

May 2008

An Overview and Assessment of the Indian Army's Cold Start Strategy

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A paper prepared for
Cold Start: India's New Strategic Doctrine and its Implications
Naval Postgraduate School
29-30 May 2008
Monterey, CA

In April 2004, the Indian Army announced a new limited war doctrine that would allow it to mobilize quickly and undertake retaliatory attacks in response to specific challenges posed by Pakistan's "proxy war" in Kashmir. This Cold Start doctrine marked a break from the fundamentally defensive orientation that the Indian military has employed since independence. Cold Start represents a significant undertaking for the Indian military as it requires combined arms to operate jointly with airpower from the Indian Air Force. This study explores the origins and details of the Cold Start concept and raises several questions about its potential impact on strategic stability on the sub-continent.

This paper has five parts. The first section provides an overview of the Sundarji doctrine and its perceived failure in Operation Parakram which took place in 2001-2002. The second section explains the pressures for doctrinal change that emerged following Parakram's conclusion. The third section outlines the significant features of the Cold Start doctrine. Section four explores a number of outstanding organizational, political, and strategic questions about the Cold Start concept. Section five identifies important contradictions between Cold Start and India's broader strategic goals vis-à-vis Pakistan and suggests that the strategy may do more harm than good for India's interests.

The Failure of the Sundarji Doctrine in Operation Parakram

Following the successful operational innovations displayed during the 1971 war, the Indian Army underwent a reorganization in the 1980s that was principally directed by Chief of the Army Staff (COAS) General Krishnaswamy Sundarajan.¹ Under Sundarji's strategy, the international border was protected by seven defensive "holding corps," which consisted of infantry divisions for static defense, mobile mechanized divisions that could respond to enemy penetrations, and a small number of armored units.² Although possessing limited offensive power, as their name implies, the primary role of the holding corps during a war was to check an enemy advance by manning the extensive defensive obstacles constructed in the border region.

Sundarji concentrated the army's offensive power into three mobile armored columns that were capable of striking deep into Pakistan. Each "strike corps" was built around an armored division with mechanized infantry and extensive artillery support.³ In a war, after the holding corps halted a Pakistani attack, the strike corps would counterattack from their bases in central India (I Corps in Mathura, II Corps in Ambala, and XXI Corps in Bhopal) and penetrate deep into Pakistani territory to destroy the Pakistan Army's own two strike corps (known as Army Reserve North and Army Reserve South) through "deep sledgehammer blows" in a high-intensity battle of attrition.⁴ The strike corps would operate under the protection of the Indian Air Force, which would be expected to

¹ Stephen P. Cohen, *The Indian Army: Its Contribution to the Development of a Nation* (Oxford: Oxford University Press, 1990), pp. 207-9. Initial aspects of the "Sundarji Doctrine" were tested in the early 1980s under the tenure of General Krishna Rao, however Sundarajan is given credit for refining the concept.

² V.R. Raghavan, "Limited War and Nuclear Escalation in South Asia," *Nonproliferation Review*, Vol. 8, No. 3 (Fall/Winter 2001), p. 8.

³ Ibid.

⁴ Pravin Sawhney and V. K. Sood, *Operation Parakram: The War Unfinished* (New Delhi: Sage, 2003), p. 81.

first gain air superiority over Pakistan and then provide close air support to ground operations.

Although innovative, the Sundarji's doctrine proved poorly suited to respond to the challenges posed by Pakistan's proxy war in Kashmir. Following the December 13, 2001 attack on the Indian Parliament building in New Delhi by suspected Kashmiri militants, India attempted to compel Pakistan to ban the Lashkar-e-Taiyyaba and Jaish-e-Mohammad, extradite twenty named individuals accused of terrorism in India, and prevent militants from crossing the line-of-control into Kashmir by launching Operation Parakram (Operation Valor) on December 18, the largest activation of Indian forces since the 1971 Bangladesh war.⁵ Although uncertainty still surrounds the actual objectives of Operation Parakram, at a minimum, India clearly intended to signal to Pakistan that, nuclear weapons or not, it was willing to go to war to end Pakistani support for militants in Kashmir.⁶ After the attack on the heart of its government, "something concrete needed to be done to show people at home and in the international community that India meant business."⁷ Unfortunately for India's efforts, the decisiveness of its message was undercut by the inability of the Indian Army to present a timely threat to Pakistan.

The armored columns of the strike corps took nearly three weeks to make their way to the international border area after the mobilization order was given. In this intervening period, the Pakistan Army was able to countermobilize on the border, and more important, major powers became increasingly concerned by the extent of India's military mobilization and counseled New Delhi to exercise restraint.⁸ Although initially sympathetic to India in the wake of the December 13 attack, the United Kingdom and the United States, which was conducting military operations in Afghanistan from support bases in Pakistan, were troubled by Delhi's increasing forcefulness as well as the subsequent diversion of Pakistani forces away from operations along the Afghan border that occurred in response to Parakram. Senior British and American officials urged the Indian government to refrain from military action until Pakistani President Pervez Musharraf delivered his "about turn" speech on January 12, 2002. In a nationwide address Musharraf denounced terrorism in the name of Kashmir and pledged a renewed crackdown on militant groups in Pakistan.⁹ By the time the strike corps had reached the border region, India's political justification for military action was significantly reduced as a result of Musharraf's declaration, and Operation Parakram quickly lost momentum. The result was a ten-month standoff, which cost an estimated \$2 billion and ended with India's quiet withdrawal rather than a military clash.¹⁰

⁵ For a detailed account of Operation Parakram, see *ibid*.

⁶ For supporting evidence that Pakistan has the ability to control the militant groups in Kashmir, see C. Christine Fair, "Militant Recruitment in Pakistan: Implications for Al Qaeda and Other Organizations," *Studies in Conflict and Terrorism*, Vol. 27, No. 6 (November 2004), pp. 489-504.

⁷ Sawhney and Sood, *Operation Parakram*, p. 10.

⁸ Countries urging India to halt its military buildup included France, Germany, Japan, Russia, Iran, Turkey and Saudi Arabia. P.R. Chari, Pervaiz Iqbal Cheema, and Stephen P. Cohen, *Four Crises and a Peace Process: American Engagement in South Asia* (Washington, DC: Brookings Institution Press, 2007), p. 164.

⁹ "Musharraf Speech Highlights," *BBC News*, January 12, 2002, http://news.bbc.co.uk/1/hi/world/south_asia/175251.stm.

¹⁰ Chari, et. al., *Four Crises and a Peace Process*, p. 162.

Assessment of Operation Parakram's outcome within India was mixed. Senior government officials, including the Prime Minister, the Defense Minister and the National Security Advisor have all claimed that the mobilization was a successful exercise in coercive diplomacy as it pressured Washington and Islamabad to take action against Islamic militant groups based in Pakistan.¹¹ In contrast, a number of independent observers believe that Operation Parakram was a less successful endeavor. For example, former COAS Shankar Roychoudhry called the mass mobilization a "pointless gesture" that had harmed India's credibility while journalist Praveen Swami went further in denouncing Operation Parakram as "arguably the most ill-conceived maneuver in Indian military history," which "ended as an ignominious retreat after having failed to secure even its minimum objectives."¹² Bolstering the critics' case is the fact that India had failed to achieve either the extradition of the wanted criminals or, despite Musharraf's public statements, a permanent end to Pakistani support for terrorism within India. This latter failure was made clear in the years following Operation Parakram as the death toll from terrorist attacks in Kashmir continued to rise.¹³

Pressure for a New Operational Concept

The Indian Army's postmortem analyses of Operation Parakram identified three principal failings with the performance of the Sundarji doctrine:

1. The enormous size of the strike corps made them difficult to deploy and maneuver. By the time the strike corps had reached their forward concentration areas, President Musharraf had given his "about turn" speech, and the international community was putting significant pressure on India to restrain its response. In the eyes of many senior Indian officers, this allowed Pakistan to inflict a high-profile attack on the Indian capital via its proxies and then exploit the Indian Army's long deployment time to internationalize the crisis in a manner that allowed Pakistan to escape retribution. Even those in the Indian government who claim that Operation Parakram was never intended to be anything more than an exercise in coercive diplomacy had to be disappointed in the long delay between policy decisions and military action.
2. The strike corps lacked strategic surprise. Pakistan had its intelligence agencies focused on the three strike corps, so that any action on their part would be quickly noticed—particularly given their large, lumbering composition. Furthermore, once the strike corps mobilized, their progress and destination could be easily deduced by Pakistani forces, which could move to counter any intended attack.

¹¹ See the comments by Vajpayee, Fernandes, and Mishra in S. Paul Kapur, *Dangerous Deterrent: Nuclear Weapons Proliferation and Conflict in South Asia* (Stanford: Stanford University Press, 2007), p. 136. For an external assessment that suggests India gained its political objectives in Operation Parakram, see Alexander Evans, "India Flexes Its Muscles," *Foreign Policy*, No. 130 (May-June 2002), pp. 94-96.

¹² Kapur, *Dangerous Deterrent*, p. 136-7.

¹³ Sumit Ganguly and Michael R. Kraig, "The 2001–2002 Indo-Pakistani Crisis: Exposing the Limits of Coercive Diplomacy," *Security Studies*, Vol. 14, No. 2 (April-June 2005), p. 307.

3. The holding corps' lack of offensive power was a cause for concern. Although these units were forward deployed in the border regions, they could carry out only limited offensive tasks. In the eyes of senior Indian Army officers, the total dependence on the strike corps for offensive power hindered India's rapid response to the December 13 attacks.¹⁴

Part of the blame for Operation Parakram's failure to achieve significant political aims fell on the Indian political leadership, which failed to define any strategic objectives for the mobilization. As Sawhney and Sood note, "Operation Parakram was ordered without giving any political direction to the armed forces about the target to be achieved."¹⁵ However, there were a number of additional factors that motivated the demand for a new operational concept capable of responding promptly to contingencies requiring limited military force in a nuclear environment:

- *Military Utility.* A war-fighting strategy that called for massive armored thrusts to dismember Pakistan was too crude and inflexible a tool to respond to terrorist attacks and other indirect challenges.¹⁶ Furthermore, it was recognized that mobilizing the entire military was not an appropriate policy to pursue limited aims.
- *Desire to Avoid External Intervention.* The long delay between the mobilization order and the actual deployment of the strike corps allowed outside powers, particularly the United States, to intervene before India could bring military force to bear. Rapid mobilization would be necessary to achieve a decisive outcome in a future crisis before Pakistan could internationalize the dispute.
- *Military Autonomy.* It has been argued that the delay between the mobilization order and the commencement of military operations created a gap which allowed India's political leadership to lose its nerve.¹⁷ For its part, the army was reportedly "furious" when it was told that there would be no war with Pakistan.¹⁸ It is believed that the ability to rapidly mobilize and commence offensive operations will oblige the political leadership to define strategic goals ahead of a mobilization and prevent interference once military operations are underway.

¹⁴ See the comments of the COAS during Operation Parakram, General Sundararajan Padmanabhan in Praveen Swami, "Gen. Padmanabhan mulls over lessons of Operation Parakram" *The Hindu*, February 6, 2004.

¹⁵ How the mobilized army was to achieve India's demands was similarly unspecified. Sawhney and Sood, *Operation Parakram*, p. 73.

¹⁶ Y.I. Patel, "Dig Vijay to Divya Astra: A Paradigm Shift in the Indian Army's Doctrine," *Bharat Rakshak Monitor*, Vol. 6, No. 6 (May-July 2004), <http://www.bharat-rakshak.com/MONITOR/ISSUE6-6/patel.html>.

¹⁷ Subhash Kapila, "Indian Army's New 'Cold Start' War Doctrine Strategically Reviewed," Paper No. 991 (Noida, India: South Asia Analysis Group, May 4, 2004) <http://www.saag.org/papers10/paper991.html>.

¹⁸ P.R. Chari, Pervaiz Iqbal Cheema and Stephen P. Cohen, *Four Crises and a Peace Process: American Engagement in South Asia* (Washington, DC: Brookings Institution Press, 2007), p. 171.

- *Interservice Rivalry.* The past decade has seen the Indian Air Force and Navy enhance their relative share of the defense budget at the army's expense.¹⁹ Moreover, defense analysts suggest that airpower and sea power will play an increasingly important role in India's national security, while the army finds itself increasingly relegated to internal security missions.²⁰ A new limited war doctrine that makes conventional force relevant to India's national security could justify the army's own modernization program vis-à-vis the air force and navy.

Cold Start

The Chief of Army Staff unveiled the new Cold Start concept in April 2004. The goal of this limited war strategy is to launch a retaliatory conventional strike against Pakistan before the international community could intercede, one that would inflict significant harm on the Pakistan Army while denying Islamabad a justification to escalate the clash to the nuclear level.²¹

Cold Start seeks to leverage India's considerable conventional strength to respond to Pakistan's continued provocation.²² This concept requires a reorganization of the Indian Army's offensive power from the three large strike corps into eight smaller division-sized "integrated battle groups" (IBGs) that combine mechanized infantry, artillery, and armor in a manner reminiscent of the Soviet Union's operational maneuver groups.²³ The eight battle groups would be prepared to launch multiple strikes into Pakistan along different axes of advance. The ground operations of the IBGs require integration with close air support from the Indian Air Force and naval aviation assets to provide highly mobile fire support. According to Gurmeet Kanwal, director of the Army's Center for Land Warfare Studies, India is seeking to "mass firepower rather than forces."²⁴ In addition, the holding corps are redesignated as "pivot corps" and would be bolstered by additional armor and artillery. This would allow them to concurrently man defensive positions and undertake limited offensive operations as necessary. Under the Cold Start concept, all elements of the Indian military would engage in continuous operations, day and night, until their military objectives were achieved.

¹⁹ In the 2008-2009 defense budget, the Army receives 47%, the Air Force 29% and the Navy 18%, with 6% devoted to Defense R&D. For the Army, this is a notable step down from the 70-20-10 rule that used to define Indian defense budgeting. Laxman Kumar Behera, "India's Defence Budget 2008-09" IDSA Strategic Comment, (New Delhi: Institute for Defence Studies and Analysis, March 19, 2008), <http://www.idsa.in/publications/stratcomments/LaxmanBehera190308.htm>.

²⁰ See the comments of Kapil Kak in Vishal Thapar, "A 'General' Unrest in Forces; Army, Navy, IAF at War," *CNN-IBN*, September 21, 2007.

²¹ For a representative view, see the comments made by a senior Indian officer ahead of the April-May 2007 Ashwamedh wargame, "Army's Wargames to Test Reflexes Against Nuke, Bio Attacks," *Times of India*, April 6, 2007.

²² Christopher Langton, ed., *The Military Balance, 2006* (London: International Institute for Strategic Studies, 2006), pp. 230-240.

²³ Patel, "Dig Vijay to Divya Astra."

²⁴ Gurmeet Kanwal, "Strike Fast and Hard: Army Doctrine Undergoes Change in the Nuclear Era," *Tribune* (Chandigarh), June 23, 2006.

Rather than deliver a catastrophic blow to Pakistan (i.e., cutting the country in two), the goal of Cold Start would be to make shallow territorial gains, 50-80 kilometers deep, that could be used in post-conflict negotiations to extract concessions from Islamabad. Some commentators have emphasized the ability to quickly mass ground and air firepower to deliver a punishing blow to the Pakistan Army, perceived to be the source of much of Pakistan's aggressive foreign policy, while not harming civilian centers.²⁵

Although the operational details of Cold Start remain classified, it appears that the goal would be to have three to five IBGs entering Pakistani territory within seventy-two to ninety-six hours from the time the order to mobilize is issued.²⁶ As Kanwal argues, “[the IBGs] should be launching their break-in operations and crossing the ‘start line’ even as the holding (defensive) divisions are completing their deployment on the forward obstacles. Only such simultaneity of operations will unhinge the enemy, break his cohesion, and paralyze him into making mistakes from which he will not be able to recover.”²⁷

A major emphasis of Cold Start is on the speed of both deployment and operations. By moving forces into unpredictable locations at high speeds and making decisions faster than their opponents can, the IBGs would seek to defeat Pakistani forces in the field by disrupting their cohesion in line with the tenants of maneuver warfare. The Indian Army would also seek to take advantage of surprise at both the strategic and the operational levels to achieve a decision before outside powers such as the United States or China could intervene on Pakistan's behalf. There also appears to be an unspoken assumption that rapid operations would prevent India's civilian leadership from halting military operations in progress, lest it have second thoughts or possess insufficient resolve.²⁸

The perceived advantages of the Cold Start doctrine over its predecessor are six fold:

1. Forward-deployed division-sized units can be alerted and mobilized more quickly than larger formations.²⁹ If the battle groups and the pivot corps start closer to the international border, their logistics requirements are significantly reduced, enhancing their maneuverability and the ability to surprise.
2. Even though division-sized formations can “bite and hold” territory, they lack the power to deliver a knockout blow. In the minds of Indian military planners, this

²⁵ Firdaus Ahmed, “The Calculus of ‘Cold Start’,” *India Together*, May 2004, <http://www.indiatogether.org/2004/may/fah-coldstart.htm>.

²⁶ This is particularly important as the majority of the Pakistan Army is based near the international border region and can mobilize to their wartime positions within seventy-two hours. S. Paul Kapur, “India and Pakistan's Unstable Peace: Why Nuclear South Asia Is Not Like Cold War Europe,” *International Security*, Vol. 30, No. 2 (Fall 2005), pp. 138-139.

²⁷ Gurmeet Kanwal, “Cold Start and Battle Groups for Offensive Operations,” *ORF Strategic Trends*, Vol. 4, No. 18 (June 2006), <http://www.observerindia.com/cms/sites/orfonline/modules/strategictrend/StrategicTrendDetail.html?cmaid=1504&mmaid=1505>.

²⁸ Subhash Kapila, “Indian Army's New ‘Cold Start’ War Doctrine Strategically Reviewed—Part II (Additional Imperatives),” Paper No. 1013 (Noida, India: South Asia Analysis Group, June 1, 2004), <http://www.saag.org/papers11/paper1013.html>.

²⁹ In a short duration conflict, India would be hard-pressed to leverage the numerical superiority of its conventional forces to achieve a decisive outcome. As a result, increased emphasis is put on rapid mobilization of forces in an effort to quickly achieve victory.

denies Pakistan the “regime survival” justification for employing nuclear weapons in response to India’s conventional attack.

3. Under Cold Start, the Indian Army can undertake a range of responses to a given provocation rather than the all-or-nothing approach of the Sundarji doctrine. This has the potential to enhance India’s ability to deter Pakistan, as Cold Start presents a significantly more credible threat of retaliation which can create uncertainty in the minds of Pakistani decision-makers about the level of impunity their nuclear deterrent provides.³⁰
4. Multiple divisions, operating independently, have the potential to disrupt or incapacitate the Pakistani leadership’s decision-making cycle, as happened to the French high command in the face of the German blitzkrieg of 1940.³¹ Indian planners believe that when faced with offensive thrusts in as many as eight different sectors, the Pakistani military would be hard-pressed to determine where to concentrate its forces and which lines of advance to oppose.
5. Having eight units capable of offensive action rather than three significantly increases the challenge for Pakistani intelligence’s limited reconnaissance assets to monitor the status of all the IBGs, improving the chance of achieving surprise. In a limited war, India’s overall goals would be less predictable than in a total war, where the intent would almost certainly be to destroy Pakistan as a state. As a result, Pakistan’s defense against Indian attacks would be more difficult because the military objectives would be less obvious.³²
6. If Pakistan were to use nuclear weapons against Indian forces, divisions would present a significantly smaller target than would corps. The dispersed operations by highly mobile units envisioned by Cold Start are the kind that would be required on a nuclear battlefield.

From a tactical and operational standpoint, Cold Start is a creative attempt to formulate a military solution to the security challenges on India’s western border. However, the problems India faces are both political and military in nature. As a result, it is not clear that limited war can enhance India’s ability to achieve its strategic goals. This issue, along with several others is explored in the subsequent section.

³⁰ The role of nuclear weapons in emboldening Pakistan’s revisionist aims is taken up in Kapur, *Dangerous Deterrent*, p. 132.

³¹ Highly mobile panzer units drove deep into French territory along multiple lines of advance, bypassing defenses and strong points. The presence of German troops behind French lines disrupted the French command and control systems. Although the French still possessed numerous troops in the field, the French high command was paralyzed and unable to respond to the quickly changing events on the ground—the result of which was France’s catastrophic defeat and occupation. John R. Boyd, *Patterns of Conflict*, ed. Chuck Spinney and Chet Richards (Atlanta, Ga.: DNI, September 2006), pp. 69-89.

³² One potential rebuttal to this argument is that the forward deployment of IBGs largely constrains them to certain areas of operation, thereby reducing, rather than increasing, uncertainty about their likely axis of advance.

Five Questions About Cold Start

As of mid-2008, Cold Start is in the experimental stage of development, having moved beyond mere speculation, but still more than a decade away from achieving full implementation.³³ As a result, there are a number of outstanding questions about the employment of Cold Start that remain to be answered. This section explores five of the most pertinent issues surrounding the limited war concept.

1. Does the Indian army possess the resources necessary to execute Cold Start?

There is significant disagreement as to whether India possesses sufficient conventional superiority over Pakistan to warrant discussion of a limited war strategy.³⁴ Fighting on the defensive, Pakistan would have the advantage of shorter lines of communication as well as a network of linear obstacles and prepared fighting positions designed to blunt India's advance. In these circumstances, some analysts point to the conventional wisdom of a 3 to 1 superiority in offensive strength at the tactical level as a requirement for successful breakthrough operations and note that India's deployed forces in the West achieve only parity with their Pakistani counterparts.³⁵ Others suggest that a 1.5 to 1 superiority in forces at the theatre level, which India possesses, would "guarantee" an advantage in combat power ranging from 5 to 1 to 6 to 1 "on 3 or 4 decisive strike axes."³⁶ As Stephen Biddle has noted, however, "Even outnumbered invaders can create a large local advantage on a chosen frontage" by differentially concentrating forces against a small section of the battle line and deploying fewer troops elsewhere.³⁷ Turning to the quality of the forces on the two sides, some experts have argued that the Pakistanis are qualitatively superior to the Indians, which could make up for their numerical inferiority.³⁸ Others observers believe that when quality and sophistication of weapons systems are taken into account, India's relative superiority in military forces is increased.³⁹ Yet, still others contend that "neither side can undertake a major conventional attack with a high degree of confidence in its success."⁴⁰ It is beyond the

³³ The analysis that supports this judgment can be found in Walter Carl Ladwig III, "A Cold Start for Hot Wars? The Indian Army's New Limited War Doctrine," *International Security*, Vol. 32, No. 3 (Winter 2007/08), pp. 175-190.

³⁴ Khurshid Khan, "Limited War under the Nuclear Umbrella and Its Implications for South Asia" (Washington, D.C.: Henry L. Stimson Center, May 2005), p. 21.

³⁵ Arzan Tarapore, "Holocaust or Hollow Victory: Limited War in Nuclear South Asia," IPCS Research Papers, No. 6 (New Delhi: Institute of Peace and Conflict Studies, February 2005), p. 16. For a general discussion of the 3:1 ratio, see John J. Mearsheimer, "Assessing the Conventional Balance: The 3:1 Rule and Its Critics," *International Security*, Vol. 13, No. 4 (Spring 1989), pp. 54-89.

³⁶ Kim R. Holmes, "Measuring the Conventional Balance in Europe," *International Security*, Vol. 12, No. 4 (Spring 1988), p. 166.

³⁷ Stephen D. Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (Princeton, NJ: Princeton University Press, 2004), p. 40.

³⁸ "Pakistan Has Quality Army, India Has Quantity, Say Experts," Agence France-Presse, May 22, 2002.

³⁹ John E. Peters, James Dickens, Derek Eaton, C. Christine Fair, Nina Hachigan, Theodore W. Karasik, Rollie Lal, Rachel M. Swanger, Gregory F. Treverton and Charles Wolf, Jr., *War and Escalation in South Asia* (Santa Monica, CA: RAND, 2006), pp. 36-37.

⁴⁰ Stephen P. Cohen, "South Asia," in Richard J. Ellings and Aaron L. Friedberg, eds. *Strategic Asia 2002-03: Asian Aftershocks* (Seattle, Wash.: National Bureau of Asian Research, 2002), p. 287.

scope of this section to render a definitive judgment on the matter, rather it simply seeks to highlight the considerable uncertainty surrounding the existing conventional balance.

Looking within the Indian Army, at present there appear to be significant material shortfalls that call into question its ability to execute Cold Start in the near-term. The army's tank corps suffers from a low operational readiness rate because much of its equipment is at the end of its service life. Although several hundred T-90 tanks recently acquired from Russia possess significant battlefield capabilities, they are at best a "silver bullet" force. Similarly, the integrated battle groups will require organic self-propelled artillery to have the mobility and firepower necessary to accomplish their mission. Yet, by one estimate, the army possesses only 10% of the self-propelled guns it needs.⁴¹ In addition, there are serious questions as to whether the army possesses the mobility and logistical capability to implement Cold Start. It is estimated that only thirty-five percent of the army is equipped to move about India, and an even smaller portion possesses the mobility to mount cross-border operations.⁴² Similarly, one recent assessment suggests that the armed forces possess less than 15% of the helicopter airlift capability Cold Start would require to move men and material.⁴³ Limited supplies of spare parts, primitive logistical networks, and inadequate maintenance facilities will also hinder offensive operations.⁴⁴ The army is attempting to gain the necessary funds to address these issues as part of its modernization program, however, India's defense budget is limited, and both the air force and the navy are pressing their own competing claims.⁴⁵

Even more deficient than the Indian Army's material shortfall is its lack of officers capable of executing Cold Start operations. A Cold Start-style maneuver doctrine requires high-quality junior officers who possess the initiative and flexibility to react to changing circumstances on the battlefield without explicit instructions from their superiors. This poses a significant challenge for the army which, as an institution, has demonstrated an unwillingness to entrust authority to junior officers and NCOs.⁴⁶ Furthermore it faces a shortage of more than 11,000 junior officers, while those it does have are the product of a military education system that emphasizes rote learning and the careful implementation of "schoolhouse solutions" rather than free thinking.⁴⁷ A conservative institutional culture that is resistant to change with subordinate units tightly controlled by higher command does not foster the initiative and creativity demanded by maneuver warfare.⁴⁸

⁴¹ John H. Gill, "India and Pakistan: A Shift in the Military Calculus?," in Ashley J. Tellis and Michael Wills, eds., *Strategic Asia 2005–06: Military Modernization in an Era of Uncertainty*, (Seattle, Wash.: National Bureau of Asian Research, 2005), p. 244.

⁴² Ibid.; and A.Z. Hilali, "India's Strategic Thinking and Its National Security Policy," *Asian Survey*, Vol. 41, No. 5 (September-October 2001), p. 745.

⁴³ Sandeep Unnithan, "Fast and Furious," *India Today*, April 7, 2008, p. 60.

⁴⁴ Ashok K. Mehta, "War or Peace?," Rediff.com, January, 18, 2002, <http://in.rediff.com/news/2002/jan/18ashok.htm>.

⁴⁵ Gill, "India and Pakistan," pp. 247-248.

⁴⁶ Sunil Dasgupta, "The Indian Army and the Problem of Military Change," in Swarna Rajagopalan, ed., *Security and South Asia: Ideas, Institutions and Initiatives* (London: Routledge, 2006), pp. 105-6.

⁴⁷ Sandeep Dikshit, "Major Shortage of Army Officers: Antony," *The Hindu*, March 6, 2008.

⁴⁸ V.K. Kapoor, "Indian Army—A Perspective on Future Challenges, Force Development, and Doctrine," *USI Journal*, Vol. 134, No. 3 (July-September 2004); Stephen Peter Rosen, *Societies and Military Power: India and Its Armies* (Ithaca, N.Y.: Cornell University Press, 1996), p. 233; and Tellis, *Stability in South Asia*, p. 24.

2. Have the other services embraced the Cold Start concept?

As an army concept for warfare on land, Cold Start places the other two services in a subordinate combat role. This is particularly true of the air force. Cold Start employs airpower according to the army's own vision of joint warfare, where elements of all three services are under the control of a unified (presumably army) commander. As Y.I. Patel notes, this plan runs counter to the Indian Air Force's own concept of joint operations, which involves the services fighting wars separately but according to a coordinated plan.⁴⁹ Furthermore, the air force believes that attaching aircraft to specific ground units in a defined geographic space, as the integrated battle group concept requires, is a fundamental misuse of airpower that fails to leverage the air force's numerical superiority over its Pakistani counterparts.⁵⁰ Given the army's previously mentioned shortages of self-propelled artillery, close air support takes on an ever more vital role in Cold Start as the IBGs will require highly mobile firepower of the type provided by attack helicopters and ground attack aircraft.

This issue is unlikely to be resolved quickly, as the air force continues to focus its efforts on air-to-air combat and strategic bombing while downplaying the importance of close air support as a core mission.⁵¹ This can be seen in the IAF's recent acquisition pattern which has focused on air superiority platforms such as advanced fighter aircraft and airborne early warning systems. Moreover, the focus on the IAF's own new doctrine, which reportedly emphasizes deep attack and strategic reach, appears to be moving further away from the types of missions Cold Start would require.⁵² An operational Cold Start capability would, therefore, require the air force to support the strategy at a level at which it has heretofore been unwilling to do.

In the absence of the appointment of a chief of the Integrated Defense Staff, India's three services function largely autonomously. Strong joint leadership would be required to force the army and the air force to integrate their wartime strategies and plans and overcome inter-service rivalries. Such leadership is unlikely to be forthcoming in the near term, suggesting that service-specific rather than joint warfighting strategies will continue to proliferate within the Indian military.

3. Does India possess the civil-military structures necessary to manage limited war in a nuclear environment?

Policymakers contemplating limited war must craft a strategy and related objectives that are achievable by the use of military force yet sufficiently limited to ensure that the conflict does not escalate to the nuclear threshold. Clear policy objectives are of utmost

⁴⁹ Patel, "Dig Vijay to Divya Astra."

⁵⁰ Ahmed, "The Calculus of Cold Start."

⁵¹ Oberoi, "Air Power and Joint Operations"; A.Y. Tipnis, "Indian Air Force 2020," *Security Research Review*, Vol. 1, No. 2 (January 2005), <http://www.bharat-rakshak.com/SRR/Volume12/tipnis.html>; and P.K. Vasudeva, "Integrated War Doctrine Required," *Tribune* (Chandigarh), January 18, 2005.

⁵² Rajat Pandit, "IAF Plans War Doctrine to Expand Strategic Reach," *Times of India*, August 2, 2007.

importance in limited wars because they must overcome both internal and external pressures to expand the scope of a conflict. Wars have a way of taking on a life of their own: Once lives have been lost, money has been spent, and territory has changed hands, leaders could face tremendous pressure to expand the scope or objectives of a conflict. In theory, clearly defined strategic objectives with a properly developed correlation between means and ends could be an effective way to prevent the escalation of a conflict. In practice, the selection of ways and means to conduct a limited campaign can be challenging for a national security bureaucracy such as India's, which is characterized by a high degree of disconnection between civil and military authorities.⁵³

In peacetime, the country's elected leadership is often disengaged from security matters and provides the military with only vague planning guidance.⁵⁴ Within India's defense community, civilian bureaucrats at the Ministry of Defense dominate decision-making, while the uniformed military is largely excluded from the security policymaking process. The impact of this disconnect between politicians and the military is apparent when evaluating Operation Parakram, which lacked clear objectives and terminated with inconclusive results. This raises questions about the ability of India's civilian leaders to set the kind of concrete objectives and associated military tasks that would be necessary to successfully engage in limited warfare between two nuclear powers.

4. Where would Cold Start be employed?

At present, it is not necessarily clear where a Cold Start-style limited military operation would be directed: Against jihadi training camps in Kashmir or their support bases in Punjab and Sindh? In pursuit of militants crossing the line-of-control? Against vulnerable parts of Pakistan as part of a response to a terrorist attack within India? There is an implicit assumption behind Cold Start that punishment inflicted by limited conventional strikes can persuade Pakistan to halt its support for Kashmiri militants.⁵⁵ Theorists of both limited war and coercion have suggested that an asymmetry of interests in the particular issue being contested is an important pre-condition for the successful use of limited force to change an opponent's behavior.⁵⁶ Yet, the issue of Kashmir is not a peripheral one for either India or Pakistan. As Paul Kapur notes, the disposition of the disputed territory has both important symbolic and strategic implications for the two

⁵³ A number of observers have identified significant flaws in India's defense management system. See for example, Vijay Oberoi, "Air Power and Joint Operations: Doctrinal and Organisational Challenges," *USI Journal*, Vol. 133, No. 1 (January-March 2003), pp. 3-22; and Ayesha Ray, "Civil-Military Relations in India: Questions and Concerns," *ORF Issue Brief*, Vol. 1, No. 6 (September 2004), pp. 4-6.

⁵⁴ India does not publish a national security strategy and subsequently the armed forces have little on which to base a national military strategy.

⁵⁵ The concept of deterrence by punishment is explored in Glenn H. Snyder, *Deterrence and Defense: Toward a Theory of National Security* (Princeton, N.J.: Princeton University Press, 1961), pp. 9-16. For a discussion of why punishment is unlikely to change Pakistani behavior, see Ganguly and Kraig, "The 2001-2002 Indo-Pakistani Crisis," pp. 316-317.

⁵⁶ See, for example, Henry Kissinger, *Nuclear Weapons and Foreign Policy* (New York: Council on Foreign Relations, 1957), p. 145 and Alexander L. George, *Forceful Persuasion: Coercive Diplomacy As an Alternative to War* (Washington, DC: United States Institute of Peace Press, 1992), pp.69-71.

countries.⁵⁷ As a result, it is not necessarily clear that a sufficient level of punishment can be inflicted on Pakistan to change its behavior without crossing its nuclear threshold.

5. Can India undertake limited conventional operations against Pakistan without triggering a nuclear response?

Preventing escalation in limited war requires clear signaling of intentions by both sides. However, by its very purpose, maneuver warfare seeks to surprise, confuse and disorient the adversary's decision-makers. Furthermore, it is not necessarily clear that political-military objectives that are considered limited in New Delhi will be viewed the same way in Islamabad or Rawalpindi. Cold Start envisions "limited" thrusts into Pakistan to a depth of 50-80 km. Yet as Raja Mohan notes, "in no past war [between India and Pakistan] has there been a penetration of the territory of the other side beyond 15-20 kilometers."⁵⁸ Given that a number of important Pakistani cities, as well as transport networks and lines of communication, lie close to the international border, it is easy to see how these limited offensives could be perceived to be quite unlimited.

Moreover, it is not at all clear that in a future conflict Pakistan would play by India's rules. As one Indian official has noted, "The idea that Pakistan will cooperate in a conflict and comply with India's wishes to fight a limited war is ridiculous. It will be naturally in [Pakistan's] interest to keep any conflagration as unlimited as possible."⁵⁹ Although the exact conditions under which Pakistan would use its nuclear weapons remain ambiguous, it has not ruled out employing them in response to a conventional attack. The clearest articulation of Pakistan's "red lines" comes from Lt. Gen. Khalid Kidwai, who, while head of the Strategic Plans Division, outlined the general conditions under which nuclear weapons could be used: India attacks Pakistan and conquers a large part of its territory; India destroys a large part of Pakistan's land or air forces; India blockades Pakistan in an effort to strangle it economically; or India pushes Pakistan into political destabilization or creates large-scale internal subversion in Pakistan.⁶⁰

The development of the Cold Start doctrine and associated improvements in the army's conventional war fighting capabilities has significant implications for stability on the subcontinent. Analysts such as Ashley Tellis have argued that the cornerstone of the "ugly stability" that has persisted between India and Pakistan is a product of the incapacity of either side to gain its political objectives through conventional war.⁶¹ As the asymmetry between India and Pakistan's conventional military power grows,

⁵⁷ Kapur, *Dangerous Deterrent*, p. 48.

⁵⁸ Mohan, "Conventional Arms Race in South Asia," in Pervaiz Iqbal Cheema and Imtiaz H. Bokhari, eds., *Arms Race and Nuclear Developments in South Asia* (Islamabad: Islamabad Policy Research Institute, 2004), p. 9-10.

⁵⁹ Quoted in Ganguly and Kraig, "The 2001-2002 Indo-Pakistani Crisis," p. 311.

⁶⁰ Paolo Cotta-Ramusino and Maurizio Martellini, "Nuclear Safety, Nuclear Stability and Nuclear Strategy in Pakistan: A Concise Report of a Visit by Landau Network-Centro-Volta," (Como, Italy: Landau Network, January 2001), p. 5. A subsequent discussion of Pakistan's nuclear program, sanctioned by the Pakistani government, that attempted to create more ambiguity about the conditions under which Pakistan would employ nuclear weapons can be found in Mahmud Ali Durrani, "Pakistan's Strategic Thinking and the Role of Nuclear Weapons," Cooperative Monitoring Center Occasional Paper, No. 37 (Albuquerque, N.M.: Sandia National Laboratories, July 2004), pp. 1-54.

⁶¹ Tellis, *Stability in South Asia*, p. 5.

Pakistan will come under increasing pressure to rely on its nuclear arsenal for self-defense. An operational Cold Start capability could lead Pakistan to lower its nuclear red line, put its nuclear weapons on a higher state of readiness, develop tactical nuclear weapons, or undertake some equally destabilizing course of action.⁶²

As the five questions explored in this section indicate, there is still a considerable need to think through the implications of Cold Start for India's national security goals. Fostering public discussion of these types of national security matters can help ensure that India's military doctrines are well aligned with the country's grand strategy. That issue is explored in the subsequent section.

Cold Start and India's Grand Strategy

India's national security establishment faces significant difficulty in linking its grand strategy to the development of its military doctrines and plans. As a result of the grand bargain struck at independence, Indian civil-military relations appear to conform to the Huntingtonian model of separate political and military spheres: Indian service chiefs have been granted operational autonomy in return for extremely limited input into national security policy-making at the highest levels.⁶³ Barry Posen has argued that the intervention of civilian leadership is necessary to ensure that a state's military doctrine is well integrated with its grand strategy, a situation that does not appear to be the case with Cold Start.⁶⁴

Within India, few politicians are well versed in military affairs, and the actual expertise in defense matters possessed by civil servants in the Ministry of Defense is "patchy" at best.⁶⁵ Moreover, following Nehru's blundering political interference in the 1962 war, Indian politicians have been wary of intervening in the details of military matters.⁶⁶ As a result, the armed services are often left to develop their strategies and plans without significant civilian direction, a practice that is unlikely to result in the fusion of strategic and military goals.

While this structural-bureaucratic problem is unlikely to be resolved in the near term, the Indian Army can take steps to address many of the issues raised in this paper by adopting a more transparent stance on Cold Start. The available evidence indicates that the Indian army developed Cold Start with minimal guidance from the country's political leadership. Refusal to engage in broader-based discussions of the Cold Start concept on the grounds that it is a warfighting strategy is myopic. If Cold Start is indeed a real concept for limited war rather than just a bureaucratic justification for army modernization programs, its strategic and policy implications deserve to be assessed by both India's political establishment and its strategic community. In particular, there needs to be a rigorous examination of the impact the development of an organizational

⁶² It has been suggested that Pakistan's nuclear escalation ladder has only "one rung." Shireen M. Mazari, "Nature of Future Pakistan-India Wars," *Strategic Studies* (Islamabad), Vol. 22, No. 2 (Summer 2002), pp.1-8.

⁶³ Cohen, *The Indian Army*, p. 219; Raju G.C. Thomas, *Indian Security Policy* (Princeton: Princeton University Press, 1986), p. 122.

⁶⁴ Posen, *The Sources of Military Doctrine*, p. 241.

⁶⁵ Cohen, *The Indian Army*, p. xii and 173.

⁶⁶ Dasgupta, "The Indian Army and the Problem of Military Change," p. 93.

Cold Start capability would have on India's strategic goals vis-à-vis Pakistan. Active pursuit of a limited war strategy runs the risk of upsetting favorable trends within Pakistan, most notably improved bilateral relations between India and Pakistan and the Pakistan Army's fight against domestic militancy.

Indo-Pak relations have improved considerably since the Composite Dialogue was initiated in February 2004. Although progress has been slow, the effort to promote a normalization of bilateral relations has resulted in the establishment of direct bus services across the line of control in Kashmir as well as confidence-building measures such as a ban on nuclear testing and a notification regime for ballistic missile tests. The new civilian Pakistani government, elected in February 2008, has signaled a more pragmatic approach to relations with India, which suggests that it may be possible for both sides to make progress on Kashmir and other outstanding territorial disputes. As Pakistan's first civilian government in years, the present coalition retains an unstable position, albeit one that has been helped by the Pakistan Army's decision to take a step backward from its visible intrusion into the country's governance. The perception of a renewed conventional threat from India could have the pernicious effect of reversing gains that have been made in the Composite Dialogue and encouraging the Pakistan army to reassert itself in the domestic political sphere.

The spread of Islamism and militancy from Pashtun tribal areas in eastern Pakistan has been a continual source of instability in Afghanistan and one that increasingly poses a threat to Pakistan itself. Over the past four years, the Pakistan Army has been focusing its attention on the Afghan border region and the associated challenge posed by domestic terrorists/insurgents in the Federally Administered Tribal Areas and North-West Frontier Province. While some Indian observers may gleefully welcome the sight of suicide bombers attacking the Pakistan Army as well-deserved "blowback" from Pakistan's past sponsorship of Jihadis in South Asia, the fact remains that it is in New Delhi's long-term interest to see Pakistan succeed in containing the spread of Islamic militancy. As a result, any action on India's part that leads the Pakistani government to concentrate its forces on a future Indo-Pak conflict rather than domestic counterinsurgency will be self-defeating.

As the analysis above indicates, the Indian Army's leaders must broaden their vision beyond the narrow military imperatives of responding to proxy war and consider the degree to which Cold Start fits in with India's broader strategic goals. At the same time, India's political leadership needs to engage with the Cold Start concept and think through the political and strategic implications of such a warfighting strategy.

It is a well-worn military axiom that no plan survives contact with the enemy. Cold Start is an example of creative military problem-solving in response to Pakistan's support for terrorism and stated rejection of a no-first-use nuclear doctrine. By moving away from the Sundarji doctrine, the Indian Army believes that it is developing the ability to respond to a Pakistani proxy war with conventional force, while remaining below the nuclear threshold. While Cold Start represents a significant advance in India's conventional capabilities, it is a concept that is poorly aligned with India's broader strategic goals. In the near term, active pursuit of Cold Start could have a pernicious impact on India's burgeoning relations with Pakistan. In the longer-term, if Cold Start were operationalized, it could risk provoking or escalating a crisis on the subcontinent that could breach the nuclear threshold.