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## LIMI'TS IN THE SEAS

No. 89
CONTINENTAL SHELF BOUNDARY: Italy-Tunisia

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\text { January 7, } 1980
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Office of the Geographer Bureau of Intelifgence and Research

On August 20, 1971, the Governments of the Italian Republic and the Republic of Tunisia signed an agreement delimiting their common continental shelf boundary in the Mediterranean sea. Instruments of ratification were exchanged and the agreement entered into force on December 6, 1978. The full text is as follows:

AGREEMETNT BETWEEN THE GOVERTMENT OF THE ITALIAIJ REPUBLIC AND THE GOVERINMENT OF me tulisial republic relatiljg to the DELIMITATION OF THE CONTINENTAL SHELF BETWEEI THE TWO COUNTRIES

The Government of the Italian Republic and the Government of the Tunisian Republic,

Desirous of strengthening further their neighbourliness and of drawing the bonds of friendship between their two countries closer,

Have agreed to define and establish in the present Agreement the principles and criteria for drawing the line of delimitation of the continental shelf between Italy and Tunisia.

Article I
The boundary of the continental shelf between the two countries shall be the median line, every point of which is equidistant from the nearest points of the baselines from which the breadths of the Italian and Tunisian territorial seas are measured, taking into account islands, islets and low-tide elevations with exception of Lampione, Lampedusa, Linosa and Pantelleria.

## Article II

With regard to the islands referred to in Article I, the boundary of the continental shelf shall be determined by the following provisions:
(a) Around Pantelleria, the boundary with Tunisia shall be the envelope of circles with a radius of 13 nautical miles and centres on the coastline of this island, as far as the intersection of this envelope with the median line defined in Article $I$.
(u) Around Lampione, the boundary with Tunisia shall be the envelope of circles with a radius of 12 nautical miles and centres on the coastline of this island, as far as the intersection of this envelope with that relating to Lampedusa defined in (c) below.
(c) Around Lampedusa, the boundary with Funisia shall be the sections of the envelope of circles with a radius of 13 nautical miles and centres on the coastline of this island, these sections being between the intersection of this envelope, on the one hand, with that of Lampione specified in (b) above and, on the other hand, with that of Linosa derined in (a) below.
(d) Around Linosa, the boundary with Tunisia shall be the sections of the envelope of circles with a radius of 13 nautical miles and centres on the coastine of this island, these sections being between the intersection of this envelope, on the one hand, with that of Lampedusa specified in (c) above and, on the other hand, with the hedian line defined in Article $I$.

Article III
'ihere shall be created as soon as possible a runisian-Italian Technical Commission whose task shall be to draw on charts the median line and the sections of envelopes defined above and to determine the co-ordinates of the points forming these lines.

This Commission ought, as far as possible, to have completed its work within three months of the date of the present Agreement.

These maps as well as the definition of the co-ordinates of the points forming these lines, which shall be established by the said Commission, shall be
authenticated by the signatures of the plenipotentiaries of the two Parties; they shall be annexed to the present Agreement.

## Article IV

If deposits of natural resources extend on both sides of the boundary of the continental shelf, with the result that the resources of the part of the continental shelf belonging to one of the contracting Parties could be exploited from the part of the continental shelf belonging to the other party, the competent authorities of the Contracting Parties shall act together with the aim of reaching an agreement to determine the manner in which these resources are to be exploited, after having consulted the holders of any concessions.

Pending the conclusion of such an agreement, each Party shall ensure that exploitation is carried out under optimum conditions in accordance with the technical rules.

## Article V

In the event of a difference over the position of an installation in relation to the boundary line, as defined by the present Agreement, the competent authorities of the Contracting Parties shall by ayreement determine on which Party's continental shelf the installation is situated.

## Article VI

The present Agreement shall be ratified in accordance with the constitutional rules of the Contracting Parties and shall enter into force on the date of the exchange of instruments of ratification, which shall take place at Rome as soon as possible.

Nevertheless, from the date of signature of the present Agreement, the two Governments may grant licences for the exploration and exploitation of the mineral resources in the areas falling to them and as defined by the principles set out above.

Done in duplicate at Tunis on August 20, 1971 in the French language, each copy being equally authoritative.

Based on work of the Tunisian-Italian Technical Commission (created in Article III of the Agreement), the two states reached agreement on the precise course of the boundary. The boundary description has been included in the following Annex:

Annex to the funisian-Italian Agreement of August 20, 1971 regarding the Delimitation of the Continental

Shelf between the Two Countries
(Maps and Geographic Coordinates)
List of Points Constituting the Median Line and Envelope Sections Defined in Articles I and II of the Agreement


South intersection of the envelope line of circles having the low-water line of Pantelleria as centers and a radius of 13 miles, and of the median line joining auxiliary point 18 A defined above and point 20 defined hereunder.

The line of delimitation between points 18 and 19 is constituted by the west arc of the envelope of circles having the low-water line of Pantelleria as center and a radius of 13 miles.

20

$$
36^{\circ} 35.0^{\prime}
$$

$$
12^{\circ} 21.2^{\prime}
$$

$$
36^{\circ} 23.0^{\prime}
$$

$$
12^{\circ} 29.4^{\prime}
$$

$$
36^{\circ} 21.7^{\prime}
$$

$$
36^{\circ} 15.2^{\prime}
$$

$$
12^{\circ} 30.2^{\prime}
$$

$$
12^{\circ} 32.4^{\prime}
$$

$$
36^{\circ} 08.7^{\prime}
$$

$$
12^{\circ} 38.1^{\prime}
$$

25 The north intersection of the envelope line of circles having the low-water line of Linosa as centers and a radius of 13 miles, and of the median line joining point 24 to auxiliary point 25 A define hereunder.
$25 A$ (auxiliary $\quad 35^{\circ} 52.3^{\prime} \quad 12^{\circ} 51.0^{\prime}$ point)

26 Jorth intersection of the envelope line of circles having the low-water line of Linosa as centers and a radius of 13 miles , and of the envelope line of circles having the low-water line of Lampedusa as centers and a radius of 13 miles.

The line of delimitation between points 25 and 26 is constituted by the north arc of the envelope of circles having the low-water line of Linosa as centers and a radius of 13 miles.

27 IJorth intersection of the envelope line of circles having the low-water line of Lampedusa as centers and a radius of 13 miles and of the envelope line of circles having the low-water line of Lampione as centers and a radius of 12 miles.

The line of delimitation between points 26 and 27 is constituted by the north arc of the envelope of circles having the low-water line of Lampedusa as centers and a radius of 13 miles.

Points

28

North
Latitude

East Longitude from Greenwich

South intersection of the envelope line of circles having the low-water line of Lampione as centers and a radius of 12 miles and of the envelope line of circles having the low-water line of Lampedusa as centers and a radius of 13 miles.

The line of delimitation between points 27 and 28 is constituted by the west arc of envelope of circles having the low-water line of Lampione as centers and a radius of 12 miles.

29 South intersection of the envelope line of circles having the low-water line of Lampedusa as centers and a radius of 13 miles and of the envelope line of circles having the low-water line of Linosa as centers and a radius of 13 miles.

The line of delimitation between points 28
and 29 is constituted by the south arc of envelope of circles having the low-water line of Lampedusa as centers and a radius of 13 miles.

30 A (auxiliary $\quad 35^{\circ} 46.5^{\prime} \quad 13^{\circ} 01.7^{\prime}$ point)

30 South intersection of the envelope line of circles having the low-water line of Linosa as centers and radius of 13 miles and of the median line joining auxiliary point 30 A and point 31 defined hereunder.

31
$35^{\circ} 39.6^{\prime} \quad 13^{\circ} 11.5^{\prime}$
32
$35^{\circ} 15.0^{\prime}$
$13^{\circ} 36.6^{\prime}$
The points of the line of delimitation as defined above were represented geographically on Italian maritime chart No. 260 at a scale of 1:750,000, Mercator projection, $40^{\circ} 04^{\prime}$ latitude, 1963 edition, reprinted in March 1972, published by the Marine Ilydrographic Institute at Genoa.

The line of delimitation is constituted by the arcs of great circles which join the points defined above and by envelope sections around the islands mentioned in Article 2 of the Ayreement.

The auxiliary points used in the plotting are not part of the line of delimitation.

This map and the present document were drawn up in application of the Agrement of August 20, 1971 and form an integral part thereof, notwithstanding any other legislative or regulatory provision regarding the definition of baselines enacted after the aforementioned date.

## Analysis

The Italy-Tunisia continental shelf boundary has been depicted on the attached map, which is based on United States DMAHTC charts 52020 and 53020. The straight lines drawn on the map are rhumb lines. According to the treaty annex, however, the boundary is comprised of segments of great circles as well as arcs developed around the relevant islands. For this analysis, geodesic distances have been calculated by computer on a spheroid different from the one utilized by the two countries. Slight discrepancies may, therefore, appear in any comparison.

The continental shelf boundary extends for a total distance of 443.36 miles. 1 In the north it runs in an east-west direction and is situated between 'lunisia's north coast and the Italian island of Sardinia. The boundary then turns southeasterly and runs through the strait of sicily between the northeast coast of Tunisia and Sicily. Farther to the south the boundary arcs around and to the west of four Italian islands to terminate at a point approximately 50 miles east of the nearest Italian basepoint on Lampedusa, 114 miles east of Tunisia's nearest basepoint, 101 miles south of Sicily's, 51 miles southwest of Malta's, and approximately 135 miles north of Libya's.

The boundary, according to the treaty, is to follow, with noted exceptions, a median line. Italy and Tunisia have agreed that the Italian islands of Pantelleria, Linosa, Lampedusa, and Lampione, all situated near the Tunisian mainland, constitute a special circumstance. This causes a true equidistant line, developed from all runisian and Italian basepoints, to follow a course much to Tunisia's disadvantage. An equidistant line developed between Tunisia and Pantelleria, for example, would deflect

1. All mileages in this study are stated in nautical miles. One nautical mile $=1.15$ statute mile $=1,852$ meters.
the boundary to within 20 miles of the Tunisian mainland. Therefore, in the equidistant line calculation the two states agreed to disregard these four Italian islands. In the area of the islands the boundary deviates from equidistance, as developed from basepoints on Sicily and the Tunisian mainland, and follows the outer limits of maritime zones drawn around each of the four islands.

In effect, each of the islands has been given a territorial sea and contiguous zones, which Italy at the tine claimed to be 12 miles in breadth. ${ }^{2}$ In addition, Pantelleria, Lampedusa, and Linosa have been given a l-mile-wide continental shelf zone beyond the l2-mile zone.

This boundary is an example of two states, by agreement, having acknowledged the presence of special circumstances. The location of relatively small islands would have created an inequitable boundary under the equidistance method. Through negotiation, the states agreed to allow the islands to have limited maritime zones.

Both states have published laws relating to their baseline. Where applicable, these baselines, including coordinates, have been used in the present analysis. Although the Ecueil des Sorelles (small rocks situated off Tunisia's north coast) have been used as basepoints for Tunisia's territorial sea, it is questionable whether they have been used in this boundary delimitation. Whereas turning points 0 and 1 are basically equidistant from other Italian and Tunisia basepoints, they are 6 miles nearer to the Ecueil des Sorelles. Turning point 2 is almost 2 miles closer to these small rocks than to the other basepoints.

Although the boundary from point 0 to 13 is generally equidistant from the two coasts, it appears that it does deviate from a "true" equidistant line. In a "true" equidistant calculation the line must be equidistant at all times from one point on each coast. At the turning points, a "true" equidistant line must be equidistant from three basepoints--one on one coast and two on the other coast. There are several turning points in this boundary that appear to be equidistant from two basepoints, but not three.
2. At the time of the treaty, in 1971, Italy claimed a 6-mile territorial sea. In 1974 Italy expanded its territorial sea claim to 12 miles. The United States does not recognize any state's claim to a territorial sea breadth in excess of 3 miles. In the UN Law of the Sea negotiations, however, the United states has expressed its willingness to accept a maximum territorial sea breadth of 12 miles within the framework of a comprehensive and acceptable Law of the sea treaty.
'i'urning point 3, for example, calculates to be equidistant from the Tunisian Galitons de l'Est and Sardinia, but the Italian Isolatto il Toro is approximately 2.5 miles farther fron the boundary at this point. Similarly, turning points 4,5,6, and 7 do not appear to be trijunctions.

Fron turning point 13 to turning point 18 , the island of Pantelleria has been disreyarded in the development of the equidistant line. Point 18 represents the intersection of the equidistant line with an arc drawn 13 miles froa the baseline of Pantelleria; segment 18-19 has been developed by drawing 13 -mile arcs from its baseline. ${ }^{3}$ From turning points 19 to 23 , the boundary follows an equidistant line developed from the Tunisian mainland and the baseline of Sicily while disregarding the presence of Pantelleria.

At turning point 23 , Linosa is closer to the median line than any other territory, but it also has been ignored in the development of the equidistant line. Boundary segments 25 to 27 follow the l3-mile arcs drawn from the baselines of Linosa and Lampedusa; segment 27-28 follows the 12-mile arcs developed from the baseline of Lampione; segrents 28-30 again follow the 13 -mile arcs drawn from Lampedusa, and Linosa. While the final segments of the boundary--the lines connecting points $30-32-$ are again, according to the treaty, supposed to be equidistant from Sicily and Tunisia, it is evident from the calculation that this part of the boundary does not quite neet the requirements of a "true" equidistant line. At terminal point 32 , the boundary is generally half the distance, and basically equidistant, from Lampedusa and Malta, than it is from Sicily and Tunisia. Malta and Italy have yet to delimit their maritime boundary.
3. Auxiliary points have been established to determine the intersections between the equidistant line and the arcs drawn from the four islands.

| TURNTNG |
| :---: |
| POINI |

0

1

2

3
13.11

4
DISTANCE BETWEEN
TURNING FOINTS
MILES) $\therefore$ MILES)
10.43
. 49

$\qquad$

ITALIAN TERRITORY

Isolatto il Toro*

Iso atto il Toro*

Isolatto il Toro*

Isolaito il Toro:

Sardinia (Capo Teulada)*

Sardinia (Capo Teulada)*

Sardinia
(Capo Spartiverato *

DISTANCE TO TURNING POINT (N. MILES) $58.0 \quad 52.2$
58.8
48.0
42.2
48.6
48.6

TGKiING POTNT.

5

## DISTANCE BETWEEN TURNING POINES (N. MITES)

| TURNING |
| :---: |
| POINT |

11
7.33
$\qquad$ TURNZNG POINTS (N. MILES)

| ITAJIAN |
| :---: |
| TERRITORY |

Isola
Mare+timo
Isola
Marettimo(2)
24.76

Isola
Varettimo(2)
Isola
Marettimo(3)
2.14

Isola
Marettimo (3)

Isola di Pantelleria

Isola di
Pantelleria

Isola
Marettimo
Sicily

Isola di Panteileria

Sicily
39.9

Sicily (2-Capo
39.7
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Tp etosi
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тe etosi
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Sicily（3－Capo
Granitola）＊
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Isola di
Feto）＊


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$\stackrel{\circ}{\circ}$
$\nabla \cdot \varepsilon \nabla$
$\forall \cdot 6 \varepsilon$

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$\varepsilon \cdot L \varepsilon$

41.7
$\stackrel{1}{i}$
$\qquad$ ITMLIAN TEERRITORY
sicily (4-Capo
Granitola)*
13.69
1.45

| Isola di <br> Pantelleria | 30.2 | 71.4 | Mainland(5) |
| :--- | :--- | :--- | :--- |
| Sicily (4-Capo <br> Granitola)* | 71.0 | 71.3 | Mainland (6-Ra's <br> Mustafa) |
| Sicily (5-Capo <br> Blanco) | 71.5 |  |  |


| Isola di | 31.6 | 72.4 |
| :---: | :---: | :---: |
| Pantelleria |  | Mainland <br> Mustafa) |

Sicily (5-Capo 72.3 Blanco)

Sicily (6-Capo 72.0 Rossello)*
6.73

| Isola di <br> Linosa | 27.4 | 76.8 |
| :--- | :--- | :--- |
| Sicily (6 Capo <br> Rossello)* | 76.5 | 77.4 |

7.96

| Isola di <br> Linosa | 19.4 | 80.0 |
| :--- | :--- | :--- |
| Sicily (6-Capo <br> Rosscilo)* | 79.1 |  |

Jazirat Qurayyat

URNING poINT

25

## DISTANCE BETWEEN Turene mozes <br> (N. MILES)

| TURETNG | DISTANCE BETWEEN |
| :---: | :---: |
| DOINT | TURNTE POINTS |
|  | (N. MILES) |


| DISTANCE TO |
| :---: |
| TURNING POINT |
| (N. MILES) |

TUNISIAN
COMMENTS TURNTES POINTS (N. MILES)

| ITALIRN |
| :---: |
| MERRITOR |

Linosa

Sicily (6-Capo 88.7 San Nicoli)*
Sicily (7-Capo 92.2

Scaramia)

### 32.00

| Isola di <br> Lampedusa | 50.0 |  |
| :--- | :---: | :---: |
| Sicily (7-Capo <br> Sacramia) | 101.6 | 100.0 |

El Mzebla**
Malta is 50.4 n. mile from point 32.

* Coordinates for this Italian basepoint taken from Presidential Decree No. 816 of April 26, 1977, Gazzetta Ufficiale No. 305, November 9, 1977.
** Coordinates for this Tunisian basepoint taken from Tunisian Decree No. 73-527 of Nov. 3, 1973, Journal Official de la Republique Tunisienne, 2-6 November 1973, pp-1697-1698.

