

## NAVIGATIONAL SAFETY, OIL POLLUTION AND PASSAGE IN THE STRAITS OF MALACCA\*

### INTRODUCTION

On February 24, 1977 the Foreign Ministers of Indonesia, Malaysia and Singapore signed on behalf of their respective governments an agreement entitled "Agreement on Safety of Navigation in the Straits of Malacca and Singapore"<sup>1</sup> (hereinafter referred to as the "Safety Agreement"). This Safety Agreement adopted several recommendations made by senior officials of the three countries on the matter of promoting navigational safety and anti-pollution measures in the Straits of Malacca, one of which was that all vessels transiting the Malacca Straits maintain an "under keel clearance"<sup>2</sup> (UKC) of 3.5 metres. As a result of this Agreement to regulate tanker traffic in the Straits, it has been estimated that Japan, with an industrial economy heavily dependent on oil, faces an additional US\$100-\$270 million in its annual oil import bill. Japan's oil requirements are largely supplied by Middle East countries which pump oil into giant Japanese super-tankers which carry their cargoes *via* the Malacca Straits to Japanese ports. The new requirement will mean that the tankers will have to either lighten their cargo (which is estimated to mean loss revenue of US\$75,000 per voyage) to reduce their draughtage and increase UKC, or make a detour through the Indonesian Lombok Straits which would add two additional days to the route at a cost of US\$33,000/- per day.

The Safety Agreement was reached in the spirit of an earlier Agreement. On November 16, 1971 the Governments of Indonesia and Malaysia declared jointly that the Straits of Malacca (and Singapore) was not an international waterway although they fully recognized

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<sup>1</sup> See *Appendix 1* for text of this Agreement; see also *Appendix 2* for Report of the Senior Officials Meeting on Safety of Navigation in the Straits of Malacca and Singapore and the Annexes to this Report, *e.g.* Joint Statement on Safety of Navigation in the Straits of Malacca and Singapore (Annex C); Guidelines for Senior Officials and Technical Experts Group on Safety of Navigation in the Straits of Malacca and Singapore (Annex D).

<sup>2</sup> By "under keel clearance" is meant the distance between a ship's keel and the seabed.

its use for international shipping in accordance with the principle of innocent passage.<sup>3</sup>

This assertion of sovereign rights by coastal states over a much used sea corridor linking two oceans has elicited an unsympathetic response from major maritime powers. Besides attracting attention to competing security interests within South-east Asia at a time when the regional power balance was (and still is) in a state of flux, it brought into focus the debate surrounding the general doctrine of the freedom of the seas which after passing through numerous vicissitudes of history came to be accepted only at the beginning of the 19th century.

The joint declaration of 1971 and the Safety Agreement of 1977 have raised critical questions of international law.

In this short paper it is proposed to examine, in the context of international law the claims of Indonesia and Malaysia, the coastal States in the Straits, to extended jurisdiction arising from enlarged territorial seas. The right of the coastal States to impede passage through the Straits of Malacca (hereinafter referred to as "Straits") for security, navigational safety and other reasons will be briefly evaluated against the background of the general principles of the Law of the Sea and the doctrine of innocent passage.

#### *GEOGRAPHICAL LOCATION*

The Straits lies between the Pacific Ocean and the Indian Ocean, that is, between the south western part of the South China Sea, and the south eastern part of the Andaman Sea.

The term "Malacca Straits" refers to a sea area from its north western most entrance between Perak Island (Pulau Perak) and Diamond Point to the south eastern most entrance between Mount Datok (Tahan Datok) and Pergam Coast (Tanjong Pergam) on Indonesia's small Bintan Island (Pulau Bintan). Situated on the Continental Shelf of the Sunda Platform, it is a multi-entrance strait, stretching approximately 500 miles from north to south. It is a narrow strait by general standards; it has a width of approximately 200 nautical miles at its northern entrance which narrows southwards to almost 8 miles off Kukup, a tiny village in south Johore, West Malaysia, before it enters into the Straits of Singapore. The minimum depth of the navigational channel in the Straits is only 23.6 metres (78 feet).<sup>4</sup> The narrowness and shallowness of the Straits raise acute problems of safety.

#### *IS THE MALACCA STRAITS AN INTERNATIONAL WATERWAY?*

There exists an argument which has a popular misconception for support, namely, that the Straits is not "international" if, as a result

<sup>3</sup> Singapore Government Press Statement, MC:Nov/21/71(F.A.) November 16, 1971 reproduced in *Appendix 3*. Singapore strictly does not border the Straits of Malacca. Its position is discussed, in this paper as a coastal State, because it borders the Straits of Singapore and the Straits of Johore which are both extensions of the Straits of Malacca. It is none the less vitally concerned with the problems of navigational safety and oil pollution.

<sup>4</sup> Port of Singapore Authority sources.

of territorial sea claims, the remaining high seas in the waterway vanish. The belief exists among some of the coastal States that somehow their right to control the Straits would be diluted, if not extinguished, if the Straits is classified as international. This is a misconception because it ignores the fact that in international law a territorial strait may simultaneously be classified as an international strait: *Corfu Channel Case*.<sup>5</sup>

*The Corfu Channel Case* proffered the test of "use". So far as this test is concerned the Malacca Straits in terms of volume of shipping is the second busiest strait in the world, after the Straits of Dover. Approximately 140 ships traverse the Straits *daily*. The Straits is undeniably important to the 3,000 ships or so which are serviced *monthly* in Singapore. There is no doubt that the Malacca Straits satisfies all conceivable and reasonable criteria of an international strait. Bruel in his treatise included the Malacca Straits with 5 other straits in the category of the most important straits in Asia.<sup>6</sup>

#### THE POSTURES OF THE COASTAL STATES

Perhaps the most succinct expression of the position of the three coastal States in regard to the Straits is expressed in the joint statement issued after consultations between relevant Indonesian and Singapore Ministers on October 8, 1971, and Indonesian and Malaysian Ministers in Kuala Lumpur on October 14, 1971. This joint statement or declaration is commonly referred to as the safety of navigation agreement.<sup>7</sup>

Paragraph (b) of the declaration reads:

"The governments of the Republic of Indonesia and of Malaysia agreed that the Straits of Malacca and Singapore are not international straits, while fully recognising their use for international shipping in accordance with the principle of innocent passage. The government of Singapore takes note of the position of the governments of the Republic of Indonesia and of Malaysia on this point."<sup>8</sup>

Subsequently in a statement before Singapore's Parliament, the Singapore Foreign Minister, Mr. S. Rajaratnam explained his government's position of reserve.<sup>9</sup> He maintained that although there existed a need to ensure safety of navigation, which was the primary object of the consultations and the resultant declaration, and also the prevention of pollution through the imposition of regulations, Singapore stood for the "unimpeded passage of all ships of all nations through the Straits." The Minister's rationale, couched in terms of an objection to anything which might disrupt a major artery of international communication and which might also serve as a "catalyst for a new cold war" reflected, in addition, a political concern lest any concession of principle concerning the status of both Straits should increase Singapore's vulnerability interposed as it is between Malaysia and Indonesia, especially if political upheavals took place in the region.

<sup>5</sup> (1949) I.C.J. Rep. 4 also 43 American Journal of International Law 558. (1949) Straits of Messina is another example.

<sup>6</sup> E. Bruel, *International Straits*, (Vol. 1), (1947), p. 44.

<sup>7</sup> *Supra*, note 3.

<sup>8</sup> *Ibid.*

<sup>9</sup> Parliamentary Debates, Singapore, March 17, 1972.

Singapore has consistently refused to support the joint Indonesian-Malaysian position. It has advocated that the status of the Malacca Straits should not be considered in isolation from all other straits which are vital links in international sea communications.<sup>10</sup>

The Singapore stand is further explained by the fact that it contemplates provision for security not only in terms of local defence but also in the form of multiple big power involvements in South-east Asia which would effectively neutralise individual great power influence and also that of any potentially dominant regional State. There are also important economic considerations for Singapore wanting to keep the major artery of trade between East and West open to all. The oil refining industry in Singapore has been built on the assumption of free access for the most modern tankers of any size. Any regulation of traffic in the Straits which restricts the passage or size of those tankers would be seriously detrimental to the growth of the petroleum refining industry in Singapore.

Singapore's position in pointing to the dangers of a scramble to "carve up and to lay claims for straits and oceans in which right must be and will be largely on the side of those who have the might" therefore reflected its essential self-interest. But the Singapore reservation might have unwittingly given support to the outcry from the major maritime powers which the Declaration precipitated. These powers included the Soviet Union, Japan, the United Kingdom and the United States.

In the face of this vociferous opposition, Indonesia and Malaysia resolutely adopted a common defiant stand. Malaysia asserted that the two countries reserved the right to search any ship passing through the Straits and would also object to naval vessels carrying arms through the Straits for use by unfriendly countries.

Malaysia has rejected internationalization proposals as fundamentally unacceptable as it would mean a "surrender of territorial sovereignty." This reaction would be valid if one takes into account the 12 mile territorial sea claims. If these claims are valid, large portions of the Malacca Straits will come within the territorial jurisdiction of the coastal states as a result whereof internationalization cannot but interfere with territorial sovereignty. The coastal States are resentful of user States that advance internationalization proposals. When Japan, the principal economic user of the Straits, unilaterally submitted to various international bodies a traffic separation plan for the Straits,<sup>11</sup> Malaysia and Indonesia reacted angrily and branded it an unwarranted attempt to internationalize the Straits.

The Japanese initiatives resulted in the coastal States expressing their hostility in terms of the 1971 joint declaration.

<sup>10</sup> The Singapore Foreign Minister explained: "Singapore... could not go any further than take note of the views of our two neighbours. The reason is that, in Singapore's view, the status of the Straits of Malacca... should not be considered in isolation but in conjunction with the status of some 114 straits scattered throughout the world and which are considered vital sea links in international sea communications" (*ibid*).

<sup>11</sup> To IMCO, A.S.P.A.C. and Ministerial Conference for Economic Development of South East Asia.

Paragraphs (i), (iii) and (iv) stated:

- “(i) the three governments agreed that the safety of navigation in the Straits of Malacca and Singapore is the responsibility of the coastal States concerned;
- (iii) the three governments agreed that a body for co-operation to co-ordinate efforts for the safety of navigation in the Straits of Malacca and Singapore be established as soon as possible and that such body should be composed of only the coastal States concerned;
- (iv) the three governments also agreed that the problem of the safety of navigation and the question of internationalization of the Straits are two separate issues;”<sup>12</sup>

The last quoted paragraph was intended to preclude foreign interference in the affairs of the Straits under the pretext of ensuring safety of navigation.

The internationalization debate has strong geopolitical economic and strategic undercurrents. It would be naive to believe that Indonesia and Malaysia will accept supervision or control by any international agency. Indonesia has for long been intensely concerned about the political integrity of an ethnically diverse archipelago which had no historical existence as a political unit before administrative consolidation under Dutch hands. The Straits of Malacca provides a direct channel into the maritime interstices of Indonesia. To open the Straits to international influences would be to allow maritime powers to galvanise their strategic mobility which could pose a challenge to Indonesia's security and its concept of regional order and possibly regional leadership. Likewise Malaysian thinking too is influenced by the changing power balance in Asia.<sup>13</sup>

Any international body will have a herculean task in attempting to preserve order amongst the 50,000 ships from more than 130 countries which use the Straits annually. The major maritime powers who seek free transit are bound to be represented on this body and inevitably political considerations will pervade or be suspected to have pervaded the agency's functioning, thereby inhibiting the agency's efforts at reconciling the interests of coastal and user States.

#### *TERRITORIAL SEA LIMITS OF MALAYSIA AND INDONESIA*

The two coastal States both claim a territorial sea limit of 12 nautical miles. Indonesia has since 1960 claimed a 12 mile limit.<sup>14</sup> Malaysia had till 1969 claimed only a 3 mile limit. With the enactment of the Emergency (Territorial Waters) Ordinance 1969, Malaysia officially extended its territorial sea to 12 miles. This Ordinance was subsequently incorporated in the Territorial Waters Act 1971 which also stipulated the mode of delimitation of the territorial sea of Malaysia. As a result of Indonesia's and Malaysia's extension, portions of the Straits, particularly in the south where the width of the Straits is less than 24 miles, fall within their territorial waters.

<sup>12</sup> *Supra*, note 3.

<sup>13</sup> A former Malaysian Prime Minister had proposed the “neutralisation” of Southeast Asia in an attempt to promote a new order to serve the interests of regional States.

<sup>14</sup> Territorial Sea Act (L.N.22/1960). See Hornick, “Indonesian Maritime Law” (1976) 8 *Journal of Maritime Law & Commerce* 82.

While the Malaysian Territorial Waters Act generally followed the principles of the Geneva Convention on the Territorial Sea and the Contiguous Zone 1958, for measuring Malaysian territorial waters it did not set forth rules applicable to the Malacca Straits on which Agreement had been previously reached between the two States with the signing on March 17, 1970 of the Friendship Treaty and the Delimitation of the Territorial Seas Treaty.<sup>15</sup> Article 12(1) of the Geneva Convention employs the median line principle to divide the territorial seas of States the coasts of which are opposite or adjacent to each other. By this mode, every point along the median line is equidistant from the base line from which the breadth of the territorial sea of each littoral State is measured.

The proper width of the territorial sea remains a source of controversy in international law, although at recent sessions of the Third Conference on the Law of the Sea much of the heat has been removed from the debate by virtual acceptance of the principle that the limit shall be 12 nautical miles.

Several major maritime powers have indicated that they are prepared to accept a 12 mile territorial sea limit provided that there is a conventional guarantee of free transit through straits used for international navigation, an issue believed to be part of the territorial sea problem.<sup>16</sup>

In the debate as to the proper breadth of the territorial sea, one needs to bear in mind the geographical realities of the Malacca Straits. Near Kukup, in the south of the Malaysian State of Johore, the Straits narrows acutely to 7.8 miles. There are also many points in the south where the Straits is less than 12 miles in width. The debate as to the width of the territorial sea therefore becomes academic in relation to the Malacca Straits, namely as to whether it should be 6 miles or 12 miles. Even if only a 4 mile limit was to be agreed upon at the final session of the Third Conference of the Law of the Sea, a portion (and a crucial one at that) of the Malacca Straits would still be within the joint territorial waters of Malaysia and Indonesia. All user States would be subject to the jurisdiction of the coastal States in their territorial waters in the Straits.

#### *THE DOCTRINE OF INNOCENT PASSAGE AND THE STRAITS OF MALACCA*

The decision by the coastal States to regulate passage in the Straits is partly attributable to the fear of embroilment in major conflict, because of physical proximity to potential theatres of war, created by increased naval activity in the region. Apart from fears for national security and of possible naval confrontation in the Straits, compromising their political neutrality, Malaysia and Indonesia were also

<sup>15</sup> Foreign Affairs, Malaysia, Vol. 3 No. 1, June 1970.

<sup>16</sup> See (a) U.S. State Department Press Release; February 18, 1970 (No. 49) 9 International Legal Materials (1970), p.434. Also, letter to Chairman of U.N. Committee on Peaceful Uses of the Seabed and the Ocean Floor beyond the Limits of National Jurisdiction from President Nixon: U.N. Doc. A/AC 138/22, 9 International Legal Materials (1970) 306; (b) Statement by S. Oda, Alternate Member for Japan, January 20, 1972.

apprehensive that oil pollution will cause havoc to the environment and their economies.

Singapore's different approach reflects its economic dependence on the communication links which the Straits provide, as well as the concern for navigational and environmental safety. Singapore's rapid economic growth has been largely due to its traditional entrepot economy which developed from the island's excellent geographical situation on the major sea route between East and West, of which the Malacca Straits formed a significant part. Singapore is thus highly dependent on the existence of an unrestricted traffic flow through its major ocean highway, the Straits. But at the same time, no matter how excellent a location the Singapore Harbour may have and no matter how efficient its facilities and services may be, it would not be a convenient port to call at if access to it was beset by navigational or environmental problems. For Singapore's industries, which service more than 3,000 ships a month, this can be a serious problem. More than a fifth of the traffic traversing the Straits comprises oil tankers. The average size of the Japanese oil tanker is more than 200,000 tons dead weight and there are more than 100 such Japanese tankers which call at Singapore regularly. If a ship of this size collided or sank with her cargo of oil in the perilously narrow entrances, because of shifting sand banks or uncharted wrecks or simple navigational error, the consequences for Singapore economically and otherwise would be disastrous. This prompted Singapore to stress that:—

“those who use (the Straits) must, in turn, agree to observe certain rules and regulations to ensure safety security and avoid risks of collisions in the Straits.”<sup>17</sup>

Regulations have been prescribed the effect of which will next be considered. But the existence of such regulations would imply some element of territorial jurisdiction and would mean that this passage is somewhat less than “unimpeded.”

The conflict of interests between the coastal States and major maritime powers over passage in the Straits is an example of the clash between States clamouring for the right of unimpeded passage or free transit and those coastal States prepared to concede only the right of innocent passage.

From the viewpoint of reconciling the legitimate interests of the international shipping community with the vital need of the coastal States, the stand adopted by Malaysia and Indonesia jointly seems reasonable and also consistent with international law. A denial to the coastal States of the right to take measures within their own territories in international straits, when these do not unreasonably interfere with innocent passage, or the right to effect a suspension of passage when their security is in jeopardy, would be to selfishly promote the interests of the major maritime powers with scant regard for the welfare of the international community as a whole.

<sup>17</sup> 8 The Mirror (No. 13) March 27, 1972.

### THE PROBLEM OF WARSHIPS

Both Indonesia<sup>18</sup> and Malaysia<sup>19</sup> have indicated that they wish to be informed of the presence of foreign warships in the Straits or of their intentions to use the Straits.

State practice on the problem of transiting warships in territorial straits has depended on whether the littoral States have imposed the requirement of "previous authorization" or only "prior notification."<sup>20</sup> As far as Malaysia is concerned it previously required foreign warships to obtain prior permission.<sup>21</sup> But it now seems to require only notification as a matter of legal requirement.<sup>22</sup> The Indonesian attitude is similar.<sup>23</sup>

Singapore, however, takes a different view. It contemplates provision for security not only in terms of national defence but also in the form of great power involvement in South-east Asia. To this end it is prepared to allow comparatively free movement of naval vessels, as this would neutralise big power influence and even that of any potentially dominant regional State. Singapore has in this vein of thought granted repair facilities to Russian naval vessels.<sup>24</sup>

Previous notification to the coastal States does seem to be the minimum requirement to be fulfilled before warships can exercise the right of innocent passage through territorial straits. Since an overwhelming majority of States favours as a minimum requirement previous notification, it is arguable that this rule by virtue of its popular acceptance and endorsement by States enjoys the force of law and has the capacity to mature into a rule of customary international law.

### THE PROBLEMS OF NAVIGATIONAL SAFETY AND OIL POLLUTION

Navigational safety and oil pollution constitute two of the most critical concerns of the coastal states in regard to traffic traversing straits. Japan's oil needs and its tanker traffic through the Straits is central to the issues involved.

Japan's industrial economy is heavily dependent on oil<sup>25</sup> and naturally the Malacca Straits is the principal supply route for Japan's oil requirements. About 90% of Japan's annual imports of some 280 million tons of oil is shipped through the Malacca Straits.<sup>26</sup> Japanese oil imports for the financial year 1972 were estimated at

<sup>18</sup> The Straits Times, April 6, 18, 1972.

<sup>19</sup> Asia Research Bulletin, May 31, 1972, p. 931 A-B.

<sup>20</sup> The British view is that only notification is required. See Statement by Dean, reported in E. Lauterpacht (Ed.), *British Practice in International Law* (1964), pp. 78-79.

<sup>21</sup> When a Soviet submarine with a support ship anchored in Malaysian territorial waters in the Straits: December 8, 1969.

<sup>22</sup> Asia Research Bulletin, May 31, 1972, p. 931 B.

<sup>23</sup> The New Nation, April 17, 1972.

<sup>24</sup> Far Eastern Economic Review, November 4, 1977, p. 5.

<sup>25</sup> It is estimated that Japan is currently dependent on petroleum for 90% of its energy needs.

<sup>26</sup> Asia Research Bulletin, January 31, 1975, p. 45.



254,130,000 kilolitres, while for the financial year 1976 the estimated total escalated to 326,506,000 kilolitres.<sup>27</sup> In 1970 about 145 million tons of crude oil were shipped from the Persian Gulf to Japan requiring the use of 18 million dead weight tons of tanker tonnage. The customary route from the Middle-East to Japan passes through the Straits.

Of the estimated 37,000 ships which traversed the Straits in 1970, 7,331 were oil tankers.<sup>28</sup> Almost all were bound for Japan. It was estimated that there was one tanker for every 60 miles of ocean between the Persian Gulf and Japan, bringing oil to Japan. These figures have increased considerably since. The Malaysian Minister for Communications stated on August 4, 1976 that the number of vessels passing through the Straits daily has increased to 140 which means an annual traffic of approximately 51,100 vessels.<sup>29</sup>

An estimated 600 Japanese oil tankers use the Straits every month. The oil crisis of 1973 acutely demonstrated Japan's dependence on oil from the Persian Gulf for continued industrial growth. Since then, Japan has embarked on a concerted effort to build up reserves so that any further embargoes by producer countries could not hamper the country's industrial activities in the short term. To this end, most of the tankers of tonnage exceeding 200,000 tons (Very Large Crude Carriers — VLCC) are being used to carry oil from the supply depots in the Persian Gulf to Japan. In 1972 there were about 15 tankers exceeding 200,000 dead weight tons (dwt) mark which used the Straits monthly. According to the Malaysian Government the monthly tanker traffic in the second half of 1976 was 50, all in the category of 150,000 dwt to 380,000 dwt in tonnage, fully loaded. The bulk of the tanker traffic is in the 150,000 dwt to 290,000 dwt class.<sup>30</sup>

Each oil tanker annually makes approximately 8 to 9 return trips between the Persian Gulf and Japan. The VLCCs in operation along this route include some of the biggest tankers in service in the world, including the 372,400 tons Nissekei Maru.<sup>31</sup> The largest Japanese oil tanker presently in service is believed to have a dwt of 492,000 tons.<sup>32</sup> There appears to be no limit on the size of these gigantic tankers.

#### *The problems of navigational safety*

Japan's voracious appetite for oil and the increase in tanker traffic engendered has brought into acute focus the problem of navigational safety in the Straits. This problem admittedly existed even before the advent of the supertankers; but the narrowness and shallowness of the Straits, coupled with the ever increasing traffic density in the Straits, has exacerbated the problem. Giant super ships transiting the Straits have brought the problem to a critical head.

<sup>27</sup> *Ibid.*

<sup>28</sup> Asia Research Bulletin, April 30, 1972, p. 771 B.

<sup>29</sup> Press Statement on Safety of Navigation in the Straits of Malacca, Kuala Lumpur, August 4, 1976.

<sup>30</sup> *Ibid.*

<sup>31</sup> Fabrikant (Ed.), "Oil Discovery and Technical Change in Southeast Asia" Institute of Southeast Asian Studies, Field Report Series No. 5, p. 52 (1973).

<sup>32</sup> It is believed to ply the Persian Gulf — Far East route, according to Port of Singapore Authority sources.

The problem of the shallowness of the Straits has remained unsolved. The average depth of the navigable channel in the Straits is only 23.6 metres (78 feet). The gravity of the problem can thus be appreciated when it is realized that a fully laden 150,000 - 200,000 dwt supertanker needs a draught of approximately 19.7 metres (65 feet) thus leaving little room for human error in pilotage. For supertankers exceeding 200,000 dwt, there is no room for error.

In July 1970 the governments of Indonesia, Malaysia, Japan and Singapore agreed to conduct a joint detailed hydrographic survey of the Malacca and Singapore Straits. The first phase was carried out between October and December and records showed that the actual conditions of one sea lane, the Philip Channel, were different from those recorded in former British Admiralty Charts made during the 1930's and amended by the findings of a British survey vessel in 1967. The survey also discovered a total of 30 shallow spots that were not marked in existing charts and were considered dangerous to large ships.<sup>33</sup> The fact that the surface of the seabed is constantly changing because of undercurrents and shifting sand, thereby rendering obsolete recent British hydrographic reports, was amply demonstrated.

The joint hydrographic area stretched from a point known as One Fathom Bank in the Malacca Straits to another point called Eastern Bank off the south-eastern tip of the Malaysian State of Johore. From January 14, 1969 to March 13, 1969 a preliminary hydrographic survey was carried out from Eastern Bank to One Fathom Bank. The survey disclosed 21 shallow waters less than 23 metres deep. From October 3, 1970 to December 19, 1970 the Main Strait and Philip Channel of the Singapore Straits were surveyed. It was discovered that there were 37 shallow areas with depths of less than 23 metres.<sup>34</sup> These surveys highlight the serious navigational dangers posed by supertankers in negotiating the two Straits since only a small, if any, margin of error is permissible

### *Pollution dangers*

Navigational safety in the Straits is far from secure. Congestion and navigational hazards have operated jointly to produce a situation where the prospect of serious maritime casualties looms ominously.

In January 1970 two Ben Line 10,000 ton vessels collided off Pulau Ansa in the Straits. One was on its way to the Malaysian island of Penang and the other was coming into the Malaysian port, Port Klang, previously known as Port Swettenham.<sup>35</sup> In January 1972 a similar collision occurred in the Singapore Straits between two naval vessels — the 34,000 ton "Ashtabulla" (U.S. Naval Fleet) and a Thai naval vessel, the "Prossa".<sup>36</sup> at a time when the U.S. Seventh Fleet was on its way from the Indian Ocean to the Pacific Ocean.

<sup>33</sup> Asia Research Bulletin, March 31, 1972, p. 774 A.

<sup>34</sup> Report of Joint Hydrographic Survey in Malacca — Singapore Straits, April 1971 quoted in Fabrikant, *op.cit.*

<sup>35</sup> The Straits Times, January 29, 1970.

<sup>36</sup> The Straits Times, January 12, 1972.

The greatest danger, however, is the possibility of supertankers running aground in the shallows of the Straits and spilling large quantities of oil. In April 1967 the 150,000 ton Japanese oil tanker, the "Tokyo Maru", touched bottom in a shallow part of the Straits when fully loaded with oil on its return from the Middle East.<sup>37</sup> In 1968 a similar mishap occurred involving another Japanese supertanker, the "Idematsu Maru", bound for Japan with oil which narrowly escaped being holed by a rock in the Straits. In June 1971 a major maritime disaster was barely averted when two fully loaded supertankers — the 208,000 ton oil tanker "Arabiah" and the 212,000 ton "Eugenie Niarchos" ploughed into under water hazards a few miles south of Singapore. Both vessels were crude oil tankers bound for Japan and Middle East. Both vessels had to be towed into the South China Sea where the oil was transferred and the ships repaired but only after an estimated 5,000 tons of crude oil had escaped. On June 25, 1972 the 210,967 ton "Myrtea" ran aground half a mile west of Pulau Bukom, an island lying a short distance just south of the Singapore Island but still part of Singapore territory. An estimated 1,000 tons of oil were spilled. The slick polluted resort beaches on the Singapore coast and on the other outlying islands. It materially damaged fisheries in the affected areas. The bill for the cleaning up operations came to an estimated S\$1 million.<sup>38</sup> On January 16, 1975 two tankers collided in the Straits but were only slightly damaged.

Perhaps the most serious disaster to date was the grounding on January 6, 1975 of a 237,000 ton Japanese tanker, "Showa Maru", off Pulau Sebarok (Sebarok Island) just 8 kilometers south of Singapore but in Indonesian territorial waters. The tanker fully laden with crude oil from Saudi Arabia sprung a massive leak as a result, polluting the surrounding sea and damaging the marine life of the three coastal States. The resultant damage has been estimated to run into millions of dollars. Although the tanker is insured for US\$30 million, the compensation claims will exceed that figure easily. Malaysia has claimed from the owners<sup>39</sup> US\$10 million for operational costs and damage to marine life. Indonesia and Singapore are claiming US\$51 million and US\$1.6 million respectively for operational costs. It is believed that Indonesia's total claim for damages resulting from the spill may reach US\$100 million.<sup>40</sup>

That oil can be a noxious substance and its carriage an ultra hazardous activity needs to be stressed. Maritime disasters involving oil spillage pose a serious threat to the marine life and environment of the coastal States. The "Torrey Canyon" disaster, when approximately 60,000 tons of oil were released into the sea resulting in considerable pollution to both the French and English coasts, serves as a grim reminder of the catastrophic consequences experienced by coastal states as a result of oil spillage off its shores. The inquiry in the "Torrey Canyon" case disclosed that human error was the sole cause of the casualty.

<sup>37</sup> The Straits Times, May 26, 1972.

<sup>38</sup> The Straits Times, June 26, 1972.

<sup>39</sup> The tanker was jointly owned by Taiheijo Kainn and Nippon Yusen Kabushiki Kaisha while the crude oil was owned by Mitsubishi.

<sup>40</sup> Asia Research Bulletin, March 31, 1975, p. 64.

The peculiar geographical configuration of the Malacca Straits, their shallowness, narrow width and shifting sand banks, and the uncharted wrecks and congestion of shipping in the Straits generally, all serve to emphasize that the Malacca Straits is horrifyingly vulnerable to the distinct possibility of another "Torrey Canyon" casualty in the Straits. Without any doubt, the stranding, sinking or maritime accident (such as collision) involving a fully loaded 250,000 ton oil tanker in the Straits would have catastrophic consequences for the shores of the 3 coastal States. The Malacca Straits will be transformed quickly into a sea of oil bringing in its wake the destruction of marine flora and fauna, pollution on the beaches, increase in the risk of fire to wooden structures and buildings, including attap dwelling huts along the coast popular amongst the fishing folk of the villages, and generally seriously undermining the ecological balance in the region.

In terms of the danger to coastal States of pollution any tanker of tonnage exceeding 150,000 tons will encounter special navigational hazards in the Straits. The test is "draughtage" rather than "tonnage", *albeit* the two are interdependent. The draught for tankers in the category of 150,000 tons and above is at least 65 feet which increases proportionately with higher tonnage. So far as the capacity of tankers to pollute the Straits is concerned, any tanker of 100,000 tons or more represents a potentially dangerous pollution hazard. There have been instances where 280,000 ton tankers have traversed the Straits, fortunately without mishap. The draught for a fully loaded 280,000 ton tanker is about 70 feet. Although there have been no reported incidents of spillage, the passage of these supertankers has caused considerable concern and anxiety amongst coastal States. Measures to combat the omnipresent threat of oil pollution assume a critical urgency.

#### *The Japanese contribution*

Japan's increased dependence upon the Straits as its oil pipeline and economic artery has been largely responsible for its growing sense of responsibility for its oil tankers plying between Middle East and Japanese ports. Japanese shipowners too have a vested interest in seeing the waterway safe as virtually all their oil passes through the Straits. In July 1968 realising the navigational hazards faced by the oil tankers using the Straits, Japan established the Malacca Straits Council.<sup>41</sup> The principal function of this semi-governmental body is to "ensure the safety of vessels, to promote the improvement of navigation aids on the Malacca-Singapore Straits and other sea ranges." The membership of the Council includes such powerful bodies as the Petroleum Association of Japan, Shipbuilders Association of Japan, Shipowners Association of Japan, Japanese Maritime Foundation and Japanese Hull Insurers Union.<sup>42</sup>

The Council has not been idle. During the 1969 and 1970 fiscal years it donated five lighted buoys, two lighthouses and one lighted beacon to the Indonesian Government. In March 1971 two additional lighthouses and one lighted beacon were donated to Indonesia for use

<sup>41</sup> Act of Endowment of Malacca Straits Council (Incorporated Foundation) Tokyo, Japan.

<sup>42</sup> Far Eastern Economic Review, September 2, 1977, p. 64.

in the Straits.<sup>43</sup> The Council bears the operational costs and maintenance of these navigational aids. The Council has concerned itself principally with the question of navigational safety and to this end in 1968 developed and submitted to various international bodies for adoption a traffic separation scheme in the Straits designed to ease congestion and reduce the possibilities of a collision in the Straits. Apart from an internationally sanctioned traffic separation scheme, Japan also proposed dredging of the main channels. Indonesia and Malaysia rejected these proposals on the grounds that the former would infringe their territorial rights and the latter would increase the size and number of supertankers passing through. The Japanese, however, continue to hope that their participation in the joint navigational surveys with the coastal States and the United Kingdom would ensure its ships continued access.<sup>44</sup>

In early 1971 the British Royal Navy conducted a survey of the Straits and also devised a traffic separation scheme. The scheme bifurcates the Straits into a dual carriageway whereby one lane is to be used by eastbound tankers and the other by westbound tankers. The proposal was expressly designed to avoid the possibility of a collision. Practical difficulties have prevented its adoption and implementation.

#### *THE REGULATORY MEASURES ADOPTED BY THE COASTAL STATES*

Against that background, the leaders of the three coastal States met on October 8 and 14, 1971 to consider primarily the question of navigational safety in the two Straits. The fruit of their labours saw form in the joint declaration commonly called the "Safety of Navigation Agreement".

The overriding concern with navigational safety displayed by a foreign maritime power galvanized the coastal States into action. In 1972 Indonesia proposed that oil tankers of more than 200,000 tons be prohibited from using the Straits because of numerous shallow areas in the waterway. As an alternative to the Straits of Malacca, the Indonesian Cabinet decided on March 14, 1972 to make available two waterways, the Straits of Lombok between the islands of Bali and Lombok and the Straits of Makassar between Kalimantan and the Sulawesi, for international passage of tankers of more than 200,000 tons. The suggested alternative route was held out to be<sup>45</sup> most economical for tankers plying between Middle East ports and Japan, as the passage would be smoother and speedier. The sea depth ranges from 2,200 to 21,000 feet and the nearest point between coastlines in the Lombok Straits is 8 miles.<sup>46</sup>

In mid-February 1975 the Foreign Ministers of the coastal States held another series of meetings in Singapore to consult and co-operate on the safety of navigation and combating of oil pollution in the

<sup>43</sup> Activities of the Malacca Straits Council, Japan.

<sup>44</sup> Asia Research Bulletin, March 31, 1972, p. 774 A.

<sup>45</sup> By Sunjoto, an Indonesian Maritime expert.

<sup>46</sup> Asia Research Bulletin, March 31, 1972, p. 773 A.

Straits.<sup>47</sup> After discussing the problems involved and extent of remedial measures required, the Ministers agreed to establish a Council on Safety of Navigation and Control of Marine Pollution in the Straits of Malacca and Singapore at Ministerial level for the co-ordination of efforts and co-operation in these fields.

The Indonesian proposal to bar the use of tankers over 200,000 tons in the Straits was never enforced partly because Japan agreed to help install additional navigational aids in the Straits. The Japanese on their own initiative drew up regulations to help ease sea passage in the Straits. The Japanese Shipowners Association drew up safety measures for its members to observe when plying the Straits of Malacca. The measures, worked out at the request of the Japanese Transport Ministry covered essentially:

- (a) avoiding use of the Straits of Malacca at night;
- (b) slowing down to 10 to 12 knots when using the Straits;
- (c) training navigators by using ship navigation simulators.

In December 1975, following a three day conference in Tokyo of an international group of shipping and oil industry interests<sup>48</sup> the coastal States were requested to implement promptly up to date navigational safety measures in the Straits.

In February 1977 the Foreign Ministers of Singapore, Malaysia and Indonesia met in Manila and agreed on a series of recommendations for safety in the Straits of Malacca.

These were embodied in the Safety Agreement<sup>49</sup> of February 24, 1977. This Agreement represents a concrete effort to control the navigational safety of the waterway and minimize the ecological toll exacted by the traffic. The tripartite agreement adopted twelve recommendations, proposed by their respective Senior Officials and Technical Experts.<sup>50</sup> These recommendations covered such ground as formulation of a Traffic Separation Scheme (TSS) in three specified critical areas;<sup>51</sup> the delineation of a Deep Water Route (DWR) for deep draught vessels<sup>52</sup> only;<sup>53</sup> the requirement that VLCC and deep draught vessels navigate at a speed of not more than 12 knots during passage through critical areas with no overtaking in the DWR;<sup>54</sup> and the most important recommendation, on which international and Japanese concern is focussed, that under-keel clearance (UKC) — the distance between a ship's keel and the seabed — be at least 3.5 metres at all times during the transit of the Straits.<sup>55</sup>

<sup>47</sup> Joint Statement following Tripartite Meeting of Indonesia, Malaysia and Singapore on Safety of Navigation in the Straits of Malacca and Singapore, February 17 to 19, 1975.

<sup>48</sup> Including besides many Japanese associations, the London-based International Chamber of Shipping.

<sup>49</sup> See *supra*, note 1.

<sup>50</sup> Who met in Jakarta on December 20 and 21, 1976.

<sup>51</sup> Paragraph (ii).

<sup>52</sup> Those with draughts exceeding 15 metres.

<sup>53</sup> Paragraph (iii).

<sup>54</sup> Paragraph (vii).

<sup>55</sup> Paragraph (i).

The figure of 3.5 metres represents a compromise.<sup>56</sup> Singapore, anticipating a possible reduction in the number of transiting tankers and hence a loss of customers for its shipyards, had urged that after "squat" (wave action and a safety margin) 2.5 metres would be sufficient. The Malaysians, after doubling for "squat" and introducing the human factor of pilotage errors, proposed that 4.5 metres was a better margin. Indonesia supported the Malaysian stand. These two States were gravely concerned about a possible major spillage from a grounded supertanker. After two years of negotiations the States compromised on 3.5 metres.

"Squat" is a phenomenon of the larger tankers and bulk carriers.<sup>57</sup> A VLCC or Ultra Large Crude Carrier (ULCC) because of its enormous flat bottom and bulbous bow tends to nose down when underway thus increasing the vessel's already substantial draught. Lauriat<sup>58</sup> points out that in shallow water, say with an UKC of 2.5 metres, a tanker can become unmanageable because of its flat bottom, single propeller and single rudder, because there is insufficient water for the propellers to get a proper grip. The result is that the vessel has a tendency to pivot off the nose, causing a sliding action which can be exaggerated when coupled with currents of a narrow channel. To counteract this tendency vessels have to maintain an effective speed and enough water under the keel. Maintaining sufficient speed, however, is dangerous as the stopping distance of VLCCs and ULCCs is often over a mile. This is compounded by the width of channels in which these large carriers operate. Often a tanker cannot take the recommended evasive action to avoid a collision because there is not enough depth in adjacent waters.

The original idea of restricting tankers to below 200,000 tons was omitted in the final Agreement. Tankers up to 280,000 tons are allowed passage through the Straits, but because large tankers maintain an average UKC of 2.85 metres many will be excluded from the waterway unless they reduce loads below their maximum capacities. A fully loaded 280,000 ton tanker may have to lighten its oil cargo by 15,000 tons so as to reduce its draught by 1 metre.<sup>59</sup> Shippers estimate that such a cutback would mean lost revenue of about US\$75,000 per voyage. For the Japanese tanker trade, which currently runs at 1,400 trips a year between Japan and its Middle-East oil supplies, losses could easily top US\$100 million if such load cutbacks become general practice.

An alternative would be for supertankers to make a 1,200 mile detour through the Lombok-Makassar Straits and incur extra charges estimated at US\$33,000 per day.<sup>60</sup> On a round trip basis, total costs could easily add up to about US\$270 million to Japan's oil import

<sup>56</sup> The three states had been divided on this issue for two years.

<sup>57</sup> No'el Mostert in "Supership" (Knopf 1974) highlights the problems inherent in large tanker operation.

<sup>58</sup> G. Lauriat, "A matter of handling Squat" 97 *Far Eastern Economic Review*, September 2, 1977, p. 64.

<sup>59</sup> *Ibid.*

<sup>60</sup> It is estimated that the cost per ship per voyage would increase to about 30 yen per kilolitre: *Asia Research Bulletin*, March 31, 1972, p. 772 B.

costs. The probable outcome for the tanker trade will be a compromise with some tankers lightening their loads while larger vessels take the Lombok-Makassar Straits diversion. There are ways of circumventing the UKC hurdle by sailing through shallow areas during high tide which is expected to give an extra 2.8 metres clearance or to raise cruising speed which is not only costly but dangerous in view of stopping distances in the congested Straits. These cannot, however, be reliable solutions because the Agreement also limits deep draught vessels (those drawing more than 15 metres) to a maximum speed of 12 knots. These vessels are also not permitted to overtake in the deep water sections which extend from the Straits of Singapore to Buffalo Rock and Batu Berhanti.

The Traffic Separation Scheme (TSS) is scheduled for the four critical areas: One Fathom Bank, the Main Strait, Philip Channel and off Horsburgh Lighthouse. This would divide the Straits into two deepwater channels with possibly two shallow water fairways running on either side. Since any limitation upon the passage of supertankers through the Straits would affect numerous vessels, the validity of such measures under international law needs to be evaluated.

#### *SOME COMMENTS ON THE VALIDITY OF THESE REGULATORY MEASURES UNDER INTERNATIONAL LAW*

##### *To promote navigational safety*

The foregoing discussion indicates the magnitude of the Malacca Straits problem from a navigational perspective. Any mishap involving a supertanker could have at least two major effects : oil pollution and, in the case of a collision or even a stranding beyond salvage, a sinking causing blockage.

Measures that may be taken in the Straits to satisfy the twin requirements of navigational safety and of unimpeded passage must emanate from the littoral States. Except for the question of innocent passage for foreign ships, territorial waters are juridically a part of the land area of the coastal States, which may therefore make whatever regulations they desire within their territorial sea as they may within their land area. The implementation of any measures in the interests of navigational safety, such as prescribing a particular navigational route, are a legitimate exercise of the right now declared in Article 17 of the 1958 Geneva Territorial Sea Convention. In 1927 Jessup wrote: "It seems clear that even transient vessels must obey reasonable rules and regulations laid down by the littoral state in the interests of safety of navigation..."<sup>61</sup> The emphasis is on "reasonableness" since any "attempt to make these so onerous as to constitute a real burden on world trade would undoubtedly meet with prompt and justifiable protest."<sup>62</sup>

The question which arises is whether measures can be undertaken which effectively prohibit the movement of only certain classes of

<sup>61</sup> P.C. Jessup, *The Law on Territorial Waters and Maritime Jurisdiction* (1927), p. 121.

<sup>62</sup> *Ibid.*, pp. 121-22.



vessels. The conflict here is not so much between the international shipping community (although no doubt it is also interested and concerned) and the coastal States, but between a segment of the international shipping community — the petroleum industry — Maritime Association and the coastal States. The problem can be paraphrased: to what extent should the interests of this segment of the community override the interests of the coastal States (or even possibly the global community) when the physical economic and environmental well-being of the latter are at stake?

Bruel noted that, if freedom of passage is regarded as an inviolable right, adequate consideration must also be given to the physical convenience of such passage. He wrote:

“The regulations regarding navigation must be prompted — and this applied probably to the ordinary territorial waters as well — by a regard for the safety of navigation and not out of regard for the littoral state itself, at least not exclusively, not even subject to “*passage inoffensif*” thereby not being prevented.”<sup>63</sup>

The true test for regulations imposed in the interests of navigation is not whether they effect a prohibition of passage in certain circumstances but whether they are reasonable. Reasonableness naturally depends on the circumstances of each particular case. The consequences of a collision or stranding in the narrow shallow congested Straits would be very serious (as witnessed in the recent past). In the light of this, the measures which effectively prohibit supertankers because of their size from navigating the Straits would seem to be reasonable.

Indeed, it is arguable that under international law coastal States have not only a right but a duty to ensure navigational safety in the Straits. International law places the duty squarely on coastal States, to notify ships of existing dangers in its waters and the argument that a State ought not to take measures to inform unless specifically requested to do so is untenable. The duty was recognised by the International Court of Justice in the *Corfu Channel Case*.

It would be relevant to inquire whether the coastal States should take steps to improve navigational facilities the inadequacy whereof is responsible for a large measure of the present navigational dangers, so that prohibitions on supertankers would be unnecessary. That the coastal States have an obligation to do this indubitable and is acknowledged. The Agreement of February 24, 1977 adopted recommendations (iv) and (viii) which require that navigational aids and facilities be improved for the effective and efficient implementation of the TSS, and that charts and currents and other tidal data be improved.<sup>64</sup>

One measure which would ease congestion and thereby reduce the danger of collision is the implementation of a traffic system. The problem with a dual carriageway system is that ships cannot use the centre of the channel thereby aggravating the danger of stranding on the shallows that exist on either side of the channel. This is particularly so at points where the meandering Straits narrows considerably.

<sup>63</sup> *Brüel op. cit.*, p.

<sup>64</sup> *Supra*, note 1.

Compulsory pilotage is another measure which could be imposed. Local pilots have an intimate knowledge of the geophysical conditions and traffic flow. But using local pilots would only reduce the margin of human error. It does not excise the problem of inadequate navigational facilities. If all that can be done, for financial and other reasons, is the provision of additional lighthouses and buoys, then the status quo in the Straits will prevail. Accordingly a user State would be hard put to classify as unreasonable, legislation which sought to restrict draught depths and thereby, indirectly debar particular sizes or types of vessels from using the Straits.

The serious navigational hazards in the Straits clearly require the imposition of remedial measures. The only test is that these measures be reasonable which in turn would require their being formulated by those who have a sound and intimate knowledge of the geophysical and technological problems involved. That this has been done by the three coastal States acting jointly and with expert advice from IMCO is also beyond question. The measures therefore taken by the coastal States for the promotion of navigational safety, albeit having the effect of prohibiting a certain type and size of vessels from undertaking passage of the Straits are not violative of international law.

*To preserve environmental security and protect economies*

If a major oil pollution disaster occurred in the Straits the injury to the environmental and ecological balance in the region surrounding the coastal States would be irreparable. What is also not often realized is that, although major oil disasters caused by collisions or stranding cause serious damage, the more dangerous causes in the long run arise from systematic pollution which takes place when tanks are cleaned and general shipping waste removed by vessels when at sea. It was customary for a vessel to flush its tanks before entering the Straits. Unfortunately the waste through wind and tidal action is drawn through the Straits in any case. The geographical centrality of the Straits as the principal nexus between the Pacific and Indian Oceans and the internal waters of the region compound the likelihood of danger on a regional scale. A State's desire to preserve the environment is not motivated solely by the wish to preserve plant and animal life in their natural habitat but also by the need to prevent the disastrous economic consequences which are a concomitant of environmental destruction.

International law recognises the right of States to combat marine pollution by oil discharges from ships and undertake anti-pollution measures.

The three Coastal States of the Straits are not parties to the relevant Conventions presently in force. Indonesia is, however, a party<sup>65</sup> to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damages which is supplementary to the International Convention on Civil Liability for Oil Pollution Damage, 1969.<sup>66</sup> This Convention provides for full and

<sup>65</sup> Pertamina Bulletin, vol. I No. 1, January 1971, p. 4.

<sup>66</sup> Text of the Convention is reproduced in II Lay, Churchill & Nordquist (Ed). *New Directions in the Law of the Sea* (1973), p. 611.

adequate compensation for oil pollution victims. It is generally agreed that international legislation has not advanced fast enough in this field. The general effectiveness of international instruments to combat marine pollution still remains poor today.

Not all efforts to control marine pollution at the international level have been in the form of treaties. The tanker industry, inspired at least in part by fears that Governments either unilaterally or by international convention would introduce strict liability and compulsory insurance for the oil tanker industry, has made private responses to the problem; TOVALOP and CRISTAL are two such examples. The importance of TOVALOP and CRISTAL has been recognized by the three coastal States. Their Senior Officials and Technical Experts and Foreign Ministers, who met in Manila in February 1977, devised a set of guidelines which were adopted to enhance safety of navigation and promote close co-operation and co-ordination on anti-pollution policy and measures in the Straits of Malacca and Singapore. One guideline directed the Senior Officials and Technical Experts to devise ways to expedite adequate compensation for any damage caused by oil pollution either through TOVALOP and CRISTAL arrangements or through other insurance and compensation schemes.<sup>67</sup> Singapore has in force municipal legislation which renders the discharge of oil by any vessel registered in Singapore into any part of the sea outside the territorial waters of Singapore, and the discharge of oil into the territorial waters of Singapore, by any ship to be criminal offences.<sup>68</sup> Malaysia has enacted similar legislation in the form of the Environmental Quality Act of 1974.

The measures announced by the coastal States are understandably preventive in nature. The requirement of 3.5 metres for UKC eliminates a number of tankers from using the Straits. But mere tonnage restrictions alone are insufficient. The paucity of good navigational aids makes pilotage not only desirable but essential. When it was learnt that a 200,000 ton tanker touched bottom somewhere at the entrance to the Singapore Straits, the Joint Hydrographic Team conducted an exploratory survey in the area and found the waters there generally deep and therefore unlikely to be the cause of the accident. The grounding must have been caused by navigational error. It would be almost suicidal for coastal States to rely on the competence of pilots of supertankers unfamiliar with the Straits-zone. Pilotage is in normal circumstances an exacting and arduous task. It becomes infinitely more important and taxing when it is realised that the margin for human error in the Straits is almost negligible and the consequences of a maritime disaster catastrophic.<sup>69</sup> A recent report discloses that the three coastal States have agreed to install navigational aids costing S\$4 million for the implementation of the TSS, initially by the instal-

<sup>67</sup> See also paragraph (xii) of the Joint Statement.

<sup>68</sup> Prevention of the Pollution of the Sea Act 1971 (No. 3 of 1971) as amended by the Civil Liability (Oil Pollution) Act 1973 (No. 43 of 1973).

<sup>69</sup> In this regard it is noteworthy that the Joint Statement on Safety of Navigation in the Straits (supra, note 1) makes pilotage through the critical areas in the Straits of Singapore only voluntary. Article 6 of the Montreux Convention regarding the regime of the Straits of the Bosphorus and the Dardanelles (July 20, 1936) permitted compulsory pilotage but without a charge therefor.

lation of light beacons at several points including Tanjong Tohor and Tanjong Piai, radar beacons at Batu Berhanti and One Fathom Bank and resilient light beacons at Buffalo Rock, Batu Berhanti and Pulau Nipa.<sup>70</sup>

### *CONCLUSION*

User States such as the major maritime powers advocating the continued exercise of free transit through and over the Malacca Straits have a responsibility to develop a viable solution with Malaysia, Indonesia and Singapore, the coastal States affected. This is particularly true in areas such as traffic control and marine pollution. Freedom has never meant freedom from responsibility or control. Freedom constantly and consistently abused warrants checks and controls to limit the practices of the abuser. In international law the interplay of controls must be carefully apportioned so as to permit coastal States protection of vital interests while maintaining international constraint upon coastal State powers which are unreasonable or exceed the necessary limits.

With an expanded territorial sea there is a corresponding extension of jurisdiction to control traffic and pollution. These measures consistent with the doctrine of freedom of passage must remain within the purview of the coastal States but subject to international rules which should be established to prevent capricious or unwarranted or discriminatory exercise of these powers. At the same time, these rules must prevent conduct by ships of user States which is detrimental to the coastal States. Breaches of these rules by any party must be punished by compelling payment of damages.

Bearing navigational interests in mind, a more rational approach would allow States representing opposing interests to acknowledge that the underlying principles upon which high seas access is founded remain valid but these must be malleable in their application to modern problems. The established rights of States under existing law must not be arbitrarily changed or decided without obtaining the consent of all affected States.

A solution to guarantee continued access to international straits and responsible use thereof may lie in the adoption of a functional approach which is not at the expense of any State. If the concept of the territorial sea must remain, then functional recognition of the essential community interest in navigation must result. Equally for there to be a durable solution the international community must appreciate that the concomitant benefit derived from a continued right of access requires a much higher standard of care and willingness to compensate affected coastal States in the event of damage or loss sustained from the use of straits.

The right of freedom of navigation needs to be removed from the arena of international politics and the vicissitudes of foreign policy. This is because the diverse problems arising from maritime pursuits

<sup>70</sup> The Straits Times, February 15, 1978.

and the interminable conflicts among States on grounds of sovereignty could result in mutual rejection of the international law of the sea leading to confusion, chaos and worse, even possibly, resort to armed conflict to resolve disputes. At all costs armed confrontation and conflict need to be avoided. International conciliation machinery and the wide array of peaceful methods of resolving substantive issues must be resorted to.

The means of resolving the navigational problems involved in passage through international straits such as the Malacca Straits, functionally, within the framework of an acceptable international treaty, exist. It is to be hoped that the international community will appreciate that the time to reach accommodation peacefully is opportune. A global community growing increasingly smaller and interdependent cannot settle for less.

NADAISAN LOGARAJ\*

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## APPENDIX 1

AGREEMENT ON SAFETY OF NAVIGATION IN  
THE STRAITS OF MALACCA AND SINGAPORE

The Ministers for Foreign Affairs of the Republic of Indonesia, Malaysia and the Republic of Singapore;

RECALLING the decision of the three countries as reflected in the Joint Statement of 16 November, 1971 *inter alia*, that the safety of navigation in the Straits of Malacca and Singapore is the responsibility of the three coastal States;

REAFFIRMING their determination to further promote the existing tripartite co-operation on enhancing safety of navigation and promoting close co-operation and co-ordination on anti-pollution policy and measures in the Straits of Malacca and Singapore;

TAKING INTO CONSIDERATION the results of various Tripartite Consultations since 1971;

## HAVE AGREED TO ADOPT

The recommendations contained in the Report of the Senior Officials Meeting held in Jakarta from 20 to 21 December, 1976 and accordingly instruct their Senior Officials and Technical Experts Group to implement the recommendations.

DONE in Manila, this 24th day of February in the year One Thousand Nine Hundred and Seventy Seven.

For the Government of the  
Republic of Indonesia,

ADAM MALIK  
Minister for Foreign Affairs

For the Government of Malaysia,  
TENGGU AHMAD RITHAUDDEEN  
Minister of Foreign Affairs

For the Government of the  
Republic of Singapore,

S. RAJARATNAM  
Minister for Foreign Affairs

## APPENDIX 2

REPORT OF THE SENIOR OFFICIALS MEETING ON SAFETY  
OF NAVIGATION IN THE STRAITS OF MALACCA AND  
SINGAPORE

Manila, Philippines, 23 February 1977

1. The Meeting of the Senior Officials of Indonesia, Malaysia and Singapore on Safety of Navigation in the Straits of Malacca and Singapore was held at the Indonesian Embassy in Manila on 23 February 1977.
2. The Meeting was attended by the Delegations of Indonesia, Malaysia and Singapore. The list of Delegates appears as Annex A. Rear Admiral Harjono Nimpuno, Leader of the Indonesian Delegation, was unanimously elected Chairman of the Meeting.
3. The Meeting adopted the final texts of the following documents:
  - (i) Agreement on Safety of Navigation in the Straits of Malacca and Singapore, which appears as Annex B [see Appendix 1, *ante*].
  - (ii) Joint Statement on Safety of Navigation in the Straits of Malacca and Singapore, which appears as Annex C [see *post*].
  - (iii) Guidelines for Senior Officials and Technical Experts Group on Safety of Navigation in the Straits of Malacca and Singapore, which appears as Annex D [see *post*].
  - (iv) Record of the Meeting of Foreign Ministers of Indonesia, Malaysia and Singapore on Safety of Navigation in the Straits of Malacca and Singapore, which appears as Annex E [not reproduced].
4. The Meeting was held in cordial atmosphere and in the spirit of mutual understanding and cooperation.

Dated this 23rd day of February 1977.

For Indonesian Delegation,  
(Sgd. REAR ADMIRAL HARJONO NIMPUNO)

For Malaysian Delegation,  
(Sgd. N. PARAMESWARAN)

For Singapore Delegation,  
(Sgd. TAN BOON SENG)

### Annex C

#### JOINT STATEMENT ON SAFETY OF NAVIGATION IN THE STRAITS OF MALACCA AND SINGAPORE

The Meeting of the Foreign Ministers of Indonesia, Malaysia and Singapore was held in Manila on 24 February, 1977, to consider measures to enhance safety of navigation and to promote close co-operation and coordination on anti-pollution policy and measures in the Straits of Malacca and Singapore.

H. E. Adam Malik, Minister for Foreign Affairs of Indonesia, Y.B.M. Tengku Ahmad Rithauddeen, Minister of Foreign Affairs of Malaysia and H.E. S. Rajaratnam, Minister for Foreign Affairs of Singapore, attended the Meeting.

The Foreign Ministers considered and reviewed the Report of the Senior Officials Meeting held in Jakarta from 20 to 21 December, 1976 and signed the Agreement on Safety of Navigation in the Straits of Malacca and Singapore adopting the following recommendations:

- (i) Vessels maintain a single Under Keel Clearance (UKC) of at least 3.5 metres at all times during the entire passage through the Straits of Malacca and Singapore and that they also take all necessary safety precautions especially when navigating through the critical areas.
- (ii) The delineation of the Traffic Separation Scheme (TSS) in three specified critical areas of the Straits of Malacca and Singapore, namely in the One Fathom Bank area, the Main Strait and Philip Channel, and off Horsburgh Lighthouse.
- (iii) Deep draught vessels, namely, vessels having draughts of 15 metres and above, are required to pass through the designated Deep Water Route (DWR) in the Straits of Singapore up to Buffalo Rock and are recommended to navigate in the specified route from Buffalo Rock up to Batu Berhanti area. Other vessels are recommended not to enter the DWR except in an emergency.
- (iv) Navigational aids and facilities be improved for the effective and efficient implementation of the TSS.
- (v) The existing voluntary reporting procedure and mechanism for large vessels be maintained.
- (vi) The principle of voluntary pilotage through the critical areas in the Strait of Singapore be applied.
- (vii) VLCCs and deep draught vessels are advised to navigate at a speed of not more than 12 knots during their passage through critical areas, and that no overtaking be allowed in the DWR.
- (viii) Charts and current and tidal data be improved.



- (ix) Rule 10 of the International Regulations for Preventing Collisions At Sea, 1972, be applied as far as practicable within the TSS.
- (x) The implementation of the TSS should not pose a financial burden on the coastal States and the necessary funds be obtained from the users.
- (xi) A joint policy to deal with marine pollution be formulated.
- (xii) All tankers and large vessels navigating through the Straits of Malacca and Singapore be adequately covered by insurance and compensation schemes.

The Foreign Ministers of Indonesia, Malaysia and Singapore expressed their appreciation to the Government of the Republic of the Philippines for having provided the facilities for their meeting in Manila.

**Annex D****GUIDELINES FOR SENIOR OFFICIALS AND TECHNICAL EXPERTS GROUP ON SAFETY OF NAVIGATION IN THE STRAITS OF MALACCA AND SINGAPORE**

The Foreign Ministers of Indonesia, Malaysia and Singapore met in Manila on 24 February, 1977 and set the following guidelines to enhance safety of navigation and to promote close cooperation and coordination on anti-pollution policy and measures in the Straits of Malacca and Singapore:

- (1) To work out jointly the procedure and the modality for voluntary utilization of pilotage services of the respective countries.
- (2) To expedite the conclusion of joint projects on common datum chart and currents and tides observations.
- (3) To study the financial sources that could be tapped for funding the implementation of the TSS.
- (4) To formulate a joint policy to deal with marine pollution, especially by coordinating their resources, manpower and technology.
- (5) To devise ways to expedite adequate compensation for any damage caused by oil pollution either through TOVALOP and CRISTAL arrangements or through other insurance and compensation schemes, including the possibility of ratifying the International Convention on Civil Liability for Oil Pollution Damage, 1969 and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971.
- (6) To study the need and possibility of creating a "revolving" fund for anti-pollution activities.
- (7) To initiate consultation with IMCO on the TSS at the earliest possible date,
- (8) To initiate consultation with the users of the Straits.
- (9) To continue to cooperate in various fields relating to the Straits of Malacca and Singapore.

## APPENDIX 3

## SINGAPORE GOVERNMENT PRESS STATEMENT\*

The Governments of the Republic of Indonesia, Malaysia and the Republic of Singapore held consultations with a view to adopting a common position on matters relating to the Straits of Malacca and Singapore.

Consultations between the Governments of the Republic of Indonesia and the Republic of Singapore were held at the Ministry of Foreign Affairs, Singapore on 8 October, 1971 and attended by the Minister of Communications, H.E. Frans Seda and the Indonesian Ambassador to Singapore, H.E. Major General Soenarso, representing Indonesia while Singapore was represented by the Minister for Communications, Mr. Yong Nyuk Lin, the Minister of Defence, Dr. Goh Keng Swee and the Acting Minister for Foreign Affairs, Mr. E.W. Barker.

Consultations between the Government of the Republic of Indonesia and the Government of Malaysia were held at the Attorney-General's Chambers, Kuala Lumpur on 14 October 1971 and attended by the Minister of Communications, H.E. Frans Seda, the Indonesian Ambassador to Malaysia, H.E. Tan Sri Major General H.A. Thalib, PMN and the Indonesian Ambassador to Singapore, H.E. Major General Soenarso representing Indonesia, while Malaysia was represented by the Attorney-General, the Honorable Tan Sri Haji Abdul Kadir bin Yusof and the Deputy Secretary-General, Ministry of Foreign Affairs, Mr. Zainal Abidin bin Sulong.

The results of the abovementioned consultations were as follows:

- (i) the three governments agreed that the safety of navigation in the Straits of Malacca and Singapore is the responsibility of the coastal States concerned;
- (ii) the three governments agreed on the need for a tripartite cooperation on the safety of navigation in the two straits;
- (iii) the three governments agreed that a body for cooperation to coordinate efforts for the safety of navigation in the Straits of Malacca and Singapore be established as soon as possible and that such body should be composed of only the three coastal States concerned;
- (iv) the three governments also agreed that the problem of the safety of navigation and the question of internationalisation of the straits are two separate issues;
- (v) the Governments of the Republic of Indonesia and Malaysia agreed that the Straits of Malacca and Singapore are not international straits, while fully recognising their use for international shipping in accordance with the principle of innocent passage.

\* Commonly referred to as the "Safety of Navigation Agreement."

The Government of Singapore takes note of the position of the Governments of the Republic of Indonesia and of Malaysia on this point;

- (vi) on the basis of this understanding, the three governments approved the continuation of the hydrographic survey.

Announced simultaneously in Djakarta, Kuala Lumpur and Singapore on Tuesday, 16th November 1971 at 1200 hours Western Indonesian Time and at 1230 hours Malaysian and Singapore Time.

Date: 16th November, 1971