RESOLUTION A.160(ES.IV)

RECOMMENDATION ON DATA CONCERNING MANOEUVRING CAPABILITIES AND STOPPING DISTANCES OF SHIPS

The Assembly,

Noting Article 16(i) of the Convention on the Inter-Governmental Maritime Consultative Organization concerning the functions of the Assembly,

Having regard to the variety of the circumstances and to the manoeuvring capabilities of the ship,

Taking into account the provisions of the International Regulations for Preventing Collisions at Sea, 1960,

Having examined the Recommendation on data concerning manoeuvring capabilities and stopping distances of ships adopted by the Maritime Safety Committee at its seventeenth session,

Recommends to governments that they ensure that the master and officers have readily available on the bridge all necessary data concerning the manoeuvring capabilities of the ship and stopping distances under various conditions of draught and speed.

27 November 1968
Agenda item 4

RESOLUTION A.161(ES.IV) Superseded by A.284(VIII)

RECOMMENDATION ON ESTABLISHING TRAFFIC SEPARATION SCHEMES AND AREAS TO BE AVOIDED BY SHIPS OF CERTAIN CLASSES

The Assembly,

Noting Article 16(i) of the Convention on the Inter-Governmental Maritime Consultative Organization concerning the functions of the Assembly,

Recognizing the fact that the practice of following traffic separation schemes recommended by the Organization for international use would contribute considerably to the avoidance of collisions between ships,

Recognizing also that the avoidance of some areas by ships of certain classes would reduce the risk of pollution of the sea and the coastlines and the risk of damage to marine life in cases of accident,

Having examined the Recommendations by the Maritime Safety Committee at its seventeenth session,

Confirming the view taken by the Maritime Safety Committee at its fifteenth session that IMCO is the only international body responsible for establishing and recommending measures on an international level concerning the separation of traffic in congested areas and related questions,

Noting that the Ninth International Hydrographic Conference charged the International Hydrographic Bureau:

(a) to deal with matters relating to presentation on the charts and in sailing directions, details of routeing schemes which have been considered, approved and recommended by IMCO for international use;

(b) to determine from IMCO terms and definitions related to the matter,

Adopts

(a) traffic separation schemes and areas to be avoided by ships of certain classes as described at Annex I to this Resolution;

(b) terms, definitions and general principles concerning traffic separation and routeing, as set out at Annex II to this Resolution,

Invites the governments concerned to advise ships under their flags to follow the recommended schemes and avoid navigating within the areas which are "areas to be avoided by ships of certain classes",

Requests the Maritime Safety Committee to prepare as soon as possible a comprehensive document for publication, giving detailed descriptions of the schemes and also principles on the use of, and navigation in, traffic separation schemes, the terms to be used in this connexion as well as chartlets illustrating the schemes,

Adopts provisionally traffic separation schemes in the approaches to New York Harbour and in Delaware Bay, given at Annex III to this Resolution, and inclusion of these schemes in the IMCO publication on traffic separation, subject to consideration and adoption of these two schemes later, in accordance with established procedure,

Requests also the Maritime Safety Committee to keep the subject under continuous review aiming at preparation of new schemes or amending and updating existing schemes as necessary,

Authorizes the Maritime Safety Committee to adopt for provisional implementation and subject to final approval by the Assembly, any new traffic separation schemes and areas to be avoided or amend existing schemes and areas as necessary and to advise all concerned accordingly,

Requests the Secretary-General to advise the International Hydrographic Bureau on details of the schemes already adopted as well as terms, definitions and principles approved by the Maritime Safety Committee to facilitate the hydrographers' work on inclusion of this material in the appropriate nautical publications for the information of mariners.

ANNEX I

DESCRIPTION OF TRAFFIC SEPARATION SCHEMES AND AREAS TO BE AVOIDED BY SHIPS OF CERTAIN CLASSES*

I. *Traffic separation schemes*

Off the Lizard (Reference chart: 2565)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 49°50'.7 N., 5°00'.7 W
(ii) 49°48'.6 N., 5°19'.1 W

A traffic lane, three miles wide is established on each side of the separation zone.

The main traffic directions are:

080° - 260°

Off Land's End, between Seven Stones and Longships (Reference chart: 2565)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 49°54'.0 N., 5°57'.3 W
(ii) 50°08'.0 N., 5°57'.3 W

A traffic lane, three miles wide is established on each side of the separation zone.

The main traffic directions are:

000° - 180°

South of the Scilly Islands (Reference chart: 1123 or 2649)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 49°43'.4 N., 6°15'.8 W
(ii) 49°43'.4 N., 6°34'.4 W

A traffic lane, three miles wide is established on each side of the separation zone.

The main traffic directions are:

090° - 270°

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* Reference charts in the text are British Admiralty Charts. Their numbers correspond to those given in the latest edition of the Catalogue of Admiralty Charts and other Hydrographic Publications.

West of Scilly Islands (Reference chart: 1123 or 2649)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 49°51'.9 N., 6°41'.4 W
(ii) 50°01'.6 N., 6°37'.0 W

A traffic lane, three miles wide is established on each side of the separation zone.

The main traffic directions are:

016° - 196°

Off Smalls (Reference chart: 1478)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 51°39'.1 N., 5°52'.1 W
(ii) 51°50'.7 N., 5°46'.8 W

A traffic lane, three miles wide is established on each side of the separation zone.

The main traffic directions are:

016° - 196°

Off Skerries (Reference chart: 1977)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 53°22'.8 N., 4°52'.0 W
(ii) 53°31'.3 N., 4°41'.7 W
(iii) 53°32'.1 N., 4°31'.6 W

A traffic lane, two miles wide is established on each side of the separation zone.

The main traffic directions are:

036° - 216°
083° - 263°

Off Chicken Rock, Calf of Man (Reference chart: 45)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 53°55'.5 N., 4°52'.9 W
(ii) 53°57'.9 N., 5°00'.3 W
(iii) 54°02'.8 N., 5°02'.0 W

A traffic lane, three miles wide is established on each side of the separation zone.

The main traffic directions are:

298° - 118°
349° - 169°

In the North Channel (Reference chart: 46)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 55°15'.3 N., 5°55'.4 W
(ii) 55°22'.8 N., 6°04'.6 W
(iii) 55°24'.0 N., 6°15'.0 W

A traffic lane, two miles wide is established on each side of the separation zone.

The main traffic directions are:

326° - 146°
282° - 102°

Off Casquets (Reference chart: 2669)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 49°46'.1 N., 2°35'.1 W
(ii) 49°49'.4 N., 2°27'.2 W
(iii) 49°51'.5 N., 2°18'.3 W

A traffic lane, three miles wide, is established on each side of the separation zone.

The main traffic directions are:

057° - 237°
071° - 251°

Off Tuskar Rock (Reference chart: 1410)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 52°14'.0 N., 6°00'.8 W
(ii) 52°08'.5 N., 6°03'.8 W
(iii) 52°04'.7 N., 6°11'.5 W

A traffic lane, three miles wide, is centred on each side of the separation zone.

The main traffic directions are:

051° - 231°
018° - 198°

The area between the landward boundary of the scheme and the Tuskar Rock is considered as an inshore traffic zone.

Off Fastnet Rock (Reference chart: 2424)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 51°20'.0 N., 9°25'.8 W
(ii) 51°18'.2 N., 9°35'.2 W

A traffic lane, two miles wide, is established on each side of the separation zone.

The main traffic directions are:

073° - 253°

The area between the landward boundary of the scheme and the Fastnet Rock is considered as an inshore traffic zone.

Off Ushant (Reference chart: 2643)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 48°28'.6 N., 5°23'.6 W
(ii) 48°34'.0 N., 5°19'.4 W
(iii) 48°37'.4 N., 5°11'.9 W

A traffic lane, four miles wide is established on each side of the separation zone.

The main traffic directions are:

028° - 208°
055° - 235°

The area between the landward boundary of the scheme and the Ushant Island is considered as an inshore traffic zone.

Off Cape Finisterre (Reference chart: 1752)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 42°59'.5 N., 9°31'.0 W
(ii) 43°05'.5 N., 9°31'.0 W
(iii) 43°10'.9 N., 9°27'.2 W

A traffic lane, four miles wide, is established on each side of the separation zone.

The main traffic directions are:

000° - 180°
028° - 208°

The area between the landward boundary of the scheme and the coastline is considered as an inshore traffic zone.

Off Cape Roca (Reference chart: 1515)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 38°39'.8 N., 9°40'.9 W
(ii) 38°45'.7 N., 9°42'.5 W
(iii) 38°51'.7 N., 9°42'.5 W

A traffic lane, four miles wide, is established on each side of the separation zone.

The main traffic directions are:

348° - 168°
000° - 180°

The area between the landward boundary of the scheme and the coastline is considered as an inshore traffic zone.

Off Cape St. Vincent (Reference chart: 92)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 36°53'.1 N., 8°55'.5 W
(ii) 36°54'.6 N., 9°00'.7 W
(iii) 36°56'.5 N., 9°03'.6 W
(iv) 37°00'.5 N., 9°06'.6 W

A traffic lane, three miles wide, is established on each side of the separation zone.

The main traffic directions are:

290° - 110°
305° - 125°
330° - 150°

The area between the landward boundary of the scheme and the coastline is considered as an inshore traffic zone.

In the Strait of Gibraltar (Reference chart: 142)

A half-mile wide separation zone is centred upon the following geographical positions:

(i) 35°58'.8 N., 5°25'.7 W
(ii) 35°56'.0 N., 5°36'.5 W
(iii) 35°56'.0 N., 5°45'.0 W

The outside limits of the scheme are lines passing through the following points:

(a) Northern limit

(i) 36°01'.0 N., 5°25'.7 W
(ii) 35°58'.2 N., 5°36'.5 W
(iii) 35°58'.2 N., 5°45'.0 W

(b) Southern limit

(i) 35°56'.6 N., 5°25'.7 W
(ii) 35°53'.6 N., 5°36'.5 W
(iii) 35°52'.3 N., 5°45'.0 W

The main traffic directions are:

090° - 270°
072° - 252°

The areas between the outside boundaries and the coastlines are considered as inshore traffic zones.

In the Gulf of Suez (Reference chart: 757)

A separation line dividing northbound and southbound traffic passes through the following geographical positions:

(i) 29°48'.4 N., 32°32'.0 E
(ii) 29°36'.0 N., 32°32'.0 E
(iii) 28°34'.0 N., 33°02'.0 E
(iv) 28°11'.2 N., 33°18'.5 E
(v) 27°30'.0 N., 34°07'.0 E

In the Southern portion of the Red Sea (Reference chart: 2523)

A separation line dividing northbound and southbound traffic passes through the following geographical positions:

(i) 16°00'.0 N., 41°26'.0 E
(ii) 15°01'.3 N., 42°03'.5 E
(iii) Abu Ail Light
(iv) 13°40'.0 N., 42°58'.0 E

In Bab el Mandeb Strait (Reference chart: 1925)

A one-mile wide separation zone is centred upon the following geographical positions:

(i) 12°55'.8 N., 43°13'.0 E
(ii) 12°37'.3 N., 43°20'.4 E
(iii) 12°33'.1 N., 43°27'.8 E

The main traffic directions are:

300° - 120°
339° - 159°

The passage between Perim Island and the mainland is intended for coastal traffic moving in both directions.

In Hormuz Strait (Reference chart: 3956)

A one-mile wide separation zone is centred upon the following geographical positions:

(i) 26°27'.2 N., 56°22'.8 E
(ii) 26°27'.2 N., 56°30'.3 E
(iii) 26°26'.2 N., 56°33'.9 E
(iv) 26°21'.4 N., 56°37'.9 E

A traffic lane, one-and-a-half miles wide, is established on the southern side of the separation zone.

The northern limit of the scheme is the mainland coastline.

The main traffic directions are:

90° - 270°
108° - 288°
143° - 323°

Remark: Inbound ships may alternatively navigate between Quoin Islands and the mainland.

Persian Gulf (Reference chart: 2837)

Separation of the traffic in the area is achieved by establishing the following tracks:

Track for West-bound ships

In-bound ships which have passed Quoin Islands are recommended to set their courses so as to proceed westward, keeping Jaz. Tunb and Jaz. Farur on their port side;

Track for East-bound ships

Out-bound ships are recommended to set their courses so as to proceed eastwards, keeping Jaz. Farur and Jaz. Tunb on their port side and aiming at getting into the appropriate traffic lane of the Hormuz Strait traffic separation scheme.

II. *Areas which should be avoided by ships of certain classes*

(a) *At the Rochebonne Shelf* (Reference chart: 2648)

All tankers carrying oil should avoid the area contained within a circle of seven miles radius, centred at 46°10'.0 N., 2°26'.0 W.

(b) *Off Cape Terpenie* (Sakhalin) (Reference chart: 452)

Ships of more than 1000 tons gross tonnage carrying oil or hazardous cargoes should avoid the area defined below for reasons of wildlife conservation and because it is inadequately surveyed.

The area is limited by the line connecting Cape Davydov and the following points:

(i) 21.8 miles at 100° from Terpenie Lighthouse
(ii) 40.5 miles at 126° from Terpenie L.H.
(iii) 41.6 miles at 146°.7 from Terpenie L.H.
(iv) 20.2 miles at 208°.5 from Terpenie L.H.
(v) 12.0 miles at 307°.5 from Terpenie L.H.

and thence eastward to the coast.

Off Kalbadagrund Lighthouse (Reference chart: 2248)

A one-mile wide separation zone is centred upon the following geographical positions:

(i) 59°52'.2 N., 25°30'.7 E
(ii) 59°53'.0 N., 25°38'.6 E
(iii) 59°53'.9 N., 25°46'.5 E

A traffic lane, one-and-a-half miles wide is established on each side of the separation zone.

The main traffic directions are:

078° - 258° and
076° - 256°

The area between the Kalbadagrund Lighthouse and the traffic separation scheme is considered as an inshore traffic zone.

Off Hogland (Gogland) Island (Reference chart: 2264)

The traffic separation scheme in the area contains two parts.

Part I

A half-mile wide separation zone is centred upon the following geographical positions:

(i) 59°59'.0 N., 26°57'.4 E
(ii) 59°58'.7 N., 27°01'.4 E
(iii) 59°59'.7 N., 27°04'.8 E

A traffic lane, one mile wide is established on each side of the separation zone.

The main traffic directions are:

099° - 279° and
060° - 240°

Part II

A separation line dividing north-eastbound and south-westbound traffic passes through the following geographical positions:

(i) 59°59'.7 N., 27°04'.8 E
(ii) 60°07'.7 N., 27°32'.6 E

The main traffic directions are:

060° - 240°

Off Rodsher Island (Reference chart: 2248 or 2357)

A half-mile wide separation zone is centred upon the following geographical positions:

(i) 59°59'.9 N., 26°36'.5 E
(ii) 60°00'.4 N., 26°40'.3 E
(iii) 60°00'.1 N., 26°44'.3 E

A traffic lane, one-mile wide is established on each side of the separation zone.

The main traffic directions are:

076° - 256° and
099° - 279°

Off Sommers Island (Reference chart: 2264)

The traffic separation scheme off Sommers Island contains four parts.

Part I forms a "roundabout" with a circular traffic separation zone of one mile in diameter centred at the following geographical position:

60°11'.5 N., 27°46'.2 E

The width of the circular traffic lane is one mile.

The "roundabout" is serving the purpose of facilitating manoeuvring at the focal point where routes leading to Leningrad, Vyborg and the Western Baltic meet.

In the centre of the "roundabout" a lighted buoy with a passive radar reflector will be continuously kept in the summer period.

Part II

A half-mile wide separation zone is centred upon the following geographical positions:

(i) 60°07'.7 N., 27°32'.6 E
(ii) 60°10'.4 N., 27°42'.2 E

A traffic lane, one mile wide is established on each side of the traffic separation zone.

The main traffic directions are:

060° - 240°

Part III

A separation line dividing eastbound and westbound traffic passes through the following geographical positions:

(i) 60°11'.1 N., 27°49'.0 E
(ii) 60°07'.7 N., 28°16'.1 E
(iii) 60°01'.9 N., 28°29'.0 E
(Position of Buoy No.1 of the Leningrad Approach Fairway)

The main traffic directions are:

104° - 284° and
132° - 312°

Part IV

A separation line dividing north-eastbound and south-westbound traffic passes through the following geographical positions:

(i) 60°12'.8 N., 27°47'.8 E
(ii) 60°24'.5 N., 28°05'.0 E

The main traffic directions are:

036° - 216°

Off Porkkala Lighthouse (Reference chart: 2248)

A one-mile wide separation zone is centred upon the following geographical positions:

(i) 59°44'.1 N., 24°13'.7 E
(ii) 59°44'.9 N., 24°21'.4 E
(iii) 59°45'.9 N., 24°29'.1 E

A traffic lane one-and-a-half miles wide is established on the northern side of the separation zone.

A traffic lane, two miles wide, is established on the southern side of the separation zone.

The main traffic directions are:

076° - 256° and
078° - 258°

The area between the traffic separation scheme and the Porkkala Lighthouse is considered as an inshore traffic zone.

Off Hankoniemi Peninsula (Reference chart: 2241)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 59°28'.2 N., 22°33'.3 E
(ii) 59°31'.9 N., 22°42'.6 E
(iii) 59°33'.3 N., 22°53'.9 E

A traffic lane, four miles wide, is established on each side of the separation zone.

The main traffic directions are:

052° - 232° and
076° - 256°

The areas between outside boundaries of the scheme and both coasts are considered as inshore traffic zones.

Off Kopu Peninsula (Hiikmaa Island) (Reference chart: 2842B)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 59°02'.9 N., 21°35'.8 E
(ii) 59°07'.7 N., 21°42'.6 E
(iii) 59°11'.6 N., 21°52'.0 E

A traffic lane, four miles wide, is established on each side of the separation zone.

The main traffic directions are:

037° - 217° and
052° - 232°

Off Gotland Island (Reference chart: 2842B)

A one-mile wide separation zone is centred upon the following geographical positions:

(i) 56°46'.0 N., 18°19'.0 E
(ii) 56°49'.5 N., 18°27'.5 E

A traffic lane, three miles wide, is established on each side of the separation zone.

The main traffic directions are:

053° - 233°

The area between the landward boundary of the scheme and the Island is considered as an inshore traffic zone.

Off Öland Island (Reference chart: 2842B or 2251)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 56°02'.0 N., 16°35'.0 E
(ii) Öland Sodra Grund Lighthouse
(iii) 56°06'.7 N., 16°46'.9 E

A traffic lane, three miles wide, is established on each side of the separation zone.

The main traffic directions are:

058° - 238° and
053° - 233°

The area between the landward boundary of the scheme and the Island is considered as an inshore traffic zone.

Off the Oslo Fjord (Reference chart: 2329)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 58°43'.0 N., 10°08'.0 E
(ii) 58°51'.0 N., 10°27'.0 E

A traffic lane, three miles wide, is established on each side of the separation zone.

The main traffic directions are:

051° - 231°

This scheme is only intended for ships approaching the Oslo Fjord from the south-west or proceeding in the opposite direction. It is not intended for ships navigating in other directions.

Off Oksøy (Reference chart: 2289)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 57°50'.0 N., 08°03'.0 E
(ii) 57°58'.0 N., 08°22'.0 E

A traffic lane, three miles wide, is established on each side of the separation zone.

The main traffic directions are:

051° - 231°

Off Lindesnes (Reference chart: 2327)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 57°50'.0 N., 07°22'.0 E
(ii) 57°50'.0 N., 07°00'.0 E

A traffic lane, three miles wide, is established on each side of the separation zone.

The main traffic directions are:

090° - 270°

Off Lista (Reference chart: 2281)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 57°55'.0 N., 06°37'.0 E
(ii) 58°00'.0 N., 06°17'.0 E

A traffic lane, three miles wide, is established on each side of the separation zone.

The main traffic directions are:

115° - 295°

Off Feistein (Reference chart: 2281)

The traffic separation scheme of Feistein contains two parts:

Part I (intended for ships using the Dover Strait)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 58°43'.0 N., 05°11'.0 E
(ii) 58°32'.0 N., 05°05'.0 E

A traffic lane, three miles wide, is established on each side of the separation zone.

The main traffic directions are:

015° - 195°

Part II (intended for ships using the Fair Isle Passage)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) $58^{\circ}48'.0$ N., $05^{\circ}06'.0$ E

(ii) $58^{\circ}50'.0$ N., $04^{\circ}43'.0$ E

A traffic lane, three miles wide, is established on each side of the separation zone.

The main traffic directions are:

100° - 280°

Off San Francisco (Reference chart: US Coast and Geodetic Chart 5072)

1. The San Francisco traffic separation scheme consists of the following parts:

(a) A circle six miles in radius centred on San Francisco Lightship at 37°-45'-00" N, 122°-41'-30" W, which serves as the terminal boundary of all traffic lanes at the San Francisco end.

(b) Three separate approaches to the circle described above, the approaches to be described hereafter as the Northern Lanes, the Southern Lanes and the Main Lanes.

(c) An area within a circle one mile in diameter, centred on the San Francisco Lightship, should be considered as an area to be avoided.

2. Each of the approaches consists of a separation zone, an outbound lane, and an inbound lane, each approximately one-half mile wide at the inner limits and one-and-a-half miles wide at the outer limits. The centreline of each approach will be marked with a buoy at the intersection with the arc of the circle.

Boundaries of the three schemes are listed below.

NORTHERN LANES

Separation Zone

From a point at 37°-48'-38" N, 122°-47'-30" W to a point at 37°-57'-05" N, 123°-03'-28" W and from a point at 37°-47'-47" N, 122°-48'-11" W to a point at 37°-55'-40" N, 123°-04'-35" W.

Traffic Lanes (Exterior Boundaries)

From a point at 37°-49'-22" N, 122°-46'-39" W to a point at 37°-58'-29" N, 123°-02'-20" W to a point at 37°-54'-16" N, 123°-05'-43" W to a point at 37°-46'-51" N, 122°-48'-40" W.

SOUTHERN LANES

Separation Zone

From a point at 37°-39'-04" N, 122°-40'-17" W to a point at 37°-27'-00" N, 122°-36'-55" W, and from a point at 37°-39'-19" N, 122°-39'-04" W to a point at 37°-27'-00" N, 122°-34'-45" W.

Traffic Lanes (Exterior Boundaries)

From a point at 37°-39'-00" N, 122°-41'-33" W to a point at 37°-27'-00" N, 122°-39'-02" W to a point at 37°-27'-00" N, 122°-32'-35" W to a point at 37°-39'-43" N, 122°-37'-55" W.

MAIN LANES

Separation Zone

From a point at 37°-41'-53" N, 122°-47'-57" W to a point at 37°-38'-05" N, 122°-58'-04" W and from a point at 37°-41'-04" N, 122°-47'-12" W to a point at 37°-36'-32" N, 122°-57'-16" W.

Traffic Lanes (Exterior Boundaries)

From a point at 37°-42'-47" N, 122°-48'-31" W to a point at 37°-59'-37" N, 122°-58'-51" W to a point at 37°-34'-58" N, 122°-56'-28" W to a point at 37°-40'-21" N, 122°-46'-17" W.

ANNEX II

TERMS, DEFINITIONS AND GENERAL PRINCIPLES COVERING TRAFFIC SEPARATION AND ROUTEING

Terms and Definitions

1. *Routeing*

A complex of measures concerning routes followed by ships and aiming at reducing the risk of casualties; it includes traffic separation schemes, fairways, tracks and deep-draught routes.

2. *Traffic Separation Scheme*

A scheme which aims at reducing the risk of collision in congested and/or converging areas by separating traffic.

3. *Traffic Lane*

An area within definite limits inside which all ships are advised to proceed in approximately the same direction.

4. *Track*

A recommended direction of general traffic flow without definite boundaries or with only one such boundary.

5. *Fairway*

An area within defined limits inside which two-way traffic normally may be expected.

6. *Separation Zone or Line*

The zone or line separating traffic proceeding in opposite, or nearly opposite, directions.

7. *Roundabout*

A traffic separation scheme in which traffic moves in a counter-clockwise direction around a specified point or zone.

8. *Inshore Traffic Zone*

An area between the landward boundary of a traffic separation scheme and the adjacent coast intended for coastal traffic.

9. *Deep-draught route*

A route which is primarily selected for use by ships which, because of their draught, cannot navigate safely outside such a route.

Methods of Routeing

When establishing recommended routes the following methods may be used:

(a) separation of traffic by separation zones or lines;

(b) separation of traffic by using natural obstacles and geographically defined objects;

(c) separation of traffic by establishing inshore traffic zones intended for keeping coastal traffic away from traffic separation schemes;

(d) separation of traffic by the use of sectors at approaches to focal points;

(e) separation of traffic by introduction of "roundabouts" intended to facilitate navigation at focal points, where recommended routes meet;

(f) routeing of traffic by using recommended routes for deep-draught vessels or fairways for ships proceeding in specific directions or tracks recommended for safe navigation in or near dangerous areas.

The Use of Routeing Systems

1. The recommended routeing systems are intended for use by day and by night in all weathers, in ice-free waters or under light ice conditions where no extraordinary manoeuvres or assistance by icebreaker(s) are required.

2. Routeing systems are recommended for use by all ships unless stated otherwise.

3. Vessels not restricted to navigation in deep-draught routes should, where possible, avoid hampering those vessels which are so restricted when navigating in deep-draught routes.

4. All vessels not using routeing systems should avoid them by as wide a margin as is practicable.

5. Inshore traffic zones should normally be used by coastal traffic.

Navigation in Routeing Systems

1. The International Regulations for Preventing Collisions at Sea apply to navigation in routeing systems.

2. Ships navigating along lanes should keep to starboard of the separation line, separation zone or focal point at a "roundabout".

3. Ships joining and leaving traffic lanes should normally do so at the termination of the lanes. Ships joining or leaving the lanes from the sides should do so at as small an angle as practicable.

4. Vessels navigating within traffic lanes should ensure so far as practicable that their courses conform with those of the lanes.

5. Vessels should so far as practicable avoid crossing traffic lanes.

6. Vessels crossing traffic lanes should so far as practicable do so at right angles.

7. Other than by crossing vessels the separation zone should not be used and the separation line should not be crossed except in cases of emergency to avoid immediate danger.

8. The outside limits of traffic separation schemes and limits of inshore traffic zones should be regarded as the boundaries at which crossing or joining vessels should start to manoeuvre as recommended in paragraphs 3, 4 and 6 above.

9. The arrows printed on charts to indicate tracks are intended to give the general direction of traffic only; ships need not set their courses strictly along the arrows.

Adoption and Recommendation of International Routeing and Areas to be avoided

1. IMCO is recognized as the only international body responsible for establishing and recommending measures on an international level concerning routeing and areas to be avoided by ships or certain classes of ships.

2. (a) A government proposing a routeing system or an area to be avoided, any part of which lies within international waters, should consult with IMCO so that such system or area may be adopted or recommended by IMCO for international use;

(b) A government may establish or adjust a routeing system or area to be avoided by certain classes of international shipping before consulting with IMCO where local conditions require that early action be taken, with a view to later adoption by the Organization;

(c) A government when proposing, establishing or adjusting a routeing system or area to be avoided by certain classes of ships should follow IMCO principles and practice so far as may be possible and practicable in the circumstances.

3. When establishing, reviewing, or adjusting a routeing system, due account should be taken of:

(a) the rights and practices of States in respect of the exploitation of living and mineral resources of the high seas and of the sea-bed and subsoil underlying the high seas;

(b) the effects the routeing system may have upon traffic patterns within territorial waters having special regard to its compatibility with routeing systems which may be established within territorial waters;

(c) the aids to navigation already established in the area, the effect the routeing system may have upon demands for improvements or adjustments in the navigation aids provided in the area concerned.

4. When establishing areas to be avoided by certain ships the necessity for creating such areas should be well established, and the reasons stated. In general, these areas should be established in places where inadequate survey or insufficient provision of aids to navigation may lead to danger of stranding or where local knowledge is considered essential to safe passage. Another reason for the establishment of such areas is the possibility of unacceptable damage to wildlife, which may result from a casualty. These areas shall not be regarded as prohibited areas unless specifically stated otherwise; the classes of ships which should avoid the areas should be considered in each particular case.

5. Established routeing systems and areas to be avoided by certain classes of ships should be adjusted as necessary so as to maintain their effectiveness and compatibility with trade patterns, resource exploitation and other developments.

6. Nothing in this Annex shall be deemed to affect the rights, claims or views of any government in regard to the limits of territorial waters.

ANNEX III

NEW YORK TRAFFIC SEPARATION SCHEME

(UNITED STATES ATLANTIC COAST)

1. The New York Traffic Separation Scheme consists of the following parts:

(a) An arc of a circle seven miles in radius centred on Ambrose Light at 40°-27'-31.7" N, 73°-49'-51.7" W. This arc serves as a terminal boundary of all traffic lanes at the New York end.

(b) Three separate approaches to the circle described above, the approaches to be described hereafter as the Eastern Lanes, the Southeastern Lanes and the Southern Lanes.

2. Each of the approaches consists of a separation zone, an outbound lane, and an inbound lane. These lanes are approximately one mile wide at the inner limits and five miles wide at the outer limits. The centreline of the eastern and southern separation zones will be marked with white lighted, radar reflecting, whistle buoys at the intersection with the arc of the circle, and additionally on the centreline of the separation zone $22\frac{1}{2}$ miles to seaward of the circle for the Eastern and Southeastern Lanes. On the Eastern and Southern Lanes, a lightship is positioned on the centreline of the separation zone at its seaward extremity.

3. Boundaries of the 3 schemes are listed below, co-ordinates taken from United States Coast and Geodetic Survey Chart 1108 (approaches to New York, Nantucket Shoals to Five Fathom Bank).

EASTERN LANES

Separation Zone

From a point at 40°-28'-30" N, 69°-27'-54" W, to a point at 40°-24'-12" N, 73°-11'-30" W, thence to a point on the circle at 40°-26'-00" N, 73°-40'-48" W.

and

From a point at 40°-31'-30" N, 69°-28'-06" W, to a point 40°-27'-12" N, 73°-11'-30" W, thence to a point on the circle at 40°-27'-00" N, 73°-40'-42" W.

Traffic Lanes (Exterior Boundaries)

From a point at 40°-23'-30" N, 69°-27'-48" W, to a point at 40°-19'-12" N, 73°-11'-30" W, thence to a point on the circle at 40°-25'-00" N, 73°-41'-12" W.

and

From a point at 40°-36'-30" N, 69°-28'-12" W, to a point at 40°-32'-12" N, 73°-11'-30" W, thence to a point on the circle at 40°-27'-54" N, 73°-40'-36" W.

SOUTHEASTERN LANES

Separation Zone

From a point at 39°-20'-42" N, 72°-18'-00" W, to a point at 40°-06'-18" N, 73°-22'-42" W, thence to a point on the circle at 40°-22'-24" N, 73°-43'-30" W.

and

From a point at 39°-23'-00" N, 72°-15'-12" W, to a point at 40°-08'-36" N, 73°-20'-06" W, thence to a point on the circle at 40°-23'-00" N, 73°-42'-42" W.

Traffic Lanes (Exterior Boundaries)

From a point at 39°-17'-00" N, 72°-22'-24" W, to a point at 40°-02'-42" N, 73°-27'-12" W, thence to a point on the circle at 40°-21'-42" N, 73°-44'-30" W.

and

From a point at 39°-26'-42" N, 72°-10'-48" W, to a point at 40°-12'-12" N, 73°-15'-42" W, thence to a point on the circle at 40°-24'-00" N, 73°-41'-54" W.

SOUTHERN LANES

Separation Zone

From a point at 39°-45'-42" N, 73°-48'-00" W, to a point on the circle at 40°-20'-30" N, 73°-48'-18" W.

and

From a point at 39°-45'-42" N, 73°-44'-00" W, to a point on the circle at 40°-20'-42" N, 73°-47'-00" W.

Traffic Lanes (Exterior Boundaries)

From a point at 39°-45'-42" N, 73°-54'-24" W, to a point on the circle at 40°-20'-24" N, 73°-49'-36" W.

and

From a point at 39°-45'-42" N, 73°-37'-42" W, to a point on the circle at 40°-21'-12" N, 73°-45'-48" W.

DELAWARE BAY TRAFFIC SEPARATION SCHEME

(UNITED STATES ATLANTIC COAST)

1. The Delaware Bay Approach Traffic Separation Scheme consists of the following parts:

(a) An arc of a circle eight miles in radius centred on Harbour of Refuge Light located at 38°-48'-52" N, 75°-05'-34" W. This arc serves as a terminal boundary of traffic lanes at the Delaware Bay end.

(b) Two separate approaches to the circle described above, the approaches to be described hereafter as the Eastern Lanes and the Southeastern Lanes.

2. Each of the approaches consists of a separation zone one mile wide, an outbound lane, and an inbound lane. The traffic lanes are two miles wide at their seaward extremities and taper to a width of one mile at their junction with the circle. Beginning at the circle the centreline at each separation zone is marked with white lighted, radar reflecting, whistle buoys and at the seaward extremities the centreline of each separation zone is marked by a lightship.

3. Boundaries of the two schemes are listed below, co-ordinates taken from United States Coast and Geodetic Survey Chart 1219 (Cape May to Fenwick Island Light).

EASTERN LANES

Separation Zone

From a point at 38°-46'-46" N, 74°-34'-36" W, to a point on the circle at 38°-46'-46" N, 74°-55'-40" W.

and

From a point at 38°-47'-46" N, 74°-34'-36" W, to a point on the circle at 38°-47'-46" N, 74°-55'-26" W.

Traffic Lanes (Exterior Boundaries)

From a point at 38°-44'-46" N, 74°-34'-36" W, to a point on the circle at 38°-45'-49" N, 74°-56'-06" W.

and

From a point at 38°-49'-46" N, 74°-34'-36" W, to a point on the circle at 38°-48'-45" N, 74°-55'-20" W.

SOUTHEASTERN LANES

Separation Zone

From a point at 38°-27'-00" N, 74°-35'-39" W, to a point on the circle at 38°-43'-26" N, 74°-58'-01" W.

and

From a point at 38°-27'-37" N, 74°-34'-38" W, to a point on the circle at 38°-44'-12" N, 74°-57'-14" W.

Traffic Lanes (Exterior Boundaries)

From a point at 38°-27'-00" N, 74°-39'-12" W, to a point on the circle at 38°-42'-45" N, 74°-58'-55" W.

and

From a point at 38°-29'-04" N, 74°-32'-54" W, to a point on the circle at 38°-45'-04" N, 74°-56'-33" W.

TRAFFIC SEPARATION SCHEME FOR NEW YORK AND DELAWARE BAY