



IMO

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NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its seventy-fifth session (15 to 24 May 2002), adopted, in accordance with the provisions of resolution A.858(20), new and amended existing traffic separation schemes and associated routeing measures, listed at annexes 1 to 8, as follows:

- .1 "Off the Mediterranean coast of Egypt" (new scheme);
- .2 "South of Gedser" (amended scheme);
- .3 "Off Ushant" (amended scheme);
- .4 "Approaches to Los Angeles - Long Beach" (amended scheme);
- .5 "Strait of Juan De Fuca and its approaches" (amended scheme);
- .6 "In Puget Sound and its approaches" (amended scheme);
- .7 "In Haro Strait, Boundary Pass and in the Strait of Georgia" (amended scheme); and
- .8 "East part of the Gulf of Finland" (amended scheme).

Implementation dates

2(a) The amended ships' routeing system in the East part of the Gulf of Finland (annex 8) was implemented by the Russian Federation on 1 November 2001, as an interim measure.

2(b) The amended TSS "South of Gedser" (annex 2) was implemented by Denmark and Germany on 6 January 2002 (SN/Circ.218 of 18 July 2001).

2(c) The new and amended traffic separation schemes (listed in sub-paragraphs 1.1, 1.4, 1.5, 1.6 and 1.7 above and detailed at annexes 1, 4, 5, 6 and 7) will be implemented at 0000 hours UTC on 1 December 2002.

2(d) The amended TSS "Off Ushant" (annex 3) will be implemented by France at 0000 hours UTC on 1 May 2003.

**NEW AND AMENDED TRAFFIC SEPARATION SCHEMES AND
ASSOCIATED ROUTEING MEASURES**

ANNEX 1

OFF THE MEDITERRANEAN COAST OF EGYPT

(Reference charts: British Admiralty chart No. 2573, 2574 and 2578)

Note: All positions are in degrees, minutes and decimals of a minute and are referred to World Geodetic System 1984 Datum (WGS 84).

Description of the new traffic separation schemes:

Western Approach to Mina Dumyat (143° - 323°)

(a) A separation line connects the following geographical positions:

- (1) 31°38'.60N, 31°47'.15E
- (2) 31°45'.10N, 31°41'.50E

(b) A traffic lane for northbound traffic is established between the separation line and a separation line connecting the following geographical positions:

- (3) 31°39'.00N, 31°47'.80E
- (4) 31°45'.10N, 31°42'.40E

(c) A traffic lane for southbound traffic is established between the separation line and a separation line connecting the following geographical positions:

- (5) 31°37'.75N, 31°47'.00E
- (6) 31°45'.10N, 31°40'.50E

Precautionary area

(d) A precautionary area north Dumyat is established by a line connecting the following geographical positions:

- 31°37'.75N, 31°47'.00E
- 31°38'.60N, 31°47'.15E
- 31°39'.00N, 31°47'.80E
- 31°38'.45N, 31°48'.25E
- 31°37'.50N, 31°48'.00E

Eastern Approaches to Mina Dumyat (055°-235°)

(a) A separation line connects the following geographical positions:

(7) 31°38'.45N, 31°48'.25E

(8) 31°44'.05N, 31°57'.55E

(b) A traffic lane for northbound traffic is established between the separation line and a separation line connecting the following geographical positions:

(9) 31°37'.50N, 31°48'.00E

(10) 31°43'.55N, 31°58'.10E

(c) A traffic lane for southbound traffic is established between the separation line and a separation line connecting the following geographical positions:

(11) 31°39'.00N, 31°47'.80E

(12) 31°44'.50N, 31°57'.00E

Western Approaches to Bur Said (135° - 315°)

(a) A separation zone half mile wide as the following geographical positions:

(13) 31°44'.25N, 31°59'.30E

(14) 31°44'.00N, 31°58'.85E

(15) 31°31'.85N, 32°12'.95E

(16) 31°32'.20N, 32°13'.40E

(b) A traffic lane for northbound traffic is established between the separation line and a separation line connecting the following geographical positions (one mile wide):

(17) 31°32'.70N, 32°14'.00E

(18) 31°44'.70N, 32°00'.05E

(c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions (one mile wide):

(19) 31°31'.30N, 32°12'.35E

(20) 31°43'.55N, 31°58'.10E

Eastern Approach to Bur Said (059°-239°)

(a) A separation zone half mile wide as the following geographical positions:

(21) 31°35'.45N, 32°22'.95E

(22) 31°35'.85N, 32°22'.65E

(23) 31°42'.55N, 32°35'.65E

(24) 31°42'.15N, 32°35'.95E

- (b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions (one mile wide):

(25) 31°34'.80N, 32°23'.40E

(26) 31°46'.00N, 32°45'.30E

- (c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions (one mile wide):

(27) 31°46'.00N, 32°35'.20E

(28) 31°43'.20N, 32°35'.20E

(29) 31°35'.80N, 32°20'.80E

Precautionary area

- (d) A precautionary area north west Bur Said established by a line connecting the following geographical positions:

31°45'.40N, 31°55'.95E

31°43'.55N, 31°58'.10E

31°44'.70N, 32°00'.05E

31°45'.40N, 31°59'.52E

ANNEX 2

EXTENSION OF THE DEEP WATER ROUTE DW 17M INTO THE TRAFFIC SEPARATION SCHEME SOUTH OF GEDSER**AMENDED DEEP-WATER ROUTE NORTH-EAST OF GEDSER**

(Reference chart: German 163, INT 1351, 2001 edition.)

Note: This chart is based on WGS 84

Description of the deep-water route

A deep-water route with a minimum depth of water below mean sea level of 17 metres is bounded by a line connecting the following geographical positions:

Existing No.	New No.	Geographical positions in WGS 84		
	(1)	54°27'.10N,	012°10'.50E	added
	(2)	54°27'.73N,	012°11'.30E	added
(1)	(3)	54°31'.30N,	012°12'.80E	amended
(2)	(4)	54°36'.46N,	012°15'.83E	
(3)	(5)	54°46'.86N,	012°43'.23E	
(4)	(6)	54°46'.06N,	012°44'.03E	
(5)	(7)	54°35'.36N,	012°16'.93E	
(6)	(8)	54°31'.00N,	012°15'.20E	amended
	(9)	54°27'.40N,	012°13'.10E	added
	(10)	54°26'.57N,	012°11'.90E	added

Note:

Ships, other than ships which, because of their draught, must use the deep-water route, are recommended to use the area outside the deep-water route, in such manner that eastbound ships proceed on the east and south side of the deep-water route and westbound ships on the north and west side.

ANNEX 3

Description of the amended Ushant traffic separation scheme:

(Reference chart: 6989)

Note: All positions are in degrees, minutes and decimals of a minute and are referred to World Geodetic System 1984 Datum (WGS 84).

1 The Ushant traffic separation scheme consists of:

Two traffic lanes;

A two way traffic route;

An Inshore traffic zone;

An outer separation zone;

A separation zone between the traffic lanes;

A separation zone between the northeast bound lane and the two way route;

A separation zone between the two-way traffic route and the inshore traffic zone.

2 The direction of navigation will be as follows:

- Northeast bound traffic, course on ground: 028° as far as the line of the turning point at 315° from the Créac'h light, then: 060° as far as the north-east boundary of the scheme.
- Southwestbound traffic, course on ground: 240° as far as the line of the turning point at 315° from the Créac'h light, then: 208° as far as the south-west boundary of the scheme.

Description of the amended traffic separation scheme:

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

	Latitude	Longitude
Point 1	48°57'.00 N	005°32'.50 W
Point 2	48°52'.75 N	005°28'.60 W
Point 3	48°48'.60 N	005°39'.60 W
Point 4	48°37'.40 N	005°48'.60 W
Point 5	48°39'.70 N	005°55'.20 W
Point 6	48°52'.05 N	005°45'.00 W

(b) A traffic lane for ships leaving the English Channel between the above separation zone and the following geographical positions:

	Latitude	Longitude
Point 7	48°42'.00 N	006°01'.60 W
Point 8	48°55'.60 N	005°50'.60 W
Point 9	49°01'.10 N	005°36'.05 W

- (c) A traffic lane for ships entering the English Channel between that separation zone and the following geographical positions:

	Latitude	Longitude
Point 10	48°35'.10 N	005°42'.30 W
Point 11	48°45'.00 N	005°34'.30 W
Point 12	48°48'.60 N	005°25'.10 W

- (d) An outer separation zone, seaward of the Ouessant traffic separation scheme, bounded by a line connecting points 7, 8, 9 and the following geographical positions:

	Latitude	Longitude
Point 17	48°42'.60 N	006°02'.80 W
Point 18	48°56'.40 N	005°51'.60 W
Point 19	49°02'.00 N	005°36'.80 W

- (e) A separation zone bounded by a line connecting points 10, 11, 12 and the following geographical positions:

	Latitude	Longitude
Point 13	48°39'.70 N	005°14'.70 W
Point 14	48°30'.60 N	005°26'.30 W

- (f) A separation zone bounded by a line connecting the following geographical positions

	Latitude	Longitude
Point 15	48°29'.80 N	005°23'.50 W
Point 16	48°38'.00 N	005°12'.90 W
Point 20	48°37'.20 N	005°11'.90 W
Point 21	48°29'.39 N	005°22'.05 W

- (g) An inshore traffic zone bounded by a line connecting points 20, 21, and the following geographical positions:

	Latitude	Longitude
Men Korn Light	48°28'.00 N	005°01'.40 W
Jument Light	48°25'.35 N	005°08'.00 W

- (h) A two-way traffic route 2 miles wide established between the separation zones described in paragraphs (e) and (f), for passenger ships operating regular schedules to or from a Channel port situated west of meridian 1°W, and for ships sailing between ports situated between Cape de la Hague and Cape Finisterre, except for ships carrying oils listed in appendix 1 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78), and ships carrying in bulk the substances listed in categories A and B listed in appendices I and II of Annex II of that Convention."

3 Special provision

Northeastbound traffic lane in 2(c)

Ships carrying oils listed in appendix 1 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78), and ships carrying in bulk the substances listed in categories A and B listed in appendices I and II of Annex II of that Convention must, as far as possible, sail in the outer part of this lane.

ANNEX 4

IN THE APPROACHES TO LOS ANGELES – LONG BEACH

(Reference Chart: United States 18746, 2000 edition.

Note: This chart is based on North American 1983 Datum.)

Description of the amended traffic separation scheme

The traffic separation scheme “In the Approaches to Los Angeles – Long Beach” consists of three parts:

Western approach

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

- | | | |
|-----|------------|-------------|
| (1) | 33°37'.70N | 118°17'.60W |
| (2) | 33°36'.50N | 118°17'.60W |
| (3) | 33°36'.50N | 118°23'.10W |
| (4) | 33°43'.20N | 118°36'.90W |
| (5) | 33°44'.90N | 118°35'.70W |
| (6) | 33°37'.70N | 118°20'.90W |

(b) A traffic lane for northbound coastwise traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | |
|-----|------------|-------------|
| (7) | 33°38'.70N | 118°17'.60W |
| (8) | 33°38'.70N | 118°20'.60W |
| (9) | 33°45'.80N | 118°35'.10W |

(c) A traffic lane for southbound coastwise traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | |
|------|------------|-------------|
| (10) | 33°35'.50N | 118°17'.60W |
| (11) | 33°35'.50N | 118°23'.43W |
| (12) | 33°42'.30N | 118°37'.50W |

Southern approach

(a) A separation zone is established bounded by a line connecting the following geographic position:

- | | | |
|------|------------|-------------|
| (13) | 33°35'.50N | 118°10'.30W |
| (14) | 33°35'.50N | 118°12'.75W |
| (15) | 33°19'.00N | 118°05'.60W |
| (16) | 33°19'.70N | 118°03'.50W |

(b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

- (17) 33°35'.50N 118°09'.00W
- (18) 33°20'.00N 118°02'.30W

(c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

- (19) 33°35'.50N 118°14'.00W
- (20) 33°18'.70N 118°06'.75W

Precautionary area

(a) The precautionary area consists of the water area enclosed by the Los Angeles - Long Beach breakwater and a line connecting Point Fermin Light at 33°42'.30N, 118°17'.60W, with the following geographical positions:

- (10) 33°35'.50N 118°17'.60W
- (17) 33°35'.50N 118°09'.00W
- (21) 33°37'.70N 118°06'.50W
- (22) 33°43'.40N 118°10'.80W

Note: Pilot boarding areas are located in the precautionary area. Due to heavy vessel traffic, mariners are advised not to anchor or linger in this precautionary area except to pick up or disembark a pilot.

ANNEX 5

IN THE STRAIT OF JUAN DE FUCA AND ITS APPROACHES

(Reference charts: United States 18400, 2000 edition; 18421, 2000 edition; 18440, 2000 edition; 18460, 1998 edition; 18465, 1995 edition; 18480, 1999 edition; 18485, 1998 edition; Canadian Hydrographic Service 3440, 1998 edition. *Note:* These charts are based on North American 1983 Datum.)

Description of the amended traffic separation scheme*Part I*

In the approaches to the Strait of Juan de Fuca there are two traffic separation schemes and a precautionary area:

Western approach

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

(1) 48°30'.10N	125°09'.00W
(2) 48°30'.10N	125°04'.67W
(3) 48°29'.11N	125°04'.67W
(4) 48°29'.11N	125°09'.00W

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

(5) 48°31'.09N	125°04'.67W
(6) 48°31'.93N	125°09'.00W

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

(7) 48°27'.31N	125°09'.00W
(8) 48°28'.13N	125°04'.67W

South-western approach

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

(10) 48°23'.99N	125°06'.54W
(11) 48°27'.63N	125°03'.38W
(12) 48°27'.14N	125°02'.08W
(13) 48°23'.50N	125°05'.26W

(b) A traffic lane for north-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(14) 48°22'.55N	125°02'.80W
(15) 48°26'.64N	125°00'.81W

(c) A traffic lane for south-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(8) 48°28'.13N	125°04'.67W
(9) 48°24'.94N	125°09'.00W

Precautionary area

A precautionary area "JF", is bounded by a line connecting the following geographical positions:

(5) 48°31'.09N	125°04'.67W
(2) 48°30'.10N	125°04'.67W
(3) 48°29'.11N	125°04'.67W
(8) 48°28'.13N	125°04'.67W
(11) 48°27'.63N	125°03'.38W
(12) 48°27'.14N	125°02'.08W
(15) 48°26'.64N	125°00'.81W
(16) 48°28'.13N	124°57'.90W
(18) 48°29'.11N	125°00'.00W
(25) 48°30'.10N	125°00'.00W
(17) 48°31'.09N	125°00'.00W

thence back to the point of origin at (5).

Part II

In the Strait of Juan de Fuca there are four separation schemes and a precautionary area:

Western lanes

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

(18) 48°29'.11N	125°00'.00W
(19) 48°29'.11N	124°43'.78W
(20) 48°13'.89N	123°54'.84W
(21) 48°13'.89N	123°31'.98W
(22) 48°14'.49N	123°31'.98W
(23) 48°17'.02N	123°56'.46W
(24) 48°30'.10N	124°43'.50W
(25) 48°30'.10N	125°00'.00W

(b) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(26) 48°16'.45N	123°30'.42W
(27) 48°15'.97N	123°33'.54W
(28) 48°18'.00N	123°56'.07W
(29) 48°32'.00N	124°46'.57W
(30) 48°31'.09N	124°47'.13W
(17) 48°31'.09N	125°00'.00W

Traffic may exit the lane between points (29) and (30) or may remain in the lane between points (30) and (17) en route to the precautionary area.

(c) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(16) 48°28'.13N	124°57'.90W
(31) 48°28'.13N	124°44'.07W
(32) 48°12'.90N	123°55'.24W
(33) 48°12'.94N	123°32'.89W

Southern lanes

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

(34) 48°10'.82N	123°25'.44W
(35) 48°12'.38N	123°28'.68W
(36) 48°12'.90N	123°28'.68W
(37) 48°12'.84N	123°27'.46W
(38) 48°10'.99N	123°24'.84W

(b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(39) 48°11'.24N	123°23'.82W
(40) 48°12'.72N	123°25'.34W

(c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(33) 48°12'.94N	123°32'.89W
(41) 48°09'.42N	123°24'.24W

Northern lanes

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

(42) 48°21'.15N	123°24'.83W
(43) 48°16'.16N	123°28'.50W
(44) 48°15'.77N	123°27'.18W
(45) 48°20'.93N	123°24'.26W

- (b) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(46) 48°21'.83N	123°25'.56W
(26) 48°16'.45N	123°30'.42W

- (c) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(47) 48°20'.93N	123°23'.22W
(48) 48°15'.13N	123°25'.62W

Eastern lanes

- (a) A separation zone is established bounded by a line connecting the following geographical positions:

(49) 48°13'.22N	123°15'.91W
(50) 48°14'.03N	123°25'.98W
(51) 48°13'.54N	123°25'.86W
(52) 48°12'.89N	123°16'.69W

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

(54) 48°14'.27N	123°13'.41W
(55) 48°14'.05N	123°16'.08W
(48) 48°15'.13N	123°25'.62W

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

(40) 48°12'.72N	123°25'.34W
(53) 48°12'.34N	123°18'.01W

Precautionary area

A precautionary area "PA", is bounded by a line connecting the following geographical positions:

(33) 48°12'.94N	123°32'.89W
(21) 48°13'.89N	123°31'.98W
(22) 48°14'.49N	123°31'.98W
(26) 48°16'.45N	123°30'.42W
(43) 48°16'.16N	123°28'.50W
(44) 48°15'.77N	123°27'.18W
(48) 48°15'.13N	123°25'.62W
(50) 48°14'.03N	123°25'.98W
(51) 48°13'.54N	123°25'.86W
(40) 48°12'.72N	123°25'.34W
(37) 48°12'.84N	123°27'.46W
(36) 48°12'.90N	123°28'.68W

thence back to point of origin at (33).

ANNEX 6

IN PUGET SOUND AND ITS APPROACHES

(Reference charts: United States 18421, 2000 edition; 18429, 1999 edition; 18430, 1996 edition; 18440, 2000 edition. *Note:* These charts are based on North American 1983 Datum.)

Description of the traffic separation scheme

The traffic separation scheme "In Puget Sound and its approaches" consists of a series of traffic separation schemes and precautionary areas broken into three geographic designations as follows:

- Part I: Rosario Strait
- Part II: Approaches to Puget Sound
- Part III: Puget Sound

*Part I***Rosario Strait**

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

(1) 48°48'.98N	122°55'.20W
(2) 48°46'.76N	122°50'.43W
(3) 48°45'.56N	122°48'.36W
(4) 48°45'.97N	122°48'.12W
(5) 48°46'.39N	122°50'.76W
(6) 48°48'.73N	122°55'.68W

- (b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(7) 48°49'.49N	122°54'.24W
(8) 48°47'.14N	122°50'.10W
(9) 48°46'.35N	122°47'.50W

- (c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(10) 48°44'.95N	122°48'.28W
(11) 48°46'.76N	122°53'.10W
(12) 48°47'.93N	122°57'.12W

- (d) Connecting with precautionary "CA", the waters contained within a circle of radius 1.24 miles centered at geographical position 48°45'.30N, 122°46'.50W.

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

(13) 48°44'.27N	122°45'.53W
(14) 48°41'.72N	122°43'.50W
(15) 48°41'.60N	122°43'.82W
(16) 48°44'.17N	122°45'.87W

(f) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(17) 48°44'.62N	122°44'.96W
(18) 48°41'.80N	122°42'.70W

(g) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(19) 48°44'.08N	122°46'.65W
(20) 48°41'.25N	122°44'.37W

(h) Connecting with precautionary "C", the waters contained within a circle of radius 1.24 miles centered at geographical position 48°40'.55N, 122°42'.80W.

(i) A two-way route is established between the following geographical positions:

(21) 48°39'.33N	122°42'.73W
(22) 48°36'.08N	122°45'.00W
(23) 48°26'.82N	122°43'.53W
(24) 48°27'.62N	122°45'.53W
(25) 48°29'.48N	122°44'.77W
(26) 48°36'.13N	122°45'.80W
(27) 48°38'.38N	122°44'.20W
(28) 48°39'.63N	122°44'.03W

(j) Connecting with precautionary area "RB", bounded to the north by the arc of a circle of radius 1.24 miles centred on geographical position 48°26'.38N, 122°45'.27W and connecting the following geographical positions:

(42) 48°25'.97N	122°47'.03W
(83) 48°25'.55N	122°43'.93W

and bounded to the south by a line connecting the following geographical positions:

(42) 48°25'.97N	122°47'.03W
(43) 48°24'.62N	122°48'.68W
(38) 48°23'.75N	122°47'.47W
(37) 48°25'.20N	122°45'.73W
(86) 48°25'.17N	122°45'.62W
(87) 48°24'.15N	122°45'.27W
(84) 48°24'.08N	122°43'.38W
(83) 48°25'.55N	122°43'.93W

Part II

Approaches to Puget Sound

The traffic separation scheme in the approaches to Puget Sound consists of a north-east/south-west approach, a north-west/south-east approach, a north/south approach and an east/west approach connecting with precautionary areas as follows:

North-east/south-west approach

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

(29) 48°24'.13N	122°47'.97W
(30) 48°20'.32N	122°57'.02W
(31) 48°20'.53N	122°57'.22W
(32) 48°24'.32N	122°48'.22W

connecting with precautionary area "RA", the waters contained within a circle of radius 1.24 miles centered at 48°19'.77N, 122°58'.57W, and thence to:

(33) 48°16'.25N	123°06'.58W
(34) 48°16'.57N	123°06'.58W
(35) 48°19'.20N	123°00'.35W
(36) 48°19'.00N	123°00'.17W

(b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(38) 48°23'.75N	122°47'.47W
(39) 48°19'.80N	122°56'.83W

connecting with precautionary area "RA", and thence to:

(40) 48°15'.70N	123°06'.58W
(41) 48°18'.67N	122°59'.57W

(c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(43) 48°24'.62N	122°48'.68W
(44) 48°20'.85N	122°57'.80W

connecting with precautionary area "RA", and thence to:

(45) 48°19'.70N	123°00'.53W
(46) 48°17'.15N	123°06'.57W

(d) Connecting with precautionary area "ND", which is bounded by a line connecting the following positions:

(47) 48°11'.00N	123°06'.58W
(46) 48°17'.15N	123°06'.57W
(48) 48°14'.27N	123°13'.41W
(49) 48°12'.34N	123°18'.01W
(50) 48°12'.72N	123°25'.34W
(51) 48°11'.24N	123°23'.82W
(52) 48°10'.82N	123°25'.44W
(53) 48°09'.42N	123°24'.24W
(54) 48°08'.39N	123°24'.24W

thence along the shoreline to the point of beginning (47).

North-west/south-east approach

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

(55) 48°27'.79N	123°07'.80W
(56) 48°25'.43N	123°03'.88W
(57) 48°22'.88N	123°00'.82W
(58) 48°20'.93N	122°59'.30W
(59) 48°20'.82N	122°59'.62W
(60) 48°22'.72N	123°01'.12W
(61) 48°25'.32N	123°04'.30W
(62) 48°27'.58N	123°08'.10W

connecting with precautionary area "RA", and thence to:

(63) 48°18'.83N	122°57'.48W
(64) 48°13'.15N	122°51'.33W
(65) 48°13'.00N	122°51'.62W
(66) 48°18'.70N	122°57'.77W

(f) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(67) 48°28'.15N	123°07'.31W
(68) 48°25'.60N	123°03'.13W
(69) 48°23'.20N	123°00'.20W
(70) 48°21'.00N	122°58'.50W

connecting with precautionary area "RA", and thence to:

(71) 48°19'.20N	122°57'.03W
(72) 48°13'.35N	122°50'.63W

(g) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(73) 48°27'.43N	123°08'.94W
(74) 48°25'.17N	123°04'.98W
(75) 48°22'.48N	123°01'.73W
(76) 48°20'.47N	123°00'.20W

connecting with precautionary area "RA", and thence to:

(77) 48°18'.52N	122°58'.50W
(78) 48°12'.63N	122°52'.15W

(h) Connecting with precautionary area "SA", the waters contained within a circle of radius 2 miles centered at geographical position 48°11'.45N, 122°49'.78W.

North/south approach (between precautionary areas "RB" and "SA")

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

(79) 48°24'.15N	122°44'.08W
(80) 48°13'.33N	122°48'.78W
(81) 48°13'.38N	122°49'.15W
(82) 48°24'.17N	122°44'.48W

(j) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(84) 48°24'.08N	122°43'.38W
(85) 48°13'.10N	122°48'.12W

(k) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(87) 48°24'.15N	122°45'.27W
(88) 48°13'.43N	122°49'.90W

East/west approach (between precautionary areas "ND" and "SA")

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

(89) 48°11'.50N	122°52'.73W
(90) 48°11'.73N	122°52'.70W
(91) 48°12'.48N	123°06'.58W
(92) 48°12'.23N	123°06'.58W

(m) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(93) 48°12'.22N	122°52'.52W
(94) 48°12'.98N	123°06'.58W

(n) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(95) 48°11'.73N	123°06'.58W
(96) 48°10'.98N	122°52'.65W

Part III

Puget Sound

The traffic separation scheme in Puget Sound consists of a series of traffic lanes with separation zones connecting with precautionary areas.

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

(97) 48°11'.08N	122°46'.88W
(98) 48°06'.85N	122°39'.52W
(99) 48°02'.48N	122°38'.17W
(100) 48°02'.43N	122°38'.52W
(101) 48°06'.72N	122°39'.83W
(102) 48°10'.82N	122°46'.98W

connecting with precautionary area "SC", the waters contained within a circle of radius 0.62 miles centered at 48°01'.85N, 122°38'.15W, and thence to:

(103) 48°01'.40N	122°37'.57W
(104) 47°57'.95N	122°34'.67W
(105) 47°55'.85N	122°30'.22W
(106) 47°55'.67N	122°30'.40W
(107) 47°57'.78N	122°34'.92W
(108) 48°01'.28N	122°37'.87W

connecting with precautionary area "SE", the waters contained within a circle of radius 0.62 miles centered at 47°55'.40N, 122°29'.55W, and thence to:

(109) 47°54'.85N	122°29'.18W
(110) 47°46'.52N	122°26'.30W
(111) 47°46'.47N	122°26'.62W
(112) 47°54'.80N	122°29'.53W

connecting with precautionary area "SF", the waters contained within a circle of radius 0.62 miles centered at 47°45'.90N, 122°26'.25W, and thence to:

(113) 47°45'.20N	122°26'.25W
(114) 47°40'.27N	122°27'.55W
(115) 47°40'.30N	122°27'.88W
(116) 47°45'.33N	122°26'.60W

connecting with precautionary area "SG", the waters contained within a circle of radius 0.62 miles centered at 47°39'.68N, 122°27'.87W, and thence to:

(117) 47°39'.12N	122°27'.62W
(118) 47°35'.18N	122°27'.08W
(119) 47°35'.17N	122°27'.35W
(120) 47°39'.08N	122°27'.97W

connecting with precautionary area "T", the waters contained within a circle of radius 0.62 miles centered at 47°34'.55N, 122°27'.07W, and thence to:

(121) 47°34'.02N	122°26'.70W
(122) 47°26'.92N	122°24'.10W
(123) 47°23'.07N	122°20'.98W
(124) 47°19'.78N	122°26'.58W
(125) 47°19'.98N	122°26'.83W
(126) 47°23'.15N	122°21'.45W
(127) 47°26'.85N	122°24'.45W
(128) 47°33'.95N	122°27'.03W

connecting with precautionary area "TC", the waters contained within a circle of radius 0.62 miles centered at 47°19'.48N, 122°27'.38W.

(b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(129) 48°11'.72N	122°46'.83W
(130) 48°07'.13N	122°38'.83W
(131) 48°02'.10N	122°37'.32W
(132) 47°58'.23N	122°34'.07W
(133) 47°55'.83N	122°28'.80W
(134) 47°45'.92N	122°25'.33W
(135) 47°39'.68N	122°26'.95W
(136) 47°34'.65N	122°26'.18W
(137) 47°27'.13N	122°23'.40W
(138) 47°23'.33N	122°20'.37W
(139) 47°22'.67N	122°20'.53W
(140) 47°19'.07N	122°26'.75W

(c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(141) 48°10'.15N	122°47'.58W
(142) 48°09'.35N	122°45'.55W
(143) 48°06'.45N	122°40'.52W
(144) 48°01'.65N	122°39'.03W
(145) 47°57'.47N	122°35'.45W
(146) 47°55'.07N	122°30'.35W
(147) 47°45'.90N	122°27'.18W
(148) 47°39'.70N	122°28'.78W
(149) 47°34'.47N	122°27'.98W
(150) 47°26'.63N	122°25'.12W
(151) 47°23'.25N	122°22'.42W
(152) 47°20'.00N	122°27'.90W

ANNEX 7

IN HARO STRAIT, BOUNDARY PASS, AND THE STRAIT OF GEORGIA

(Reference charts: United States 18421, 2000 edition; 18423, 2001 edition; 18431, 1996 edition; 18432, 1992 edition; 18433, 2000 edition; Canadian Hydrographic Service 3441, 1996 edition. Note: The charts are based on North America 1983 Datum.)

Description of the traffic separation scheme

The traffic separation scheme "In Haro Strait, Boundary Pass, and In the Strait of Georgia" consists of a series of traffic separation schemes, two-way traffic lanes, and precautionary areas broken into two geographic designations as follows:

Part I: Haro Strait and Boundary Pass

Part II: Strait of Georgia

*Part I***Haro Strait and Boundary Pass**

(a) A precautionary area "V", is established bounded by a line connecting the following geographical points:

(1) 48°21'.83N	123°25'.56W
(2) 48°21'.13N	123°24'.84W
(3) 48°20'.95N	123°24'.24W
(4) 48°20'.93N	123°23'.22W
(5) 48°21'.67N	123°21'.12W
(6) 48°22'.12N	123°21'.12W
(7) 48°22'.37N	123°21'.12W
(8) 48°22'.85N	123°21'.24W
(9) 48°23'.71N	123°23'.88W

thence back to point of origin (1).

(b) Connecting with precautionary area "V", a separation zone is established bounded by a line connecting the following geographical positions:

(7) 48°22'.37N	123°21'.12W
(10) 48°22'.39N	123°18'.36W
(11) 48°23'.90N	123°12'.78W
(12) 48°23'.63N	123°12'.78W
(13) 48°22'.15N	123°18'.30W
(6) 48°22'.12N	123°21'.12W

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

(5) 48°21'.67N	123°21'.12W
(14) 48°21'.73N	123°18'.36W
(15) 48°23'.84N	123°10'.08W

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

(8) 48°22'.85N	123°21'.24W
(16) 48°22'.87N	123°18'.42W
(17) 48°24'.28N	123°13'.02W
(18) 48°24'.78N	123°12'.42W

(e) A separation zone is established bounded by a line connecting the following geographical positions:

(19) 48°24'.72N	123°11'.40W
(20) 48°28'.81N	123°11'.46W
(21) 48°28'.37N	123°10'.68W
(22) 48°27'.17N	123°10'.26W
(23) 48°24'.95N	123°10'.68W

(f) A traffic lane for north-bound traffic is established between the separation zone and a line connecting the following geographical positions:

(15) 48°23'.84N	123°10'.08W
(24) 48°27'.43N	123°08'.94W

(g) A traffic lane for south-bound traffic is established between the separation zone and a line connecting the following geographical positions:

(25) 48°28'.79N	123°12'.77W
(18) 48°24'.78N	123°12'.42W

(h) A precautionary area "HS", is established bounded by a line connecting the following geographical points:

(25) 48°28'.79N	123°12'.77W
(26) 48°31'.73N	123°13'.02W
(27) 48°31'.03N	123°11'.22W
(28) 48°29'.45N	123°09'.42W
(29) 48°28'.15N	123°07'.31W
(30) 48°27'.79N	123°07'.80W
(31) 48°27'.58N	123°08'.10W
(24) 48°27'.43N	123°08'.94W
(21) 48°28'.37N	123°10'.68W
(20) 48°28'.81N	123°11'.46W

thence back to point of origin (25).

(g) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(55) 49°00'.37N

123°13'.32W

(62) 49°04'.52N

123°20'.04W

(h) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(61) 49°02'.51N

123°23'.76W

(56) 48°58'.18N

123°16'.74W

(i) A two-way route is established between the following geographical positions:

(27) 48°31'.03N	123°11'.22W
(32) 48°35'.18N	123°12'.78W
(33) 48°38'.37N	123°12'.36W
(34) 48°39'.20N	123°13'.09W
(35) 48°39'.41N	123°16'.06W
(26) 48°31'.73N	123°13'.02W

(j) A precautionary area "TP", is established bounded to the north by the arc of a circle of radius 2.1 miles centered at geographical position 48°41.3N, 123°14.2W (Turn Point Light) and connecting the following points:

(36) 48°43'.04N	123°16'.06W
(37) 48°43'.15N	123°12'.75W
(42) 48°42'.23N	123°11'.35W
(43) 48°40'.93N	123°11'.01W

and bounded to the south by the arc of a circle of radius 2.1 miles centered at geographical position 48°41.3N, 123°14.2W (Turn Point Light) and connecting the following points:

(44) 48°39'.76N	123°11'.84W
(34) 48°39'.20N	123°13'.09W
(35) 48°39'.41N	123°16'.06W

thence a direct line connecting the following points:

(35) 48°39'.41N	123°16'.06W
(36) 48°43'.04N	123°16'.06W

(k) A two-way route is established between the following geographical positions:

(37) 48°43'.15N	123°12'.75W
(38) 48°46'.43N	123°03'.12W
(39) 48°48'.19N	123°00'.84W
(40) 48°47'.78N	122°59'.12W
(41) 48°45'.51N	123°01'.82W
(42) 48°42'.23N	123°11'.35W

Part II

Strait of Georgia

(a) A precautionary area "GS", is established bounded by a line connecting the following geographical points:

(45) 48°52'.30N	123°07'.44W
(46) 48°54'.81N	123°03'.66W
(47) 48°49'.49N	122°54'.24W
(48) 48°47'.93N	122°57'.12W
(40) 48°47'.78N	122°59'.12W
(39) 48°48'.19N	123°00'.84W

thence to the point of origin (45).

(b) A separation zone is established bounded by a line connecting the following geographical positions:

(49) 48°53'.89N	123°05'.04W
(50) 48°56'.82N	123°10'.08W
(51) 48°56'.30N	123°10'.80W
(52) 48°53'.39N	123°05'.70W

(c) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(46) 48°54'.81N	123°03'.66W
(54) 48°57'.68N	123°08'.76W

(d) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(53) 48°55'.34N	123°12'.30W
(45) 48°52'.30N	123°07'.44W

(e) A precautionary area "PR", is established bounded by a line connecting the following geographical points:

(53) 48°55'.34N	123°12'.30W
(54) 48°57'.68N	123°08'.76W
(55) 49°00'.37N	123°13'.32W
(56) 48°58'.18N	123°16'.74W

(f) A separation zone is established bounded by a line connecting the following geographical positions:

(57) 48°59'.53N	123°14'.66W
(58) 49°03'.80N	123°21'.24W
(59) 49°03'.14N	123°22'.26W
(60) 48°58'.90N	123°15'.63W

ANNEX 8

Description of the amended traffic separation scheme in the Gulf of Finland

Amendments to the traffic separation schemes previously adopted by IMO

(Reference map (INT 1214). Geodetic datum of the year 1942 (Pulkovo). For obtaining position in WGS datum such position should be moved 0'.14 (8".3) westward).

Traffic separation scheme near Gogland Island

The traffic separation scheme consists of two parts:

Part I consists of two traffic lanes separated by a zone with a centre line connecting the following geographical positions:

- (1) 59°59'.00N 026°57'.40E
- (2) 59°58'.52N 027°03'.10E
- (3) 59°59'.47N 027°06'.30E.

The traffic separation zone is 0.5 mile wide.

The traffic lanes on the both sides of the traffic separation zone are 1 mile wide.

The direction of navigation will be 99°-279° and 59°.3-239°.3.

Part II consists of two traffic lanes separated by a line connecting the following geographical positions :

- (1) 59°59'.47N 027°06'.30E
- (2) 60°07'.55N 027°32'.80E.

The traffic lanes on the both sides of the traffic separation line are 1.25 miles wide.

The direction of navigation will be 59°.3-239°.3.

Traffic separation scheme near Sommers Island

The traffic separation scheme consists of four parts:

Part I consists of a roundabout around the separation zone 0.5 mile in diameter centred on the geographical position 60°11'.50N 027°46'.20E. The roundabout lane is 1 mile wide.

Part II consists of two traffic lanes separated by a zone with a centre line connecting the following geographical positions:

- (1) 60°07'.55N 027°32'.80E
- (2) 60°10'.77N 027°43'.62E.

The traffic separation zone is 0.5 mile wide.

The traffic lanes on both sides of the traffic separation zone are 1 mile wide.

The direction of navigation will be 59°.3-239°.3.

Part III consists of two traffic lanes separated by a line connecting the following geographical positions:

- (1) 60°11'.15N 027°49'.05E
- (2) 60°07'.70N 028°16'.10E.

The traffic lanes on both sides of the traffic separation line are 1 mile wide.
 The direction of navigation will be 104°.3-284°.3.

Part IV consists of two traffic lanes separated by a line connecting the following geographical positions:

- (1) 60°12'.70N 027°47'.90E
- (2) 60°24'.54N 028°05'.05E.

The traffic lanes on both sides of the traffic separation line are 0.5 mile wide.
 The direction of navigation will be 35°.7-215°.7.

Establishing of deep water route inside the borders of the traffic separation scheme from the Gogland Island to the Rodsher Island

The route lane is 1000 m wide with established direction of traffic flow and is intended for the passage of ships with a draught up to 15 m.

1	Deep water route centre line connecting positions (Pulkovo-42)		Direction, degrees	Distance, miles	Lane width, cables
1	60°01'.55N 027°11'.20E	59°59'.12N 027°03'.05E	239.3	4.8	5.4
2	59°59'.12N 027°03'.05E	59°59'.90N 026°53'.57E	279	4.8	5.4
3	59°59'.90N 026°53'.57E	60°03'.25N 026°40'.00E	296.5	7.6	5.4
4	60°03'.25N 026°40'.00E	60°02'.06N 026°30'.30E	255.5	5	5.4