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**Undelimited Maritime Boundaries of the  
Asian Rim in the Pacific Ocean**

*Victor Prescott and Clive Schofield*



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## **Undelimited Maritime Boundaries of the Asian Rim in the Pacific Ocean**

by

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## **Preface**

This analysis expresses the views of the authors who do not know whether the governments of any countries mentioned support or disagree with the descriptions provided or the conclusions reached.

The authors wish to thank both Chandra Jayasuriya and Andrew Hardie in Melbourne and David Hulme and his colleagues in Durham University's Design and Imaging Unit for drawing some of the maps so well and promptly.

The opinions contained herein are those of the authors and are not to be construed as those of IBRU.

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# Undelimited Maritime Boundaries of the Asian Rim in the Pacific Ocean

*Victor Prescott and Clive Schofield*

## 1. Introduction

This is the second in a series of studies of undelimited maritime boundaries. The first considered undelimited maritime boundaries in the Pacific Ocean excluding the Asian Rim (Prescott and Boyes, 2000). This study completes the survey of the Pacific Ocean. It reviews the undelimited maritime boundaries that occur in the seas and gulfs lying between the mainland of Asia and the chain of archipelagos stretching from Indonesia to Japan via the Philippines and Taiwan; it also examines the boundaries that lie within that chain of archipelagos (see Figure 1).

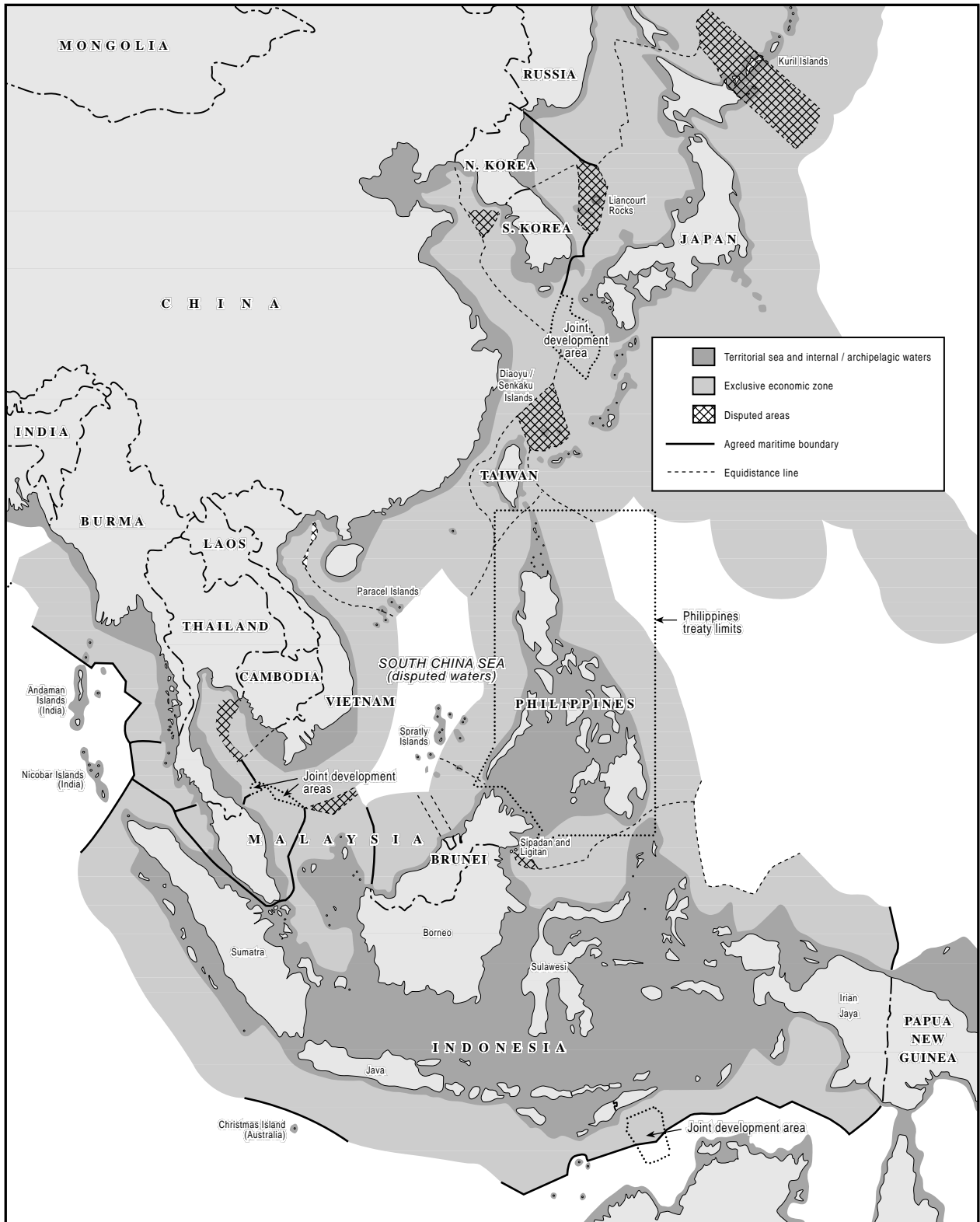
The physical geography of the Asian Rim is in sharp contrast with the physical geography of the rest of the Pacific Ocean. In the central and south Pacific and along the coasts of north and central America coastal configurations are uncomplicated and continental margins are narrow, except in the Gulf of Alaska and around New Zealand. Coastal configurations along the Asian Rim are complicated with gulfs that penetrate deeply into the mainland, a multitude of large and small islands and wide and narrow margins. Most of the countries located in the open Pacific Ocean can claim the full width of exclusive economic zones. Samoa and American Samoa are the only exceptions. Along the Asian Rim only Russia, Japan, the Philippines and Indonesia can claim exclusive economic zones (EEZs) 200 nautical miles (nm) wide.

The political geography of the two parts of the Pacific Ocean is also contrasting. In the previous study the only sovereignty dispute concerned Matthew and Hunter Islands controlled by France and claimed by Vanuatu. Along the Asian Rim there are seven bilateral disputes and in the Spratly Islands there are six states contending for all or some of the islands. It is also the case that some of these sovereignty disputes are entrenched and have prevented any progress towards the delimitation of maritime boundaries. These include the Japanese-Russian dispute over the southern Kuril Islands (called the 'Northern Territories' by Japan), the North Korea-South Korea conflict over the northwest islands, the Japan-South Korea dispute over Liancourt Rocks (known to the claimants as Takeshima and Tok-do respectively) and the Sino-Japanese counter claims over the Diaoyu Dao known as the Senkaku Islands by the Japanese.

In addition there have been periods in the past when political relations between states were so unsatisfactory that the negotiation of maritime boundaries was unthinkable. Despite some continuing political problems it seems that the present political climate is more conducive to maritime boundary negotiations along the Asian Rim than at any time since 1945 when claims to the seabed and wide national seas started in earnest. Nevertheless, there are three persistent political problems that will inhibit the negotiation of maritime boundaries in some parts of the Asian Rim in the immediate future.

First, there is the unresolved issue of the status of Taiwan. Taiwan has been very cautious in making maritime claims and its declaration of straight baselines was delayed until China had

Figure 1: Maritime Boundary Delimitation and the Asian Rim





proclaimed straight baselines along the mainland coast. Until the status of Taiwan is resolved there can be no question of a maritime boundary through the Strait of Taiwan and it is unlikely that Japan or the Philippines would enter into negotiations with Taiwan or with China regarding maritime boundaries based on the coast of Taiwan. Second, there seems to be no prospect of any bilateral maritime boundaries being negotiated in the Spratly Islands until there is a settlement regarding the competing claims to sovereignty. Third, the Philippines' insistence that its colonial treaty limits define the extent of its territorial waters prevents any maritime boundary delimitations with Japan or Indonesia and its latent claim to northern Sabah makes negotiations with Malaysia uncertain.<sup>1</sup>

The analytical structure used in the earlier volume will be continued in this review. The first section provides a brief introduction noting the status of each country and its maritime claims that give rise to the need for a maritime boundary with its neighbour. The second section describes a line of equidistance that has been constructed on charts of appropriate scale. The lines of equidistance are related to all appropriate basepoints from which maritime claims may be measured.

A line of equidistance, which may also be called a median line, was selected for two reasons. First every point on a median line is equidistant from the nearest points of the baselines of the two countries concerned. This means that providing there is agreement on the basepoints to be used the line of equidistance constructed by different cartographers will be identical. In short, the line of equidistance is an impartial construction once the basepoints have been selected. The problem of selecting basepoints is considered below. The second reason for drawing lines of equidistance is that it is generally the first line constructed by countries preparing for boundary delimitations. Countries know that the line of equidistance will deliver to them the seabed and seas that are closer to their baselines than the baselines of any neighbour. Most countries would regard the marine area surrounded by a line of equidistance as the minimum acceptable area.

Straight baselines were not used in constructing the lines of equidistance because some straight baselines have the potential to inequitably deflect the line of equidistance to the distinct advantage of the state that constructed them. As a result, there is no certainty that any party to negotiations will accept the validity of another's straight baselines. In addition, a party without straight baselines might insist on drawing its own straight baselines or construction lines on which the boundary should be based.

Some countries might decide to generate marine boundaries from either straight baselines or archipelagic baselines. The rules for drawing archipelagic baselines are more rigorous than the rules governing straight baselines so it would not be surprising if two archipelagic states, such as Indonesia and the Philippines, decided to base any boundary on their long-established archipelagic baselines.

It is of course also possible that one state will object to the use of particular basepoints by a neighbour. They might argue, for example, that an island is only a rock that does not meet the conditions set out in Article 121(3) of the United Nations Convention on the Law of the Sea

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<sup>1</sup> On 15 March 2001 the Philippines filed an application with the International Court of Justice in The Hague to intervene in the Indonesia-Malaysia dispute over the sovereignty of Ligitan and Sipadan Islands. According to an ICJ press release, the request was prompted by the Philippines' claim to sovereignty over North Borneo.

(UNCLOS) and therefore can only be used as a basis for claims to territorial waters and a contiguous zone and not continental shelf rights and exclusive economic zones.

Briefly, if a feature is an island claims can be made to the full suite of maritime zones while if the feature is a rock one of two conditions must be satisfied before similar claims can be made. Those conditions are that the rock can support habitation or economic life of its own. Article 121 is perhaps the most badly drafted article in UNCLOS and its interpretation has excited fierce debate amongst some academics. Most of the contenders fall into one of two groups.

The first group has argued in favour of the widest possible interpretation of the term rock and the narrowest interpretation of the two qualifications. Some members of this group would include sand cays and barren islands in the category of rocks. The second group has supported a narrow interpretation of the term rock and the broad definition of the qualifications.

For many governments the interpretation of Article 121 is a matter of practical politics rather than academic debate. The overwhelming response of governments is to adopt the opinion of the second group of academics for their own islands and rocks and the view of the first group of academics for the small islands and rocks of neighbours that have a major influence on the course of the line of equidistance. For every self-denying decision, such as that by Britain regarding Rockall, there are dozens of cases of countries defending the use of tiny rocks as basepoints. In the final analysis it is for the country that owns the rock or island to decide whether extended maritime claims can be made from it. If the claims appear to be unreasonable it is for neighbours negotiating maritime boundaries to argue for such a feature to be discounted.

For the purposes of this study, a deliberately generous or liberal interpretation of Article 121 has been applied. Thus, all the lines of equidistance were constructed between features which the authors considered were likely to be claimed as fully-fledged islands from which extended maritime zones could be claimed under the terms of Article 121 by the relevant coastal states.

The authors have made the following general assumptions concerning the status of basepoints in constructing lines of equidistance. First, states owning offshore islands and rocks are entitled to interpret the term rock in a strict sense and thus consider all sand cays and islets to be islands. Second, if features are inhabited they may be used to generate extended maritime zones. Third, that the rocks of one country recognised by a neighbour as being an appropriate feature for generating an extended maritime zone fulfils the requirements of Article 121(3). Fourth, that rocks used as basepoints in systems of straight baselines may be used to claim the full suite of maritime claims. Fifth, that countries will normally claim that rocks, which will move the line of equidistance in their favour, have an economic life of their own or can sustain habitation. Sixth, that the barren nature of any island does not disqualify its use as a basepoint. Despite these assumptions attention will be drawn to instances where a neighbour has queried or is considered likely to query the status of a marginal feature either in the case of the boundary under examination or during other boundary negotiations.

Each analysis concludes with a statement of the grounds on which either country might argue that a boundary based on equidistance would be inequitable. Where there is a clear economic disparity between the parties to a dispute, the less well-off state frequently advances the argument that it should be compensated for this circumstance by means of shifting the delimitation line in its favour. This sort of argument could be applied to several of the potential delimitations in the area under consideration, for example where there is a clear disparity

between the populations of states concerned.<sup>2</sup> Such economic arguments have met with little sympathy before the International Court of Justice, which has on more than one occasion held that such factors are not of relevance as they are liable to significant change over time and have not been considered as valid arguments for the modification of an equidistance line in the context of this study.

Nevertheless, it is worth acknowledging that there is a significant difference between the approach adopted by the courts and that of states entering into bilateral or multilateral negotiations. This is unsurprising in that, firstly, states are quite free to raise any factors they choose for consideration between them, and, secondly, economic and environmental issues are frequently the prime concern of the parties and thus the driving force behind the negotiations in the first place. In certain circumstances, therefore, these issues might hold a major role in determining the course of the delimitation line.

In some cases neighbouring countries dispute the ownership of one or more islands. In such cases two lines of equidistance have been constructed to show the effect of ownership by either country. No attempt has been made to assess the strength of the arguments used by both sides in these territorial disputes.

In a number of cases throughout the Asian Rim countries have delimited joint zones because they were unable to decide on a single line. There are several such agreements throughout the world and often they include a statement that the search will continue for a single boundary. Experience shows that once a joint zone is established the search for a single boundary becomes a low priority. The possibility that East Timor might argue for a single boundary to replace the Timor Gap Zone of Cooperation might be a rare exception to this generalisation. However, in this study no attempt has been made to identify equidistant maritime boundaries to replace existing joint zones.

It has also been decided not to draw lines of equidistance between the various islands occupied by or claimed by countries involved in the Spratly Islands. There are so many permutations that no purpose would be served by attempting that exercise. Instead, lines of equidistance will be drawn between the outermost Spratly Islands and islands or mainlands where sovereignty realistically is not disputed. This will identify the area of sea and seabed which attaches to the Spratly Islands on the basis of equidistance. It is not considered that Scarborough Reef is part of the Spratly Islands.

Finally, to this list of undelimited boundaries that will not be considered we add any maritime boundary between China and Taiwan. In our view it is unlikely that the status of Taiwan will be resolved in the near future and Taiwan has not made any attempt to define its area of maritime claims either towards the mainland or towards its neighbours. However, since the status of Taiwan does not influence the equidistant delimitation of boundaries between that island and Japan or the Philippines these undelimited boundaries are considered.

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<sup>2</sup> For example, Palau has a population of 18,467 whereas its maritime neighbour the Philippines has a population in excess of 81 million (CIA, 2000).

## 2. Undelimited Maritime Boundaries

### Brunei – Malaysia

#### *Introduction*

Brunei and Malaysia are adjacent states that both claim territorial seas 12nm wide and EEZs 200nm wide. The two countries inherited three seabed boundaries delimited by the United Kingdom in 1958 according to the Colonial Boundaries Act of 1895. The boundaries separated the seabed and territorial waters of Brunei from the identical zones of Sabah and Sarawak in the South China Sea and Brunei Bay (Charney and Alexander, 1993: 815-28). At that time Britain claimed territorial waters 3nm wide and the seabed to the 100 fathoms (182m) isobath. Sabah and Sarawak became part of Malaysia in 1963 and in 1979 Malaysia published a chart showing the British boundaries by a symbol identified in the legend as “*International Boundary*” (Director of National Mapping Malaysia, 1979).

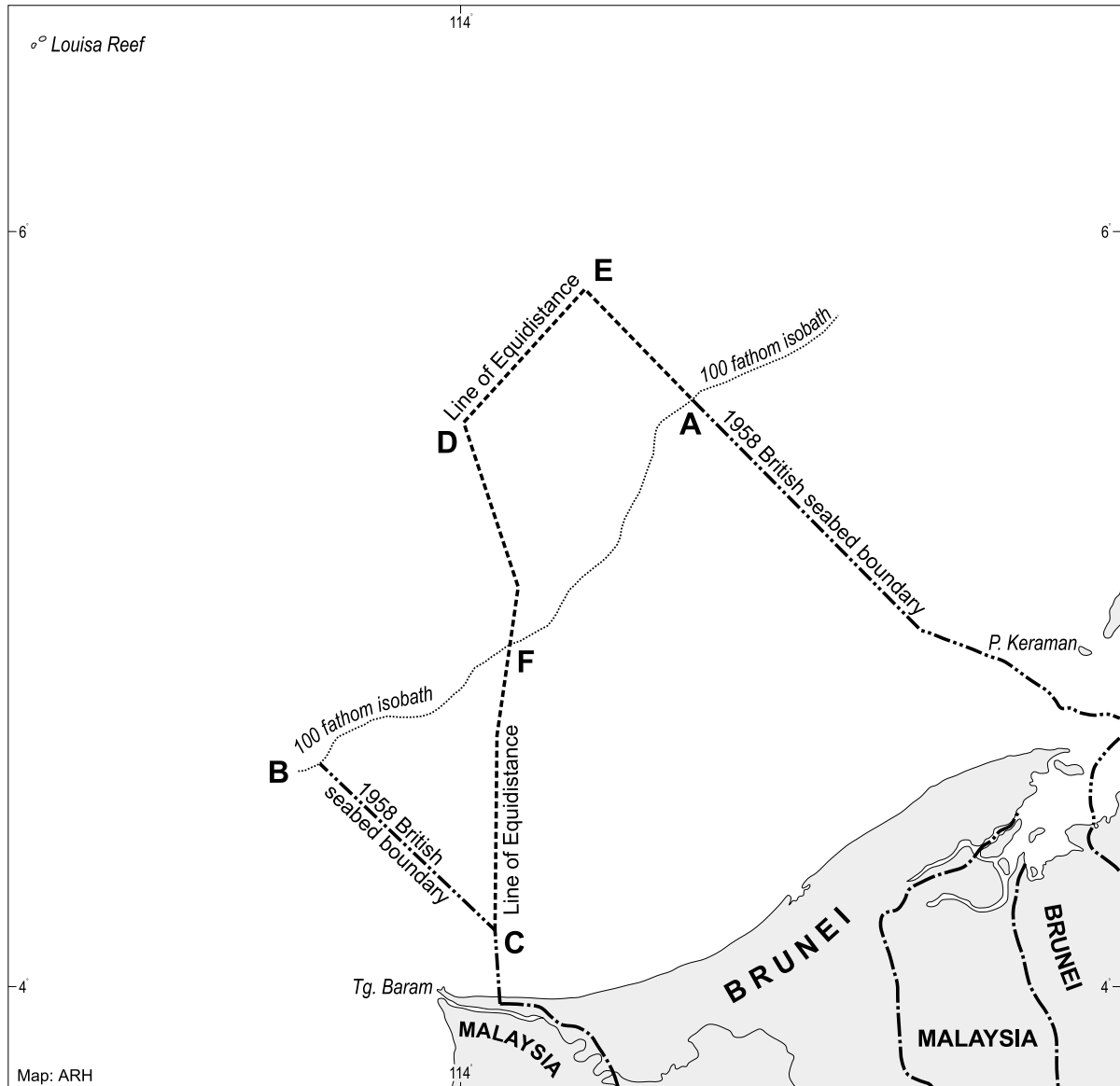
Reliable information about Brunei’s maritime claims has been difficult to obtain but a map, believed to be published by an office of the United States State Department (1995), shows what was generally believed to be Brunei’s maritime claim in 1995. This map, which is specified to be “...for illustrative purposes only...”, shows Brunei’s maritime claim as lying within the British boundaries and their straight-line extensions as far as an equidistant line between the mainlands of Brunei and Vietnam. Such a claim would extend for 240nm from Brunei’s coast. It is believed that subsequently Brunei’s claim has been reduced to 200nm from its baselines.

#### *Line of equidistance*

This analysis is concerned with possible continuations of the two British boundaries that project into the South China Sea. It does not deal with the British boundaries within Brunei Bay. The eastern territorial sea and seabed boundary between Brunei and Malaysia is an equidistance line that extends 60nm from the mouth of Brunei Bay to the 100 fathom isobath. This is Point A in Figure 2. The western territorial sea and seabed boundary between the two countries extends from the terminus of the land boundary for about 35nm to the 100 fathom isobath. This is Point B in Figure 2. The only equidistant section of this boundary extends for about 5nm from the coast, shown as Point C. The remainder of the line is perpendicular to the general direction of the coast ignoring Tanjong Baram, a prominent cape located about 8nm west of the terminus of the land boundary. When this British boundary was drawn on British Admiralty chart BA 2109 named in the British Orders in Council it passed between two oil well-heads only 0.75 nm apart (Charney and Alexander, 1993: 919).

The construction of lines of equidistance between Brunei and Malaysia faces two difficulties. First both countries claim sovereignty over Louisa Reef which is reported to be surmounted by rocks standing three feet above high water (The Hydrographer, 1975: 72). Since Louisa Reef is considered to lie within the Spratly Islands group this feature is excluded from consideration in this analysis but is considered later. The second problem is exactly the same as that encountered in the extension of the Indonesian-Malaysia boundary north of Tanjong Datu. In both cases the seabed boundary does not terminate in an equidistant position and accordingly it is necessary to explore how a non-equidistant seabed boundary can be linked to an equidistant water-column boundary.

Figure 2: Brunei – Malaysia



Commencing at Point C where the western boundary diverges from an equidistant course, 5nm from the coast, the line of equidistance continues northwards for about 29nm. The coast immediately adjacent to the terminus of the land boundary provides the basepoints for both countries. At a distance about 29nm from the coast Tanjong Baram (The Hydrographer, 1975: 74) becomes the basepoint for Malaysia and for about 17nm the line tends northeast until the northward bulge of the Brunei coast in the vicinity of meridian 114°34' E becomes the nearest Brunei basepoint. The line of equidistance is deflected northwest for about 19nm to Point D.

This point, in the vicinity of 5°38.5' N and 114° 01' E, is the terminus of the line of equidistance because Louisa Reef then becomes a basepoint. This terminus is about 41nm northeast of the terminus of the British boundary on the 100 fathom isobath. It should be noted that the definition of a boundary terminus by the intersection of a bearing and an isobath is unsatisfactory because it is possible that the location of the isobath might change. The change could be to the advantage of one party. Perhaps the disadvantaged party might argue that the intersection should be located where the bearing intersects the isobath as shown on chart BA 2109 in 1958.

The eastern British boundary follows an equidistant course based on the Malaysian basepoint of Pulau Keraman (The Hydrographer, 1975: 79) and the Brunei coast east of 114°51' E as far as the 100 fathom isobath. Using the same basepoints the line of equidistance continues northwestwards from the British terminus for about 16nm to a point where Louisa Reef becomes a basepoint shown as Point E. This point is in the vicinity of 5°53.5' N and 114°14' E. The two equidistant termini related to the Malaysian and Brunei basepoints and Louisa Reef lie about 20nm apart.

*Factors that might encourage discussions about deviations from a line of equidistance*

There are two reasons which make it unlikely that Malaysia and Brunei will negotiate extensions of the British boundaries in the near future. First the British boundaries divide the seabed to points close to the junction of the continental shelf and the continental slope. While hydrocarbon deposits are found on continental slopes most discoveries are on the continental shelf (Prescott, 2000: 76-7). This means that both countries already have access to the most prospective areas of the seabed in this region. Second the issue of sovereignty over Louisa Reef is very important to the configuration of lines of equidistance in the southern South China Sea.

It seems unlikely that either country would argue that the eastern boundary would create an inequitable maritime boundary. Malaysia has made a cartographic declaration that this sector defined by Britain is an international boundary and Brunei appears to have views about extending the line either half-way to Vietnam or to 200nm. Brunei appears to believe that the western boundary should also be projected in a straight line so that it secures a corridor 57nm wide between the British termini on the 100 fathom isobath and 63nm wide 200nm from the coast. Since the western British boundary favours Brunei it would be surprising if Malaysia agreed that the favour should be increased as the extension of the British boundary deviates ever further from the strict line of equidistance. Since Malaysia probably faces Indonesian demands for a water-column boundary separate from the seabed boundary north of Tanjong Datu it might consider that a similar arrangement is appropriate vis-à-vis Brunei. If a separate water-column boundary is delimited there is then the problem of joining the seabed boundary to it.

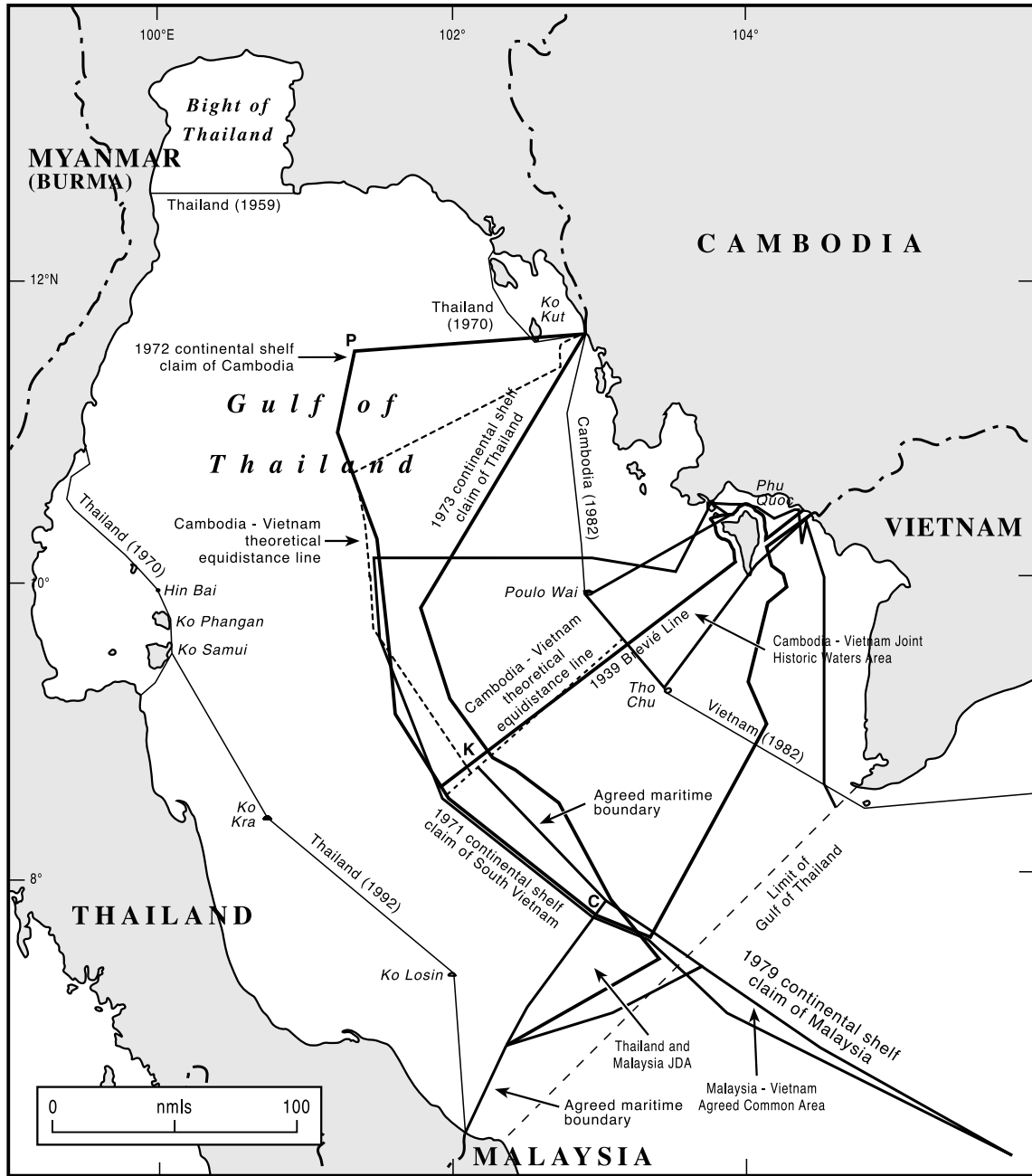
The task appears to be simpler than in the Malaysia-Indonesia case because the British Orders in Council referred to the 100 fathom isobath. It might be appropriate if the terminus of the western British seabed boundary was joined to the strict line of equidistance by straight lines coincident with the 100 fathom isobath at Point F (Figure 2). This would mean that with one exception, in the triangular area defined by the British boundary, the line of equidistance and the 100 fathom isobath the waters would be subject to Malaysia and the seabed to Brunei. The exception would be that Brunei should probably be allowed a small area of waters in the southern part of this triangular area to preserve the integrity of its territorial waters.

## **Cambodia – Thailand**

### *Introduction*

Cambodia and Thailand are both littoral states of the Gulf of Thailand which claim 12nm breadth territorial seas and EEZs theoretically out to 200nm. Cambodia, in contrast to Thailand, also claims a 24nm breadth contiguous zone. As the two states share a land boundary terminus on the coast they may be considered adjacent states and a lateral delimitation is required between their territorial sea and EEZ jurisdictions. However, the configuration of the

Figure 3: The Gulf of Thailand



Gulf of Thailand means that the two states' coastal relationship is both adjacent and, in the central part of the Gulf, opposite. The dimensions of the Gulf also dictate that the two states are 'zone locked' by the claims of their neighbours and that an EEZ boundary delimitation is necessary between their opposite coasts.

The resolution of a sovereignty dispute between Cambodia and Vietnam over islands in the Gulf of Thailand means that the southern terminus of the delimitation between Thailand and Cambodia is likely to be in the vicinity of the northern point of the Thai-Vietnamese continental shelf agreement of 1997 at 8°46'54".7754 N, 102°12'11".5342 E (see Figure 3).<sup>3</sup>

<sup>3</sup> However, see section dealing with Cambodia-Vietnam.

*Line of equidistance*

The line of equidistance was constructed graphically on British Admiralty charts 3967 at a scale of 1:240,000 at 10° N (The Hydrographer, 1957a) and chart 2414 at a scale of 1:1.5 million at 7° N (The Hydrographer, 1967) and can be considered in two sections – that relating to the boundary between the two states' adjacent coastlines and that in the central part of the Gulf of Thailand between their opposite coastlines.

The equidistance line between Cambodia and Thailand's adjacent coasts originates at the terminus of their land boundary on the Gulf of Thailand at 11°38'8" N, 102°54'3" E. The equidistance line extends seawards through eight turning points in a generally southwesterly direction until approximately 10°40' N, 101°20' E where Hin [Stone] Bai an islet off the Thai coast on the opposite side of the Gulf causes the line to turn abruptly southwards.

The basepoints controlling the territorial sea portion of this line on the Cambodian side are the land boundary's coastal terminus itself, a headland directly to the south in the vicinity of Obyam on the mainland, Koh [Island] Yor and the southern headland forming the mouth of the Kasper River. Further offshore two points at the northern tip and on the central part of the west coast of Koh Kong, just off the mainland coast become the controlling basepoints before Koh Kusrovie takes over that role.

The basepoints on the Thai side are the land boundary's coastal terminus and a point on the smooth mainland coastline directly to the north, the Ao Yai promontory on the east coast of Ko [Island] Kut, a point on Ko Kut's coast to the south, Hlaem [Cape] Thian at the southern extremity of Ko Kut and Hin Bang Bao, a rock just off the southwestern coast of the same island (see Figure 4).

The equidistance line between Cambodia and Thailand's opposite coasts proceeds in a broadly southerly and then southeasterly direction through eight turning points in the central part of the Gulf. The basepoints on the Cambodian side are Koh Kusrovie, Koh Veer and the Poulo Wai group. On the Thai side they are Hin Bai, two points on the east coast of Ko Phangan, Ko Samui, Ko Kra and, in the extreme south, Ko Losin (see Figures 3 and 5).

*Factors that might encourage discussions about deviations from a line of equidistance*

Both Cambodia and Thailand have advanced claims to maritime jurisdiction which are considerably at variance to the line of equidistance. These are likely to form the basis for the two states' arguments in favour of deviations to that line of equidistance.

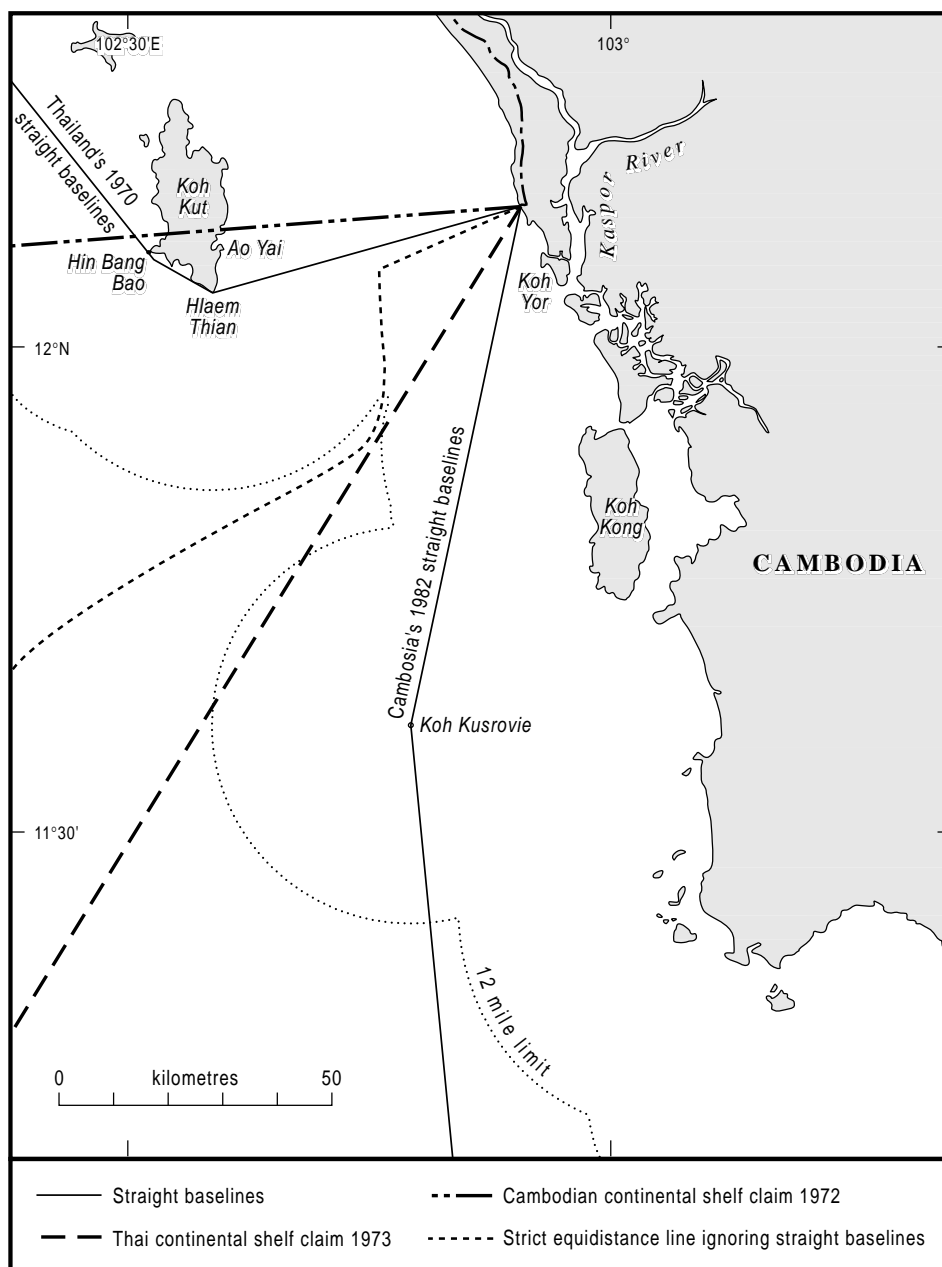
In 1972 Cambodia made its claims to territorial sea and continental shelf jurisdiction explicit. In relation to Cambodia's adjacent boundary with Thailand, both territorial sea and continental shelf claims were based on a radical interpretation of the *Franco-Siamese Treaty* of 23 March 1907. Cambodia's claim follows a straight line joining the terminus of the land boundary on the coast with "the highest summit on the Island of Koh Kut and thence [still in a straight line] up to Point P" in the central Gulf.<sup>4</sup>

From Point P, the limit of the Cambodian continental shelf claim turns abruptly southwards. Cambodia's claimed straight baseline system was apparently not used in the construction of this line. It is, however, clear that Cambodia's claim in the central Gulf is constructed broadly on

<sup>4</sup> Defined in the list of coordinates attached to the *Kret* [decree] as 11°32' N, 101°20' E.



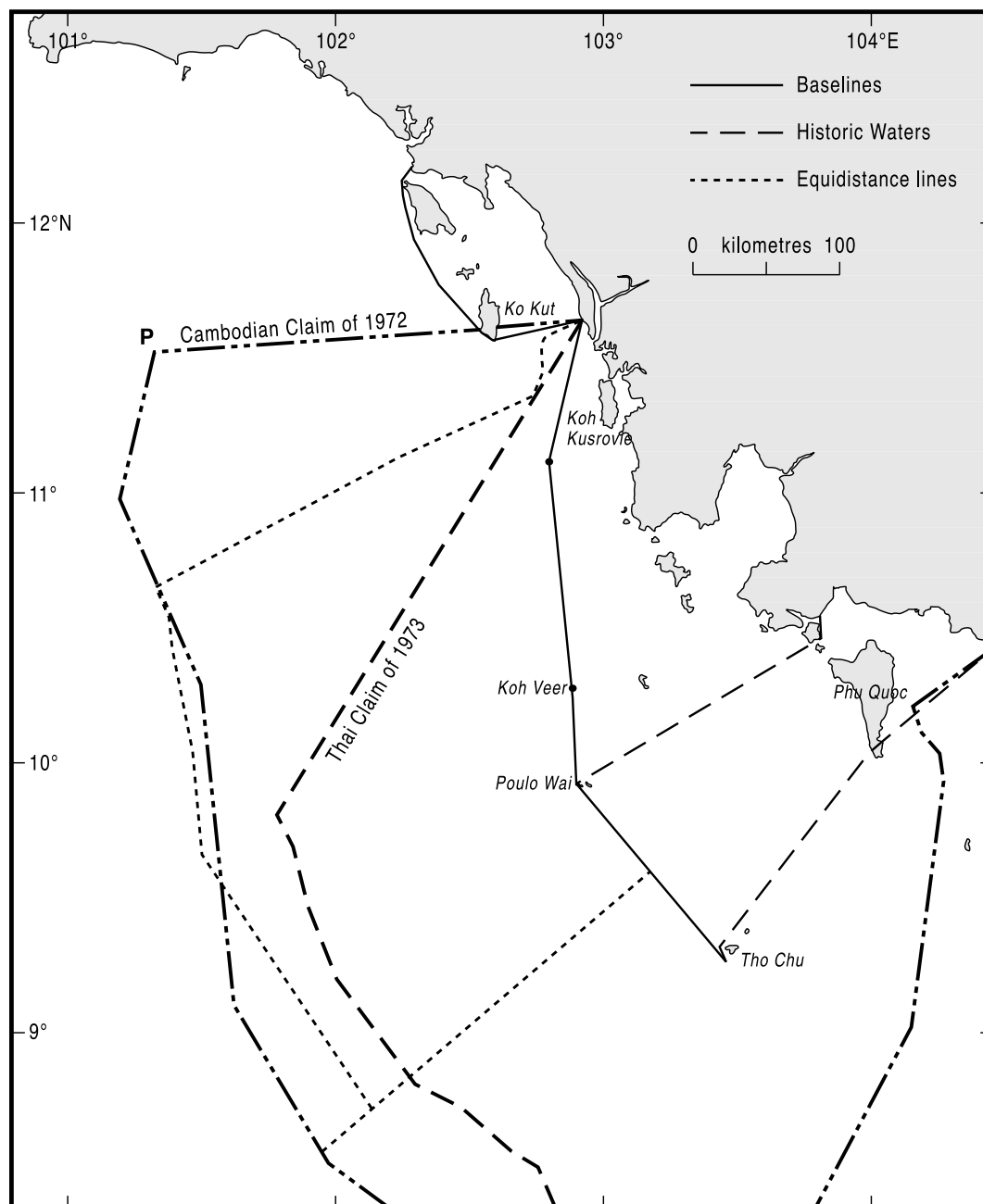
**Figure 4: Cambodia – Thailand in the Vicinity of the Land Boundary Terminus**



the basis of equidistance between opposite Cambodian and Thai mainland and island coasts. The median line is somewhat simplified and generally falls marginally short, to Cambodia's disadvantage, of an equidistance line giving full effect to Cambodian claimed islands on one side and the Thai mainland and islands in close proximity to it on the other. The Thai islets of Ko Kra and Ko Losin were, however, ignored in the construction of Cambodia's 1972 claim (Schofield, 1999: 210-11 and 215-223) (see Figures 3-5).

Thailand made its formal claim to continental shelf in 1973. Point 1 of the Thai claim coincides with the coastal terminus of the land boundary between Cambodia and Thailand. The entire lateral or adjacent boundary between Cambodia and Thailand claimed by the Thais is made up of a straight line from the land boundary terminus to Point 2 in the central Gulf. Thailand's adjacent boundary claim in relation to Cambodia in 1973 is consistent with a bisector of the

Figure 5: Cambodia – Thailand



angle between the straight baseline segments of the two states' respective straight baseline systems immediately offshore (Schofield, 1999: 212-213 and 225-229).<sup>5</sup>

The remainder of the 1973 Thai claim in the central Gulf of Thailand relevant to Cambodia and Vietnam consists of a north-south median line through 13 points, generally equidistant, between the opposite mainland coasts of Cambodia and Thailand but ignoring both its own straight baselines claim, Cambodia's straight baselines claims and Cambodian islands – notably Koh Kusrovie, Koh Veer and the Poulo [Island] Wai group (Schofield, 1999: 229-230) (see Figures 3-5).

<sup>5</sup> The two straight baseline claims involved were Thailand's Area 1 declared by Bangkok in 1970 and the relatively conservative straight baselines declared by Cambodia in 1957. Cambodia subsequently altered its straight baselines system in this area in 1972 and 1982.

Thus, neither Cambodia nor Thailand have claimed a lateral maritime boundary on the basis of equidistance. In contrast, in the central part of the Gulf, both states have based their claims on equidistance but a considerable area of overlapping claims has resulted from their selective use of island basepoints used in constructing each side's version of the median line.

With respect to the delimitation between the two states' adjacent coasts, it is fair to say that both Cambodia's and Thailand's claims are constructed on the basis of unconventional methodologies which are likely to be subject to criticism from the other side. Cambodia's claim in particular, is extremely difficult to sustain. Not only is the Cambodian claim to extended maritime jurisdiction erroneously based on a treaty dealing with island sovereignty and land boundary issues at a time when maritime jurisdiction generally did not exceed 3nm from the coast, but it also cuts through Thailand's claimed internal waters. Indeed, the Cambodian claim extends right up to and round the southern third of the coast of the undisputedly Thai island of Koh Kut which is accorded no maritime jurisdiction whatsoever south of the Cambodian claim line (Schofield, 1999: 317-323).

For its part, the Thai claim line discounts the potential influence of Cambodian straight baseline claims post-1957 as well as Cambodian islands in their own right. Thus, Thailand claims continental shelf rights over maritime areas which Cambodia considers part of its territorial sea in the vicinity of Koh Kusrovie (Schofield, 1999: 323-325). Furthermore, the use of the first segments of the Thai and Cambodian straight baseline systems of 1970 and 1957 respectively, in isolation, in order to determine the angle of the Thai claim line is also distinctly to Thailand's advantage.

This is so because the first segment of Thailand's Area 1 straight baseline claim seaward of the terminus of the land boundary on the coast proceeds in a west-southwesterly direction. In contrast, the first leg of Cambodia's 1957 straight baselines claim follows a south-southeasterly bearing. It could therefore be argued that while the Cambodian baseline segment accords with the general direction of the coast, the Thai segment in question, linking as it does Koh Kut island to the mainland coast, clearly does not and is in fact virtually perpendicular to the general direction of the coast. While it is generally accepted that in order to reach the first island in a string of fringing islands the baseline segments linking the fringe to the mainland coast may depart substantially from the general direction of the coast, even to the point of being perpendicular to it, using this baseline segment, together with Cambodia's first segment which more closely accords with the general direction of the coast, as a means to determine the *angle* that Thailand's claim to continental shelf proceeds offshore is certainly questionable. The consequence of this approach is that the Thai claim not only discounts other straight baseline segments claimed by Cambodia in 1957 which are located further to the south but also takes no account of the Cambodian mainland itself, particularly between Point Yai Sen and Point Samit.

It is inconceivable that Cambodia's claim based on historic arguments related to the 1907 Treaty would be acceptable to Thailand, particularly in the vicinity of Koh Kut. Similarly, Thailand's 130nm-long bisector of initial baseline segments claim is likely to be unacceptable to the Cambodian side.

In this context, there do not appear to be sufficient grounds on which either Cambodia or Thailand could argue that a line of equidistance would create an inequitable lateral maritime boundary between them. It is worth noting, however, that an equidistance line based on the two states' mainland coasts, ignoring all islands would favour Cambodia while one based on all

territory including islands would favour Thailand (with an equidistance line using straight baselines lying in between) (Prescott, 1998: 48-49). It may be that Cambodia could argue that the presence of Koh Kut directly offshore the terminus of the land boundary terminus on the coast effectively masks part of the Cambodian coastline and inequitably diverts the equidistance line based on all features southwards to Cambodia's disadvantage. In contrast, Thailand is likely to highlight the substantial nature of the inhabited Koh Kut as against the small, isolated and uninhabited offshore islands such as Koh Kusrovie on which Cambodian claims would largely rely. Nevertheless, it is worth observing that in the lateral section of the delimitation the equidistance-based lines described do not, in fact, lie more than 8nm apart (Prescott, 1998: 48). Compromise should, therefore, be attainable.

With respect to the delimitation in the central Gulf of Thailand between Cambodia and Thailand's opposite coasts, it is significant that both states have based their claims on equidistance and it is therefore reasonable to conclude that equidistance is likely to form the basis of any eventual delimitation between them. As previously mentioned in reference to the claims advanced by the two states, the factors encouraging a departure from the equidistance line described above are likely to relate to the suitability of particular insular features as basepoints for the generation of extended claims to maritime jurisdiction.

Cambodia is likely to argue that the Thai islets of Ko Kra and Ko Losin are no more than mere rocks incapable of sustaining human habitation or an economic life of their own under the terms of UNCLOS Article 121(3) and should therefore be ignored for the purposes of continental shelf and EEZ delimitation (Schofield, 1999: 325-329).

This analysis is supported by the relevant passages relating to the two features in the British Admiralty's *China Sea Pilot* and certainly both Ko Kra and Ko Losin are small, isolated, barren and uninhabited rocky features. Ko Kra is deemed such a minor feature that the only information recorded in the *Pilot* concerning it are its height, location and the fact that a navigation light is exhibited from it (Hydrographer of the Navy, 1978: 87). Similarly, Ko Losin is described as being "1 m (5 ft) high and steep-to all round" together with details as to its location and the fact that it hosts another light beacon (Hydrographer of the Navy, 1978: 85).

Thailand is likely to argue the reverse, a position supported by the fact that the southern boundary of the Thai-Malaysian joint development area agreed in 1979 uses Ko Losin as a basepoint. Furthermore, if the insular status of Ko Kra and Ko Losin is brought into question, Thailand is likely to raise similar, though more difficult to sustain, doubts over whether Cambodian features such as Koh Kusrovie and Koh Veer are fully-fledged islands under Article 121 (Schofield, 1999: 327-329).

In this context it is worth noting that as Cambodia's islands are further offshore than are those belonging to Thailand, an equidistance line based on all features favours Cambodia whereas one which discounts all islands for the purposes of delimitation is distinctly to Thailand's advantage.

One additional factor may serve to encourage Cambodia and Thailand to pursue a boundary line which diverges from the equidistance line described or, alternatively, eventually opt for a joint development zone in lieu of delimitation. The central part of the Gulf of Thailand is regarded as having significant potential as a source of oil and gas deposits. This fact has tended to limit the perceived scope for compromise. Furthermore, it is understood that the most prospective potentially oil and gas-bearing structures are located on the eastern margins of the

Pattani Trough which extends into the overlapping claims area from exclusively Thai waters. It is quite possible, therefore, that the main oil and gas deposits within the disputed area are unevenly distributed and predominantly located on its western side. This perception may go a long way to explaining Thailand's enthusiasm for a delimitation solution, which could (presuming such a line represents a compromise between the parties claims) potentially leave the lion's share of the hydrocarbon reserves of the overlapping claims area in Thai waters, and Cambodia's consistent push for a joint development arrangement encompassing the whole of the contested area (Schofield, 1999: 348-350)

## **Cambodia – Vietnam**

### *Introduction*

Cambodia and Vietnam share a land boundary which terminates on the coast of the Gulf of Thailand. They may therefore be considered to be adjacent states. However, the area to be delimited has a complex coastal geography, characterised by a highly indented coastline and numerous islands, large and small, which complicates boundary delimitation. In particular, the presence of Vietnamese islands, notably the large island of Phu Quoc, directly offshore part of the Cambodian mainland means that for much of the potential boundary, the two states' coastal relationship may be considered to be opposite rather than adjacent.

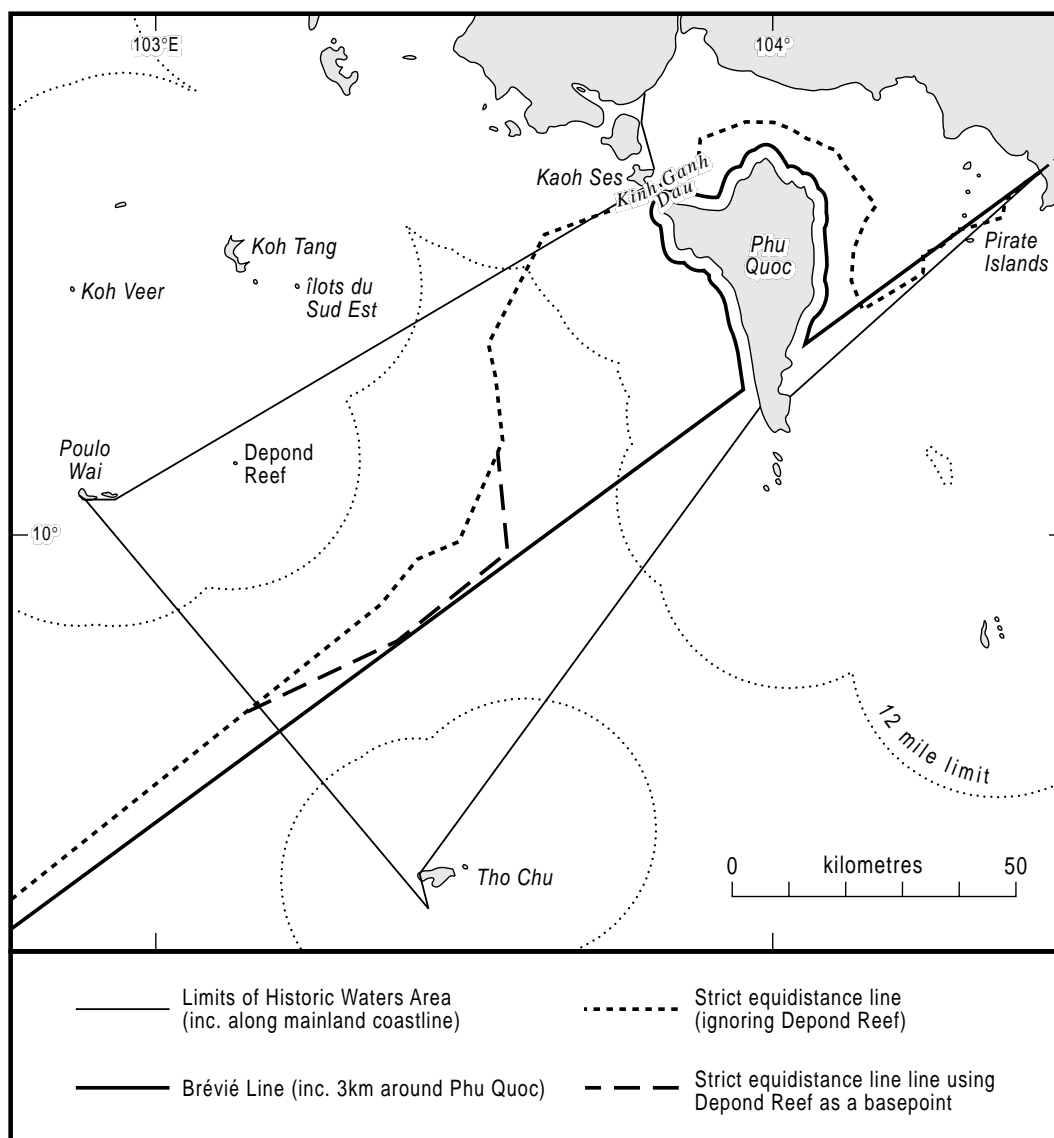
Both Cambodia and Vietnam claim territorial seas 12nm wide, a contiguous zone of 24nm, and EEZs measuring 200nm and any maritime boundary between them will need to separate these zones. The two states have also established a joint claim to historic waters projecting off their mainland coasts into the Gulf of Thailand and this will also require division between them (see Figure 3).

### *Line of equidistance*

The line of equidistance was constructed graphically on British Admiralty charts 3879 at a scale of 1:240,000 at 10° N (The Hydrographer, 1957b) and chart 2414 at a scale of 1:1.5 million at 7° N (The Hydrographer, 1967).

The initial point of a maritime delimitation between Cambodia and Vietnam will be the coastal terminus of their land boundary. The resolution of the two states' sovereignty dispute over islands means that the seaward terminus of the delimitation between Cambodia and Vietnam is likely to be in the vicinity of the northern point of the Thai-Vietnamese continental shelf agreement of 1997 at 8°46'54".7754 N, 102°12'11".5342 E, although this may be complicated by historical claims (see below).

From the intersection of the land boundary with the coast the equidistance line proceeds broadly southwestwards between Cambodian and Vietnamese islands belonging to the Quan-Dao [Archipelago] Hai group [the Pirates and Northern Pirates Islands] until Vietnam's large Dao [Island] Phu Quoc comes into play. The equidistance line then turns northwards and loops around the northern part of Phu Quoc between points on that island and associated islets and points on Cambodian islands and the Cambodian mainland. The equidistance line then passes westwards through the Kinh Ganh Dau, the strait between Phu Quoc and Cambodia's Kaoh [Island] Ses.

**Figure 6: Cambodia – Vietnam Historic Waters Area**

The line proceeds westwards until Cambodia's *Îlots du Sud Est* [South East Islands] divert it southwards. Cambodia's Depond Reef serves to push the line further to the south until Vietnam's Tho Chu [Poulo Panjang] group causes the line to turn southwestwards. The section of the equidistance line furthest offshore extending towards the central Gulf of Thailand is controlled by basepoints among Cambodia's Poulo Wai group and Vietnam's Tho Chu group (see Figures 3 and 6).

It is worth noting that Depond Reef is a low-tide elevation whose charted position is almost exactly 12nm from the nearest feature in the Poulo Wai island group (British Admiralty chart 3879, Hydrographer, 1978: 108). However, its position is approximate and it would only be a valid basepoint for territorial sea delimitation purposes if it lies within 12nm of the nearest island or mainland coast. Were Depond Reef not a valid Cambodian basepoint, the equidistance line would not be pushed quite so far to the south as this section of the line would, on the Cambodian side, be controlled by basepoints among the Poulo Wai group rather than by Depond Reef. These alternative alignments for the equidistance line are illustrated on Figure 6.

The basepoints controlling the equidistance line from the terminus of the land boundary on the coast up to the point where Phu Quoc Island becomes relevant are the intersection of the land boundary with the coast itself and, on the Cambodian side, a low-tide elevation to the north near the entrance to the Kompong Trach River, Hon [small island] Dung, Hon Keo-Ngu'a and a rock offshore that feature, Rocher [Rock] Déchiré and Rocher Rosita. On the Vietnamese side they are the coastal terminus of the land boundary, two points north of Mui Nai, the Mui Nai peninsula itself, several points among the Pirate Islands group – two points on Hon Đoc, Hon Truc Mon, an unnamed island to the south and Hon Đuoc – and Poulo Cici.

The basepoints controlling the equidistance line between Vietnam's Phu Quoc island and the Cambodian mainland and islands up to the Kinh Ganh Dau are, on the Cambodian side, Rocher Rosita, a rock in the vicinity of Îlot Temple, Kaoh Kras a rock off the Cambodian coast west of Cape Bumbi, three points on the mainland, a rock offshore and another mainland point coast further west and the eastern, southeastern and southern tips of Kaoh Ses. On the Vietnamese side, on or near Phu Quoc, they are a point on Phu Quoc's eastern coast north of Mui Đa Bac, a rock off Mui [Cape] Sao, Mui Sao point itself, a point on Phu Quoc further north between Mui Sao and Mui Đa-Chong, two rocks off Phu Quoc's coast further to the north, a rock off Mui Đa-Chong and one north of that cape, a rock off Hon Mot, a rock northwest of that point, a reef off Mui Kwala, three points on Mui Kwala, a point southwest of Mui Kwala, three points on Phu Quoc east of Mui Ganh Dau and Rocher Plat.

*Factors that might encourage discussions about deviations from a line of equidistance*

Historical claims and geographical factors may give rise to arguments that there should be deviations to the equidistance line described above.

When (South) Vietnam and Cambodia advanced their claims to continental shelf jurisdiction in 1971 and 1972 respectively the two states both claimed sovereignty over Phu Quoc island and associated islets, the Poulo Wai group and the Tho Chu [Poulo Panjang] group. As a result of both states using these islands as basepoints, their claims overlapped to a considerable degree. Although to date neither of these claims has officially been retracted, the dispute over island sovereignty was resolved in 1982 with the Poulo Wai group being confirmed as Cambodian and the other islands as Vietnamese (Schofield, 1999: 372-374).

However, in resolving the dispute over island sovereignty, Cambodia and Vietnam also established a roughly oblong-shaped area of joint (and still disputed) "historic waters" projecting into the Gulf of Thailand offshore the two states' border provinces on the coast (see Figure 6). The seaward, southwestern, limit of the historic waters area was defined as being "the straight baseline linking the Tho Chu archipelago and Poulo Wei [Wai] Island." Both states modified their straight baseline claims in 1982 such that they terminate at Poulo Wai for Cambodia and Tho Chu for Vietnam and join one another at a floating "Point O" on the straight line linking those points. It was agreed that the precise position of Point O would be determined by mutual agreement.

One further historic factor is worth consideration. In the colonial period, when both states were ruled by France, a dispute over islands arose between Ha-tien Province of what was to become Vietnam and Cambodia's Kampot Province. In due course Governor-General Jules Brevié issued a decision on the islands question on 31 January 1939 which became known as the *Brevié Line* (see Figure 6) (Schofield, 1999: 356-358). It is notable that when Cambodia and

Vietnam established their joint historic waters area it was stated that they would “*continue to regard the Brevié Line drawn in 1939 as the dividing line for the islands in this zone.*”

It is also understood that Cambodia may argue in favour of the use of the *Brevié Line* not merely as a line defining sovereignty over islands, but as a maritime boundary. As the *Brevié Line* loops around Phu Quoc 3km from the coast of the island, this would clearly be distinctly to Cambodia’s advantage in the maritime space between Phu Quoc and the Cambodian littoral and in the area west of the northern part of the island. Were the *Brevié Line* confirmed as the maritime boundary Cambodia would gain c.70% of the joint historic waters area with Vietnam receiving the remaining 30%. If a strict equidistance line were applied, Cambodia’s share of the zone would fall dramatically to approximately 43% to Vietnam’s 57% (Schofield, 1999: 382).

Seaward of the historic waters area, the potential advantage to Cambodia of applying the *Brevié Line* as opposed to the equidistance line as the boundary is more limited. Approximately midway between the limit of the joint historic waters area and the limits of Cambodia and Vietnam’s claims in the central Gulf of Thailand the equidistance line and *Brevié Line* cross. Thus, immediately seaward of the straight baseline linking Poulo Wei to Tho Chu, the *Brevié Line* is located to the southeast of the equidistance line. Further offshore, however, the *Brevié Line* lies to the northwest of the equidistance line. Were Cambodia to claim the *Brevié Line* in preference to the equidistance line, therefore, it would gain approximately 100nm<sup>2</sup> (344km<sup>2</sup>) of maritime space in the vicinity of the historic waters area but lose approximately 57nm<sup>2</sup> (195km<sup>2</sup>) further offshore. Adoption of the *Brevié Line* as the maritime boundary between the two states seaward of the historic waters area would still, however, be of net benefit to Cambodia in comparison with a strict equidistance line.

Cambodia can strongly argue that the *Brevié Line* has been established over a considerable period of time since its formulation in 1939 and that during that time it has been respected by both sides as the proper limits of their jurisdiction. Furthermore, Cambodia can point to past Vietnamese actions, crucially the statements made by the communist National Liberation Front and North Vietnamese government in 1967, which can be viewed as proof of Vietnam’s acceptance of the *Brevié Line* as the maritime boundary between the two states and not merely as the line distinguishing sovereignty over islands (Schofield, 1999: 379).

Were Cambodia to make such claims, Vietnam would in all probability raise the fact that Governor-General Brevié himself stated that “*the issue of the islands’ territorial jurisdiction remains entirely reserved.*” Moreover, Vietnam would be likely to argue that the 1967 statements have no legal meaning having been signed under duress and that they have in any case been superseded by the 1982 *Historic Waters Agreement* which specifically provides for delimitation in the future, thus making it clear that no maritime boundary existed at the time of the conclusion of the agreement. For its part, Vietnam is likely to favour an equidistance-based solution as this would clearly be significantly more favourable to it than one utilising the *Brevié Line*.

Even if historical arguments were set aside, it is likely that Cambodia would find the equidistance line problematic. Cambodia is likely to argue that it is a geographically disadvantaged state. Cambodia can contend that the presence of the Vietnamese island of Phu Quoc directly offshore and fronting approximately 26nm (48km) of its mainland coast provides a severe impediment to its potential maritime claims were strict equidistance to be applied as a



delimitation method. Accordingly, Cambodia can argue that any such delimitation would be highly inequitable and would be to Cambodia's detriment (Schofield, 1999: 379).

Vietnam would be likely to counter such arguments on the grounds that there is no question of the substantial island of Phu Quoc being anything other than a fully-fledged island under the definition provided by Article 121 of UNCLOS. As such Phu Quoc is entitled to the same maritime jurisdictional rights accorded to other land territory and thus there is no justification for giving Phu Quoc a reduced weight in delimitation (Schofield, 1999: 379).

Seaward of Phu Quoc, and in particular beyond the limits of the historic waters area, there seems little scope to argue that the equidistance line would result in an inequitable maritime boundary as comparable basepoints – the Poulo Wai and Tho Chu island groups – generate the line. Indeed, it is clear from Vietnam's maritime boundary agreement with Thailand of 7 August 1997 that Vietnam considers that the lateral maritime boundary between Cambodia and Vietnam, as well as the location of Point "O" on the limit of the historic waters area, has already been established, at least as a "*working arrangement*" line, on the basis of equidistance. The northwestern terminus of the Thai-Vietnamese agreement, Point K, is defined in the 1997 agreement as being:

*...situated on the maritime boundary between the Socialist Republic of Vietnam and the Kingdom of Cambodia, which is a straight line equidistant from the Tho Chu islands and Pulo Wai [sic.] drawn from Point O Latitude N 09° 35' 00".4159 and Longitude 103° 10' 15".9808.*

However, Point K is, in fact, not strictly equidistant from the nearest coastal points of the three states – Cambodia's Poulo Wai islands, Thailand's Ko Kra islet and Vietnam's Tho Chu islands. Instead, Point K is actually located approximately 7nm northeast of where strict equidistance from the three islands mentioned would place the tripoint. Were this accepted as the tripoint, it would put Cambodia at a distinct disadvantage in negotiations with Thailand as Thailand's Ko Kra is accorded greater weight than Cambodia's Poulo Wai group. Cambodia duly issued a formal protest note in February 1998 over the Thai-Vietnamese agreement, stating that it has "*never agreed to*" such a boundary which "*constitutes a violation of Cambodia's sovereignty*" (Schofield, 1999: 285-294).

## China – Japan

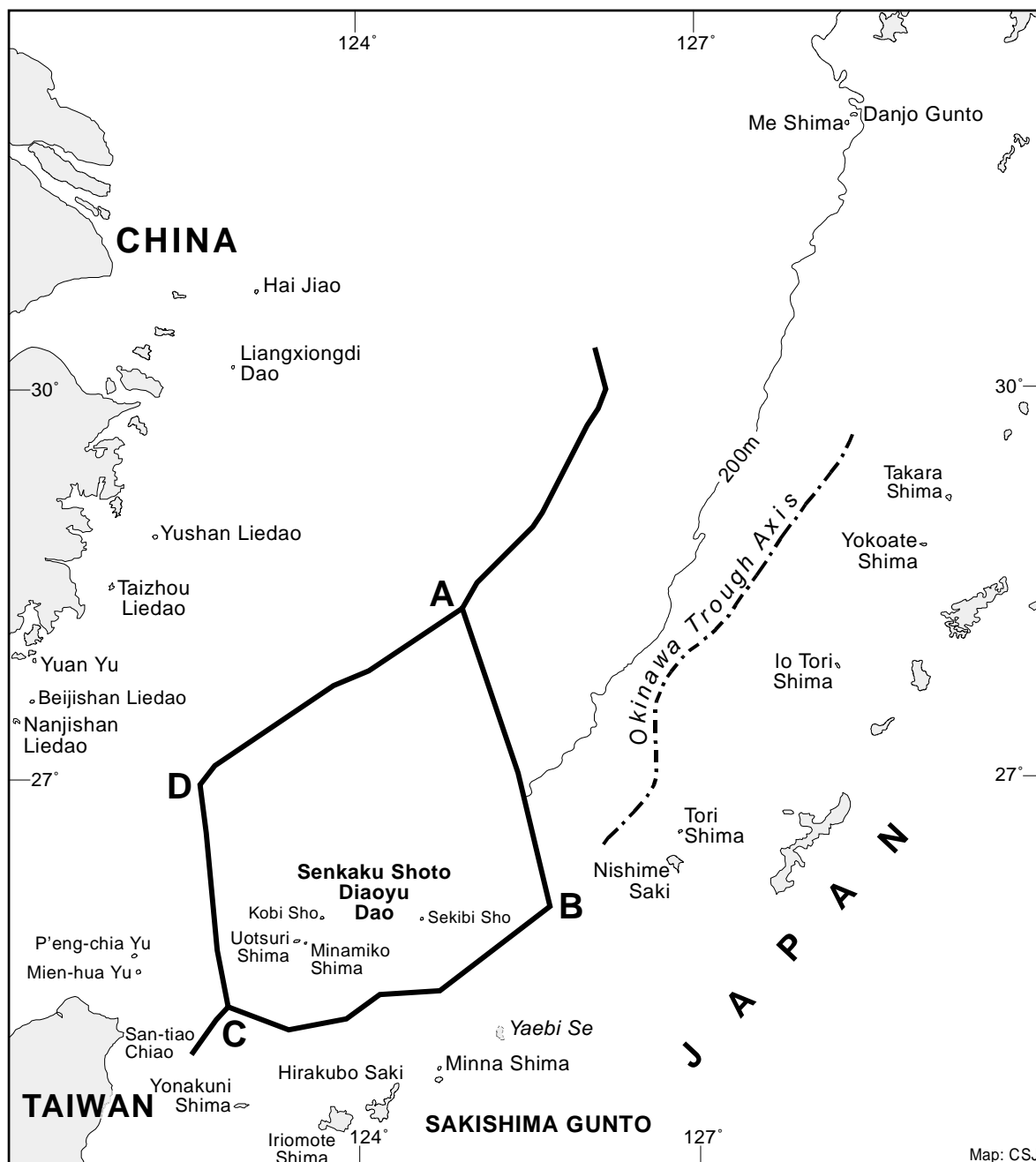
### *Introduction*

The Chinese mainland, its coastal islands, Taiwan and its offshore Lan Yu, extending over about 540nm, face that part of the Japanese archipelago extending from Danjo Gunto to Sakeshima Gunto about 650nm distant. Both countries have claimed EEZ 200nm wide and they overlap in the East China Sea and off the east coast of Taiwan (see Figure 7).

### *Line of equidistance*

The line of equidistance that trends roughly north-south between China and Japan must be considered in three sections. First, there is the northern section where there is no territorial dispute between the two countries. Second, there is the central section in the vicinity of the Diaoyu Dao, which the Japanese call the Senkaku Islands. Both China and Japan claim

Figure 7: China – Japan



sovereignty over these islands which are presently occupied by Japan. Third, there is the section off the east coast of Taiwan where there is no dispute over the ownership of islands.

The line of equidistance was constructed graphically using the following charts; Chinese Navy Chart 00011 on a Mercator projection at a scale of 1:2.5 million at 30° N (Chinese Navy, 1994); British Admiralty chart BA 2412 on a Mercator projection at a scale of 1:1.5 million at 29° N (The Hydrographer, 1992); Chinese chart 03069 on a Mercator projection at a scale of 1:4 million at 30° N (The Navigation Guarantee Department of the Chinese Navy Headquarters, 1997).

The northern section of the line of equidistance commences in the vicinity of 20°46' N and 125°55' E at a point equidistant from Mara Do in Korea, Hai Jiao in China and a small island in

Japan's Danjo Gunto (The Hydrographer, 1966: 76; The Hydrographer, 1968: 306; The Hydrographer, 1979: 124). This is very close to Point 6 on the boundary defining the South Korean-Japanese Joint Development Zone (Charney and Alexander, 1993: 1,073). This segment of the South Korean-Japanese joint zone defined by Points 6, 7, and 8 of the 1974 agreement (Charney and Alexander, 1993: 1,073), which is not binding on China, almost coincides with the line of equidistance between the nearest territories of China and Japan. This analysis of the northern section of the Chinese-Japanese line of equidistance commences at the location of Point 8 at 30°18.2'N and 126°05.5'E. It is equidistant between Hai Jiao off the mouth of the Chang Jiang and the southernmost island of Japan's Danjo Gunto.

From Point 8 the boundary of the Joint Development Zone trends southeast while the line of equidistance between the outlying islands of China and Japan trends south and then southwest to a point about 140nm distant. This point, located in the vicinity of 28°18'N and 124°55'E is equidistant from China's Yushan Liedao, Japan's Tori Shima and Chiwei Yu, called Sekibi Sho by the Japanese that is the most easterly Diaoyu Dao/Senkaku island. The Japanese features that were used to generate the line of equidistance are Danjo Gunto, Yokoate Shima, Io Tori Shima and Tori Shima (The Hydrographer, 1979: 74, 86 and 90). All these features are likely to be used as basepoints from which extended maritime claims can be made in accordance with Article 121 of the 1982 Law of the Sea Convention. The three Chinese features used to generate the line of equidistance are all points on China's baselines proclaimed in May 1996. They are Hai Jiao, called Tung Tao in the British Sailing Directions, Liangxiongdi Dao called Wai Shuai Shan in the Sailing Directions and Yushan Liedao (The Hydrographer, 1968: 247, 288, and 306). These features are also basepoints from which extended maritime claims are likely to be made in accordance with Article 121.

The central section of the line of equidistance related to the Diaoyu Dao/Senkaku Islands must now be considered. The dispute over sovereignty means that it is necessary to draw two lines of equidistance. Because these islands are not extensively described in the literature dealing with this dispute a brief account of their characteristics is provided.

The Diaoyu Dao/Senkaku Islands consists of five islands and three rocks standing above the high-water line in three shoal areas. The islands Diaoyu Dao [Uotsuri Shima], Bei Xiaodao [Kitako Shima] and Nan Xiaodao [Minamiko Shima] and the rocks Feilai [Tobi Se], Peihshiao [Okinokita Iwa] and Nanhsiao [Okinominami Iwa] are situated on a triangular shoal area measuring 10nm<sup>2</sup> with depths less than 100m. Diaoyu Dao with an area of 3.5km<sup>2</sup> is the largest island in the Group. There are twin peaks at the east and west end of the island which stand 349m and 362m respectively. On the ridge joining them there is an obvious pinnacle. According to Findlay (1889: 1,135) the other islands in this archipelago were known as The Pinnacle Group; his name for Diaoyu Dao was Hoa-pin-su. Choon-Ho Park (1972: 37) notes that the Japanese name Senkaku, bestowed in 1900 means "*a pointed house.*" Nan Xiaodao is a barren rocky island that rises to 148m; it has an area of 49 hectares. The adjoining Bei Xiaodao is also a barren rocky island that rises to 128m; it has an area of 39 hectares. Feilai is an isolated rock standing 1m above the sea. Tide rips form between this rock and Diaoyu Dao and are marked on the Japanese chart. Peihshiao and Nanhsiao are barren rocks, sometimes called islets that stand 23 and 4m respectively above high water.

Huangwei Yu [Kobi Sho] lies 11nm northeast of Pseihshiao and is the summit of an extinct volcano standing 116m above high water. This island has an area of 79 hectares and was covered with palm trees and undergrowth, The coast is marked by cliffs bordered by large

blocks of lava. The waters between Huangwei Yu and the main group of islands reaches depths of 148m. Chiwei Yu [Sekibi Sho], the most isolated of the Diaoyu Dao/Senkaku Islands, lies 48nm east of Huangwei Yu. It is a steep-to bare volcanic islet rising to 83m. The waters separating Huangwei Yu and Chiwei Yu have depths of 140m.

It is evident from this brief description that the islands and rocks have little value as territory that might be settled, cultivated or mined. The real value of these islands is that they permit claims to the surrounding seas and seabed which respectively might contain valuable fish stocks and reserves of natural gas and oil. From the islands can be claimed an EEZ of 200nm; the same claim can be made from rocks if they can support habitation or if they have an economic life of their own in accordance with Article 121(3) of the 1982 Convention. In our estimation all these features may be used as basepoints in accordance with Article 121 of the 1982 Convention to claim extended maritime zones. This view is based on the fact that some features are islands and not rocks and the others are rocks close to them. It is widely accepted that Article 121, which was badly drafted, was designed to prevent extended claims from fragments of rock standing above high tide in the open sea that would reduce the common areas of seas and seabed (Charney, 1999: 866). None of the rocks in Diaoyu Dao/Senkaku Islands falls into that category. Charney (1999: 874-5) has shown that it is logically inconsistent to apply Article 121(3) to rocks involved in the construction of baselines due to their proximity to coastlines. Although some authors have tried to apply the test in paragraph 3 of Article 121 to barren islands as well as rocks there is no proof that this interpretation was intended.

Although it would be possible for China and Japan to divide the sovereignty of the Diaoyu Dao/Senkaku Islands, the two lines of equidistance constructed assume first that China owns all the islands and second that Japan owns all the islands. If China owned all the Diaoyu Dao/Senkaku Islands the line of equidistance would trend first southwards for about 145nm, from the southern terminus of the northern section of the line of equidistance, and then eastwards for about 170nm. This line is marked by the Points A, B and C on Figure 7. The Japanese basepoints on which this central section of the line of equidistance is based are Tori Shima, Nishime Saki [Cape], Yaebi Se, Minna Shima, Hirakubo Saki, Iriomote Shima and Yonakuni Shima (The Hydrographer, 1979: 69, 71-2 and 74). The Chinese basepoints would be Yushan Liedao off the mainland coast of China, Chiwei Yu [Sekibi Sho], Nan Xiaodao [Minamiko Shima] and Diaoyu Dao [Uotsuri Shima] in the Diaoyu Dao/Senkaku Islands, and Mien-hua Yu off the northeast coast of Taiwan (The Hydrographer, 1979: 73-4; The Hydrographer, 1968: 201). The southwest terminus of this line of equidistance would lie in the vicinity of 25°18 N, 122°52. E and be equidistant from Mien-hua Yu, Yonakuni Shima and Diaoyu Dao [Uotsuri Shima].

If the Diaoyu Dao/Senkaku Islands belonged to Japan the line of equidistance would also begin at the southern terminus of the northern section. It would then trend southwest for about 150nm and then southwards for about 105nm to reach the same terminus as the line of equidistance that assumed China owned all the Diaoyu Dao. This line joins the Points A,D and C on Figure 7. The Japanese basepoints that generate this line of equidistance are Sekibi Sho [Chiwei Yu], Kobi Sho [Huangwei Yu] and Uotsuri Shima [Diaoyu Dao] in the Diaoyu Dao/Senkaku Islands and Yonakuni Shima (The Hydrographer, 1979: 69 and 73-4). The corresponding Chinese basepoints are Yushan Liedao, Taizhou Leidao, P'I Shan, Beijishan, called Pei-chi Shan in the Sailing Directions, off the mainland coast of China and P'eng-chia Yu and Mien-hua Yu off the northeast coast of Taiwan (The Hydrographer, 1968: 201-2, 230, 242, 244 and 247).

The two lines of equidistance in the central section enclose an area of 19,800nm<sup>2</sup> (67,800km<sup>2</sup>) and almost all of it is sea and seabed. When this area is related to the configuration and structure of the seabed the following characteristics emerge. The area straddles the junction between the continental shelf, and the continental slope that descends comparatively steeply to the deep ocean floor. In this area the 200m isobath can be considered to divide the geological continental shelf from the geological continental slope. The western continental shelf zone occupies 74% of the total area attached to the Diaoyu Dao/Senkaku Islands. Both these areas might contain oil or gas fields and they include valuable fishing grounds (Morgan and Valencia, 1992: 81-91 and 109-12). If China owned the Diaoyu Dao/Senkaku Islands the area attached to those islands would represent 4.7% of the EEZ of China excluding the Spratly islands. If the Diaoyu Dao/Senkaku Islands are considered to be part of Japan the area attached to them is less than 2% of the EEZ of Japan. However only about 39% of Japan's EEZ consists of continental margin whereas the equivalent figure for China is about 80% (The Geographer, 1972).

The southern section of the line of equidistance between China and Japan extends for about 210nm from the conjunction of the two lines of equidistance surrounding the Diaoyu Dao/Senkaku Islands and the tri-junction of claims from China, Japan and the Philippines (see Figure 9). This point is located off the eastern entrance to Bashi Strait in the vicinity of 22°10' N and 123° 40' E. The Chinese basepoints from which the line of equidistance is derived are Mein-Hua Yu, San-tiao Chiao, Kei-shan Dao, Pei-chiao, Wu-Shih Pi, Hua Lien, Shih-t'i Pi and an unnamed point lying 5nm north, Lu Dao and Lan Yu (The Hydrographer, 1968: 203, 205, 207-8, 210, 213). The two Japanese basepoints used in constructing the line of equidistance are Yonakuni Shima and Haderama Shima (The Hydrographer, 1979: 69-70).

*Factors that might encourage discussion about deviations from the line of equidistance*

There do not appear to be any reasons why Japan would suggest that the northern section of the line of equidistance would make an inequitable maritime boundary. Such a boundary would give full effect to Japan's chain of islands, stretching southwestwards from the its heartland, and access to shallow areas of the continental margin where there are considerable thicknesses of sediment. Morgan and Valencia (1992: 84) show that these areas have good prospects for oil discovery.

In contrast, it would be remarkable if China did not oppose the use of the line of equidistance as a basis for a seabed boundary. Geologically and geomorphologically the continental margin bounded by the Okinawa Trough is Chinese. It stretches seawards from the mainland coast of China and it has been formed mainly by the filling of marginal basins with sediment provided by Chinese rivers (Morgan and Valencia, 1992: 81-2). The imperfect concept of natural prolongation fashioned in the North Sea by the International Court of Justice in 1969 is perfectly illustrated by the continental margin of the East China Sea.

A similar situation exists in the Timor Sea where Australia is in the situation of China and Indonesia and East Timor correspond to Japan. In 1972 Australia was able to secure an agreement with Indonesia for a seabed boundary based on geomorphology rather than equidistance (Prescott, 1985:104-5). In the judgment in the case between Libya and Malta in 1985 the International Court of Justice seemed to reserve issues of natural prolongation for areas more than 200nm from a country's baseline (Weil, 1989: 38-45). However, it is a fact that in 1989 and 1997 Australia reached agreements with Indonesia that enabled Australia to control or share control over areas of seabed beyond the line of equidistance (Charney and

Alexander, 1993: 1,245-1,329; Prescott, 1997). With this precedent it can be expected that China will explore the possibilities of securing a seabed boundary with Japan that does not coincide with the line of equidistance. This analysis will not review the possible arguments that might be deployed by both sides but simply identify a range of possible delimitations.

These can be arranged along a spectrum bounded by the outcomes that will give the maximum areas of sea and seabed to China and Japan. For China, two boundaries would be needed. The water column divided by the line of equidistance and the seabed by a line coincident with the axis of the Okinawa Trough. While separate boundaries for the sea and seabed are rare Australia and Indonesia and Australia and Papua New Guinea have shown that they can operate without difficulty if treaties are carefully drawn and relations between the two countries are cordial. For Japan the optimal boundary would coincide with the line of equidistance. From China's optimal maritime boundaries other possibilities can be arranged in a theoretical list of Chinese preference. The second and third options involve using the line of equidistance to divide the water column and establishing the seabed boundary between the line of equidistance and the axis of the Okinawa Trough. For example, the second preference could be for the seabed to be divided by the 200 metre isobath. Then the third preference might be for a line between the line of equidistance and the 200 metre isobath. The fourth theoretical Chinese preference might be for a joint seabed zone bounded by the line of equidistance and either the axis of the Okinawa Trough or the 200 metre isobath.

With respect to the central section of the line of equidistance discussions about the fitness of a line of equidistance to form an equitable maritime boundary must follow an agreement on sovereignty over the Diaoyu Dao/Senkaku Islands. There is no public evidence to suggest that a solution to this dispute is near. This probably means that the stalemate will continue. Japan will continue to occupy the islands but will be unable to make significant use of the waters and seabed that lie within lines of equidistance. Apart from the policy of masterly inactivity by both sides there is one other possibility. The countries could agree to establish a joint development zone in the marine domain that appertains to the Diaoyu/Senkaku Islands. Such an agreement would conform to the spirit of Article 74 and 83 of the 1982 Convention on the Law of the Sea. These two articles deal in identical terms with the determination of boundaries separating national exclusive economic zones and continental margins respectively.

*Pending agreement...the States concerned, in a spirit of understanding and cooperation, shall make every effort to enter into provisional arrangements of a practical nature and, during this transitional period, not to jeopardize or hamper the reaching of the final agreement (Articles 74 and 83 of the 1982 Convention on the Law of the Sea).*

There are now several such agreements in existence and so it would not be difficult to find a model that could be adjusted to suit the needs of this particular situation (Miyoshi, 1999). The merit of such a policy is that exploration could then be conducted so that the hydrocarbon potential of this province could be determined. If there are useful deposits then both countries could obtain some benefit from them. However mineral exploration of this continental shelf is probably a more urgent matter for Japan than for China. Japan has very restricted areas of prospective continental shelf whereas China still has extensive areas that are unexplored.

In this context it is perhaps significant that Japan and China have already reached agreement on a joint fisheries zone located to the north of the Diaoyu Dao/Senkaku Islands. A bilateral

fisheries agreement between China and Japan signed on 11 November 1997. The agreement circumvented the Diaoyu Dao/Senkakus issue by shelving EEZ issues and establishing a jointly controlled provisional sea zone between 30.4° and 27° N and excluding areas within 52nm of the two states' coasts. In areas south of 27° (i.e. around the disputed islands) it was agreed that current fishing activities would continue.

This review of the possible maritime boundaries separating the domains of China and Japan in the East China Sea reaches no conclusion about the likely location of any marine boundary or boundaries. It does establish that the negotiation of this line or lines will be complicated by the geomorphology and geology of the Okinawa Trough and the territorial dispute over the Diaoyu Dao. It seems probable that any negotiations will be protracted unless the two countries decide to create some joint development zones in respect of the seabed and perhaps in some sections of the water column as a temporary solution.

It seems unlikely that Japan would wish to argue that the southern section of the line of equidistance would create an inequitable maritime boundary. If China attaches importance to its ability to claim an exclusive economic zone that terminates at the high seas its best chance lies east of Taiwan. This aim could be achieved if Japan and the Philippines, or one of those countries, agreed to waive the use of lines of equidistance and to give China a corridor to the high seas. China could reward such an accommodation by these countries with adjustments elsewhere along their boundaries with China.

## **China – North Korea**

### *Introduction*

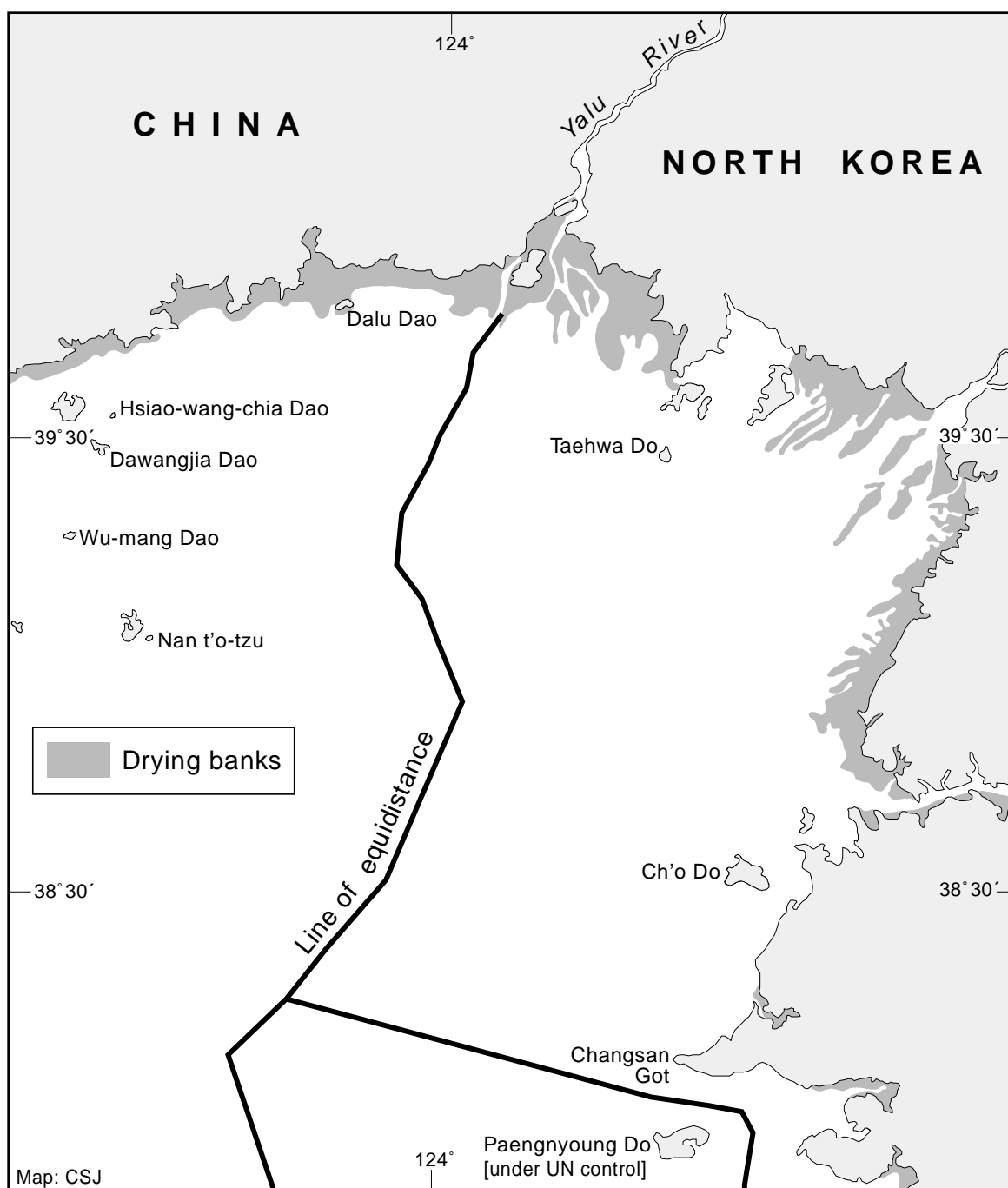
China and North Korea are adjacent states in the north of the Yellow Sea and they both claim territorial seas 12nm wide and EEZs extending 200nm from their basepoints. The configuration of their coasts and the presence of offshore islands creates the very large Korea Bay that means they could also be considered to be opposite countries. The line of equidistance drawn between the basepoints of both countries separates their territorial seas within 12nm of the coast and their exclusive economic zones beyond that distance.

### *Line of equidistance*

The line of equidistance was constructed using two charts. The first is an American chart (Defense Mapping Agency, 1986) at a scale of 1:864,700 at latitude 38° N on a Mercator projection. The second is a Chinese chart (The Mapping Agency of the Navigation Guarantee Department of the Chinese Navy Headquarters, 1993) at a scale of 1:750,000 at 30° N on a Mercator projection (see Figure 8).

The chief problem in delimiting a line of equidistance separating the territorial waters and EEZs of China and North Korea is determining where the boundary begins in the Yalu River and ends at the tri-junction with South Korea. The southern part of the land boundary between China and North Korea is assumed to lie along the Yalu River.

Figure 8: China – North Korea



This assumption is necessary because no treaty has been found which delimits the boundary between China and North Korea and is based on the following inferences. Hulbert (1962, Vol.1, Chapters 3 and 4) describes the Yalu and Tumen Rivers as early political limits between Korean and Chinese administrations. The peace treaty that ended the war between China and Japan in April 1895 ceded the southern portion of China's Feng-Tien Province and defined part of the cession by a line which "...begins at the mouth of the Yalu River and ascends that stream to the mouth of the River An-Ping..." (Prescott, 1975: 502). That territory, defined in the same terms, was retro-ceded to China after Japan had received clear signs of disapproval by other major powers (Conroy, 1960: 290-2). In November 1911 China and Japan signed a treaty dealing with railway traffic between Korea and China and Article 2 noted that "...the centre of



*the Yalu iron bridge [near Antung] shall be regarded as the frontier between the two countries”* (United Kingdom Inspector of Customs, 1917: Volume 2, 773). Several reputable atlases including *The Times Atlas of the World* (1994) and *The Times Atlas of China* (1974) show the boundary between China and Korea coinciding with the Yalu River.

Presumably any maritime boundary between China and North Korea would commence at the terminus of the land boundary in the mouth of the Yalu River. The mouth of the Yalu River is about 15nm wide and is occupied by numerous islands and drying banks:

*The mouth and estuary of the Amnok Kang [The Korean name for the Yalu River] is encumbered with numerous sand and mud banks. Large areas of these banks dry and they are intersected by many channels which are constantly changing. The only practicable channels are Tong sudo [channel] on the eastern side of the estuary, and So Sudo on the western side. So Sudo is the channel most generally used, as the northern part of Tong sudo is more liable to shift.*

*The boundary between China and North Korea passes down the centre of the channel of So Sudo* (The Hydrographer, 1968: 571).

The statement in the British *Sailing Directions* that the boundary passes along the western channel of the Yalu estuary corresponds to the information contained in a map based on information provided by the Department of the Geographer in the Department of State sometime after 1974.

This map entitled *Potential Maritime Zones of Northern East Asia* is drawn at a scale of 1:2.4529 million on a Mercator projection. This map locates the origin of the “*China-North Korea hypothetical equidistant line*”, outside the western channel leading into the Yalu River. This hypothetical line is continued landwards by a short black line that might be a representation of the boundary that passes along the Yalu River. The terminus of the river boundary in the mouth of the So Sudo appears to be in the vicinity of 39°43’N and 124°08’E. These coordinates were derived from a chart published by the United States’ Defense Mapping Agency (1986).

Although the *Sailing Directions* notes that the boundary coincides with the centre of the So Sudo it would be more usual for a boundary drawn in such a river to coincide with the talweg which is the deepest continuous channel. The *talweg* ensures that each side has equal rights of navigation. A boundary drawn along the mathematical centre of the river might intersect the navigable channel and place sections of that channel entirely within China or entirely within North Korea. Such an outcome might be considered unsatisfactory.

If Tong Sudo is a useful channel for navigation by Chinese mariners travelling along the Yalu River, either throughout the year or in particular seasons or weather conditions, it is possible that China might wish to negotiate access rights to use the channel when any maritime boundary is delimited with North Korea if such rights do not already exist.

A line of equidistance was constructed graphically on Chart 94033 (Defense Mapping Agency, 1986) between overlapping claims by China and North Korea (see Figure 8). The line originates at a point in the mouth of So Sudo identified above. The line of equidistance extends generally south-southwest through six segments for a distance of about 100nm to a point with the

coordinates 38°16'N and 123°36'E. This point appears to be equidistant from an islet called Nan t'o-tzu belonging to China, Changsang Got [Point] belonging to North Korea and Paengyoung Do [Island] under the control of the United Nations (The Hydrographer, 1968: 545, 548 and 582-3). The Chinese basepoints that were involved in generating the line of equidistance are two points on the low water line of the extensive inter-tidal zone of the Yalu River delta, Dalu Dao and Nan t'o-tzu (The Hydrographer, 1968: 577 and 582-3). The equivalent North Korean basepoints are a point on the low-water line of the Yalu Delta, Taehwa Do, Ch'o Do and Changsan Got (The Hydrographer, 1968: 548-9 and 560).

Paengyoung Do is one of the Taech'ong Kundo [archipelago] which is under the control of the United Nations and the sovereignty of which is disputed by North and South Korea. The Chinese view on this territorial dispute is not known. Clearly if the islands belonged to North Korea then the line of equidistance between China and North Korea would extend about 100nm southwards to a point with the coordinates of 36°43' N and 124°02' E (see Figure 18). This point is equidistant from Lu Erh Shih belonging to China, Sochong Do one of the islands claimed by both North and South Korea and Tonggyongnyolbi Do belonging to South Korea (The Hydrographer, 1968: 368, 506 and 544-5).

*Factors that might encourage discussions about deviations from the line of equidistance*

It is not clear what arguments might be used by either side to suggest that the line of equidistance was not an equitable boundary. All the offshore features noted are islands within the meaning of Article 121 of the LOS Convention. While it is the case that the islet Nan t'o-tzu is the Chinese basepoint to which much of the line of equidistance is related this is appropriate. It is the outermost point of an archipelago which fringes the coast of the Liaodong Bandao [Peninsula]. It would not be unusual if China completed its straight baselines announced in May 1966 by enclosing Changshan Qundao and attaching its islands and rocks to the peninsula by a system of straight baselines.

## **China – Philippines**

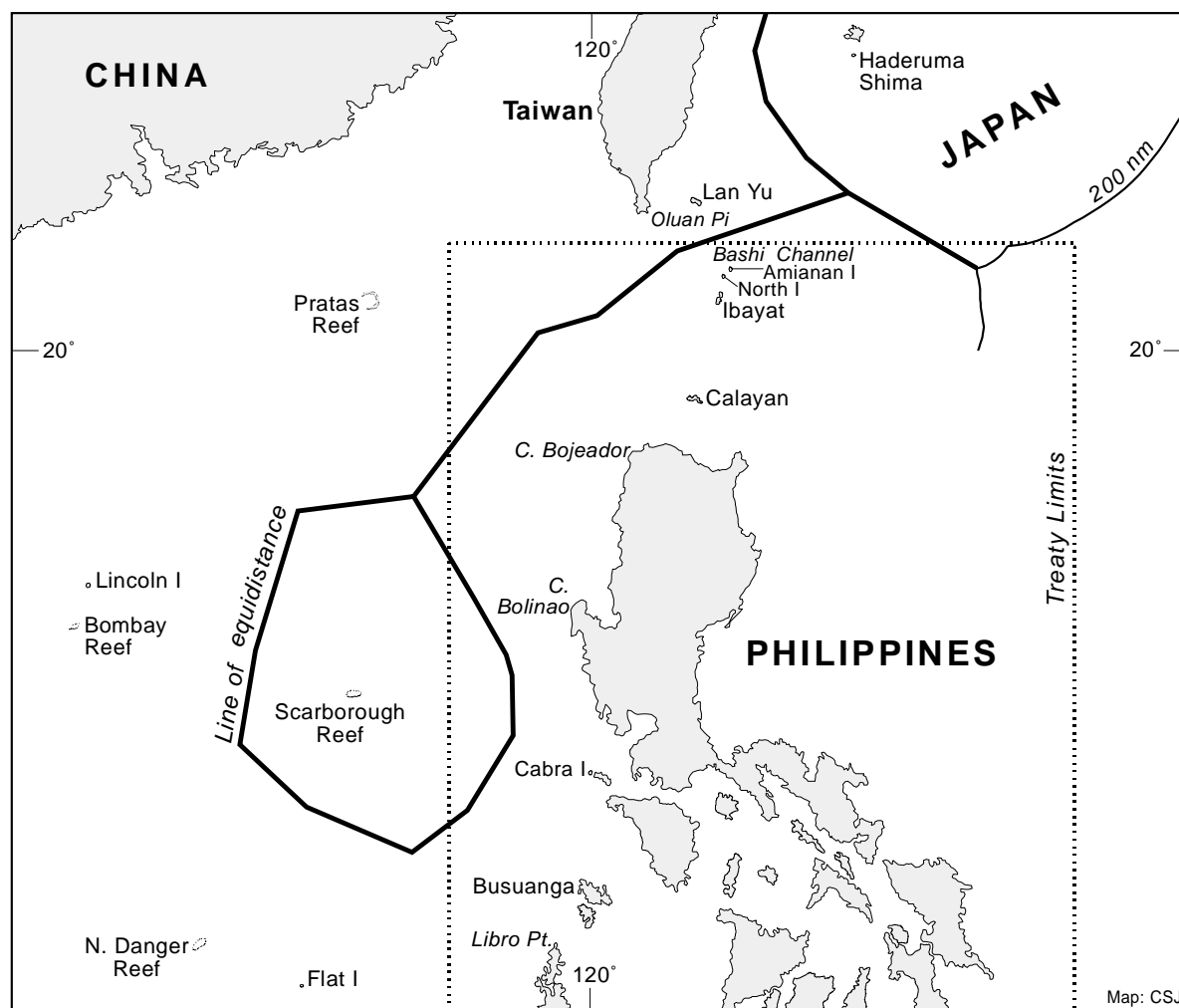
*Introduction*

This analysis makes two assumptions for the purposes of simplification. First, China is deemed to consist of The People's Republic of China and the Republic of China which means that the line of equidistance applies to a united China. If in the future the two part of China agree to exist separately then the line of equidistance defined here will apply in different sections to the separate parts. Second, the Philippines claim to maritime zones defined by its Treaty Limits has been ignored in the construction of the line of equidistance. This issue will be discussed as one of the factors that the Philippines might use to argue that a line of equidistance is inequitable.

China and the Philippines have each claimed EEZs 200nm wide. At no point does the territorial proximity of the two countries require the construction of a territorial sea boundary.

*Line of equidistance*

The chief complication in delimiting the line of equidistance is that China and the Philippines dispute ownership of Scarborough Reef which the Chinese call Huangyan Dao. Scarborough Reef lies 120nm from the west coast of Luzon and outside the Treaty Limits that established the territory of the Philippines (see Figure 9). There is no island on Scarborough Reef but there are rocks and the most prominent is South Rock standing 10 feet above high-water.

**Figure 9: China – Japan – Philippines**

Comparison of the chart produced by Edward Wilds Master Commanding HMS *Swallow* in 1866 at a scale of 1:48,900 and modern publications show that the topography of the reef does not appear to have changed significantly in 136 years and that South Rock is still in place. It is not disputed that this reef has attracted fishermen for many years and it would be reasonable to assume that the rocks and the drying reef they stand on can sustain an economic life of their own in the context of a broad interpretation of this requirement under Article 121(3) of UNCLOS. In short it is expected that whichever country establishes sovereignty over Scarborough Reef will use it as a basepoint from which maritime claims are made. It is equally true that whichever country fails to establish sovereignty over this feature will argue that it is no more than a rock, incapable of generating extended claims to maritime jurisdiction.

Since the dispute undeniably exists, two lines of equidistance have been drawn to show the effect of sovereignty over Scarborough Reef being held by China and the Philippines. The seas and seabed attached to Scarborough Reef cover about 54,000nm<sup>2</sup> (185,500km<sup>2</sup>) contained within lines of equidistance drawn between Scarborough Reef and the coast of Luzon, Pratas Island, the Paracel Islands and the northernmost islands in the Spratly Group. That area would add 14% to the extent of seas and seabed that China can claim to line of equidistance and 10% to the equivalent area available to the Philippines (The Geographer, 1972a).

The lines of equidistance were constructed graphically using the following charts: Chinese Navy Chart 0307 on a Mercator projection at a scale of 1:1 million at latitude 30° N (Chinese

Navy, 1998); Chinese Chart 03069 on a Mercator projection at a scale of 1:4 million at latitude 30° N (The Navigation Guarantee Department of the Chinese Navy Headquarters, 1997); British Admiralty chart BA 3489 on a Mercator projection at a scale of 1:1.5 million at latitude 12° N (The Hydrographer, 1998); and British Admiralty chart BA 1263 on a Mercator projection at a scale of 1:4.84 million at latitude 15° N (The Hydrographer, 1977).

The line of equidistance can be considered in three sections. The northerly section extends for about 450nm from the trijunction of claims by China, Japan and the Philippines to the point that is equidistant from Dongsha Qundao [Pratas Reef], Scarborough Reef and Cape Bolinao on the west coast of Luzon. The northern terminus is located off the eastern entrance to Bashi Strait in the vicinity of 22°10' N and 123° 40 E and the southern terminus is in the vicinity of 17°50' N and 117°20 E.

The Philippine basepoints on which this section of straight baselines is based are Amianan Island, North Island, Mabudis Island, Ibayat Island, Dequey Island, Calayan Island, Dalupiri Island, Cape Bojeador, Culili Point, Pinget Island, the coast near Point Dile, Cape Bolinao and Scarborough Reef (The Hydrographer, 1968: 146, 154-5, 158 and 160-1; The Hydrographer, 1975: 157, 164, 166 and 168). The Chinese basepoints on which this section of the line of equidistance is based are Lan Yu [Island], Oluan Pi [Cape], Mau-pi Tau, Dongsha Qundao and Scarborough Reef (The Hydrographer, 1968: 163 and 203; The Hydrographer 1978: 65-6).

Two southern extensions of the line of equidistance have been constructed. The first is based on the assumption that Scarborough Reef is Chinese territory. This section extends for about 370nm and the Philippine basepoints used are Cabra Island, Busuanga Island, Libro Point (The Hydrographer, 1975: 128 and 158; The Hydrographer, 1978a: 56). The terminus of this section of the line of equidistance is in the vicinity of 12°40' N and 117°25' E and is equidistant from Scarborough Reef, Busuanga Island and Flat Island, which is one of the Spratly Islands (The Hydrographer, 1975: 134).

The second southern extension assumes that Scarborough Reef is Philippines territory. This section measures about 300nm and the Chinese basepoints used are Donsha Qundao and Dong Dao [Lincoln Island] and Langhua Jiao [Bombay Reef] in the Xisha Qundao (The Hydrographer, 1978: 62-3). The terminus of this section of the line of equidistance is in the vicinity of 14°20' N and 114°55' E and is equidistant from Xisha Qundao, Scarborough Reef and North Danger Reef that is one of the Spratly Islands (The Hydrographer, 1975: 132). The southern limit of the sea and seabed attached to Scarborough Reef is a line joining the termini of the two southern sections of the lines of equidistance. This line is equidistant from Scarborough Reef to the north and North Danger Reef, West York Island and Flat Island in the Spratly Islands group.

*Factors that might encourage discussions about deviations from the line of equidistance*

There do not appear to be strong arguments that would enable either country to claim that the northern section of the line of equidistance would make an inequitable maritime boundary. However, it is possible that both countries might raise the issue of equity for different reasons. First China might draw attention to the fact that the equidistant claims of China, Japan and the Philippines result in China being unable to claim an exclusive economic zone 200nm wide, This occurs because the Japanese islands Sakishima Gunto [archipelago] and the most northerly Philippine islands lie seawards of Lan Yu China's most easterly island. The territorial configuration of China and its neighbours prevents China from claiming to the full limit of

200nm anywhere. If China attached importance to this disadvantage, favourable consideration of this matter by Japan and the Philippines would offer the best opportunity of overcoming it. Any favourable consideration could be the subject of off-setting adjustments in other sections of the maritime boundaries of China and these two neighbours.

It is not known whether the Philippines will argue that the Treaty Limits provide an historic claim to the waters lying within them. Such a claim appears to have no validity in modern international law. The Treaty Limits were established in two treaties. The first signed in Paris on 10 December 1898 specified in Article III that “*Spain cedes to the United States the archipelago known as the Philippines Islands and comprehending the islands lying within the following lines...*” (Parry, 1979: 101). There is no mention of any cession of seas. The second treaty signed in Washington DC on 7 November 1900 arranged for Spain to relinquish title and claims to title and all islands “*...lying outside the lines described in Article III of that Treaty [1899]...*” (Parry, 1979a: 109). The second treaty then goes on to refer particularly to the islands of “*Cagayan Sulu and Sibutu and their dependencies*” (Parry, 1979a: 109). The redefinition of the Treaty Limits was completed in 1930 when Britain and the United States of America delimited the line separating the Philippines Islands on the one hand from the islands belong to British North Borneo [Sabah] (League of Nations, 1933). There is no suggestion in any of these arrangements that Scarborough Reef was one of the claimed features lying outside the lines described in Article III.

If the Philippines suggested that its Treaty Limits represent an historic claim to seas it would be asking China to abandon maritime areas measuring 14,000nm<sup>2</sup> (48,000km<sup>2</sup>) in the northwest corner of the Treaty Limits that are conveyed to China by a line of equidistance. In view of the weakness of the historical waters concept it is not obvious why China should make such a major concession. If this became a matter for discussion China might draw attention to the ambiguity of the Treaty Limit in the *Paris Treaty*. Article III refers to a line running east to west along or near the 20<sup>th</sup> parallel of north latitude through the middle of the navigable Bashi Channel whereas the line selected is parallel 21°30' N 90 nm northwards (Prescott, 1981, 16-7).

It is now necessary to consider the two southern sections of the line of equidistance. If China held sovereignty over Scarborough Reef the Philippines would be highly likely to argue that a line of equidistance based on Scarborough Reef would make an inequitable maritime boundary. Such a line of equidistance, based on a small, rocky, uninhabited rock-like feature distant from mainland China, would approach within 60nm of the coast of Luzon – one of the main islands of the Philippines archipelago. The Philippines would also be likely, as a matter of principle, to argue strongly for the use of its archipelagic baselines in any delimitations, including the potential one with Scarborough Reef. Nevertheless, China would be likely to resist any solution based on enclaving the feature.

In contrast, if the Philippines held Scarborough Reef a line of equidistance based on it would still be 140nm from the nearest Chinese territory in the Xisha Qundao (Paracel Islands). This archipelago lies 150nm from Hainan Dao that might be considered part of the Chinese mainland.

## China – South Korea

### *Introduction*

China and South Korea face each other across the Yellow Sea. Both states claim territorial seas 12nm wide and EEZs measuring 200nm from their basepoints. The line of equidistance between the two countries will separate their EEZs. There are no disputed territories between the two countries but the territorial dispute between North and South Korea over the northwest islands might cause the Chinese authorities to delay negotiating any boundary that involves these islands (see Figure 18).

### *Line of equidistance*

The line of equidistance that divides overlapping Chinese and South Korean claims to EEZs extends for about 510nm from the tri-junction with North Korea in the vicinity of 38°16'N and 123°36'E (see Figure 18) to the trijunction with Japan in the vicinity of 30°46.2'N and 125°55.5'E (see Figure 7). The North Korean tri-junction was derived by manual calculation while the Japanese tri-junction was adopted from Point 6 in the delimitation of the Joint Development Zone agreed between Japan and South Korea in 1974 (Charney and Alexander, 1993: 1,068). When this tri-junction was derived graphically it was very close to the values given for Point 6 in the 1974 treaty.<sup>6</sup>

The line of equidistance was constructed on two overlapping American charts at scales of 1:1 million and 1:864,700 (Defense Mapping Agency, 1986 and 1990). Four Chinese charts were also consulted (The Mapping Agency of the Navigation Guarantee Department of the Chinese Navy Headquarters, 1992, 1993, 1993a and 1993b). It was then transferred to a Chinese chart showing its territorial sea baselines (The Navigation Guarantee Department of the Chinese Navy Headquarters, 1997). This non-navigational chart is at a scale of 1:4 million and was used to allow the construction of figures attached to this analysis.

As expected, the line of equidistance between the two tri-junctions follows the alignment of the two coasts and their associated islands. Thus the line curves southwestwards from the tri-junction with North Korea to take account of the deep embayment of the Chinese coast in the vicinity of Haizhou Wan. From this feature near parallel 35° N the line of equidistance trends southeastwards following the alignment of the Chinese coast north of the estuary of the Chiang Kiang and of the many islands off that estuary.

On the Chinese coast and islands the following basepoints, listed from the north appear to influence the location of the line of equidistance: Nan T'o-tzu, Hailu Dao, Shandong Gao Jiao, Mata Jiao, Lu Erh Shih, Moye Dao, Sushan Dao, three low-tide elevations in the vicinity of 33°N and 121°33'E, 32°16'N and 121°52'E, and 31°40'N and 122°06', Sushan Dao, She-Shan Dao and Hai Jiao (The Hydrographer, 1968: 306, 324, 365, 366-7, 368-9, 372-3 and 382). The low-tide elevations were fixed from the Chinese chart series published at a scale of 1:750,000 at 30°N by the Mapping Agency of the Navigation Guarantee Department of the Chinese Navy Headquarters (1993). The basepoints of the South Korean coast and islands that appear to influence the location of the line of equidistance are, from the north, Paengnyoung Do, Kapchuk Do, Sochong Do, Soggongnyolbi Do, Maega Do, Soheugsan Do, and Mara Do (The Hydrographer, 1968: 449, 456, 500 and 544-6; The Hydrographer, 1966: 76).

<sup>6</sup> See also Figure 17 in Prescott, 1987: 24.

*Factors that might encourage discussions about deviations from the line of equidistance*

There do not appear to be any obvious factors that would enable either China or South Korea to argue that the line of equidistance would create an inequitable maritime boundary. Both countries have offshore islands which extend their claims and China benefits from the existence of broad inter-tidal flats and associated low-tide elevations immediately north of the estuary of the Chiang Kiang that provide a significant seaward bulge in its baselines.

One possible problem might arise from South Korea's Northwest Islands which are a cause of dispute between North and South Korea (see Figure 18). China might consider that it would be inappropriate to negotiate a tri-junction point with either North or South Korea until the matter of their common boundary in the vicinity of the Northwest Islands is decided. If China wished to delimit maritime boundaries through the Yellow Sea without giving offence to the views of either North and South Korea about the Northwest Islands it would be possible to delimit the boundaries with the two Koreas excluding the section which involves the Northwest islands. The section of boundary would measure about 100 nm and would lie between a northern point with the coordinates 38°16'N and 123°36'E and a southern point in the vicinity of 36°43'N and 124°02'E. Alternatively, China could agree on a boundary with South Korea as far as the northern point and insert in the treaty a statement that the northern section of the boundary is defined without prejudice to any claims which a third state might make. This is the formula used by Fiji and France when they delimited a maritime boundary which involved two islands occupied by France and claims by Vanuatu. Article 3 of the 1983 Franco-Fijian treaty stated "*This Agreement is without prejudice to sovereign rights of any neighbouring State in the area to which it applies*" (Charney and Alexander, 1993: 1,001).

## **China – Vietnam**

### *Introduction*

The Sino-Vietnamese boundary on land, delimited and demarcated in the period 1885-95 terminates in the estuary of the Song Ka Long in the northwest of the Gulf of Tongking [Tonkin], known in China as the Beibu Gulf and in Vietnam as the Bac Bo Gulf (United States Army Map Service, 1953). From their respective baselines China and Vietnam claim territorial seas 12nm wide, a contiguous zone of 24nm, and EEZs measuring 200nm (Office of Ocean Affairs, 2000). China and Vietnam are adjacent states and occupy opposite sections of the Gulf of Tongking which is extended by the existence of Hainan Dao [Island] which is part of China. Outside the Gulf the Xisha Qun Dao [Paracel Archipelago] claimed and occupied by China lies 114-168nm off the coast of Vietnam. Vietnam also claims sovereignty over what it terms the Quan Dao Hoang Sa [Paracel Islands]. The maritime boundary of these two countries will divide their territorial seas, contiguous zones and EEZs.

It has been reported that China and Vietnam agreed on a maritime boundary in the Gulf of Tonking on 25 December 2000 (Boundary and Security Bulletin, 2000-2001: 48). There are also reports from a number of sources that the text of the treaty will not be released until both countries have ratified it. An unofficial list of boundary point coordinates has been obtained by the authors but the text was not available. It was therefore decided to treat the boundary between the two countries in this review as undelimited. However, a conclusion has been added analysing the given coordinates in the context of the line of equidistance described in this section.

*The line of equidistance*

The line of equidistance between China and Vietnam through the Gulf of Tongking is based on the respective mainlands and islands close to the mainland with two exceptions. The Vietnamese Island called Dao Bach Long Vi lies 58nm from the mainland and the Chinese island called Weizhou Dao is 18nm from the coast. Outside the Gulf of Tongking features in the Xisha Qun Dao [Paracel Islands] used as basepoints lie 114nm and 168nm from the coast of Hainan Dao. The island in the Xisha Qun Dao that is closest to Vietnam is Zhongjian Dao [Triton Island] lying 120nm from Cu Lao Re. The line of equidistance was constructed on British Admiralty chart 3488 that uses a Mercator projection and has a scale of 1:1.5 million at parallel 12° N (The Hydrographer, 1997) (see Figure 10).

The line of equidistance measures about 660nm from the estuary of the Song Ka Long to a terminus lying equidistant from the nearest points of China, Vietnam and North Danger Reef in the Spratly Islands. That terminus is located in the vicinity of 13° 16' N and 112° 14' E. British Admiralty chart 3488 shows that the line of the lowest astronomic tide lies 6nm off the mainland and at that tidal level the Vietnamese island Tra Co and the Chinese island Ile de Van My are both surrounded by extensive exposed mud flats. It is not known whether the Song Ka Long flows across these mud flats to the sea at low tide during the dry season. The British sailing directions note that the Chinese port of Chuc San, that lies on the eastern bank of the Song Ka Long about 7nm from the line of the lowest astronomic tide, is only accessible to small vessels with local knowledge. It seems likely that the origin of any maritime boundary will be based where the Song Ka Long intersects the low tide elevation. It is not known whether that point changes during periods of maximum flow during the wet season.

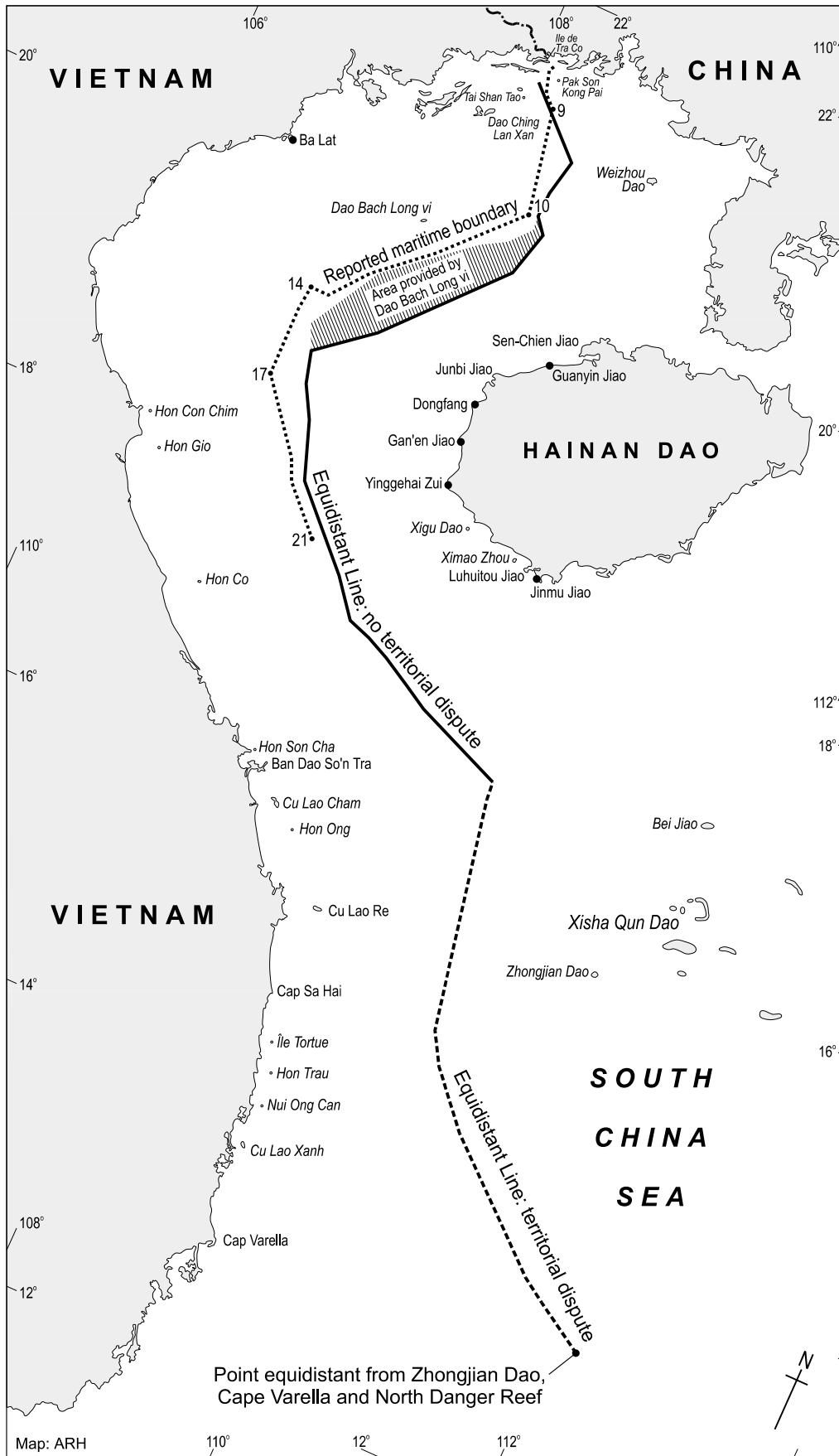
If the mouth of the river does change its location it would be sensible to place the terminus of the maritime boundary at a point a short distance offshore. Then the final segment of the maritime boundary could be a geodesic joining the fixed point and the mouth of the river wherever it happens to be. Such a point 2,000ft seawards of the coast was used by Mexico and the United States in respect of their maritime boundary off the mouth of the Rio Grande (Charney and Alexander, 1993: 439-40).

Apart from the origin in the mouth of the Song Ka Long at the line of equidistance is based on 18 Vietnamese basepoints which are all features that can serve as basepoints for extended maritime claims in accordance with the authors' interpretation of Article 121 of UNCLOS for the purposes of this Briefing. These features are Ile du Kersaint, Tai Shan Tao, Dao Ching Lan Xan, Dao Bach Long Vi, Hon Con Chim, Hon Gio, Hon Co, Hon Son Cha, Ban Dao So'n Tra, Cu Lao Cham, Hon Ong, Cu Lao Re, Cap Sa Hai, Ile Tortue, Hon Trau, Nui Ong Can, Cu Lao Zanh and Cap Varella and they are described in reverse order in the British Sailing Directions (The Hydrographer, 1978a: 139, 142, 144-8, 151-2, 158, 181-2 and 184).

Thirteen Chinese basepoints in addition to the origin in the estuary of the Song Ka Long are used in constructing the line of equidistance and they all satisfy the requirements of Article 121(3) for making extended maritime claims on the same basis as those outlined above. The features are Pak Son Kong Pai, Weizhou Dao, Sen-Chien Jiao, Guanyin Jiao, Junbi Jiao, Dongfang, Gan'en Jiao, Yinggehai Zui, Xigu Dao, Ximao Zhou, Luhuitou Jiao, Jinmu Jiao, Bei Jiao [North Reef], Zhongjian Dao [Triton Island] and they are described in the British Sailing Directions (The Hydrographer, 1978a: 62, 64, 185, 188-90 and 197-8). The Vietnamese basepoint that is involved in defining the longest section of the line of equidistance is Dao Bach Long Vi and the length is 114nm. The equivalent Chinese basepoint is Zhongjian Dao



Figure 10: China – Vietnam



which is involved in defining the eastern section of the line of equidistance that measures about 255nm.

*Factors that might encourage discussion about deviations from the line of equidistance*

This discussion is helped by considering this boundary in two sections. First there is the line of equidistance measuring about 400nm that is delimited from the origin in the estuary of the Song Ka Long to a point in the vicinity of 16°47' N and 109°56' E. In respect of this section of the line of equidistance there is no dispute over territory between the two countries. At the defined point the Paracel Islands begin to influence the line of equidistance to its eastern terminus about 260nm distant and sovereignty over these islands is disputed. It is also the case that where there is no territorial dispute the line of equidistance traverses the continental shelf at depths less than 200m and only the most easterly 16nm of this line traverses depths reaching to 1,000m.

In the section where there is no dispute over sovereignty there seems to be only one possible argument by China that the line of equidistance would create an inequitable maritime boundary. Attention could be drawn to the fact that Vietnam's Dao Bach Long Vi lying 58nm from the mainland delivers an additional 5,680km<sup>2</sup> to Vietnam. This island was awarded to France by the *Sino-French Convention* of 26 June 1887 (Prescott, 1975: 453). This convention noted that the islands in the Gulf of Tongking were allocated on the basis of meridian 108°03'13" E, which then passed through the eastern tip of Tra Co. Dao Bach Long Vi lies west of that meridian and so belonged to France and was inherited by Vietnam.

From the 1970s Vietnam maintained that the Sino-Vietnamese boundary had in fact already been defined in 1887 Convention as the meridian 108°3'13"E passing through the eastern tip of Tra Co [Island]. This division would have placed most of the Gulf on the Vietnamese side of the line. In response, China stated accurately that the 1887 line was intended merely to divide ownership over islands in the Gulf and that a boundary has yet to be determined. The use of straight lines as a form of geographical shorthand to divide islands between colonial powers was common in the late 19<sup>th</sup> century. The technique was used by Britain when it claimed islands in Torres Strait in 1879, by France and Portugal in West Africa in 1886, by Spain and the United States when they defined the Philippine Islands in 1898 and by Britain and Germany in the Solomon Islands in 1899. The 1887 agreement does not mention any division of seas or seabed, it does not provide a southern terminus for the meridian, and if it was a marine boundary Vietnam would possess no territorial seas off the eastern tip of Tra Co. If the reports of the recent boundary agreement between the two states are correct, it seems that Vietnam has abandoned its claims to a diversion from a median line on the basis of the 1887 Convention.

If China argued that Vietnam should offer some discount on claims from Dao Bach Long Vi Vietnam might respond by noting that by virtue of its geography and the proximity of neighbours its maritime zone is more confined than that of China.

The section of the equidistant line based on the coast of Vietnam and the Paracel Islands can now be considered. This line trends south and southeast over a spur of the continental slope where depths are 400-500m and after passing over areas where water depths are 2,700m terminates in waters 2,000m deep. The Paracel Islands have been occupied by China since 1974 but were certainly claimed by China as early as 1935 as shown in a list of place names of South China Sea Islands published by the Committee of Place Names (1983). This list reproduced the lists of names published in 1935, 1947 and 1983.

It is of course entirely possible that China's formal claims and association with the islands can be traced to the period before 1935. Chemillier-Gendreau (1996) produced a legal treatise on the issue of sovereignty in the Paracel and Spratly Islands. Her survey of Chinese, French and Vietnamese documents leads to the conclusion that the indigenous kingdoms of Vietnam held title over the Paracel Islands for at least two centuries before French annexation in the 1880s. Chemillier-Gendreau has no reservations about the supremacy of Vietnam's claim to the Paracel Islands. However she seems to gloss too easily over the message sent by the Premier of North Vietnam on 14 September 1958 to the Chinese government by referring to North Vietnam's dependence on China. This message recognises, in approving terms, China's declaration on 4 September 1958 claiming territorial waters 12nm around Chinese territory. This declaration makes it clear that the Paracel Islands were regarded as Chinese territory (The Geographer, 1972: 1).

If Vietnam maintains its claims to the Paracel Islands it seems unlikely that any maritime boundary that involves those features will be negotiated. It appears certain that China will not abandon its claim to and occupation of the Paracel Islands and that it will not agree to arbitration by any court or third party over this matter. If Vietnam accepted that its claim to the Paracel Islands will not succeed and boundary negotiations ensued Vietnam might argue that China's maritime claims from the Paracel Islands should be discounted. Such an argument would be supported by the marked difference in size and population of the relevant part of the Vietnamese mainland and Paracel Islands.

### *Conclusion*

As noted in the introduction to the analysis of this undelimited boundary there are reports that the two countries have delimited their maritime boundary in the Gulf of Tongking. While the text has not been seen coordinates believed to be those of the boundary have been acquired. When those coordinates are plotted the following conclusions about the basis of the boundary can be reached.

First, the boundary is restricted to the Gulf of Tongking. The southern terminus of the boundary, numbered Point 21, is located 2nm south of a line joining Mui [cape] Lay on Vietnam's coast to Yinggehai Zui [cape] at the southwest extremity of Hainan. Those capes are considered to mark the entrance to the Gulf (The Hydrographer, 1978a: 151). The length of the boundary within the Gulf is about 270nm.

Second, the boundary can be divided into two sections. The first section joining the first nine points extends about 20nm from the common low-water line southeast of Tra Co named in the Sino-French treaty of 1887. It appears that this section of the line is close to the line of equidistance. The landward section of this line will separate the territorial seas 12nm wide of China and Vietnam. The second section joining the remaining 22 points lies west of a strict line of equidistance.

Third, the position of the delimited boundary appears to ignore the existence of the Vietnamese island called Dao Bach Long Vi. The section joining points 10-13 lies very close to a strict line of equidistance giving no effect to that island. The remaining section from Point 13 to Point 21 lies from 4-16nm west of a strict line of equidistance. A table has been constructed to show the relationship of Points 12-21 to the Chinese and Vietnamese coasts. It appears to show that with two possible exceptions the boundary is based on the mainland coasts of the two countries rather than the mainland coast of Hainan and Vietnam's many offshore islands. The two

exceptions are Dao Canh Cuoc, the principal group of islands in the Archipel des Fai Tai Long and perhaps the tiny island Dao Bien Son in the vicinity of latitude 19°20' N which is attached to the mainland by a drying bank (The Hydrographer, 1978a: 155).

Fourth, it appears that China has secured about 3,200nm<sup>2</sup> beyond a strict line of equidistance. Without access to the text of the treaty it is not possible to explain why China appears to have benefited to the extent described.

## Indonesia – Malaysia (Celebes Sea)

### *Introduction*

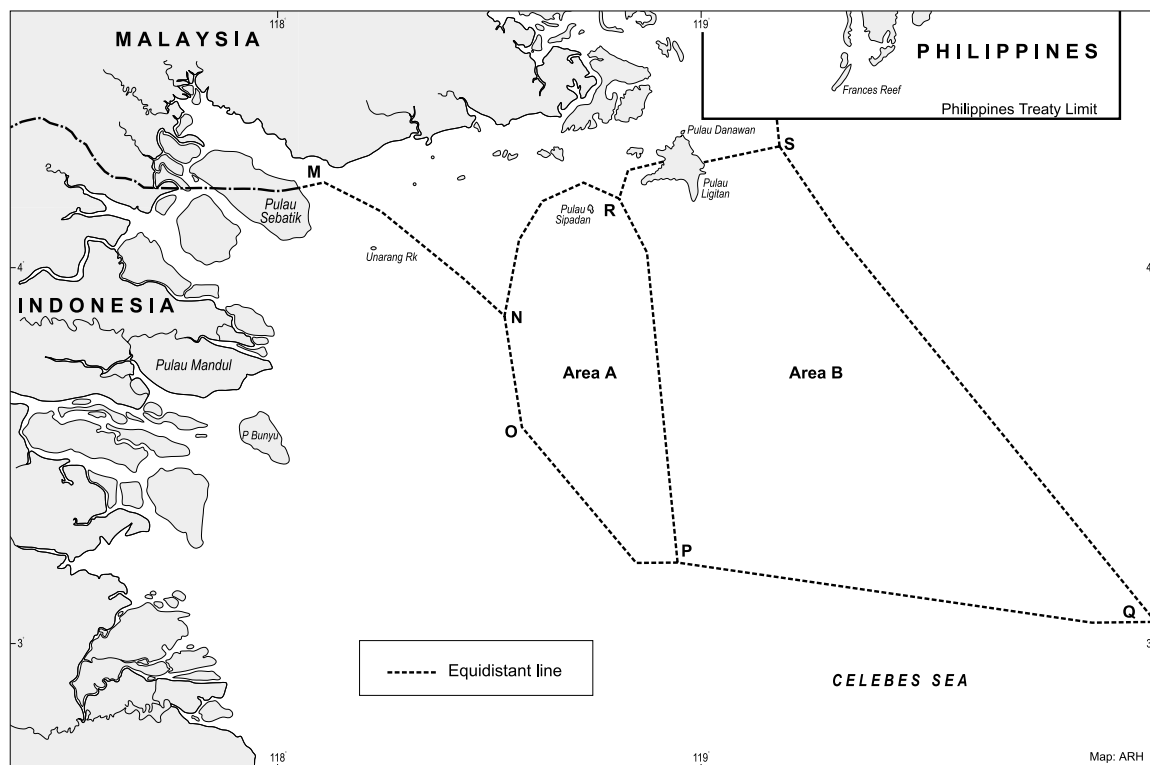
The Island of Borneo is shared by Brunei, Indonesia and Malaysia. The land boundary between Indonesia and Malaysia was settled by British and Dutch governments in the period 1891-1928 (Prescott *et al.*, 1977: 90). The western terminus of the land boundary is Tanjong Datu on the shore of the South China Sea. The eastern terminus that concerns this analysis is located in the Celebes Sea where the east coast of Pulau Sebatik is intersected by latitude 4°10' N. Indonesia and Malaysia both claim territorial seas 12nm wide and EEZs 200nm wide and the maritime boundary between Indonesia and Malaysia will separate those two zones.

Indonesia and Malaysia negotiated three seabed boundaries in 1969. Those in Malacca Strait and north from Tanjong Datu on Borneo were not lines of equidistance and favoured Malaysia. Indonesia is known to prefer a water column boundary in Malacca Strait and north of Tanjong Datu that would give it seas over part of Malaysia's seabed. It is possible that the two countries will decide to negotiate solutions to the existing non-equidistant seabed boundaries and the boundary in the Celebes Sea simultaneously. Such negotiations would provide opportunities for matching concessions.

### *Line of equidistance*

The line of equidistance was constructed graphically on American chart 2576 constructed on a Mercator projection at a scale of 1:725,600 at 5° N. In this analysis it was necessary to construct four lines of equidistance because Indonesia and Malaysia are currently engaged in a case before the International Court of Justice over which country has sovereignty over two small islands in the Celebes Sea – Pulau Ligitan and Pulau Sipadan. It was therefore necessary to draw one line of equidistance if both islands were judged to belong to Malaysia, another line of equidistance if both were judged to belong to Indonesia, and two more lines if each party was awarded one island (Figure 11).

Proceeding south from latitude 4°10' N on the east coast of Pulau Sebatik the Indonesian basepoints used in constructing the line of equidistance are Takat (Rock) Unarang, Pulau Ahus, Pulau Maratua and associated reefs and Karang (Reef) Muaras (The Hydrographer, 1976: 228 and 236-7). Surprisingly, Takat Unarang does not appear to be one of the basepoints defining Indonesia's archipelagic baselines but there appears to be no obstacle in Article 47 of UNCLOS to its use. In the first edition of the British *Sailing Directions* of 1976 it is noted that Takat Unarang is a low-tide elevation "...which dries 0.3m (1ft) and is steep-to..." (The Hydrographer, 1976: 237). In the second edition, dated 1999, the entry reads "...Unarang 4°01' N, 118°05' E) a steep-to rock..." (The Hydrographer, 1999: 342).

**Figure 11: Indonesia – Malaysia (Celebes Sea)**

It is possible that Indonesia may argue that if Takat Unarang is a low-tide elevation then Indonesia is the only country that could use it as a basepoint for its territorial sea because it lies closer to Indonesia's coast than any Malaysian basepoint. Such a proximity-based claim to sovereignty must, on its own, be considered weak. If the feature is a rock then it could belong to either country and the Malaysian seabed claim published in 1979 shows Takat Unarang within the unilateral seabed boundary shown on Malaysian maps (Director of National Mapping Malaysia, 1979). However, it is inconceivable that Indonesia would regard this feature as belonging to Malaysia. In this region the Indonesian maritime claim follows parallel 4°10' N (Departemen Pertahanan Keamanan Staf Territorial- Pankorwilnas, 1983).

Proceeding east from the east coast of Pulau Sebatik at 4° 19' N the Malaysian basepoints used in constructing the lines of equidistance are Hand Rock, Roach Reef and Ligitan Reefs (The Hydrographer, 1978a: 118-9). Pulau Sipadan and Pulau Ligitan were used as basepoints for both Indonesia and Malaysia. If Pulau Ligitan is awarded to Indonesia it is uncertain whether the award will include the extensive reef attached to the north of the island.

Figure 11 shows four lines of equidistance that enclose Area A and Area B. Area A is the sea and seabed that attaches to Pulau Sipadan and measures about 920nm<sup>2</sup>; Area B attaches to Pulau Ligitan and measures about 2,800nm<sup>2</sup>. If Malaysia was awarded both the disputed islands the line of equidistance with Indonesia would join Points M-N-O-P-Q. If both islands were awarded to Indonesia the line of equidistance between the two countries would join Points M-N-R-S. If Pulau Sipadan was awarded to Malaysia and Pulau Ligitan to Indonesia the line of equidistance would join Points M-N-O-P-R-S. If the ownership of islands was reversed then the line of equidistance would join Points M-N-R-P-Q. The equidistance line S-Q will separate

the area closest to the Philippines from the claim by the state that has sovereignty over Pulau Ligitan.

*Factors which might encourage discussions about deviations from the line of equidistance*

There do not appear to be any grounds on which Indonesia or Malaysia could argue that the line of equidistance between Points M and N would create an inequitable maritime boundary. This section is based on the mainland coasts and equivalent offshore features called Hand Rock to the north and Takat Unarang to the south.

If Malaysia secured the disputed islands of Sipadan and Ligitan it would be difficult for Indonesia to argue that the line of equidistance joining Points N-O-P-Q would create an inequitable boundary. These islands form part of the fringe of reefs, rocks and islands extending eastwards from Pulau Sebatik to Pulau Bum Bum where the coast of Sabah turns northwards.

If Indonesia secured either or both of Pulau Sipadan and Pulau Ligitan, lines of equidistance giving them full effect would deliver up to 3,720nm<sup>2</sup> of seas and seabed. In those circumstances it is probable that Malaysia would regard such lines of equidistance as being inequitable. They would probably regard Indonesian control of the two islands as equivalent to British occupation of the Channel Islands close to the French coast. Presumably Malaysia would argue that Indonesia should be content with a small enclave of seabed and waters within Malaysian claims that extended towards the vicinity of the line marked by Points N-O-P-Q.

## **Indonesia – Malaysia (South China Sea)**

### *Introduction*

In 1969 Indonesia and Malaysia delimited three seabed boundaries. The boundaries in Malacca Strait and in the South China Sea west of the Kepulauan Natuna were based on lines of equidistance (Charney and Alexander, 1993: 1,021). The boundary east of Kepulauan Natuna has its origin at Tanjong Datu on the north coast of Borneo where the Indonesian and Malaysian boundary reaches the coast between Sarawak and Kalimantan Barat. For 40nm north of Tanjong Datu the boundary follows an equidistant course before swinging progressively further westwards of the continuation of the line of equidistance in Malaysia's favour (Prescott, 1981: 39-41). Choon-Ho Park has suggested that Malaysia was rewarded by Indonesia in this delimitation for support in respect of Indonesia's claim to archipelagic waters (Charney and Alexander, 1993: 1,022).

An Indonesian map published in 1983 shows Indonesia's claim to maritime zones and a claim is shown to an area of EEZ east of the seabed boundary north of Tanjong Datu as far as a strict line of equidistance (Departemen Pertahanan Keamanan Staf Territorial Pankorwilnas, 1983). If Malaysia accepted this claim it would mean that Indonesia would control the water column over an area of Malaysian seabed similar to arrangements that exist between Australia and Indonesia in the Timor Sea where separate boundaries divide the seabed and the water column. Both Indonesia and Malaysia claim an EEZ 200nm wide. Any new boundary drawn northwards from Tanjong Datu would divide first the territorial seas of the two countries and then the water column above the Malaysian seabed.

As mentioned in relation to their Celebes Sea delimitation, Indonesia and Malaysia negotiated three seabed boundaries in 1969. Those in Malacca Strait and north from Tanjong Datu on

Borneo were not lines of equidistance and favoured Malaysia. The third, drawn north from the eastern end of Singapore Strait, is a line of equidistance and can therefore easily be raised to the status of a maritime boundary without any change in position. Indonesia is known to favour a water column boundary in Malacca Strait and north of Tanjong Datu that would give it seas over part of Malaysia's seabed. It is possible that the two countries will decide to negotiate solutions to the existing non-equidistant seabed boundaries and the boundary in the Celebes Sea simultaneously. Such negotiations would provide opportunities for matching concessions.

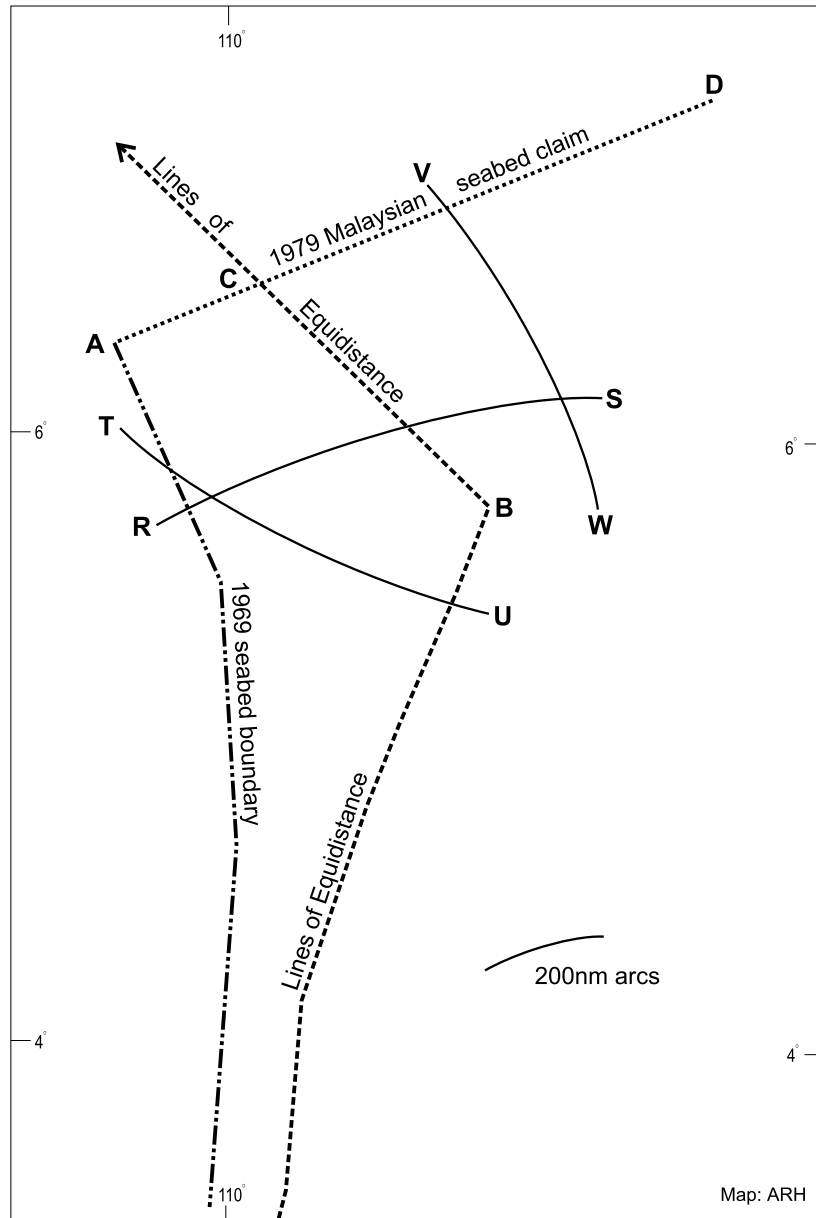
#### *Line of equidistance*

The line of equidistance dividing the water column north of Tanjong Datu would follow the 1969 seabed boundary for the first 40nm. It would then lie progressively further east of the seabed boundary for about 200nm to a tri-junction of the nearest territory of Indonesia and Malaysia and features in the Spratly Islands called Amboyna Cay and Ladd Reef. That tri-junction is located in the vicinity of 5°48' N and 110°52' E and is marked Point B on Figure 12. The Indonesian basepoints involved in the construction of the line of equidistance are Tanjong Datu, Pulau Kepala, Pulau Subi Kechil, Pulau Bunguran Besar and Pulau Laut (The Hydrographer, 1976: 40-1, 43, 47 and 49). The Malaysian basepoints are Tanjong Datu and Tanjong Sirik (The Hydrographer, 1975: 65).

If Indonesia ever agreed on a boundary to divide the water column east of the seabed boundary Malaysia will face an interesting problem. The problem is indicated in Figure 12. This figure shows the 1969 seabed boundary terminating at A and the equidistant water-column boundary terminating at B. It also shows a line B-C that is a line of equidistance between Indonesia and whichever country has sovereignty over Ladd Reef and Spratly Island. Malaysia's interesting question is how to continue its seabed boundary from Point A the terminus agreed with Indonesia.

Malaysia has already given one answer to this question in the 1979 chart showing its claims to the seabed and territorial water (Director of National Mapping, 1979). The first segment of the continuation of the seabed boundary with Indonesia is shown by the line A-D in Figure 12. However, the triangular area B-C-D lies closer to Ladd Reef, which Malaysia does not claim than to Pulau Kecil Amboyna, which Malaysia does claim but does not occupy. The extent of this triangular area is about 3,200nm<sup>2</sup> with depths down to 1,750m.

An uncontroversial answer to the question would be to join Points A and B by a geodesic. Indonesia has already relinquished its claim to the area of seabed east of Point A. Another answer, that might be accepted by Indonesia and any country that has sovereignty over Ladd Reef, would be to extend the boundary eastwards along the parallel that passes through Point A as far as the line B-C, then follow the line B-C southeastwards to Point B. The logic of such a line is that in the vicinity of the 1969 terminus Malaysia should not claim any seabed north of that terminus and that in this region Malaysia should not claim any seabed that belongs to countries other than Indonesia. The line B-D is a line of equidistance between the Spratly Islands claimed by Malaysia and other Spratly Islands. This line is mentioned only to illuminate Malaysia's problem since it is not proposed to examine maritime boundaries within the Spratly Islands. In Figure 12 the lines marked R-S, T-U and V-W represents arcs of circles with a radius of 200nm drawn from the nearest territory of Malaysia, Ladd Reef in the Spratly islands, which is occupied by Vietnam, and the nearest territory of Indonesia.

**Figure 12: Indonesia – Malaysia (South China Sea)**

*Factors which might encourage discussions about deviations from the line of equidistance*

There do not appear to be any factors that would enable either country to mount a case that the line of equidistance dividing the water column was inequitable.

## **Indonesia – Philippines**

### *Introduction*

Indonesia and the Philippines are archipelagic states that face each other across the Celebes Sea and no part of that sea is more than 200nm from the nearest coast. Both countries claim an EEZ 200nm wide and while Indonesia claims territorial seas 12nm wide the Philippines appears to claim all waters within its treaty limits as territorial waters which means that they are up to 285nm wide at one point (Office of Oceans Affairs, 2000: 116). For two reasons it is uncertain

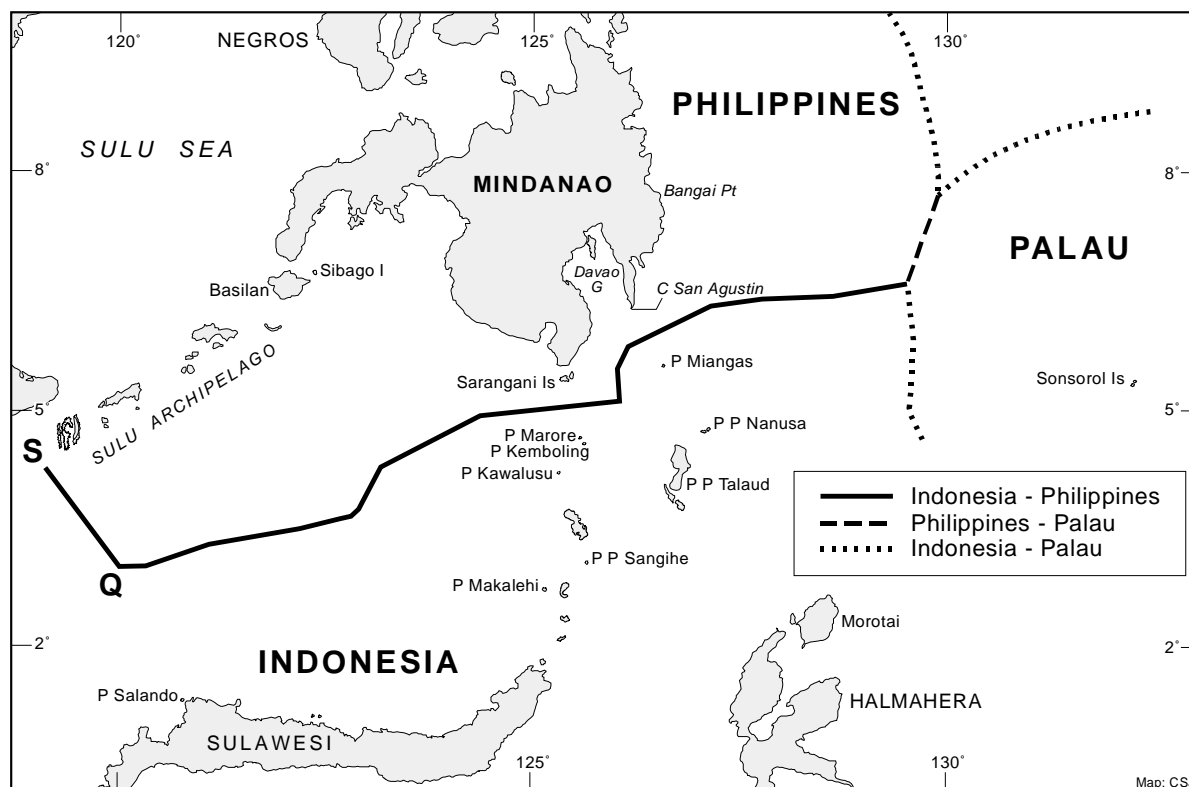


whether the two countries will need to draw a territorial sea boundary. First, it remains to be determined by the International Court of Justice whether Pulau Ligitan belongs to Indonesia or Malaysia. Second, if the island is Indonesian it is not clear whether the Philippines will claim territorial waters 12nm from its archipelagic baselines. If the International Court of Justice rules that Pulau Ligitan belongs to Malaysia and if the Philippines abandons its treaty limits territorial sea claim in favour of a 12nm territorial sea measured from its archipelagic baselines, then no territorial sea boundary between Indonesia and the Philippines will be required.

#### *Line of equidistance*

The line of equidistance will extend from the northwest part of the Celebes Sea to the equidistant tri-junction of claims by the Indonesia, Palau and the Philippines. This tri-junction is located in the vicinity of 6°40' N and 129°30' E about 180nm from Point Pusan on Mindanao Island and Pulau Merampit in the Kepulauan Nanusa. The western origin of the line of equidistance will be located at either Point S or Q after it is decided whether Pulau Ligitan belongs to Indonesia or Malaysia (see Figure 13).

**Figure 13: Indonesia – Palau – Philippines**



The line of equidistance was drawn graphically on British Admiralty charts BA 4507 that uses a Mercator projection and a scale of 1:3.5 million at 22°30' N (The Hydrographer, 1992 and BA 943 that also uses a Mercator projection and a scale of 1:555 million at 6°45' N (The Hydrographer, 1946). The line of equidistance measures about 760nm if Indonesia is awarded Pulau Ligitan and 670nm if the island is awarded to Malaysia. The median line passes through two narrow passages south of Mindanao. Only 38nm of sea separates the Philippine island called Tinina Balut at the southern tip of Mindanao from the Indonesia's Pulau Marore and only 50nm separates Pulau Miangas from Cape San Agustin on Mindanao.

The Philippine basepoints on which the line of equidistance is based are Frances Reef, Tumindao Island, Manuk Manka Island, Mantabuan Island, Kinapusian Island, Siasi Island, Tungkil Island, Pelimban Point on Mindanao, Tinina Balut, Sarangani Island, Cape San Agustin, Lamigan Point, Tugubun Point and Pusan Point (The Hydrographer, 1978a: 105-6, 129, 131-2, 137, 162, 165, 171 and 340-1). The Indonesian basepoints were located on Pulau Ligitan, Karang Mauras, Pulau Salando, Pulau Dolangon, Tanjong Kandi, Karang Bulolio, Karang Buliogut, Pulau Makalehi, Pulau Kawalusu, Pulau Kemboling, Pulau Marore, Pulau Memmanuk, Pulau Miangas and Pulau Merampit (the northernmost island in the P.P. Nanusa group) (The Hydrographer, 1978a: 116; The Hydrographer, 1976: 40, 42-3, 47, 226, 228 and 300-2; The Hydrographer, 1980: 40).

*Factors which might encourage discussions about deviations from the line of equidistance*

There do not appear to be any strong arguments that could be used by either country to support a view that the line of equidistance was inequitable. However, it will be very difficult for Indonesia to enter into negotiations so long as the Philippines insists on claiming all the waters within its treaty limits. One of the reasons for this is that Indonesia's Pulau Miangas lies within those treaty limits.<sup>7</sup>

In conversations with one of the authors academics and officials of the Philippines have canvassed the possibility that Indonesia's claims from Pulau Miangas might be curtailed in the same way that British claims were restricted from the Channel islands but there do not seem to be any points of similarity in the two cases. France and Britain were dealing with a narrow stretch of sea and the location of the Channel Islands would have caused a major deviation in the course of the line of equidistance to France's disadvantage. Pulau Miangas is simply the northernmost feature in a chain of Indonesian archipelagos called Sangihe, Talaud, Kawio and Nanusa trending northwards from the eastern tip of Sulawesi and the northern tip of Halmahera. Further, Indonesia is an archipelagic state and like the Philippines is entitled to draw archipelagic baselines around the outermost points of its outermost islands and drying reefs.

Furthermore, as previously noted, both the Philippines and Indonesia are archipelagic states legitimately claiming archipelagic baselines. There therefore seems to be little reason why these baselines (rather than the low-water line) wouldn't be used as the basis for generating an equidistance line. It is, after all, in both states interests to see full weight being given to archipelagic baselines so that they may argue that the same should apply elsewhere.

The Philippines cannot argue that the location of Pulau Miangas is unusual and has a major influence on the extent of EEZ that can be claimed by the Philippines and Indonesia. If Pulau Miangas did not exist and lines of equidistance were drawn the Philippines would gain 3,300nm<sup>2</sup> of sea that represents 0.6% of the EEZ that the Philippines can claim either to 200nm or to lines of equidistance with neighbours (The Geographer, 1972a). Pulau Miangas delivers to Indonesia 0.2% of the EEZ Indonesia can claim in the same manner (The Geographer, 1972a).<sup>8</sup>

<sup>7</sup> Pulau Miangas, also known as the Island of Palmas, was disputed between the Netherlands (which possessed what is now Indonesia) and the USA (on behalf of the Philippines) in the 1920s. The dispute was subject to arbitration in 1928 which resulted in the island being confirmed as belonging to the Netherlands/Indonesia.

<sup>8</sup> It should be noted that these figures exclude any claims to the Spratly Islands area.

## Indonesia – Vietnam

### *Introduction*

Indonesia and Vietnam are opposite states facing one another across the Natuna Sea in the southwestern South China Sea. Indonesia is an archipelagic state. Both states claim 12nm territorial seas and EEZs out to 200nm. Vietnam also claims a 24nm breadth contiguous zone. However, as the nearest Indonesian and Vietnamese coasts are over 240nm from one another, any boundary between the two states will separate their EEZs.

### *Line of equidistance*

The line of equidistance was constructed graphically on British Admiralty chart 2660A, Mercator projection, at a scale of 1:1.55 million (The Hydrographer, 1972).

From west to east the equidistance line proceeds from the northern terminus (Point 20) of the western part of the Indonesia-Malaysia continental shelf agreement concluded in 1969 at 6° 5'.8 N, 105°49'.2 E (Charney and Alexander, 1993: 1,019-28). This point is consistent with a tripoint between Malaysia's Pulau [Island] Tenggol, Indonesia's Pulau Semium and Vietnam's Hull Rock. The equidistance line proceeds in a broadly northeasterly direction, through seven turning points, for most of its length before being diverted somewhat south of east through the influence of Vietnam's Poulo [Island] Sepate [Îlot Sapate]. This short section of the line terminates in the vicinity of 7°14' N, 109°17'.5 E at a point equidistant from Indonesia's Pulau Sekatung, Vietnam's Poulo Sepate and Ladd Reef in the Spratly Islands (see Figure 14).

The Indonesian basepoints controlling this line are, from west to east, Pulau Semium, two points on the southwestern side of Pulau Laut and Pulau Sekatung directly to the north of Pulau Laut. The Vietnamese basepoints are Hull Rock, the southernmost islet of Les Deux Frères, a rock south of Con [Island] Dao [Grand Condore], the eastern point of Hon [small island] Bai Canh, Hon Cau and Poulo Sepate.

### *Factors that might encourage discussions about deviations from the line of equidistance*

There do not appear to be strong arguments that either country could use to claim that the line of equidistance would make an inequitable boundary. Indeed, the equidistance line described is broadly consistent with Indonesia's claim. Although Indonesia's claim comprises an equidistance line between its archipelagic baselines around the Natuna Islands group, the Vietnamese mainland coast and Condore Island, because of the configuration of Indonesia's outlying rocks and reefs, the use of Indonesia's archipelagic baselines does not have a substantial impact on the alignment of the equidistance line.

Nevertheless, it is worth recalling that Vietnam's claims are not consistent with equidistance. Although South Vietnam made a continental shelf claim in 1971 relevant to this area based on a median line, in the late 1970s reunified Vietnam adopted the principle of natural prolongation as the basis for determining the limits of its continental shelf claim. This led Vietnam to favour determining the boundary by means of the 'Talweg Principle'. In essence, application of this principle, traditionally only applied in river boundary situations as it refers to a division along the deepest part of the deepest navigable channel, would result in a delimitation along the deepest part of the trough in the continental shelf between the two countries. As this trough lies just to the north of the Natuna Islands such a delimitation would be highly favourable to Vietnam and would lie considerably to the south of Saigon's 1971 continental shelf claim in this area.

Subsequently, Vietnam appears to have retreated from this position in favour of a so-called “*harmonised line*” as the southern extent of the Vietnamese-Indonesian overlapping claims area. The harmonised line represents a compromise proposal running as it does north of the thalweg-inspired line but south of both the 1971 claim and an equidistance line between Vietnamese and Indonesian baselines. It also lies to the south of the northernmost extent of the continental shelf boundaries agreed between Indonesia and Malaysia in 1969 (Johnston and Valencia, 1991: 128-134). There have been reports that this line was constructed by drawing an equidistance line between mainland Vietnam and Indonesia’s Kalimantan (Borneo) and then adjusting this line southwards to reflect Vietnam’s longer coastline in this region (Prescott, 1996: 26-27). However, no sets of coordinates or precise maps of the harmonised line have been issued to date and it seems highly unlikely that such significant discounting of Indonesian basepoints such as the Natuna Islands would be acceptable to Indonesia.

## Japan – Philippines

### *Introduction*

Japan and the Philippines both claim EEZs 200nm wide. Claims to these zones from the most southwesterly Japanese islands Sakishima Gunto and the most northerly Philippine islands overlap.

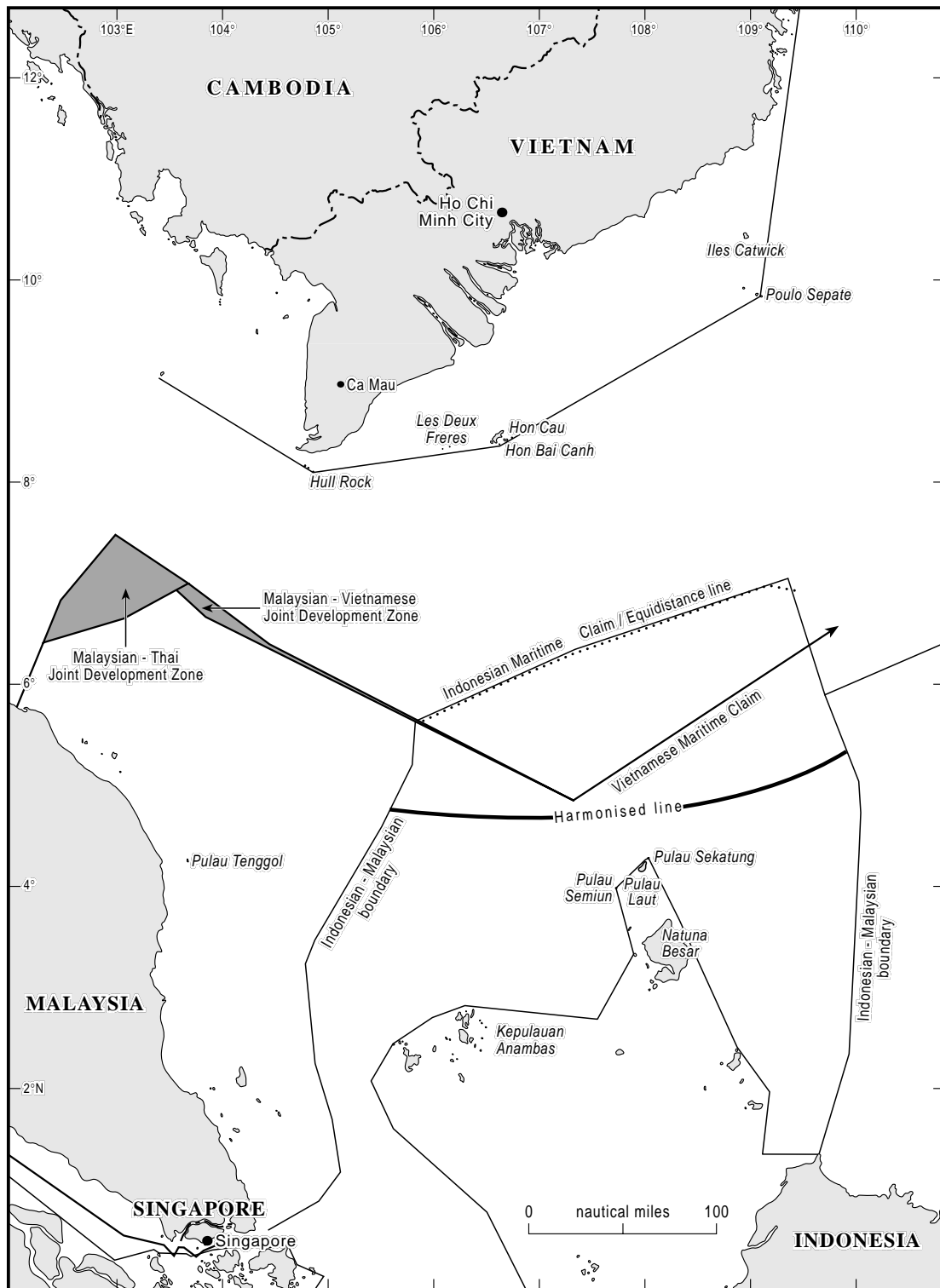
### *Line of equidistance*

The line of equidistance was constructed graphically using chart 03068 on a Mercator projection at a scale of 1:4 million (The Navigation Guarantee Department of the Chinese Navy Headquarters, 1997) and British Admiralty chart BA 1263 on a Mercator projection at a scale of 1:4.84 million (The Hydrographer, 1977). The line was based on the Japanese island Haderuma Shima and the Philippine Island Amiani Island (The Hydrographer, 1979: 70; The Hydrographer, 1968: 161). The origin of the line of equidistance is the tri-junction of equidistant claims from China, Japan and the Philippines east of Bashi Strait in the vicinity of 22°10’N and 123°40’ E. The eastern terminus of the line of equidistance is formed by the intersection of arcs with a radius of 200nm drawn from the two islands; this intersection is located in the vicinity of 21°10’ N and 125°34’ E (see Figure 9).

### *Factors that might encourage discussions about deviations from the line of equidistance*

There does not appear to be any strong argument that might be used by either side to suggest that the line of equidistance would make an inequitable maritime boundary. However, the eastern terminus of the line of equidistance lies within the Treaty Limits of the Philippines and would deliver to Japan 630nm<sup>2</sup> of sea and seabed that lie within the Treaty Limits claim. It is not known whether the Philippines would argue that the Treaty Limits were established claims to historical waters. However, even if the Treaty Limits were set aside, it is likely that the Philippines would favour its archipelagic baselines being used as the basis for delimitation rather than normal baselines.

Figure 14: Indonesia – Vietnam



## Japan – Russia

### *Introduction*

The territories of Japan and Russia face each other across the Sea of Japan, the Sea of Okhotsk and the northwest Pacific Ocean. Both countries claim territorial seas 12nm wide and EEZs extending for 200nm from their territorial sea baselines. Depending upon the outcome of a territorial dispute in the southern Kuril Islands known by Japan as the Northern Territories the countries would need to draw a territorial sea boundary either in the Goyomai Suido [channel] or the Etorohu Kaikyo in the southern Kuril Islands (The Hydrographer, 1966a: 321 and 375).

In 1986 North Korea and Russia delimited a boundary between their EEZs (Charney and Alexander, 1993: 1,045-53). This boundary terminated at a point with the coordinates 39°39.3' N and 133°45' E. This point lies 12nm southwest of the strict equidistance point between Russia's Mys Povorotny, the Liancourt Rocks, a pair of islets and scattered rocks contested between Japan to which they are known as Takeshima and South Korea to which they are known as Tok Do, and Hegura Shima that belongs to Japan. That point is in the vicinity of 39°49' N and 133°54' E. Liancourt Rocks is 18nm nearer the North Korea-Russia terminus than Mys Povorotny and Hegura Shima is 5nm nearer to the terminus than Mys Povorotny.

### *Line of equidistance*

The line of equidistance was constructed graphically using the British Admiralty charts BA 4511 (The Hydrographer, 1999a) and BA 1803 (The Hydrographer, 1996). The termini of the line of equidistance between Japan and Russia cannot be defined without qualification. The location of the western terminus in the Sea of Japan is uncertain because of a territorial dispute between Japan and South Korea over the ownership of Liancourt Rocks.

The terminus in the northwest Pacific Ocean is in doubt because of a territorial dispute over the ownership of the southern Kuril Islands (Prescott 1987: 57-63). Accordingly two possible locations will be provided for the western terminus based on either Japan or South Korea securing undisputed sovereignty over Liancourt Rocks. Similarly two lines of equidistance terminating at different points will be shown based on the assumptions of either Japanese or Russian undisputed sovereignty being secured in the southern Kuril Islands.

If Japan secures undisputed sovereignty over Liancourt Rocks the line of equidistance between Japan and Russia will be located in the vicinity of 39°54' N and 133°11' E shown as Point A in Figure 15. This point would be equidistant between Liancourt Rocks, and North Korea's Musu Dan and Russia's Mys Povorotny (The Hydrographer, 1966: 200, 268 and 350). If South Korea secured undisputed sovereignty over Liancourt Rocks Japan's line of equidistance with Russia would be located in the vicinity of 39° 49' N and 133°54' E at Point B. This point would be equidistant from Liancourt Rocks, Japan's Hegura Shima and Russia's Mys Povorotny (The Hydrographer, 1966: 350; The Hydrographer, 1966a: 132). The equidistance line between these two points measures about 37nm.

From the most easterly of these two termini the line of equidistance between Japan and Russia the line of equidistance trends northwards through the Sea of Japan to the mouth of the Gulf of Tartary, where it turns eastwards through La Perouse Strait between Hokkaido and Sakhalin to a point in the Sea of Okhotsk. The length of this segment of the line of equidistance is about 720nm and it terminates in the vicinity of 45°36' N and 145°12' E equidistant from Mys Aniva, the southeast cape of Sakhalin, Siretoko Misaki, the northeast cape of Hokkaido and Mys

Figure 15: Japan – Russia



Donuchaeva the northern cape of Etorohu To (The Hydrographer, 1966a: 329, 331 and 335). At this point, marked C in Figure 15, in the Sea of Okhotsk the islands occupied by Russia and claimed by Japan begin to affect the course of the line of equidistance.

This line of 720nm is based on the Russian basepoints of Mys [point] Povorotnyy, Mys Ostrovnoy, Mys Ovsyankina, Mys Dali'niy, Mys Nizmennyy, Mys Sobota, Mys Balyuzek, Mys Brinera, Mys Groznyy, Mys Yegorova, Mys Pervenets, Mys Shantsa, Mys Takema, Mys Belkina, Mys Maksimova, Mys Olympiady, Mys Sosunova, Ostrov Mys Povorotny [island] Monneron, Mys Kuznetsova, Mys Kril'on, Skala (rock) Kamen Opasnosti, Mys Aniva (The Hydrographer, 1966: 350, 354-5, 358-60, 364, 368-70, 372-4, 379, 407-8 and 411; The Hydrographer, 1966a: 283 and 290). The Japanese basepoints involved in defining this line of equidistance are Hegura Shima [island], Kyuroku Shima, Okushiri Shima, Motsuta Misaki [point], Kamui Misaki, Rebuton To, Sukoton Misaki, Nosappu Misaki [northwest Hokkaido], Soya Misaki, Notoro Misaki, Siretoko Misaki (The Hydrographer, 1966a: 174, 178, 254, 256, 259, 277, 279, -80, 282, 329 and 332).

From Point C in the vicinity of 45°36' N and 145°12' E the continuation of the line of equidistance depends on which country secures undisputed sovereignty over the disputed

features in the southern Kuril Islands. Two limiting cases will be considered. First, that Russia, presently in occupation of the islands will have that title conceded by Japan. Second Japan will persuade Russia that the islands should be converted to Japanese sovereignty. It would be possible for Russia to concede some islands and retain others and for Japan to accept this arrangement. In such a situation the new line of equidistance would lie somewhere between the lines described.

If Russian sovereignty is conceded by Japan the continuation of the line of equidistance would trend southwards through the Nemuro Kaikyo and Goyomai Channel to the Pacific Ocean and generally southeast to Point D 200nm from the nearest Japanese and Russian basepoints. This segment of the line of equidistance measures about 350nm. The Russian basepoints on which the equidistance line is based are Mys Donuchaeva, Mys Ivanovskiy, Mys Palatsov, Mys Veslo, Ostrov Tanfil-eva and Ostrov Anuchina (The Hydrographer, 1966a: 326-7, 331, 343 and 349). The principal Japanese basepoints are Notsuke Saki, Nosappu Miska [east Hokkaido], Tatsumino Se [islet] and Yururi Shima (The Hydrographer, 1966a: 280, 319 and 323). Some additional points would also need to be used on smooth sections of the coastline.

If Russia transferred the disputed islands to Japan the line of equidistance would continue northeastwards to Point E and then southeastwards to pass through Etorohu Kaikyoto to terminate at Point F in the Pacific Ocean 200nm from the nearest Japanese and Russian basepoints. This continuation of the line of equidistance measures about 520nm. The principal Russian basepoints used to generate this section of the line of equidistance are Mys Levenorna, Ostrov Yuleny, Mys Terpeniya and Mys Van-der-Linda (The Hydrographer, 1966: 477-8 and 494-5; 1966a: 376). Four unnamed points on the northeast tip of Etorohu To would also be used as basepoints. The principal Japanese basepoints used in generating this second line of equidistance are Mys Donuchaeva, Notoro Misaki, Ikabanotu Misaki and Rakkibetu Misaki (The Hydrographer, 1966a: 331, 367, 369 and 375). Two unnamed basepoints near Rakkibetu Misaki would also be involved.

The area of seas and seabed contained between the two lines of equidistance and arcs of a circle with a radius of 200nm from the most seaward basepoints measures approximately 55,000nm<sup>2</sup>.

#### *Factors that might encourage discussions about deviations from the line of equidistance*

There do not appear to be any grounds on which either side might argue that the lines of equidistance would create an inequitable maritime boundary. Nevertheless, it can be assumed that Japan and South Korea will not accept the selected terminus of the North Korea-Russia EEZ delimitation as a starting point for any boundary with Russia as this lies approximately 12nm southwest of the strict equidistance tripoint, to Russia's advantage.

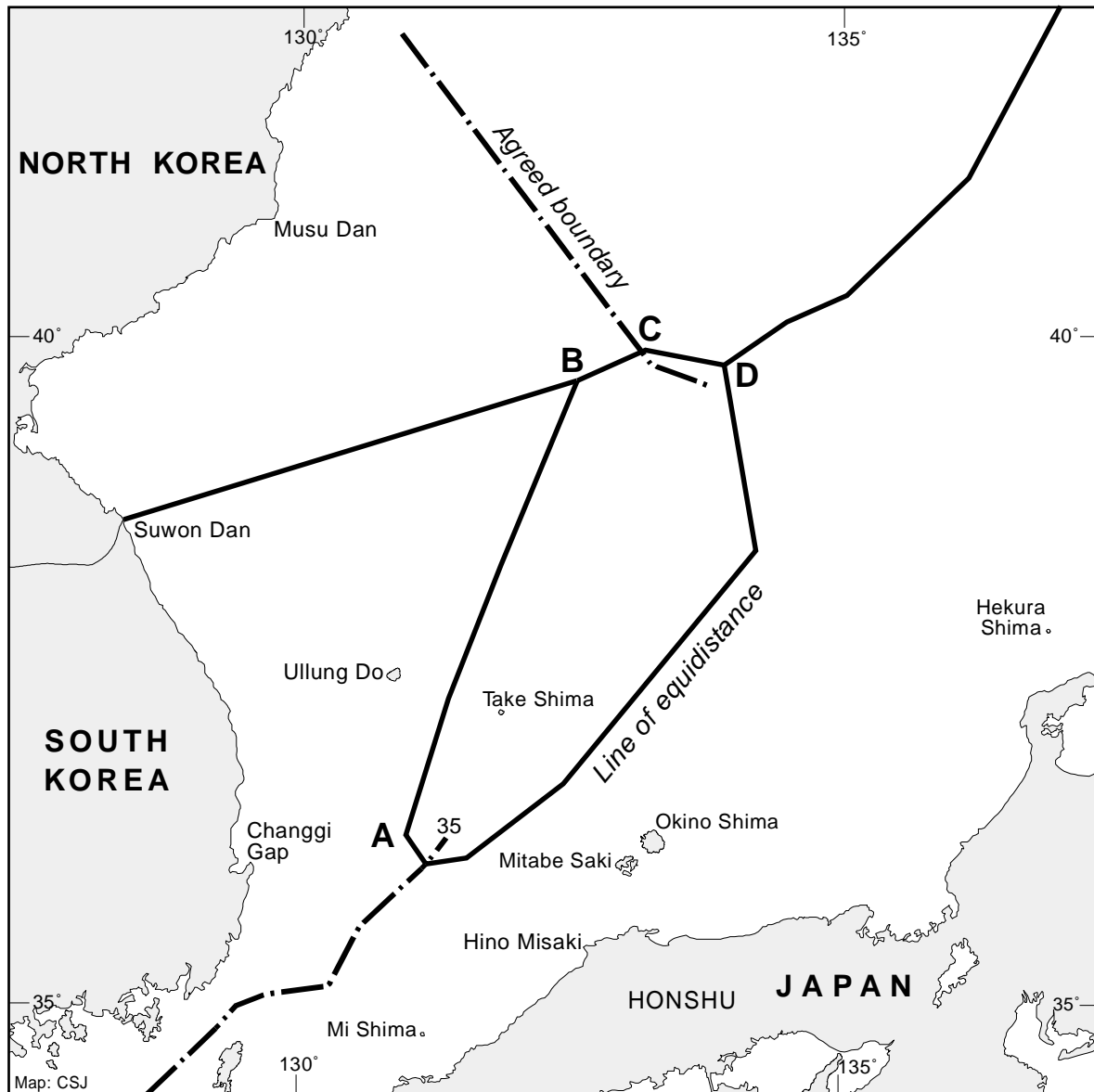
## **Japan – South Korea**

### *Introduction*

Japan and South Korea face each other in the East China Sea, the Korea Strait and the Sea of Japan. In 1974 the two countries delimited a seabed boundary in the Strait and a joint-zone in the East China Sea (Charney and Alexander, 1993: 1,057-89). The boundary terminated at the eastern entrance to the Korea Strait at Point 35 with the coordinates 36°10' N and 131°15.0' E. The boundary ended at this point because the two countries dispute sovereignty over the Liancourt Rocks. This small isolated feature consists of two islets and some rocks; it has the



**Figure 16: Japan – North Korea – South Korea**



Korean name Tok Do [island] and the Japanese name Takeshima ['shima' – island] (The Hydrographer, 1966: 200). Point 35 appears to be 82nm from the Korean features Changgi Gap [point] and Ullung Do, the Japanese island Mi Shima and a Japanese cape Hino Misaki [point] (The Hydrographer, 1966a: 70 and 85). Point 35 lies only 73nm from Liancourt Rocks which is occupied by South Korea.

The equidistant point at which Liancourt Rocks comes into calculations lies about 5nm south of Point 35. This point is equidistant from Liancourt Rocks, Changgi Gap and Mi Shima and is located in the vicinity of 36° 05' N and 131° 10' E. It is from this equidistant point that the lines of equidistance for this analysis are constructed.

Both South Korea and Japan claim EEZs 200nm wide and they overlap in the Sea of Japan (see Figure 16).

*Line of equidistance*

Two lines of equidistance were constructed. For the first, it was assumed that Liancourt Rocks belongs to South Korea and for the second it was assumed that they belong to Japan. The first line of equidistance is based on the Korean basepoints of Changgi Gap and Liancourt Rocks and the Japanese basepoints of Mi Shima, Hino Misaki, Mitabe Saki, Okino Shima near Dogo and Hegura Shima (The Hydrographer, 1966: 200 and 214; 1966a: 70, 85, 90 and 132). This line of equidistance extends for about 300nm and terminates at the tri-junction of Japanese, South Korean and Russian claims. This line joins Points A and D in Figure 16. This point is in the vicinity of 39°49' N and 133°54' E and is equidistant from Liancourt Rocks, Hegura Shima and Mys [cape] Povorotvny on the Russian coast (The Hydrographer, 1966: 350). In this situation South Korea would have a short boundary with Russia shown by Points C and D.

The second line of equidistance is based on the Japanese basepoints of Mi Shima and Liancourt Rocks and the South Korean basepoints of Changgi Gap and Ullung Do (The Hydrographer, 1966: 214, 200; The Hydrographer, 1966a: 70). This line of equidistance is about 230nm long and it terminates at the tri-junction of Japanese, North Korean and South Korean claims. It is shown by Points A and B on Figure 16. This tri-junction is in the vicinity of 39°41' and 132°33' E and is equidistant from Ullung Do, Tok Do and Musu Dan on the North Korean coast (The Hydrographer, 2000: 214 and 268; The Hydrographer, 1966a: 70). Such a line of equidistance would mean that Japan had an equidistant maritime boundary with North Korea extending from the tri-junction just defined and a trijunction between the claims of Japan, North Korea and Russia in the vicinity of 39°54' N and 133°11' E. This short line is marked by Points B and C in Figure 16. This last tri-junction is equidistant from Musu Dan on the North Korean coast, Russia's Mys Povorotvny and Liancourt Rocks. One of the results of this analysis is that if Japan owns Liancourt Rocks it has a potential maritime boundary with North Korea, marked by Points B and C, while if South Korea owns Liancourt Rocks it has a potential maritime boundary with Russia marked by Points C and D. The area contained within the lines of equidistance joining Points A,B,C and D measures about 15,000nm<sup>2</sup>.

*Factors that might encourage discussions about variations from the line of equidistance*

It seems unlikely that a maritime boundary could be delimited before the sovereignty of Liancourt Rocks is settled by agreement. It would be possible for both sides to agree to leave the sovereignty issue unsettled and then delimit a joint development zone occupying the area within the various lines of equidistance. This would give symmetry to their 1974 boundary arrangements that has a joint development zone in the East China Sea. In the unlikely event that Japan or South Korea decided to withdraw its claim to Liancourt Rocks it might be on the basis that those islands were not used to make any maritime claims other than territorial waters.

If there was no territorial dispute it is possible that the country which did not own Liancourt Rocks would argue that it has a disproportionate effect on the course of the line of equidistance and that it should be discounted or ignored.

## Malaysia – Philippines

### *Introduction*

Malaysia and the Philippines are adjacent states in the South China Sea, the Sulu Sea and the Celebes Sea. Both countries claim EEZs 200nm wide and these claims overlap in the three seas. Malaysia claims territorial seas 12nm wide although a 1979 Malaysian chart shows sections of territorial waters wider than 12nm (Director of National Mapping, 1979). The Philippines claims territorial waters up to 285nm wide between its archipelagic baselines and the treaty limits established by American-Spanish treaties of 1898 and 1900 and an Anglo-American treaty of 1930 (Parry, 1979: 100-105; 1979a: 108-9; League of Nations, 1933: 298-317). Malaysia chart of 1979 shows the Philippines' treaty limits as an international boundary. However when Prescott suggested to officials of the Philippines, that given the Malaysian representation it would presumably be an easy matter to agree on a maritime boundary through the Sulu Sea, he was informed that the Philippines had not abandoned its claim to northern Sabah.<sup>9</sup> In the three seas there are sections where the territorial waters of the two countries would overlap if the treaty limits were not accepted as a maritime boundary.

In view of the apparent contradiction in the views of the two countries towards the status of the treaty limits it was decided to draw a line of equidistance based on the features that are allocated to each country by the treaty limits in the three seas.

### *Line of equidistance*

The line of equidistance was drawn graphically on the following charts: BA Chart 1650 at a scale of 1:100,000 (The Hydrographer, 1958), BA 287 at a scale of 1:300,000 (The Hydrographer, 1990), BA 928 at a scale of 1:500,000 (The Hydrographer, 1991a) and BA 1649 at a scale of 1:100,000 (The Hydrographer, 1958a). The various sections of the line of equidistance were then transferred to the 1979 Malaysian chart at a scale of 1:1.5 million (see Figure 17).

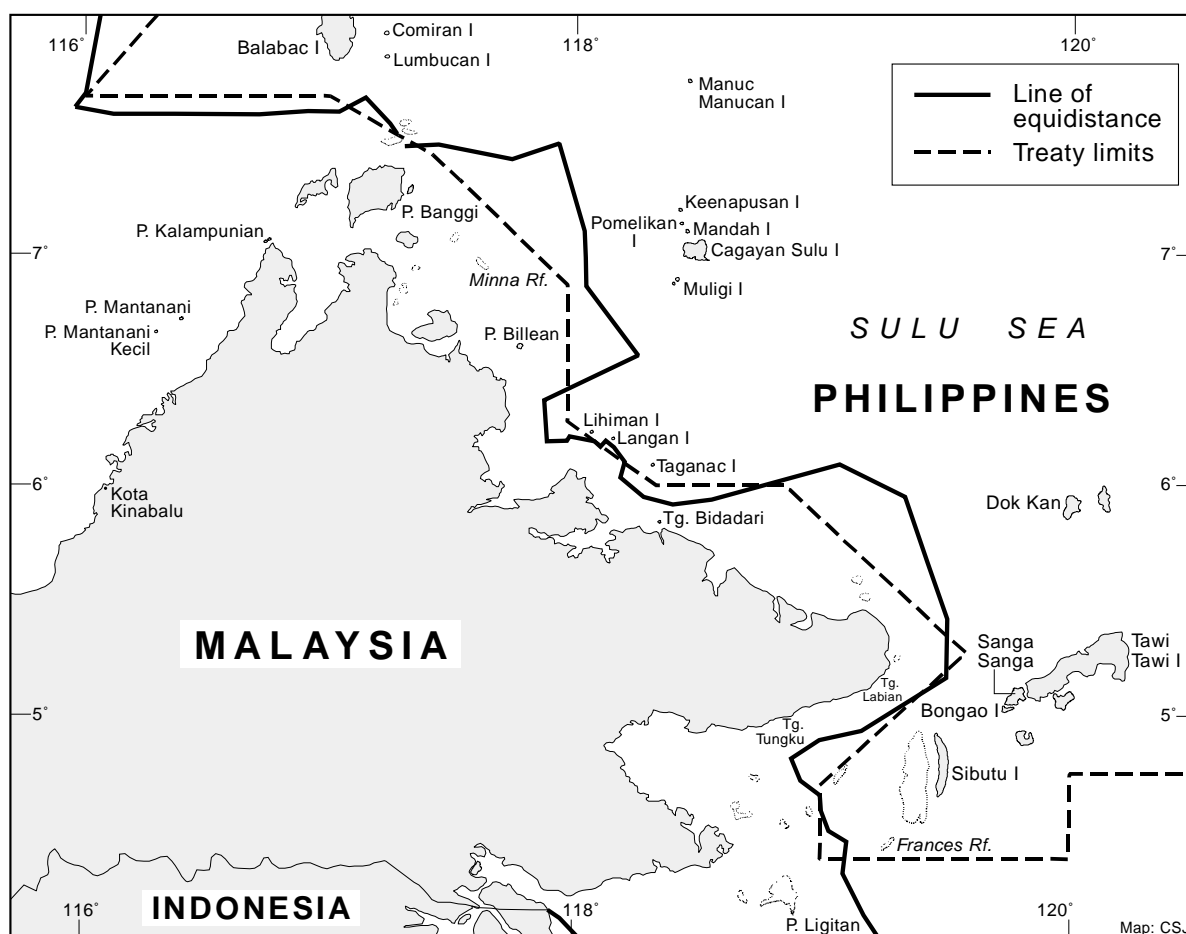
Proceeding from south to north the following features belonging to the Philippines are involved in constructing a line of equidistance: Frances Reef, Riddels Reef, Panguan Island, Alice Reef, Andulinang Island, a reef northwest of North Lagoon, Omapoy Island, Sibutu Island, Sanga Sanga Island, low-tide elevation north of the mouth of Menalik Channel, Tataan Islands, Pearl Bank, Baguan Island, Taganak Island, Pulau Langaan, Great Bak Kunguan Island, Pulau Lihiman, Sibaung Island, Baoan Island, Muligi Miki Island, Tanjong Tavo-tavo, Keenapusan Island, cay on Great Danger Bank, South Mangsee Island, North Mangsee Island, Salingsingan Island, Lumbucan Island, Balabac Island (The Hydrographer, 1978: 67-8, 84-5 and 81, 98, 105, 106, 124 and 127).

Proceeding from south to north the following Malaysian features are involved in delimiting the line of equidistance: Pulau Ligitan, Pulau Bohayan, Pulau Matakang, low-tide elevation off Pulau Gaya, Tanjong Tungku, the coast of Sabah 7nm west of Tanjong Labian, Tanjong Terang, Pulau Tambisan, Driftwood Point, Tanjong Bidadari, low-tide elevation off the entrance of Trusan Kinabatangan, Pulau Nunuyan Laut, low-tide elevation off Taonjong Lari

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<sup>9</sup> The Philippines articulated its claim to Sabah, then known as British North Borneo, in 1961 as preparations were underway to grant Malaysia independence. The Philippine claim, based largely on historical arguments, was rejected by Britain and, on independence in 1963, by Malaysia. The dispute has been largely dormant, but unresolved, since the Philippine President announced that his government would cease actively prosecuting its claim in 1967.

Figure 17: Malaysia – the Philippines



Lari, Little Bakkungan Island, Pulau Siligaabn, Pulau Libaran, low-tide elevation off Pura Pura, Tanjong Siasib, Pulau Lankayan, Pulau Billean, Muncey Reef, Minna Reef, Pulau Straggler, Southeast Banggi Dangers, Banggi Outer Northeast Reefs, Mangsee Great Reef, Tanjong Siagut, Pulau Kalamunian (The Hydrographer, 1978: 85-6, 89, 94, 96-99, 103-4, 106, 110 and 116; 1975: 94).

*Factors that might encourage discussions about deviations from the line of equidistance*

Unlike other cases studied in this review there is already a potential boundary in existence between Malaysia and the Philippines. Malaysia has shown the Philippines' treaty limits as an international boundary and has shaded the waters between Malaysian territory and the treaty limits as territorial waters (Director of National Mapping, 1979). The Philippines has claimed that the treaty limits mark the outer edge of the territorial sea measured from its archipelagic baselines (State Department, 2000: 116). If the Philippines abandoned its claim to territory in northern Sabah the two countries are entitled to agree that the treaty limits formed their maritime boundary through parts of the South China Sea and Sulu Sea. This possibility exists even though the documents defining the treaty limits explicitly state that they deal only with the allocation of islands:

*Spain cedes to the United States the archipelago known as the Philippines Islands, and comprehending the islands lying within the following lines (Parry, 1979: 101).*

*Spain relinquishes to the United States all title and claim of title ... to any and all islands belonging to the Philippines Archipelago, lying outside the line lines described in Article III of that treaty [Treaty of Paris] and particularly to the islands of Cagayan Sulu and Sibutu and their dependencies...* (Parry, 1979a: 109).

*It is hereby agreed and declared that the line separating the islands belonging to the Philippines Archipelago on the one hand and the islands belonging to the State of North Borneo which is under British protection on the other hand shall be and is hereby established as follows* (League of Nations, 1933: 298).

The line of equidistance crosses and recrosses the treaty limits in the Sulu Sea. The treaty limits measure about 330nm and the line of equidistance measures about 430nm. If the countries decided to adopt the line of equidistance as an equitable maritime boundary Malaysia would secure about 1,600nm<sup>2</sup> [5,488km<sup>2</sup>] inside the treaty limits while the Philippines would secure about 800nm<sup>2</sup> [2,744km<sup>2</sup>] outside the treaty limits. It is not known whether any of the specific areas that would be exchanged have special values in an economic or security sense.

On 13 March 2001 the Philippines applied to the International Court of Justice for permission to intervene in the case before the Court involving rival claims by Indonesia and Malaysia to sovereignty over Pulau Ligitan. The application was based on the Philippines desire to preserve and safeguard its historical and legal rights to dominion and sovereignty over North Borneo, now called Sabah. This action suggests that there is little immediate prospect of the Philippines abandoning its claims to some Malaysian territory and that therefore there is no prospect of the two countries negotiating maritime boundaries in the Sulu Sea in the foreseeable future.

## **North Korea – South Korea (Sea of Japan)**

### *Introduction*

North and South Korea are adjacent states that make overlapping claims into the Yellow Sea, known as the West Sea to Koreans, and the Sea of Japan, known as the East Sea to Koreans. Both countries claim territorial seas 12nm wide and EEZs measuring 200nm. The line of equidistance in the Sea of Japan will divide territorial seas within 12nm of the coast and EEZs beyond that distance. It is worth noting in this context that these potential maritime boundaries would be rendered obsolete by any eventual reunification of the two Koreas.

### *Line of equidistance*

The line of equidistance was drawn graphically on British Admiralty chart BA 4511 (The Hydrographer, 1999a). The line of equidistance has its origin near Suwon Dan [cape] where the land boundary reaches the coast. The location of the seaward terminus of the line of equidistance depends on whether Japan or South Korea possesses undisputed sovereignty over Liancourt Rocks (see Figure 16). If South Korea owns those islands then the terminus is about 174nm from Tok Do and Musu Dan on the coast of the Korean peninsula in the vicinity of the intersection of parallel 39°54' N and meridian 133°11' E. This is the tri-junction of overlapping claims from the two countries and Russia and it is equidistant from North Korea's Musu Dan, South Korea's Liancourt Rocks and Russia's Mys Pvorotvny (The Hydrographer, 1977: 200, 269 and 350). If Japan owns Liancourt Rocks then the tri-junction between claims from North and South Korea and Japan intersect at a point in the vicinity of 39°54' N and 132°33' E about 200nm from Suwon Dan. This tri-junction is equidistant from Ullung Do of South Korea,

Liancourt Rocks of Japan and Musu Dan of North Korea (The Hydrographer, 1966: 200-1 and 269).

The North Korean basepoints are Suwon Dan, Nan Do and Musu Dan and the South Korean basepoints are Suwon Dan, Ullung Do and Liancourt Rocks (The Hydrographer, 1966: 200-1, 235, 267 and 289).

*Factors that might encourage discussions about deviations from the line of equidistance*

Since no North Korean feature has a pronounced influence on the alignment of the line of equidistance it is unlikely that South Korea would argue that the line of equidistance would be inequitable as a maritime boundary. However North Korea might argue that Liancourt Rocks and Ullung Do, located respectively 70nm and 115nm from the mainland, should be discounted when, and if, a boundary is delimited.

### **North Korea – South Korea (Yellow Sea)**

*Introduction*

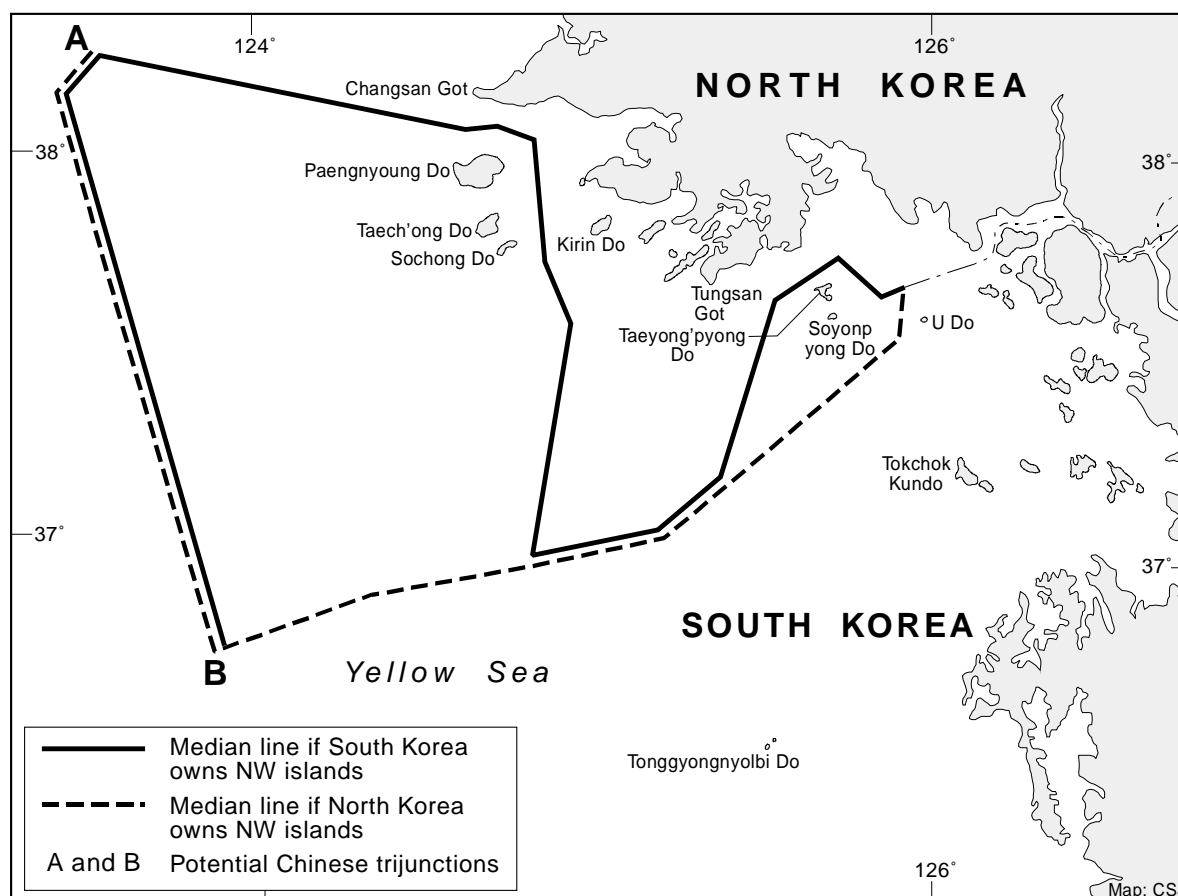
North and South Korea are adjacent states along the eastern shore of the Yellow Sea. Each state claims territorial waters 12nm wide and EEZs 200nm wide. If the two countries ever negotiate maritime boundaries it is uncertain whether they would deal with the boundaries in the Yellow Sea and the Sea of Japan simultaneously or separately. The negotiation of a maritime boundary in the Yellow Sea is complicated because both countries claim islands that have been under United Nations control since the end of the war in Korea in 1958.

*Line of equidistance*

In the following analysis two lines of equidistance have been drawn to demonstrate the effect of North Korea or South Korea owning the disputed islands. No attempt has been made to draw lines of equidistance in a situation where the two countries decided to divide the islands.

Lines of equidistance were constructed graphically on the United States Chart 94033 on a Mercator projection at a scale of 1:864,700 at latitude 38° N (Defense Mapping Agency, 1986). The features used on the coast of North Korea are Changsan Got [Cape], small island west of Kirin Do [Island], Piap Do, Sunwi Do, Tungsan Got, Taksun Hang [Point], Yongmae Do and associated tidal flats (The Hydrographer, 1968: 535-6, 538, 540-1, 544 and 548). The features used on islands controlled by the United Nations are Paengnyoung Do, Taech'ong Do, Sochong Do, Taeyong'pyong Do and Soyonp'yong Do (The Hydrographer, 1968: 536 and 544-6). The South Korean features used are Tonggyongnyolbi Do, Tokchok Kundo [Archipelago] and U Do (The Hydrographer, 1968: 506, 510 and 532).

The two lines of equidistance are shown on Figure 18. If South Korea owned the islands controlled by the United Nations then the trijunction point of China and North and South Korea would be located at Point A on Figure 18. That point is in the vicinity of 38°16' N and 123°36' E and is equidistant from Changsan Got, Paengnyoung Do and China's Nan t'o tzu. If North Korea owned the islands controlled by the United Nations the tri-junction with China would be located at Point B in Figure 18. That point is in the vicinity of 38°43'N and 124°02' E and is equidistant from Sochong Do, Tonggyongnyolbi Do, and China's Lu Erh Shih.

**Figure 18: North Korea – South Korea**

*Factors that might encourage discussion about deviations from the line of equidistance*

If North Korea owned the islands presently controlled by the United Nations there do not seem to be any factors that would enable South Korea to mount a strong argument that the line of equidistance was inequitable. This is because the islands under the control of the United Nations do not overlap the coast of South Korea. However if South Korea owned the islands controlled by the United Nations it would be surprising if North Korea did not argue that the line of equidistance was inequitable. Those islands provide a close fringe to the coast of North Korea and a line of equidistance giving them full effect would significantly curtail North Korea's claims from the mainland coast and access to and security along that coastline.

There is of course the prospect that improved relations between the two countries might lead to an agreement to share the resources of the disputed islands and the associated seas and seabed or, ultimately, to reunification, eliminating the need for a delimitation in this area.

## **Palau – Philippines**

### *Introduction*

Palau is a small archipelagic state, although it has not declared archipelagic baselines, lying less than 400nm southeast of the Philippine island called Mindanao. In contrast, the Philippines is a large archipelagic state encompassing over 7,200 islands. Both countries claim an EEZ 200nm wide.

*Line of equidistance*

The line of equidistance measuring 73nm was constructed graphically on the British Admiralty chart BA 4507 on a Mercator projection at a scale of 1:3.5 million at parallel 22°30' N. The basepoints used are located on the coast of Mindanao in the vicinity of Point Pusan and Fana Island the most northerly of the Sonsorol Islands in Palau (The Hydrographer, 1978a: 340; The Hydrographer, 1870: 547). The southern terminus of the line of equidistance is the tri-junction of equidistant claims from Indonesia, Palau and the Philippines. The northern terminus coincides with the intersection of arcs with a radius of 200nm measured from the basepoints of each country (see Figure 13).

*Factors that might encourage discussions about deviations from the line of equidistance*

The Philippines might raise questions over the weight to be accorded to small, isolated islands (even if a state in their own right) in delimitation with an archipelago consisting of thousands of islands. There is a significant disparity in the lengths of relevant coastline involved, the sizes of the states and populations involved (18,110 vs. 81 million).<sup>10</sup> In answer Palau might argue strongly that its national territory should receive its full entitlement of marine areas and draw attention to Palau's limited resources when compared to those of the Philippines.

**The Spratly Islands**

The 170-plus features collectively termed the Spratly Islands are located in the southern part of the South China Sea extending for approximately 900km from southwest to northeast. The majority of the Spratlys are in fact really submerged banks, reefs and low-tide elevations. Only 36 are known to rise above high-tide to form tiny islands, the biggest of which (Itu Aba Island) is a mere 1.4km long and 400m wide. The total land area of the Spratlys above the highest astronomic tide has been estimated to be less than 8km<sup>2</sup> (3 sq. miles) yet they are scattered over an area of around 240,000km<sup>2</sup>. Estimates of the total contested maritime area in the South China Sea vary considerably but far exceed this figure.

Six coastal states – China, Taiwan (Republic of China, ROC), Vietnam, the Philippines, Malaysia and Brunei – lay claim to all or part of the Spratly and Paracel archipelagos and their surrounding maritime space. Of these six claimants, all save Brunei maintain a military presence on one or more islands.

China (7), Malaysia (5), the Philippines (8), Taiwan (1) and Vietnam (at least 19) all occupy Spratlys features (see Figure 19).<sup>11</sup> Brunei appears to claim Louisa Reef but has not occupied it (see Figure 2). The five countries with a permanent presence in the Spratly Islands also claim all or some of the other Spratly features that they do not occupy. For these reasons and because none of the countries has recognised the claims of others it is not possible to draw lines of equidistance within the Spratly Islands to show the areas claimed by each country.

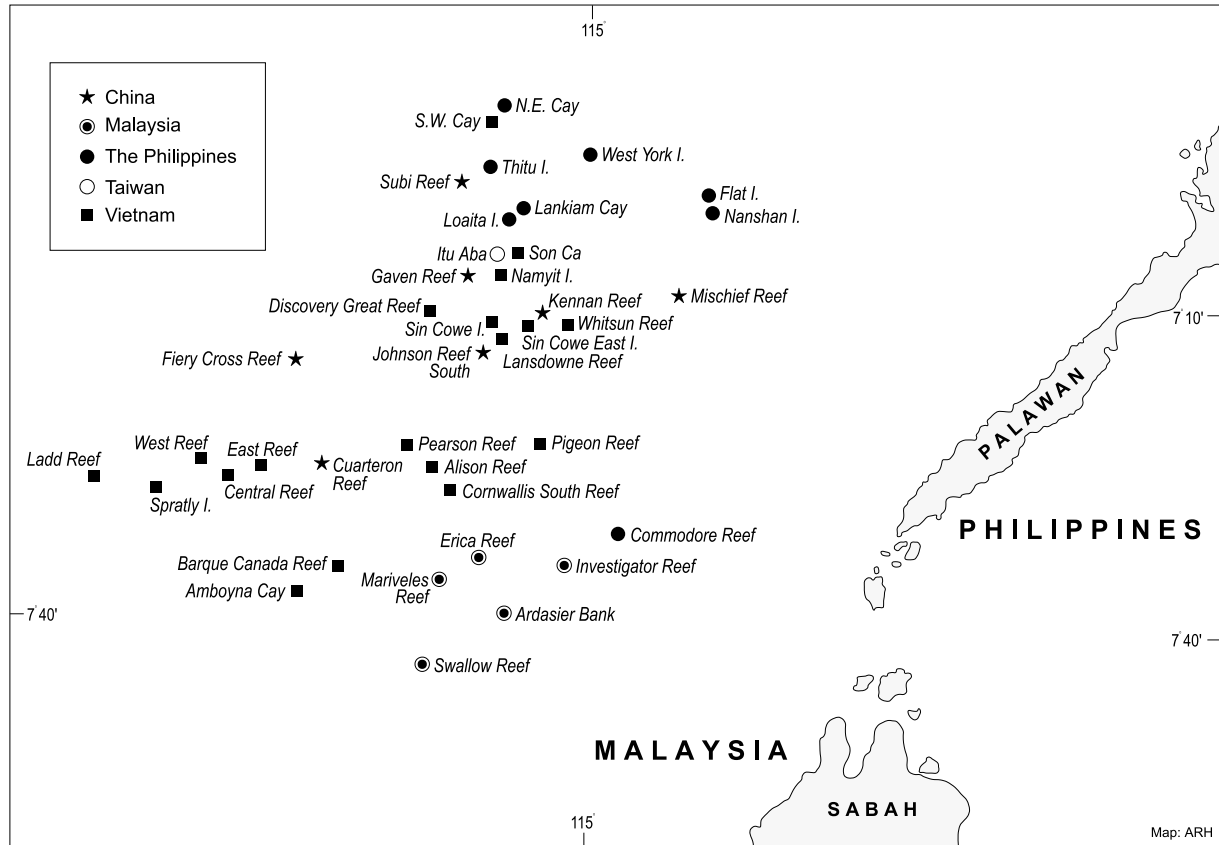
Having excluded the Spratly Islands from this analysis it became necessary to identify the region of the Asian Rim of the Pacific Ocean that attaches to the Spratly Islands. This exercise was undertaken using the following charts: British Admiralty chart 4508 on a Mercator

<sup>10</sup> CIA, 2000.

<sup>11</sup> The authors are grateful for recent information about the occupation of islands and rocks in the Spratlys provided by Dan Dzurek in November 2000.



**Figure 19: Occupied Spratly Islands**

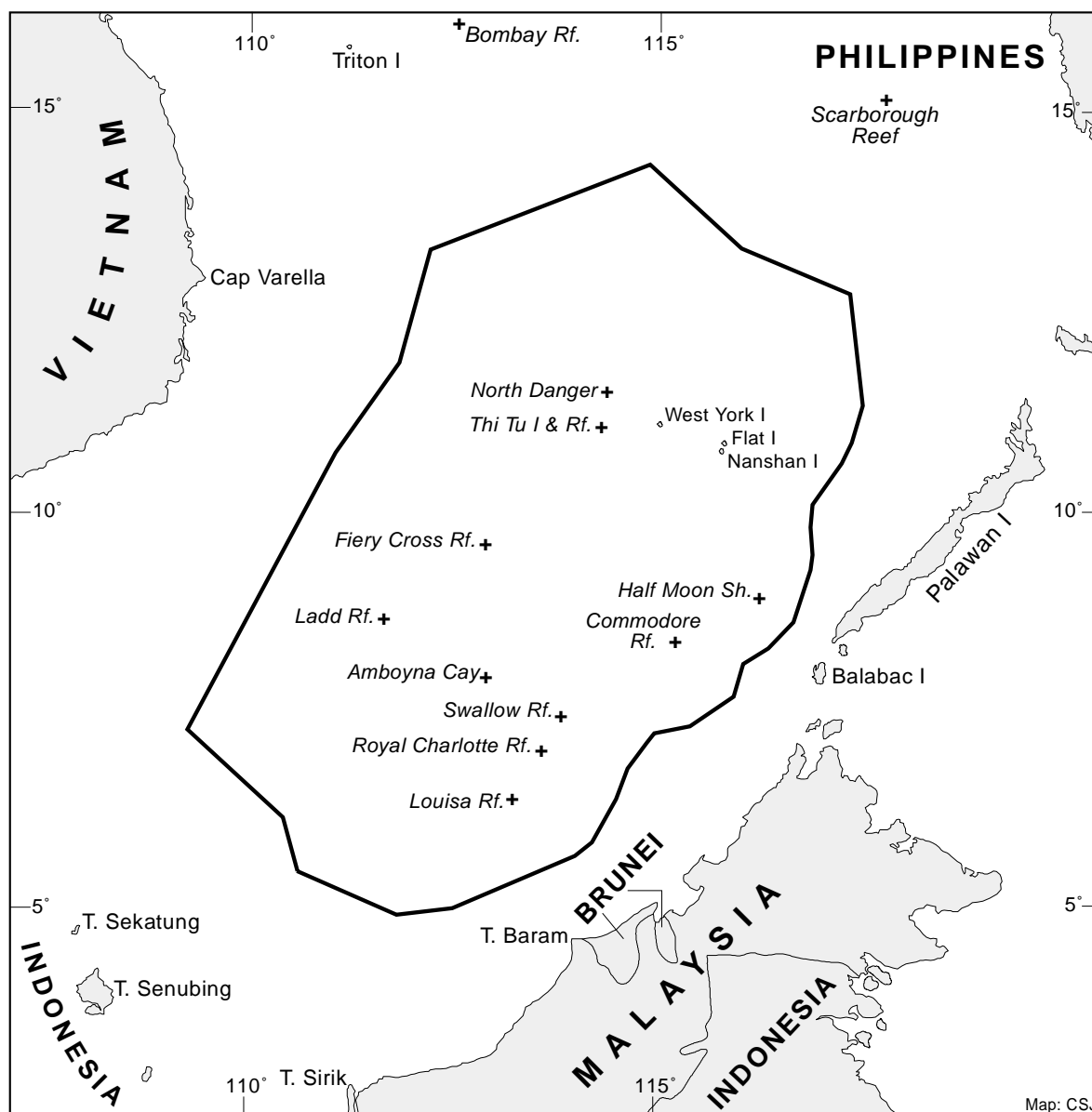


projection at a scale of 1:3.5 million at 23°30'N (The Hydrographer, 1991); a Malaysian chart showing its territorial sea boundaries (Director of National Mapping, Malaysia, 1979) on a Mercator projection at a scale of 1:1.5 million at 5°30' N; British Admiralty chart BA 943 on a Mercator projection at a scale of 1:1.55 million at 6°45' N (The Hydrographer, 1946); British Admiralty chart BA 2660B on a Mercator projection at a scale of 1:1.55 million at latitude 5°30' N (The Hydrographer, 1971); an American chart on a Mercator projection at a scale of 1:1.071 million at 12°15' N (Defense Mapping Agency Hydrographic/Topographic Centre, 1980).

The line of equidistance enclosing those areas of sea and seabed that are closer to islands or rocks in the Spratly Islands than the territory of surrounding states was drawn between the outlying islands and rocks of the Spratly Islands and the mainland, islands and rocks of Vietnam, China, the Philippines, Malaysia and Brunei. It is known that some countries have occupied submarine banks using artificial structures but these features were not considered in defining the area of sea and seabed that attaches to the islands and rocks of the Spratlys. The line of equidistance was also drawn between the northernmost outlying Spratly Islands and Scarborough Reef claimed by both China and the Philippines (see Figure 20).

The outlying islands and rocks of the Spratly group proceeding clockwise from Ladd Reef, lying just west of Spratly Island are Fiery Cross Reef, Thi Tu Reefs, North Danger Reef, West York Island, Flat Island, Nanshan Island, Half Moon Shoal, Commodore Reef, Swallow Reef and Louisa Reef (Hancox and Prescott, 1995).

Figure 20: Maritime Area Associated with the Spratly Islands



The basepoints on the coasts of the surrounding states that fixed the line of equidistance have been arranged in clockwise order from Tanjong Sekatung in Indonesia southwest from Ladd Reef, that generates a point equidistant from Ladd Reef and Louisa Reef, to Tanjong Senubing belonging to Indonesia, that lies southeast of Tanjong Sekatung (The Hydrographer, 1975: 44 and 47). The Vietnamese basepoints proceeding clockwise from Tanjong Sekatung are Poulo Sepate, the headlands of Vinh Cam Ranh, Mui [point] Rach Trang, Mui Ganh and Cape Varella (The Hydrographer, 1978: 61, 134-5 and 138-9). Basepoints in the Paracel Islands, claimed by both China and Vietnam are Zhangjian Dao [Triton Island] and Langhua Jiao [Bombay Reef] (The Hydrographer, 1978: 62). Scarborough Reef claimed by China and the Philippines forms the next basepoint (The Hydrographer, 1975: 168). The Philippine basepoints are Tapiutan Island, North Guntao Island, eleven points along the west coast of Palawan, Martinez Point and Ligas Point (The Hydrographer, 1975: 113-28; The Hydrographer, 1978a: 83). The Malaysian and Brunei basepoints are Pulau Kalampunian, Pulau Mantanani Kechil, Pulau Mengalom, Jahat Rock, Labuan, the east coast of Brunei in the vicinity of 114°45' E, Tanjong Baram, two points lying about 55nm and 25nm east of Tanjong Sirik, and Tanjong Sirik (The

Hydrographer, 1975: 65, 74-6, 78, 93, 99 and 102-3). The list of basepoints around the edge of the South China Sea is completed by Tanjong Senubing that is part of Indonesia (The Hydrographer, 1978: 44).

The area of land, sea and seabed lying within the line of equidistance surrounding Spratly Islands measures 165,000nm<sup>2</sup> (565,000km<sup>2</sup>). This area is about 1.7 times the area of Malaysia or Vietnam and consists mainly of seas and seabed.

### **3. Conclusions**

The United Kingdom drew the first modern maritime boundaries within the Asian Rim in 1958 to separate the continental shelves of Brunei from those of Sarawak and Sabah. Those boundaries have survived in the post-colonial period but they have not been extended to completion. Since 1958 only seven maritime boundary agreements have been negotiated and only one can be considered to be complete. The 1969 continental shelf boundary between Indonesia and Malaysia north of Tanjong Datu does not follow a line of equidistance and a line dividing the water column remains to be found. The other continental shelf boundary between Indonesia and Malaysia north of Singapore Strait is a line of equidistance. However, if Horsburgh Light [Pulau Puteh] is awarded to Singapore in the current case before the International Court of Justice, the southern terminus may need to be adjusted because Indonesia would have a potential maritime boundary with Singapore. The seabed boundary selected by Japan and South Korea in 1974 terminated when the island claimed by both came into range. The 1979 agreement between Malaysia and Thailand settled the territorial sea line but created a joint zone seawards. The agreement on joint historic waters between Cambodia and Vietnam dated 1982 remains inconclusive. The EEZ boundary delimited by North Korea and Russia in 1986 appears to be complete but its terminus is not equidistant with either Japanese or South Korean territory. Malaysia and Vietnam created a cooperative arrangement for the exploration and exploitation of hydrocarbon reserves in their overlapping continental shelf claims in 1992. Only the territorial sea boundary drawn by North Korea and Russia in 1985 appears to be complete. If reports that in 2000 China and Vietnam drew a maritime boundary through the Gulf of Tonking are correct this line will join the list of incomplete boundaries. The reported line does not continue outside the Gulf.

There are a number of regional and local factors that account for the small number of boundary agreements since 1958 and their incompleteness. The regional factors are considered first. The existence of competing claims by six states to the Spratly Islands introduced such a large number of possible outcomes that it was necessary for the authors to put a cordon around them and disregard questions of dividing the central region of the South China Sea. The Philippines' attachment to its colonial treaty limits has been a straight-jacket restricting opportunities for maritime boundary negotiations with all except two neighbours. Malaysia is one of the exceptions since it has accepted the treaty limits as an international boundary through the Sulu Sea, but the Philippines' claim to Malaysian territory beyond the treaty limits prevents any discussions of a possible maritime boundary. Palau is the other neighbour with which the Philippines could negotiate without abandoning its claims in respect of the treaty limits.

The equivocal status of Taiwan vis-à-vis China seems to have made it impossible for Taiwan to settle any maritime boundaries if it had wished to do so. Until the present the ideological and practical legacies of the Korean War probably have been partly responsible for the fact that North Korea and South Korea have each concluded only one maritime boundary and those with political allies. A regional factor that complicates eight boundary segments is the number of disputes over territorial sovereignty. This type of dispute involving islands embroils Brunei and Malaysia, China and Japan, China and the Philippines, Indonesia and Malaysia in the Celebes Sea, Japan and South Korea, Japan and Russia and North and South Korea; The other territorial dispute concerns the claim by the Philippines to Sabah.

The local factors encountered in the Asian Rim are similar to those found in some maritime boundary negotiations throughout the world. The most common disputes are over the status of islands and rocks, the view that one island has a significant influence on the configuration of a boundary, and the belief that the boundary should favour the country with the longer coastline. Other disputes centre on assertions that a non-equidistant seabed boundary should also be used to divide the water column and appeals to the principle of natural prolongation versus equidistance.

The examination of 19 boundary segments suggests that there are only three cases where there do not appear to be any likely arguments that a line of equidistance is inequitable. Those cases involve China and North Korea, Indonesia and Vietnam and the Philippines and Palau.

If reports that China and Vietnam have delimited a maritime boundary within the Gulf of Tongking are accurate this is an encouraging development. It might mean that other countries will be able to negotiate those segments of their maritime boundaries that do not impinge on disputed islands.

## Bibliography

- Blake, G.H. (1994) (ed.) *Maritime Boundaries*, World Boundaries, Vol.5, London: Routledge.
- Boundary and Security Bulletin*, Durham: International Boundaries Research Unit.
- Bureau of Public Affairs (1960) *Foreign relations of the United States, Diplomatic Papers: The Conference of Berlin (The Potsdam Conference) 1945*, two volumes, Washington DC: United States Government Printing Office.
- (1961) *Foreign relations of the United States, Diplomatic Papers, the Conferences at Cairo and Teheran 1943*, Washington DC: United States Government Printing Office.
- (1977) *Foreign relations of the United States 1951: Asia and the Pacific*, Vol.VI, Part 1, 1119-33, Washington DC: United States Government Printing Office.
- Charney, J.I. (1999) 'Rocks that cannot sustain human habitation', *American Journal of International Law*, 93(4): 863-78.
- Charney, J.I. and Alexander, L.M. (1993) (eds) *International Maritime Boundaries*, 2 Vols., Dordrecht: Martinus Nijhoff.
- Chemillier-Gendreau, M. (1996) *La souveraineté sur les archipels Paracels et Spratlys*, Paris: L'Harmattan.
- Choon-Ho Park (1972) *Continental shelf issues in the Yellow sea and the East China Sea*, Occasional Paper No.15, Law of the Sea Institute, University of Rhode Island.
- Committee of Place names (1983) 'Islands in the South China Sea', *People's Daily* (Chinese version), 4<sup>th</sup> edition (25 April).
- Conroy, H. (1960) *The Japanese seizure of Korea 1868-1910*, Philadelphia.
- Defense Mapping Agency (1980) *Mui Bai Bung to Mui Da Nang*, Mercator projection, scale 1:1.071 million at 12°15' N, Washington DC.
- (1986) *Northern Part of Yellow Sea including Bo Hai and Liaodong Wan*, scale: 1:864,700 at latitude 38°, Mercator projection.
- (1990) *Yellow Sea including the East China Sea and Korea Strait*, scale 1:1 million at 33°47'N, Mercator projection.
- Departemen Pertahanan Keamanan Staf Territorial – Pankorwilnas (1983) *Peta Wilayah Kedautalan Dan Yurisdiksi Indonesia* [Chart of the areas under the jurisdiction of Indonesia], Mercator projection, scale 1: 5 million.

- Director of National Mapping Malaysia (1979) *Map showing territorial waters and continental shelf boundaries of Malaysia*, Sheet 2, Mercator projection, scale 1:1.5 million at 5°30' N.
- Findlay, A.G. (1889) *A Directory for the Navigation of the Indian Archipelago and the Coast of China...*, 3<sup>rd</sup> edition, London: Richard Holes Laurie.
- Hancox, D. and Prescott, J.R.V. (1995) *A Geographical Description of the Spratly Islands and an Account of Hydrographic Surveys Amongst Those Islands*, Maritime Briefing, 1 (6), Durham: International Boundaries Research Unit.
- Hulbert, H.B. (1962) *History of Korea*, (ed) C.N.Weems, 2 vols., London.
- The Hydrographer of the Navy (1946) *Philippine Islands and adjacent seas from Molucca sea to Manila Bay*, Mercator projection, scale 1:1.55 million, Taunton: United Kingdom Hydrographic Office.
- (1957a) *Baie de Ream to Ko Kut*, Mercator projection, scale 1:240,000, Taunton: United Kingdom Hydrographic Office.
- (1957b) *Quan-Đao Nam Du to Chhâk Réam*, Chart 3879, 1:240,000, London: British Admiralty
- (1958) *Pulau Billean to Lihiman*, Mercator projection, scale 1:100,000, Taunton: United Kingdom Hydrographic Office.
- (1958a) *Approaches to Sandakan including Labuk Bay*, Mercator projection, scale 1:100,000, Taunton: United Kingdom Hydrographic Office.
- (1966) *South and east coasts of Korea, east coast of Siberia and Sea of Okhotsk Pilot*, Taunton: United Kingdom Hydrographic Office.
- (1966a) *Japan Pilot*, Vol.I, Taunton: United Kingdom Hydrographic Office.
- (1967) *Singapore to Saigon and the Gulf of Thailand*, chart 2414, Mercator projection, scale 1:1.5 million, Taunton: United Kingdom Hydrographic Office.
- (1968) *China Sea Pilot*, Vol.III, 3 edition, Taunton: United Kingdom Hydrographic Office.
- (1970) *Pacific Islands Pilot*, Vol.I, 9<sup>th</sup> edition, Taunton: United Kingdom Hydrographic Office.
- (1971) *China Sea*, Mercator projection, scale 1.1.55 million, Taunton: United Kingdom Hydrographic Office.
- (1972) *China Sea – Southern Portion – Western Sheet*, chart 2660A, Mercator projection, scale of 1:1.55 million, Taunton: United Kingdom Hydrographic Office.
- (1974) *Japan Pilot*, Vol.II, Taunton: United Kingdom Hydrographic Office.

- (1975) *China Sea Pilot*, Vol.II., Taunton: United Kingdom Hydrographic Office.
- (1976) *Indonesia Pilot*, Vol.II, first edition, Taunton: United Kingdom Hydrographic Office.
- (1977) *South China Sea*, BA1263, Mercator projection, scale 1:4.84 million at latitude 15° N, Taunton: United Kingdom Hydrographic Office.
- (1978) *China Sea Pilot*, Vol.1. Taunton: United Kingdom Hydrographic Office.
- (1978a) *Philippine Islands Pilot*, Taunton: United Kingdom Hydrographic Office.
- (1979) *Japan Pilot*, Vol.II, Taunton: United Kingdom Hydrographic Office.
- (1980) *Indonesia Pilot*, Vol.III, first edition, Taunton: United Kingdom Hydrographic Office.
- (1990) *Eastern approaches to Balabac Strait*, Mercator projection, scale 1:300,000 at 8° N, Taunton: United Kingdom Hydrographic Office.
- (1991) *South China Sea*, BA 4508, Mercator projection, scale 1:3.5 million, Taunton: United Kingdom Hydrographic Office.
- (1991a) *Sulu archipelago*, Mercator projection, scale 1:500,000 at 8° N, Taunton: United Kingdom Hydrographic Office.
- (1992) *Philippine Islands to Bismark Archipelago*, Taunton: United Kingdom Hydrographic Office.
- (1992) *East China Sea*, BA 2412, Mercator projection, scale 1:1.5 million, Taunton: United Kingdom Hydrographic Office.
- (1996) *Hokkaido southeast coast*, BA 1803, Mercator projection, scale 1:500,000 at latitude 43° N, Taunton: United Kingdom Hydrographic Office.
- (1997) *South China Sea – Northwest Part: Song Sai Gon to Hong Kong*, BA3488. Mercator projection, scale 1:1.5 million at 12° N, Taunton: United Kingdom Hydrographic Office.
- (1998) *Manila to Hong Kong*, BA 3489, Mercator projection, scale 1:1.5 million at 12° N, Taunton: United Kingdom Hydrographic Office.
- (1999) *Indonesia Pilot*, Vol.II, second edition, Taunton: United Kingdom Hydrographic Office.
- (1999a) *Northern portion of Japan*, Mercator projection, scale 1:3.5 million at latitude 22°30' N, Taunton: United Kingdom Hydrographic Office.
- League of Nations (1933) *Treaty Series*, Vol.137, Geneva: Publication Department: 298-317.

- Li Linghua (1998) 'Consideration and Suggestions on China's Maritime Delimitation', *Ocean Development and Management* (in Chinese), Vol.3, No.55 (July): 52-54, China Ocean World Press.
- Liu Wenzong (1996) 'Diaoyu Islands part of China's territory', *China Daily*, 21 August 1996: 4.
- Miyoshi, M. (1999) *The Joint Development of Offshore Oil and Gas in Relation to Maritime Boundary Delimitation*, Maritime Briefing, 2, 5, Durham: International Boundaries Research Unit.
- Morgan, J. and Valencia, M.J. (1992) *Atlas for Marine Policy in East Asian Seas*, Berkeley: University of California Press.
- National Geographic Society (1981) *Indian Ocean Floor*, scale at equator 1:25.72 million. [This map also shows the eastern seabed of Asia].
- Parry, C. (1979) *Consolidated Treaty Series*, Vol.187, New York: Oceana.
- (1979a) *Consolidated Treaty Series*, Vol.189, New York: Oceana.
- People's Republic of China, The Mapping Agency of the Navigation Guarantee Department of the Chinese Navy Headquarters (1993) *Bohai Sea and northern part of the Yellow Sea*, no.9701, scale: 1:750,000, Mercator projection,
- People's Republic of China, The Navigation Guarantee Department of the Chinese Navy Headquarters. (1997) *The chart of baselines of territorial sea of partial mainland and Xisha Qundao of the People's Republic of China*, No. 03069, Scale: 1:4 million at 30° N, Mercator projection,
- People's Republic of China, The Mapping Agency of the Navigation Guarantee Department of the Chinese Navy Headquarters, 1992. *Shanghai Gang to Ningbo Gang*, Number 9307, Scale 1:300,000 at 30° N, Mercator projection.
- People's Republic of China, The Mapping Agency of the Navigation Guarantee Department of the Chinese Navy Headquarters, 1993. *Chengshan Jiao to Changjiang Kou*, Number 9702, Scale 1:750,000 at 30° N, Mercator projection.
- (1993a) *Changjiang Kou to Minjiang Kou*, Number 9703, Scale 1: 750,000 at 30° N, Mercator projection.
- (1993b) *Bohai Sea and northern part of the Yellow Sea*, Number 9701, Scale 1: 750,000 at 30° N, Mercator projection.
- (1997) *The chart of baselines of territorial sea of partial mainland and Xisha Qundao of the People's Republic of China*, Scale: 1:4 million at 30°N, Mercator projection.
- Prescott, J.R.V. (1975) *Map of Mainland Asia by Treaty*, Melbourne: Melbourne University Press.



- (1981) *Maritime jurisdiction in Southeast Asia: a commentary and a map*, Environment and Policy Institute, East-West Centre: Honolulu, Research Report no.2.
- (1985) *Australia's maritime boundaries*, Canberra: Australian National University.
- (1987) *Maritime jurisdiction in East Asian Seas*, Occasional paper no.4, Environment and Policy Institute, East West Center: Honolulu.
- (1994) 'The Papua New Guinea-Solomon Islands maritime boundary', *Ocean Yearbook* 11, 179-92, Chicago: University of Chicago.
- (1996) *The South China Sea: Limits of National Claims*, MIMA Paper, Kuala Lumpur: Maritime Institute of Malaysia.
- (1997) 'An analysis of the basis of claims by Taiwan and Japan to the Diaoyu Islands', pp.47-58 in K.H.C.Chiu and L.Chen (eds) *International Law Conference on the Dispute over Diaoyu/Senkaku Islands*, Taiwan Law Society and Taiwan Institute of International Law.
- (1997a) 'The completion of marine boundary delimitation between Australia and Indonesia', *Geopolitics and International Boundaries*, 2 (2): 132-49.
- (1998) *The Gulf of Thailand: Maritime Limits to Conflict and Cooperation*, Maritime Institute of Malaysia: Kuala Lumpur.
- Prescott, J.R.V., Collier, H.J. and Prescott, D.F. (1977) *Frontiers of Asia and Southeast Asia*, Melbourne: Melbourne University Press.
- Prescott, J.R.V. and Boyes, G. (2000) *Undelimited Maritime Boundaries in the Pacific Ocean Excluding the Asian Rim*, Maritime Briefing, 2 (8), Durham: International Boundaries Research Unit.
- Republic of China Navy (1994) *Eastern China Sea and approaches to southern part of Japan*. No. 000111, Mercator projection, scale 1:1.5 million at 30° N, Taipei: Republic of China.
- (1998) *Ming Chiang entrance to Hong Kong*, No. 0307, Mercator projection, scale 1:1 million at 30° N, Taipei: Republic of China.
- Schofield, C.H. (1999) *Maritime Boundary Delimitation in the Gulf of Thailand*, unpublished Ph.D. thesis, International Boundaries Research Unit, University of Durham.
- The Times Atlas of China* (1974) London: Times Newspapers.
- The Times Atlas of the World* (1994) London: Times Books.
- United Kingdom Inspector of Customs (1917) *Treaties. Conventions etc. between China and Foreign States*, 2 volumes, Shanghai.

United States Army Map Service (1953) *Copy of Carte de L'Indochine Sheet 40 (bis) west*, Transverse Mercator projection, scale 1:100,000, edition 1925.

United States Department of State (1988) *Foreign relations of the United States: papers relating to the foreign relations of the United States 1922*, two volumes, Washington DC: United States Government Printing Office: 276-81.

(1995) *South China Sea*, Mercator Projection, scale 1:2.9 Million at 16°30 N, 735216 (RO1788) 5-95.

United States Department of State, The Geographer (1972) 'Straight baselines: People's Republic of China', *Limits in the Seas*, Series A, No.43, Washington DC: US Department of State.

(1972a) 'Theoretical areal allocations of seabed to coastal states', *Limits in the Seas*, Series A, No. 46, Washington DC: US Department of State.

United States Department of State, Office of Oceans Affairs (2000) 'National Claims to Maritime Jurisdictions', *Limits in the Seas*, No.36, 6<sup>th</sup> Revision, Washington D.C.: US Department of State.

Weil, P. (1989) *The Law of Marine Delimitations – Reflections*, Cambridge: Grotius.