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Prospects of Conventional Arms Control in South Asia

Abstract

The intensely adversarial relationship between India and Pakistan is marked by military rivalry, mutual distrust, and suspicion. The most dividing disagreement has been over the Kashmir region. An inability to discuss the Kashmir issue has prevented discussion on other important issues. Since there is little prospect of détente, at least in the near-term, the question is whether this rivalry can be contained by other means, such as arms control approaches.

Conventional arms control has been applied flexibly and successfully in some regions to reduce threat-perceptions and achieve reassuring military stability. Some lessons from other international models might be applied to the India/Pakistan context. This paper discusses the status of conventional arms control in South Asia, the dominant Indian and Pakistani perceptions about arms control, the benefits that could be derived from arms control, as well as the problems and prospects of arms control. It also discusses existing conventional arms control agreements at the regional and global levels as well as the potential role of cooperative monitoring technology.

Acronyms

ASLV	Augmented Space Launch Vehicle
C3I	command, control, communications, and intelligence
CBM	confidence-building measure
CD	Conference on Disarmament
CFE	Conventional Forces in Europe
cm	centimeter
CTBT	Comprehensive Test Ban Treaty
FMCT	Fissile Material Cutoff Treaty
GDP	gross domestic product
ICBM	Intercontinental Ballistic Missile
IMF	International Money Fund
kt	kiloton
LoC	Line of Control
m	meters
NATO	North Atlantic Treaty Organization
NTM	National Technical Means
PSLV	Polar Space Launch Vehicle
SAARC	South Asian Association for Regional Cooperation
SAR	synthetic aperture radar
SIPRI	Stockholm International Peace Research Institute
SLBM	Submarine-Launched Ballistic Missiles
UN	United Nations
UNMOG	United Nations Military Observer Group

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Prospects of Conventional Arms Control in South Asia

Executive Summary

India and Pakistan have been adversaries since the time of their independence from British colonial rule in August 1947. They have fought three wars since then, the first within a few months of their independence. Their relationship has also been marred by limited armed conflicts as well as by crises that have brought them close to war.

Their military rivalry has been costly, as they belong to one of the world's poorest regions. Besides draining scarce resources, their military competition threatens to make a future war more destructive than their past armed conflicts have been. In addition, the nuclear dimension has deepened concern about the danger of war, as it could escalate beyond conventional weapons.

Of the various issues that divide India and Pakistan, the most troubling are their differences over the Kashmir dispute. There is little sign yet that a breakthrough might occur on this issue. Unless this happens, their bilateral talks are highly unlikely to show progress on other issues. India and Pakistan are thus faced with the prospect of an expensive and destabilizing military competition that will aggravate mutual threat-perceptions.

Of the various issues that divide India and Pakistan, the most troubling are their differences over the Kashmir dispute.

Defense spending, a substantial portion of their budgets, will continue to rise as well. Their protracted rivalry has spawned large armed forces that have become costlier to maintain for a variety of reasons, including the increasing cost of arms procurement.

Since there is little prospect of détente, at least in the near-term, the question is whether this rivalry can be contained by other means. Although arms control prospects look rather bleak, India and Pakistan could consider some measures that may help to prevent a deterioration of their tense relations, without adversely affecting their position on contentious issues.

Until a breakthrough occurs on the Kashmir issue or their existing positions soften, what might be possible are modest measures to reduce the threat of war.

One such measure could be a substantially upgraded UN monitoring force along the Line of Control (LoC) in Kashmir so that its presence can discourage cross-border

firings as well as larger clashes between the forward-deployed Pakistani and Indian forces. The most likely scenario of a future conflict would be an escalation of military confrontation along the LoC. A sizable UN presence would also help to address India's accusations that Pakistan is providing material support to the armed unrest on the Indian side of the LoC.

Another proposed measure is an agreement or a tacit understanding for the nondeployment of ballistic missiles. Nondeployment would cover all missile varieties, as it would be difficult to distinguish a nuclear armed from a conventionally armed missile.

India and Pakistan should also consider a "no-war" or nonaggression pact. Such a pact would be declaratory in nature and susceptible to conflicting interpretations about what would constitute aggression in an actual crisis. Yet, it would still be a step forward, especially given that there is now heightened concern about the consequences of a future conflict and the fact that they have not been able to move forward on any major issue.

Should there be a breakthrough in the India-Pakistan relationship or should the two adversaries become more amenable to the idea of stabilizing their mutual security through arms control, they could consider a variation of an agreement used successfully elsewhere in the world. For example, the Sinai disengagement agreements that eased tensions between Egypt and Israel in the 1970s could serve as a general model for reducing mutual threat-perceptions, providing early warning and stabilizing the military situation along the India-Pakistan border at a lower level of armaments. A Sinai-type agreement may require some form of an Open Skies arrangement for verifying compliance.

(India and Pakistan) could consider a variation of an agreement used successfully elsewhere in the world.

A more ambitious model, such as the Conventional Forces in Europe (CFE) Treaty, would be far less manageable in the India/Pakistan context and might not succeed. Negotiated in 1990, the CFE sought significant and equal reductions of all major conventional weapon systems belonging to the member states of the North Atlantic Treaty Organization and the former Warsaw pact countries. To ensure success, any model would have to be adapted to suit the India-Pakistan context.

An additional long-term prospect for promoting the conventional arms control process between India and Pakistan is for both sides to gain expertise so that they can carry out monitoring and verification missions associated with regional arms control agreements. Pakistan and India could engage separately in training programs that could include sending personnel to other countries that have experience and advanced technology for monitoring. This kind of cooperation would be similar to the kind of cooperation that already exists in terms of military or other professional exchanges between governments.

Prospects of Conventional Arms Control in South Asia

1. Introduction

India and Pakistan have been adversaries since the time of their independence from British colonial rule in August 1947. They have fought three wars since then, the first within a few months of their independence. Their relationship has also been marred by limited armed conflicts as well as by crises that have brought them close to war. In addition, India and Pakistan continue to make unmitigated allegations of interference in each other's internal affairs, including accusations of subversion and sabotage.

This intensely adversarial relationship, marked by military rivalry, has been costly to these two countries which belong to one of the poorest regions of the world. Besides draining scarce resources, their military competition threatens to make a future war more destructive than their past armed conflicts have been. Thus, a future conflict would cause a major economic setback, aggravating social instability.

In addition, the nuclear dimension has deepened concern about the danger of war, as it could escalate beyond conventional weapons. Such an eventuality would have devastating economic, human, and environmental consequences.

The India-Pakistan relationship is beset by serious differences over various issues, especially the long-standing dispute over Kashmir, and it appears that this bitter relationship will not improve any time soon. Thus, India and Pakistan are faced with the prospect of an expensive and destabilizing military competition that will aggravate mutual threat-perceptions.

Defense spending, which represents a substantial portion of their budget, will continue to rise as well. Their protracted rivalry has spawned large armed forces that have become costlier to maintain, with a proportionate increase in maintenance costs and pension liabilities. Making the military service attractive at a time of social change has also generated pressure for better salaries and benefits. The cost of arms procurement, too, has increased.

Since there is little prospect of détente, at least in the near-term, the question is whether this rivalry can be contained by other means, such as arms control approaches.

Conventional arms control has been applied flexibly and successfully in some regions to reduce threat-perceptions and achieve reassuring military stability. This paper will discuss the status of conventional arms control in South Asia, the dominant Indian and Pakistani perceptions about arms control, the benefits that could be derived from arms control, as well as the problems and prospects of arms control. It will also discuss existing conventional arms control agreements at the regional and global levels as well as the role of cooperative monitoring technology.

2. Conventional Arms Control in South Asia

By definition, arms control implies the reduction and limitation of military forces or disarmament in one or more categories of weaponry. But in reality, arms control covers a wider range of activities and it could also include the management of adversarial relationships between states or groups of states. In the South Asian context, arms control could take a variety of forms, which may include proscribing activities that impinge on security, achieving greater transparency, containing military competition, and reducing forces.

From the outset, however, the India-Pakistan agenda has been virtually bereft of conventional arms control even as a generic concept that could help to improve mutual security and stability. Initial interest in such a concept has been of recent origin and outside of officialdom. Thus, familiarity with the role that cooperative monitoring technology could play in support of arms control efforts is virtually nonexistent in India and Pakistan. Not surprisingly, there are some misgivings about reliance on technology.

This is not the case at the international level, where arms control and cooperative monitoring have become well established as a result of various bilateral, multilateral, and global agreements. As these agreements show, cooperative monitoring could be employed usefully for a wide range of purposes, including military disengagement, confidence building, and arms control (limitation and reduction). See Appendix A for examples of conventional arms control agreements.

2.1 Current Measures

India and Pakistan have yet to agree on measures to achieve military stability and reduce their mutual threat-perceptions. Only a few confidence-building measures (CBMs) are in place, including restrictions on military exercises and movements near their common border, prevention of violation of airspace, and a hot line between their Directorate-General of Military Operations. As subsequent developments have shown, these CBMs, which were agreed to in 1991, fall far short of the measures required to reverse the India-Pakistan military rivalry. (For the text of the CBM agreements, see Appendix B.)

2.2 Pakistan's Policies and Perceptions on Arms Control

2.2.1 Influence of Kashmir Dispute

At the official level, Pakistan's attitude toward arms control with India has been molded by the Kashmir dispute, especially since the early 1990s when tension over that issue flared up. The official stance has been that unless India moves forward to negotiate a settlement of this long-standing dispute, Islamabad would not engage in talks to address other important issues, whether military or nonmilitary.

In early 1994, Pakistan suspended bilateral talks (that began through U.S. urging in 1990) after these talks failed to show progress on Kashmir. Pakistan also imposed

conditions for their resumption, including a scaling down of security forces on the Indian side of the Line of Control in Kashmir.

Pakistan subsequently softened its stance without changing its basic position on Kashmir. This facilitated a resumption of talks in 1997 that showed some promise that a way would be found to incorporate Kashmir in an agreed-upon agenda for negotiating bilateral problems. These talks collapsed after several rounds failed to achieve a procedural breakthrough on Kashmir. Efforts to iron out procedural problems were finally successful in September 1998, paving the way for a new round of talks.

Both sides agree that their bilateral agenda should include a subset of security-related issues under the rubric of "peace and security." Conceptually, this subset is broad enough to incorporate both arms control and CBMs.

However, Pakistan continues to stress that Kashmir is a core issue whose resolution is central to the normalization of the India-Pakistan relationship and a precondition for negotiation on other issues.

The most likely scenario of a future conflict would be an escalation of military confrontation ... in Kashmir.

There is no sign of any change in their postures on the Kashmir dispute. The official view remains that Pakistan will not negotiate on other issues unless Kashmir is treated as the foremost issue and progress is made in resolving this dispute through negotiations on the basis of the UN Security Council resolutions adopted in the late 1940s and 1950s.

According to an opinion survey last year, almost 80% of the Pakistani people polled rejected the idea of accepting the status quo in Kashmir.[1] The Pakistani stance on Kashmir also enjoys strong support from most politicians and, perhaps more important, from influential circles within the Pakistani establishment.

2.2.2 Siachen Glacier Dispute

The firmness of the Pakistani posture on Kashmir is also reflected in its position on the Siachen Glacier dispute. Although India and Pakistan engaged in negotiations in the late 1980s on this dispute with a view to achieving disengagement and demilitarization, the prospect of a resumption of talks on that issue has steadily declined. It appears that Pakistan does not wish to discuss the Siachen issue unless there is progress on the wider dispute over Kashmir, of which Siachen is a part.

Thus, the shadow cast by the deadlock over Kashmir has stultified the prospects of India and Pakistan making progress on the arms control front.

[1] "82 pc Pakistanis want to stay home; most hopeful of future," *Dawn* (Pakistan), January 31, 1997. The survey was conducted by *Herald*, a leading Karachi-based magazine.

2.2.3 Pakistani Efforts in Regional Arms Control

Even in earlier periods when tension between India and Pakistan over Kashmir was not quite as pronounced as it has been since the early 1990s, there was little evidence of Pakistani interest in seeking formal arms control with India with a view to establishing military stability or reducing mutual threat-perceptions.

Pakistan did however, initiate or support numerous UN General Assembly resolutions in the 1980s and early 1990s urging regional arms control, which India voted against or abstained from voting. More recently, Pakistan has made implicit references to the need for conventional arms control at the Conference on Disarmament (CD) in Geneva—a multilateral negotiating body linked to the UN.[2] In September 1998, Pakistani Prime Minister Nawaz Sharif spoke about creating a "regime for nuclear restraint and conventional balance" in his speech to the United Nations General Assembly.[3] Subsequently, a Pakistani Foreign Office spokesman said that the issue of "conventional arms constraint" would be raised by Pakistan at the next round of bilateral talks with India[4].

In recent years, an issue on which Pakistan has periodically or intermittently called for an agreement with India relates to a "no-war" or a nonaggression pact. Even in this area, however, the impact of the Kashmir dispute has been felt. Recently, both Prime Minister Nawaz Sharif and Foreign Secretary Shamshad Ahmad reiterated the offer of a nonaggression pact but linked it to "a just and fair settlement of the Kashmir dispute."[5]

The centrality of the Kashmir dispute in Pakistan's policy toward India can also be gauged from the attempts by Islamabad to create a link between a settlement on Kashmir with Pakistan's willingness to adhere to the Comprehensive Test Ban Treaty (CTBT). Prime Minister Nawaz Sharif reportedly said that Pakistan would have "no hesitation" to hold talks with the U.S. on signing the CTBT if the Kashmir dispute was "solved first."[6]

Similarly, Foreign Secretary Shamshad Ahmad said that Pakistan would sign the CTBT if "there is clear demonstration from the major powers of their involvement in the

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[2] In a statement to the CD, Pakistan's representative said, "Nuclear restraint and balance in South Asia will be possible if this is accompanied by effective measures for greater balance and symmetry in the conventional arms capabilities in South Asia." Statement by Ambassador Munir Akram at the Plenary of the Conference on Disarmament on June 2, 1998.

[3] See, for example, Amit Baruah, "Indo-Pak Talks on the Basis of Agreed Agenda" *The Hindu*, October 15, 1998.

[4] *Dawn*, October 4, 1998.

[5] Akhtar, Hasan, "Islamabad ready to sign no-war pact with India: FO," *Dawn* (Pakistan), July 9, 1998.

[6] "Nawaz links CTBT signing to Kashmir," *Dawn*, July 12, 1998.

issues of peace and security in South Asia (including the resolution of) the core issue of Kashmir."[7]

Pakistani leaders have said over the past decade that if a settlement of this dispute were to take place, Pakistan would keenly cooperate toward achieving wide-ranging agreements with India to reverse their adversary relationship.[8]

Another issue on which Pakistan had sought an agreement with India was for a zero-missile regime, but lately Pakistan's interest in that proposal seems to have receded.

2.2.4 Nongovernmental Analysts

At the nongovernmental level, views on arms control are not much different from the official positions, even though a fairly large body of opinion makers has emerged in Pakistan who write frequently on security issues. They include a steadily growing number of senior retired civil and military officers as well as journalists and academics.

The opinions and analyses that appear in the Pakistani media on security issues are, however, almost completely devoid of reference to conventional arms control issues. Moreover, there is little discussion when this subject is infrequently broached, which is done mainly by academics writing in journals or monographs published by Pakistani or foreign research institutes and think-tanks.[9]

Arms control continues to be a neglected subject in South Asia...

Other than that, arms control issues are raised intermittently by a small advocacy group, drawn from diverse professional backgrounds, who support de-militarization measures between India and Pakistan but whose main concern has been the burden of defense spending on the Pakistani economy.[10]

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[7] "Pakistan links CTBT signing with Kashmir," *Dawn*, July 9, 1998.

[8] Recently, Islamabad offered flexibility if negotiations were undertaken to settle the Kashmir dispute.

[9] Some examples of Pakistani writings on conventional arms issues include: Naeem Ahmad Salik, "Non-offensive Defense - Promoting Confidence and Security," Henry Stimson Center, Washington, D.C., April 1995; Nazir Kamal, "Defensive Security in Regions other than Europe," *Disarmament: A Periodic Review by the United Nations*, New York, No. 4, 1992; Nazir Kamal, "Conventional and Nuclear Issues in India-Pakistan Relations, *National Development and Security*, a journal of the Foundation for Research on International Environment, National Development and Security, Rawalpindi, November 1995; and Nazir Kamal, "Regional Arms Balance and Weapons of Mass Destruction in South Asia," in D. D. Khanna, ed., *Sustainable Development, Environmental Security, Disarmament and Development Interface in South Asia*, MacMillan India Limited, 1997.

[10] See, for example, Pervez Tahir, "Futility of defence spending debate," *The News* (Pakistan), August 28, 1994; Karen Byrne, "Open discussion of defence budget will benefit forces," *The News*, April 22, 1996; Shahrukh Khan, "Military must realize that a strong economy serves the purpose of defence," *The News*, August 24, 1997; and "Are we paying for security with prosperity?" *The News*, March 18, 1996.

2.2.5 Reasons for Minimal Interest in Conventional Arms Control

A variety of reasons have contributed to the scarcity of public discussion and debate on conventional arms control issues, as follows:

1. The external pressures on Pakistan to forego the nuclear option and the domestic pressures to resist those attempts have overshadowed regional conventional arms control issues, even though the primary reason behind public support for safeguarding the nuclear option has been Pakistan's concerns about India's greater conventional military strength and potential. Thus, the nuclear issue has dominated Pakistan's security agenda for more than a decade. The situation created by recent nuclear tests by India and Pakistan has further reinforced the dominance of the nuclear issue.

2. The Kashmir dispute, especially since the early 1990s, became a preoccupation following a marked escalation of violence in the part of Kashmir that falls on the Indian side of the LoC.

3. A majority of opinion-makers in Pakistan, including some senior retired military officers, support the official position on Kashmir.

4. There is a general perception that arms control is too complicated and sensitive a subject, particularly as it may involve intrusive verification measures that would be unacceptable either because India cannot be trusted to show good faith or because other national security interests may be compromised unwittingly.

5. There is a lack of familiarity with conventional arms control. By contrast, nuclear nonproliferation issues are better known, if not well understood by many, because they have been the subject of intensive diplomatic activity and media comment for more than a decade. They have also been a subject that has figured prominently in political rallies and election campaigns over the last 10 years when parliamentary democracy was reintroduced in Pakistan after 11 years of military rule.

Of the various factors that account for the lack of attention to conventional arms control issues, the wide acceptance of the official position on Kashmir and the saliency of the nuclear issue would seem to be the main ones.

Thus, the only arms control issue that has figured prominently in the columns of the Pakistani press in recent years has been the official proposal for the nondeployment of ballistic missiles, made a couple of years ago, after India had completed the development of its short-range missile, Prithvi-1.

Not surprisingly, reference to that proposal by security analysts has diminished in tandem with a perceptible decline of official interest in a zero-missile regime following Pakistani testing of Ghauri, a medium-range missile, and disclosures by Pakistani defense scientists about progress in developing other short- and medium-range missiles.

2.3 India's Policies and Perceptions on Arms Control

The Indian concerns about arms control, and less so about CBMs, are driven by three factors: 1) establishing security with respect to Pakistan; 2) establishing security with respect to China; and 3) the assumption that as a major state in world affairs, Indian security and foreign policy interests go beyond the immediate South Asian region.

2.3.1 International Factors

The Indian government, since the times of Jawaharlal Nehru, has spoken of the need for global disarmament. This desire for disarmament was not primarily influenced by any Gandhian notion of universal peace. Instead, it came out of the recognition that the continued escalation of the Cold War would swallow up the newly independent nations of the south and make them lose their recently gained freedom. There was also the belief that if the arms race was curtailed, some of the money wasted by the super-powers on armament could be transferred to develop the nations of the south. Only with global development, Nehru believed, could true peace be achieved in the international system.[11]

In the 1980s and 1990s, this position was broadened to take into account what Indian policy makers felt was India's international status. Arms control was no longer just an issue of global peace but also provided a forum where India's prestige and influence could be enhanced. After the first test of the Agni intermediate-range ballistic missile, K. Subrahmanyam, India's leading defense analyst commented, "Agni makes India a significant factor in international power politics. If it is followed by successful ASLV, PSLV, and ICBM tests, then there can be no future international arms control negotiations without India's participation. India's voice will be heard with much greater attention than has been the case hitherto. One-sixth of humanity coming into international decision making means greater democratization of the process."[12] Arms control for India, therefore, has not only meant the process of managing regional arms races but also of securing status and power in international systems. This preference is reflected in the Indian position on nuclear issues where the country has consistently wanted to be part of global regimes, which are considered equitable, rather than regional regimes, which do not include major powers and place one-sided restrictions on India.

2.3.2 Establishing Regional Security

India's position on regional arms control, and to a lesser extent CBMs, has been predicated by the existence of a two-front threat and by the very different natures of the India-China and India-Pakistan relationships. The existence of a two-front threat has led to a reluctance to sign agreements with Pakistan because they would leave out China and prevent building a comprehensive security regime with which India would feel comfort-

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[11] For a discussion of Nehru's foreign and security policies see Sisir Gupta, *India and Regional Integration in Asia* (Bombay: Asia, 1964), pp.1-27.

[12] K. Subrahmanyam, "The Meaning of Agni," *The Hindu*, May 24, 1998. The ASLV is the Augmented Space Launch Vehicle while the PSLV is the Polar Space Launch Vehicle.

able. There is also the consideration that arrangements that work between India and China may run into problems if applied in the India-Pakistan context. The reason lies in the difference between the two dyadic relationships.

The India-China relationship is a competitive one. The dispute itself is based on an unresolved border and the jockeying for power between two Asian mega-states.

The India-Pakistan dispute is colored by visceral factors such as history, culture, and religion that make attempts towards negotiations and concessions difficult. These tensions make it difficult for either side to make concessions without being charged by opposition groups with having sold out to the enemy.

2.3.3 Lack of Understanding of Conventional Arms Control Concepts

Along with these negative feelings, there is a general lack of research and work in the area of conventional arms control. As in the Pakistani case, there is greater familiarity with the nuclear issue among scholars and policy makers. Thus scholars at three of India's leading think tanks, the Center for Policy Research, the government-run Institute for Defense Studies and Analyses, and the Center for the Study of Developing Societies, have focused primarily on the nuclear issue. Further, on the Indian side, there has been an intellectual division of labor on conventional force issues. Civilian interest has focused on conventional weapons acquisition and production.[13] Military officers, through journals such as the United Services Institute Journal and newspaper articles, have written on conventional forces and doctrine. The focus of these writings has been on operational and tactical issues rather than on grand strategy or on the possibility of establishing arms control regimes.

Nor is there a significant body of nongovernmental work on the subject. One scholar, Ravi Rikhye, wrote extensively in the 1980s on the deployment and use of conventional forces.[14] Nongovernmental groups have focused on building cooperative relations between the two countries and dealing with the nuclear issue.[15] One such group is the Committee For a Sane Nuclear Policy, which has sought to educate the general public on safety and security issues in the nuclear realm.

2.4 Attempts to Negotiate

Despite such limitations, a set of CBM agreements between India and Pakistan have, in part, been reactions to crises in the region. The agreement barring attacks on

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[13] See, for example, K. Subrahmanyam, *Indian Security Perspectives* (New Delhi: ABC, 1983), and Raju G. C. Thomas, *The Defense of India: A Budgetary Perspective of Strategy and Politics* (New Delhi: Macmillan, 1978).

[14] Ravi Rikhye, *The Militarisation of Mother India* (New Delhi: Chanakya, 1990).

[15] The most recent report detailing Track Two and Track Three diplomacy in South Asia is by Navnita Chadha Behra, Paul M. Evans, and Gowher Rizvi, *Beyond Boundaries: A Report on the State of Non-Official Dialogues on Peace, Security, and Cooperation in South Asia*, (York, Ontario: University of Toronto-York University, 1997).

nuclear facilities, for example, originated from the 1984 crisis where it was believed that India was planning to attack Pakistan's nuclear facilities at Kahuta. Similarly, the agreements on notification of military exercises and violations of air space emerged after the 1990 crisis over Kashmir. (See Appendix B.)

The two countries, through the early 1990s, were also engaged in negotiations at the foreign secretary level to discuss contentious issues. These talks were terminated by Pakistan in 1994 because of charges of Indian misbehavior in Kashmir. At the time the talks were suspended, Indian diplomats had submitted six "non-papers" to their Pakistani counterparts on building a regime of new CBMs. These included a commitment by each country to not wage nuclear war on the other; a mutual withdrawal of forces from the Siachen Glacier without either side giving up its territorial claims; better and more secure communications between the military commanders of both sides; and a proposal to resolve the territorial dispute of Sir Creek.[16] These papers, in part, served as the basis for official talks between the two countries in March and April 1997.[17] By June 1997, when the talks were again broken off, the two sides had come up with eight issue areas to discuss in the future. Two of these, peace and security and the Kashmir issue, are likely to be the most prominent when India and Pakistan resume negotiations. In the aftermath of the nuclear tests, both countries have stated that they want to resume talks, although there are differing views on how much emphasis should be given to each issue.

Pakistan contends that Kashmir is the core issue that adversely effects India-Pakistan relations and, therefore, no significant breakthroughs are possible without addressing this issue. The Indian position is that Kashmir's future has already been decided and that it is an integral part of India. Further, India says that talks on Kashmir make little sense when Pakistan, it claims, is supporting terrorist actions in the state. The Indian parliament raised the ante when it passed a resolution stating that the entire territory of Kashmir legally belonged to India. Lastly, the Indian preference to discuss the issue at the bilateral level conflicts with Pakistani attempts to internationalize the issue.

After the nuclear tests, the Indian government has suggested that both sides sign a no-first-use pledge. It has also agreed to follow parts of the CTBT without becoming a member—this would include a moratorium on testing. Other potential areas of discussion include the spread of light weapons in the region and coordinated attempts to check terrorism.

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[16] Shekhar Gupta, "India Redefines its Role," *Adelphi Paper* No. 293, (London: Oxford, 1995), p. 46.

[17] *Indian Express*, New Delhi, April 11, 1997.

3. Case for Conventional Arms Control

3.1 Benefits of Conventional Arms Control

Conventional arms control could benefit India and Pakistan in the following ways:

1. Measures to achieve conventional military stability would reduce the danger of armed conflict. India and Pakistan have fought three full-blown wars over the past 50 years and have engaged in limited armed conflict on two occasions.[18] Wars in South Asia have tended to result from long-standing disputes and the actual conflicts have resulted from drawn-out crises.

2. A stable and nonthreatening military equation would provide strategic stability which is required in the new situation following the recent nuclear device tests and possible moves by India and Pakistan toward nuclear weaponization. The nuclearization of South Asia has raised the danger that a conventional conflict between India and Pakistan could escalate to a nuclear conflict.

3.2 Possibilities of Nuclear Conflict

However, few observers believe that either side would be irrational in the use of nuclear weapons. Some comfort can be taken from the fact that both countries have demonstrated restraint, notwithstanding occasional provocative statements by them, and that a relationship of nuclear deterrence has prevailed in the region since the 1980s.

India's 1974 nuclear test was not followed by weaponization or any offensive disposition of its nuclear weapons capability. Similarly, Pakistan, which had developed the capability to produce nuclear weapons by the mid-1980s, did not seek to develop an overt nuclear arsenal. Instead, both sides pursued what is widely believed to have been a fairly stable relationship of nonweaponized deterrence. Although the situation has changed as a result of recent developments, most observers do not perceive a serious danger of one side engaging in a preemptive strike nor do they believe that such a strike could be carried out meaningfully.

One Indian analyst has observed that "India and Pakistan have very small nuclear arsenals and for some years to come are not likely to cross the two-digit figure. No one will use a tactical nuclear weapon as its use is an invitation to a much larger retaliatory strike. There are no proposals these days to have nuclear weapons on hair-trigger alert. These countries are not likely to deploy their weapons lest they should lose them to even conventional strikes. Since the arsenals are small, extreme care will be taken not to lose those assets."[19]

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[18] They fought full-blown wars in 1948, 1965, and 1971, and limited armed conflicts in 1964 over Rann of Kutch and an ongoing conflict over Siachen Glacier since 1984.

[19] K. Subrahmanyam, "Past Imperfect: Time for New Nuclearspeak," *The Times of India*, August 3, 1998.

Thus, a more credible scenario of a nuclear conflict is one that results from the escalation of a conventional war. More specifically, this could happen if Pakistan comes under pressure to resort to nuclear weapons in order to halt an Indian breakthrough. Since Pakistan is militarily inferior to India, both quantitatively and qualitatively, such a situation could arise if an India-Pakistan war erupted. The likeliest cause of war could be the Kashmir dispute, which was responsible for the 1948 and 1965 wars.

This scenario, more than any other, poses a genuine challenge to Indian and Pakistani military planners and civilian policy makers. The balance of forces between India and Pakistan is not likely to change in favor of a stable military equation in view of the unequal military potential of the two countries and the intensity of their adversarial relationship. Nor have any significant steps been taken beyond the 1991 CBMs to actually lessen the chances of conventional conflict in the region. Therefore, achieving conventional stability through arms control measures would help to strengthen nuclear deterrence.

Thus, there is a need to address the dangers that would precipitate a conventional conflict. Both countries recognize the danger that a conventional conflict could escalate to the point where the decision-makers may be forced to contemplate the use of nuclear weapons. The decisions to defuse the 1987 and 1990 crises may have stemmed from such fears. Numerous Indians and Pakistanis believe it to be the case. Hectic U.S. efforts to help defuse those crises were also, it seems, motivated largely by such fear.

3.3 Possible Arms Control Approaches

The arms control effort could follow several approaches:

- treaties that lead to the management of the adversarial relationship;
- arms reduction; and
- processes that allow for early warning or even those that provide a forum for a regular discussion of security-related issues between the two sides.

A Pakistan Foreign Office statement stressed the importance of some of these issues. The spokesman said, "Pakistan has also proposed that under the item pertaining to peace and security, special and urgent attention may be given to arriving at mutually agreed measures for avoidance of conflict as well as promotion of nuclear and conventional restraint and stabilization factors."[20]

A second incentive for arms control comes from the positive impact it would have on the defense expenditure of both countries, even though the growth of defense spending has generally been slow in recent years.

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[20] Amit Baruah, "Raising the Stakes," *Frontline*, Vol. 15, No. 13, June 20-July 3, 1998.

3.4 Defense Expenditures

While the early 1980s witnessed high imports of weaponry, by the late 1980s and through the early and mid-1990s, both India and Pakistan saw a reduction of their defense spending as a percentage of the gross domestic product (GDP). Thus, the Indian defense budget declined from 3.3% of GDP in 1987 to 2.8% in 1995. In the case of Pakistan, its expenditure dropped from 8% in 1987 to 7.4% in 1993 and then rebounded to an estimated 8% in 1995.[21]

During this period, military expenditure as a percentage of central government expenditure also declined in both countries. In India such expenditure dropped from 15.7% in 1985 to 12.7% in 1995. In Pakistan, the percentage declined from 28.1% in 1985 to 25.3% in 1995.[22]

Despite budgetary constraints,... allocations for defense greatly overshadow ... allocations for social and economic development.

Yet, the slowdown in the growth of military spending has been attributed largely to acute budgetary problems. In the absence of a financial squeeze, their military expenditures would most likely have grown at a faster rate, as both countries maintain large armed forces and have had to make do with shoestring budgets in recent years. There is also pressure on both sides to increase defense expenditures.[23]

India's defense budget for fiscal year 1998-99 stands approximately at $10 billion.[24] This marks an increase of roughly 7% over the previous year, after adjusting for inflation, which is the biggest raise in recent years, and it represents a little over 15% of total central government expenditure.[25] Plagued by more acute financial problems, Pakistan's allocation for defense for the same period stands at $3.15 billion, registering no real-term increase because of inflation and currency devaluation. This represents a little over 23% of total central government expenditure.

Despite budgetary constraints, allocations for defense greatly overshadow their allocations for social and economic development. Both India and Pakistan have been

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[21] *SIPRI Yearbook 1997: Armaments, Disarmament and International Security*, (New York: Oxford University Press, 1997), p. 203.

[22] U. S. Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers 1996* (Washington: U.S. Government Printing Office, 1997), p. 74 and p. 85.

[23] See, for example, the views of the Indian parliamentary committee on defense, "Panel indicts Govt over inadequate defence budget," *The Times of India*, July 10, 1998.

[24] All monetary figures are expressed in U.S. dollars.

[25] India increased more significantly its allocation for the Atomic Energy Commission and the Department of Space.

running huge budget deficits and are low-income economies faced with staggering social and economic problems.

More than 40% of India's population of 960 million and about 30% of Pakistan's population of 130 million live below the poverty line. Thus, together, there are half a billion people in India and Pakistan who live in grueling conditions. Pressures exerted by population growth have also been a major cause of environmental degradation in the region. Similarly, India and Pakistan have high rates of illiteracy (India about 50% and Pakistan about 65%). Likewise, both countries rank very low in the Human Development Index developed by the United Nations Development Program. Pakistan ranks 138 and India ranks as 139 out of 178 countries in the index.

Military expenditures will increase once nuclear weapons are included in their force structures. (India has already announced an increase in its defense spending.) Depending on the scale of weaponization, it could add a significant additional burden to the economies of both countries.

Military expenditures will increase once nuclear weapons are included in their force structures.

Initial analysis of one proposed Indian nuclear force suggests a requirement of about 150 nuclear weapons with the necessary delivery systems, along with the required command, control, communications, and intelligence (C3I) features needed to manage these systems. An Indian parliamentarian, Subramaniam Swamy, has even called for a nuclear force of 400 intermediate-range ballistic missiles.

Some Indian estimates have put the cost at approximately $714 million annually for ten years. This estimate is based on each nuclear warhead costing $375,000 and each missile costing about $3.75 million. When the cost of a C3I infrastructure is added, the total cost of the force was estimated at about $2.5 billion.[26] Since Indian pricing on defense production tends to be deflated, as it places expenditures under civil and other headings, it must be assumed that the cost of each warhead and missile may be significantly higher. A leading Pakistani nuclear scientist, Dr. Samar Mobarik Mand, has called for the development of a nuclear force of 60 to 70 bombs, though he also said that deterrence did not depend on the size of the arsenal.[27]

3.5 Rationale for Conventional Arms Reductions

A costly arms competition would ensue if either side initiates a build-up of nuclear capabilities. Conventional weaponry may be the area to begin expenditure cutbacks because, unlike nuclear weapons and related systems, conventional forces do not enjoy the status that nuclear forces do in terms of the international prestige it bestows on

[26] Subramaniam Swamy, "India's Defense Needs," *The Hindustan Times*, July 12, 1998.

[27] *Dawn*, Karachi, June 3, 1998.

the possessor and the importance which politicians and other influential figures give to nuclear weapons.

Another positive aspect of conventional arms control would be the economic gains that could be derived. Both India and Pakistan are trying to make market reforms and modernize their economies. In order to accelerate this process, they need to create a conducive environment for attracting foreign direct investment on a sustained and substantial scale. Among other things, such investments would help to raise the technological base of their economies, as seen in countries that have attracted large-scale investments.

The pace of economic modernization will be adversely affected by continued tensions between India and Pakistan. Any escalation in arms competition between them would make potential investors wary of making long-term commitments. Private investors are unlikely to invest in a region that is prone to conflict. Following the May 1998 nuclear device tests, the flow of investments almost dried up and the Indian stock market plummeted by nearly one-fifth of its value.[28] The impact of sanctions imposed by the United States and some other countries has already been estimated to cost the Indian economy about $4 billion[29] as well as a loss of about one billion dollars in foreign investments.[30] These sums are significant for a country with a per capita income of $400.

Pakistan's situation is more difficult because of the nation's high debt, estimated at between $60 to $80 billion,[31] with foreign debt in excess of $30 billion. The sanctions imposed on Pakistan after its nuclear device tests of May 1998 have brought the country to the brink of financial collapse. Assistance from the International Money Fund (IMF) was suspended, which has raised the danger of default on its debt payment unless a new package of assistance is secured.

In order to obtain this loan, however, Pakistan is being asked to undertake economic reform measures that might create political difficulties for the government, partly because of the short-term hardships it would impose on the general public. The preconditions by the U.S. for facilitating new IMF loans also include nonproliferation measures by Pakistan, such as joining the CTBT and supporting the commencement of Fissile Material Cutoff Treaty (FMCT) negotiations in Geneva.[32] Even before the sanctions were imposed, there was growing concern in Pakistan about the negative

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[28] Molly Moore, "Bomb Tests Wound India's Economy," *The Washington Post*, June 20, 1998, p. A 01.

[29] *India Today*, July 6, 1998.

[30] *India Today*, July 13, 1998.

[31] Manzur Ejaz, "Redefining State Priorities," *The News International Pakistan*, August 3, 1998. According to Oxford Analytica, a UK-based body, Pakistan's total external debt amounts to $42 billion. See "UK firm fears debt default by Pakistan" *Dawn* (Pakistan), August 10, 1998. It should be noted that in recent years Pakistan's short-term debts have risen sharply.

[32] Maleeha Lodhi, "Testing Times for Pakistan's Nuclear Diplomacy," *The News International Pakistan*, July 30, 1998.

impact of economic deterioration on its security. Notably, such concerns were also voiced by the Pakistan army chief, General Jahangir Karamat.[33]

For both India and Pakistan, therefore, the path to economic growth, or at the very least continued economic stability, lies in convincing foreign governments and international investors of the soundness of their economic and fiscal policies, their willingness to pursue greater economic reforms, and their commitment to the peaceful and negotiated settlement of disputes and outstanding issues.

Peace and stability between them would also benefit other countries in the neighborhood. The region as a whole would be perceived as more stable by foreign governments as well as by overseas investors who may also seek to exploit the region's full market potential.

Finally, conventional arms control would also enable India and Pakistan to lower mutual threat perceptions. It has been argued that they have pursued an "action/reaction" model in their weapon procurement policies. Purchases by one side have led the other side to seek comparable weapons systems.[34] Such a competitive build-up of capabilities heightens threat perceptions and leads to the belief that the military balance in the region has been fundamentally altered or is in the process of being changed drastically.

Thus, Pakistan's procurement of F-16 fighters from the U.S. in the early and mid-1980s caused concern in India that the air balance in the region would be altered. Similarly, India's ongoing procurement of more capable Su-30 combat aircraft from Russia is viewed by Pakistan as a threatening move. The entry into service of the Prithvi missile, which India originally stated would be fitted with conventional warheads, was seen as a destabilizing move in Pakistan, motivating it to speed up its missile development efforts. Thus, adopting measures to control or manage the arms balance would lead to a lessening of mutual threat perceptions.

4 Possibilities for Conventional Arms Control in South Asia

This section will deal with both the near-term and longer-term possibilities for conventional arms control between India and Pakistan, starting with the near-term prospects. The possibilities will be discussed in terms of what seem to be the most feasible approaches.

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[33] "Poor economy greater threat than that from outside: COAS," *Dawn*, May 5, 1998.

[34] For a discussion of this problem and its consequences see Amit Gupta, "Determining India's Force Structure and Military Doctrine: I Want my MiG," *Asian Survey*, Vol. XXXV, No. 5, May 1995, pp. 441-458.

4.1 Near-term Prospects

In the existing circumstances, the prospects for conventional arms control in South Asia are fairly dismal. India and Pakistan have not been able to move forward toward resolving the fundamental issues that continue to stall their bilateral talks.

At the Colombo summit of the South Asian Association for Regional Cooperation (SAARC)[35] countries in July 1998, the prime ministers of India and Pakistan agreed to make an effort to reopen talks. Intense pressure to do so had come from the United States, which had imposed sanctions on them following their nuclear device tests. But the exploratory talks between the Indian and Pakistani foreign secretaries failed to make headway, ending in mutual recrimination.

They had agreed in 1997 that all issues would be discussed and a mechanism for discussing each issue simultaneously would be worked out. Those talks were suspended because they could not agree on a mechanism for discussing the Kashmir dispute.

In the most recent attempt, in September 1998, India and Pakistan decided to revert back to their previously agreed-upon framework for talks. That framework provides the conceptual basis for addressing conventional arms control issues under the rubric of "peace and security," which they had accepted as one of the major subsets of their bilateral agenda.[36]

But it is highly unlikely that substantive progress would be made because fundamental differences persist over the Kashmir issue. As long as one side or the other shows inflexibility, their overall relations will remain locked in tension and this would mar the prospects for arms control.

Although arms control prospects look rather bleak, India and Pakistan could consider some measures in the near term that may help to prevent a deterioration of their tense relations, without adversely affecting their position on contentious issues.

4.1.1 UN Monitoring Presence

One such measure could be an expanded UN monitoring presence along the Line of Control in Kashmir. A UN observer group in Kashmir maintains only a token presence. In 1949, when India and Pakistan established a cease-fire line in Kashmir under the Karachi Agreement, they accepted a supervisory role by the United Nations Military Observer Group (UNMOG). However, this group's role has been seriously affected by disagreement between India and Pakistan over its mandate and functions. Although the UN Security Council has not terminated UNMOG, its effectiveness has

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[35] SAARC consists of the following countries: India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan and Maldives. SAARC was established in 1985 at the initiative of Bangladesh.

[36] The Pakistani Foreign Office spokesman said recently that at the forthcoming bilateral Foreign Secretary talks the Pakistani side would introduce the issue of conventional arms restraint under the agenda subset of Peace and Security. *Dawn*, October 4, 1998.

been further affected by its reduced size, equipment, and funding.[37] A new mandate adapted to deal with present-day problems is needed.

At the LoC, frequent cross-border firing has caused considerable loss of life and damage to property, affecting mainly poor farmers. Such incidents increase tension between the governments and fuel public anger. The most deadly exchange of artillery fire in many years occurred in August 1998, raising the tension sharply and also causing some fear of escalation.

A UN presence would also help to address India's allegations that Pakistan is engaged in infiltrating armed insurgents into the Indian side of the LoC. In addition, a UN presence would discourage hot-pursuit operations, which will remain a danger as long as tensions over the Kashmir dispute remain high. Any such action by India would prompt a countervailing Pakistani response, thereby bringing the two adversaries to the brink of a bigger conflict.

Despite the difficulties posed by Kashmir's mountainous terrain and by population centers being close to the LoC, a UN monitoring role would still be useful but it would require a much bigger presence than the 43 observers who comprise UNMOG. For example, the demilitarized zone in the Golan Heights, which is much shorter and less rugged than the LoC, is monitored by a force of some 80 UN military observers who are assisted by more than 1,000 troops. [38]

Although technology has not played a major role in the United Nations peacekeeping operations, there is growing interest in strengthening those operations by relying more on available technology.

In many cases, technology may provide a more cost effective and less intrusive monitoring option than sole reliance on human observers. For example, overflights by UN observer teams could be enhanced by use of certain sensors to evaluate violations of the agreement pertaining to the Line of Control. Similarly, if both India and Pakistan are receptive to the idea, there could be an additional role for technology. For example, the UN observer groups could make supplementary use of ground sensors in areas of special monitoring concern.

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[37] As of May 1998, UNMOG had a total strength of 43 military observers, drawn mainly from Europe. In 1994, UNMOG's budget was approximately $7.2 million. Since 1972, when a new line of control was established following the 1971 Indo-Pakistan war, India has argued that UNMOG's mandate had lapsed, maintaining that its mandate was linked specifically to the 1949 agreement.

[38] The cost of the UN observer force in the Golan Heights was $32 million in fiscal year 1996-97.

4.1.2 Nondeployment Options

Another measure that India and Pakistan could consider is an agreement for the nondeployment of ballistic missiles. Alternatively, they could declare a moratorium on deployment, as they have done on nuclear device testing. Their missile capabilities are not planned exclusively for nuclear deterrence, especially the shorter range missiles, which may be deployed for battlefield purposes and for other conventional roles. Missile deployment would make an armed conflict more destructive. It would also greatly raise the risk of being employed as terror weapons, as seen during the Iran-Iraq war when cities were targeted. Nondeployment would be good not only for conventional stability but also for nuclear stability, as it would minimize a hair-trigger situation.

The deployment of missiles would... increase the risk of escalation to the nuclear level.

In view of the degree of intrusiveness that would be required to monitor such an agreement and given the national sensitivities of India and Pakistan at least in the near term, reliance would have to be placed on a tacit understanding. Such an understanding should be possible as it would serve equally the security interests of both sides. It may be possible to further strengthen such an understanding if a third party, using its advanced National Technical Means, were to perform a monitoring role on an informal and discreet basis with the agreement of both sides.

4.1.3 Nonaggression Pacts

A nonaggression or a "no-war" pact would be desirable. Although Pakistan recently made such a pact conditional on progress in resolving the Kashmir dispute,[39] its previous proposals have not carried such a link.[40] A nonaggression pact would be declaratory in nature and its integrity would depend on how aggression is defined or would be interpreted in a crisis. Nevertheless, it would have some positive psychological effect. Given the importance of avoiding conflict, especially in light of the increased nuclear danger, any step that promises to reduce the threat of war would be a welcome development.

4.2 Longer-term Prospects

Once relations between India and Pakistan improve, or the existing stumbling block to negotiating arms control ceases to exist, they could examine a number of approaches to achieving military stability and controlling their arms competition.

[39] Hasan Akhtar, "Pakistan ready to sign no-war pact with India: FO," *Dawn*, July 9, 1998.

[40] See, for example, "Nawaz for no-war pact with India," *The News*, August 8, 1996.

4.2.1 Observation of Military Exercises

As a first step, India and Pakistan could strengthen the 1991 agreement concerning large-scale military exercises by an agreement for inviting observers from the other side to their military exercises. Though not an arms control measure, it would be a useful start in trying to overcome suspicion and build mutual confidence. Once there is military contact between the two sides, it would facilitate delicate negotiations for more substantive measures.

4.2.2 Force Limitation Zones

In order to achieve conventional stability, discourage arms competition, and greatly reduce mutual threat-perceptions, India and Pakistan would need to consider concepts of defensive security. This could take, for example, the form of force-limitation zones along their border. In this regard, the Sinai-II agreement between Egypt and Israel would seem to be the most appropriate model even though that agreement was an interim arrangement preceding the peace treaty of 1979. Sinai II covered an area of 620 square kilometers and the verification arrangements worked very successfully.[41]

The main provisions of the Sinai agreement that seem relevant to South Asia are 1) the *establishment of a buffer zone*, where neither side has forces, and 2) the *limited deployment of forces* in the zones adjacent to the buffer zone. The deployment of Egyptian and Israeli forces was monitored through a comprehensive verification process. The verification regime was monitored by four parties—from Egypt, Israel, the United States, and the United Nations. Israel and Egypt were free to use their available NTM, which included flight missions up to the buffer zone, and to operate reconnaissance aircraft up to the middle line of the buffer zone according to a predetermined schedule of two aircraft up to seven times a week.[42]

Clearly, the Sinai model would have to be modified so that it conforms to South Asia's geographical and political context. The details concerning force levels and the configuration of the zone would have to be worked out by military experts.

In the India-Pakistan case, the creation of a buffer zone could be done on a sector-by-sector basis starting with Punjab, where both sides are least likely to achieve a military breakthrough in a future conflict. Conflict in that strategic sector would also be very costly, thereby posing the greatest danger of escalation to the nuclear level.

The buffer zone could then be expanded to cover the entire border as confidence builds. The maintenance of limited troops in the area adjacent to the buffer zone would have to be arrived at by negotiations and could be monitored by use of reconnaissance aircraft in the buffer zone.

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[41] See Appendix A for a discussion of the Sinai agreements.

[42] Itshak Lederman, "Verification in the Middle East and Europe: Lessons from Past Experience," in Shai Feldman (ed.), *Confidence Building and Verification: Prospects in The Middle East* (Boulder: Westview, 1994), p. 139.

Certain steps can be taken to make the Sinai-type arrangement more applicable to South Asia. Given the proximity of major population centers like Lahore and Amritsar to the border, the buffer zone could change course and size to fit the security requirements of both countries.

There is also the issue of outside observers. The Sinai disengagement was monitored both by the United States and the United Nations. Further, the United States invested money and national prestige in making the agreement work. The question to be raised is whether India and Pakistan would permit international observers to monitor and help implement such an agreement. India, given its long-standing opposition to foreign military presence in the region, will not be likely to accept a U.S. presence along its border with Pakistan. The latter, too, may have serious difficulty with a U.S. role. The United Nations, on the other hand, has had a peacekeeping force in Kashmir since 1949 and both countries could agree to extend this force and its mission to cover the entire border.

4.2.2.1. Monitoring Aspects of Force Limitation Zones

In the Sinai agreement, two early warning monitoring stations, equipped with sensors but no offensive weaponry, were established to provide an early warning capability. These could also be manned by the UN group, which would obviate the need for an American monitoring presence in the area. Alternatively, India and Pakistan could maintain their own stations, subject to inspection by the UN.

The Sinai force-limitation agreements provided for flights through the middle of the buffer zone so that both parties could monitor the implementation of the agreement. The problem of airspace intrusion has become a problem in the India-Pakistan relationship and, following the nuclear tests, Pakistan accused India of carrying out violations of its airspace. The Indian government responded that no such intrusions had taken place.[43] Yet such airspace violations take place despite an agreement on nonviolation.

Given the need for aerial reconnaissance for monitoring a force limitation agreement, and the tensions created by airspace intrusions, both countries, as part of such an agreement, could consider an Open Skies protocol. The protocol would permit a certain number of flights through the middle of the buffer zone and thereby allow each country to independently verify compliance with the force limitation agreement.[44] It

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[43] Kuldip Nayar, "Delink Kashmir from Bomb," *Deccan Herald*, August 12, 1998, and Michael Krepon, "Time Ripe for Serious Bilateral Talks," *The Hindu*, August 12, 1998, p. 13.

[44] A major question concerning transparency of aerial inspections has been the risk of excessive intrusiveness. But this is not an insurmountable problem. The degree of transparency could be controlled by limiting the capabilities of the sensor suite and by placing restrictions on the flight path and aircraft altitude. Aerial inspection may reduce reliance on on-site inspection and thus cut the cost of monitoring. Aircraft-mounted sensors offer sharper resolutions than satellite imagery. In cases where NTM capabilities are considered inadequate, or reliance on ground-based monitoring is inadequate, aerial inspection could be the most effective means of cooperative monitoring

would also enhance the existing agreement for the prevention of airspace violation and thus serve as a useful confidence-building measure. These flights could be enhanced by regular patrols by UN aircraft through the buffer zone.

Another option for India and Pakistan could be to negotiate some form of a bilateral Open Skies agreement as a supplemental means for monitoring the force limitation zones. For example, Hungary and Romania have been implementing an Open Skies agreement that provides for cooperative monitoring overflights since 1992.[45] Cooperative monitoring is also stipulated in the multilateral Open Skies treaty under which some of the signatories to the treaty have engaged in experimental exercises in each other's territory.[46] Whichever recourse is taken, technical and procedural measures would need to be built into the agreement so that the national security of the parties is not compromised.

Developments taking place in commercial satellite imagery offer an additional monitoring capability for arms control or other security-related purposes. Advances in commercial technology and the increasing competition among satellite service providers will soon enable clients to obtain satellite pictures with a ground resolution of 2 m at an inexpensive price. As a result of this brisk competition, clients will also be to obtain updated pictures of the visited site at shorter intervals.[47]

4.2.2.2 Other Aspects of Force Limitation Zones

To some extent, force-limitation zones would also address the arms asymmetry between India and Pakistan by reducing the military significance of an overall imbalance.[48] The military balance between them has always been in India's favor by an overall ratio that has varied from 3:1 to 2:1. Since the two countries are significantly unequal in size and military potential, it will not be possible realistically for Pakistan to match India's military strength. Nor will India agree to draw down its capabilities in order to allow Pakistan to achieve an approximate parity, at least partly because of its requirements vis-à-vis China.

The more ambitious approach to arms control provided by the Conventional Forces in Europe (CFE) treaty may not be feasible in South Asia as India and Pakistan are likely to find it exceedingly difficult to agree on an acceptable correlation of forces, both in armaments and manpower. Furthermore, the extensive demands on verification, particularly the scale of on-site inspection, are likely to be considered too intrusive.

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[45] See Appendix A for Hungary/Romania Open Skies agreement discussion.

[46] See Appendix A for multilateral Open Skies agreement discussion.

[47] See Nazir Kamal and Pravin Sawhney, "Missile Control in South Asia and the Role of Cooperative Monitoring Technology", SAND 98-0505/4, Sandia National Laboratories, October 1998. Appendix E.

[48] Refer to *The Military Balance 1997-98*, International Institute for Strategic Studies, London, for specific details.

Unlike a CFE-type regime, the concept of force limitation zones would give them more room for defense planning and addressing other security interests unrelated to their common border. It would also significantly lower mutual threat-perceptions as well as greatly strengthen conventional stability, thereby creating conditions for reducing the burden of defense on the economy and reversing their intensely adversarial relationship.

4.2.3 Training for Cooperative Monitoring

An additional long-term prospect for promoting the conventional arms control process between India and Pakistan is for both sides to build up expertise so that they can carry out monitoring and verification missions associated with regional arms control agreements. Pakistan and India could engage separately in training programs that could include sending personnel to other countries that have experience and advanced technology for monitoring. This kind of cooperation would be similar to the kind of cooperation that already exists in terms of military or other professional exchanges between governments.

The countries which could be useful in this regard include not only the major powers such as the United States and Russia, but also some other countries that have unique regional cooperative experience. Examples include Hungary and Romania in the context of cooperative overflights, Egypt and Israel for their experience with force limitation zones, and European countries that are part of the Conventional Forces in Europe treaty regime.

Such programs to acquire advanced expertise in monitoring would be necessary for the successful implementation of the proposed force limitation zones concept. They may also prove necessary for the verification of other substantive conventional arms control approaches that may seem more desirable or feasible in the South Asian context.

For most arms control agreements, some means of cooperative monitoring may prove necessary for various reasons. One of these could be the inadequacy of the parties' National Technical Means (NTM) to monitor compliance. Cooperative monitoring may also prove necessary to the extent that the NTM capabilities of the two sides are uneven. Cooperative monitoring can also play an important role in boosting mutual confidence.

A wide range of sensor technologies has been used successfully for the cooperative monitoring of different types of arms control agreements, whether conventional armaments, nuclear weapons, or missiles. Ground-based sensors could be used exclusively or in conjunction with aerial inspection or space-based surveillance technologies. Different agreements would require different levels of resolution.[49] Many

[49] For information on sensors and typical requirements for resolution, see Nazir Kamal and Pravin Sawhney, "Missile Control in South Asia and the Role of Cooperative Monitoring Technology", SAND 98-0505/4, Sandia National Laboratories, October 1998. Appendices C and D.

of these sensors are commercially available. Creative configurations can suit the requirements of a specific agreement. Meanwhile, advances in computer technology have greatly enhanced the efficiency of cooperative monitoring techniques.

5. Conclusions

Arms control continues to remain a neglected subject in South Asia. While both sides have some arms control advocates, on the whole there has been little public support or discussion of arms control.

It is difficult to see how the India-Pakistan military rivalry can be contained without some form of agreement to stabilize their arms equation. Arms control could also help to lessen the burden of defense as well as indirectly assist the process of economic revival.

Of late, however, there have been some positive developments. The recently agreed agenda for bilateral talks between India and Pakistan consists of several subsets of issues. One of them falls under the rubric of "peace and security." Conceptually, it would include arms control, though much of the focus of attention in past talks, have been on CBMs.

Another development has been incipient Pakistani interest in concepts that imply some form of arms control, including:

1) the reference made by Prime Minister Nawaz Sharif to the need for a regime for nuclear restraint and conventional balance at the United Nations in September 1998,
2) the Pakistani delegate at the India/Pakistan talks in October 1998 formally proposed a "stabilization regime" covering nuclear weapons, ballistic missiles, and conventional forces.

Arms control could ...lessen the burden of defense (and) indirectly assist the process of economic revival...

Unfortunately, of the various issues that divide India and Pakistan, the most troubling are their fundamental differences over the Kashmir dispute. The two sides hold irreconcilable positions on this emotive issue and there is little sign that a breakthrough might occur.

In such circumstances, arms control prospects would be severely limited as the depth of mutual distrust would deter them from contemplating agreements, especially those requiring cooperative monitoring.

Until a breakthrough occurs, what might be possible are modest measures to reduce the threat of war. Concern about the danger of war has been heightened by the

nuclear dimension, especially in the aftermath of nuclear device tests. Any measure that can even modestly lessen that danger would be a welcome development.

One such measure could be a substantially upgraded UN monitoring force along the LoC in Kashmir so that its presence can discourage cross-border firings as well as more serious clashes between the forward-deployed Pakistani and Indian forces. The most likely scenario of a future conflict would be an escalation of military confrontation along the LoC. A sizable UN presence would also help to address India's accusations that Pakistan is sending trained infiltrators to support the armed unrest on the Indian side of the LoC.

Another proposed measure is an agreement or a tacit understanding for the nondeployment of ballistic missiles. Nondeployment would cover all kinds of such missiles since it would be difficult to distinguish a nuclear-armed from a conventionally armed missile. The deployment of missiles would not only make a future conflict more destructive, it would also increase the risk of escalation to the nuclear level.

India and Pakistan should also consider a "no-war" or nonaggression pact. Such a pact would be declaratory in nature and susceptible to conflicting interpretations about what constitutes aggression or would constitute aggression in an actual crisis. However, it would still be a step forward, especially given that there is heightened concern about the danger of conflict and the fact that they have not been able to move forward on any major issue.

Should there be a breakthrough in the India-Pakistan relationship or should the two adversaries become more amenable to the idea of stabilizing their mutual security through arms control, they could consider the Sinai agreements as a general model for reducing mutual threat-perceptions and for stabilizing the military situation along their common border at a lower level of armaments.

Establishing force-limitation zones along the border would be a less ambitious and a more manageable approach than the type of arms control attempted under the Conventional Forces in Europe treaty. A Sinai-type agreement may require some form of an aerial inspection protocol for verifying compliance. It may also require early warning monitoring stations on both sides of a force limitation, or buffer, zone. Where necessary, reliance may also be placed on the use of ground sensors. This model would have to be adapted to suit the India-Pakistan context.

An additional long-term prospect for promoting the conventional arms control process between India and Pakistan is for both sides to build up expertise so that they can carry out monitoring and verification missions associated with regional arms control agreements. This will not only help serve the purpose of verifying a force limitation agreement but may also prove necessary for the verification of other substantive arms control approaches. As greater levels of intrusiveness are accepted, more types of on-site systems could be employed to build confidence and verify compliance with agreements.

APPENDIX A: Examples of Conventional Arms Control Agreements

A.1 Sinai Disengagement Agreements

The Sinai I and II agreements came in the wake of the Arab-Israeli war of 1973. Under Sinai-I, signed in January 1974, Israel withdrew 20 km from the Suez Canal and a 10-km buffer zone was created with limited force zones on both sides. A UN peacekeeping force conducted on-site inspections while the U.S. provided aerial surveillance to monitor the situation.

More significant was the Sinai-II agreement, reached in September 1975. Under it, Israel withdrew from the Giddi and Mitla passes to a line east of these passes in return for the monitoring of those strategic passes by the U.S. A wider 25-km buffer zone was created between limited force zones where Egypt and Israel were restricted to a maximum of 8,000 military personnel along with ceilings on tanks and artillery pieces. Egypt and Israel were permitted to operate a single signal collection station in the buffer zone near the Giddi pass. They were also permitted to conduct aerial reconnaissance missions up to the edge of their respective force limitation zones.

A UN peacekeeping force of 4,000 personnel inspected the Israeli and Egyptian garrisons in the limited force zones, while the U.S. operated sensor fields at the two passes, using off-the-shelf seismic, acoustic, and magnetic sensors that had earlier been used in the Vietnam War. The U.S. performed overflights to observe the buffer zone and conducted inspections of the Israeli and Egyptian signal collection stations in the buffer zone. Under Sinai-II, an area of 620 square kilometers was monitored.

Its implementation proved extremely successful. There were few significant violations and the monitoring systems worked well. The confidence that resulted from this contributed significantly to the Egypt-Israel Peace Accord of March 1979. Under that accord, Israel withdrew from the Sinai in phases, completing the process in 1982. The monitoring of the Giddi and Mitla passes was terminated earlier in 1980.[50]

The peace accord of 1979 imposed restrictions on Egyptian military presence in the Sinai by creating several force limitation zones. In the post-Sinai phase, the following steps were taken: in Zone C, closest to the Israeli border, Egypt could only deploy civilian police units while in Zone B it could maintain up to 4,000 lightly armed troops. A ceiling of 22,000 troops, 230 tanks, 540 armored personnel carriers, and 126 medium-range artillery pieces was imposed on Egypt in Zone A on the Sinai side of the Suez Canal. The UN peacekeeping forces monitor these arrangements in coordination with the parties that rely on their National Technical Means (NTM).

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[50] See Michael Vannoni, *Sensors in the Sinai: A Precedent for Regional Cooperative Monitoring*, Cooperative Monitoring Center, Sandia National Laboratories, Albuquerque, New Mexico, April 1996, p.xiii.

As the Sinai-II agreement showed, sensor-based monitoring can be an effective instrument for cooperative monitoring even if the parties are deeply suspicious of each other and have a history of deep mutual distrust. The sensors used were fairly simple by contemporary standards. Though their capabilities and hardiness had been established in the Vietnam War, conditions in the Sinai were vastly different.

However, cooperative monitoring would not have been possible in the Sinai case without a third-party role by the U.S., which had friendly relations with both Israel and Egypt. Another lesson is that Sinai-II's success was facilitated by progress toward a peace treaty. Doubtless, the effectiveness of Sinai-II contributed to the success of the peace process, but the crucial breakthrough from Sinai-I to Sinai-II may not have occurred except in the context of shuttle diplomacy by the U.S. and movement toward a peace accord.

A.2 Golan Heights Disengagement Agreement

In May 1974, after the termination of armed conflict between Israel and Syria, an 80-km demilitarized zone was established in the Golan Heights. Surface-to-air missiles are banned from 5-km-wide adjacent zones on both sides. A UN observer force monitors the agreement, using 11 observation posts. Sensors are not employed. Reliance by the two parties on their NTM and coordination between them and the UN force has proved adequate. The agreement's duration is indefinite.

The Golan Agreement has worked very well for more than two decades even though a peace process has not been in place and the two parties have been at loggerheads over Lebanon. The radical Hizbollah, backed by Syria and Iran, has been at war with Israel, which occupies a strip of territory in southern Lebanon. Perhaps the main reason for the stability of the Golan accord is that both parties want to avoid conflict and, as has been observed, the "overall system of monitoring provides sufficient early warning to both parties."[51] The Golan case demonstrates that sensor technology is not indispensable for all types of agreements.

A.3 Open Skies Agreements

As the Open Skies agreements show, the degree of intrusiveness from aerial inspection can be controlled by placing restrictions on the type of sensors to be employed and on their technical parameters. Similarly, the territorial scope of such inspection can be controlled by placing constraints on the aircraft's altitude and flight path. For example, with a ground resolution of 4.5 meters, cameras mounted on an aircraft can only detect the presence of a bridge. The object's precise identification would require a much

[51] See Michael Vannoni et al., *Confidence Building on the Korean Peninsula: A Conceptual Development for the Cooperative Monitoring of Limited-Force Deployment Zones*, SANDOC97-0583, Cooperative Monitoring Center, Sandia National Laboratories, Albuquerque, New Mexico, April 1997, p. 59.

sharper resolution of 1.5 m, while a detailed description of it would require a 1-m or better resolution.

The experience gained from the multilateral Open Skies treaty and a similar agreement between Hungary and Romania could apply to other regions to address specific requirements.

A.3.1 Open Skies treaty between NATO and former Warsaw Pact

In 1992, the member-states of NATO and the former Warsaw Pact, together with some former Soviet republics, signed an Open Skies treaty, for which negotiations had begun in 1989. The treaty's purpose was to create transparency and generate mutual confidence by allowing the parties to observe by aerial inspection any significant military movements, including training exercises. Although the treaty has not yet come into force (because of delays in its ratification by Russia and Ukraine), there are encouraging signs that this may happen in the near future.

Under this treaty, each party can conduct a limited number of short-notice flights by unarmed aircraft anywhere over the territory of other parties, using approved technologies and in the presence of the personnel of the host country. The treaty provides for rigorous checking of the aircraft's instruments shortly before an overflight is undertaken. All the parties to the treaty share the data equally.

The question of intrusiveness was a highly sensitive issue during the negotiations, and much of the delay in concluding the treaty was caused by this issue, which was initially a major concern of the former Soviet Union and also of the U.S.

The treaty stipulates sensors with specific capabilities and configurations, allowing the inspected party to monitor their application during the overflight in order to guard against any loss of vital national secrets, while enabling enough information to assure the parties of adequate transparency. The technologies are commercially available, inexpensive, and can be operated easily.

The treaty provides for four categories of sensors, including aircraft-mounted optical and video cameras (both with a 30-cm resolution), an infrared scanner with a 50-cm resolution, and a sideways-looking synthetic aperture radar (SAR) with a 3-m resolution.

Although the Open Skies agreement is not linked to the Conventional Forces in Europe (CFE) treaty, the transparency derived from it would supplement the monitoring provisions of the CFE treaty, agreed to during the Cold War, which do not include aerial inspection.

The Open Skies treaty, which provides an unprecedented degree of transparency, was facilitated by the end of the Cold War and the Soviet collapse in early 1991. Until then, the talks had made little progress because of the issue of intrusiveness. Another factor that made the treaty possible was the idea of a common European home, which

post-Communist Russia was eager to be a part of, and for which such a treaty was considered essential by Western Europe. Although the treaty has not entered into force, a number of trial flights have taken place over the territories of some member-states.

A.3.2 Open Skies Agreement between Hungary and Romania

The only instance, thus far, of a bilateral Open Skies agreement is the one between Hungary and Romania that came into effect in 1992. It was negotiated after the multilateral Open Skies talks between NATO and former Warsaw Pact members ran into snags, and it was feared that the imminent collapse of the Warsaw Pact (of which both were members) would create a vacuum, thereby bringing their pre-Cold War tensions to the surface.

Thus, the purpose of this treaty was to create mutual confidence and goodwill so that an amicable solution could be found to the sensitive issue of ethnic minority rights that had been the cause of bitter bilateral relations in the pre-war period. It succeeded in enabling them to achieve a historic reconciliation in 1996.

The treaty provides for four overflights a year after an advance notice of one week. Each flight is limited to a distance of 1200 km or a maximum duration of three hours. Loitering or repeated passes over the flight path are prohibited. Although the agreement provides for optical and video cameras, in practice they have only made use of optical cameras with a ground resolution of 10 cm. Panchromatic film was used as it could be developed rapidly and the data could be shared quickly.

The objective of overflights was to provide enough transparency so as to enable detection of any significant military activity. The initial flights covered military facilities, including a military college, an exercise ground, a former Soviet air base, a military airfield, and an ammunition storage site.

Though technologically simple, the sensor adequately served their distinct needs. Indeed, with the passage of time, they did not feel the need to utilize the full quota of overflights.

Perhaps the most powerful factor that pushed Hungary and Romania into an Open Skies agreement was pressure from NATO, which had made the normalization of relations between them a precondition for their admission into the Western alliance, which they were very eager to join.

A.4 Conventional Forces in Europe Treaty

The Conventional Forces in Europe (CFE) Treaty is perhaps the most comprehensive conventional arms control regime in international history. Starting with 22 signatories, it now includes 30 countries. Its various restrictions on armaments encompass the territories of all the European NATO member-states and all the former Warsaw Pact countries as well as some former Soviet republics.

Signed in 1990, the treaty was conceived to address Cold War problems. Its general purpose was to achieve military stability in Europe at a lower level of armaments through agreed-upon ceilings on major weapon categories and other restrictions on the deployment of forces. The treaty's specific objectives were to eliminate the danger of surprise attack across Central Europe by NATO or Warsaw Pact forces and to make large-scale offensive operations exceedingly difficult to undertake for both sides.

The most salient features of the CFE treaty are the following:

- the equal limits imposed on tanks, artillery pieces, armored combat vehicles, fighter aircraft, and attack helicopters belonging to the alliances as groups
- restrictions on major armaments that active units can hold
- limits on major weapons that any one country in Europe can possess
- division of geographical areas into several zones with specific restrictions being placed on each zone
- obligations for the parties to negotiate reductions of military manpower for each country

The treaty came into effect in 1992 and, by 1995, more than 50,000 pieces of major military equipment had been destroyed, including 18,000 battletanks. Implementing the treaty's restrictions required more than 2,500 on-site inspections of declared sites, specified sites, and destruction sites.

In 1996, the CFE treaty parties agreed to adapt the treaty in light of the political and military changes that followed the end of the Cold War. In particular, Russia and Ukraine found certain restrictions that affect them directly to be adverse to their new security interests in their immediate periphery. Thus, to ensure the long-term viability of the treaty, it was agreed that restrictions on force deployment would be lifted for certain parts of the northern and southern zones of the treaty area. A broader adaptation of the treaty, as agreed to in principle, has yet to be concluded.

APPENDIX B: Indian and Pakistani Conventional Force Agreements

B.1 Agreement between India and Pakistan on the Advance Notice on Military Exercises, Maneuvers and Troop Movements

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 form 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

B.2 Agreement Between Pakistan and India on Prevention of Air Space Violations and for Permitting Over Flights and Landings by Military Aircraft

Preamble

States parties to the present Air Agreement, recognizing the fact that both the Pakistan Air Force (PAF) and the Indian Air Force (IAF) aircraft operate near each other's airspace.

Aware that despite best efforts by both sides, violations of each other's airspace have occurred from time to time.

Desirous of promoting good neighborly relations between the two countries. Conscious of the fact that renewed efforts should be made to avoid unnecessary alarm.

Have agreed to enter into the following Air Agreement:

Air Violations

Article 1

Henceforth, both sides will take adequate measures to ensure, that air violations of each other's airspace do not take place. However, if any inadvertent violation does take place, the incident will be promptly investigated and the Headquarters (HQ) of the other Air Force informed of the results without delay, through diplomatic channels.

Article 2

Subject to Articles 3,4 and 6, the following restrictions are to be observed by military aircraft of both the forces:

a. Combat aircraft (to include fighter, bomber, reconnaissance, jet military trainer and armed helicopter aircraft) will not fly within 10 kms of each other's airspace including ADIZ. No aircraft of any side will enter the airspace over the territorial waters of the other country, except by prior permission.

b. Unarmed transport and logistics aircraft including unarmed helicopters, and Air Observation Post (AOP) aircraft, will be permitted up to 1000 meters from each other's airspace including ADIZ.

Aerial Survey, Supply Dropping, Mercy and Rescue Missions

Article 3

In the event of a country having to undertake flights less than 1000 meters from the other's airspace including ADIZ, for purposes such as aerial survey, supply dropping for mercy missions and aerial rescue missions, the country concerned will give the following information in advance to their own Air Advisors for notification to the Air HQ of the other country:

a. Type of aircraft/helicopter.

b. Height of flight within Plus/Minus 1000 ft.

c. Block number of days (normally not to exceed seven days) when flights are proposed to be undertaken.

d. Proposed timing of flight, where possible.

e. Area involved (in latitude and longitude).

No formal clearance would be required as the flights are being undertaken within own territory.

Air Exercises Near Border

Article 4

In order to avoid any tension being created, prior notice be given with regard to air exercises, or any special air activity proposed to be undertaken close to each other's airspace including ADIZ, even though the limits as laid down in Article 2 are not likely to be infringed.

Communication Between PAF and TAF

Article 5

In matters of safety and any air operations in emergency situations, the authorities designated by the respective Governments should contact each other by the quickest means of communications available. The Air Advisor shall be kept informed of such contacts. Matters of flight safety and urgent air operations should promptly be brought to the notice of the other side through the authorities designated by using the telephone line established between the Army Headquarters of the two countries.

Operations from Air Fields Close to the Borders

Article 6

Combat aircraft (as defined in Article 2A. above) operating from the air bases specified below will maintain a distance of 5 kms from each other's airspace:

a. Indian Side

1. Jannu
2. Pathankot
3. Amritsar
4. Suratgarh

b: Pakistan Side

1. Pasrur
2. Lahore
3. Vehari
4. Rahim Yar Khan.

Flights of Military Aircraft Through Each Other's Air Space

Article 7

Military aircraft may fly through each other's airspace with the prior permission of the other country and subject to conditions specified in Appendix A to this Agreement.

Notwithstanding paragraph 1 of this Article, each country has the sovereign right to specify further conditions, at short notice, for flights of military aircraft through its airspace.

Validity of Agreement

Article 8

This Agreement supersedes all previous understandings in so far as air space violations and over flights and landings by military aircraft are concerned.

Article 9

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

Article 10

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

B.3 Agreement on the Prohibition of Attack Against Nuclear Installations and Facilities

Signed: December 31, 1988 (Islamabad)
Instruments of Ratification Exchanged: December 1990 (Entry Into Force)

The Government of the Islamic Republic of Pakistan and the Government of the Republic of India, hereinafter referred to as the Contracting Parties, reaffirming their commitment to durable peace and the development of friendly and harmonious bilateral relations; conscious of the role of confidence building measures in promoting such bilateral relations based on mutual trust and goodwill; have agreed as follows:

1. (1) Each party shall refrain from undertaking, encouraging or participating in, directly or indirectly, any action aimed at causing the destruction of, or damage to, any nuclear installation or facility in the other country.
(2) The term "nuclear installation or facility" includes nuclear power and research reactors, fuel fabrication, uranium enrichment, isotopes separation and reprocessing facilities as well as any other installations with fresh or irradiated nuclear fuel and materials in any form and establishments storing significant quantities of radio-active materials.

2. Each Contracting Party shall inform the other on 1st January of each calendar year of the latitude and longitude of its nuclear installations and facilities and whenever there is any change.

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

Done at Islamabad on this Thirty-first day of December 1988, in, two copies each in Urdu, Hindi and English, the English text being authentic in case of any difference or dispute of interpretation.

[Signed:]

Humayun Khan
Foreign Secretary
Islamic Republic of Pakistan

K.P.S. Menon
Foreign Secretary
Republic of India

About the Authors

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