

Confidence Building Measures at Sea: Opportunities for India and Pakistan

Rear Admiral Hasan Ansari (r)
Rear Admiral Ravi Vohra (r)

Cooperative Monitoring Center Occasional Paper/33



Sandia National Laboratories

Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy' National Nuclear Security Administration under contract DE-AC04-94AL85000.

The Cooperative Monitoring Center (CMC) at Sandia National Laboratories assists political and technical experts from around the world to acquire the technology-based tools they need to assess, design, analyze, and implement nonproliferation, arms control, and other cooperative security measures. As part of its mission, the CMC sponsors research on cooperative security and the role of technology. Reports of that work are provided through the Occasional Papers series. Research is conducted by Sandia staff, international technical experts, and visiting scholars. (The CMC's Visiting Scholars Program is administered by the Institute for Public Policy at the University of New Mexico.) For additional information on the CMC's programs, visit the CMC home page on the World Wide Web at <<http://www.cmc.sandia.gov>> or write to:

Cooperative Monitoring Center
Sandia National Laboratories
Mail Stop 1373
Albuquerque, NM 87185-1373

For specific information on this report contact:
David Betsill at the above address.

This report was prepared by Sandia National Laboratories
Albuquerque, NM 87185.

Confidence Building Measures at Sea: Opportunities for India and Pakistan

Abstract

The sea presents unique possibilities for implementing confidence building measures (CBMs) between India and Pakistan that are currently not available along the contentious land borders surrounding Jammu and Kashmir. This is due to the nature of maritime issues, the common military culture of naval forces, and a less contentious history of maritime interaction between the two nations. Maritime issues of mutual concern provide a strong foundation for more far-reaching future CBMs on land, while addressing pressing security, economic, and humanitarian needs at sea in the near-term. Although Indian and Pakistani maritime forces currently have stronger opportunities to cooperate with one another than their counterparts on land, reliable mechanisms to alleviate tension or promote operational coordination remain non-existent. Therefore, possible maritime CBMs, as well as pragmatic mechanisms to initiate and sustain cooperation, require serious examination.

This report reflects the unique joint research undertaking of two retired Senior Naval Officers from both India and Pakistan, sponsored by the Cooperative Monitoring Center of the International Security Center at Sandia National Laboratories. Research focuses on technology as a valuable tool to facilitate confidence building between states having a low level of initial trust. Technical CBMs not only increase transparency, but also provide standardized, scientific means of interacting on politically difficult problems. Admirals Vohra and Ansari introduce technology as a mechanism to facilitate consistent forms of cooperation and initiate discussion in the maritime realm. They present technical CBMs capable of being acted upon as well as high-level political recommendations regarding the following issues:

- Delimitation of the maritime boundary between India and Pakistan and its relationship to the Sir Creek dispute
- Restoration of full shipping links and the security of ports and cargos
- Fishing within disputed areas and resolution of issues relating to arrest and repatriation of fishermen from both sides
- Naval and maritime agency interaction and possibilities for cooperation.

Acknowledgements

Kent Biringer: For his constructive criticism and ability to get to the core of the issues, to separate the kernel from the chaff.

Jenny Koelm: The tireless, patient, indefatigable co-worker who helped shape contents and research material.

David Betsill: For his discreet but sane advice.

Bob Matthews: Who worked well beyond his mandate as “tech editor,” patiently editing changes by the hour, reworking the material, and offering solid advice.

Stephanie Sustaita: The logistics provider and just-in-time savior. The improbable was done straightaway while the impossible took just a little longer.

Nora Tankersley: The benign minister of finance, counselor, and morale booster who kept the Visiting Research Scholars on an even keel.

All the other staff for their support, kindnesses, and courtesies....

Abbreviations and Acronyms

APRI	Asia-Pacific Research Institute
CBM	Confidence-Building Measure
CMC	Cooperative Monitoring Center
COLREG	Convention on International Regulations for Preventing Collisions At Sea
CSBM	Confidence and Security Building Measure
CSI	Container Security Initiative
DOE	Department of Energy
DOD	Department of Defense
EEZ	Exclusive Economic Zone
GATT	General Agreement on Tariffs and Trade
GPS	Global Positioning System
ICG	Indian Coast Guard
ICRC	International Convention of Red Cross
IDSA	Institute for Defence Studies and Analysis
ILO 147	International Labor Organization Convention No 147, Merchant Shipping (Minimum Standards)
IMO	International Maritime Organization
IOMAC	Indian Ocean Maritime Affairs Council
INCSEA	Agreement on Prevention of Incidents on the High Seas
KPT	Karachi Port Trust
LoC	Line of Control
m	Meter(s)
MARPOL	International Convention for Prevention of Maritime Pollution from Ships
MARSAF	Maritime Safety Colloquium
MEI	Military Expenditure Intensity
MOD	Ministry of Defense
MOU	Memorandum of Understanding
MPI	Military Personnel Intensity
MSA	Maritime Security Agency (Pakistan)
N/A	Not available
NECC	National Environmental Coordination Committee
nm	nautical mile
OSC	Operation Safe Commerce
PEPC	Pakistan Environmental Protection Council
PNSC	Pakistan National Shipping Corporation
PQA	Port Qasim Authority
RAMSAR	International Convention on Protection of Wetlands
ROE	Rules of Engagement
SAARC	South Asian Association for Regional Cooperation
SACEP	South Asia Cooperative Environment Programme
SAR	Search and Rescue
SASAP	South Asian Seas Action Plan

SLOC	Sea Lines of Communication
SOLAS	International Convention for Safety of Life at Sea
STCW	International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers
TALOS	Technical Articles of the Law of the Sea
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
US	United States
WTO	World Trade Organization

Contents

Executive Summary	1
Introduction.....	4
<i>Confidence Building Measures</i>	<i>7</i>
<i>Key Issues.....</i>	<i>8</i>
Territorial Issues.....	10
<i>Maritime Boundary.....</i>	<i>10</i>
<i>Sir Creek</i>	<i>17</i>
Maritime Trade.....	22
<i>Shipping and Trade.....</i>	<i>22</i>
<i>Security of Ports and Cargo</i>	<i>25</i>
Fishing and the Fishermen’s Plight.....	28
Naval Interactions and Coastal Force Interactions	34
<i>INCSEA and Law of Naval Warfare</i>	<i>34</i>
<i>Indian Coast Guard–Pakistani Maritime Security Agency Cooperation</i>	<i>37</i>
Conclusion	40
Proposed Actions.....	41
<i>Near-Term Projects</i>	<i>41</i>
<i>Complete Proposals List.....</i>	<i>41</i>
Appendixes.....	45
Appendix 1 Agreement Between India and Pakistan on the Advance Notice of Military Exercises	46
Appendix 2 Lahore Declaration and Lahore Memorandum of Understanding.....	49
Appendix 3 Technical Aspects of the Law of the Sea (TALOS).....	53
Appendix 4 Protocol On Resumption Of Shipping Services Between India and Pakistan.....	55
About the Authors:	58

Figures

Figure 1. Sea Lines of Communications.....	10
Figure 2. India's and Pakistan's Perceptions of Maritime Boundary Lines from Sir Creek.....	13
Figure 3. Example of Possible India-Pakistan Maritime Boundary as Determined by the Seaward Approach Method.....	15
Figure 4. Sir Creek and Vicinity (Map B-44).....	17
Figure 5. Sir Creek, Showing Points 1 and K.....	20
Figure 6. South Asia Search and Rescue Responsibilities.....	38

Tables

Table 1. Indian Maritime Boundary Agreements.....	11
Table 2. Pakistani Maritime Boundary Agreements.....	12
Table 3. India and Pakistan Fish Production.....	28
Table 4. State of Gujarat-Fishing Data.....	29
Table 5. Number of Boats and Fishermen Released by India and Pakistan.....	30

Executive Summary

Despite suspicion and mistrust, India and Pakistan have engaged in confidence building measures (CBMs) in the past. However, an assessment of previous initiatives reveals a disturbing feature: the near absence of naval or maritime CBMs. Although maritime issues have been frequently a part of nation-to-nation dialogue, discussions to resolve outstanding disputes have not yet succeeded.

Even with this checkered history, the maritime sphere holds the greatest opportunity and potential for realistic cooperation between India and Pakistan. Many maritime issues of concern do not respect boundaries. For example, oil pollution, environmental disasters, human safety at sea, maritime crime, and terrorism often require a coordinated approach in order to be successful. Second, maritime forces and coastal agencies maintain similar functions at sea and often speak one another's operational language in a way that cannot be mirrored on land. Third, Indian and Pakistani naval forces do not harbor animosity to the degree that land forces do. Finally, technology is already in use in the maritime world and can be easily converted to a cooperative application.

India and Pakistan are currently facing a historical crossroads of opportunity. The time is right to pursue CBMs that may prove pragmatic and can lead to further stability and security. The medium to achieve a breakthrough is the sea, where it is feasible to negotiate CBMs that deal with less contentious issues and involve agencies that have a higher probability of near-term success. This paper, therefore, focuses on feasible projects and advocates a maritime building-block approach to address larger and more complex issues as confidence increases.

Political, process-oriented recommendations and technical project proposals have been developed to address four main topic areas, based upon the cooperative research of senior naval scholars from both India and Pakistan, as well as their in-depth interactions with high-level Navy and Coastal Authorities in the region. Recommendations are made based upon topical areas that may hold mutual benefits for both sides. Technical projects are proposed to increase transparency, communication, and the standardization of approaches between both sides. The main topical areas for maritime cooperation are therefore supported by various technical project proposals, ranging from short-term to long-term in approach and feasibility.¹

The recommendations and technical project proposals with most potential for being acted upon in the near-term are as follows:

¹ At the time this paper is going to press, December 2003, there are a number of articles appearing in the South Asia regional and international press reporting favorable gestures and proposals for cooperation in the maritime arena between India and Pakistan. These intimations include avoiding arrest of fishermen in specified areas, initiating a passenger ferry service between the countries, and cultivating communication and interaction between the Indian Coast Guard and the Pakistani Maritime Security Agency.

Disputed India-Pakistan maritime boundary

1. The authors recommend that both sides include the maritime boundary in government-to-government talks, separate the Sir Creek dispute from the larger maritime boundary discussion, and actively involve technical and legal experts from both sides to address delineation methods.
2. Technical projects to support these initiatives include:
 - a. Developing boundary mapping technologies, including Geographic Information Systems (GIS) and remote sensing imagery for the maritime boundary and Sir Creek in order to facilitate critical discussion between technical and policy stakeholders in both India and Pakistan.
 - b. Encouraging a meeting between environmental groups from both sides to investigate or exchange existing information regarding the fragile ecosystem surrounding the mouth of the Sir Creek area, which could build a foundation for joint environmental monitoring and management once the boundary is settled.

Shipping and trade links/port and cargo security

1. The authors recommend that both sides convene the India-Pakistan Joint Commission to revise outdated Shipping Protocols, which are inhibiting maritime trade and economic growth.
2. Technical projects to support the opening of maritime trade links include: building upon current US-led port security initiatives in order to increase customs and security information exchange between future Indian and Pakistani ports of open trade.

Fishermen arrest avoidance and repatriation

1. The authors recommend that governments adopt an “arrest avoidance policy” for fishing crews that inadvertently stray across the disputed maritime boundary.
2. Technical project proposals to further alleviate this problem include:
 - a. Development of a fishermen’s arrest and repatriation database to be jointly monitored and used between authorities and coastal agencies on both sides.
 - b. Creation of a “zone of disengagement” which would allow registered fishing in the current area under dispute, through a system of zone demarcation and technical monitoring by authorities of each side.

Naval and maritime agency interaction

1. The authors recommend that India and Pakistan:
 - a. Update respective Naval Rules of Engagement in accordance with the San Remo manual on International Law Applicable to Armed Conflict at Sea (1984) and support Navy-to-Navy agreements such as the “Prevention of Incidents at Sea Agreement” (INCSEA) in order to reduce the potential for accidents during operations.
 - b. Activate more formal contacts between India’s Coast Guard and Pakistan’s Maritime Security Agency to facilitate operational coordination of humanitarian, environmental, and security responsibilities.

2. Technical project proposals include conducting a joint table-top search and rescue (SAR) simulation exercise between officials of India's Coast Guard and Pakistan's Maritime Security Agency, to lead to a potential coordinated sea exercise.

Introduction

The partition of India in August 1947 was a traumatic event. Post-world-war Britain, lacking the will and resources to continue its South Asian involvement, decided to pull out of its former possession a year earlier than scheduled, leaving the sub-continent at the mercy of forces of lawlessness and anarchy and with a number of unfinished issues.

The legacy of unfinished business includes the dispute regarding accession of Kashmir and unsettled border issues with all of India's and Pakistan's neighbors. These issues contribute to major inter-state conflicts that continue to sour bilateral relations. A half-century of confrontation and conflicts have sparked reckless militarism, with states incurring disproportionately high military expenditures.² The arms race has now escalated to the nuclearization of both India and Pakistan, with an increasing focus on delivery systems.

Three major wars, numerous armed skirmishes, and recurring exchange of fire across the Line of Control (LoC) in Kashmir have set the scene for one of the most volatile regions in the world. The fourth and eighth largest armies in the world have remained eyeball-to-eyeball in confrontation for the most part of fifty years. Kashmir continues to remain at the center of all contentious issues, which defy resolution. Its centrality has precluded progress on other relatively minor issues that constitute "irritants."

However, the bilateral landscape is not entirely barren and devoid of cooperative features. Some notable examples include:

- Indus Water Treaty, 1960³
- Salal Hydroelectric Plant, 1978
- Prohibiting attacks against nuclear installations and facilities, 1988
- Advance notice of military exercises, maneuvers, and troop movements, 1991⁴

² Faruqui, Ahmed. *Rethinking the National Security of Pakistan: The Price of Strategic Myopia*. Aldershot, UK: Ashgate Publishing Ltd, 2002. Faruqui notes that "the military stalemate between India and Pakistan over the first half century of their existence has been a negative-sum game. Today Pakistan's MPI (military personnel intensity—military personnel per head of population) is 3.3 times that of India and MEI (military expenditure intensity per dollar of GDP) is 1.8 times that of India. Thirty years ago the MPI was 1.4 and MEI was 1.0. Clearly, this is unsustainable, particularly by Pakistan. South Asia is moving away from global disarmament trends; globally military spending declined 37% whereas in South Asia it went up by 12%. Between 1987 and 1994, military spending in the industrial world declined by 41% and in the developing world by 13%. Out of the top 10 armies in the world India is ranked 4th and Pakistan is ranked 8th."

³ It is noteworthy that the Indus Water Treaty was facilitated by the World Bank, which financed the infrastructure costs.

⁴ The Agreement Between India and Pakistan on the Advance Notice of Military Exercises (6 April 1991) includes (see Appendix 1 for the full text of the agreement):

- a. Agreement that naval ships and submarines belonging to the other country are not to close less than 3 nm from each other so as to avoid any accident while operating in international waters.
- b. Agreement that aircraft of either country will refrain from buzzing surface units and platforms of the other country in international waters.
- c. Exchange of radio frequencies by the two navies to enable vessels and aircraft to communicate when they are in each other's vicinity.

- Prevention of airspace violations and preventing over flights and landings by military aircraft, 1991
- Joint declaration on complete prohibition of chemical weapons, 1992
- Lahore Declaration of 1999.⁵

The main thrust of this paper is maritime affairs, which have suffered from benign neglect. The continental mindset has historically dominated and structured the thinking, strategy, and goals in South Asia. The Pakistani armed forces have dominated the domestic political scene, supported by a nexus of politicians and bureaucrats. They have concentrated their energies on terra firma, including Kashmir, Siachen Glacier, the LoC, Durand Line, etc. The Indian strategy has been reactive, and in spite of its vast oceanic frontage, remains land-oriented. This situation persists despite the fact that over 95% of the trade of both countries is carried by sea. It is lamentable that South Asia has little share of the six *trillion* dollars worth of trade in the Indian Ocean region⁶. The apathy and indifference of the establishment towards maritime affairs remain an enduring enigma, and the military scene remains remarkable for the absence of Naval CBMs.

People on both sides of the border are suffering from “crisis fatigue.”⁷ A diaspora of Muhajirs (immigrants) in Sindh and Kashmiri Muslims have settled in Punjab on the Pakistani side. Similarly, there is a community of Sikhs and Hindu Punjabis on the Indian side. These communities on both sides of the border are politically significant and yearn for normalization of relations, free movement of goods, and ease of travel. While other regional trading blocs are thriving, the South Asian Association for Regional Cooperation (SAARC) countries continue to languish in poverty, inherent mistrust, and hostility. Meanwhile, the Indian Ocean is bereft of any collective maritime security and trade arrangements.

An almost perpetual preoccupation with interstate conflicts has left little time and resources to seek regional solutions. Whatever talks have taken place have been a dialogue of the deaf.

The medium to achieve a breakthrough is the sea, where it is feasible to negotiate CBMs, which deal with less contentious and softer issues. This paper, therefore, initially focuses on soft, doable projects, advocating a building-blocks approach to address larger and more complex issues as confidence continues to build.

Transparency is a fundamental requirement of confidence building. Some essential aspects of transparency—monitoring, surveillance, and verification—are enabled by technology. Today’s technologies facilitate making connections and building mutual

⁵ See Appendix 2 for the text of the declaration.

⁶ Ishrat Hussain, Governor of the State Bank of Pakistan. Address to Pakistan Chamber of Commerce and Industry, June 2002.

⁷ Kashmiri Muslims and the Urdu-speaking Muhajirs in Pakistan and the Punjabi-speaking Sikhs and Hindus dispersed all over India yearn to rekindle their spiritual linkages and rediscover their roots in their ancestral lands and cultures. The debilitating arms race has to be checked and funds diverted towards alleviating poverty, improving health and hygiene, education, potable water, and housing for all.

confidence. This paper identifies projects and proposals that may be implemented through the applications of currently available technologies.

Today, when the atmosphere is conducive to dialogue, it is necessary to adopt an incremental bottom-up approach involving low-level, technical experts and professionals, thereby avoiding the potential pitfalls of high-profile failures. The log-jam in the maritime field can only be broken by focusing on substantive issues through a strategy of employing low-key, pragmatic steps, leading progressively to larger solutions.

This paper addresses in a general way issues in the maritime sphere and, more specifically, the festering disputes concerning the delimitation of the maritime boundary, Sir Creek, and the fishermen's issues, which have a strong humanitarian aspect.⁸

The present research focuses on four points:

- The delimitation of the maritime boundary and relationship with Sir Creek
- Restoration of full shipping links and the security of ports and cargos
- Fishermen arrests and repatriation
- Naval and maritime agency interactions and possibilities for cooperation.

The reason to select the sea as the starting point for initiating a dialogue for confidence building is indicated by Dr. Siddiqa-Agha, who states that “the Indian and Pakistani navies do not carry as much psychological baggage as other branches of the services do.”⁹ Commander Rajesh Pendharker of the Indian Navy, too, has opined that “the character of the Naval forces themselves makes it possible to cooperate in a manner detached from political wranglings between the two states.”¹⁰ Both of these statements are true to a large extent, considering the efforts made by the two navies to forge cooperation in the past, despite hostility on other fronts.

These authors have focused on the sea as a good starting point for carrying the seeds for future agreement, since it is less contentious than other areas. Despite the personal involvement of some Heads of Service on both sides, there has been regrettably little Navy-to-Navy contact or dialogue. Fortunately, the process got a shot in the arm at Lahore in February 1999 when the Prime Ministers of both the countries agreed to:

- Conclude an agreement for prevention of incidents at sea
- Periodically review the implementation of CBMs, and, where necessary, set up consultative mechanisms
- Review the existing communication links with a view to upgrading them.

⁸ At the time this paper is going to press, December 2003, there are a number of articles appearing in the South Asia regional and international press reporting favorable gestures and proposals for cooperation in the maritime arena between India and Pakistan. These intimations include avoiding arrest of fishermen in specified areas, initiating a passenger ferry service between the countries, and cultivating communication and interaction between the Indian Coast Guard and the Pakistani Maritime Security Agency.

⁹ Ayesha Siddiqa-Agha, *Maritime Cooperation between India and Pakistan: Building Confidence at Sea*, SAND 98-0505/18. Albuquerque, NM: Sandia National Laboratories, November 2000. p. 11.

¹⁰ Rajesh Pendharkar, *The Lahore Declaration and Beyond: Maritime Confidence-Building Measures in South Asia*, Occasional Paper 51. Washington, DC: The Henry L. Stimson Centre. February 2003. p. iii.

The Lahore declaration has thus provided the two countries with an excellent instrument not only to structure mechanisms for establishing/upgrading communications but also to commence negotiations/consultations for formulating a set of CBMs, along similar lines as INCSEA, which would minimize the risk of initiating a war by accident.

From the military point of view, the efforts of both sides over a decade and a half finally culminated in the 1991 agreement titled “Advance Notice of Military Exercises and Manoeuvres.” As far as the two navies are concerned, both sides have by and large adhered to various clauses of the agreement. However, aircraft of both sides continued to buzz each other’s ships and aircraft at sea. Vijai Sakhuja has written about four such incidents.¹¹ Cdr. Pendharker has also described three incidents, one each in the years 1995, 1996, and 1999.¹² These close encounters could have resulted in ugly incidents at sea but, fortunately, did not. Further, it is no less important to note that a number of Chiefs of Naval Staff of both countries had, during their tenures as Chiefs, expressed their keen desire to their respective governments to commence a Navy-to-Navy dialogue through visits of ships and officials at senior levels. All of these efforts were aimed at fostering friendly relations and creating a more congenial operational atmosphere at sea. However, these efforts were blocked by hardline elements on both sides and by certain political events.

Confidence Building Measures

History shows that to be truly effective, the concept of CBMs requires substance rather than platitudes. The approach must be rational and pragmatic, focusing on proposals that are less contentious, mutually beneficial, and easily put into action. Acceptance and implementation by both sides of small, initial steps can be followed by a deliberate and incremental approach to the larger, more complex, substantive issues. This building-block approach envisages a process where each previous measure forms the basis for further measures that consolidate and strengthen the building of confidence.

This paper addresses issues in the military, economic, and humanitarian fields. The paper is also cognizant of the fact that any approach to CBMs, while recognizing the common interests of the regional states, must also be mindful of the interests of the outside users of the area.

The maritime field offers great opportunities for enacting CBMs. Navies and naval officers have a transnational reach and outlook and their history is not encumbered with animosity. An incremental approach to problem solving, starting with subjects that are less contentious and have minimal security implications, is recommended.

CBMs as an institutional process may take years to produce positive results; hence, patience and political will are necessary ingredients to progress. It is noteworthy that in South Asia as many as 40 channels are currently working on CBMs. While CBMs are often seen as essentially military, it is important that “soft” issues are not ignored; the

¹¹ Vijai Sakuja, “Cold War In The Arabian Sea,” *Strategic Analysis*, XXV, 4 (June 2001). pp. 376-377.

¹² Rajesh Pendharker, *op. cit.*, p. 5.

role of people and societies is just as important as governments. Unfortunately, the public attitude in this area is that CBMs and Track II initiatives are the exclusive domain of a few concerned citizens.

Therefore, there is a crying need to dispel the perception of elitism and to bring CBMs and increased dialogue to the popular level. Use of the vernacular press to inform the general public about the role of CBMs is necessary to mold public opinion and mobilize support.

A pressing need of the hour is to extend the scope of CBMs and enlarge them to other areas in the non-military fields, such as economics, trade and shipping, water resources, environment, power, energy, education, and science and technology.

It is necessary to emphasize that the single most important component of a CBM is transparency. Both parties need to be consistently reassured through a series of constraint measures, communications, and verifiability. These are the primary tools which institutions, aided by technology, can make the states' behavior more predictable.

Mistrust is a formidable problem as well as a formidable weapon. For any measure to succeed, both sides have to be convinced that the other side will abide by the mutually established rules. It is therefore advisable to adopt an incremental approach and to identify and start with small steps, which are of common interest and help build confidence over a period of time. The measures identified must also be capable of being put into action and should not offend any sensitivities (political, military, or otherwise).

Key Issues

There are three substantive issues in the maritime arena that have the potential to flare up and raise the political temperature. These are (1) the maritime boundary, (2) Sir Creek, and (3) fishermen's arrests. These issues also hold the promise of economic benefits for both sides if resolved in a cooperative atmosphere. However, for about the past 50 years, the two sides have been preoccupied with Kashmir, which has remained their main focus. The maritime issues, though under discussion at various times, have remained in the background and accorded little attention.

The maritime boundary issue arose out of the United Nations Convention on the Law of the Sea (UNCLOS) III (1982), which gave vast swathes of the ocean to coastal states' jurisdiction, thereby sowing the seeds of inevitable conflicts of interest. As compared to the highly volatile issue of Kashmir, the delimitation of the maritime boundary and the dispute involving the Sir Creek have not yet attained a flash point status, although both issues have the potential to do so at a future date. Sir Creek issues are complex in nature. Although less complicated, delimitation of the maritime boundary has also not made any headway, because it has been linked to Sir Creek.

Next, the 1975 Protocol on Shipping and Trade constitutes self-imposed shackles that need to be broken if trade potential is to be realized and for both countries to prosper. The countries' economic health is as dependent on ports as it is on keeping sea lines of

communications open. For Pakistan, with only one port, this represents its jugular; denial or closure of the port would be a crippling blow to the economy. In addition, the security of ports has assumed great importance and significance in the wake of the terrorist attacks of September 11, 2001. Therefore, issues related to port security need to be addressed in detail.

There is also the perennial humanitarian problem of captured fishermen, who regrettably continue to be pawns in a game of profits and politics.

In addition to these issues, the paper looks at the possibility of interaction and cooperation between Naval and maritime agency officials.

The study concludes with a set of recommendations and project proposals. The recommendations cover both short-term and long-term measures as recommended actions for government agencies, both unilateral and bilateral. The proposed technical projects are considered able to be put into action with possible assistance from various technical and regional sources.

Territorial Issues

Maritime Boundary

Published figures show that over 95 percent of overseas trade of both India and Pakistan is carried in ships.¹³ Given this dependence on sea-borne trade, a maritime conflict between India and Pakistan would have a significant negative impact on the two countries' economies. India and Pakistan are both heavily dependent on unrestricted inflow of oil from the Persian Gulf states. In the event of a conflict, each country's navy would likely focus on disrupting the sea lines of communications (SLOCs) and trade of the other country, while defending their own interests.

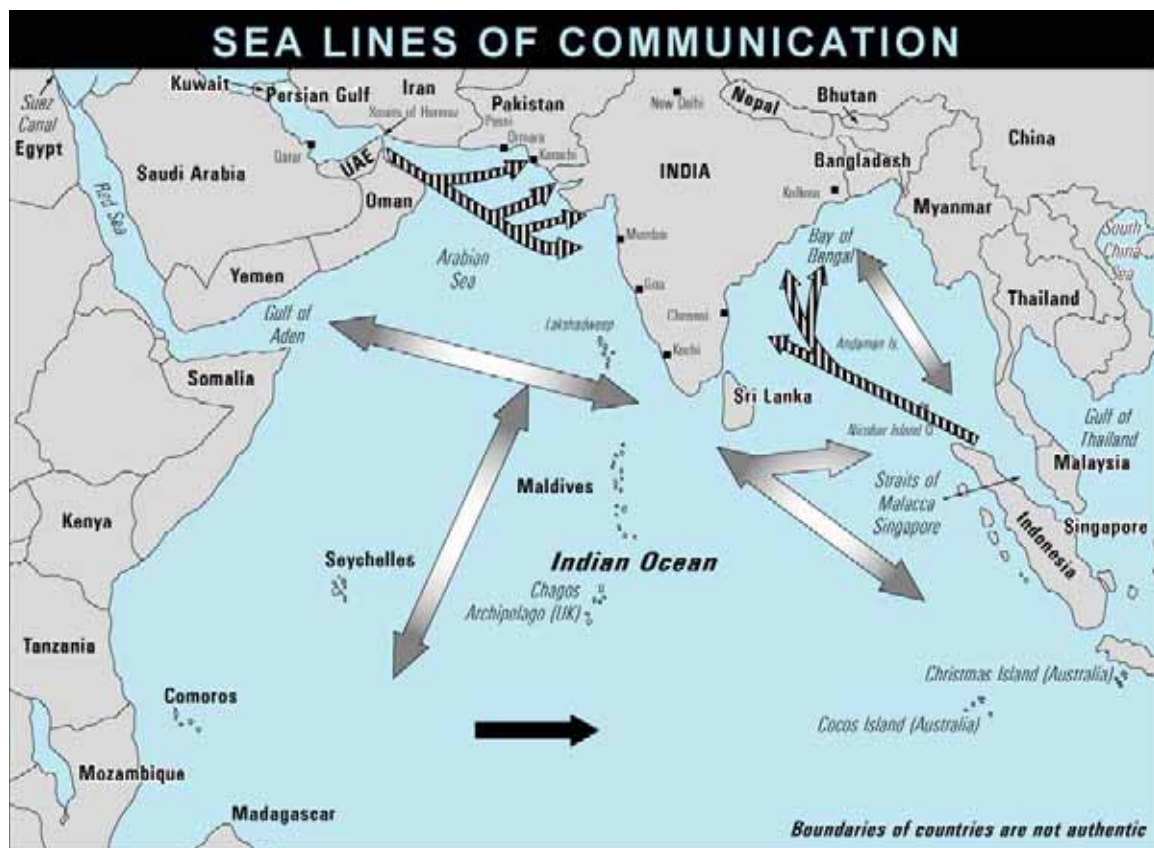


Figure 1. Sea Lines of Communications

Trade routes through the Indian Ocean and Arabian Sea¹⁴

Hatched arrow: Trade routes to India and Pakistan

Shaded arrow: Trade routes for SE and NE Asian countries

¹³ Rahul-Roy Chaudhury, *India's Maritime Security*. New Delhi: ISDA and Knowledge World, June 2000. p. xiv.

¹⁴ The importance of these SLOCs to the rest of the world is indicated by the following figures:

Energy Dependence on Gulf Oil: Japan 76%, China 40%, Australia 65%

Trade through Indian Ocean in US \$: Oil trade through Hormuz \$200 billion, oil trade through Straits of Malacca \$70 billion, Japan's trade over \$250 billion, China's trade \$100 billion.

Additionally, war at sea has no geographical limits. A conflict in the Arabian Sea would have a global dimension. Nearly 70% of the Gulf’s oil is trans-shipped through the waters of the Arabian Sea.¹⁵ Many Northeast Asian countries such as Japan, Taiwan, and South Korea are heavily dependent on Gulf oil. An India/Pakistan war at sea could increase shipping insurance rates. If shipping companies undertook a longer route, sea freight costs would rise as well.

This scenario has become even more complicated since India and Pakistan attained nuclear status in 1998. In any future conflict, therefore, intervention, or at least presence, of large powers in the area to contain and diffuse the situation cannot be ruled out. It is therefore in the interest of both countries that most issues be addressed without delay, thereby reducing the number of thorny issues that have dogged the political relationship between the two countries for over fifty years. Delimitation of the maritime boundary is such an issue.

India started delimitation of boundaries at sea with its maritime neighbours in the 1970s¹⁶ and has signed nine bilateral and three trilateral agreements to date, as shown in Table 1.

Table 1. Indian Maritime Boundary Agreements

Partner Country	Date	Type of Agreement
Indonesia	8 August 1974	Bilateral
	14 January 1977	
Maldives	28 December 1976	Bilateral
Myanmar	23 December 1986	Bilateral
Sri Lanka	26/28 June 1974	Bilateral
	23 March 1976	
	22 November 1976	
Thailand	22 June 1978	Bilateral
	27 October 1993	
Sri Lanka and Maldives	24 July 1976	Trilateral
Indonesia and Thailand	22 June 1978	Trilateral
Myanmar and Thailand	27 October 1993	Trilateral

¹⁵ Peter Walker, “The Evolving Regional Security Environment: What the Maritime Strategist Should Know.” Presented to the Regional Maritime Security in the Indian Ocean conference, Halifax, Nova Scotia, July 2001.

¹⁶ Rahul Roy-Chaudhury, Trends in the Delimitation of India’s Maritime Boundaries. New Delhi, IDSA, 2002. <http://www.idsa-india.org/an-jan9-5.html>. p. 2.

Similarly, Pakistan has signed agreements with Iran and Oman and settled its maritime boundaries with those two countries, as shown in Table 2.

Table 2. Pakistani Maritime Boundary Agreements

Partner Country	Date	Type of Agreement
Oman	1996	Bilateral
Iran	1996/1997	Bilateral

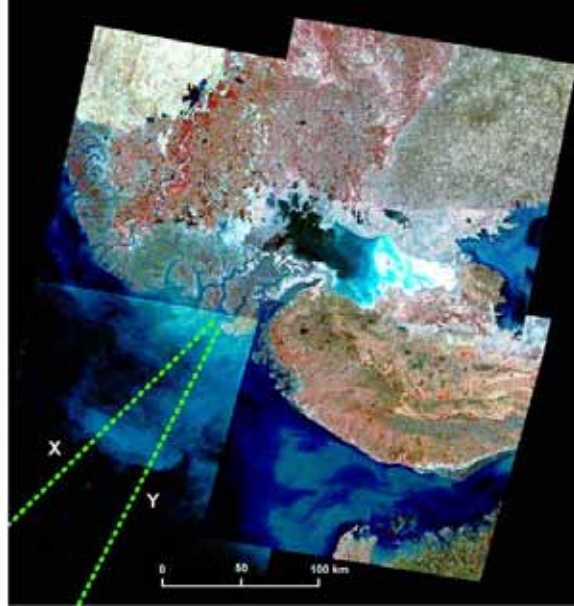
Despite this record of formulating agreements with their neighbors, India and Pakistan have held six rounds of discussions between 1989 and 1998 without a breakthrough.¹⁷ The first meeting was held on 2 June 1989 and the sixth and last one on 9 November 1998. After defining the scope of discussions and agreeing to the basic agenda, little was achieved during the first two rounds. There was a thaw in bilateral relations in 1991, which enabled both sides to achieve some progress on the issue during the two meetings held that year. During the fifth round, held in November 1992, the talks floundered due to technical differences and linking of contentious issues. In the last round of discussions held in November 1998 at New Delhi, India's proposal of a seaward approach to establishing the maritime boundary was discussed but no agreement could be reached.

The Pakistani viewpoint was that in order to delimit the maritime boundary, it would be necessary to first decide upon a mutually agreeable land terminus. This would then become a reference point used to draw the boundary line on charts up to a distance of 200 nm from the shore. The distance of 200 nm was chosen because it is the distance of the exclusive economic zone (EEZ). The Indian view was that the Pakistani proposal, de-facto, suggested that no progress would be possible until the Sir Creek dispute was resolved. India considered that the two issues could be de-linked and tackled simultaneously as separate issues. In January 1994, India presented a "non-paper" suggesting a seaward approach method in conformity with International Law.

Dr. Ayesha Siddiq, a security analyst, has stated that there is a difference in the perception of officials of India and Pakistan regarding the demarcation of the maritime boundary line, as shown in Figure 2.¹⁸

¹⁷ *Ibid*, p. 5.

¹⁸ Ayesha Siddiq-Agha, *op. cit.*, p. 31.



*Figure 2. India's and Pakistan's Perceptions of Maritime Boundary Lines
Projecting from Sir Creek*

X – India's perception
Y – Pakistan's perception

Most writers have suggested the following three possibilities as methods to delimit the maritime boundary:

- (a) Land Terminus. This process involves resolution of the Sir Creek dispute to begin with, and is therefore unlikely to be resolved in the immediate future.
- (b) Base Line. This approach, too, is unlikely to offer a solution in the near-term because India has not yet finalized and submitted its base line charts to the UN Secretary-General, and the baseline proposals must subsequently be accepted by the concerned agencies.
- (c) Seaward Approach. Under the circumstances mentioned in subparagraphs (a) and (b) above, the seaward approach as outlined in the United Nations Convention on International Law of the Sea (UNCLOS) offers a possibility that needs to be considered and discussed to arrive at an interim solution.

The United Nations Convention on International Law of the Sea (UNCLOS) III (1982) became effective on 16 November 1994. This law conferred greatly extended maritime zones to coastal and island states, thereby extending the jurisdiction of maritime nations over vast areas of adjoining seas. For delimitation of maritime boundaries, the new law has adopted the “median” or the “equidistance” principle in the case of both adjacent and opposite coastal states. Articles 74 and 83 of UNCLOS III also describe the process of delimitation of the EEZ and the Continental Shelf. In the case of India and Pakistan, being adjacent coastal states, article 6.2.5.3 of the Technical Aspects of Law of the Sea (TALOS), a technical support document to UNCLOS, also proves relevant. Specific information regarding TALOS approaches can be found in Appendix 3.

Some writers have noted that, depending upon the starting point on land, one country will gain or lose an area of approximately 2500 square nm in the EEZ. However, this estimation is not supported by actual chart work, which, as described in the recommendations below, reduces the area of gain or loss by a factor of 100.

Recommendations:

In view of the foregoing, it is proposed that the two governments consider the following recommendations to delineate the maritime boundary:

1. De-link Sir Creek from the maritime boundary issue.
2. Agree to adopt the seaward approach in conformity with TALOS Article 6.2.5.3 up to a mutually agreed point from the coastline. The remaining area from this point to the coast could be delineated at a later date pursuant to agreements reached regarding Sir Creek. The procedure for delineating the maritime boundary is described below:
 - Determine a point 200 nautical miles at sea (the EEZ limit), equidistant from the coasts of India and Pakistan, using well established and undisputed shore/baseline points from their respective mainlands. (As per the procedure described in Article 6.2.5.3).
 - Adopting the same procedure, determine and mark points on the chart at 150, 100, 50, and 35 nm from the two coasts, or up to any agreed distance (perhaps 16 nm).
 - Mark a point on the mouth of the creek, equidistant from the two positions claimed by India (I) and Pakistan (K) as an interim solution without any prejudice to future claims.
 - The line joining these points would then indicate the marked boundary on the chart.

An example illustrating this proposed method is shown in Figure 3.

The above procedure seems simple in theory, but in practice it may not be so easy to apply in this instance. It would require all the patience, professional skill, and understanding of expert hydrographers from both sides to arrive at a boundary line that could be recommended for consideration by the appropriate authorities.

Finally, it is important to understand that as long as the shore points selected are mutually acceptable to the two sides, the boundary line delineated using the angular bisection process, will undergo only minimal change when the final base lines are established. The only part of the maritime boundary line that will be affected will be the 25-35 nm closest to shore, which will shift depending upon the terminus point determined after the issue of Sir Creek issue is resolved. To help this process, a maritime mapping software package could also be used.

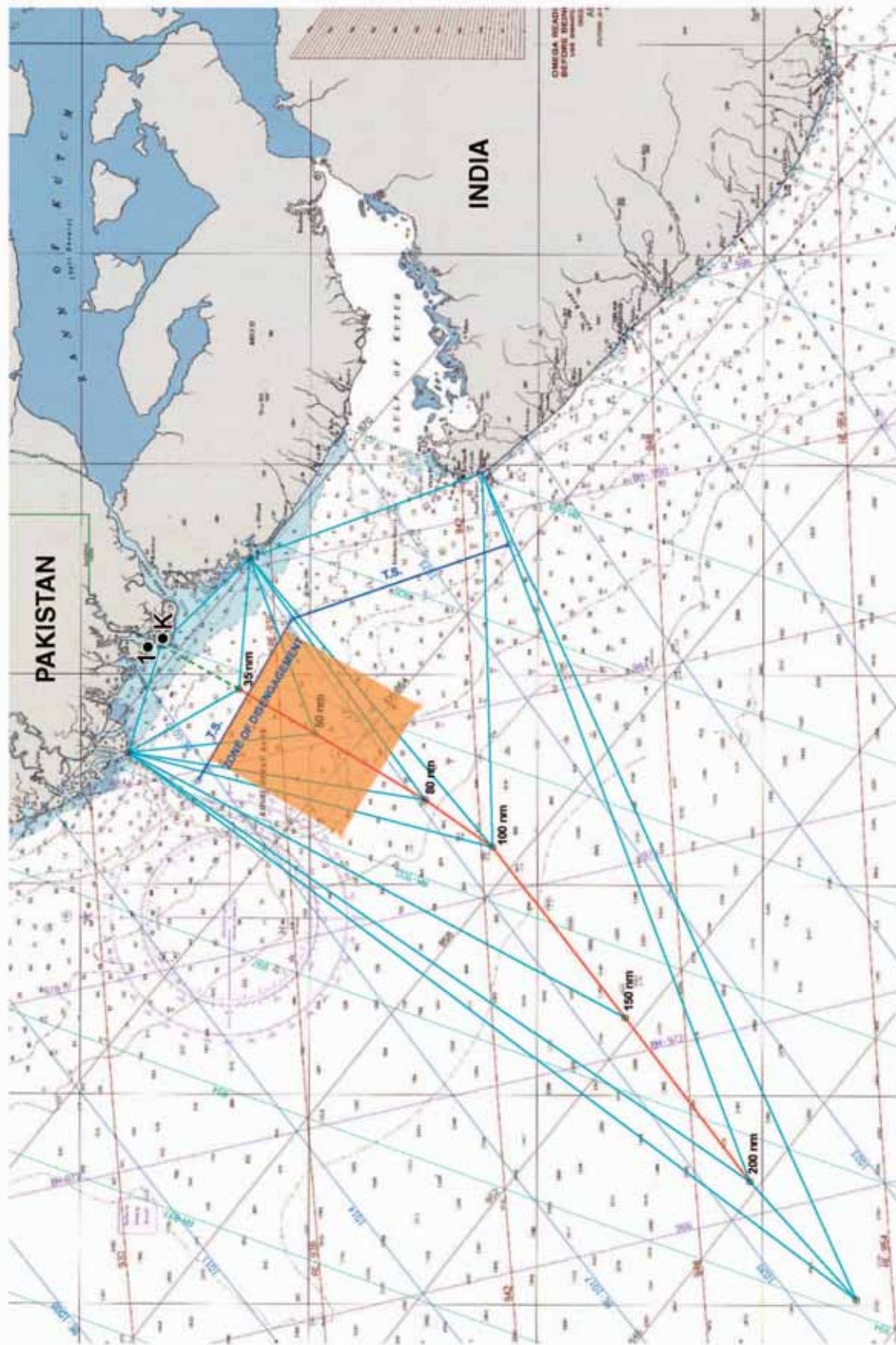


Figure 3. Example of India-Pakistan Maritime Boundary as Illustrated by the Seaward Approach Method

[This page intentionally left blank]

Sir Creek

The Sir Creek dispute is documented to have originated in 1875 between the two princely states of Sind (now in Pakistan) and Kutch (now in India).¹⁹ The government of Bombay, under the British, took up the issue in 1907-1908, and, after consultations with both sides, brokered an agreement and promulgated its decision in a letter dated 20 September 1913 (Number 5543) and in the form of map Number B-44, which was published in 1914. Map B-44 was subsequently implemented in 1924 in the form of map Number B-74, both of which are now referred to as the “1914 Resolution Maps”. Some experts believe that maps B-44 and B-74 differ in their contents. Map B-44 is shown in Figure 4, below.

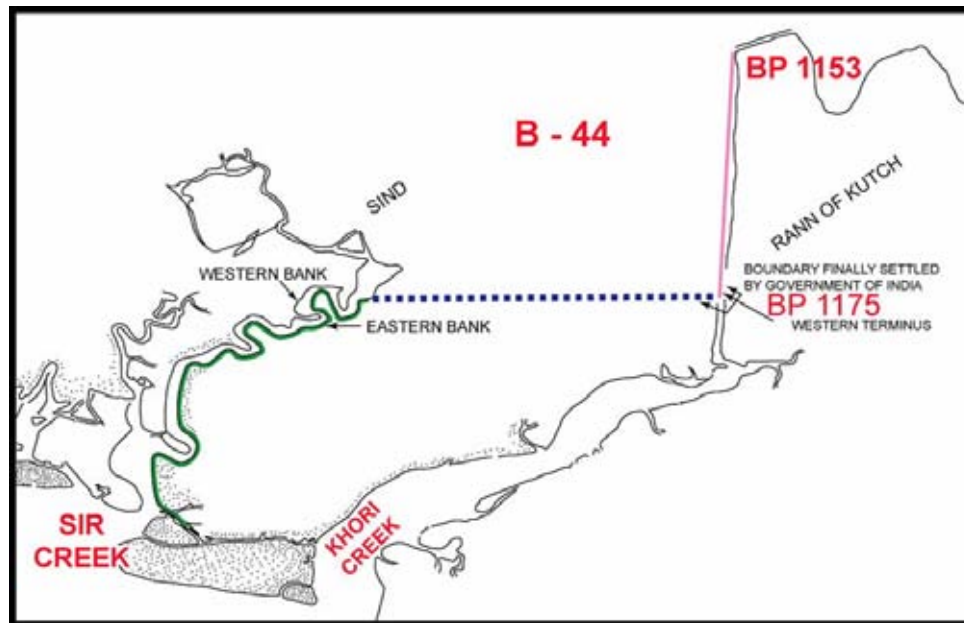


Figure 4. Sir Creek and Vicinity (Map B-44)

After independence, the dispute resurfaced in July 1948 when Pakistan raised the issue of the delimitation of the Sind/Kutch border. The dispute remained low-key for some time, but in mid-1965 the Rann of Kutch area to the east of the Creek erupted in bloody clashes, and the subsequent events led to war.

After the war, the two sides referred the dispute to an Arbitration Panel, which published its decision on 19 February 1968, defining a new boundary between Kutch and Sind. Although Sir Creek was not in the purview of this panel, the panel’s award referenced the September 1913 document and thus created a link between the boundary defined by the Panel and the boundary promulgated by the British in 1913.

At the Panel’s directive, the two sides were to erect pillars along the newly defined boundary, but this task was not undertaken with any enthusiasm by either side. Therefore, the demarcation of the boundary remains incomplete to this date.

¹⁹ H.R. Gupta, *The Kutch Affair*. Delhi: UC Kapur, 1969. p. 77.

Six bilateral discussions have been held on this issue between 1989 and 1998, but the two sides have failed to come to an agreement. Possible presence of hydrocarbons in proximity of Sir Creek is stated to be one reason, according to some media reports. However, there have been no reports of discovery of oil or gas in the area so far. There is also a perception in certain quarters in India that Pakistan is delaying the process for political reasons, and may press for an arbitration at a later date. Indian officials, on the other hand, do not wish to get involved with another arbitration panel and would like to settle the issue bilaterally.

The fact remains that the two sides have fought a war in this area, sought arbitration in the past, and yet have not been able to resolve the ongoing dispute. This is indicative of the complexity and sensitivity of the problem and perhaps other issues involved.

Over the past five decades, several natural geomorphic changes have occurred in the deltaic region of the Indus River. Sir Creek, being a part of this delta system, is now reported to be somewhat different in reality from the map that was printed in 1914.²⁰ The following changes in particular are relevant to the issue:

- The orientation of the creek has changed, creating a gap of approximately two kilometers from the point as marked in the 1914 map to the current outflow of the creek.
- The mouth of the creek has widened.
- An island has appeared near the mouth of the creek due to siltation, so that the boundary as marked on the 1914 map ends landwards of the tide line.

The respective stands of India and Pakistan on how the boundary is to be delineated are as follows:

Pakistan

- Land boundary to be defined along the green line shown on Map B-44 (Figure 4). The boundary runs along the east bank of the creek.
- Delimitation of the maritime boundary to be addressed after the land terminus is decided and the Sir Creek dispute settled.

India

- The boundary of Sir Creek should be defined by the mid-channel principle, in conformity with International Law.
- De-link Sir Creek and address maritime boundary delimitation separately.

A.G. Noorani quotes a notation by the tribunal that delineated the Sind-Kutch border, “In view of the aforesaid agreement, the question concerning Sir Creek parts of the boundary

²⁰ Rear Admiral KR Menon (Ret), “Maritime Confidence Building in South Asia,” in *Maritime Confidence Building in Regions of Tension*, Report No 21. Washington, DC: The Henry L. Stimson Center, May 1996. p. 78.

is left out of consideration.”²¹ He also quotes an observation by the Commissioner of Sind on the boundary award, “that the Sir Creek changes its course from time to time and the western boundary of the area, which it is proposed to surrender to Rao of Kutch, should therefore be described as ‘the center of the channel’ of the Sir Creek.”²² The provision described above is indicative of the claim and objections raised by the princely state of Kutch regarding the boundary delimitation. However, the same was not agreed to by the British.

At the last bilateral meeting held in November 1998 in New Delhi to settle the issue based on the median line principle, no progress could be achieved, probably because of the lack of up-to-date hydrographic charts of the Creek. Therefore, before the next meeting is scheduled it would be advisable to complete a fresh hydrographic survey to ascertain the latest orientation and depths in the creek and its approaches. This survey would:

- Delineate the high water line
- Locate protruding edges along the Creek
- Take soundings and marking of coastline in the approaches area.
- Gather information regarding the navigability in the creek.

In case a hydrographic survey has been recently completed and charts prepared by one side (India reportedly notified Pakistan of a recent survey), then time could be saved by carrying out joint check surveys at selected points. Once authenticated charts of the Creek, acceptable to both sides, are available, it is hoped that the two sides will be able to make some progress at their next meeting.

As it stands, the two sides have the following options available:

- Indian claim of the boundary line along the Western bank, terminating at point 1 (Figure 5)
- Pakistani claim of the boundary line along the Eastern bank, terminating at point K (Figure 5)
- Indian proposal of defining the boundary as one equidistance line in accordance with UNCLOS/TALOS Article 6.2.5.2 (See Appendix 3)
- Arbitration
- Maintain status quo; i.e. mutually agree to remain in dispute.

²¹ AG Noorani, in Micheal Krepon and Amit Sevak, eds. *Crises Prevention, Confidence Building and Reconciliation in South East Asia*. Washington DC: Henry L. Stimson Center, 1995. p. 100.

²² *Ibid*, p. 101.

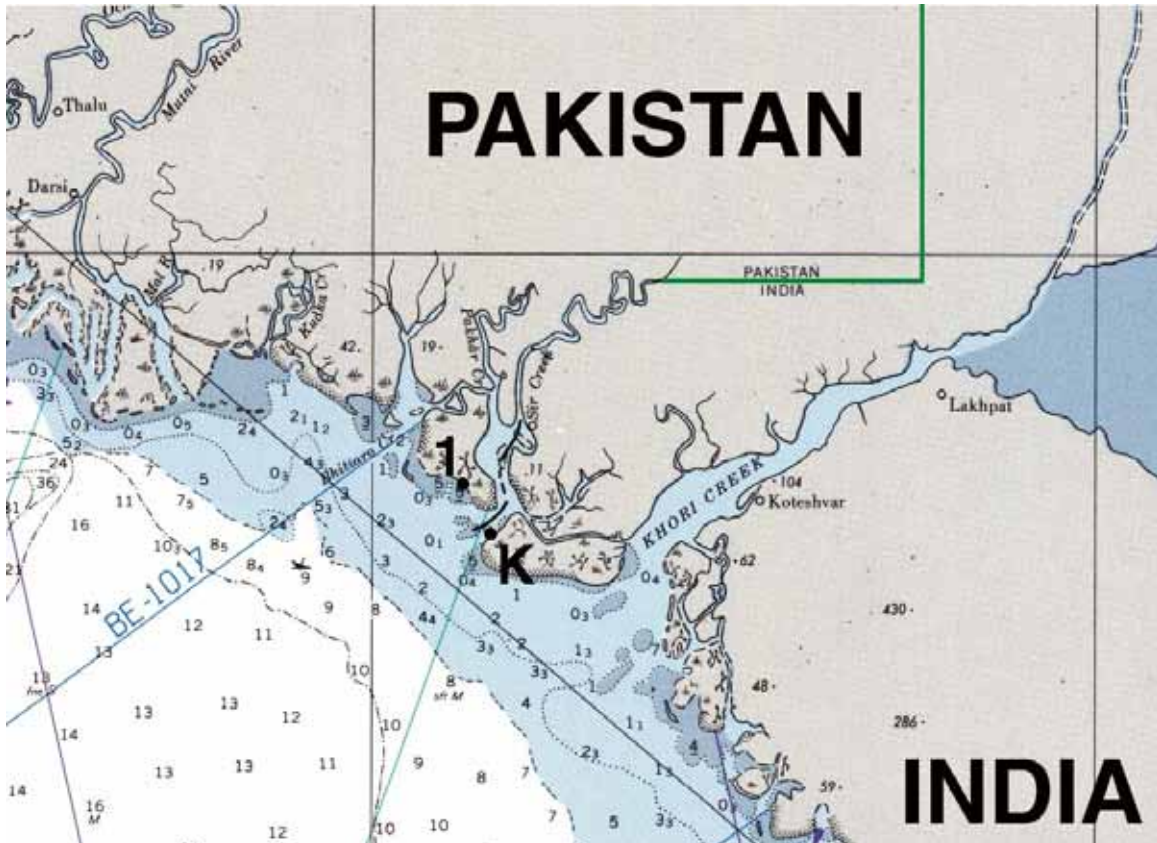


Figure 5. Sir Creek, Showing Points 1 and K

Recommendations:

The authors are of the opinion that, considering the hostility and impasse of the past 55 years, the most pragmatic solution to the dispute would be to divide the Creek along the median/equidistant line in accordance with International Law. However, considering the political climate in the two countries at the present stage, it is perhaps best to maintain the status quo and hope that both India and Pakistan will resolve this dispute in an atmosphere of compromise and not hold delimitation of the maritime boundary hostage to the Sir Creek issue.

In the interim however, CBMs involving Sir Creek could advance relations and management of the area overall. UNCLOS has a provision for creation of Maritime Sensitive Zones under mutual agreement. Such zones and areas, under interim arrangement, could either be jointly exploited or made a subject of joint study for environmental monitoring and ecological preservation, without prejudice to larger maritime claims of either side.²³ A joint study of this complex inter-tidal ecosystem, in accordance with UNCLOS, Part 12, Section 2, Article 200 may prove to be very useful. The study could be focused either on the Sir Creek area, or it could be a larger project involving entire or part of the coastline from Karachi to Mumbai. A sub-regional

²³ Gaurav Rajen, *Cooperative Environmental Monitoring in the Coastal Regions of India and Pakistan*, CMC Occasional Paper 11, SAND98-0505-11. Albuquerque, NM: Sandia National Laboratories, 1999.

mechanism for cooperation under UNCLOS also exists as the South Asian Seas Action Plan (SASAP).²⁴ The governments of India and Pakistan have agreed to this regional plan along with the governments of other cooperating South Asian countries.

One of the key elements of the SASAP is to encourage collaboration among regional scientists and technicians and their institutions for the study of various processes occurring in the coastal areas and open ocean, as well as assessing sources and levels of pollutants and their effects on marine life and human health. The SASAP thus provides India and Pakistan with a framework for sharing environmental release and effluent data in the Sir Creek and coastal regions. A joint project may help gain a better understanding of ecological and physical aspects of the Sir Creek area, as well as help lower the tensions in the area of dispute.

²⁴ Prasantha Dias Abeyegunawardene, *South Asian Seas: a critical moment*. UN Environment Programme, <http://www.unep.ch/seas/sascap.html>.

Maritime Trade

Shipping and Trade

Oceans are still the “great highways” on which much of the world’s business depends. The global economy now depends on the continuous, uninterrupted flow of shipping among producers of raw materials, energy component manufacturers, assembly plants, and consumers.

Trade within South Asia, and maritime trade in particular, can be the great engine that drives the peace process forward. Economic cooperation and development can only come about when the political situation is stable and secure.

There is now a convergence of interests for India and Pakistan to work towards restoration of unrestricted direct trade and shipping links. Generally, a consensus exists that there is greater trade potential between the two countries than currently takes place.²⁵ Consumers in both countries are not well served by current trade barriers.²⁶ In fact, the UN humanitarian development report (2002) estimates that trade with India would make foodstuffs cheaper by 20-30% in Pakistan.²⁷

Sea-borne trade represents a vital lifeline for both India and Pakistan, where over 95% of goods are transported by sea.²⁸ For Pakistan, with only one major port, sea trade is the jugular vein of the economy. Any disruption of the SLOCs or port closures can quickly bring Pakistan to its knees. Whereas India’s overall trade is \$44 billion, the bilateral, official trade with Pakistan has never exceeded \$500 million. Meanwhile, unofficial trade is estimated at \$2 billion and illegal trade at \$1 billion.²⁹ This situation is the adverse consequence of shipping constraints and tariff barriers.

Pursuant to the Simla Agreement in 1972, both countries signed the 1974 Protocol on Resumption of Trade. This was followed in January 1975 by the Protocol on Resumption of Shipping Services (Appendix 4). However, the clauses of the 1975 Protocol were so restrictive concerning ship registrations, volumes of cargo, equality principles, etc., that it actually resulted in a sharp decline in trade. It is a measure of the official apathy towards maritime affairs that this Protocol, which was to be reviewed yearly, did not come up for review until 1984.³⁰

²⁵ At a meeting on 28-29 June 2003, the President of the India-Pakistan Chamber of Commerce and Industry noted that “trade can be jacked up to US\$3-4 billion from US\$500 Million from present. Major items are: pharmaceuticals, autos, IT, tea, chemicals, tires, iron ore, textile machinery.” *Daily Times*, 27 June 2003.

²⁶ Amit Mitra, Secretary General, FICCI.

²⁷ United Nations Human Development Programme, *Human Development Report 2002*.

²⁸ Geoffrey Till, “Regional naval trends in the Indian Ocean,” International Maritime Seminar on the Indian Ocean, Islamabad, 1994.

²⁹ Described as “abysmally low; trade potential is for \$5 billion.” Y. Sinha, Indian Foreign Minister, address to India-Pakistan Chamber of Commerce and Industry, Delhi, June 2003.

³⁰ “Both sides accept the expansion of trade to their ‘mutual benefit’ to expand the 1975 Protocol to cover the carriage of 3rd country liner cargo originating from the ports of either country and destined to ports in third countries and vice versa.” The next meeting in 1976 discussed transit trade to landlocked countries,

The Shipping Protocol stipulates, “Neither country can lift third country liner cargo originating from the ports of either country and destined for ports in third countries and vice versa.” That is, Indian ships are not allowed to carry cargo from Pakistan to any country other than India, nor can Pakistani ships carry cargo from Indian ports to any third country. The fact is that this Protocol has worked to the detriment of shipping concerns on both sides of the border by restricting them to lifting only bilateral cargo, which is insignificant.³¹

Shipping companies operate in consortiums, and containers are transported and trans-shipped from hubs. Ships and cargos that are not part of this system are losers. Pakistani shipping, being small and largely in the government sector,³² would greatly benefit if allowed to join various consortiums to lift cargo to the Indian ports. Indian ship owners, having larger fleets,³³ are also eager to call at Karachi/Port Qasim Authority (PQA), especially with transit cargo for Afghanistan. Currently this lucrative business goes by default to third-flag vessels. Pakistan’s freight bill, including these third party vessels, is \$1.3 billion a year and India’s is at least four times as high.³⁴

Pakistani shipping works on the basis of a single port operation; this imposes great limitations on the efficient operation of the fleet and hinders rationalization of its services. For example, in a one-port system ships often leave less than fully loaded and it is difficult for shippers to participate in consortia to maximize utilization of their capacity. If the restrictions on both sides on carrying third-flag cargos are lifted, a much larger Indian market and a greater number of Indian ports would be open to Pakistani trade and shipping. Both the public and private ship owners in Pakistan are clamoring for a revision of the protocol to allow them access to this lucrative business.³⁵ Regrettably, there has been no progress on this issue, possibly because Pakistan has not yet agreed to grant Most Favored Nation status to India.

The trade figures are misleading, as they do not reflect the clandestine transactions of over \$3.0 billion a year, conducted largely through unofficial monetary channels of “hundi” and “havala.” These are informal banking systems where transactions are covered by a chit system or simply by word of mouth. Payments are made and accepted

carriage of passengers, shore leave of seamen, and delay in freight remittances. The Foreign Ministers meeting in June 1983 was inconclusive. The India-Pakistan Joint Commission in July 1985 virtually sealed the issue with “insufficient volume of trade” and “imbalanced tonnage.” The negotiations have foundered on the issue of transit trade to Afghanistan.

³¹ Bilateral trade is \$500 million. Most trading is indirect, transshipped via Dubai or Singapore in third flag vessels or from Central Asia; trade volume is estimated at \$2.0 billion. Smuggling is pegged at \$1 billion. Riaz Khokhar, Pakistani Foreign Secretary, quoted in *Daily Times*, 27 June 2003.

³² 17 ships, 240,605 GRT. Regional Seminar on Liberalisation of Maritime Transport Services Under WTO/GATT, 11-13 February 2002, Bangkok.

³³ Four hundred ships, 6 million GRT. Despite being 5th largest fleet in world only 36% of India’s foreign trade is carried in Indian ships (50% of its oil, 26% of bulk carrier cargo, and 21% of liner cargo). Amit Agarwal, Chairman, Foreign Committee of the Association of Chambers of Commerce and Industry.

³⁴ Regional Seminar on Liberalisation of Maritime Transport Services, *op. cit.*

³⁵ National Shipowners’ Association-Pakistan. Mr. Masood Baghpati’s letter to the Government on 9 June 1996 and PNSC Chairman’s letter to the Government 1993.

in either country, either by direct communication or via agents in Singapore, Dubai, or other Gulf ports. Bilateral trade in 1948-49 was between 35-50% of the two countries' total, but it has now dwindled to 1% or less, because of restrictive tariff barriers.³⁶ Pakistan has a list of 600 items that may be imported from India, but the high import duties make them non-competitive, thereby encouraging smuggling and indirect trade through third countries.³⁷ These trade practices have served Pakistani consumers badly, while reaping huge profits for a nexus of shady businessmen, corrupt politicians, officials, smugglers, and criminals. The UN Human Development Report of 2002 estimates that open trading would reduce the cost of foodstuffs in Pakistan by 20-30%.³⁸

There is now a convergence of commercial interests on both sides of the border. The moribund India-Pakistan Chamber of Commerce and Industry has been revived and high-profile, large-scale exchanges of delegations have taken place. Some direct trading and joint venture activity is evident. Trade and commerce is the engine that will drive the peace process forward. In order to prosper, this region has to trade internally and externally as a trading block.

Bilateral trade has some obvious advantages: no language barrier, lower freight charges, quick just-in-time deliveries, and familiar trade practices. Less obvious advantages include access to the lucrative transit trade through Pakistan to Afghanistan, Central Asia, and Iran for India and Nepal and through India to Bangladesh for Pakistan. Pakistan would also benefit from the huge Indian middle-class market estimated at 200 million people.

Despite glowing references made by government officials regarding road, rail, and air links, it is a fact that the infrastructure does not exist in these areas to handle the current restricted volume of trade, not to mention possible future increases in trade. Trade is almost entirely carried by sea and shall continue to be so for the foreseeable future. To allow unrestricted flow of trade it is necessary to revise the Shipping Protocol of 1975. The mechanism exists whereby the India-Pakistan Joint Commission can be convened to remove Clauses 5 and 9 of the Protocol, thereby removing the impediments to free movement of goods and cargo in ships owned, operated, and chartered by either country. Booming bilateral trade would nourish both economies, lower lead times, ensure cheaper goods and commodities, and create a reservoir of vested interests and goodwill that will go a long way towards reduced tension and hostilities.

Recommendations:

It is recommended that the India-Pakistan Joint Commission be convened to discuss Most Favored Nation status for India, review the Shipping Protocol, and introduce appropriate amendments to Clauses 5 and 9, thereby breaking the shackles on bilateral trade. It would be best if these clauses were removed altogether. This would result in manifold increases in direct trade, reduced shipping time, and reduced freight charges. It would discourage smuggling and bring profits to the national carriers. This CBM is not highly sensitive

³⁶ *Sify News* (India), 9 June 2003.

³⁷ Amit Mitra, Secretary General, FICCI.

³⁸ United Nations Human Development Programme, *op. cit.*

politically and is unlikely to cause any repercussions since it is beneficial to both countries. It is not inconceivable that ship owners may enter into joint ventures to maximize profits in the future.

The two sides have also discussed the issue of restoration of passenger services between Karachi and Mumbai, but these talks have been inconclusive. It is recommended that restoration of passenger services also be considered as a CBM.

Security of Ports and Cargo

In the wake of the September 11, 2001 terrorist attacks within the United States, the security of ports, their resilience to violence and disaster, and the ability of a port complex to recover are important and urgent concerns. The emerging threat of smuggling radioactive materials and the endemic issues of smuggling drugs and contraband items, are driving the port authorities to improve security measures. However, the security problem is compounded by the nature of the maritime shipping business and the physical location of most ports. Most ports are wide open and easily accessible both from land and water. They are surrounded by large population centers, congested with multiple agencies operating around the clock. The ports are saddled with intensely competitive cargo handling regimes, obsolete transaction practices, institutional corruption, and poor communications. All of these factors combine to raise serious security concerns. The popular perception does not associate ports with terrorism, but the fact is that flags of convenience and registrations represent the soft underbelly of the maritime world.³⁹

Some of these concerns put the free flow of trade, and thus freedom of navigation, firmly on the contemporary international agenda. The ports and transportation measures need to be developed and harmonized both regionally and globally. Unilateral efforts to tighten security within one country without commensurate efforts in neighboring countries would remain ineffective. Today, global economy and trade have to be protected. It is not trade, per se, that needs protection, but the overall system in which it takes place that *has* to be protected. However, it is critical that maritime nations strike a balance between security and the free movement of trade.

Security can no longer be a neglected element of the transportation system. Transparency of both goods and personnel is essential. Communications and database technologies can promote transparency, especially through private-public information sharing, allowing the authorities to monitor the system's activities. To achieve this, expertise needs to be developed by commitment of resources, upgrading facilities, and overhaul of procedures.⁴⁰

³⁹ William Langwiesche, "Anarchy at Sea," *Atlantic Monthly*, October 2003.

⁴⁰ It is estimated that in developing countries transportation and logistics cost add 15% to the goods cost compared with 5% for developed countries. World Bank paper quoted in *The Economist*, 6 April 2002.

Because of the very large volume of cargo being shipped and long supply chains, the related communication systems have become nearly as important as ships and ports themselves.⁴¹

Port security now has a new dimension and urgency. With the creation of the U.S. Department of Homeland Security, funds and resources are available to improve security of designated ports in the United States and abroad. Operation Safe Commerce (OSC)⁴² will analyze weaknesses in security along the entire supply chain. Specialist teams from Sandia National Laboratories and commercial partners are already engaged in supply chain security evaluation and Security Effective Assessments of designated ports in the United States and abroad. Specialist teams will identify procedures and technologies to improve security and help plan a layered and balanced security posture while maintaining the viability of maritime commerce.

In parallel, the US Customs Service has implemented the Container Security Initiative (CSI), which focuses on seaports with large volumes of containerized cargos going to the United States. The US DOE/National Nuclear Security Administration is cooperatively supporting this initiative through its Megaport Initiative, which addresses the nuclear material smuggling threat. Technical and security support for this initiative comes from US national laboratories, including Sandia National Laboratories, which perform feasibility and vulnerability assessments of ports to design and determine the effectiveness of nuclear material detection systems for ports of interest.

Recommendations:

In the context of India and Pakistan, adequate security measures would help generate a level of confidence prior to restoration of unrestricted shipping and trading. Effective security measures warrant a layered defense approach and transparency of goods and personnel movement. Crew identification, container tagging and tracking, communication, and data base technologies can promote transparency through information sharing between port authorities of Karachi, Port Qasim, Mumbai, Kochi, and Chennai. The port authorities and partners participating in bilateral agreements would be in a position to monitor ships, container movements, and flow of goods and to develop robust risk-management practices.

As confidence builds, data and information on security matters can begin to be shared. If Pakistani and Indian ports (Karachi-Mumbai, etc.) each enter into bilateral agreements with the United States, it would be expedient and logical to complete the triangle by entering into bilateral agreements locally. The following recommendations are made for improving port and cargo security.

⁴¹ Figures for 2000: 5.88 billion tons total—2.15 billion tons oil, 1.98 billion tons dry cargo, and 1.75 billion tons other cargo. 200 million containers transported. Only 2% were inspected. Editorial in *The Economist*, 6 April 2002.

⁴² OSC addresses the security of maritime commerce at the three largest US ports: Los Angeles/Long Beach, Seattle/Tacoma, and New York/New Jersey, which transact annual business of \$200 billion (43% containers).

It is recommended that respective governments and port authorities:

- Reform practices, streamline procedures, and upgrade facilities
- Share data regarding crews and cargos
- Share security information
- Negotiate local bilateral agreements modeled after the US Container Security Initiative.

These issues are very real and should be addressed comprehensively in the form of a separate study.⁴³

⁴³ At the initiative of IMO and DG Shipping, India, the Indian Ocean Rim States have set up the Port State Control Organization with Headquarters at Goa to monitor the entry of sub-standard ships into the waters of these states. Financial constraints may, however, stop India from investing heavily in environmental hardware.

Fishing and the Fishermen's Plight

The fishing industry both in India and Pakistan has come a long way from the time of the Independence. The fisheries sector has become a powerful income and employment generator, and it is an important instrument of livelihood for a large section of the economically underdeveloped population in both countries. More than seven million people in India and Pakistan depend on fisheries and aquaculture for their livelihood. India has emerged as the third largest producer of fish in the world.⁴⁴

Progress in fish production and export earnings from fishing over the years can be seen in Table 3.

Table 3. India and Pakistan Fish Production

	<u>1961-1962</u>	<u>1999-2000</u>		
Fish Production-India (tons)	1,160,000	5,657,000		
Fish production-Pakistan (tons)	66,600	333,047		
	<u>1961-1962</u>	<u>1999-2000</u>	<u>2000-2001</u>	<u>2001-2002</u>
Fish Exports-India (million rupees)	39.2	6308.8	N/A	N/A
Fish Exports-Pakistan (million \$US)	N/A	188.9	136.0	125.6

The growth factor and export earnings notwithstanding, the fishing industries in both India and Pakistan are beset with the following problems:

- Proliferation of boats and trawlers resulting in over-fishing along coasts of Gujarat and Sind
- Dwindling yield in the coastal areas in the last two to three years
- Environmental and ecological damage; for example, mangroves along the coast are being depleted
- Undemarcated maritime boundary making laws and regulations difficult to enforce.

The number of fishing craft that are known to operate along the coasts of Gujarat and Sind is very large, approximately 26,000 from Gujarat⁴⁵ and 4,000-4,500 from Sind.⁴⁶ To understand the overall issue certain basic facts concerning the Indian state of Gujarat are instructive, as noted in Table 4.

⁴⁴ Government of India, 10th Planning Commission Working Group Report, June 2001. Most data pertaining to India is from the Working Group Report.

⁴⁵ *Ibid.*

⁴⁶ Moinuddin Ahmed, "Pakistani Fishing Industry in Doldrums," *Dawn*, 29 January, 2001.

Table 4. State of Gujarat-Fishing Data⁴⁷

Length of the coastline of Gujarat state	1,600 km
Number of fishermen in Gujarat	140,208
Number of fish landing centers	286
Number of fishing villages	851
Number of fishing vessels in Gujarat	9,222 (traditional, non-motorized)
	5,391 (traditional, motorized)
	11,372 (mechanized)
Total number of vessels	25,985

Although data about the exact number of fishermen and fishing boats from Gujarat that are operating off the Sir Creek area are not readily available, the magnitude of the problem can be visualized when we consider that an additional 4000 to 4,500 Pakistani fishing craft⁴⁸ are reported to be operating along the Pakistani coast between Karachi and Sir Creek.

Fishermen have been fishing using traditional methods in the waters off the coast for centuries and know about the seasonal migratory trend of fish, which does not regard any national boundary. They follow the fish to bring in the required quantity of catch to satisfy local market demands. The Pakistani boats go over to the Indian side to catch pomfret, grouper, prawns, shrimp, etc. Indian fishermen encroach the Pakistani waters in search of squid, ribbon fish, red snapper, tiger prawn, etc. In the process of doing so, some fishermen stray deep into the territory of the other country. In most cases, this happens due to lack of adequate instrumentation on-board the trawlers, especially in the smaller traditional boats that do not even carry radio sets. The majority of these fishermen are poor and are hired by the wealthy contractors ashore, who provide only the very basic amenities to the crew and tend to take minimal responsibility in case the fishermen cross the international boundary and get arrested.

Whatever the circumstances, fishermen caught fishing in the other country's territory are arrested with their boats, escorted to the nearest harbor, and handed over to the local police. The police register the case and introduce the crew into the court system for further legal action. Regrettably, the legal process, both in India and Pakistan, is painfully slow, and it often takes years before the arrested crews are released from the jails. One major concern about this process is that it may divert scarce resources from other, more important security issues, such as interdicting drug trafficking or smuggling.

It is distressing to note that the fishermen are used as political pawns, and not one fisherman on either side has secured a release through the legal process. Release of fishermen and their boats is announced from time to time by the respective President/Prime Minister of one or the other country, as goodwill gestures.

⁴⁷ *Ibid.*

⁴⁸ Moinuddin Ahmed, *op. cit.* An FAO report suggests a potential of 24,000 mt/year with proper conservation policies enacted; needing only 460 modern trawlers. Current population of 2565 trawlers, 1500 motorized sailboats, and 100 canoes are concentrated only on the Sind coast.

The number of fishermen and boats released by the two countries since 1994 is shown in Table 5.

Table 5. Number of Boats and Fishermen Released by India and Pakistan

<u>Month/Year</u>	<u>Fishermen Released</u>	<u>Boats released</u>
May 1994	109	8
Jul/Oct 1997	196	17
Dec 1998	149	13
May/Sep 1999	13	2
Apr/Sep 2000	204	14
Dec 2001	202	13

Pakistani media reported the release of 269 fishermen and 31 boats on 5 September 2003.⁴⁹ Indian media reported release of 93 Pakistani fishermen by India and 74 fishermen by Pakistan on 4 November 2003.⁵⁰

The issue of fishermen getting arrested by the law enforcement agency of another country is not unique to India and Pakistan. Numerous incidents of a similar nature take place in almost all coastal parts of the world. What is distressing is that whereas most other nations have managed to resolve this issue by laying down certain rules through bilateral agreements, India and Pakistan have failed to resolve this essentially humanitarian issue over the last five decades.⁵¹ Perhaps the main reason for the arrests is that there are too many fishing craft operating in the near shore area and competing with each other for their livelihood.

The state of Gujarat has not yet promulgated any regulations to earmark separate fishing areas for the traditional craft and the mechanized fishing boats, like some other coastal states in India have done. Poaching by fishing fleets of extra-regional countries like Russia, Taiwan, South Korea, and others has also been observed and reported. Effective fisheries enforcement therefore presents the possibility of preventing future disputes not only between India and Pakistan but also with extra-regional states.

⁴⁹ “Pakistan to release 269 Indian fishermen as part of peace packages,” Agence France Presse, 3 September 2003.

⁵⁰ *Times of India*, 19 November 2003. p. 9.

⁵¹ Fishing disputes and agreements gained prominence following state declarations of EEZs, according to UNCLOS. Many nations soon experienced overlapping claims in maritime jurisdiction. The 1990s heralded in a decade of increased concern for the management of resources and the potential escalation of fishing conflicts in NE Asia. Subsequently, three bilateral agreements were signed (China-Japan 1997, Korea-China 1998, and Japan-Korea 1998). These agreements are significant for the following reasons:

- The maritime boundaries in North East Asia are still not clearly defined.
- Boundary issues were separated from fishery issues. Thus, all agreements are transitional, pending boundary delineation.
- Detailed nautical zones were created, in which registered fishermen from either side could work openly, with flag states maintaining jurisdiction over their own vessels.
- Provisional EEZs were established with exchange quota agreements to allow seasonal or regulated fishing in traditional areas by fishermen of the corresponding state.
- Bilateral Joint Fishing Commissions were established to conserve and manage living maritime resources and effectively monitor the nature and progress of the agreement.

Proliferation of boats and trawlers in the area is beginning to adversely effect the preservation of fish stock. In the case of India, the report of the Working Group of the Tenth Planning Commission states that, “a sizeable percentage of the fishing vessels operate in the near shore waters. During the 1990’s, the marine fish production has reached a plateau. Most stocks are showing signs of over exploitation.” Any further growth of fishing craft in the near shore area is therefore likely to prove counter-productive in the long-run.

It is, however, beyond the scope of this paper to address issues of fish stock assessment, regulating fishing practices, restricting number of boats and trawlers, encouraging environmental conservation, and other related issues. These aspects are in the ambit of respective governments and local administration and need to be addressed separately.

This paper focuses on the issue of fishing in the disputed area and the consequential arrest of fishermen. The problem, besides being a major irritant in bilateral relations, has a strong humanitarian element that cries out for alleviating the misery of the impoverished fishermen community.

Recommendations for Arrest Avoidance and Repatriation:

The practice of fishermen crossing the international maritime boundary is unlikely to stop even after the boundary issue between India and Pakistan is resolved. Only operational cooperation and coordination and establishment of communications between the Indian Coast Guard and Pakistani Maritime Security Agency ships at sea may help mitigate the suffering of the fishermen and their families. The following recommendations should be considered:

- Strict instructions may be issued by both governments not to arrest fishermen unless they are found indulging in illegal activities like narcotics trafficking, smuggling, etc. It is understood that the Prime Ministers of both the countries had indeed come to this understanding at Lahore in February 1999. However, subsequent political events did not allow the two governments sufficient time to implement the understanding. This is perhaps an ideal solution, but the fishing area and the operational framework need to be defined and notified.
- Boats found in each other’s territory be warned and turned/escorted back into their respective country’s area. This would require continuous presence of patrol craft, for which both sides may not have enough resources.
- Both countries grant fishing licenses to a specified number of boats of the other country on a monthly/seasonal/yearly basis, limiting the total permissible quantity of catch on an annual basis.

Technical Project Proposals:

1. Create a 40 x 40 nm Zone of Disengagement (ZoD) straddling the disputed maritime boundary in which fishing boats from both India and Pakistan would be permitted to operate without fear of arrest (see Figure 3). This would allow the fishermen on both sides to continue their traditional fishing methods, and allow them to share the transboundary migratory fish resource. The boats would,

however, not be permitted to cross the outer limit of the Zone of the other country, and the total catch would have to be regulated on an annual basis. Ships and aircraft from the Indian Coast Guard (ICG) and Pakistani Maritime Security Agency (MSA) would patrol within their respective Zones and warn/escort the other country's fishing vessels tending to cross the outer limit of the zone line. The outer limit of the zone could be marked with buoys.

2. Structure a Joint Commission to lay down the number and types of boats from each country that may be permitted to fish in the zone, the type of fish, and the annual catch quantity.
3. The Joint Commission could also be authorized to adjudicate cases of violations.
4. As an interim measure, the fishermen arrested with their craft may be handled as follows: on arrival at the port, crew to be released and repatriated after registering the case. Catch to be auctioned. Boat to be returned after the legal trials and formalities are completed. Both sides to discuss and finalize the amount to be levied on account of maintenance of the boat, on a monthly basis, until the legal proceedings are completed.
5. Inform the local fishing community unions/associations to provide necessary help for speeding up the legal formalities. Fishery unions of both countries to be encouraged to establish contact with each other through e-mail/fax/telephone lines for mutual help and assistance.
6. Introduction of the following low-end technological steps would also help in maintaining a tighter control in the area:
 - a. Warning Aids Ashore:

Both countries may consider erecting tall structures on undisputed land on the coast, on either side of the boundary. These structures could be equipped with:

 - Transponder facility to keep track of each country's own boats. The equipment could be designed to give an audio warning and mark boats likely to cross the boundary.
 - Transfer this information electronically to ICG/MSA ships on patrol for further necessary action.
 - Upgrade the facilities in the shore structures in due course of time by installing a Vessel Monitoring System.
 - Have powerful lights with red and green sectors, both for ease of navigation at night and also for an indication to the fishermen that they are likely to stray into the other country's territory (as soon as they start seeing the red light).
 - b. Warning Aids Onboard:

Since it may not be possible to do much with the traditional fishing boats at this stage, a beginning could be made by mandating all mechanized/motorized fishing craft of 18-20 m length or more to carry a transponder and an instrument with a GPS link that would give them:

- Latitude/longitude position.
- An audio warning when the boat crosses the international boundary and the outer limit of the common fishing zone of the other country. These warnings would have to be in the local language.
- In due course, such vessels could be fitted to participate in the Vessel Monitoring System.

Note: In order to encourage the fishermen to install the above equipment on-board, the cost of the equipment would almost certainly have to be subsidized.

c. Data Bank:

A data bank should be created at central locations ashore, which may be networked with all the small and large fishing harbors of the area. These data banks are to maintain a record of all the fishing boats and their crews. Captains of the boats must submit a list of their crew to the network center before proceeding to sea. This network may be built up over a period of time and would prove most useful in crew tagging, boat tracking, and identifying the boats and crews in case of arrests. In due course, both countries may consider linking the two networks so that the questions of identity and citizenship of the arrested crew are established without any doubt and loss of time. Involvement of the fishermen unions in populating and building up the database would expedite the process and also provide the unions' access to the data.

Naval Interactions and Coastal Force Interactions

INCSEA and Law of Naval Warfare

On 6 April 1991, India and Pakistan concluded an agreement on advance notice of military exercises, maneuvers, and troop movements (see Appendix 1). Clearly, this agreement, though important from the military point of view, does not address issues of safety and security of smaller units, non-combatants, and neutral ships and aircraft. The need for a more comprehensive agreement to prevent incidents at sea was recognized by both India and Pakistan and incorporated in the Memorandum of Understanding (MOU) to the Lahore Declaration of February 1999.⁵²

The CMC and Centre for Foreign Policy Studies at Dalhousie University in their publications⁵³ and seminars⁵⁴ have promoted and endorsed this clause as a significant CBM. The participants at the 2002 Symposium on Confidence Building in South Asian Waters in Malaysia, recognizing the urgent need for an INCSEA-type agreement, recommended the Malaysia-Indonesia model as a more suitable precedent. This agreement was preferred because it, “made creative and explicit provision for its application to the operation of their ships in disputed waters without prejudice to their respective claims.”⁵⁵ INCSEA is not an end itself, but a beginning. Whereas it may not prevent all incidents, it will be a catalyst for a change in relationship.

Despite rigorous efforts, the INCSEA proposals have not advanced due to lack of substantive progress on the political front. It is also a fact that maritime issues in this region have tended to take a back seat in both government and non-government forums.

Without digressing from this core proposal, this paper seeks to recommend that both navies consider a revision and update to their respective Rules of Engagements (ROEs) in conformity with the San Remo Manual on “International Law Applicable to Armed Conflicts at Sea.” The Law of Naval Warfare dates back to 1907. Whereas laws of warfare in other spheres (e.g. laws of the air, Law of Armed Conflict on Land, etc.) have

⁵² Paragraph 5 of MOU, “The two sides shall conclude an agreement on prevention of incidents at sea in order to ensure safety of navigation by naval vessels, and aircraft belonging to the two sides.”

⁵³ Ayesha Siddiqi-Agha, *op. cit.*

⁵⁴ Seminars concerning advance notice CBMs included the following activities conducted by the Centre for Foreign Policy Studies, Dalhousie University (www.dal.ca/~centre).

a) Symposium on Confidence and Cooperation in South Asian Waters at Lumut, Malaysia 29-31 June 2001

b) Workshop on Regional Maritime Security in the Indian Ocean, Halifax, Canada, July 2001

c) Maritime Study working group seminar in Islamabad, Pakistan, 22 May 2001

d) Symposium on Confidence and Cooperation in South Asian Waters, Kuala Lumpur, Malaysia 29 April-3 May 2002

e) Symposium on Confidence and Cooperation in South Asian Waters, Colombo, Sri Lanka, August 2003.

⁵⁵ Detailed report on the Symposium on Confidence Building in South Asian Waters in Malaysia, CMC, May 2002.

been revised and updated,⁵⁶ these issues in the maritime arena have all remained unaddressed until recently.

The law relating to land warfare has been affirmed in recent treaties, such as the Additional Protocols of 1977 to the Geneva Convention of 1949. However, this has not been the case regarding the Law of Naval Warfare.^{57, 58}

It is often not realized that the Law of Naval Warfare does not merely provide a code of conduct of operations in war, but also has a confidence building potential in peacetime. With the prohibition of the use of force except in self-defense under the UN Charter, there has been a marked reluctance on the part of countries to acknowledge the existence of hostilities. Modern wars have many gray areas, due to which the rules and regulations of naval activities need to be revised. The nature and dimension of naval warfare have changed dramatically, as evident from the recent conduct of war in Afghanistan and Iraq.

While all aspects of armed conflict, land, air or sea, should be in conformity with the basic principles of international humanitarian law, certain specificities of naval operations need to be taken into account, particularly where neutral interests are involved at sea. This raises the issues of contemporary international law as applicable to armed conflict at sea. Examples of such conflicts include the Falklands conflict, which raised significant questions of the use of exclusion zones; the Iran-Iraq war, which saw extensive attacks on neutral shipping as well as use of exclusion zones by belligerents; the downing of an Iranian airliner by the USS *Vincennes*; the sinking by the Liberation Tigers of Tamil Elam of a vessel chartered by the International Committee of the Red Cross (ICRC); and a blockade of Iraq by Coalition forces without declaration of war.

The Institute of Humanitarian Law, supported by the ICRC, after two decades of labor by experts produced the “San Remo Manual of International Law Applicable to Armed Conflicts at Sea” on 12 June 1994.⁵⁹ This restatement is very timely considering that:

- 50% of the world’s gas and oil reserves are off-shore
- Over 100 states face the sea (and are in a position to exploit it)
- UNCLOS III has given states jurisdiction over vast swathes of sea
- The nature of armed conflict has changed. There is no longer a “declaration of war” that precedes armed conflict.

The title referring to armed conflict at sea is a little misleading, because today maritime strategy and application of sea-power is as much concerned with power projection onto land. Otherwise, naval commanders would be faced with conflicting rules at sea and on

⁵⁶ This proposal was mooted and adopted at the International Seminar on the Indian Ocean, Islamabad, April 1994.

⁵⁷ Louise Doswald-Beck Head, *International Review of the Red Cross* No. 309, pp. 583-594.

⁵⁸ Almost all treaties date from 1907 and did not deal with all subjects. Subsequently, a non-binding code was adopted in 1913 at Oxford. The Oxford Manual on the Law of Naval War governing the relations between belligerents was adopted by the Institute of International Law.

⁵⁹ The manual takes into account the UN Charter, Laws of the Sea, air law, Law of Armed Conflict on Land, and environmental law.

land. US strikes on targets in Sudan, Afghanistan, and Iraq emphasize this important dimension of sea power.

The San Remo Manual addresses important issues including:

- Use of different sea areas (EEZ, territorial sea, and exclusion zones) which impact rights of passage of neutral shipping
- Establishing that indiscriminate naval operations are unlawful
- Principles of “proportionality” and “due regard” are called up
- Prohibition of attack on the environment without military necessity as a violation of the concept of “collateral damage” (This prohibition precludes hostile action in rare and fragile ecosystems, etc.)
- Prohibition of disproportionate effects on environment compared to the military advantage to be gained
- Aspects of air law as they apply to civil aircraft
- Protection of legitimate rights of neutral states
- Distinction between civilians, protected persons, and combatants at all times
- States’ rights to choose methods and means of warfare are not unlimited.

In the absence of this manual, many naval forces have adopted their own rules of engagement. Among the more notable examples are:

- US Commanders Handbook on the Law of Naval Operations (NW9A) and its annotated supplements (1989)
- German manual of Humanitarian Law in Armed Conflict.⁶⁰

The US handbook is a comprehensive document. Part I deals with US Naval Operations in peacetime, and Part II applies to conduct of US forces in armed conflict. The United States applies this law whether war has been declared or not.

There is an urgent need to revise rules and regulations governing naval activities in times of peace and war. Many provisions of the San Remo Manual are finding their way into modern naval manuals. Like most significant navies, India and Pakistan need to review their respective rules of engagement vis-à-vis the San Remo Manual.

If revised and implemented, customary law regulating armed conflict would become common law worldwide, and more particularly in South Asia. This would:

- Codify rules of engagement to be in conformity with International Law
- Provide commonality of doctrine, which would produce predictable actions/reactions in areas of congruity
- Be recognized internationally as a set of rules which may be used in courts if needed
- Create a common grid and range of mutual interests.

⁶⁰ Federal Ministry of Defense, Humanitarian Law in Armed Conflicts Manual, ZDv15/2 (1992).

Adoption and promulgation of a common Law of Naval Warfare by each state would pave the way for the conclusion of INCSEA as a natural corollary and result of this measure.⁶¹ This recommendation may be the subject of a separate study or project.

Indian Coast Guard–Pakistani Maritime Security Agency Cooperation

Both the ICG and MSA are paramilitary forces and operate under the defense ministries of their respective countries. These forces are not structured as fighting arms like the Navies. The advantage of seeking closer cooperation between these two services is that the progress of dialogue and the actual implementation on the ground would be very closely monitored by the respective Navies and Defense Ministries. Further, the Charter of Duties assigned to the two services is also similar in nature and they are broadly responsible for the following type of activities in their respective areas:

- Protection of fishermen
- Search and rescue at sea
- Assistance in disaster management at sea
- Anti-piracy
- Anti-smuggling
- Interdiction of narcotics trade and gun running
- Protection of the marine environment
- Pollution control, especially from oil spills.

The listed activities can be effectively executed by ensuring a certain amount of synergy between the ICG and the MSA. This would mean functional cooperation and coordination of operations at sea between the two services. To bring about the required level of understanding, the following steps are recommended:

- a. A tabletop exercise involving search and rescue (SAR), oil spill pollution control, or any other incident, to be conducted in a neutral country, like Canada. The Canadian Coast Guard has been active in the Asia-Pacific region in fields such as SAR, marine environment protection, oil spills, and maritime training. Canada has also been active in bringing maritime professionals together to share views on maritime safety and security in Track II settings. A concrete example is the Middle East and Northern African Maritime Safety Colloquium (MARSAF), which provides a foundation for sustainable maritime cooperation. The Canadian Coast Guard has built up an acceptable, helpful, non-military image and thus is an ideal vehicle for bringing the MSA and ICG officials together for a joint exercise. This exercise would need to be sponsored and worked through the Defense Ministries so that bureaucratic delays are

⁶¹ Some important aspects called up in San Remo Section IV: Areas of Naval Warfare include territorial sea, inland water, land territories, EEZ, continental shelf, and archipelagic waters of belligerent states. No hostile action in (a) rare and fragile ecosystems or (b) habitats of depleted, threatened and endangered species. Protection of legitimate rights of neutral states. States' rights to choose methods and means of warfare are not unlimited. Distinguish between civilians/protected persons and combatants at all times. It should be noted that the manual exempts eight categories of vessels from capture during war, including small coastal fishing vessels and small boats engaged in local trade. Therefore, exemption during peacetime should not be difficult.

avoided. It would also be prudent to structure the exercise specifically for the Arabian Sea area and involve one or two other countries, e.g., Oman or the Maldives, as appropriate.

Each side could depute at least one senior-level officer and one-middle level officer for the exercise. Participation could be as many as four officers from each side. The aim of the exercise should be to promote understanding between the officers and work out common procedures for operations at sea.

A map indicating the SAR responsibilities assigned by international agreement to the countries in the South Asia region is shown in Figure 6 below:

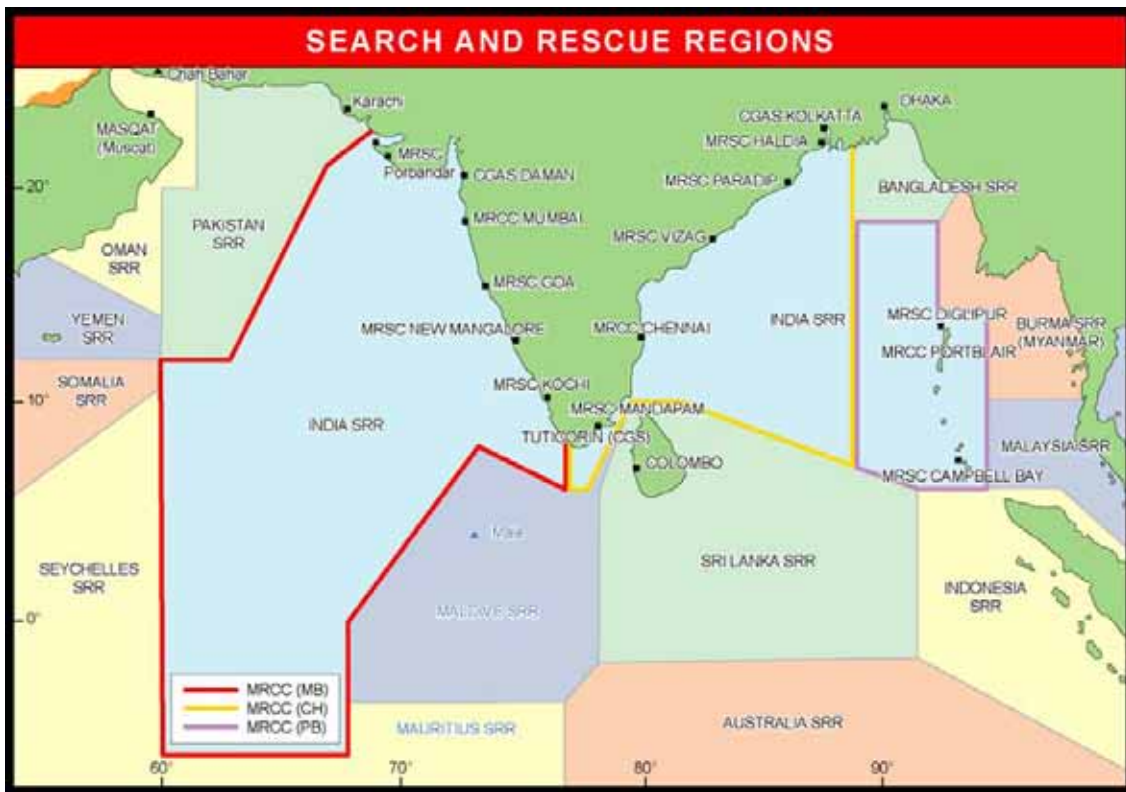


Figure 6. South Asia Search and Rescue Responsibilities

- b. After overcoming the initial operational difficulties, the next logical step would be to hold an exercise at sea. This may be a sensitive issue because all participating sides would have to commit assets as a part of the exercise. It would therefore be prudent to limit the overall scope so that no side gets over committed.
- c. Once the above CBM is achieved, it may be possible to persuade India to invite Pakistan to participate in the “Dosti” SAR exercise held annually between India and the Maldives. This would be a brave and historic step forward, and, given the right political atmosphere at the time, it is hoped that the authorities in India would extend, and Pakistan would accept, the proposal. In due course of time, it may become a

regular feature and gather support of the other countries of the region and may develop in shape and concept like Joint Exercises Trincomalee of the 1950s and 1960s.

- d. In the next phase, the ICG and the MSA ships at sea could coordinate their patrols and searches at sea and exchange operational information regarding smuggling, narcotics, gun running, etc., on designated radio frequencies. This phase would also include an agreement on monitoring the fishing activities in the proposed Zone of Disengagement. For this purpose, the officials of both ICG and MSA could jointly board patrol craft to ensure that rules regarding type and quantity of catch, etc. are being followed.
- e. The two parties could establish communications between the ICG and MSA headquarters at Mumbai and Karachi and share data regarding pollution control,⁶² protection of marine environment, and disaster management. This would go a long way towards getting an overall picture of the activities in the area of concern. The ICG, having larger resources of technical equipment and expertise, could extend help to MSA at the time of their need and vice-versa. This would help both sides share data and deploy maritime assets in a more economical way, with greater positive results.
- f. In due course, the two countries could consider setting up Maritime Rapid Response Centers, linked to each other, with adequate and mandatory powers to board and inspect various types of craft for anti-smuggling and anti-gun-running operations, etc. Similarly, tankers passing through the area could also be inspected for anti-pollution operations, as is being done by Italy, France, Turkey, etc.

The authors believe that in due course of time, the success story of the ICG/MSA cooperation will trickle upwards and may help to soften the attitudes in the armed forces of both the countries.

⁶² Peter Cozens, "Overview of Maritime Security in Indian Ocean," Asia Pacific Research Institute. Approximately 0.5% of a super tanker's cargo of crude oil settles down during the delivery voyage and has to be washed out. 0.5% of 100,000 tons is 500 tons. With 100 such tankers crossing the Indian Ocean every day, nearly 50,000 tons/day are perhaps being jettisoned between the Persian Gulf and North East Asia.

Conclusion

A stage has now been reached in South Asia when the current situation can no longer be allowed to drift. The ongoing 50-year confrontation between India and Pakistan has taken a heavy toll on the economies and social development of both nations. The people are suffering from crisis fatigue and yearn for a tension-free environment.

The timing is right, the leadership is willing to talk, and popular support for peace exists on both sides. This unique historical opportunity must not be allowed to pass. Bold, visionary leaders need to grasp this moment.

Intractable issues may be set aside, as this paper suggests, and the two sides may address issues that are soft and less politically volatile; the need is to proceed with cautious haste and optimism by building blocks for future cooperation and linkages.

The thrust of this paper is on maritime issues. The continental approach may be set aside and the more promising areas of conflict resolution at sea may be addressed. Initially, the contacts need to be confined to technical and professional levels; a bottom-up approach contains greater promise of success.

The private sector is emerging as a powerful player in the South Asian arena, and the dynamics of commerce and trade will help knock down the artificial barriers. Trade in general, and maritime trade in particular, may be the engine that will drive the peace process forward.

The authors of this paper have great faith in the ancient wisdom and sagacity of the peoples of this great Asian Sub-continent to stem the tide of sapping hostility and come together as a harmonious community, as behooves the inheritors of a glorious past, tradition, and culture.

In conclusion, the authors recommend that the following proposed actions be seriously considered and immediate steps taken to put these CBMs in place. Thereafter, we recommend enacting as many proposals as possible to solve the maritime issues and drive the peace process forward.

Proposed Actions

Analysis of the issues presented in this study leads to the following lists of proposed actionable CBMs. These lists propose specific ways to address the key issues identified in this study. The first list is a focused subset of projects that could be implemented in the near term. The second, complete list describes CBM actions arranged by the subject areas they are intended to address. Some of these actions may take longer to implement than those in the first list. They may also have significant political components that would need to be addressed first.

Near-Term Projects

1. Demonstrate technologies for locating fishing vessels with respect to a Zone of Disengagement and maritime boundary.
 - a. Inexpensive location indicator for vessels
 - b. Vessel location monitoring system to include
 - Location tracking
 - Identity database (for both vessels and personnel).
2. Request Canadian and US simulation experts to sponsor and conduct a tabletop exercise involving SAR and invite ICG and MSA personnel to attend.
3. Develop boundary mapping technologies, including Geographic Information Systems (GIS) and remote sensing imagery, for the maritime boundary and Sir Creek in order to facilitate critical discussion between technical and policy stakeholders in both India and Pakistan.
4. Both governments to take steps to upgrade port security by negotiating bi-lateral agreements with the US for designated ports (such as Karachi/PQ, Mumbai, Kochi, Chennai).
5. Conduct an ecological survey of the Sir Creek ecosystem. Involve non-governmental organizations already engaged (for example, the International Union for Conservation of Nature and Natural Resources in Pakistan and India). Convene an appropriate transboundary workshop in either country under the auspices of the CMC.

Complete Proposals List

Maritime Boundary

1. Policy decision by both governments to de-link Sir Creek from the maritime boundary issue.
2. Convene meetings of the Working Group (established by the Lahore MOU) at the Additional Secretary level to negotiate the maritime boundary along the following guidelines:
 - a. Use seaward approach method in accordance with TALOS
 - b. Divide Sir Creek at the median outflow point, as an interim measure, without prejudice to any future claim by either side.
3. Develop boundary mapping technologies, including Geographic Information Systems (GIS) and remote sensing imagery, for the maritime boundary and Sir

Creek in order to facilitate critical discussion between technical and policy stakeholders in both India and Pakistan.

Sir Creek

1. Maintain status quo.
2. Complete the survey of the Sir Creek estuary. Since India has recently conducted surveys in the area, it takes the lead in this effort. Indian survey information to be exchanged with Pakistani Navy hydrographers for authentication. The joint survey effort should include:
 - a. Delineation of high water line
 - b. Fixing of protruding edges along the creek
 - c. Sounding and marking of coastline in the approaches area.
3. Conduct check surveys if and where required.
4. Survey the Sir Creek ecosystem. Involve non-governmental organizations already engaged (IUCN). Convene a workshop in either country under the auspices of the CMC. Encourage a meeting between environmental groups from both sides to investigate or exchange existing information regarding the fragile ecosystem surrounding the mouth of the Sir Creek area, which could build a foundation for joint environmental monitoring and management once the boundary is established.
5. Establish boundary mapping technologies and remote sensing imagery for Sir Creek in order to facilitate critical discussion between technical and policy stakeholders.

Shipping and Trade

1. Both governments agree to convene immediately the India-Pakistan Joint Commission to review 1975 Shipping Protocol and to delete Clauses 5 and 9. This would open up unrestricted shipping and cargo haulage between the two countries.
2. Resume passenger services between Karachi and Mumbai.

Security of Ports and Cargos

1. Both governments take steps to upgrade port security by negotiating bi-lateral agreements with the US for designated ports (such as Karachi/PQ, Mumbai, and Cochin). As trade links strengthen between these ports, the dynamics of commercial activity will enable sharing of data regarding crews and cargo loading initially. Eventually, security information will be shared, as well. There is potential for bi-lateral agreements between the ports along the lines of the US Container Security Initiative and Operation Safe Commerce.

Fishermen

1. Both governments agree in principle to create a Zone of Disengagement on either side of the proposed/disputed maritime boundary.
2. Convene a meeting of hydrographers from both countries to delineate the ZoD.
3. Demonstrate technologies for locating fishing vessels with respect to ZoD and maritime boundary.

1. Inexpensive location indicator for vessels
2. Vessel location monitoring system to include
 - Location tracking
 - Identity database for both vessels and personnel.
4. Structure a Joint Commission to administer the ZoD.
5. Promulgate orders for licensing, catch limits, surveillance, and fishing restrictions in the ZoD.
6. Minimize hardships to fishermen by following an arrest avoidance policy.
7. In case of arrests, release the crew after registering of case by police. Boat to be released after the legal process is completed.

Interaction Between Naval and Other Maritime Authorities

Navy-to-Navy

1. Each navy to revise and update its respective Rules of Engagement in accordance with the San Remo Manual on International Law Applicable to Armed Conflict at Sea.
2. The Defense Ministries' and Naval Headquarters' staff should convene meetings of professional naval officers to negotiate INCSEA agreements on the basis of the updated rules of engagement.

Indian Coast Guard/Pakistani Maritime Security Agency Cooperation

1. Defense Ministries accept the principle of cooperation between the ICG and MSA and approve joint SAR exercises.
2. Request Canadian/US simulation experts to sponsor and conduct tabletop SAR exercises and invite both countries' organizations to participate.
3. Both countries' Defense Ministries order follow-up exercises at sea.
4. The Directors General of ICG and MSA depute representatives to draw up operational plans to conduct regular, live SAR exercises and share data and assets.
5. The Directors General may seek their governments' approval to set up Maritime Risk Response Centers to deal with oil spills, pollution events, and other emergencies.
6. The ICG Director General seeks government clearance to invite Pakistan to participate in the Dosti SAR exercise held annually between India and the Maldives.

[This page intentionally left blank]

Appendixes

The following appendixes include, in their entirety, important agreements and documents referred to in the body of the paper. The following documents are presented:

- Appendix 1. Agreement Between India and Pakistan on the Advance Notice of Military Exercises (6 April 1991)
- Appendix 2. Lahore Declaration and Lahore Memorandum of Understanding (21 February 1999)
- Appendix 3. Technical Aspects of the Law of the Sea (TALOS)
- Appendix 4. Protocol On Resumption Of Shipping Services Between India and Pakistan (15, January 1975)

Appendix 1

Agreement Between India and Pakistan on the Advance Notice of Military Exercises (6 April 1991)

Whereas Pakistan and India recognize the need to jointly formulate an agreement at the government level on giving advance notice on exercises, manoeuvres and troop movements in order to prevent any crisis situation arising due to misreading of the other side's intentions. Therefore, the governments of Pakistan and India jointly decide that:

1. Their Land, Naval and Air Forces will avoid holding major military manoeuvres and exercises in close proximity to each other. However, if such exercises are held within distances as prescribed in this Agreement, the strategic direction of the main force being exercised will not be towards the other side, nor will any logistics build up be carried out close to it. The following will constitute a major military manoeuvre/exercise for the purposes of this Agreement:

a. Land Forces

1. India-Pakistan International Border

Concentrations of Corps level (comprising two or more divisions) and above.

2. Line of Control and the area between the Manawar Tawi and Ravi Rivers.

Division level and above.

b. Naval Forces: Any exercise involving six or more ships of destroyer/frigate size and above, exercising in company and crossing into the other's Exclusive Economic Zone (EEZ).

c. Air Force: Regional Command level and above.

2. Both sides may not conduct exercises of Land Forces at Divisional level and above within five kilometers (Kms) of the areas specified at Paragraph (1).a. (1) and (2).

3. Both sides will provide notice regarding exercises of Land Forces as follow:

a. All exercises/concentrations at Divisional level in areas specified at Paragraph (1).a (2).

b. All exercises/concentrations at Corps level within a distance of seventy five Kms in areas specified at Paragraph (1).a. (1) and (2).

c. All exercises above Corps level irrespective of the distance.

4. Both sides will give fifteen days prior notice when formations with defensive roles are moved to their operational locations for periodic maintenance of defences.

5. The schedule of major exercises with troops will be transmitted in writing to the other side through diplomatic channels in advance as follows:

- a. Air exercises at Regional Command level and above. -- Fifteen days
- b. Divisional level exercise, and major Naval exercises involving six or more ships of destroyer/frigate size and above, exercising in company and crossing into the other's EEZ.
- c. Corps level exercises -- Sixty days
- d. Army level exercises -- Ninety days

Provided that the above provisions relate to the commencement of moves of formations and units from their permanent locations for the proposed exercises.

6. Information on the following aspects of major exercises will be intimated:
- a. Type and level of exercises.
 - b. General area of the exercise on land, air and sea. In respect of air and sea exercises, these will be defined in latitude and longitude.
 - c. Planned duration of the activity.
 - d. Number and type of formations participating.
 - e. Any shifting of forces from other Commands/Corps/Strategic formations envisaged.
 - f. The move of strategic formations, particularly armored division, mechanized divisions, air assault divisions/reserve infantry formations and artillery divisions/air defence artillery divisions.

Provided that in respect of major Air and Naval exercises, only the information at Paragraphs (a) to (c) need be intimated.

7. In case some change in exercise area/grouping of participating formations from the previously notified composition is necessitated, the country carrying out the exercise will intimate the details of changes so as to reach the other country at least thirty days in advance in respect of Corps level exercises and above, and fifteen days in advance in respect of divisional level exercises and Naval exercises. In respect of Air exercises, if minor changes to the previously notified details are necessitated, an advance notice of seven days will be provided.

8. Any induction/concentration of additional troops of a division size force and above, within one hundred and fifty kms of areas specified at Paragraph 1.a.(1) and (2), for internal security duties and/or in aid of civil power will be notified to the other side at least two days before the start of their movements, whenever possible. In case of immediate movements, information may be passed on Hot Line to the Army Headquarters of the other country. The force so employed will not move forward their logistic bases/installations and armor/artillery.

9. Each country will be entitled to obtain timely clarification from the country undertaking military manoeuvres/exercises concerning the assembly of formations, the extent, direction of the exercise and the duration.

10. The Naval ships and submarines belonging to the other country are not to close less than three Nautical Miles (NMs) from each other so as to avoid any accident while operating in international waters.

11. Combat aircraft including fighter, bomber reconnaissance, jet military trainer and armed helicopter aircraft will not fly within ten kms of each other's airspace, including the Air Defence Identification Zones (ADIZ), except when such aircraft are operating from Jammu, Pathankot, Amritsar and Suratgarh air bases on the Indian side, as well as Pasrur, Lahore, Vehari and Rahimyar Khan air bases on the Pakistan side, in which case they will maintain a distance of five kms from each other's airspace. Unarmed transport and logistics aircraft including unarmed helicopters and Air Observation Post (AOP) aircraft will be permitted to operate up to 1000 meters from each other's airspace including the ADIZ.

12. Aircraft of either country will refrain from buzzing surface units and platforms of the other country in international waters.

13. This Agreement supersedes all previous understandings in so far as the above points are concerned.

14. This Agreement is subject to ratification. It shall come into force with effect from the date on which the Instruments of Ratification are exchanged.

15. Done at New Delhi on this sixth day of April, 1991.

Shaharyar M. Khan
Foreign Secretary
For the Government of the Islamic Republic of Pakistan

Muchkund Dubey
Foreign Secretary
For the Government of the Republic of India

Appendix 2

Lahore Declaration and Lahore Memorandum of Understanding (21 February 1999)

Lahore Declaration

The following is the text of the Lahore Declaration signed by the Prime Minister, Mr. A. B. Vajpayee, and the Pakistan Prime Minister, Mr. Nawaz Sharif, in Lahore on Sunday:

The Prime Ministers of the Republic of India and the Islamic Republic of Pakistan:

Sharing a vision of peace and stability between their countries, and of progress and prosperity for their peoples;

Convinced that durable peace and development of harmonious relations and friendly cooperation will serve the vital interests of the peoples of the two countries, enabling them to devote their energies for a better future;

Recognising that the nuclear dimension of the security environment of the two countries adds to their responsibility for avoidance of conflict between the two countries;

Committed to the principles and purposes of the Charter of the United Nations, and the universally accepted principles of peaceful co-existence;

Reiterating the determination of both countries to implementing the Simla Agreement in letter and spirit;

Committed to the objective of universal nuclear disarmament and non-proliferation;

Convinced of the importance of mutually agreed confidence building measures for improving the security environment;

Recalling their agreement of 23rd September, 1998, that an environment of peace and security is in the supreme national interest of both sides and that the resolution of all outstanding issues, including Jammu and Kashmir, is essential for this purpose;

Have agreed that their respective Governments:

shall intensify their efforts to resolve all issues, including the issue of Jammu and Kashmir.

shall refrain from intervention and interference in each other's internal affairs.

shall intensify their composite and integrated dialogue process for an early and positive outcome of the agreed bilateral agenda.

shall take immediate steps for reducing the risk of accidental or unauthorised use of nuclear weapons and discuss concepts and doctrines with a view to elaborating measures for confidence building in the nuclear and conventional fields, aimed at prevention of conflict.

reaffirm their commitment to the goals and objectives of SAARC and to concert their efforts towards the realisation of the SAARC vision for the year 2000 and beyond with a view to promoting the welfare of the peoples of South Asia and to improve their quality of life through accelerated economic growth, social progress and cultural development.

reaffirm their condemnation of terrorism in all its forms and manifestations and their determination to combat this menace.

shall promote and protect all human rights and fundamental freedoms.

Signed at Lahore on the 21st day of February 1999.

Atal Behari Vajpayee - Prime Minister of the Republic of India

Muhammad Nawaz Sharif - Prime Minister of the Islamic Republic of Pakistan

Lahore Memorandum of Understanding

The following is the text of the Memorandum of Understanding signed by the Foreign Secretary, Mr. K. Raghunath, and the Pakistan Foreign Secretary, Mr. Shamshad Ahmad, in Lahore on Sunday:

The Foreign Secretaries of India and Pakistan:-

Reaffirming the continued commitment of their respective governments to the principles and purposes of the U.N. Charter;

Reiterating the determination of both countries to implementing the Shimla Agreement in letter and spirit;

Guided by the agreement between their Prime Ministers of 23rd September 1998 that an environment of peace and security is in the supreme national interest of both sides and that resolution of all outstanding issues, including Jammu and Kashmir, is essential for this purpose;

Pursuant to the directive given by their respective Prime Ministers in Lahore, to adopt measures for promoting a stable environment of peace, and security between the two countries;

Have on this day, agreed to the following:-

1. The two sides shall engage in bilateral consultations on security concepts, and nuclear doctrines, with a view to developing measures for confidence building in the nuclear and conventional fields, aimed at avoidance of conflict.
2. The two sides undertake to provide each other with advance notification in respect of ballistic missile flight tests, and shall conclude a bilateral agreement in this regard.
3. The two sides are fully committed to undertaking national measures to reducing the risks of accidental or unauthorised use of nuclear weapons under their respective control. The two sides further undertake to notify each other immediately in the event of any accidental, unauthorised or unexplained incident that could create the risk of a fallout with adverse consequences for both sides, or an outbreak of a nuclear war between the two countries, as well as to adopt measures aimed at diminishing the possibility of such actions, or such incidents being misinterpreted by the other. The two sides shall identify/establish the appropriate communication mechanism for this purpose.
4. The two sides shall continue to abide by their respective unilateral moratorium on conducting further nuclear test explosions unless either side, in exercise of its national sovereignty decides that extraordinary events have jeopardised its supreme interests.

5. The two sides shall conclude an agreement on prevention of incidents at sea in order to ensure safety of navigation by naval vessels, and aircraft belonging to the two sides.

6. The two sides shall periodically review the implementation of existing Confidence Building Measures (CBMs) and where necessary, set up appropriate consultative mechanisms to monitor and ensure effective implementation of these CBMs.

7. The two sides shall undertake a review of the existing communication links (e.g. between the respective Directors-General, Military Operations) with a view to upgrading and improving these links, and to provide for fail-safe and secure communications.

8. The two sides shall engage in bilateral consultations on security, disarmament and non-proliferation issues within the context of negotiations on these issues in multilateral fora.

Where required, the technical details of the above measures will be worked out by experts of the two sides in meetings to be held on mutually agreed dates, before mid 1999, with a view to reaching bilateral agreements.

Done at Lahore on 21st February 1999 in the presence of Prime Minister of India, Mr. Atal Behari Vajpayee, and Prime Minister of Pakistan, Mr. Muhammad Nawaz Sharif.

(K. Raghunath)
Foreign Secretary of the Republic of India

(Shamshad Ahmad)
Foreign Secretary of the Islamic Republic of Pakistan

Appendix 3 Technical Aspects of the Law of the Sea (TALOS)

A. Technical Aspects of the Law of the Sea (TALOS) for delineating rivers of adjacent states and maritime boundary:

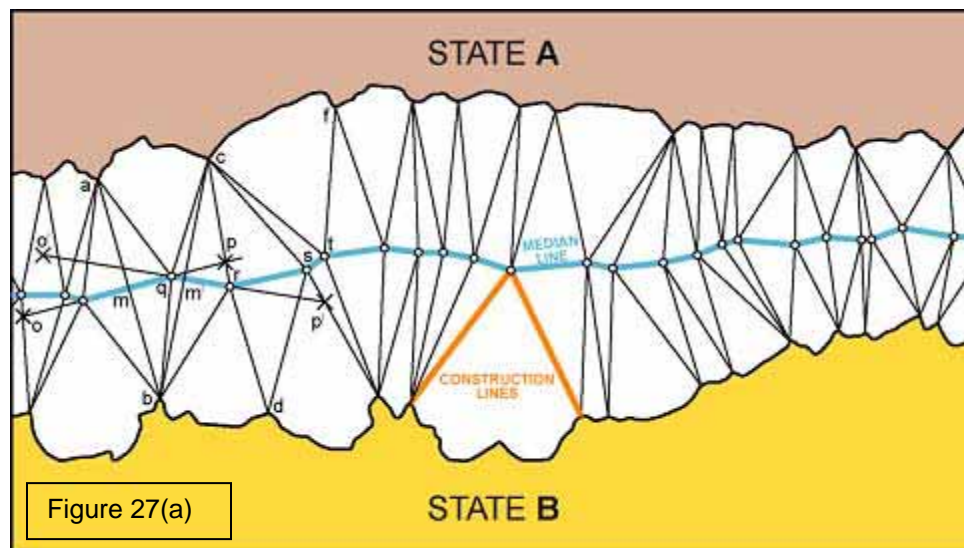
6.2.5 The Equidistance Line

6.2.5.1

An equidistance line has already been defined (see 6.2.1). Figure 27 illustrates graphically the construction of an equidistance line between opposite States (a) and one between adjacent States (b).

6.2.5.2

Figure 27 (a) shows the coasts (the low-water line) of two opposite States, both of which employ normal baselines (i.e. not a system of straight base lines). The construction of the median line may be seen on the left hand side of the figure. Taking points a and b, a perpendicular bisector op is drawn with m being the precise bisecting point of the line ab. Proceed towards p until a point c of State A now becomes equidistant from a mid point q to a, b and c. Now taking b and c a perpendicular bisector o'p' is drawn. This intersects the first baseline bisector op at q. Then proceed towards p' until a point d in State B becomes equidistant from a midpoint r to b, c and d. By continuing to proceed to the right in this way, the segments of the median line would be constructed until the total median line is derived. The points along the median line equidistant from three points are known as tri-points.



6.2.5.3

Figure 27 (b) shows the coasts (low water line) of two adjacent States, again, both of which employ normal baselines. There is no essential difference between the method of determining the equidistance line in this case and that already described for opposite coasts. Difficulties in determining the link with the land boundary may, however, be avoided by beginning the exercise from seaward rather than from the land boundary terminal. The construction of this equidistance (lateral) line may be achieved as follows: Starting a suitable distance offshore look for two points, in this case a and b, situated in States A and B respectively, that are an equal distance from starting point t. Produce the angular bisector op. Proceed shorewards until point u it is found that an additional point c is equidistant with a and b. Now prescribe the angular bisector between b and c and again continue shorewards until point v is reached where a new point d is equidistant to c and b. Continue the process and it will be found that the equidistance line terminates at the land boundary between States A and B.

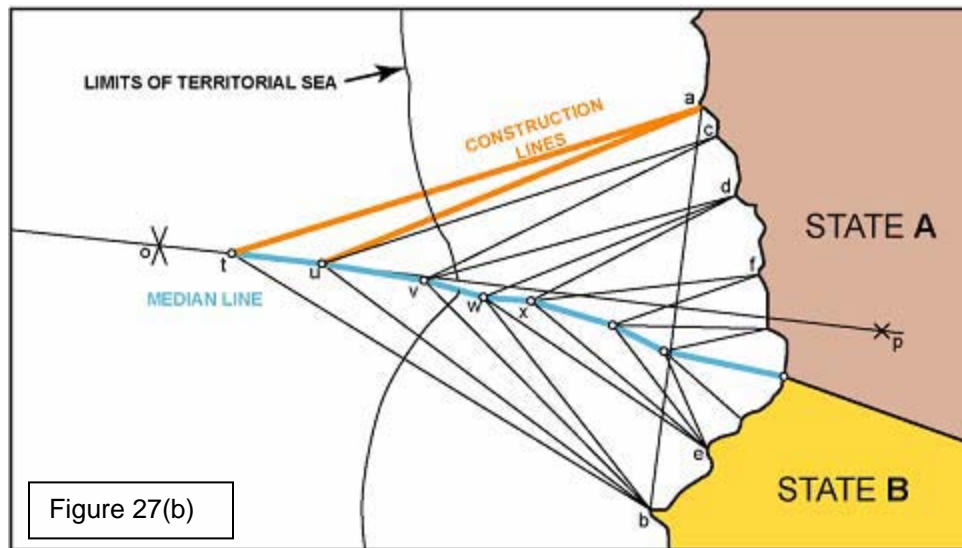


Figure 27(b)

Appendix 4

Protocol On Resumption Of Shipping Services Between India and Pakistan

(15 January 1975)

This agreement also flows out of the provisions of the Shimla agreement. It relates to resumption of shipping services between the two countries and enjoins upon each contracting party to make available all facilities to the shipping crews.

RECALLING the provisions of the Shimla Agreement of 1972 to progressively restore and normalise relations between the two countries, and

RECALLING further the Protocol on Resumption of Trade between India and Pakistan signed at New Delhi on the 30th November 1974, and

RECALLING to restore direct shipping services between the two countries,

The Delegations of India and Pakistan, which met in New Delhi from the 11th to 15th January 1975, have agreed as follows:

- (1) Necessary steps will be taken by both the countries to restore direct shipping services by the 15th February 1975, on the principles of sovereign equality, and mutual benefit.
- (2) Such services will cover the carriage of cargo between the two countries.
- (3) Such carriage will only be by the vessels of the mercantile marine sailing under the flag of either country in accordance with its laws and regulations.
- (4) All cargo between the ports of the two countries shall be carried on the principle of equality in matters relating to cargo lifting and freight earnings on an annual basis.
- (5) Vessels of either country will load in the ports of one country only such cargo as is destined for other country.
- (6) For coordination of all questions connected with the operation of direct shipping services between both the countries, the Government of India hereby nominate the Director General of Shipping, Bombay on their part and the Government of Pakistan likewise nominate the Director General of Ports and Shipping, Karachi on their part.
- (7) The authorities referred to in Article (6) will nominate the shipping companies of their respective countries to determine by mutual discussions the details of operation of the services. For this purpose the representatives of the Shipping companies shall meet, as early as possible, on a mutually convenient date.

- (8) The vessels of either country, their crew, and cargoes shall be admitted to the territorial waters and the parts of the other country and shall be accorded the most-favoured-nation treatment relating to their entry, stay, loading/unloading of cargo, leaving of the ports, and all necessary facilities for safe maritime navigation.
- (9) The provisions of Article (8) shall be subject to Article (5) and such restrictions as are or may be imposed, from time to time, by the laws of either country.
- (10) Either country shall adopt, within the limits of their laws and port regulations, all appropriate measures to facilitate and expedite maritime traffic, to prevent delays to vessels and to expedite the carrying out of customs and other formalities applicable at the ports.
- (11) All ships documents including those relating to nationality, registration, tonnage and survey issued or recognised by one country shall be recognised by the other country.
- (12) Either country shall recognise the seamen's identity documents issued by the appropriate authorities of the other country.
- (13) Holder of Seamen's identity documents specified in Article (12) shall, during the stay of the vessel in the ports of the other country, be permitted to land on temporary shore leave without visa, on his obtaining a Landing Permit valid for a period not exceeding 24 hours, provided he deposits his Continuous Discharge Certificate with the Immigration authorities and provided further that the crew list has been submitted to the concerned authorities in accordance with the laws and regulations in force in that port. The said person shall be subject to customs control. His entry and stay in port shall be governed by the provisions of the India-Pakistan Visa Agreement of 14th September 1974 and the laws and regulations in force in that port.
- (14) When a member of the crew disembarks in the port of the other country due to illness, he shall be permitted to enter a hospital. He shall also be permitted to rejoin ship or be repatriated. If a member of the crew is left behind for reasons such as, "missing the ship" or his transfer from the ship, he shall be permitted to rejoin ship or be repatriated.
- (15) The captain of the vessel staying in the port of the other country or a person authorised by him shall be permitted and assisted to contact or visit the Consular official representing the interest of the other country.
- (16) If a vessel of either country be involved in maritime peril or encounters any other danger off the coast or in the ports of the other country, the vessel, the cargo, the crew and the passengers shall receive the same assistance which is accorded to a national vessel, its cargo, crew and passengers. This will be subject to the respective laws and international obligations of the two countries.

- (17) The cargo, ship stores, machinery spares etc., of the damaged vessel which have to be offloaded, shall not be subject to customs duties and taxes provided the same are taken out of the country within a reasonable period.
- (18) All payments and expenses relating to shipping services between the two countries shall be effected in freely convertible currency in accordance with the foreign exchange regulations in force from time to time in each country.
- (19) The representatives of the two authorities referred to in Article (5) above shall meet, as necessary, to discuss and resolve all outstanding problems. If they are unable to settle any question concerning the interpretation or application of this Protocol, such questions shall be referred to the respective Governments for settlement.
- (20) To facilitate urgent consultants in matters relating to implementation of this protocol and any arrangements made there under, visas shall be granted immediately, on request, to four nationals of either country nominated by the respective authorities referred to in Article (6), for travel to the other country. Names and full particulars of the nationals so nominated shall be exchanged as soon as possible and Consular authorities representing the interests of both the countries informed accordingly.
- (21) Both the Governments shall take necessary steps to rescind with effect from the 1st February 1975, the existing restrictions on the entry of merchant vessels of their countries to each other's ports.
- (22) The working of the Protocol shall be reviewed by the two Governments after the lapse of one year and thereafter as may be mutually agreed upon.

This Protocol will come into force on the date of signing.

Sd/-
M. Ramakrishanayya
Secretary to the Government of India
Ministry of Shipping and Transport
and Leader of the Indian Delegation.

Sd/-
K. T. Kidwai
Secretary to the
Government of Pakistan
Ministry of Communications
and Leader of the Pakistan Delegation.

New Delhi, 15th January 1975.

About the Authors:

Rear Admiral Hasan Ansari (Pakistan)

Rear Admiral Hasan Ansari served an impressive career in the Pakistani Navy from 1955-1995. His naval experience encompasses Command, Staff, Administrative, and Industrial assignments. He attained top positions open to engineering duties officers throughout his career, serving as Deputy Chief of Naval Staff (Material) and (Logistics) at Naval Headquarters, overseeing a ships transfer program in Washington DC, and becoming a Principal of the Pakistan Navy Engineering College, where he established a graduate program in electronics and telecommunications engineering. His last navy command was Commander Logistics. Admiral Ansari's academic history includes postgraduate War Studies at the Royal College of Defence Studies (London UK) and post-graduate specialization in marine engineering from R.N.E.C. (Plymouth UK). He is a graduate of the Royal Naval Engineering College (Plymouth UK), Forman Christian College (Lahore), and Britannia Royal Naval College (Dartmouth).



For his distinguished services, he is the recipient of the high Hilal-E-Imtiaz (Military) and Sitara-E-Basalat awards.

Throughout the past five years, Admiral Ansari has served as a Member of the Public Service Commission, Government of Sindh, where he helped bring about institutional changes such as syllabi revision, exams formatting, and psychological testing of civil servants. In 1991, he assisted in founding the Pakistan Institute of Maritime Affairs, which is headed by Admiral Chaudri, the first Commander-in-Chief of Navy.

Admiral Ansari is married with two grown children. He is an avid reader and passionate golfer.

Rear Admiral Ravi Vohra (India)

Rear Admiral Ravi Vohra retired with a distinguished career in the Indian Navy spanning 1962-1994. Key naval appointments included Assistant Controller of Warship Production and Acquisition (Delhi), Flag Officer Offshore Defence Advisory Group (Bombay), Naval Attaché (Bonn West Germany), Naval Assistant to the Chief of Naval Staff (Delhi), Command of INS Taragiri, Second-in-Command of the missile destroyer INS Rajput, and Second-in-Command of the INS Nilgiri. Admiral Vohra is a graduate of the National Defence Academy in Pune, post graduate from Staff College in Greenwich (UK), and has had training in missile control and exploitation from Russia.



Beginning in 2001, Admiral Vohra has focused on Indian Ocean related issues for the Strategic Studies & Security Group, a non-government organization. Prior to this, he was the Chairman and Managing Director of Garden Reach Shipbuilders and Engineers, located in Calcutta. Admiral Vohra has also been a Chairman of the Indian Shipbuilders Association and was awarded the Vashisht Seva Medal by the President of India in 1984.

Admiral Vohra is married with two grown children.

Distribution

450	MS 1373	CMC Library, 5341
1	MS 9018	Central Tech Files, 8945-1
2	MS 0899	Technical Library, 9616
1	MS 0619	Review and Approval Desk, 9612