## NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its seventy-third session (26 November to 6 December 2000), adopted, in accordance with the provisions of resolution A.858(20), new and amended existing traffic separation schemes and associated routeing measures, as follows:
. 1 "Landfall and approaches to Talara Bay" (new scheme);
. 2 "Landfall Off Puerto Salaverry" (new scheme);
. 3 "Landfall and approaches to Ferrol Bay (Puerto Chimbotu)" (new scheme);
. 4 "Landfall and approaches to San Nicolas Bay" (new scheme);
. 5 "In the approaches to the River Humber (new scheme); and
. 6 "In Prince William Sound" (amended scheme).
2 The new and amended traffic separation schemes (listed above and detailed at annexes 1 to 7 ) will be implemented at 0000 hours UTC on 1 June 2001.

## ANNEX

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

## LANDFALL AND APPROACHES TO TALARA BAY

(Reference charts: PERU-HIDRONAV-1126,1984 edition, Rev.1998; 1150,1999 edition Note: these charts are based on the World Geodetic System (WGS 84) Datum)

## Description of traffic separation scheme

The traffic separation scheme for the landfall and approaches to Talara Bay consists of the following:
(a) A separation zone bounded by a line connecting the following geographical points:
(1) $04^{\circ} 33^{\prime} .10 \mathrm{~S} ; 081^{\circ} 19^{\prime} .13 \mathrm{~W}$
(2) $04^{\circ} 32^{\prime} .90 \mathrm{~S} ; 081^{\circ} 22^{\prime} .13 \mathrm{~W}$
(3) $04^{\circ} 33^{\prime} .90 \mathrm{~S} ; 081^{\circ} 22^{\prime} .13 \mathrm{~W}$
(4) $04^{\circ} 33^{\prime} .70 \mathrm{~S} ; 081^{\circ} 19{ }^{\prime} .13 \mathrm{~W}$
(b) A traffic zone for westbound traffic, between the separation zone and a line connecting the following geographical points:
(5) $04^{\circ} 32^{\prime} .40 \mathrm{~S} ; 081^{\circ} 19{ }^{\prime} .13 \mathrm{~W}$
(6) $04^{\circ} 31^{\prime} .10 \mathrm{~S} ; 081^{\circ} 22^{\prime} .13 \mathrm{~W}$
(c) A traffic zone for eastbound traffic, between the separation zone and a line connecting the following geographical points:
(7) $04^{\circ} 35^{\prime} .70 \mathrm{~S}: 081^{\circ} 22^{\prime} .13 \mathrm{~W}$
(8) $04^{\circ} 344^{\prime} .60 \mathrm{~S} ; 081^{\circ} 19{ }^{\circ} .13 \mathrm{~W}$

## LANDFALL OFF PUERTO SALAVERRY

(Reference charts: PERU-HIDRONAV-1270, 1988 edition, Rev.1998; 2111, 1987 edition, Rev. 1994 Note: these charts are based on the World Geodetic System (WGS 84) Datum.)

## Description of traffic separation scheme

The traffic separation scheme for the landfall off Puerto Salaverry consists of the following:
(a) A separation zone bounded by a line connecting the following geographical points:
(1) $08^{\circ} 12^{\prime} .65 \mathrm{~S} ; 079^{\circ} 02^{\prime} .23 \mathrm{~W}$
(2) $08^{\circ} 12^{\prime} .65 \mathrm{~S} ; 079^{\circ} 04^{\prime} .63 \mathrm{~W}$
(3) $08^{\circ} 13^{\prime} .30 \mathrm{~S} ; 079^{\circ} 04^{\prime} .63 \mathrm{~W}$
(4) $08^{\circ} 13^{\prime} .30 \mathrm{~S} ; 079^{\circ} 02^{\prime} .23 \mathrm{~W}$
(b) A traffic lane for westbound traffic, between the separation zone and a line connecting the following geographical points:
(5) $08^{\circ} 11^{\prime} .96 \mathrm{~S} ; 079^{\circ} 02^{\prime} .23 \mathrm{~W}$
(6) $08^{\circ} 11^{\prime} .10 \mathrm{~S} ; 079^{\circ} 04^{\prime} .63 \mathrm{~W}$
(c) A traffic lane for eastbound traffic, between the separation zone and a line connecting the following geographical points:
(7) $08^{\circ} 14^{\prime} .80 \mathrm{~S} ; 079^{\circ} 04^{\prime} .63 \mathrm{~W}$
(8) $08^{\circ} 14^{\prime} .00 \mathrm{~S} ; 079^{\circ} 02^{\prime} .23 \mathrm{~W}$

## LANDFALL AND APPROACHES TO FERROL BAY (PUERTO CHIMBOTE)

(Reference charts: PERU-HIDRONAV-1310, 1993 edition, Rev.1997; 2123, 1980 edition, Rev. 1998 Note: these charts are based on the World Geodetic System (WGS 84) Datum.)

## Description of traffic separation scheme

The traffic separation scheme for the landfall and approaches to Ferrol Bay (Puerto Chimbote) consists of the following:
(a) A separation zone bounded by a line connecting the following geographical points:
(1) $09^{\circ} 07^{\prime} .20 \mathrm{~S} ; 078^{\circ} 37^{\prime} .83 \mathrm{~W}$
(2) $09^{\circ} 07^{\prime} .20 \mathrm{~S} ; 078^{\circ} 40^{\prime} .33 \mathrm{~W}$
(3) $09^{\circ} 07^{\prime} .80 \mathrm{~S} ; 078^{\circ} 40^{\prime} .33 \mathrm{~W}$
(4) $09^{\circ} 07^{\prime} .80 \mathrm{~S} ; 078^{\circ} 37^{\prime} .83 \mathrm{~W}$
(b) A traffic lane for westbound traffic, between the separation zone and a line connecting the following geographical points:
(5) $09^{\circ} 06^{\prime} .70 \mathrm{~S} ; 078^{\circ} 37^{\prime} .83 \mathrm{~W}$
(6) $09^{\circ} 05^{\prime} .80 \mathrm{~S} ; 078^{\circ} 40^{\prime} .33 \mathrm{~W}$
(c) A traffic lane for eastbound traffic, between the separation zone and a line connecting the following geographical points:
(7) $09^{\circ} 09^{\prime} .40 \mathrm{~S} ; 078^{\circ} 40^{\prime} .33 \mathrm{~W}$
(8) $09^{\circ} 08^{\prime} .40 \mathrm{~S} ; 078^{\circ} 37^{\prime} .83 \mathrm{~W}$

## LANDFALL AND APPROACHES TO SAN NICOLAS BAY

(Reference charts: PERU-HIDRONAV-312, 1999 edition; 3122, 1999 edition
Note: these charts are based on the World Geodetic System (WGS 84) Datum.)

## Description of traffic separation scheme

The traffic separation scheme for the landfall and approaches to San Nicolas Bay consists of the following:
(a) A separation zone bounded by a line connecting the following geographical points:
(1) $15^{\circ} 13^{\prime} .10 \mathrm{~S} ; 075^{\circ} 16{ }^{\prime} .13 \mathrm{~W}$
(2) $15^{\circ} 13^{\prime} .10 \mathrm{~S} ; 075^{\circ} 18^{\prime} .77 \mathrm{~W}$
(3) $15^{\circ} 13^{\prime} .85 \mathrm{~S} ; 075^{\circ} 18.77 \mathrm{~W}$
(4) $15^{\circ} 13^{\prime} .85 \mathrm{~S} ; 075^{\circ} 16{ }^{\prime} .13 \mathrm{~W}$
(b) A traffic lane for westbound traffic, between the separation zone and a line connecting the following geographical points:
(5) $15^{\circ} 122^{\prime} .54 \mathrm{~S} ; 075^{\circ} 16^{\prime} .13 \mathrm{~W}$
(6) $15^{\circ} 11^{\prime} .70 \mathrm{~S} ; 075^{\circ} 18^{\prime} .77 \mathrm{~W}$
(c) A traffic zone for eastbound traffic, between the separation zone and a line between the following geographical points:
(7) $15^{\circ} 15^{\prime} .40 \mathrm{~S} ; 075^{\circ} 18$ '. 77 W
(8) $15^{\circ} 14^{\prime} .45 \mathrm{~S} ; 075^{\circ} 16^{\prime} .13 \mathrm{~W}$

## RIVER HUMBER ENTRANCE

(Reference charts: British Admiralty 1188, 1999 edition; 109, 1998 edition; 107, 1996 edition; 1190, 1997 edition.
Note: These charts are based on Ordnance Survey of Great Britain (1936) Datum.)

## Description of the traffic separation scheme

## Part I:

## Entrance to River Humber within Port Area

(a) A precautionary area established by a line connecting the following geographical positions:
(1) $53^{\circ} 34 ' .20 \mathrm{~N}, 000^{\circ} 06.42 \mathrm{E}$
(2) $53^{\circ} 33^{\prime} .52 \mathrm{~N}, 000^{\circ} 05^{\prime} .80 \mathrm{E}$
(3) $53^{\circ} 33^{\prime} .12 \mathrm{~N}, 000^{\circ} 06^{\prime} .90 \mathrm{E}$ (Hobo)
(4) $53^{\circ} 33^{\prime} .90 \mathrm{~N}, 000^{\circ} 07^{\prime} .53 \mathrm{E}$ (No.3A Binks)
(1) $53^{\circ} 344^{\prime} .20 \mathrm{~N}, 000^{\circ} 06^{\prime} .42 \mathrm{E}$
(b) A separation line connecting the following geographical positions:
(5) $53^{\circ} 33^{\prime} .52 \mathrm{~N}, 000^{\circ} 07^{\prime} .23 \mathrm{E}$ (Delta)
(6) $53^{\circ} 32^{\prime} .71 \mathrm{~N}, 000^{\circ} 09^{\prime} .75 \mathrm{E}$ (Charlie)
(c) A traffic lane for inbound traffic established between the separation line specified in paragraph (b) above and straight line connecting the following geographical positions:
(4) $53^{\circ} 33^{\prime} .90 \mathrm{~N}, 000^{\circ} 07^{\prime} .53 \mathrm{E}$ (No.3A Binks)
(7) $53^{\circ} 33^{\prime} .14 \mathrm{~N}, \quad 000^{\circ} 10^{\prime} .37 \mathrm{E}$
(d) A traffic lane for outbound traffic established between the separation line specified in paragraph (b) above and straight line connecting the following geographical positions:
(3) $53^{\circ} 33^{\prime} .12 \mathrm{~N}, 000^{\circ} 06^{\prime} .90 \mathrm{E}$ (Hobo)
(8) $53^{\circ} 32^{\prime} .32 \mathrm{~N}, 000^{\circ} 09^{\prime} .21 \mathrm{E}$ (No.2B)
(e) A precautionary area established by a line connecting the following geographical positions:
(7) $53^{\circ} 33^{\prime} .14 \mathrm{~N}, 000^{\circ} 10^{\prime} .37 \mathrm{E}$
(8) $53^{\circ} 32^{\prime} .32 \mathrm{~N}, 000^{\circ} 09^{\prime} .21 \mathrm{E}$ (No.2B)
(9) $53^{\circ} 32^{\prime} .36 \mathrm{~N}, 000^{\circ} 11^{\prime} .22 \mathrm{E}$
(10) $53^{\circ} 33^{\prime} .14 \mathrm{~N}, 000^{\circ} 11^{\prime} .27 \mathrm{E}$
(11) $53^{\circ} 33^{\prime} .05 \mathrm{~N}, 000^{\circ} 10^{\prime} .73 \mathrm{E}$ (No. 3 Chequer)
(7) $53^{\circ} 33^{\prime} .14 \mathrm{~N}, 000^{\circ} 10^{\prime} .37 \mathrm{E}$
(f) A traffic separation line connecting the following geographical positions:
(12) $53^{\circ} 32^{\prime} .65 \mathrm{~N}, 000^{\circ} 11^{\prime} .25 \mathrm{E}$ (Bravo)
(13) $53^{\circ} 32^{\prime} .80 \mathrm{~N}, 000^{\circ} 13^{\prime} .30 \mathrm{E}$ (Alpha)
(g) A traffic lane for inbound traffic established between the separation line specified in paragraph (f) above and straight line connecting the following geographical positions:
(10) $53^{\circ} 33^{\prime} .14 \mathrm{~N}, \quad 000^{\circ} 11^{\prime} .27 \mathrm{E}$
(14) $53^{\circ} 33^{\prime} .50 \mathrm{~N}, 000^{\circ} 13^{\prime} .90 \mathrm{E}$
(h) A traffic lane for outbound traffic established between the separation line specified in paragraph ( f ) above and straight line connecting the following geographical positions:

$$
\begin{array}{lllll}
\text { (9) } 53^{\circ} & 32^{\prime} .36 \mathrm{~N}, & 000^{\circ} & 11^{\prime} .22 \mathrm{E} \\
\text { (15) } 53^{\circ} & 32^{\prime} .39 \mathrm{~N}, & 000^{\circ} & 12^{\prime} .90 \mathrm{E}
\end{array}
$$

## Part II:

## River Humber Approaches

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

| (15) | $53^{\circ}$ | 32.39 N , | $000^{\circ}$ | 12'.90E |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (16) | $53^{\circ}$ | 32.40 N | $000^{\circ}$ | 13'.28E | (No. 2 Haile Sand) |
| (17) | $53^{\circ}$ | 30.57 N, | $000^{\circ}$ | 16. 72 E |  |
| (18) | $53^{\circ}$ | 31.88 N , | $000^{\circ}$ | 18'.40E | (Hotspur) |
| (19) | $53^{\circ}$ | 33.55 N , | $000^{\circ}$ | 18'.40E |  |
| (20) | $53^{\circ}$ | 34.20 N, | $000^{\circ}$ | 17. 70 E | (South Haile) |
| (21) | $53^{\circ}$ | 34.72 N , | $000^{\circ}$ | 16.65E | (South Binks) |
| (22) | $53^{\circ}$ | 33.54 N , | $000^{\circ}$ | 14. 30 E | (Spurn Light Float) |
| (14) | $53^{\circ}$ | 33.50 N , | $000^{\circ}$ | 13'.90E |  |
| (15) | $53^{\circ}$ | 32.39 N , | $000^{\circ}$ | 12'.90E |  |

## Eastern Approaches (Sea Reach)

(j) A separation line connecting the following geographical positions:
(23) $53^{\circ} 32^{\prime} .70 \mathrm{~N} \quad 000^{\circ} 18^{\prime} .40 \mathrm{E}$ (Inner Sea Reach)
(24) $53^{\circ} 32^{\prime} .70 \mathrm{~N} \quad 000^{\circ} 23^{\prime} .06 \mathrm{E}$ (Outer Sea Reach)
(k) A traffic lane for inbound traffic established between the separation line specified in (j) above and a straight line connecting the following geographical positions:
(19) $53^{\circ} 33^{\prime} .55 \mathrm{~N}, \quad 000^{\circ} 18^{\prime} .40 \mathrm{E}$
(25) $53^{\circ} 333^{\prime} .55 \mathrm{~N}, \quad 000^{\circ} 23^{\prime} .06 \mathrm{E}$
(l) A traffic lane for outbound traffic established between the separation line specified in paragraph (j) above and straight line connecting the following geographical positions:
(18) $53^{\circ} 31^{\prime} .88 \mathrm{~N}, 000^{\circ} 18^{\prime} .40 \mathrm{E}$ (Hotspur)
(26) $53^{\circ} 31^{\prime} .88 \mathrm{~N}, 000^{\circ} 23^{\prime} .06 \mathrm{E}$

## Southeast Approaches (Rosse Reach)

(m) A separation line connecting the following geographical positions:
(27) $53^{\circ} 31^{\prime} .22 \mathrm{~N} \quad 000^{\circ} 17{ }^{\prime} .55 \mathrm{E}$ (Inner Rosse Reach)
(28) $53^{\circ} 29.87 \mathrm{~N} \quad 000^{\circ} 20^{\prime} .90 \mathrm{E}$ (Outer Rosse Reach)
(n) A traffic lane for inbound traffic established between the separation line specified in paragraph (m) above and a straight line connecting the following geographical positions:
(18) $53^{\circ} 31^{\prime} .88 \mathrm{~N}, 000^{\circ} 18^{\prime} .40 \mathrm{E}$ (Hotspur)
(29) $53^{\circ} 30^{\prime} .54 \mathrm{~N}, 000^{\circ} 21^{\prime} .68 \mathrm{E}$
(o) A traffic lane for outbound traffic established between the separation line specified in paragraph ( m ) above and straight line connecting the following geographical positions:
$\begin{array}{lllll}\text { (17) } & 53^{\circ} & 30^{\prime} .57 \mathrm{~N}, & 000^{\circ} & 16^{\prime} .72 \mathrm{E} \\ \text { (30) } & 53^{\circ} & 29^{\prime} .17 \mathrm{~N}, & 000^{\circ} & 20^{\prime} .08 \mathrm{E}\end{array}$

## Northeast Approaches (New Sand Hole)

(p) A separation line connecting the following geographical positions:

| (31) | $53^{\circ}$ | $34^{\prime} .46 \mathrm{~N}$ | $000^{\circ} 17$ | 17 E |
| :--- | :--- | :--- | :--- | :--- |
| (32) | $53^{\circ}$ | $36^{\prime} .97 \mathrm{~N}$ | $000^{\circ}$ | $20^{\prime} .75 \mathrm{E}$ |

(q) A traffic lane for inbound traffic established between the separation line specified in paragraph (p) above, and a straight line connecting the following geographical positions:
(21) $53^{\circ} 344^{\prime} .72 \mathrm{~N} \quad 000^{\circ} 16$ '.65E (South Binks)
(33) $53^{\circ} 37{ }^{\prime} .25 \mathrm{~N} \quad 000^{\circ} 20^{\prime} .20 \mathrm{E}$ (Outer Binks)
(r) A traffic lane for outbound traffic established between the separation line specified in paragraph (p) above, and a straight line connecting the following geographical positions:
(20) $53^{\circ} 34^{\prime} .20 \mathrm{~N} \quad 000^{\circ} 17{ }^{\prime} .70 \mathrm{E}$ (South Haile)
(34) $53^{\circ} 36^{\prime} .70 \mathrm{~N} \quad 000^{\circ} 21^{\prime} .30 \mathrm{E}$ (Middle New Sand)

## AMENDMENTS TO THE TRAFFIC SEPARATION SCHEME IN PRINCE WILLIAM SOUND

(Reference Chart: United States 16700, 26th Edition - 19 September 1998
Note: This chart is based on North American 1983 Geodetic Datum.)

## Description of the Traffic Separation Scheme

The traffic separation scheme "In Prince William Sound" consists of two parts:

## Part I:

## Prince William Sound

(a) A separation zone is bounded by a line connecting the following geographic positions:
(1) $60^{\circ} 20^{\prime} .77 \mathrm{~N}$
$146^{\circ} 52^{\prime} .31 \mathrm{~W}$
(2) $60^{\circ} 48^{\prime} .12 \mathrm{~N}$
$147^{\circ} 01^{\prime} .78 \mathrm{~W}$
(3) $60^{\circ} 48^{\prime} .29 \mathrm{~N}$
$146^{\circ} 59^{\prime} .77 \mathrm{~W}$
(4) $60^{\circ} 20^{\prime} .93 \mathrm{~N}$
$146^{\circ} 50^{\prime} .32 \mathrm{~W}$
(b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographic positions:
(5) $60^{\circ} 20^{\prime} .59 \mathrm{~N}$
$146^{\circ} 48^{\prime} .18 \mathrm{~W}$
(6) $60^{\circ} 49^{\prime} .39 \mathrm{~N}$
$146^{\circ} 58^{\prime} .19 \mathrm{~W}$
(c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographic positions:
(7) $60^{\circ} 49^{\prime} .10 \mathrm{~N}$
$147^{\circ} 04^{\prime} .19 \mathrm{~W}$
(8) $60^{\circ} 20^{\prime} .60 \mathrm{~N}$
$146^{\circ} 54^{\prime} .31 \mathrm{~W}$

## Part II:

Valdez Arm
(a) A separation zone is bounded by a line connecting the following geographic positions:
(9) $60^{\circ} 51^{\prime} .08 \mathrm{~N}$
$147^{\circ} 00^{\prime} .33 \mathrm{~W}$
(10) $60^{\circ} 58^{\prime} .60 \mathrm{~N}$
$146^{\circ} 48^{\prime}$.10W
(11) $60^{\circ} 58^{\prime} .30 \mathrm{~N}$
$146^{\circ} 47^{\prime} .10 \mathrm{~W}$
(12) $60^{\circ} 50^{\prime} .45 \mathrm{~N}$
$146^{\circ} 58^{\prime} .75 \mathrm{~W}$
(b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographic positions:
(6) $60^{\circ} 49 \cdot .39 \mathrm{~N}$
$146^{\circ} 58^{\prime} .19 \mathrm{~W}$
(13) $60^{\circ} 58^{\prime} .01 \mathrm{~N}$
$146^{\circ} 46$. 52 W
(c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographic positions:
(14) $60^{\circ} 58^{\prime} .93 \mathrm{~N}$
$146^{\circ} 48^{\prime} .86 \mathrm{~W}$
(15) $60^{\circ} 50^{\prime} .61 \mathrm{~N}$
$147^{\circ} 03$ '.60W

## Precautionary areas

Cape Hinchinbrook: A precautionary area is established, bounded by a line connecting the following geographical positions:

| (5) $60^{\circ} 20^{\prime} .59 \mathrm{~N}$ | $146^{\circ} 48^{\prime} .18 \mathrm{~W}$ |
| :--- | :--- |
| (16) $60^{\circ} 12^{\prime} .67 \mathrm{~N}$ | $146^{\circ} 40^{\prime} .43 \mathrm{~W}$ |
| (17) $60^{\circ} 11^{\prime} .02 \mathrm{~N}$ | $146^{\circ} 28^{\prime} .65 \mathrm{~W}$ |
| (18) $60^{\circ} 05^{\prime} .47 \mathrm{~N}$ | $146^{\circ} 00^{\prime} .01 \mathrm{~W}$ |
| (19) $60^{\circ} 00^{\prime} .81 \mathrm{~N}$ | $146^{\circ} 03^{\prime} .53 \mathrm{~W}$ |
| (20) $60^{\circ} 05^{\prime} .44 \mathrm{~N}$ | $146^{\circ} 27^{\prime} .58 \mathrm{~W}$ |
| (21) $59^{\circ} 51^{\prime} .80 \mathrm{~N}$ | $146^{\circ} 37^{\prime} .51 \mathrm{~W}$ |
| (22) $59^{\circ} 53^{\prime} .52 \mathrm{~N}$ | $146^{\circ} 46^{\prime} .84 \mathrm{~W}$ |
| (23) $60^{\circ} 07^{\circ} .76 \mathrm{~N}$ | $146^{\circ} 36^{\prime} .24 \mathrm{~W}$ |
| (24) $60^{\circ} 11^{\prime} .51 \mathrm{~N}$ | $146^{\circ} 46^{\prime} .64 \mathrm{~W}$ |
| (8) $60^{\circ} 20^{\prime} .60 \mathrm{~N}$ | $146^{\circ} 54^{\prime} .31 \mathrm{~W}$ |

Bligh Reef: A precautionary area of radius $1^{\prime} .5$ miles is centred upon geographical position:
$60^{\circ} 49^{\prime} .63 \mathrm{~N} \quad 147^{\circ} 01^{\prime} .33 \mathrm{~W}$

## Note:

A pilot boarding area is located near the centre of the Bligh Reef 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.

