIA – Perak – Kuala Sungai Perak – Light Buoy.

Source: Marine Department of Malaysia Notice No. 84/2016(T).

Chart MAL 5403 (Last Correction 49/2016) WGS 84 DATUM

Insert	legend, (***Off Station***) for No.3*, Fl.R.10s*	04° 02'.67N,	100° 42'.93E

Chart MAL 5410 (Last Correction 153/2015) WGS 84 DATUM

Insert	legend, (***Off Station***) for No.3*, Fl.R.10s*	04° 02'.67N,	100° 42'.93E

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178/2016(T) MALAYSIA – Perak – Selat Manjung (Dinding) – Light Beacon – Unlit.

Source: Marine Department of Malaysia Notice No. 82/2016(T).

Chart MAL 5416 (Last Correction 141/2016) WGS 84 DATUM

Insert legend, (***Unlit***) for
Dinding Bn, Fl(2)G.5s6M 04° 14'.68N, 100° 34'.88E

Chart MAL 5419 (Last Correction 141/2016) WGS 84 DATUM

Insert legend, (***Unlit***) for
Dinding Bn, Fl(2)G.5s6M 04° 14'.68N, 100° 34'.88E

Chart MAL 5425 (Last Correction 141/2016) WGS 84 DATUM

Insert legend, (***Unlit***) for
Dinding Bn, Fl(2)G.5s6M 04° 14'.68N, 100° 34'.88E

Chart MAL 554 (Last Correction 49/2016) WGS 84 DATUM

Insert legend, (***Unlit***) for
Dinding Bn, Fl(2)G.5s6M 04° 14'.68N, 100° 34'.88E

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179/2016(T) MALAYSIA – Perak – Selat Manjung (Dinding) – Light Beacon – Unlit.

Source: Marine Department of Malaysia Notice No. 83/2016(T).

Chart MAL 5416 (Last Correction 178/2016) WGS 84 DATUM

Insert legend, (***Unlit***) for
River Rk, Fl.WRG.3s8m7-4M 04° 14'.57N, 100° 35'.32E

Chart MAL 5419 (Last Correction 178/2016) WGS 84 DATUM

Insert legend, (***Unlit***) for
River Rk, Fl.WRG.3s8m7-4M 04° 14'.57N, 100° 35'.32E

Chart MAL 5425 (Last Correction 178/2016) WGS 84 DATUM

Insert legend, (***Unlit***) for
River Rk, Fl.WRG.3s8m7-4M 04° 14'.57N, 100° 35'.32E

Chart MAL 554 (Last Correction 178/2016) WGS 84 DATUM

Insert legend, (***Unlit***) for
River Rk, Fl.WRG.3s7-4M 04° 14'.57N, 100° 35'.32E

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184/2016(T) MALAYSIA – Perlis – Kuala Perlis – Buoy.

Source: Marine Department of Malaysia Notice No. 81/2016(T).

Chart MAL 5625 (Last Correction NE/2015) WGS 84 DATUM

Insert legend, (***Off Station***) for
Fl.G.4s 06° 24'.05N, 100° 05'.97E

Chart MAL 5630 (Last Correction 168/2016) WGS 84 DATUM

Insert legend, (***Off Station***) for
Fl.G.4s 06° 24'.05N, 100° 05'.97E

Chart MAL 565 (Last Correction 75/2016) WGS 84 DATUM

Insert legend, (***Off Station***) for
Fl.G.4s 06° 24'.05N, 100° 05'.97E

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187/2016(T) MALAYSIA – Sarawak – Pelabuhan Bintulu – Buoy – Missing.

Source: Sarawak Marine Department No. 53/2016(T).

Chart MAL 7317 (Last Correction 165/2016) WGS 84 DATUM

Insert legend, (***Missing***) for
Pelabuhan Bintulu Buoy Y1*, Fl.Y.5s* 03° 15'.89N, 113° 03'.27E

legend, (***Missing***) for
Pelabuhan Bintulu Buoy Y3*, Fl.Y.5s* 03° 15'.93N, 113° 03'.64E

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189/2016(T) MALAYSIA – Johor, Sarawak and Sabah – Main Lay Cable Installation Work (SKR1M).

Source: Optic Marine Services Sdn. Bhd.

1. SUBMARINE CABLE LAYING WORK (SKR1M) – 23 AUG 16 TO 28 FEB 17 AT POSITION AS FOLLOW:

(a) SEGMEN S1 – MERSING – KUCHING.

(1) 02°21'.84N, 103°53'.94E.
(2) 02°22'.15N, 103°54'.61E.
(3) 02°22'.67N, 103°57'.68E.
(4) 02°22'.71N, 103°58'.66E.
(5) 02°23'.75N, 104°01'.08E.
(6) 02°25'.48N, 105°05'.56E.
(7) 02°29'.20N, 104°16'.65E.
(8) 02°30'.89N, 104°19'.82E.
(9) 02°33'.63N, 104°30'.13E.
(10) 02°35'.72N, 104°33'.34E.
(11) 02°38'.91N, 104°46'.38E.
(12) 02°42'.10N, 104°55'.13E.
(13) 03°01'.33N, 105°03'.93E.
(14) 03°06'.69N, 105°09'.69E.
(15) 03°15'.95N, 105°15'.58E.
(16) 03°23'.89N, 105°26'.09E.
(17) 03°36'.03N, 105°43'.62E.
(18) 03°39'.64N, 105°56'.77E.
(19) 03°48'.68N, 106°20'.37E.
(20) 04°07'.95N, 106°59'.69E.
(21) 04°31'.44N, 107°20'.92E.
(22) 04°45'.26N, 107°29'.84E.
(23) 04°54'.00N, 107°39'.13E.
(24) 04°58'.54N, 107°44'.96E.
(25) 05°01'.33N, 108°07'.02E.
(26) 04°55'.73N, 108°26'.10E.
(27) 03°21'.94N, 109°04'.45E.
(28) 03°12'.67N, 109°07'.07E.
(29) 02°25'.88N, 109°40'.55E.
(30) 02°00'.96N, 109°52'.60E.
(31) 01°54'.16N, 110°19'.88E.

(32) 01°42'.87N, 110°21'.29E.
(33) 01°42'.81N, 110°21'.25E.

(b) SEGMEN S2 – KUCHING – BINTULU.

(1) 01°42'.81N, 110°21'.25E.
(2) 01°42'.93N, 110°21'.31E.
(3) 01°46'.56N, 110°26'.08E.
(4) 02°06'.95N, 110°33'.01E.
(5) 02°09'.55N, 110°33'.85E.
(6) 02°14'.47N, 110°35'.52E.
(7) 02°54'.21N, 110°49'.66E.
(8) 03°22'.21N, 111°09'.02E.
(9) 03°30'.93N, 111°14'.20E.
(10) 03°35'.88N, 111°18'.44E.
(11) 03°39'.44N, 111°21'.05E.
(12) 03°50'.04N, 111°39'.18E.
(13) 03°52'.16N, 111°51'.03E.
(14) 03°53'.09N, 112°10'.95E.
(15) 03°53'.64N, 112°21'.04E.
(16) 03°57'.30N, 112°37'.74E.
(17) 03°50'.34N, 112°43'.41E.
(18) 03°49'.30N, 112°44'.91E.
(19) 03°41'.86N, 112°56'.44E.
(20) 03°31'.95N, 112°59'.22E.
(21) 03°23'.42N, 113°02'.59E.
(22) 03°23'.45N, 113°03'.81E.
(23) 03°21'.49N, 113°04'.46E.
(24) 03°20'.12N, 113°05'.27E.
(25) 03°18'.89N, 113°07'.11E.

(C) SEGMEN S4 – MIRI – KOTA KINABALU.

(1) 04°22'.58N, 113°58'.34E.
(2) 04°22'.04N, 113°56'.07E.
(3) 04°15'.76N, 113°48'.01E.
(4) 04°18'.60N, 113°42'.52E.
(5) 04°22'.83N, 113°39'.95E.
(6) 04°40'.38N, 113°33'.58E.
(7) 04°45'.44N, 113°40'.60E.
(8) 05°00'.23N, 113°39'.25E.
(9) 05°02'.86N, 113°38'.65E.
(10) 05°18'.22N, 113°41'.76E.
(11) 05°44'.41N, 113°52'.44E.
(12) 05°57'.36N, 114°09'.68E.
(13) 06°04'.73N, 114°17'.21E.
(14) 06°06'.78N, 114°30'.04E.
(15) 06°04'.83N, 114°40'.81E.
(16) 05°57'.46N, 114°47'.57E.
(17) 05°55'.11N, 114°52'.86E.
(18) 05°53'.75N, 114°56'.43E.
(19) 05°53'.75N, 115°11'.97E.
(20) 05°52'.01N, 115°26'.80E.
(21) 05°54'.89N, 115°41'.96E.
(22) 05°54'.97N, 116°00'.37E.
(23) 05°57'.07N, 116°02'.64E.

2. WIDE BERTH REQUESTED. CANCEL THIS NOTICE 1 MAC 17.

3. CHART AFFECTED: MAL 5, MAL 625, MAL 6, MAL 7150, MAL 723, MAL 7257, MAL 731, MAL 7332,MAL 740, MAL 741, MAL 750, MAL 751, MAL 752, MAL 754, MAL 762, MAL 781, MAL 8608, MAL 864, MAL 865 AND MAL 872.

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190/2016(T) MALAYSIA – Sarawak – Miri – Drilling Operation.

Source: Petronas Carigali Sdn. Bhd.

1. DRILLING OPERATION – 24 SEP TO 27 MAC 18 AT 04°26'.27N, 113°48'.13E.

2. WIDE BERTH REQUESTED. CANCEL THIS NOTICE 28 MAC 18.

3. CHART AFFECTED: MAL 750 AND MAL 754.

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191/2016(T) MALAYSIA – Pahang and Sabah – Submarine Cable Laying Work (SKR1M).

Source: Marine Department of Malaysia Notice No. 88/2016(T).

1. SUBMARINE CABLE LAYING WORK (SKR1M) – 23 SEP 16 TO 28 FEB 17 AT POSITION AS FOLLOW:

(a) SEGMEN S5 – CHERATING – KOTA KINABALU.

(1) 04°05'.80N, 103°23'.01E.
(2) 04°15'.75N, 104°12'.15E.
(3) 04°30'.15N, 105°28'.59E.
(4) 04°38'.59N, 106°54'.50E.
(5) 04°50'.60N, 107°03'.57E.
(6) 05°01'.59N, 107°15'.22E.
(7) 05°20'.84N, 107°46'.91E.
(8) 05°31'.82N, 109°00'.31E.
(9) 06°02'.19N, 110°45'.01E.
(10) 06°20'.76N, 111°01'.84E.
(11) 06°30'.04N, 112°53'.84E.
(12) 06°10'.96N, 114°38'.88E.
(13) 06°01'.57N, 115°35'.08E.
(14) 05°57'.07N, 116°02'.64E.

2. WIDE BERTH REQUESTED. CANCEL THIS NOTICE 1 MAC 17.

3. CHART AFFECTED: MAL 5, MAL 645, MAL 655, MAL 6, MAL 781, MAL 8608, MAL 864, MAL 865 AND MAL 872.

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194/2016(T) MALAYSIA – Sarawak – Kuala Rajang – Wreck.

Source: Sarawak Marine Department No. 98/2016(T).

Chart MAL 7215 (Last Correction 90/2016) WGS 84 DATUM

Insert ◯ *PA* 02° 07‟.80N, 111° 06‟.96E
Rep (2016)

Chart MAL 7257 (Last Correction 113/2016) WGS 84 DATUM

Insert ◯ *PA* 02° 07‟.80N, 111° 06‟.96E
Rep (2016)

Chart MAL 731 (Last Correction 90/2016) WGS 84 DATUM

Insert ◯ *PA* 02° 07‟.80N, 111° 06‟.96E
Rep (2016)

Chart MAL 740 (Last Correction 90/2016) WGS 84 DATUM

Insert *PA*

Rep (2016) 02° 07‟.80N, 111° 06‟.96E

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198/2016(T) MALAYSIA – Sarawak – Kuala Suai – Beacon.

Source: Sarawak Marine Department No. 75/2016(T).

Chart MAL 741 (Last Correction 197/2016) WGS 84 DATUM

Insert legend (***Collapsed****)* for
Kuala Suai Beacon, Fl.6s4M 03° 47‟.64N, 113° 29‟.49E

Chart MAL 751 (Last Correction 197/2016) WGS 84 DATUM

Insert legend (***Collapsed****)* for
Kuala Suai Beacon, Fl.6s4M 03° 47‟.64N, 113° 29‟.49E

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220/2016(T) MALAYSIA – Sarawak – Kuala Rajang – Buoy.

Source: Sarawak Marine Department No. 104/2016(T).

Chart MAL 7215 (Last Correction 194/2016) WGS 84 DATUM

Insert legend, (***Missing***) for
Mv Mano Wk Buoy, *Fl(2)8s* 02° 08'.71N, 111° 14'.40E

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221/2016(T) MALAYSIA – Sabah – Lahad Datu, Semporna and Tawau – Light Beacons.

Source: Sabah Marine Department No. 18/2016(T).

Chart MAL 8421 (Last Correction 131/2012) WGS 84 DATUM

Delete Pulau Si Amil
Fl(2)15s107m15M 04° 18‟.87N, 118° 52‟.47E

Pulau Ligitan
Fl.5s10m11M 04° 09‟.87N, 118° 52‟.85E

Chart MAL 8434 (Last Correction 57/2016) WGS 84 DATUM

Delete Pulau Si Amil
Fl(2)15s107m15M 04° 18‟.87N, 118° 52‟.47E

Pulau Ligitan
Fl.5s9m11M 04° 09‟.87N, 118° 52‟.85E

Chart MAL 8503 (Last Correction 57/2016) WGS 84 DATUM

Delete Pu. Katung Kalungan
Fl.10s37m17M 04° 55‟.40N, 118° 16‟.20E

Bagahak Light
Fl.5s70m15M 04° 56‟.56N, 118° 38‟.26E

Pulau Mataking
Fl.20s27m15M 04° 34‟.62N, 118° 56‟.93E

Chart MAL 860 (Last Correction 59/2016) WGS 84 DATUM

Delete	Pulau Si Amil Fl(2)15s107m15M	04° 18‟.87N,	118° 52‟.47E
	Pulau Ligitan Fl.5s10m11M	04° 09‟.87N,	118° 52‟.85E
	Pulau Mataking Fl.20s27m15M	04° 34‟.62N,	118° 56‟.93E

Chart MAL 8617 (Last Correction 144/2016) WGS 84 DATUM

Delete	Batuan Berhala Fl(2)Y.5s17m10M	06° 03‟.35N,	118° 11‟.47E

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230/2016(T) MALAYSIA – Selangor – Pulau Indah – Light beacon.

Source: Marine Department of Malaysia No. 114/2016(T).

Chart MAL 5307 (Last Correction 176/2016) WGS 84 DATUM

Insert	legend (**Ru**) for Port Klang Water Light beacon No. 19A, Fl.G.5s12m11M	02°59'.66N,	101°21'.77E
Delete	Fl.G.5s12m11M	(above)	

.....

24. HYDROGRAPHIC REPORTS

a. Report conveying that could be useful to mariners generally, are always welcome in the National Hydrographic Centre. Such information will be used to improve existing charts, sailing directions and navigational publication, not only in the area Malaysian Charting Responsibility, but worldwide.

b. The type of information most needed concerns safe routes through poorly surveyed waters (with courses and depth where available), anchorages, harbour facilities, conspicuous, navigation aids, obstructions and other dangers that are not correctly or fully charted or described on the chart or in the Sailing Directions.

c. When reports are received in National Hydrographic Centre, copies are sent to other affected maritime authorities, including the British Admiralty for correctly British charts and Sailing Directions.

d. Report is accepted in any style or from that best suits the writer. Rough but legible handwritten report are quite accepted able and can be sent. If desired as a Hydrographic Note of which a blank copy, as a printed form, can be foundattached to each monthly edition of Malaysian Notice to Mariners. Sketches, maps, diagrams, photographic view, newspaper cutting etc. When attached to reports can be very useful.

e. Without making the task too arduous, report should include copies of the original observation on which a report is founded, with times courses and speed, bearing, radar distances or measured depths, rather than merely the derived latitudes and longitude or reduced depth.

f. Most reports records what someone as seen or done. The report should include the name and address of that person, together with mariner"s comments on its known or assumed reliability, so that the enquiries can be made when check against other sources.

g. Mariners who send charts with their reports should ask for replacement to be sent to them, if required.

25. HYDROGRAPHIC NOTE

MH 501

HYDROGRAPHIC NOTE
(for instructions, see overleaf)

Date : .....

Ref No : .....

Name of ship or address of sender.

.....

.....

.....

.....

.....

General locality .....

Subject .....

Approx position Lat ..... Long .....

Chart Affected .....

Latest Notice to Mariners held .....

Publication affected (Edition No date of latest supplement, page and Light List No etc)

.....

.....

.....

Details :-

A replacement copy of Chart No. ..... is required, but see 4 overleaf

Signature of observer/reporter .....

HYDROGRAPHIC NOTE

Forwarding Information for Malaysian Charts and Hydrographic Publications

INSTRUCTION: -

1. Mariners are requested to notify the National Hydrographic Centre, Bandar Armada Putra, Pulau Indah, 42009 PORT KLANG, Selangor, Malaysia, when new or suspected dangers to navigation are discovered, change observed in aids to navigation, or corrections to publications seems to be necessary.

2. This form and its instructions have been designed to help both the sender and the recipient. It should be used, or followed closely, whenever appropriate. Copies of this Form may be obtained gratis from the Hydrographic Directorate at the above address.

3. When **position** is defined by sextant angles or bearings (true or magnetic being specified) more than two should be used in order to provide and check. Distances observed by radar and the reading of Loran, Decca, etc, should be quoted. However, when there is a series of fixes a long a ship course, only the method of fixing and the objects used need be indicated. Latitude and longitude should only be used specifically to position the details when they have been fixed by the astronomical observations and full description of the latter should be given.

4. A cutting from the largest scale chart is the best medium for forwarding details, the alterations and additions being shown thereon in red. When requested, a new copy will be sent in replacement of chart that has been used to forward information, or when extensive observations have involved defacement of the observer"s chart. If it is preferred to show the amendments on a tracing of the largest scale chart (rather than on the chart itself) these should be in red as above, but adequate details from the chart must be traced in black ink to enable the amendments to be fitted correctly.

5. When **soundings** are obtained The Mariner"s Handbook (NP 100) should be consulted. The echo sounding trace should be marked with times, depths, etc., and forwarded with the report. It is important to state whether the echo sounder is set to register depths below the surface or below the keel; in the latter case the vessels draught should be given. Time and date should be given in order that corrections for the height of the tide may be made where necessary. The make, name and type of set, together with stylus speed/sound velocity, should also be given.

6. Modern echo sounders frequently register greater depths than the advertised maximum for the set, e.g. with a set whose maximum is 500 metres, a trace appearing at 50 metres may in fact be 550 metres or even 1050 metres. Sounding recorded beyond the set"s nominal range usually be recognised by the following:-

a. the trace being weaker than normal for the depth recorded
b. the trace passing through the transmission line
c. the “feathery” nature of trace.

As a check that apparently shoal soundings are not due to echoes beyond the sets nominal range sounding should be continued until reasonable agreement with charted soundings is reached. However soundings receive after one or more rotations of the stylus can still be useful and should be submitted if they show significant differences from charted depth.

7. Reports, which cannot be confirmed or are lacking in certain details should be withheld. Shortcomings should be stressed and any firm expectation of being able to check the information on a succeeding voyage should be mentioned.

8. Reports of **shoal soundings**, uncharted dangers and navigational aids out order should, at the mariner"s discretion, also are made by radio to the nearest coast radio station. The draught of modern tankers is such that any uncharted depth under 30 metres or 15 fathoms may be sufficient importance to justify a radio message.

9. **Port Information** should be forwarded on Form MH 501a together with Form MH 501. Form MH 501a list the information required for Admiralty Sailing Directions and should be used as an *aide memoire*. Where there insufficient space on the form an additional sheet should be used.

Note: An acknowledgement of receipt will be sent and the information then used to the best advantage, which may mean immediate action or inclusion in revision in due course. When the Notice to Mariners is issued, the sender"s vessel or name is quoted as sometimes happens the information is also received in foreign Notice to Mariners. Further communication should be expected only if the information is of outstanding value or has unusual features.

HYDROGRAPHIC NOTE FOR PORT INFORMATION

(To accompany Form MH 501)

Name of ship or address of sender

Ref No ----------

Date ----------

1. **NAME OF PORT**

2. **GENERAL REMARKS**

Principal activities and trade
Latest population figures and date
Number of ships or tonnage handled per year
Maximum size of vessel handled.
Copy of Port Handbook if available

3. **ANCHORAGES**

Designation, depths
holding ground, shelter afforded

4. **PILOTAGE**

Authority for requests.
Embarkation position.
Regulations.

5. **DIRECTIONS**

Entry and berthing information
Tidal Streams.
Navigational aids

6. **TUGS**

Number available and max. hp.

7. **WHARVES**

Names, number or positions.
Lengths.
Depth alongside.
Height above Chart Datum
Facilities available

8. **CARGO HANDLING**

Container, lighters,
Ro – Ro etc.

9. **CRANES**

Brief details and max. capacity

10. **REPAIRS**

Hull, machinery and underwater.
Ship and boat yards.
Docking or shipping facilities.
Gives sizes of vessels handled or dimensions.
Hard and ramps.
Divers.

11. **RESCUE AND DISTRESS**

Salvage, lifeboat
Coastguard, etc.

12. **SUPPLIES**

Fuel with type and quantities available
Fresh water with rate of supply.
Provisions.

13. **SERVICES**

Medical
De-ratting
Consuls.
Ship chandlery, compass adjustment,
Tank cleaning, hull painting.

14. **COMMUNICATIONS**

Road, rail and air services available.
Nearest airport or airfield.
Port radio and information service with
Frequencies and hours of operating.

15. **PORT AUTHORITY**

Designation, address
and telephone number.

16. **SMALL CRAFT FACILITIES**

Information and facilities for small craft
(E.g. yachts) visiting the port.
Yacht Clubs berth, etc.

17. **VIEWS**

Photographs (where permitted)
of the approaches, leading marks,
The entrance to the harbour, etc.
Picture postcards may also be useful

Signature of observer/reporter.....

PUSAT HIDROGRAFI NASIONAL

SEDIA BEKORBAN