RESOLUTION A.527(13)

Adopted on 17 November 1983
Agenda item 10(b)

SHIPS' ROUTEING

THE ASSEMBLY,

RECALLING Article 16(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations concerning maritime safety,

RECALLING ALSO resolution A.377(X) by which it established procedures for adopting and amending routeing systems other than traffic separation schemes,

RECALLING FURTHER resolution A.378(X) containing general provisions on ships' routeing and resolution A.428(XI) adopting amendments thereto,

HAVING CONSIDERED the reports of the Maritime Safety Committee on its forty-sixth and forty-eighth sessions,

1. CONFIRMS the adoption of the new and amended routeing systems other than traffic separation schemes, set out in Annex 1 to the present resolution;

2. ADOPTS the amendments to the general provisions on ships' routeing, set out in Annex 2 to the present resolution.

ANNEX 1

NEW AND AMENDED ROUTEING MEASURES OTHER
THAN TRAFFIC SEPARATION SCHEMES

1 DEEP WATER ROUTES

1.1 DEEP WATER ROUTE BETWEEN HATTER REV AND HATTER BARN (amended route)

(Reference chart: Danish 103)

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:

(1)	55°55'.52 N.,	10°56'.68 E.	(5)	56°50'.58 N.,	10°49'.42 E.
(2)	55°54'.15 N.,	10°51'.77 E.	(6)	55°53'.20 N.,	10°49'.60 E.
(3)	55°53'.40 N.,	10°48'.30 E	(7)	55°54'.65 N.,	10°55'.39 E..
(4)	55°50'.61 N.,	10°48'.07 E.			

Note:
Ships which are not obliged by reason of their draught to use the deep water route, should use the traffic separation scheme which lies east of the route and where there is a minimum. depth of water below mean sea level of 15 metres.

1.2 DEEP WATER ROUTE FROM NORTH HINDER TO TW/1 AND TW/2 LIGHTBUOYS VIA S2 LIGHTBUOY (amended route)

(Reference charts: British Admiralty 2182a, 1503, 1405, 1408, 1406 and Netherlands Hydrographic Office 1014, 1035, 1037 and German Hydrographic Office 50, 53)

Description of the deep water route

The deep water route is bounded by a line connecting the following geographical positions:

(1)	54°10'.90 N.,	6°00'.20 E.	(7)	52°01'.23 N.,	2°42'.47 E.
(2)	54°04'.78 N.,	4°42'.67 E.	(8)	52°09'.58 N.,	2°43'.33 E.
(3)	53°35'.52 N.,	3°36'.50 E.	(9)	52°54'.17 N.,	3°22'.00 E.
(4)	52°55'.75 N.,	3°14'.25 E.	(10)	53°32'.40 N.,	3°43'.48 E.
(5)	52°09'.92 N.,	2°35'.00 E.	(11)	54°00'.00 N.,	4°46'.00 E.
(6)	51°54'.88 N.,	2°33'.60 E.	(12)	54°06'.10 N.,	6°03'.00 E.

The deep water route coincides with the two-way route for tankers from North Hinder to the German Bight.

Note:
Least waterdepths

The area bounded by a line connecting the geographical positions (1), (2), (3), (10), (11) and (12) above was closely surveyed in 1972. The least waterdepth found in this area was more than 25 metres at LWS.

The area bounded by a line connecting the geographical positions (3), (4), (5), (6), (7), (8), (9) and (10) above, was closely surveyed in 1972. The least waterdepth found in this area was 23 metres at LWS.

See also note pertaining to the traffic separation scheme "Deutsche Bucht Lightvessel Western Approach".

1.3 DEEP WATER ROUTE FROM NORTH HINDER TO TW/1 AND TW/2 LIGHTBUOYS VIA DR1 LIGHTBUOY (amended route)

(Reference charts: British Admiralty 2182a, 1503, 1405, 1408, 1406 and
Netherlands Hydrographic Office 1014, 1035, 1037 and
German Hydrographic Office 50, 53)

Note:
These charts are based on European datum.

Description of the deep water route

The deep water route is bounded by a line connecting the following geographical positions:

(1)	54°04'.8 N.,	4°42'.7 E.
(2)	53°58'.3 N.,	3°20'.8 E.
(3)	53°44'.4 N.,	3°01'.4 E.
(4)	53°04'.8 N.,	2°36'.0 E.
(5)	52°18'.2 N.,	2°36'.0 E.
(6)	51°54'.9 N.,	2°33'.6 E.
(7)	52°01'.2 N.,	2°42'.5 E.
(8)	52°18'.2 N.,	2°44'.0 E.
(9)	53°04'.0 N.,	2°44'.0 E.
(10)	53°41'.6 N.,	3°08'.6 E.
(11)	53°53'.7 N.,	3°25'.2 E.
(12)	54°00'.0 N.,	4°46'.0 E.

The subject route joins the "Deep Water Route from North Hinder to TW/1 and TW/2 Lightbuoys via S2 Lightbuoy" in geographical position (1) and (12).

Note:
Least waterdepths

The area bounded by a line connecting the geographical positions (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11) and (12) above was closely surveyed in 1973. The least waterdepth found in this area was 28 metres at LWS except for one wreck in geographical position:

(13) 53°17'.25 N., 02°49'.0 E.

The least waterdepth over that wreck found by wire-sweeping was 25.2 metres at LWS.

See also the note pertaining to the "Deep Water Route from North Hinder to TW/1 and TW/2 Lightbuoys via S2 Lightbuoy".

1.4 DEEP WATER ROUTE LEADING TO EUROPOORT (amended route)

(Reference charts: Netherlands Hydrographic Office 1349, 1350, 1449 and 1540; International 1416)

Note:
These charts are based on European datum.

Description of the deep water route

The deep water route is bounded by a line connecting the following geographical positions:

(i)	52°00'43" N.,	3°57'01" E.	
(ii)	52°01'02" N.,	3°57'12" E.	
(iii)	52°02'04" N.,	3°53'19" E.	
(iv)	51°58'30" N.,	3°09'55" E.	(position (26) of the Maas West Outer traffic separation scheme)
(v)	51°59'55" N.,	3°09'36" E.	
(vi)	52°00'47" N.,	3°02'10" E.	
(vii)	52°00'36" N.,	2°59'22" E.	
(viii)	51°57'10" N.,	2°54'31" E.	
(ix)	51°57'39" N.,	3°00'00" E.	
(x)	51°57'00" N.,	3°00'09" E.	
(xi)	52°01'18" N.,	3°51'47" E.	
(xii)	52°01'16" N.,	3°54'18" E.	
(xiii)	52°00'57" N.,	3°56'09" E.	and position (i)

The main traffic directions are:
082½° – 26½° and
112° – 292°.

Notes:

(i) Least waterdepth

1 West of longitude 3°27'.9 E. an overall least waterdepth is established at 23.50 metres at mean LLWS.

2 Between longitudes 3°27'.9 E. and 3°44'.9 E. the least waterdepths in the deep water routes are as follows:

(a) 23.50 metres at mean LLWS in a mid-channel zone of 600 metres wide centred upon the axis of the route;

(b) 22.50 metres at mean LLWS in the two peripheral zones of 300 metres wide which border the mid-channel zone at each side.

3 Between longitudes 3°44'.9 E and 3°53'.6 E. the least waterdepths in the deep water route are as follows:

(a) 23.00 metres at mean LLWS in a mid-channel zone of 600 metres wide centred upon the axis of the route;

(b) 22.50 metres at mean LLWS in the two peripheral zones of 300 metres wide which border the mid-channel zone at each side.

4 East of longitude 3°53'.6 E. the least waterdepth in the deep water route is 22.50 metres at mean LLWS.

5 The above depths are checked and maintained by frequent surveys and dredging.

(ii) Electronic navigational aids

1 The Decca Navigator Chain (Holland Chain) enables masters of deep draught vessels equipped with a Decca receiver to be informed continuously and highly accurately about the ship's deviation from and progress along the axis of the route. For optimum use of this aid in the mid-channel zone and in the eastern part of the deep water route a special indicator is brought on board by the pilot.

2 Those vessels which, because of their draughts, are confined to the mid-channel zone, are strongly advised to make use of the above equipment.

2 AREAS TO BE AVOIDED

2.1 AT MAAS CENTRE (new area)

(Reference charts: Netherlands Hydrographic Office 1035, 1449, 1349 and 1350; International 1416)

Note:
These charts are based on European datum.

The following area to be avoided by all vessels not compelled to adhere to the deep water route is established within the precautionary area off the entrance to the Rotterdam Waterway:
an area bounded by a circle with a 0.6 mile radius, centred on the following geographical position:

52°01′45″.94 N., 3°53′34″.38 E.

2.2 AT NORTH HINDER JUNCTION POINT (new area)

(Reference charts: Netherlands Hydrographic Office 1035, 1349; International 1416)

Note:
These charts are based on European datum.

The following area to be avoided by all vessels is established within the precautionary area off North Hinder:
an area bounded by a circle with a 0.5 mile radius, centred on the following geographical position:

52°00′.13 N., 2°51′.18 E.

2.3 IN THE DOVER STRAIT (new area)

(Reference charts: British Admiralty 1610 (February 1977 edition); 1828 (September 1980 edition))

Note:
These charts are based on Ordnance Survey of Great Britain (1936) datum.

Description of the area to be avoided

All ships should avoid the area within a circle of radius 0.3 mile centred on the following geographical position:

51°08′.58 N., 01°34′.03 E.

This area is established to avoid hazard to the navigational aid which is established at the above geographical position, and which is considered to be vital to the safety of navigation.

2.4 IN THE REGION OF THE GREAT BARRIER REEF (new area)

(Reference chart: AUS 819, April 1978 edition)

Note:
This chart is based on the Australian geodetic datum.

Description of the area to be avoided

In order to avoid the risk of pollution and damage to the environment in the Capricornia Section of the Great Barrier Reef Marine Park, all ships in excess of 500 tons gross tonnage should avoid the area which is bounded by a line connecting the following geographical positions:

(1)	23°10′ S.,	151°56′ E.	(8)	23°33′ S.,	151°35′ E.
(2)	23°53′ S.,	152°28′ E.	(9)	23°30′ S.,	151°35′ E.
(3)	23°55′ S.,	152°28′ E.	(10)	23°25′ S.,	151°53′ E.
(4)	23°57′ S.,	152°26′ E.	(11)	23°20′ S.,	151°50′ E.
(5)	23°57′ S.,	152°24′ E.	(12)	23°20′ S.,	151°40′ E.
(6)	23°32′ S.,	151°55′ E.	(13)	23°15′ S.,	151°40′ E.
(7)	23°36′ S.,	151°39′ E.	(14)	23°10′ S.,	151°52′ E.

Thence to the point of commencement.

2.5 IN THE GULF OF CAMPECHE (new area)

(Reference chart: Dirección General de Oceanografía S.M.840 (Revised August 1981 edition))

Description of the area to be avoided

The area to be avoided by ships not involved in the oil activities being conducted in the area is bounded by a line connecting the following geographical positions:

(1)	19°38′.20 N.,	092°14′.00 W.
(2)	19°38′.20 N.,	092°10′.80 W.
(3)	19°35′.30 N.,	092°04′.90 W.
(4)	19°24′.40 N.,	091°59′.10 W.
(5)	19°20′.00 N.,	091°59′.20 W.
(6)	19°15′.60 N.,	092°08′.00 W.
(7)	19°12′.60 N.,	092°17′.20 W.
(8)	19°23′.00 N.,	092°22′.20 W.

Notes:

1 **Anchorage**

An anchorage is established bounded by a line connecting the following geographical positions:

(i)	19°15′.28 N.,	091°52′.33 W.
(ii)	19°20′.28 N.,	091°52′.33 W.
(iii)	19°20′.28 N.,	091°57′.58 W.
(iv)	19°15′.28 N.,	091°57′.58 W.

2 **Special provisions**

Ship movement in the area is monitored and controlled by a maritime traffic controller on a 24-hour basis.

Any ship planning to enter the area to be avoided is requested to contact the maritime traffic controller on VHF channel 16 and is requested to comply with the appropriate regulations while transiting the area.

2.6 AT MARITIME OIL TERMINAL OFF CAYO ARCAS (new area)

(Reference chart: United States Naval Oceanographic Office H.O. 1233 (28 June 1975 edition))

Description of the area to be avoided

The area to be avoided by ships not involved in the oil-related activities being conducted in the area is bounded by a line connecting the following geographical positions:

(1)	20°07′.28 N.,	092°00′.03 W.
(2)	20°10′.47 N.,	091°59′.98 W.
(3)	20°11′.25 N.,	092°00′.45 W.
(4)	20°12′.42 N.,	091°59′.58 W.
(5)	20°11′.78 N.,	091°58′.57 W.
(6)	20°09′.85 N.,	091°57′.43 W.
(7)	20°07′.28 N.,	091°57′.68 W.

Notes:

1 **Anchorage**

An anchorage is established bounded by a line connecting the following geographical positions:

(i)	20°07′.47 N.,	091°44′.75 W.
(ii)	20°12′.50 N.,	091°44′.75 W.
(iii)	20°12′.50 N.,	091°50′.00 W.
(iv)	20°07′.47 N.,	091°50′.00 W.

2 **Special provisions**

Ship movement in the terminal area is monitored and controlled by a maritime traffic controller on a 24-hour basis.

Any ship planning to enter this area to be avoided is requested to contact the maritime traffic controller on VHF channel 16 and is requested to comply with the appropriate regulations while transiting the area.

3 OTHER ROUTEING MEASURES

3.1 TWO-WAY ROUTE FOR TANKERS FROM NORTH HINDER TO THE GERMAN BIGHT (amended route)

(Reference charts: German Hydrographic Office 50D and 53D
(edition dates: fourth editions 1978/3);
Netherlands Hydrographic Office 1014, 1035 and 1037)

Note:
These charts are based on European datum.

Description of the two-way route

The two-way route is bounded by a line connecting the following geographical positions:

(1)	54°10'.90 N.,	6°00'.20 E.	(7)	52°01'.23 N.,	2°42'.47 E.
(2)	54°04'.78 N.,	4°42'.67 E.	(8)	52°09'.58 N.,	2°43'.33 E.
(3)	53°35'.52 N.,	3°36'.50 E.	(9)	52°54'.17 N.,	3°22'.00 E.
(4)	52°55'.75 N.,	3°14'.25 E.	(10)	53°32'.40 N.,	3°43'.48 E.
(5)	52°09'.92 N.,	2°35'.00 E.	(11)	54°00'.00 N.,	4°46'.00 E.
(6)	51°54'.88 N.,	2°33'.60 E.	(12)	54°06'.10 N.,	6°03'.00 E.

This two-way route coincides with the deep water route from North Hinder to lightbuoys TW/1 and TW/2 via S2 lightbuoy.

Application

The two-way route is recommended for use by the following ships of 10,000 gross tonnage and upwards.

(a) tankers carrying oils mentioned in Appendix I, Annex I to the International Convention for the Prevention of Pollution from Ships (MARPOL) 1973 as modified by the Protocol of 1978 relating thereto (MARPOL 73/78); and
(b) ships carrying in bulk liquid substances classed in categories A and B mentioned in Appendices I and II, Annex II, to the International Convention for the Prevention of Pollution from Ships (MARPOL) 1973.

Use of the two-way route

(a) Ships referred to above are recommended to use the two-way route or a part of it:
  (i) when sailing from North Hinder to North Sea ports of the Federal Republic of Germany and of the Netherlands northwards of latitude 53° North and vice versa;
  (ii) when sailing between North Sea ports of the Netherlands and/or the Federal Republic of Germany, except in the case of adjacent port areas;
(b) the traffic separation scheme "Deutsche Bucht Lightvessel, Western Approach" should be used in continuation of the two-way route;
(c) ships should, as far as practicable, keep to the starboard side of the two-way route.

Joining and leaving the two-way route

The above-mentioned ships when joining or leaving the two-way route should do so at the nearest point of the route to the port of destination or departure which permits a safe passage to or from that port.

Note:
It is recommended that an efficient electronic position-fixing device appropriate for the area should be carried on board.

3.2 RECOMMENDED TRACKS IN THE GULF OF CAMPECHE (new track)

(Reference chart: Dirección General de Oceanografía S.M.840 (Revised August 1981 edition))

Description of the recommended tracks

The following tracks are recommended for use by ships of 1000 gross tonnage and upwards:

(a) A track for ships westbound from the vicinity of Isla del Carmen to the Port of Dos Bocas is defined by a line connecting the following geographical positions:

(1)	18°52'.50 N.,	091°51'.03 W.	(3)	18°45'.33 N.,	092°49'.20 W.
(2)	18°44'.70 N.,	092°30'.67 W.	(4)	18°29'.95 N.,	093°08'.53 W.

(b) A track for ships eastbound from the Port of Dos Bocas to the vicinity of Isla del Carmen is defined by a line connecting the following geographical positions:

(5)	18°28'.47 N.,	093°07'.25 W.	(7)	18°42'.70 N.,	092°30'.50 W.
(6)	18°43'.47 N.,	092°48'.30 W.	(8)	18°50'.45 N.,	091°51'.30 W.

(c) A track for ships northbound from the vicinity of Isla del Carmen to the main oilfield platform area is defined by a line connecting the following geographical positions:

(9)	18°44'.50 N.,	091°54'.50 W.	(11)	19°16'.90 N.,	092°05'.00 W.
(10)	18°48'.80 N.,	091°59'.33 W.			

(d) A track for ships southbound from the main oilfield platform area to the vicinity of Isla del Carmen is defined by a line connecting the following geographical positions:

(12)	19°16'.10 N.,	092°06'.90 W.	(14)	18°44'.50 N.,	091°57'.50 W.
(13)	18°48'.47 N.,	092°01'.72 W.			

(e) A track for ships southbound from latitude 20°15' N to the vicinity of Isla del Carmen is defined by a line connecting the following geographical positions:

(15)	20°15'.00 N.,	091°43'.75 W.	(9)	18°44'.50 N.,	091°54'.50 W.

(f) A track for ships northbound from the vicinity of Isla del Carmen to latitude 20°15' N is defined by a line connecting the following geographical positions:

(16)	18°44'.50 N.,	091°51'.80 W.	(17)	20°15'.00 N.,	091°41'.67 W.

Precautionary areas

Two precautionary areas are established at the junctions of the recommended tracks, bounded by lines connecting the following geographical positions:

(a)	(18)	18°50'.42 N.,	092°02'.00 W.	(10)	18°48'.80 N.,	091°59'.33 W.
	(19)	18°50'.80 N.,	091°59'.75 W.	(13)	18°48'.47 N.,	092°01'.72 W.
(b)	(10)	18°52'.03 N.,	091°53'.50 W.	(8)	18°50'.45 N.,	091°51'.30 W.
	(9)	18°52'.50 N.,	091°51'.03 W.	(21)	18°49'.97 N.,	091°53'.67 W.

Notes:

1 **Anchorage**

An anchorage off the Port of Dos Bocas is established bounded by a line connecting the following geographical positions:

(i)	18°42'.50 N.,	093°08'.00 W.
(ii)	18°47'.50 N.,	093°08'.00 W.
(iii)	18°47'.50 N.,	093°13'.25 W.
(iv)	18°42'.50 N.,	093°13'.25 W.

2 Loran "C" covers the area of the recommended tracks and is recommended for use by suitably fitted ships.

3.3 RECOMMENDED DIRECTIONS OF TRAFFIC FLOW OFF RAS SHUKHEIR

Note:
See Rules for ships navigating in the Gulf of Suez (paragraph 3.4).

Recommended directions of traffic flow are established in the approaches to Ras Shukheir Oil Terminal, July, Ramadan and Morgan oilfields as shown in the chartlet below.

3.4 RULES FOR SHIPS NAVIGATING IN THE GULF OF SUEZ

1 General provisions

1.1 Ships should take into account that crossing traffic may be encountered in the traffic junction eastward of Ain Sukhna and in the precautionary area off Ras Shukheir, and should be in a high state of readiness to manoeuvre in these areas.

1.2 Exceptional care is needed, when overtaking another ship within a lane, not to enter the separation zone or force the overtaken ship to do so.

1.3 Ships navigating in the Gulf of Suez are requested to keep continuous listening watch on the Suez Gulf Traffic Information Broadcasts and report to "SUZ" as from 1 January 1983 any aids to navigation which are malfunctioning or are out of position and which are not already included in the Suez Gulf Traffic Information Broadcasts.

2 Rules

2.1 All ocean ships should have their radar in effective use by day and night throughout the passage between Shaker Island and Suez Port as an aid to achieving maximum feasible lane conformity and avoiding risk of collision. Particular care is required for strict adherence to the confines of relevant traffic lanes.

2.2 Ships proceeding south from Suez should be alert for tankers heading for the SUMED oil terminal off Ain Sukhna.

2.3 Northbound tankers heading for SUMED oil terminal should report their intention of using the traffic junction off Ain Sukhna on the appropriate frequencies.

2.4 All ships north and southbound when navigating through the precautionary area off Ras Shukheir or in the vicinity of the July oilfield should avoid overtaking in the traffic lanes in these areas.

2.5 All ships including service and supply craft serving the oil workings in July, Ramadan and Morgan oilfields proceeding in and out of Ras Shukheir oil terminal, should only cross the south and northbound traffic flow through the precautionary area off Ras Shukheir. Within the precautionary area local rules relating to crossing traffic apply.

2.6 Tankers leaving the Ras Shukheir oil terminal and intending to join the northbound traffic lane should only do so when no through southbound traffic is in the vicinity and should always report their movements to other ships beforehand on VHF.

2.7 Ships anchored in the designated waiting area for Ras Shukheir should ensure that they are never less than 0.25 of a mile from the edge of the southbound traffic lane and should pay special regard to their correct light signals for ships at anchor. They should show their deck lights.

ANNEX 2

AMENDMENTS TO THE GENERAL PROVISIONS ON SHIPS' ROUTEING

(Assembly resolution A.378(X) as amended by resolution A.428(XI))

1 **Section 3.5**

Replace second sentence by:

"That date shall not be earlier than six months after the date of adoption of a routeing system by the Organization, but when new chart editions necessitate a substantially longer period between adoption and implementation, the Organization shall set a later date as required by the circumstances of the case."

2 **Section 9.1, symbol 8**

Replace "details" for symbol 8 by:

"8. Boundary of areas to be avoided, and explicitly defined limit of designated inshore traffic zones where not already defined by the adjacent traffic separation line or zone (6) (5)".