Territorial Sea Limits in the Singapore Strait

Vivian Louis Forbes

Structured Abstract

Article Type: Commentary Essay

Purpose—The governments of Indonesia and Singapore, in February 2017, ratified two agreements that delimitated two extensions, in easterly and westerly directions, of their 1973 Territorial Sea boundary in the Strait of Singapore. Two “gaps” exist that require the urgent attention of the three littoral States to delimit the territorial sea boundaries to close the gaps.

Design, Methodology, Approach—The narrative that follows discusses the issues and problems in defining the territorial sea limits in the Strait of Singapore.

Findings: The one in the western sector appears easier to delimit. The gap in the eastern sector may require more time to negotiate especially based on reports that the Government of Malaysia requested, in January 2017, the International Court of Justice to “revisit” the Award of May 23, 2008, in the light of findings of three “vital” documents.

Practical Implications—The determination of territorial sea boundary in particular in the vicinity of Pedra Branca must be considered a priority by the littoral States for many reasons not least for the safety of navigation and maritime security.

Keywords: base point, common point, delimitation, straight baseline, territorial sea boundary

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Introduction

The present study offers an analysis of the international political divisions within the Singapore Strait. An Agreement, signed in 2014, delimited a relatively short segment of a territorial sea boundary in the eastern sector of the Singapore Strait, just south of the suburb of Changi. The Governments of Indonesia and Singapore exchanged instruments of ratification relating to that Agreement, at a ceremony in Singapore, on February 10, 2017.

This event realized the nearly complete political division of the Singapore Strait. Short segments; less than one M in the east and 10.5 M in the west of the Strait, await finalization of delimitation. Ongoing negotiations will be required sooner than later between Indonesia, Malaysia and Singapore to determine Common Points (or Tri-points), if deemed necessary, and then to link the present respective terminal points of existing delimited maritime boundaries, bilaterally negotiated between the countries since 1969, to the respective Common Points.

First, it is necessary to offer a geographical description of the setting in focus, to describe the natural limits of the Strait in the context of this narrative and to comment on the importance and relevance of this major waterway that links the Indian Ocean and the South China Sea. This will be followed with an analysis of the territorial sea boundary delimitation undertaken by the littoral States during bilateral discussions over a period of nearly five decades. Finally, a comment is offered on the prospects of a potential alignment of closing lines. This process is undoubtedly complicated by the fact that the sovereignty issue of Batu Puteh/Pedra Branca/White Rock, Middle Rocks and South Ledge is still open to debate because of findings in January 2017 and ongoing, by Malaysian Officials, of vital documents from archival files at the United Kingdom National Archives, that has the potential to change the ruling of the International Court of Justice (ICJ) of May 23, 2008, and thereby alter the political map, once again, of this regional setting.

Geographical Setting: Singapore Strait

In earlier literature, this stretch of water was also referred to as the Straits of Singapore. For the purpose of this discussion, the singular is employed. Singapore Strait is defined as the area lying between the south coasts of Malaysia and Singapore Island on the North and the islands off the southeast coast of Sumatra on the South between the following limits:

On the West:
The Southeast limit of Malacca Strait, which is, a line from Tanjung Piai (Lat. 1° 16' N, Lon. 103° 31' E,) the southern extremity of Malaysia, to:

Pulau Iyu Kecil (1° 11' N, 103° 21' E), thence to:
Pulau Karimum Kecil (1° 10' N, 103° 23' E), thence to
Tanjung Kedabu (1° 06' N, 102° 59' E)
On the East:
A line joining Tanjung Penyusop (Datok) (1° 22’ N, 104° 17’ E, the southeast extremity of Malaysia, to:

Horsburgh Lighthouse (1° 20’ N, 104° 24’ E), thence to
Pulau Koko (1° 13’ N, 104° 35’ E) lying off the Northeast extremity of Pulau Bin-tan.

The entire length of the Strait is about 60 nautical miles (M). At its eastern approach the strait is about 11.5 M in width, abreast of Tanjung Penyusop; the western approach of the strait is nearly 10 M wide. A channel between Pulau Sakijiang Pelepah (Lazurus Island) and Batu Berhanti (1° 17’ N, 103° 51’ E) which is a mere 2.5 M wide, lies South of Singapore Island. Many channels and Straits lead south out from the Strait of Singapore.5

Johor Strait, which is in two parts, separates Peninsular Malaysia from Singapore Island. A Causeway was constructed, in 1940, linking Johor Bahru, Malaysia and Woodlands, Singapore, creating a West Johor Strait and an East Johor Strait. A Second Link Bridge was constructed, in 1997, just north at Tuas that links the Island State and its neighbor, Malaysia, to the north. Indeed, a territorial sea boundary was surveyed and re-defined and delineated within the Johor Strait in 1995. This fact is alluded to later in this narrative.

Various concepts have been put in place so as to enhance marine navigation within the Straits of Malacca and Singapore (SOMS) that include a Traffic Separation Scheme (TSS), Vessel Traffic Information System (VTIS), and a Marine Electronic Highway (MEH) complete with Electronic Charts and Display Information System (ECDIS) and electronic charts to make mariners aware of the hazards to navigation within the Straits.

Hazards to Navigation

Many hazards confront the mariners on ships plying the Straits of Malacca and Singapore.6 Among the many hazards are some of the following:

Tides

Tides in the Malacca Strait are generally semi-diurnal with a diurnal component towards the south end of the Strait. In the Singapore Strait the tide is generally diurnal. The tidal range within the Straits of Malacca and Singapore (SOMS) varies, for example, in the vicinity of One Fathom Bank it can attain 3.7 meters (m); off Malacca, 1.8 m; off Pulau Iyu Kecil, 2.6 m; and, in the vicinity of Horsburgh Light it is 1.6 m. Deep-draught vessels cannot avoid passing over shoals and hence require sea space to navigate these shoals. Tidal streams are strong and are influenced by monsoon currents. Figure 1 illustrates the varying widths of Singapore Strait.
Critical Tidal Height

Constrictions of channels due to local topography and sand waves on the seafloor, for example, southeast of Rumunia Shoals (Lat. 1° 27’ N, Lon. 104° 27’ E), at the eastern approaches to the Strait, extend for about 10 M from North patch and consist of coarse sand and gravel, and are steep-to often with deep water in between. In the south, part of the area is ridged with sand waves, over which the least depth may vary from time to time.

Critical Draught of Large Vessels

The critical draught of large vessels must be considered for ships approaching Buffalo Rock (Karang Banteng) [Lat. 1° 09’ N, Lon. 103° 49’ E] and at another point, which is about 12 M north-east of Horsburgh Light. Deep-draught vessels transiting the Singapore Strait are mandated to use the Deep-Water Route. Deep-draught tankers navigate around this point as they transit through the Straits of Singapore. Other vessels should as far as practicable avoid the Deep-Water Route.

Risk of Collision

Mariners approaching Raffles Lighthouse by ship or boat either from East or West are requested to maintain an efficient lookout for traffic signals that are displayed to warn all shipping that a Very Large Crude Carrier (VLCC) is crossing the Main Strait, by reducing speed or stopping, and should not in any circumstances
cross ahead of such a vessel. Other hazards that may be encountered within the Singapore Strait include, but not limited to, fishing stakes and local fishing operations and acts of piracy or armed robbery, depending on which definition is employed for such terms.

**Dependency on Reliable Aids to Navigation**

The distance from One Fathom Bank to Horsburgh Light is about 250 M in length. Mariners are warned that long periods of considerable vigilance are necessary in order to maintain safe standards of navigation. This is not only due to natural hazards but also the sheer volume of traffic using the Straits of Malacca and Singapore. Due diligence is required by mariners operating in the southern sector of Singapore Strait, particularly in the jurisdictional waters of Indonesia.

**Busy Seaway and Ports of Call**

There are three ports of call within the Strait of Singapore. They are the Port of Singapore, Port of Tanjung Pelapas and Port of Johor (Pasir Gudang). During 2016, the number of ships at any one time in the Port of Singapore was about 1,000; indeed, a ship arrives or departs Singapore every 2–3 minutes; and the port handled about 32.6 million tons (Figure 2) equating to nearly 1,066 tons every minute according to statistics maintained by the Ministry of Transport, Singapore. In excess of 130,000 ships of varying size and type transit the Straits Singapore annually. Figure 3, illustrates the projection for 2020 and 2030 of the number of ships (78 percent increase) and deadweight tonnage (164 percent rise). The Governments of the littoral States are naturally concerned for the safety of ships, the cargo, crew operating the vessels transiting the Straits and for any potential problems that may arise in the event of collisions, terrorist attacks and natural disaster that may have an adverse effect and/or impact on the marine environment and the coastal habitat. In order to manage the Straits it is vital that territorial sea limits are defined and delineated on the largest-scale charts especially in this particular geographical setting.

![Diagram of top four container ports in 2013 (TEUs)](image)

**Figure 2:** Tonnage loaded and unloaded at Port of Singapore (Ministry of Transport, Singapore; accessed May 5, 2017).
Delimited Territorial Sea Boundaries in the Straits of Singapore

Indonesia and Singapore

The territorial sea boundary between the two states in the Strait of Singapore as agreed in May 1973 (Figure 4) utilized the equidistance principle for determining three of the turning points and negotiated positions for the three other points. Indeed, Point 2 was located about 0.5 M inside the 1960 Indonesian archipelagic straight baseline system. The 2002 and 2008 revised archipelagic base points proclaimed (re-defined) by Indonesia in this vicinity now places Point 2 just outside the archipelagic waters of Indonesia. The relevant new baseline connects points 190(B) and 191.

The total length of the geodesics connecting the terminal and turning points of the 1973 boundary was 24.8 nautical miles averaging about 4.9 M. The boundary lies in water depths ranging from 20 to 50 meters. It is aligned to the deep-water channel, which is naturally the recommended deep-draught tanker route. A traffic separation scheme operates in the vicinity.

Whereas, Indonesia adopted a territorial sea limit of 12-nautical miles, Singapore retained a three-M zone. However, in 1980, the Government of Singapore announced that it would exercise its right to extend that limit to 12 nautical miles. On May 28, 2008, Singapore proclaimed a Territorial Sea width of 12 M and an Exclusive Economic Zone (Gov. Gaz. May 28, 2005, 5 p.m.—online version).

The agreement to establish a territorial sea boundary in the Singapore Strait between the two countries on May 25, 1973, noted that extensions to the west and east of the nominated terminal points would require further negotiations. The pending
negotiations resumed in February 2005. On March 10, 2009, delegations from Indonesia and Singapore who negotiated, over a four-year period, a western extension to the territorial sea separating the two countries in the western half of the Straits of Singapore signed an Agreement. Three points were identified in that Agreement and their geographical coordinates, referenced to WGS 84 datum, were published. Table 1 offers the list of geographical coordinates of the points as agreed to in May 1973 and Table 2 presents the geographical coordinates of the western projection of the boundary.

### Table 1: Geographical Co-ordinates: Turning Points of T.S. Boundary, 1973

<table>
<thead>
<tr>
<th>Point Number</th>
<th>Latitude (N)</th>
<th>Longitude (E)</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1° 10’ 46.0&quot;</td>
<td>103° 40’ 14.6&quot;</td>
</tr>
<tr>
<td>2</td>
<td>1° 07’ 49.3&quot;</td>
<td>103° 44’ 26.5&quot;</td>
</tr>
<tr>
<td>3</td>
<td>1° 10’ 17.2&quot;</td>
<td>103° 48’ 18.0&quot;</td>
</tr>
<tr>
<td>4</td>
<td>1° 11’ 45.5&quot;</td>
<td>103° 51’ 35.4&quot;</td>
</tr>
<tr>
<td>5</td>
<td>1° 12’ 26.1&quot;</td>
<td>103° 52’ 50.7&quot;</td>
</tr>
<tr>
<td>6</td>
<td>1° 16’ 10.2&quot;</td>
<td>104° 02’ 00.0&quot;</td>
</tr>
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On August 30, 2010, the Ministers for Foreign Affairs of the Parties to the Agreement met in Singapore to exchange Instruments of Ratification, thereby, bringing the Treaty into force. The delegations of the Governments of the Republic of Indonesia and the Republic of Singapore held the Third Technical Discussions on Maritime Boundaries in the Eastern Part of the Strait of Singapore in Singapore on July 12 and 13, 2012, as a follow-up to the Second Technical Discussions, held in Bali on February 8 and 9, 2012. The Indonesian delegation was led by Mr. Rachmat Budiman, (former) Director for Treaties on Political Security and Territorial Affairs, Ministry of Foreign Affairs. The Singapore delegation was led by Mr. Lionel Yee, Second Solicitor-General of the Attorney-General’s Chambers.

At the Third Technical Discussions, the delegations continued negotiations on the Terms of Reference and other issues relating to the maritime boundaries between the two countries. Both Heads of Delegation acknowledged that the significant progress reached at the Discussions would contribute to strengthening bilateral relations between the two countries according to the Joint Statement issued on July 13, 2012, that was published in the print and electronic media the following day.

### Table 2: Geographical Co-ordinates: Turning Points of T.S. Boundary 2009

<table>
<thead>
<tr>
<th>Point Number</th>
<th>Latitude (N)</th>
<th>Longitude (E)</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>1° 10’ 46.0&quot;</td>
<td>103° 40’ 14.6&quot;</td>
</tr>
<tr>
<td>1A</td>
<td>1° 11’ 17.4&quot;</td>
<td>103° 39’ 38.5&quot;</td>
</tr>
<tr>
<td>1B</td>
<td>1° 11’ 55.5&quot;</td>
<td>103° 34’ 20.4&quot;</td>
</tr>
<tr>
<td>1C</td>
<td>1° 11’ 43.8&quot;</td>
<td>103° 34’ 00.0&quot;</td>
</tr>
</tbody>
</table>

Discussion over the eastern segment commenced following the signing of the 2009 Agreement relating to the extension of the western boundary. With a clearer boundary between the two countries, it was expected that Indonesia could further...
explore economic development in its territories near the boundary, which includes the Batam, Bintan and Karimun free trade zones in the Riau Group of Islands.

The agreement was expected to boost economic ties between Indonesia, Singapore and Malaysia, as well as the three neighbors’ security cooperation in safeguarding the Malacca Strait. Departing from previous concern, Singapore, which had been actively reclaiming its shoreline, finally agreed not to use its southern reclaimed shoreline as the basis to determine the border. The median line that forms the western segment of the boundary between the two nations was finally drawn from Indonesia’s Nipah Island and Singapore’s original Sultan Shoal Island, it was observed. The delegation from Singapore had earlier refused to talk about the eastern segment boundary, citing the country’s border dispute with Malaysia.

<table>
<thead>
<tr>
<th>Point Number</th>
<th>Latitude (N)</th>
<th>Longitude (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1° 16' 10' 12&quot;N</td>
<td>104° 02' 00.0&quot;E</td>
</tr>
<tr>
<td>7</td>
<td>1° 16' 22' 48&quot; N</td>
<td>104° 02' 16.6&quot;E</td>
</tr>
<tr>
<td>8</td>
<td>1° 16' 34' 06&quot; N</td>
<td>104° 07' 06.3&quot;E</td>
</tr>
</tbody>
</table>

These relatively short lengths of geodesics, created by the 2009 Agreement extend the Territorial Sea boundary by an additional 5.5 M in a westerly direction from Point 1 of the May 1973 Agreement. The two segments defined in the 2014 Agreement projected the boundary in an easterly direction by a distance of 5.3 Miles. The 1973 boundary as well as the western extension of 2009 and the eastern projection of 2014 are depicted in Figure 4.

Malaysia and Singapore

The Malaysia and Singapore territorial sea boundary (Point W1 to W25) in the Johor Strait, west branch was re-defined in 1995 to re-enforce the 1927 Agreement based on the deep-water channel through the entire length in western side of the Johor Strait. Points W24 and W25 will feature in any future negotiation to link the present terminal points in order to finalize the delimitation process in the western approaches of the Singapore Strait.14

Likewise, points E46 and E47 will be used in the eastern sector of the Singapore Strait in order to link Point 8 of the 2014 Agreement of the Indonesia and Singapore Territorial Sea boundary extension, as depicted in Figure 4. The overall length of the Territorial Sea boundary between these two littoral States within the Johor Straits measures 50 M.

Indonesia and Malaysia

Indonesia and Malaysia signed a territorial sea boundary, about 174 M length, for the southeastern portion of the Malacca Strait and the Western approaches of the

Opposite: Figure 4: Entire length of the Indonesia/Singapore territorial sea boundary.
the Strait of Singapore in March 1970. Terminal Point 8 (is coincident with Point 10 of the 1969 Agreement between Indonesia and Malaysia which is portrayed on Figure 5) lies about 11 M west of what may likely be the Common Point of the Indonesia-Malaysia-Singapore territorial sea boundary. The closure of the two gaps requires urgent action since the signing of the 2009 and 2014 Boundary extension Agreements between Indonesia and Singapore.

Figures 5 and 6 pre-date the 2009 Agreement and 2014 Agreements, respectively; however, they are included in the present study because they portray the Territorial Sea limits in the Johor Straits and are relevant in appreciating the facts and the issues at hand. The maps show the locations of Point 10; Points W1 to W25, E46 and E47, of the 1995 Territorial Sea Boundary within the Strait of Johor which is nearly aligned with the 1927 Boundary Agreement for Malaysia and Singapore; Points 1 and 2 of the western portion and Point 6 in the eastern sector of the Territorial Sea Boundary between Indonesia and Singapore in the 1973 Agreement; and, that section of Indonesia’s revised archipelagic straight baseline system relevant to this geographical area.

Thus, the “western gap” extends from Point 10 (Indonesia/Malaysia, 1970) to Point W25 (Malaysia/Singapore, 1995) to Point 1C of the Indonesia/Singapore, 2009) as depicted on Figure 4. The westward extension to Point 1 of the 1973 was created in 2009, which is discussed below.

Figure 6 illustrates the location of Point 6 of the 1973 Agreement between Indonesia and Singapore; Point E47 of the Malaysia and Singapore Territorial Sea
boundary; Indonesia’s archipelagic straight baseline in the context of the area in focus; and the alignment of Malaysia’s 1979 unilateral claim to a continental shelf.

**Closing the Gaps in the East and West**

A simple straight line linking Point 8 of the Indonesia/Singapore Agreement of 2014 with E47 of the Malaysia/Singapore Agreement would create a territorial sea boundary thereby closing the “eastern gap” and would not involve Indonesia in the negotiation. There would be no need to define a Common Point as E47 could be considered as the Common Point.

In the western approaches to the Strait of Singapore (in the vicinity of Tanjung Piai), the “gap” in the territorial sea boundary has narrowed since 2009 as shown in

**Table 4:** Reference Points for Determining Common Point (E), Eastern Singapore Strait

<table>
<thead>
<tr>
<th>POINT</th>
<th>LATITUDE (N)</th>
<th>LONGITUDE (E)</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pt. 8 (Indo/Sing)</td>
<td>01° 16’ 34.4’’</td>
<td>104° 07’ 06.3’’</td>
<td>2014 Agreement</td>
</tr>
<tr>
<td>E47 (Mal/Sing)</td>
<td>01° 17’ 21.3’’</td>
<td>104° 07’34.0’’</td>
<td>1995 Agreement</td>
</tr>
<tr>
<td>CSB 25</td>
<td>01° 16’ 12.0’’</td>
<td>104° 07’ 00.0’’</td>
<td>1979 CS Claim</td>
</tr>
<tr>
<td>Common Point (E)</td>
<td>Point E47</td>
<td>Point E47</td>
<td>Author’s study</td>
</tr>
</tbody>
</table>

| Pt 8 to E47 | Distance of 0.8M | Pt 8 (Indo/Sin); E47 (Mal/Sin) |
|Pt 8 to Indo baseline | Distance of 4.8M | Pt 8 is equidistant from baseline and Changi|

_Territorial Sea Limits in the Singapore Strait_
Figure 4. Indeed, it is about 11.5 M as indicated in Table 5. The gap as depicted in Figure 5 was narrowed by the action of the 2009 Agreement between Indonesia and Singapore. The location of the gap is between Tanjung Piai (Lat. 1° 16’ N, Lon. 103° 31’ E), to the northern end of Pulau Karimun Kecil (Lat. 1° 10’ N, Lon. 103° 23.5’ E) and extends eastward to an area of sea being reclaimed by Singapore as part of the development of Tuas. Singapore has not declared its territorial sea basepoints; Malaysia employs the Low Water Mark as depicted on its official nautical charts.

In order to close the “gap” in the territorial sea boundaries of the three littoral States it may be necessary to establish a Common Point (or Tri-junction point) based on the equidistance principle from pre-determined locations, for example, terminal points (Point 10, W25 and 1C) of previously agreed boundaries, territorial sea basepoints or baselines, low-tide elevations (for example, off Tanjung Piai where a breakwater is being constructed). However, as in the case of the gap in the eastern sector, it is possible for the littoral States to come to an agreement whereby a straight line (or geodesic) could link Point 10 to Point 1C; and another straight line (or geodesic) link Point 1C to W25. An alternate view and simple to administer would be delineate one straight line rather than a series of short segments aligned on different directions of the compass.

Once again, this may be easier said than done. It will simplify the situation but more importantly closing the gap would make the implementation and enforcement of rules easier to enforce with reference to maritime security, smuggling and illegal movement of persons and the transfer of goods and cargo to avoid customs and excise duty. Whereas, the western gap would be easier to close, the one in the east, although relatively narrower, may take a little more effort, to resolve on account of developments since January 2017 relating to the Batu Puteh/Pedra Branca and related rocks in ICJ Case of 2008.16

The Batu Puteh/Pedra Branca Dimension

Following the publication of the 1979 Map depicting Malaysia’s continental shelf limits, Singapore lodged a protest against Malaysia’s unilateral map.17 The resultant dispute was taken to ICJ. The judgment of the ICJ clarified the status of Pedra Branca as an island, the size of a football field. The ICJ did not determine on how
the territorial sea boundary between the two states should be delimited because both
the Parties never requested the Court to do so.

To complicate the sovereignty issue over the three features the confusion set in
because of the provisions of Article 121 of the 1982 Convention which offers a defi-
nition of an island. The discussion on “marine features”—a broad term for islands,
sand cays, reefs rocks which geographers and marine scientists recognize; however,
regrettfully, lawyers require definitions for each feature; and the issue of entitlement
to maritime jurisdictional space of a LTE (Low-Tide Elevation) and artificial islands.
Thus, a discussion on marine features has become the focus of attention because of
the ICJ’s position on South Ledge as an LTE. The issue was compounded by an Award
offered by the Permanent Court of Arbitration (PCA) on July 12, 2016, in a case that
the Government of the Philippines took against China with reference to the South
China Sea dispute.18

Furthermore, the ICJ’s decision of May 23, 2008, may be “revisited” following
the lodgement of an appeal by the Government of Malaysia based on documents
that are considered relevant by Malaysia to re-open the case. The documents were
“discovered” when files were released by the UK National Archives for public access.
The contents and nature of the documents have not been made public hence it is
not wise to speculate to a possible outcome. That stated, it will only delay any decision
necessary to delimit a territorial sea boundary at the eastern approaches to the Strait
of Singapore.

Figure 7 offers a cartographic interpretation the eastern approaches to the Strait
of Singapore at the southwestern sector of the South China Sea. The three sets of rocks
are known as Pedra Branca (PR), Middle Rocks (MR) and South Ledge (SL) which
focused in a Judgment brought down by the International Court of Justice on May
23, 2008. The decision of the Court was to award Pedra Branca to Singapore and
Middle Rocks to Malaysia.

Paragraph 18 of the ICJ Judgment of 2008 noted that “Middle Rocks and South
Ledge are two marine features closest to Pedra Branca. Middle Rocks are located
0.6M to the south and consists of two clusters of small rocks about 250m apart that
are permanently above high water and stand 0.6 to 1.2m high. South Ledge, at 2.2M
to the south-southwest of Pedra Branca, is a rock formation only visible at low tide.”

South Ledge, whose geographical coordinates are Lat. 1° 17’51” N, and Lon. 104°
23’33” E, is about 1.6 M to the south-southwest of Middle Rocks. It is a rock formation
only visible at low tide. Within the meaning of the 1982 Convention it is termed a
Low-Tide Elevation (LTE). This feature lies about 5.5 M north of Indonesia’s Archipelagic base point No. 182 which is located on a small island off Tanjung Sading.
Each of the three above-named features may be utilized as base points by the sov-
erign State in establishing a datum to measure the width of its Territorial Sea and
other maritime jurisdictional zones where deemed necessary. South Ledge lies within
Malaysia’s territorial sea. Malaysia asserted that South Ledge, which lies 1.7 M from
Middle Rocks and 2.2 M from Pedra Branca, would attach to Middle Rocks rather
than to Pedra Branca, for the simple reason that it is located within the territorial
sea appertaining to Middle Rocks.
Prior to January 2017, a likely version of the allocated maritime space in the vicinity of Pedra Branca would have this feature given a limited territorial sea, enclaved within Malaysia’s maritime space, however defined. A territorial sea boundary between Indonesia and Malaysia from Point 11 of the 1969 Continental Shelf boundary would align to the south of South Ledge and trend westward to meet in the vicinity of E47 and Point 8 employing the equidistance principle to delimit the boundary. Whilst the sovereignty status of Batu Puteh/Pedra Branca, Middle Rocks and South Ledge is still debated within Malaysia and Singapore and possibly at the ICJ once again; geographical reality and historical records infer that Malaysia has a stronger bid as the features lies wholly within Malaysia’s perceived territorial sea. That being the case, then Indonesia will need to negotiate with Malaysia a boundary between South Ledge and the Indonesia’s archipelagic baselines.

**Summary**

Negotiations to finalize delimitation of the territorial sea boundaries in the Strait of Singapore have taken place between Indonesia and Singapore, Malaysia and Singapore and between Indonesia and Malaysia. However, by early May 2017, there are two gaps that require closure: one at the western approaches and another at the eastern entrance to the Strait of Singapore. These areas have been found wanting in delineation and closure of a territorial sea boundary since 2009 and 2014, respectively. There is an urgency to delimit the remaining segments of maritime boundaries in order to establish jurisdictional control in the busiest sea-lanes of Southeast Asia.

The determination of territorial sea boundary in particular in the vicinity of Pedra Branca must be considered a priority by the littoral States for many reasons not least for the safety of navigation and maritime security. It is pertinent for Malaysia and Singapore to define and make public knowledge the territorial sea basepoint coordinates if straight baselines are to be used along the coast of southern Johor and the islands of Singapore. This process of delimitation could be prolonged and increase in complexity as a result of new evidence allegedly found and yet to be made public so as to re-open the case at the ICJ since January 2017.

**Notes**


**Opposite: Figure 7: Provisional map of actual and potential limits at the eastern approaches.**
4. The Judgment and other relevant documents relating to the Case are to be found on the web pages of the International Court of Justice.
5. The International Hydrographic Bureau, *Limits of the Oceans* SP23, 1953.
6. A detailed commentary on navigation within the Strait of Singapore is contained in the Port of Singapore *Handbook* and the UK Admiralty Hydrographic Office’s *PILOTS* of the regional seas.
7. The Ministry of Transport, Singapore and Marine and Port Authority, Singapore, maintains the statistics on shipping and trade for this port.
8. The Nippon Foundation, Japan.
12. The Proclamation was made five days after the ICJ judgment of May 23, 2008.
15. This Agreement and geographical coordinates of the turning points of this boundary delimitation may be found in V.L. Forbes and Basiron Nizam, *Malaysia’s Maritime Realm, An Atlas* (Kuala Lumpur: Maritime Institute of Malaysia, 2009).
16. The Judgment and other relevant documents relating to the Case are to be found on the web pages of the International Court of Justice, The International Hydrographic Bureau, *Limits of the Oceans* SP23, 1953.
18. The Decision of July 12, 2016, and the documents submitted to Permanent Court of Arbitration for consideration in its deliberation is available at the web pages of the PCA.

**Biographical Statement**

Vivian Louis Forbes is affiliated with a number of institutions and specializes in the study of maritime and terrestrial boundaries and geopolitical issues. He has authored several books on these topics and produced two atlases. He offers lectures, seminars and workshops on the cartographic and geographic aspects of the law sea particularly as they relate to maritime boundary delimitation. Such courses have been offered in many countries.