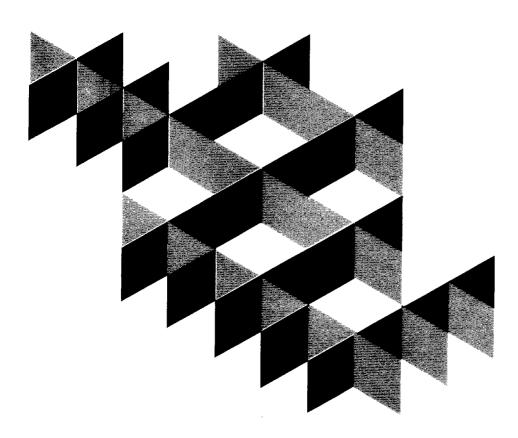


Limits in the Seas

NO. 105
MARITIME BOUNDARIES:

COLOMBIA-DOMINICAN REPUBLIC & NETHERLANDS (Neth. Antilles)-VENEZUELA



This paper is one of a series issued by The Geographer, Bureau of Intelligence and Research of the Department of State. The aim of the series is to set forth the basis for national arrangements for the measurement of marine areas or the division of the maritime areas by coastal states.

Intended for background use only, this research document does not necessarily represent an official acceptance by the United States Government of the line or lines represented on the charts or of the specific principles involved, if any, in the original drafting of the lines. Principal analyst for this study: Robert W. Smith. Additional copies may be requested by mail from The Geographer, Department of State, Washington, D.C. 20520.

LIMITS IN THE SEAS

No. 105

MARITIME BOUNDARIES:

COLOMBIA - DOMINICAN REPUBLIC

AND

NETHERLANDS (NETHERLANDS ANTILLES) - VENEZUELA

January 22, 1986

Office of The Geographer Bureau of Intelligence and Research MARITIME BOUNDARIES: COLOMBIA - DOMINICAN REPUBLIC AND NETHERLANDS (NETHERLANDS ANTILLES) - VENEZUELA

This study addresses two negotiated Caribbean Sea maritime boundaries that are closely situated: the Republic of Colombia-Dominican Republic boundary and the Kingdom of the Netherlands-Republic of Venezuela boundary. The former agreement was signed January 13, 1978, and upon the exchange of instruments of ratification, entered into force on February 15, 1979. A translation from the Spanish of the full text of the agreement is attached in Annex 1.

The Netherlands (Netherlands Antilles)-Venezuela agreement was signed March 21, 1978, and entered into force December 15, 1978. The translation from the Spanish of the full text of the treaty is attached in Annex 2.

Analysis

Colombia-Dominican Republic

The Colombia-Dominican Republic maritime boundary is illustrated in green on the attached map, which is based on DMAHTC chart NO 25000. Chart 25000 was used by the parties and was attached as an integral part of the agreement (Article II). The agreement contains no specific spheroid or datum information other than the citation of this chart. It is assumed that the parties meant to connect the boundary points by rhumb lines, which appear as straight lines on the cited chart (which is based on a Mercator projection) $\frac{1}{2}$.

A rhumb line is a line on the surface of the earth making the same angle with all meridians; it is a loxodromic curve spiraling toward the poles in a constant angle direction. A great circle arc is a circle on the surface of the earth, the plane of which passes through the center of the earth. All meridians of longitude and the Equator are great circles.

The delimitation consists of termini and extends through one turning point. From the western terminus the boundary proceeds almost due east for approximately 103.4 nautical miles (nm)2/ to the turning point where it changes direction and continues in an east-northeasterly direction. This segment is depicted on the attached map as a broken line because it is unclear from the agreement exactly where the boundary terminates. Article II of the agreement describes this segment as follows:

"...to another point located in latitude 15 degrees, 18 minutes, 00 seconds north and longitude 69 degrees, 29 minutes, 30 seconds west, to where delineation must be effected with a third state."

Does the potential intersection with a third state occur before arriving at the above position, or after this third point (to the east) is reached? The distance from the turning point to the eastern end point cited in the agreement is about 127.8 nm. It is possible the parties intend the boundary to terminate before reaching the eastern location, inasmuch as that point is 208 nm from Colombia.

One of the blue lines on the attached map depicts the boundary negotiated by the Dominican Republic and Venezuela. The western part of this boundary is south of the unclear segment of the Colombia-Dominican Republic boundary. The jurisdiction arrangement in this area may not become clear until Colombia and Venezuela resolve their boundary differences seaward to this area.

The two end points of the Colombia-Dominican Republic boundary correspond to points in the Dominican Republic's 1977 published exclusive economic zone limit (in particular, to turning points "o" and "p"). The negotiated boundary turning point, situated between points "o" and "p," gives the Dominican Republic about another 1,000 sq. nm of marine jurisdiction than it previously had claimed. Part of this area, however, now falls to Venezuela following its negotiations with the Dominican Republic. It is interesting to note that the Dominican Republic had

^{2/} One nautical mile equals 1,852 meters.

signed the maritime boundary agreement with Colombia more than a year before it signed the boundary agreement with Venezuela. $\frac{3}{2}$

Although Article I of the agreement states that the boundary is an equidistant line, the boundary is generally about 5 nm closer to the Dominican Republic than to Colombia. The western terminus, which corresponds with the Colombia-Haiti eastern terminus, is approximately 180 nm from the Dominican Republic (Isla Alto Velo), 185 nm from Colombia (Cabo de la Vela), and 181 nm south of Haiti (Pointe l'Abacou). At the turning point the boundary is approximately 148 nm from the Dominican coast and 153 nm from the Colombian coast. The eastern point cited in the agreement is approximately equidistant and 170 nm from the Dominican Republic and the Netherlands Antilles (Aruba), but more than 200 nm from Colombia.

Article III of the agreement establishes a joint scientific research and fishing zone defined by four sets of geographic coordinates (depicted in light green on the attached map). The zone straddles the boundary, between the eastern terminus and the turning point, extending 20 nm on each side of the boundary. The entire zone encompasses about 3,900 sq. nm, and water depths within this zone range between 1,100 and 2,100 fathoms (6,600-12,600 feet). Within the zone the two states have agreed to allow nationals from both states to fish and to cooperate in marine scientific research. This zone may be modified by agreement, or it can be terminated by a 90-day advance written notice by either side.

^{3/} The Dominican Republic-Venezuela boundary treaty entered into force January 15, 1982.

The measurements cited and conclusions made in this study are based on calculations of the Office of The Geographer. Slight discrepancies may appear in any comparison because of use of different spheroids, datums, charts, or other methodologies.

In addition to providing for this area of cooperation, the agreement sets forth other provisions under which the states will cooperate with each other. Article IV provides general language of cooperation to control, reduce, and prevent marine pollution. A reference to seek coordination in conserving the marine and submarine areas is given in Article V.

Netherlands (Netherlands Antilles)-Venezuela

These boundaries: (two parts: an eastern and western section) are illustrated in red on the attached map. DMAHTC chart NO 25000 has been used by the parties and attached as an integral part of the treaty (Article 3). Although the lines depicted on this chart are rhumb lines, the treaty specifically states that the listed boundary points are to be connected by arcs of great circles.

In the eastern Caribbean, in the leeward island area, the two states have negotiated a two-segment 25.2-nm boundary between Isla Aves (Venezuela) and the eastern islands of the Netherlands Antilles (Saba and Sint Eustatius). This boundary sector (Sector D), is described in Article 2, paragraph 4. The western terminus of this sector is a trijunction point equidistant from Saba, Isla Aves, and St. Croix (US) and coincides with the eastern terminus of the US-Venezuela maritime boundary. This point (treaty point No. 14--listed in Annex 2 but not labeled on the map) is approximately 67 nm from the respective coasts.

From point No. 14 to point No. 15 (23.3 nm) the boundary extends in an east-southeasterly direction through waters 800-900 fathoms (4,800-5,400 feet) deep. At point No. 15 the boundary is about 59 nm from Saba and Isla

^{5/} See Limits in the Seas No. 91, "Maritime Boundary: United States-Venezuela," US Department of State, Office of The Geographer, December 16, 1980.

Aves. The short second segment (1.9 nm) terminates at the trijunction of Isla Aves, Sint Eustatius, and the independent state of Saint Christopher and Nevis, about 58 nm from their respective coasts.

In the central Caribbean, the Netherlands and Venezuela negotiated a boundary between the Dutch islands of Aruba, Bonaire, and Curacao, and the Venezuelan mainland. This boundary comprises 13 turning or terminal points and extends for 609.5 nm. The boundary segments range from 2.2 nm (Nos. 4-5) to 174.9 nm (Nos. 12-13; see Table).

Distance Between Boundary Turning Points

Boundary	Points		Distance	(nm)
1-2			162.7	
2-3			28.0	
3-4			14.6	
4-5			2.2	
5-6			24.5	
6-7			45.4	
7-8			9.8	
8-9			50.9	
9-10			13.3	
10-11			36.2	
11-12	,		47.0	
12-13	√ }		174.9	
v	• (Total	609.5	

Although several of the boundary points are on or near an equidistant line, this boundary is not based on the equidistance method. Under a strict application of equidistance, the Netherlands would have received a larger maritime area.

Points Nos. 1 and 13 (not labeled on the map--refer to Annex 2), the two northern termini, are basically equidistant between the Dutch islands and the Dominican Republic. Point 1 is about 170 nm from Aruba and the Dominican mainland and its Isla Saona, and approximately 195 nm north of Venezuela's Paraguana Peninsula. Point 13 is about 173 nm from Curacao and Isla Saona, and more than 200 nm from Venezuela (201 nm measured from Aves de Sotovento).6

From point No. 1 the boundary extends in a southsouthwesterly direction until it reaches a point about 25 nm northwest of Aruba. Here the boundary turns due south along the 70°25' west meridian of longitude to a point about 20 nm northwest of Venezuela's Pta. Macolla. For the next 14.6 nm the boundary follows a parallel of latitude. From point No. 5 (located at 12°21'54"N, 70°08'25"W) to point No. 10 (at 11°40'N, 68°36'W), the boundary is situated where the Dutch islands and the Venezuelan mainland are opposite each other. In the area the line is fairly close to being an equidistant line with four turning points (Nos. 4-6 and 9) approximately on an equidistant line. Where the boundary is situated between Aruba and the Paraguana Peninsula (segment 5-6) the boundary comes nearest the respective coasts (8 nm). Eastward from this section (when the boundary approaches point No. 7) the boundary comes nearer to the Netherlands Antilles (Curacao) than to the Venezuelan mainland. points Nos. 8 (at 11°45'30"N, 68°57'15"W) and 10 the boundary is closer to Venezuelan territory.

The boundary follows a parallel of latitude at segment 10-11 before turning at right angles to follow a meridian of longitude to point No. 12. Although not legally significant, the latter segment is based on the meridian of Venezuela's Puerto Cabello. The last boundary segment (12-13) proceeds in a northwest direction for 174.9 nm.

^{6/} The figure of 201 nm was calculated using DMAHTC chart NO 24441 (Revised 12/24/73) to find the basepoint of Aves de Sotovento.

These boundaries have been developed on two different datums, probably because of the different charting practices in each area. In the eastern Caribbean the parties have used the North American Datum 1927, and in the central Caribbean, involving mainland Venezuela, the Provisional South American Datum 1956.

Islands were a significant factor in these boundary determinations. The Netherlands Antilles, which consist only of island territories, are located in two distinct regions in the Caribbean Sea. The smaller Dutch islands (Saba, Sint Eustatius, and Sint Maartin) are in the leeward island chain, north of the small Venezuelan Isla Aves. Here, the states have treated all the islands equally in determining the boundary (i.e., an equidistant line has been calculated giving the islands of each state full consideration).

The three large Dutch islands (Aruba, Bonaire, and Curacao) are situated in the south-central Caribbean very close to the Venezuelan mainland (16-35 nm). equidistant line had been calculated giving these three islands full consideration, the course of the two seaward boundary segments would have been different. The eastern side would have extended to the northeast intersecting a US-Venezuela boundary at approximately 14°58'N, 67°04'W. The western side would have extended to the northwest, meeting the Dominican Republic-Venezuela boundary at about 15°N, 71°06'W. Venezuela's marine area would have been substantially decreased in both areas. In an effort to delimit a maritime boundary "fairly, precisely, and on the basis of equitable principles," in the words cited in the treaty's preamble, the states deviated substantially from the equidistance method where the marine area to be delimited was adjacent to the two coasts.

It should be noted that Venezuela entered into boundary agreements with the US and the Dominican Republic after it signed the treaty with the Netherlands. In both later agreements, the Dutch islands were employed in calculating the equidistant lines that now serve as maritime boundaries between Venezuela and its northern neighbors.

Venezuela now has negotiated maritime boundaries in the Caribbean with the Dominican Republic, France (two sectors, Guadeloupe and Martinique--not shown on attached map), the Netherlands (two sectors), and the US. Assuming the application of the equidistance method, boundaries remaining for Venezuela to negotiate in the Caribbean are with Saint Christopher and Nevis, the United Kingdom (Montserrat), Dominica, Saint Lucia, Saint Vincent and the Grenadines, Grenada, Trinidad and Tobago, and Colombia.

Also, if equidistance is the method employed, the Dutch have boundary delimitations remaining with the US, the UK (Anguilla), France (Guadeloupe-St. Barthelemy and St. Martin), Saint Christopher and Nevis, and the Dominican Republic.

Annex 1

AGREEMENT ON THE DELIMITATION OF MARINE AND SUBSOIL AREAS AND MARITIME COOPERATION BETWEEN THE DOMINICAN REPUBLIC AND THE REPUBLIC OF COLOMBIA

The Governments of the Dominican Republic and of the Republic of Colombia, conscious of the cordial friendship prevailing in the relations between the two countries, and considering that it is their obligation to safeguard for their peoples the natural resources, both renewable and non-renewable, that are found in the marine and subsoil areas under their sovereignty and jurisdiction;

That their common interests in the Caribbean region make indispensable the establishment of a close collaboration in order to adopt measures adequate for the preservation, conservation and rational use of the resources existing in the said maritime areas;

That it is necessary to cooperate in the scientific research on the living resources in zones frequently visited by specific migratory species;

That it is convenient to delimit their respective marine and subsoil areas;

To that effect have designated their Plenipotentiaries as follows:

His Excellency, the President of Colombia to Dr. Indalecio Lievano Aguirre, Minister of External Relations;

His Excellency, the President of the Dominican Republic to Rear Admiral Ramon Emilio Jiminez Junior, Secretary of State for External Relations;

Who, after having communicated their full powers and found them in due form have agreed to the following:

Article I

The delineation of the marine and submarine areas that correspond to each of the two countries shall be effected, in general practice, by using the principle of the median line whose points are all equidistant from the closest points of the base lines whence the extension of the territorial sea of each state is measured.

Article II

In accordance with the procedures established in the foregoing article, the delineation shall be constituted by a line which, drawn from a point whose geographical position is in latitude 15 degrees, 2 minutes, 00 seconds north and longitude 73 degrees, 27 minutes, 30 seconds west, runs through a point located in latitude 15 degrees, 00 minutes, 30 seconds west, to another point located in latitude 15 degrees, 18 minutes, 00 seconds north and longitude 69 degrees, 29 minutes, 30 seconds west, to where delineation must be effected with a third state.

The line and the points agreed upon are shown on chart No. 25000, of the Defense Mapping Agency of the United States of America which is attached to this agreement, duly signed by the plenipotentiaries.

Article III

To establish a common scientific research and fishery exploitation zone which will be included between four straight lines drawn between the following points, each one of which is located at a distance of 20 nautical miles from the line that constitutes the maritime limit between the two countries:

Straight Line A: Between Point 1 (Latitude 15°22'00" North, Longitude 73°19'30" West) and Point 2 (Latitude 14°42'00" North, Longitude 73°20'30" West).

Straight Line B: Between Point 2 (Latitude 14°42'00" North, Longitude 73°20'30" West) and Point 3 (Latitude 14°40'30" North, Longitude 71°40'30" West).

Straight Line C: Between Point 3 (Latitude 14°40'30" North, Longitude 71°40'30" West) and Point 4 (Latitude 15°20'00" North, Longitude 71°40'00" West).

Straight Line D: Between Point 4 (Latitude 15°20'00" North, Longitude 71°40'00" West) and Point 1 (Latitude 15°22'00" North, Longitude 73°19'30" West).

In the area under its sovereignty and jurisdiction within the zone mentioned above, each of the two countries undertakes to take the following measures:

- A) To allow nationals from the other state to carry out fishing activities, provided they are effected in a rational manner and in accordance with the country to which the area in which such activities are undertaken corresponds.
- B) To provide the other party with the results of the research on live resources undertaken in such area, particularly concerning the tuna family and other migratory species.
- C) To coordinate and undertake with the other party the scientific research activities arrived at by mutual agreement.
- D) To provide the other party periodically with information on the type and quantity of the catch obtained in the area.
- E) To establish close cooperation in watchfulness over the zone to prevent nationals from third party states from engaging in unauthorized fishing activities therein.

The common scientific research and fishing exploitation zone established in this agreement, including the regime adopted therefore, may be modified by an Agreement between the Parties, or cancelled on the initiative of either of them, by a written notice to the Ministry of Foreign Relations of the other State 90 days in advance.

Article IV

To cooperate mutually, as far as possible, in order to control, reduce and avoid any pollution of the marine environment that may affect the neighboring state. They also agree to work in common accord in cases where accidents may occur involving tankers, ships and aircraft in the maritime areas of one of the two countries, and where the resulting pollution may threaten the other state.

Article V

To coordinate, as far as possible, those measures of conservation that each party applies to its marine and submarine areas, particularly for those species which stray from their respective maritime zones, taking into consideration the most recent and accurate scientific data. Such cooperation will not affect the sovereign right of each state to adopt, within the limits of its respective jurisdiction, the rules and regulations that each deem pertinent.

Article VI

The Parties will try to resolve any differences that may arise in the interpretation or during the application of this agreement by diplomatic means before using other peaceful means of solution recognized by international law.

This Agreement will come into force on the date of the exchange of the respective ratification instruments, which will take place in the city of Bogota.

In witness whereof the Plenipotentiaries sign this agreement in two originals, the text of which shall be identical.

Done in the city of Santo Domingo on the 13th day of January, nineteen hundred and seventy eight.

For the Government of the Dominican Republic

R. Emilio Jiminez Hijo Vice Admiral Secretary of State for Foreign Relations For the Government of the Republic of Colombia

Idalecio Lievano Aguirre, Minister of Foreign Relations of Colombia

Annex 2

TREATY OF DELIMITATION BETWEEN THE REPUBLIC OF VENEZUELA
AND THE KINGDOM OF THE NETHERLANDS

The President of the Republic of Venezuela and Her Majesty the Queen of the Netherlands

Reaffirming the cordial relations between their States, and, in particular, the historic, social, economic, and cultural bonds between the peoples of Venezuela and the Netherlands Antilles;

Prompted by the desire to delimit fairly, precisely, and on the basis of equitable principles the marine and submarine areas between Venezuela and the Netherlands Antilles;

Considering the need to establish adequate measures for the conservation and rational development of the resources existing within their respective jurisdictions;

Recognizing the vital and historic importance for Venezuela of the Gulf of Venezuela, the complex of fundamental interests that characterize it, and maritime transit to and from Venezuela;

Recognizing the essential importance for the Netherlands Antilles of ensuring the means for its economic development;

Taking into account the existing rules of international law and the evolution of the new law of the sea,

Have decided to conclude this Treaty and for that purpose have designated as their plenipotentiaries:

The President of the Republic of Venezuela:

Mr. S.A. Consalvi, Minister of Foreign Relations; and

Her Majesty the Queen of the Netherlands:

Mr. S.G.M. Rosendal, Prime Minister of the Netherlands

Antilles; and

who, after communicating to each other their full powers, found to be in good and due form, have agreed upon the following:

Article 1

- 1. The lines of maritime delimitation fixed by the present Treaty shall constitute the boundaries between the High Contracting Parties of the territorial seas, the continental shelves, the exclusive economic zones, and any marine or submarine areas which have been or may be established by the Parties in accordance with international law.
- 2. Marine and submarine areas mentioned in this Treaty refer exclusively to those situated in the Caribbean Sea.

Article 2

The following are the lines of maritime delimitation between Venezuela and the Netherlands Antilles:

- 1. Sector A: Between western Aruba and Venezuela territory:
- 1.1. From point No. 3, at latitude 12°21' north and longitude 70°25' west to point No. 2, at latitude 12°49' north and longitude 70°25' west;
- 1.2 From that point No. 2, a great circle arc to point No. 1, at latitude 15°24'48" north and longitude 69°34'38" west, or the point over which the same great circle results from the delimitation with third States.

- 2. Sector B: Between the leeward islands of the Netherlands Antilles (Aruba, Bonaire, Curacao) and the northern coast of Venezuela:
- 2.1 From point No. 3, at latitude 12°21' north and longitude 70°25' west, parallel 12°21' north to point No. 4, at latitude 12°21' north and longitude 70°09'51" west:
- 2.2 From that point No. 4, a great circle arc to point No. 5, at latitude 12°21'54" north and longitude 70°08'25" west;
- 2.3 From that point No. 5, a great circle arc to point No. 6, at latitude 12°15'46" north and longitude 69°44'12" west;
- 2.4 From that point No. 6, a great circle arc to point No. 7, at latitude 11°52'45" north and longitude 69°04'45" west;
- 2.5 From that point No. 7, a great circle arc to point No. 8, at latitude 11°45'30" north and longitude 68°57'15" west;
- 2.6 From that point No. 8, a great circle arc to point No. 9, at latitude 11°44'30" north and longitude 68°49'45" west:
- 2.7 From that point No. 9, a great circle arc to point No. 10, at latitude 11°40' north and longitude 68°36' west;
- 2.8 From that point No. 10, parallel 11°40' north to point No. 11, at latitude 11°40' north to point No. 11, at latitude 11°40' north and longitude 67°59'23" west.

3. Sector C: Between Bonaire and Venezuelan territory

- 3.1 From point No. 11, at latitude 11°40' north and longitude 67°59'23" west, meridian 67°59'23" west to point No. 12, at latitude 12°27' north and longitude 67°59'23" west;
- 3.2 From that point No. 12, a great circle arc to point No. 13, at latitude 15°14'28" north and longitude 68°51'44" west, or the point which over the same great circle results from the delimitation with third States.

4. Sector D: Between the islands of Aves, Saba, and St. Eustatius:

- 4.1 From point No. 15, at latitude 16°40'50" north and longitude 63°37'50" west, a great circle arc to point No. 14, at latitude 16°44'49" north and latitude 64°01'08" west, or the point which over the same great circle results from the delimitation with third States:
- 4.2 From point 15, a great circle arc to point No. 16, at latitude 16°40'01" north and longitude 63°35'20" west, or the point which over the same great circle results from the delimitation with third States.

Article 3

- 1. The positions of the points described in Article 2, sectors A, B, and C have been defined by latitudes and longitudes according to Provisional South American Datum 1956.
- 2. The positions of the points described in Article 2, sector D, have been defined by latitudes and longitudes according to North American Datum 1927.

3. The delimitation lines have been drawn, by way of illustration, on nautical chart No. 25000, sixth edition of February 12, 1977, issued by the Hydrographic Center of the Defense Mapping Agency, Washington, D.C., and attached as an integral part of this treaty.

Article 4

- 1. In the event that the Netherlands Antilles, in accordance with international law, extends the territorial sea of its leeward islands (Aruba, Bonaire, and Curacao), beyond the present breadth of three nautical miles measured from the low-water line along the coast, or establishes a legal regime in marine areas situated beyond the present territorial sea of those leeward islands, the regime applicable to those marine areas situated beyond aforementioned distance of three nautical miles will respect the conditions established in this article regarding the freedom of navigation and overflight to or from Venezuela.
- 2. All Venezuelan ships and aircraft shall enjoy the freedom of navigation and overflight solely for purposes of continuous and expeditious transit through the marine areas in question, hereinafter referred to as the right of transit passage. The requirement of continuous and expeditious transit shall not preclude passage through or above marine areas for the purpose of entering, leaving, or returning from the Netherlands Antilles, subject to the conditions that regulate entry to ports or similar conditions of access.
- 3. Subject to such additional provisions as the High Contracting Parties may, by mutual agreement, decide to establish in the future, paragraph two shall apply equally to navigation and overflight to and from Venezuela by merchant ships and government ships operated for commercial purposes and by civil aircraft of third States.

- 4. In the event that the Netherlands Antilles establishes sea lanes and, above these, air lanes, they will be established in accordance with the pertinent rules of the law of the sea. In particular, such sea and air lanes must be adequate for the safe, expeditious, and continuous passage of ships and aircraft through or above the corresponding sea areas. In the event that the Netherlands Antilles does not establish sea or air lanes, the right of transit passage will be exercised along the lanes normally used for international navigation.
- 5. The aforementioned right of transit passage may not be suspended.
- 6. Ships in transit must comply with the pertinent rules of the law of the sea, especially with regard to:
 - a. The generally accepted international regulations, procedures, and practices for safety at sea including the International Regulations for Preventing Collisions at Sea;
 - b. The generally accepted international regulations, procedures, and practices for the prevention, reduction, and control of marine pollution by vessels;
 - c. The regulations concerning the obligation to carry documents on board and the internationally agreed special safety measures for nuclear-powered vessels carrying nuclear cargo or other dangerous or noxious substances.
- 7. Aircraft in transit must comply with the pertinent rules of the law of the sea and especially:
 - a. Observe the air traffic regulations established by the International Civil Aviation Organization for civil aircraft. Government aircraft shall at all times operate in accordance with the regulations in force regarding the safety of air navigation;

- b. Monitor at all times the radio frequencies assigned to the appropriate internationally designated authority for air traffic control or the appropriate international distress frequency.
- 8. Regulations for the prevention, reduction, and control of pollution shall, to the degree that they affect navigation in exercise of the right of transit passage, be established by mutual agreement of the parties, particularly for the international navigation routes located in the marine area that extends from Los Monjes Archipelago to the Island of Aruba. The aforementioned requirement for mutual agreement shall not apply to the laws and regulations by which the Netherlands Antilles implements the generally accepted international provisions concerning the discharge of hydrocarbons, their wastes, and other noxious substances.

- 1. The High Contracting Parties will give public notice of the construction or existence within their territorial sea, exclusive economic zone, or marine areas referred to in Article 4 of artificial islands, installations, or structures under their jurisdiction. They will maintain or arrange for the maintenance of permanent means for giving warning of the presence of such artificial islands, installations, or structures.
- 2. Artificial islands, installations, and structures as well as the safety zones which surround them in the marine area of one of the parties, when these might constitute an impediment to the use of recognized sea lanes of essential importance for navigation to or from the other Party, shall be established solely by mutual consent of the Parties.

In cases where the same geological structure, or mineral, petroleum, or natural gas deposit extends across the line of delimitation and part of that structure or deposit, situated on one side of the line of delimitation, could be totally or partially exploited from the other side of the line of delimitation, the High Contracting Parties, after appropriate technical consultations, will seek to reach agreement on the most effective form of exploitation of said structure or deposit, and on the manner in which the cost of and profits from such activities shall be apportioned.

Article 7

In the event that either of the High Contracting Parties decides to conduct or permit drilling for exploration or exploitation within a distance of one nautical mile from the line of delimitation, that Party will notify the other Party.

Article 8

In the event of a dispute regarding the location of any installation or other device or of a wellhead in relation to the line of delimitation, the High Contracting Parties will determine by mutual agreement the side of the line of delimitation on which the installation or other device, or the wellhead, is located.

Article 9

With the exception of the provisions of Article 4(8), each High Contracting Party will take the necessary measures to preserve the marine environment from pollution in the marine areas referred to in this treaty. Consequently, the Parties agree to:

a. Supply the other Party with information concerning legal provisions and experience relating to preservation of the marine environment;

- b. Supply information concerning the competent enforcement authorities in matters of pollution;
- c. Inform each other of any current, imminent, or potential evidence of serious pollution originating in the maritime boundary zone;
- d. Draw up, in the shortest possible time, a joint emergency plan for use in the event of pollution caused by serious oil spills or other accidents of similar magnitude in the area. The Parties will jointly adopt measures to avoid or eliminate the aforementioned pollution and to provide all possible mutual assistance.

In order to achieve adequate conservation and exploitation of the living resources in the adjacent waters of both countries, the High Contracting Parties agree to coordinate, insofar as possible, the laws and regulations adopted by each Party.

Article 11

The High Contracting Parties agree to promote, encourage, and facilitate the conduct of marine scientific research.

Article 12

1. Any dispute regarding the interpretation or application of the provisions of Articles 4, 5, and 6 of this Treaty, which refer to navigation or to a shared geological structure or deposit, that is not resolved by negotiations between the High Contracting Parties, shall, unless the parties agree to a different arrangement, be submitted at the request of one of the parties to a commission of experts composed of three members. Each party will appoint one member of the commission and the third member shall be appointed by mutual agreement of the two members appointed by the parties.

- 2. In the event that one of the Parties fails to appoint a member within three months of the request to submit the controversy to the commission of experts, or if the third member is not appointed within one month of the appointment of the first two members, either of the Parties may request the United Nations Secretary General to appoint one member and, if necessary, two members. If the Secretary General agrees to name one member, that member shall be selected from among those not in the service of natural or juridical persons interested in the dispute, and shall be a national of a third State with no direct or indirect interests in the dispute. If the Secretary General agrees to appoint two members, the second member shall be a national of the Party that did not appoint a member.
- 3. The commission of experts shall determine its own procedures. All decisions of the commission shall be adopted by majority vote. The decisions of the commission shall be binding upon the Parties.

- 1. This Treaty shall be ratified. The instruments of ratification shall be exchanges in Caracas as soon as possible.
- 2. The treaty shall enter into force on the date of the exchange of the instruments of ratification.

In witness whereof, the aforementioned plenipotentiaries have signed this Treaty.

Done at the city of Willemstad, Curacao, on March 30, 1978, in three identical copies, each in the Spanish and Dutch languages, both texts being equally authentic.

For the President of the Republic of Venezuela:

For Her Majesty the Queen of the Netherlands: