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# MILITARY MODERNIZATION

*in an Era of Uncertainty*

*Edited by*

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## Regional Studies

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India and Pakistan: A Shift in the Military  
Calculus?

*John H. Gill*

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## EXECUTIVE SUMMARY

This chapter investigates how the security concerns and military modernization programs of India and Pakistan might alter regional security dynamics over the near term.

### MAIN ARGUMENT:

- India's forces today are sufficient to defend against China beyond the near term, but do not guarantee a quick, decisive conventional victory over Pakistan. Qualitative changes in technology, doctrine, and military culture, however, could shift the calculus in India's favor in the next ten to fifteen years.
- While trying to cope with domestic instability and maintain promising economic growth, Pakistan will modernize its armed forces at the margins in order to keep pace with India; these modernization efforts will continue to be based on incremental hardware improvements rather than doctrinal changes.

### POLICY IMPLICATIONS:

- Fundamental miscalculations regarding comparative force capabilities and terrorist violence remain the two most likely sparks for military confrontation. Stability could be fostered on the subcontinent if the nascent India-Pakistan dialogue can be reinforced, particularly in the institutionalization of conflict management measures.
- Pressing for an unambiguous end to militant infiltration into Indian Kashmir and for the dismantlement of terrorist infrastructure, as well as helping reconstruct Pakistani civil society and political institutions that neutralize extremist elements, could help reduce the threat to Pakistan's stability and regional peace posed by radical non-state groups.
- If New Delhi pursues an agenda of tailored modernization, including interoperability with U.S. and other foreign forces, then India will have the potential to become an important security provider in the region.

## India and Pakistan: A Shift in the Military Calculus?

*John H. Gill*

Comparative military capabilities are a central theme in South Asian security affairs. They dominate the complex India-Pakistan security dynamic and inform all interactions between South Asia's two largest powers and the rest of the international community. Given that the India-Pakistan relationship could once again explode into armed confrontation under the nuclear shadow, the status and prospects of Indian and Pakistani modernization programs warrant particular attention.

The main findings of the chapter are as follows: India—whose military advantages are routinely overestimated—has been traditionally unable to translate its numerical superiority into a rapid battlefield victory over Pakistan. If it can overcome a set of significant obstacles, however, New Delhi may succeed in acquiring the hardware and doctrine necessary to shift the military calculus decisively in its favor by 2020. The military dimension is also central to Sino-Indian relations. India casts a wary eye over its Himalayan shoulder, carefully monitoring the progress of Chinese military modernization even as the two Asian giants slowly move toward more productive and cooperative ties. Barring a major change in China's modernization efforts, India will only seek to equip itself with defensive and deterrent capabilities to keep Beijing at bay. Looking beyond the possibility of regional confrontations, the ability of India and Pakistan to keep pace with international military developments will largely determine each country's respective utility

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in counterterrorism operations, peacekeeping missions, and other cooperative international security enterprises. India, in particular, could become an important security provider along the sea lanes and littoral of the Indian Ocean. The speed, scope, and trajectory of military modernization in India and Pakistan are thus immediately relevant to the interests of the United States, Europe, and Asia.

This chapter is divided into two main sections that investigate India and Pakistan's responses to each country's respective security concerns. Each section first examines the military capabilities of India and Pakistan within the context of these countries' national strategies. An assessment looking at current and projected modernization programs then follows, before the chapter concludes with considerations into how these modernization programs might increase the options available to national leaders in coming years.

## India

### *Consistent Goals, Expanded Strategies*

As the modern avatar of an ancient civilization and heir to the British Empire's preeminence in the Indian Ocean, India believes that its overriding national security goal should be to establish "its rightful place in the emerging world order."<sup>1</sup> While the main thrust of Indian foreign policy has been consistent since independence, Indian grand strategy can be said to have slowly adjusted since the end of the Cold War. Having moved away from being a "permanent protestor" to assuming a more pragmatic role, India may now indeed be "on the verge of multiple breakthroughs."<sup>2</sup> Even if this assessment proves premature, New Delhi has successfully maintained the general contours of this new grand strategy amidst several changes of government since 1991 and is unlikely to make major alterations in the near future.

In practical terms, securing India's great power goals imposes two strategic requirements. The first of these is a sustained 5 to 6 percent economic growth rate.<sup>3</sup> Near-term growth will depend upon uninterrupted access to foreign sources of oil. Given the small contribution that nuclear power currently makes and the long lead time involved in significant expansion of such energy, the oil and natural gas components of energy security will occupy

<sup>1</sup> Indian Ministry of External Affairs, *Annual Report: 2003–04*, 1.

<sup>2</sup> Quotes from C. Raja Mohan, *Crossing the Rubicon* (New York: Palgrave Macmillan, 2004), 262; and C. Raja Mohan, "India's Diplomatic Spring," *Indian Express*, March 22, 2005.

<sup>3</sup> As measured in GDP in Dominic Wilson and Roopa Purushothaman, "Dreaming with the BRICs: The Path to 2050," Goldman Sachs Global Economics Paper, no. 99, October 1, 2003, 4.

a salient position in Indian strategic thinking. India's geographic position along the sea lines connecting the Persian Gulf with Asia's other growing economies reinforces India's potential to be a security provider along this crucial route. The need to secure access to these resources and unhindered foreign trade will have a clear impact on the direction of military development.

The second requirement is relative stability on the domestic front. With a persistent insurgency in Kashmir, continued unrest in the patchwork of northeastern states, and periodic outbreaks of leftist violence in the east, India's internal security situation is daunting. A multitude of police and paramilitary organizations are supposed to act as the principal line of defense against domestic turbulence, but the government has frequently turned to the army to cope with these ills. Such tactics distract regular troops from preparing for conventional conflict, absorb a portion of the military budget, and hinder the army's ability to recruit young officers. Efforts to replace regular army units with special counterinsurgency units under the control of the army (units known as "Rashtriya Rifles") have met with only partial success.<sup>4</sup> In a war situation, however, India would likely accept some risk on the domestic front in order to concentrate all available regular forces against the external foe.

Against this backdrop of economic exigencies and internal instability, New Delhi's strategic concerns can be envisaged as a set of expanding circles.<sup>5</sup> Within the immediate vicinity, Indian strategy must cope with three challenges: China, Pakistan, and its smaller neighbors—Nepal, Bhutan, Bangladesh, Burma, Sri Lanka, and the Maldives. The internal stability of these smaller states is a burgeoning concern for New Delhi, as any instability would call for increased border security and an *in extremis* ability to project regional force on short notice (as it did to quash a 1988 coup attempt in the Maldives). India's intervention in Sri Lanka in the late 1980s, however, was a chastening experience and, generally speaking, New Delhi today does not view these smaller states as arenas for active combat involvement.

China, on the other hand, constitutes one of India's most important relationships and plays a host of contradictory roles: economic competitor, potential military threat, increasingly important trading partner, occasional diplomatic collaborator, and ally and military supplier of rival Pakistan. Indian strategists are also concerned that Beijing's influence in Nepal, Ban-

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<sup>4</sup> India has no trouble recruiting enlisted soldiers, but the exigencies of military service and the lure of a booming economy have left the army some 13,000 officers short of its authorized strength. See Rahul Bedi, "Gen. J. J. Singh Faced with Task of Revamping Force," *Deccan Herald*, February 5, 2005.

<sup>5</sup> Ashley J. Tellis, "South Asia," in *Strategic Asia 2001–02: Power and Purpose*, ed. Richard J. Ellings and Aaron L. Friedberg (Seattle: The National Bureau of Asian Research, 2001).

gladesh, Burma, and Sri Lanka may be inimical to Indian interests. Nevertheless, Sino-Indian relations have steadily improved over the past decade and the two Asian giants have achieved a notable *modus vivendi* along their contested frontier. New Delhi's recent approach has thus been to facilitate slow reconciliation, accentuate new opportunities, and downplay controversies. Nonetheless, the 1962 war still casts a shadow, and India cannot ignore Beijing's military modernization programs. India's military capabilities must therefore account for the potential danger posed by China's conventional and nuclear forces—despite the growing commercial and diplomatic ties between the two countries.

Though China is a security concern over the long term, Pakistan presents an immediate challenge. Whereas India and China have not experienced a serious crisis for almost twenty years and have not fought one another for more than forty, Indian-Pakistani relations have, since independence, been punctuated with conflict, including a significant armed clash in 1999, a near-war confrontation in 2002, routine artillery exchanges in Kashmir up until late 2003, and ongoing Pakistani support for a separatist militancy inside India.<sup>6</sup> Recognizing that unremitting confrontation with Pakistan mires Indian foreign policy in a subcontinental context, New Delhi generally follows an unstated containment approach in dealing with its western neighbor. Though expanding political, economic, and cultural ties with Pakistan, India also uses diplomatic maneuvers to isolate Pakistan internationally. In terms of defense, New Delhi must cope with the entire spectrum of conflict; from nuclear exchange and full-scale conventional war to counterinsurgency operations in Indian Kashmir. The requirements inherent in this strategy—credible nuclear deterrence, conventional superiority, and counterinsurgency capabilities—have been relatively constant and are unlikely to change significantly in the near term.

The next circle of policy concern for New Delhi includes the Persian Gulf, Central Asia, and Southeast Asia. With over 70 percent of India's oil drawn from the Gulf and an expectation that demand will rise dramatically in the coming decades, India has a vital interest in the maintenance of stability in Iran and the Arab Gulf states. Furthermore, an estimated 3.5 million Indians work in the Gulf, providing valuable remittances and obligating New Delhi to take their safety into consideration.<sup>7</sup> Iran is also important as a potential avenue for commercial access to Central Asia and Afghanistan. Good relations with all of these countries serve a security purpose by deny-

<sup>6</sup> For the 2002 crisis, see Stephen P. Cohen, "South Asia," in *Strategic Asia 2002–03: Asian Aftershocks*, ed. Richard J. Ellings and Aaron L. Friedberg (Seattle: The National Bureau of Asian Research, 2003).

<sup>7</sup> Indian Ministry of Defence, *Annual Report 2004–05*, 13.

ing Pakistan the illusion of “strategic depth” in its dealings with India. While maintaining favorable ties with the Middle Eastern states, New Delhi has also succeeded in building an extraordinary relationship with Tel Aviv, with Israel being a particularly important source for military technology.<sup>8</sup> Trade and security concerns also drive the expansion of India’s commercial and strategic contacts with the Association of Southeast Asian Nations countries. New Delhi is keenly aware that India’s geographic location allows it to provide security of shipping in the Indian Ocean, and believes that stability and counterterrorism constitute key common interests with India’s South-east Asian neighbors.<sup>9</sup>

The outermost circle of India’s security interests encompasses global issues and interactions with more distant governments, chiefly the United States. In this arena, New Delhi recognizes that broad and deep ties with the world’s sole superpower are central to India’s continued economic success and to what Indian leaders see as the recovery of India’s “due status in the world.”<sup>10</sup> At the same time, India has not abandoned the ideal of strategic autonomy. Close relations with Russia, China, Japan, and the European Union serve India’s economic needs and enhance its freedom of action vis-à-vis the United States. To advance its agenda at the global level, however, New Delhi believes that India must be militarily credible, internally stable, economically strong, and diplomatically savvy.

Although India does not publish a national security strategy, its armed forces clearly have an important role to play that spans several key dimensions of this broad strategy. First, the vast array of military and paramilitary organizations are central to New Delhi’s approach to internal stability. Second, India’s conventional and nuclear capabilities are essential to the wary engagement with China and Pakistan.<sup>11</sup> Third, India’s growing energy needs will impose increasingly significant demands on the military (principally the navy) to provide security for unimpeded access to oil. At the same time, India’s security interests in the immediate region necessitate at least a force projection capability along the Indian Ocean littoral. Fourth, India’s armed forces (again, particularly the navy) have become important as adjuncts to New Delhi’s diplomacy. A powerful military is one of the emblems of great power status, and New Delhi hopes to use military cooperation and

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<sup>8</sup> After Russia, Israel is India’s most important arms supplier, and Israeli technical expertise is critical to a broad range of India’s weapons upgrade projects. See Sandeep Unnithan, “Getting a Boost,” *India Today*, February 14, 2005.

<sup>9</sup> Indian Ministry of Defence, *Annual Report: 2004–05*, 14.

<sup>10</sup> Prime Minister Manmohan Singh, speech at *India Today* conclave, New Delhi, February 25, 2005.

<sup>11</sup> Indian Ministry of Defence, *Annual Report: 2004–05*, 8–13.

arms deals to expand its influence abroad.<sup>12</sup> Similarly, India has consistently contributed to United Nations peacekeeping operations, both from a moral commitment to the institution and from a desire to bolster its Security Council aspirations. While success in weapons sales has largely eluded India thus far, an expanding menu of international military interactions is raising India's profile as a major player in the region and on the global stage. The corollary is that interaction with foreign forces, especially those of the United States, offers the Indian military unique training opportunities and experience with new technologies.

### *The Armed Forces Today: Competencies and Conundrums*

The force India maintains to support its grand strategy is one of the largest conventional military establishments in the world. India's one million man army is exceeded in number only by China's, its air force numbers more than 600 combat aircraft, and its navy is one of the ten largest in the world when measured by the number of principal surface combatants.<sup>13</sup> Many of the 650,000 paramilitary soldiers also have a role in directly supporting the regular forces. The bulk of India's military equipment is of Soviet/Russian origin, but much of this hardware is at or beyond the end of its expected service life and in urgent need of replacement.<sup>14</sup> The Indian Army is by far the dominant service, with the air force second in priority and the navy often underfunded and struggling for attention. All three services, however, exhibit high degrees of professionalism, training, and proficiency in fulfilling the demands the state has placed upon them.

Beyond these conventional capabilities, India possesses a growing nuclear force,<sup>15</sup> and nuclear considerations influence all of New Delhi's planning. A combination of aircraft and missiles are available as delivery means for nuclear weapons; India thus has the range to strike almost anywhere in Pakistan, but not yet to reach China's key population centers. Nuclear doctrine and force size continue to provoke lively debate, but Indian govern-

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<sup>12</sup> Such as exercises with the French Navy and Air Force, training with Singapore, limited support to Iran's armed forces, and efforts to market arms in Southeast Asia and the Gulf.

<sup>13</sup> The number of aircraft does not include trainers or intelligence collectors. See International Institute for Strategic Studies, *The Military Balance 2004–2005* (London: Oxford University Press, 2004).

<sup>14</sup> See Vivek Raghuvanshi, "Indian Army Faces Tank Shortages," *Defense News*, May 23, 2005.

<sup>15</sup> Estimates of Indian nuclear warhead numbers vary from 30–150 plutonium fission warheads of 5–25 kiloton yield. Most estimates are well below 100. See the Carnegie Endowment for International Peace at <http://www.carnegieendowment.org> (which provides an estimate of 70), the Natural Resource Defense Council at <http://www.nrdc.org> (est. 30–35), the Arms Control Association at <http://www.armscontrol.org> (est. 45–95), and *Jane's Sentinel Security Assessment—South Asia: India*, April 27, 2005 (est. 60 to 150).



ments since 1998 have maintained a “no first use” policy and have viewed nuclear weapons as “not really useable.”<sup>16</sup> India’s nuclear arsenal thus remains as “force in being” with a second strike capability designed to deter enemy use of weapons of mass destruction, rather than a tool of tactical utility.<sup>17</sup>

Though able to sustain a satisfactory defensive posture in the unlikely event of a war against China, India has only limited force projection capabilities around the Indian Ocean littoral or in the adjoining sub-regions, and would encounter serious strategic deficits in a conflict with Pakistan.<sup>18</sup> The two full-scale India-Pakistan wars were short (two to three weeks in duration),<sup>19</sup> and strategic thinkers on both sides expect that another conflict would be similarly brief, with international pressure, nuclear threats, and/or nuclear exchange bringing combat to a swift conclusion.<sup>20</sup> Therefore, although a prolonged conflict would allow India to exploit its numerical superiority and could exhaust Pakistan’s logistical stocks, Indian strategists believe that India must mobilize and win quickly.<sup>21</sup> Even in a purely conventional scenario, however, India’s armed forces do not currently have the capabilities necessary to guarantee a decisive military victory against Pakistan within such a narrow time frame.

Although the Indian and Pakistani armies are generally equivalent in qualitative metrics such as training and leadership, India’s numerical advantage is deceptive. The Indian quantitative superiority in personnel and equipment is relatively narrow in relation to Pakistan, and India’s services are dogged by major deficiencies that reduce its advantages to near parity. In the first place, in any war with Pakistan a significant number of troops would have to be held on the border with China in order to make sure that Beijing did not assist its nominal ally. Second, India’s acquisition of new hardware can give a misleading impression of its overall technological level—while important on the local battlefield, they may not transform overall Indian capabilities. Three hundred and ten T-90 tanks, for instance, represent less than ten percent of the Indian tank fleet, much of which is obsolete. More

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<sup>16</sup> Quoted from Natwar Singh (address at the Conference on Emerging Proliferation Challenges, New Delhi, March 28, 2005), <http://meaindia.nic.in>.

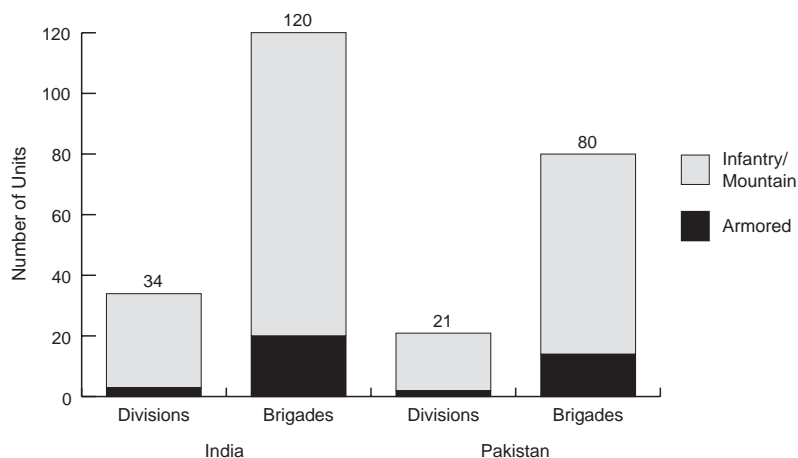
<sup>17</sup> Ashley J. Tellis, *India’s Emerging Nuclear Posture* (Santa Monica, CA: RAND, 2001); for India’s doctrine, see “The Cabinet Committee on Security Reviews Operationalization of India’s Nuclear Doctrine,” January 4, 2003, <http://meaindia.nic.in>.

<sup>18</sup> Pravin Sawhney, “Evolving Nuclear Environment Moulds India’s Military Strategy,” *Jane’s Intelligence Review*, August 2004.

<sup>19</sup> The 1947–48 war is not considered “full-scale” here because of the relatively small number of forces involved, the fact that it was confined to Kashmir, and the peculiar circumstances associated with the partition of India.

<sup>20</sup> *Indian Army Doctrine*, October 2004, <http://www.indianarmy.mic.in>; and Shaukat Qadir, “War Termination Strategy for Pakistan,” *Daily Times*, December 13, 2003.

<sup>21</sup> Shaukat Qadir, “India’s ‘Cold Start’ Strategy,” *Daily Times*, May 8, 2004.

**Figure 1. India-Pakistan Division and Brigade Comparison**

Note: Numbers of brigades are approximate. Source: International Institute of Strategic Studies, *The Military Balance 2004–2005*, London: Oxford University Press, 2004; *Jane's Sentinel Security Assessment – South Asia*.

important for the ground forces, however, are weaknesses in logistics and mobility, especially given the immature infrastructure along much of the India-Pakistan border. Only 20 of approximately 120 maneuver brigades in the Indian Army are fully mobile, for instance—the rest have only a limited capacity to transport their organic troops, weapons, and supplies simultaneously.<sup>22</sup> Other critical assets, such as self-propelled artillery, are also in short supply, and thus commanders are constrained from employing their few mobile troops in bold advances.<sup>23</sup> Instead, the bulk of the army's maneuver forces—some 84 percent of its brigades—rely on railroads, military trucks, and civilian hire transport to make any significant moves; their ability to conduct deep penetrations across the border is thus questionable. As a result, much of the Indian manpower advantage is almost irrelevant in a war of short duration. The army's conservative institutional culture is another hindrance militating against decisive offensive warfare.<sup>24</sup> Political constraints against losing any Indian territory and a lack of real-time intelligence would exponentially compound the challenges of moving large ground forces over

<sup>22</sup> The number of brigades is an estimate based on *The Military Balance 2004–2005*, and is probably low as some Indian infantry divisions have more than the normal three maneuver brigades.

<sup>23</sup> To equip just its three armored divisions and seven independent armored brigades with self-propelled artillery, the Indian Army would need at least 300 such guns. It has about 30 serviceable self-propelled guns and perhaps 150 more in storage.

<sup>24</sup> See V. K. Kapoor, "Indian Army: A Perspective on Future Challenges, Force Development and Doctrine," *Journal of the United Services Institution of India* 134, no. 557 (July–September 2004).

difficult desert and semi-desert terrain rapidly enough to achieve a decisive victory over Pakistan.<sup>25</sup>

India's real quantitative superiority over Pakistan in air and maritime forces is not currently sufficient to compensate for this near parity of ground force capabilities. Furthermore, doubts about the timeliness and accuracy of intelligence, the limited numbers of precision-guided munitions, and differences with the army over the merits of close air support all reduce the effectiveness of army-air force cooperation.<sup>26</sup> Historically, Indian joint operations have seldom proceeded smoothly; the air force, for instance, has not given much priority to the army's demands for on-call support for tactical targets.<sup>27</sup> Air force-navy cooperation has also been problematic.

All of these conventional force considerations are complicated by India's longstanding strategic conundrum: how to gauge when India is close to crossing one of Pakistan's intentionally ambiguous nuclear "red lines." New Delhi also faces a major challenge in defining its war aims and crafting suitable military operations to achieve them. What military actions will force Pakistan to cease support for militants in India? Will punitive strikes alter Pakistani behavior or merely start a cycle of escalation? Can escalation be controlled? These questions remain under debate, but the gap between Indian operational plans and probable war aims is likely quite large. The gap between those same plans and Pakistan's nuclear threshold, on the other hand, could be quite small. Assessing Pakistani perceptions of the shifting battlefield situation and calibrating the Indian response would be enormously challenging in the tension and confusion of combat. The scope for miscalculation is thus high and the problem is not amenable to technological solutions—that is, a new piece of equipment is not likely to offer much additional clarity for the decisionmaker in a future crisis.

### *Indian Modernization Programs: Enough Parts to Make a Whole?*

India is looking to use military modernization as one means to exert influence and move closer to its grand strategic goals of building a regional force projection capability, keeping pace with China, and presenting a credible conventional threat to Pakistan despite the latter's nuclear arsenal. Moreover, many Indian military officers believe that modernization is imperative

<sup>25</sup> J. F. R. Jacob, "The Maginot Mentality," *Force*, April 2005.

<sup>26</sup> An overview of joint issues appears in Vijay Oberoi, "Air Power and Joint Operations: Doctrinal and Organisational Challenges," *Journal of the United Services Institution of India* 133, no. 551 (January-March 2003); Vinod Patney provides an IAF perspective in the same issue of this journal.

<sup>27</sup> Prasan Sengupta, "Air Warriors in the New Millennium," *Vayu Aerospace Review*, vol. 5 (2001).

to restoring the conventional superiority over Pakistan that has in many respects steadily diminished over the past three decades.<sup>28</sup>

*The Army.* Although the Indian government's national strategy is broad, the focus of army thinking is Pakistan. The two recent confrontations between India and Pakistan sharpened New Delhi's frustration at being unable to translate conventional superiority into an effective exercise of power in the face of what it perceives as incessant Pakistani sub-conventional provocation. Though this conundrum is not new, the 1999 Kargil war intensified the search for a "strategic space" in which India's conventional forces could operate beneath Pakistan's nuclear thresholds. Proponents referred to the conventional force answer as "limited war," a problematic strategy under which Indian forces could launch shallow attacks or "surgical strikes" into Pakistani-controlled territory without prompting a nuclear response.<sup>29</sup> Indian strategic thinkers refined the "limited war" concept in the wake of the 2002 confrontation.<sup>30</sup> Some Indians were convinced that their country had enjoyed a brief advantage over Pakistan during the first weeks of the crisis, but was unable to exploit this opportunity because the transition from peace to deployment (called Operation Parakram) unfolded too slowly, thereby giving the international community time to intervene.<sup>31</sup>

The Indian Army conducted a detailed review of Operation Parakram and announced a new service strategy in April 2004. Popularly called "Cold Start," this strategy calls for the creation of some eight "integrated battle groups" of army, air force and, where appropriate, navy forces.<sup>32</sup> The hope is that these battle groups, garrisoned near the border, will be able to mobilize rapidly, launching powerful attacks within days while reserves from the interior move to the front. The army intends to boost the effectiveness of its quantitative advantage through greater cooperation with the air force and better utilization of high-technology force multipliers such as intelligence assets, special forces, and command/control systems.<sup>33</sup> Whereas the old strategy aimed to divide Pakistan by seizing critical terrain through deep penetrations, the operational goal now seems to be to inflict severe damage

<sup>28</sup> See Vivek Raghuvanshi, "Indian Army: Our Edge is Slipping," *Defense News*, October 13, 2003.

<sup>29</sup> Jasjit Singh, "Exploring India's Options," *Indian Express*, May 16, 2002.

<sup>30</sup> For trenchant critiques, see V.R. Raghavan, "Limited War and Nuclear Escalation in South Asia," *Nonproliferation Review*, Fall-Winter 2001; and Suba Chandran, "Limited War with Pakistan: Will It Secure India's Interests?" (Champagne-Urbana: University of Illinois, 2004).

<sup>31</sup> See, for instance, "Cold Start to New War Doctrine," *Times of India*, April 14, 2004; and Anil Athale, "We Were Ready to Punish Pakistan," *Rediff.com*, Rediff Special, March 1, 2005.

<sup>32</sup> Pravin Sawhney, "Lean and Mean: New Command Boundaries against Pakistan Give Sharper Teeth to the Army," *Force*, March 2005.

<sup>33</sup> Vijay Mohan, "Shift in Army's War Strategy," *Tribune*, May 13, 2005.

on Pakistan's armed forces through the application of massive firepower.<sup>34</sup> Indian forces theoretically could remain on their own side of the border/line of control while launching stunning artillery and airpower assaults. Indian ground units could also make shallow incursions, forcing the Pakistanis to launch counterattacks and thereby allow India's artillery and air force to have their most punishing effect.<sup>35</sup> The army has already changed the command structure on the Pakistan border to accommodate "Cold Start" and, in an effort to promote new thinking, has released a new doctrine outlining a reinvigorated operational philosophy.<sup>36</sup>

This emphasis on firepower is reflected in recent and projected army moves: standardizing the caliber of medium artillery, purchasing more guns overall, and supplementing these guns with multiple rocket launchers and Prithvi short-range ballistic missiles (SRBM). The army has also let a contract for an automated artillery fire control system, tested laser designation systems and acquired upgraded artillery ammunition.<sup>37</sup> It is not clear, however, that any steps have been taken to modernize the logistical chain that will be needed in order to supply the enormous amounts of ammunition suggested by the new doctrine.

Simultaneously, the army is endeavoring to correct serious deficiencies in command/control and intelligence capabilities so that commanders, operating from "force multiplier command posts," will see the battlefield more clearly and respond more rapidly to changing operational situations.<sup>38</sup> Special forces are another area of increased army interest. Many Indian strategists see special forces as valuable assets not only against Pakistan, but also against China and in other regional force projection scenarios as well. The army chief has called for doubling the number of special forces battalions from five to ten by 2010.<sup>39</sup>

Though focused on the artillery arm at present, the army is also pursuing other modernization programs, such as replacing some of its aging

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<sup>34</sup> Not all Indian strategic thinkers agree with this "shallow penetration" concept. For the views of a proponent of the "strike hard, strike deep" approach, see Brig. (ret.) Gurmeet Kanwal, "Pakistan's Nuclear Threshold and India's Options," Observer Research Foundation, January 18, 2005, <http://www.observerindia.com>.

<sup>35</sup> Shishir Gupta, "No Eyeball to Eyeball Any More in New War Doctrine," *Indian Express*, March 6, 2004; and Y. I. Patel, "Dig Vijay to Divya Astra: A Paradigm Shift in the India Army's Doctrine," *Bharat Rakshak Monitor* 6, no. 6 (July 2004).

<sup>36</sup> Vijay Mohan, "New Command 9 Corps Formed," *Tribune*, March 20, 2005.

<sup>37</sup> See, for instance, Dalip Singh, "New Toys on Show at War Games," *Telegraph*, March 2, 2004; Pravin Sawhney, "Artillery Goes on the Biggest Shopping Spree Ever," *Force*, November 2003; and Vivek Raghuvanshi, "ACCS Links Indian Army Artillery," *Defense News*, October 18, 2004.

<sup>38</sup> Ajit K. Dubey, "Gaming for War," *Force*, May 2005.

<sup>39</sup> Gurmeet Kanwal, "Indian Special Forces: Reorganising for an Expanding Role," *Security Research Review* 1, no. 2 (January 2005).

tank fleet with Russian T-90s and upgrading infantry equipment in select units.<sup>40</sup> Whereas the new doctrine and systems associated with the artillery, intelligence, and command/control are potentially transformative, however, these other cases merely represent product improvements or the replacement of outdated models with newer equipment.<sup>41</sup> Moreover, much of the Indian Army's success will be determined by how well it copes with a mundane problem: overcoming the distance many units have to travel from their home garrisons to their deployment areas near the border. *The Air Force*. Where the army's modernization efforts are focused on Pakistan, the Indian Air Force (IAF) is acquiring capabilities that will be applicable against China as well. Benefiting from steady growth in its share of the defense budget since 2001 (from 17.6 percent to 24.7 percent), the IAF is making important acquisitions. The most important addition to the combat aircraft fleet has been 40 SU-30MKIs—one of the most advanced multi-role fighters in the world—purchased from Russia with a license to produce an additional 140 aircraft in India.<sup>42</sup> For medium-range fighters, the IAF has announced its interest in purchasing 126 aircraft in the near future to replace many of its MiGs, while at the same time upgrading several older types.<sup>43</sup> The indigenous Light Combat Aircraft could also begin to enter service around 2012. Less glamorous, but equally important, is the conclusion of a deal to purchase 66 advanced jet trainers from the United Kingdom to address a glaring gap in the IAF's pilot training capacity. Despite these prospective acquisitions, the advanced age of many current airframes means that the IAF will struggle to keep its numerical strength at existing levels during the next five to ten years.<sup>44</sup>

The heart of IAF modernization is the acquisition of key force multipliers. Air-to-air tankers are already in service (extending loiter time and range for many of the fighter types), while Israeli Phalcon airborne early warning and control systems (AEW&C) will for the first time give India an aerial surveillance platform to track multiple threats and vector friendly fighters. These new capabilities—if melded with sophisticated air-to-air missiles, proposed aircraft self-protection systems, and the acquisition of preci-

<sup>40</sup> See interview with Gen. J. J. Singh, Chief of the Army Staff, in *India Today*, February 14, 2005.

<sup>41</sup> Enhanced capabilities for infantry units at the tactical level do contribute directly to the ongoing fight against infiltrators and insurgents in Kashmir and elsewhere. See P. K. Vasudeva, "Futuristic Weapons for the Army: But a War Doctrine Should Also Be Ready," *Tribune*, May 15, 2004.

<sup>42</sup> A. Suresh, "Indian Air Force: Enhancing Operational Capability," *Asian Defence Journal* 1, no. 2 (January-February 2005).

<sup>43</sup> Rahul Bedi, "India Paves Way for Arms Upgrade Package," *Jane's Defence Weekly*, April 6, 2005. This paragraph also draws from *Jane's Sentinel Security Assessment—South Asia: India*, April 27, 2005.

<sup>44</sup> Gulshan Luthra, "IAF Needs at Least 300 Aircraft," *Tribune*, August 18, 2004.

sion-guided munitions—could make a dramatic difference.<sup>45</sup> Indeed, these changes—along with a potentially major role for the air force in “limited war” punitive scenarios—argue for a comprehensive doctrinal review and close integration with the army; yet the IAF seems inclined to retain its traditional emphasis on air defense, interdiction, and strategic targets.<sup>46</sup>

*The Navy.* Of the three services, the Indian Navy’s modernization efforts have the potential for the broadest strategic applicability. The navy’s greatest concern is China, but New Delhi’s maritime calculations also encompass such security issues as piracy, drug trafficking, and interdiction of terrorists.<sup>47</sup> Moreover, the maritime doctrine announced in 2004 specifically calls for the Indian Navy to serve as “an effective instrument of foreign policy,” not only as a source of coercive military power, but also as a diplomatic link to other countries.<sup>48</sup> The extensive program of bilateral training exercises, port visits, and other events that the navy has developed thus supports important national strategic objectives in the Indian Ocean and beyond.

Although the navy’s share of the defense budget has increased from 12.5 percent to 16.5 percent between 2001 and 2004, attaining the navy’s blue water requirement will be difficult. Owing to the “lost decade” between 1985 and 1995 when very few new ships were ordered, India’s admirals expect that the number of ships being decommissioned will outnumber new entrants until approximately 2012.<sup>49</sup> Ideally, the Indian Navy would be based around two carrier battle groups, a fleet of 24 conventional submarines, several nuclear-powered submarines, and as many as 30 long-range maritime patrol aircraft. The navy’s plan to build a force of three carriers (necessary to support two carrier groups reliably) is underway due to both an agreement reached with Russia to purchase the refurbished *Admiral Gorshkov* with an air wing, and the decision to construct an “air defense ship” (actually a carrier of 37,000 tons). Achieving the three carrier goal in the mid-term (optimistically by 2012) will remain problematic, however, since the navy is supposed to retire its lone extant carrier upon the arrival of the *Gorshkov*.<sup>50</sup> The submarine arm

<sup>45</sup> R. K. Jasbir Singh, *Indian Defence Yearbook 2004* (Dehra Dun: Natraj, 2004), 334.

<sup>46</sup> Jasjit Singh, “The Indian Air Force: Meeting the 21st Century Challenge,” *Vayu Aerospace Review*, September 2000; and A. Y. Tipnis, “Indian Air Force 2020,” *Security Research Review* 1, no. 2 (January 2005).

<sup>47</sup> “New Naval Doctrine Stresses on Developing Nuclear Triad,” *Outlook*, June 23, 2004. This section draws on *Jane’s Fighting Ships* (updated April 29, 2005), <http://www.4janes.com>; and *Jane’s Sentinel Security Assessment—South Asia: India*, April 27, 2005.

<sup>48</sup> Indian Navy, *Indian Maritime Doctrine* (2004), 102.

<sup>49</sup> See the interview with Admiral Arun Prakash in *Defense News*, March 28, 2005; and India Defence Consultants, “Indian Navy Update: It Requires Manpower,” April 7, 2005, <http://www.indiadefence.com>.

<sup>50</sup> Ranjit Rai, “ADS Finally on Track,” India Defence Consultants, July 4, 2004, <http://www.indiadefence.com>.

will diminish in the short term, but reconditioning programs for existing models as well as new acquisitions should restore its numbers sometime after 2010. Probably owing to extensive problems with its own nuclear submarine project, India is also reportedly considering the lease or purchase of one or two nuclear-powered attack submarines from Russia. The navy is unlikely to reach the desired 30 maritime patrol aircraft in the foreseeable future and has opted instead to upgrade existing airframes and perhaps purchase P-3C Orions from the United States. India is also interested in the purchase or lease of four nuclear-capable Tu-22 Backfire bombers, but the status of this possible deal is unclear.<sup>51</sup> On the other hand, some of the new ships and refurbished submarines include a capability to launch SS-N-27 Klub anti-ship cruise missiles, and the supersonic Indo-Russian BrahMos anti-ship cruise missile (290-kilometer range) could enter the naval arsenal during 2005; both missiles are also being developed for the land attack role.

*Strategic Forces.* India is also modernizing its strategic forces. On the hardware side, ballistic missile testing and production continues as the army expands the number of missile groups in its order of battle to accommodate the short-range Prithvi (150 to 250 kilometers) and medium-range Agni variants currently entering service.<sup>52</sup> The versions of the Agni thought to be in service have a maximum range of 700 to 2,500 kilometers and carry nuclear warheads. They can thus hit any target in Pakistan, but are of limited use against China. In order to increase India's ability to deter China, New Delhi is developing an Agni with a range greater than 3,000 kilometers.<sup>53</sup> At the same time, the navy's new doctrine urges development of a submarine-based "non-provocative strategic capability" as the best means of acquiring an assured nuclear second-strike platform.<sup>54</sup> In order to address some of the structural aspects of nuclear weapons ownership, India recently formed a tri-service Strategic Forces Command to manage operational employment. Details of how this command is to function, including authority over the delivery means owned by the services and the command's interface with the scientific community that controls the warheads, remain unclear. Among other complex issues, New Delhi will have to locate resources to support a nuclear command/control system with the concomitant communications, intelligence, and protection requirements.<sup>55</sup>

<sup>51</sup> Vivek Raghuvanshi, "India OKs Russian Royalty Demands," *Defense News*, May 9, 2005.

<sup>52</sup> Missile data compiled from *The Military Balance 2004–2005* and compared with the information in *Jane's Sentinel Security Assessment—South Asia: India*, April 27, 2005.

<sup>53</sup> "Govt to Testfire Agni III this Year," *Indian Express*, January 2, 2005.

<sup>54</sup> Quoted in Rahul Bedi, "A New Doctrine for the Navy," *Frontline* 21, no. 14 (July 3–16, 2004).

<sup>55</sup> Quoted in Vivek Raghuvanshi, "Indian Nuclear Command Plans Face Long Delay," *Defense News*, January 27, 2003.



While strengthening its deterrent posture through improvements in its offensive weapons, New Delhi is also exploring defensive options. India has already acquired several Green Pine radars from Israel, has expressed interest in the Arrow anti-tactical ballistic missile (ATBM) system affiliated with these radars, and may have already signed a deal with Russia for several ATBM suites. Additionally, missile defense has been a key component of the ongoing U.S.-Indian military-to-military dialogue.<sup>56</sup>

*The effectiveness of military modernization.* This overview of India's military modernization programs suggests that, if current trends maintain their general trajectories, the country's armed forces could acquire significant new capabilities over the coming decade. Some of these capabilities could be on hand as early as 2010, though 2015 is a more realistic time frame. By that time, the navy will have improved sea denial and power projection capabilities with a modernized submarine fleet and one, perhaps two, carrier battle groups equipped with updated aircraft. Cruise missiles will not only provide a major upgrade in combat power at sea but will also give the navy the ability to strike littoral targets with greater accuracy and lethality. Deficiencies in logistical support, reconnaissance aircraft, and command/control will, however, continue to hamper the navy's efforts to achieve a true blue water power projection status. The army, combining a potentially tremendous increase in firepower with greater agility and somewhat enhanced mobility, could have the capability to launch powerful, short-notice attacks to relatively shallow depths in Pakistan. Though the army will not be able to conduct and sustain deep penetration offensives, Indian officers now seem to consider operations of this nature unnecessary and too close to the Pakistani nuclear threshold. India will likely possess some medium-range ballistic missiles that, in combination with manned aircraft, may have sufficient range to threaten important Chinese targets, and may also have some limited missile defense capability around a few select locations. The most substantial and meaningful advances, however, are most likely to be manifested in the IAF. The continued introduction of advanced aircraft and the integration of critical force multipliers will boost the air force's capabilities against China and, if coupled with timely intelligence and adequate numbers of precision-guided munitions, could allow the air force to exploit its numerical superiority over Pakistan as never before.

At present, however, the defense budget does not seem adequate to support comprehensive modernization across the services. On the one hand, funds allotted to defense have risen steadily from \$15.5 billion in Indian fiscal year 2002–03 to \$19.1 billion in 2005–06 (the equivalent of between

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<sup>56</sup> "New Framework for the U.S.-India Defense Relationship," June 28, 2005, <http://newdelhi.usembassy.gov>.

2.6 and 2.9 percent of GDP per year), thus giving India a greater capacity for modernization in comparison to Pakistan. On the other hand, Indians argue that these figures are insufficient to underwrite both the replacement of obsolescent equipment and the simultaneous introduction of new hardware in numbers sufficient to make a major difference on the battlefield. The training required to integrate these new doctrinal concepts is also both time consuming and costly. Moreover, the military may have to make major investments in personnel in order to compete with the private sector for skilled human capital. The cumbersome acquisition bureaucracy, including a new set of restrictive regulations, is an additional impediment to rapid, holistic modernization. For the past three years, for example, the Ministry of Defence has returned \$1–2 billion per annum because it has been unable to commit these funds during the course of the fiscal year. A number of high-profile acquisition scandals have compounded the delay and uncertainty by inducing further caution in the bureaucracy.<sup>57</sup>

Even if budgetary and bureaucratic problems are mastered and all of the acquisition wishes of each service are fulfilled, the central question remains whether India's armed forces can successfully employ their new systems. Three key inhibiting factors must be considered. First, India, like many other countries, has been dogged by bitter interservice rivalry. Despite joint educational programs and field exercises, successful joint endeavors in the past have relied on personal interaction among senior officers rather than institutionalized coordination.<sup>58</sup> The second problem is the frequent disconnect between national security policy as formulated by the civilian leadership and the military's strategy, doctrine, and procurement decisions. Although national policy and military strategy are sometimes well synchronized during times of crisis, senior officers often deplore the absence of clear direction from their civilian leaders.<sup>59</sup> Third, a generally conservative institutional culture pervades all three services, dampening initiative and creativity.<sup>60</sup> There is also a question concerning how much new technology and doctrine the three services can absorb over the short term. In aggregate, therefore, the Indian military could bring on board several significant new capabilities during the next ten to twelve years, but will have to overcome daunting institutional barriers in order to realize the potential implied in these proposed hardware acquisitions and new doctrinal thinking. Failing

<sup>57</sup> Vijay Oberoi, ed., *Army 2020* (New Delhi: Knowledge World, 2005), 171–200; figures are from *The Military Balance 2004–2005*.

<sup>58</sup> See Government of India, "Recommendation of the Group of Ministers on Reforming the National Security System," February 2001.

<sup>59</sup> Pravin Sawhney, "Unity of Command," *The Pioneer*, May 2, 2004.

<sup>60</sup> Vijay Oberoi, "Army Drafts New War Doctrine," *The Hindu*, March 5, 2004.

to do so will limit the military options available to India's political leaders in any future confrontation with Pakistan, and will leave India struggling to keep pace with China beyond the short term.

## Pakistan

### *A Strategy of Survival*

From the time of its establishment as an independent state, Pakistan's worldview has been dominated by the perception that it faces an existential threat from its enormous eastern neighbor. This perception pervades all aspects of Pakistan government policy, and the fear of an India committed to "undoing" the 1947 partition of British India has meant that successive Pakistani governments have viewed national security almost exclusively through a distorted military lens—to the detriment of economic, political, judicial, and social considerations.<sup>61</sup> This emphasis on military security has contributed to the overwhelming influence of the armed forces, above all the army, in policy and governance through most of Pakistan's history.<sup>62</sup> In this presumably hostile environment, survival as a sovereign state has been the central national goal, and the military's narrow institutional interests have assumed an awkward prominence that is often manifested in Pakistan's international behavior.

Within this context, Pakistan's grand strategy has coalesced around three principal elements. First, Pakistan seeks to maintain sufficient conventional and nuclear strength to deter an Indian attack or, if deterrence fails, to prevent a catastrophic defeat long enough for the international community to intervene and halt the conflict.<sup>63</sup> Second, Pakistan relies on external allies to bolster its own defenses through arms supplies and diplomatic support, seeking to translate its geostrategic position into a claim on the resources and attentions of outside actors—especially the United States and China. Islamabad, however, has been unable to secure specific security guarantees against India. Third, Pakistan seeks to weaken India militarily by enmeshing Indian forces in domestic unrest while at the same time limiting New Delhi's access to foreign sources of diplomatic assistance, moral support, and weapons transfers. In the 1990s, some Pakistani leaders briefly added a fourth element: seeking "strategic depth" against India by establishing a

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<sup>61</sup> Teresita C. Schaffer, "Pakistan's Future and U.S. Policy Options," Center for Strategic and International Studies, March 2004, 7.

<sup>62</sup> See Ayesha Siddiqa Agha, "Pakistan's Security: Problems of Linearity," *South Asian Journal*, no. 3 (January-March 2004).

<sup>63</sup> Pervez Musharraf, address to the National Security Workshop, National Defence College, Islamabad, February 12, 2004, <http://www.presidentofpakistan.gov>.

Pakistani sphere of influence in Afghanistan and Central Asia. It was never clear what real benefit was supposed to accrue to Pakistan from this notion, and it eventually foundered on the rocks of reality. Pakistan remains vitally concerned, however, with developments in Iran/Central Asia in general and Afghanistan in particular, as instability on its western border can have deeply dangerous repercussions inside Pakistan.

Pakistan's armed forces are the foundation of this grand strategy. The three services must provide conventional strength and competence adequate to persuade India that a rapid attack has little chance of producing substantial gains without triggering a nuclear response; Pakistani strategic forces, in turn, must be sufficiently numerous and reliable to make the nuclear deterrent credible. At the same time, the Pakistan Army aims to retain an offensive capability sufficient to tie down Indian forces, conduct counterattacks, and seize key bits of Indian terrain. This has led Islamabad to support "jihadi" insurgents operating in Indian Kashmir and elsewhere as a low-cost means of occupying and demoralizing Indian ground forces, reducing the likelihood that they will be capable of launching a major cross-border attack.<sup>64</sup> The jihadis, however, have come to threaten Pakistan itself, sowing instability and violence, frightening investors, and nearly provoking full-scale war with India. Since 2001, according to Pakistani accounts, Islamabad's military decisionmakers have thus been seeking to reduce the danger that these non-state groups pose to Pakistan, while at the same time retaining them as a strategic reserve to force New Delhi into negotiations on the status of Kashmir.<sup>65</sup>

The military will remain crucial to Pakistan's grand strategy for the foreseeable future, though there are indications that General Musharraf is trying to alter the fundamental strategic paradigm. Since early 2002, he has highlighted Pakistan's economic strength as a key aspect of national security equivalent, at least in theory, to military power.<sup>66</sup> Thanks in part to Pakistani policies and in part to copious international assistance, the economy has rebounded from its calamitous state several years ago and could see a growth rate of more than 8% for 2005.<sup>67</sup> Following the assassination attempts against

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<sup>64</sup> Abdul Sattar, "Development of Pakistan's Foreign Policy," Pakistan Institute of Legislative Development and Transparency, Case Study, no. 2, April 2004; and Lt. Gen. (ret.) Farrakh Khan, "Air Support Requirements of Pakistan Army and the Role of Army Aviation," Centre for Aerospace Power Studies (Karachi), September 2002, <http://www.caps.org.pk>.

<sup>65</sup> Feroz Hassan Khan, "Pakistan's Challenges and the Need for a Balanced Solution," *Strategic Insights*, August 10, 2002; and Jay Solomon, Zahid Hussain, and Keith Johnson, "Despite U.S. Effort, Pakistan Remains Key Terror Hub," *Wall Street Journal*, July 22, 2005.

<sup>66</sup> Musharraf, address to the National Security Workshop; and Josh Meyer, "Terror Camps Scatter, Persist," *Los Angeles Times*, June 20, 2005.

<sup>67</sup> Asian Development Bank, "Pakistan Economic Update," April 21, 2005, <http://www.adb.org>. For a dose of skepticism, see Shahid Kardar, "Maintaining High Growth Rates," *Dawn*, April 18, 2005.

Musharraf and other leaders during 2003 and 2004, Pakistani officials also began stressing “enlightened moderation” and the dilution of extremism. They adopted this new tack in part due to the damage such extremism inflicted on the investment climate, but also because of the danger radical and violent political groups pose to both government and society.<sup>68</sup> This new attitude has led to substantial army operations against foreign fighters and other extremists in select areas along the Afghan border, and has resulted in the capture of several high profile terrorists during 2004–05. The extent to which Pakistan will continue these operations remains to be seen, but the recent emphasis on economic progress and domestic threats suggests that the Pakistani leadership’s definition of national security is tentatively broadening beyond a purely military perspective. Despite this nascent trend, military considerations are likely to remain paramount in Pakistani security thinking for the near term, and the defense apparatus will continue to absorb between 4% and 5% of the nation’s annual GDP.

### *Pakistan’s Armed Forces Today: Military, State, and Society*

The military forces available to support Pakistan’s grand strategy are large, professional, and well-trained in their chosen tactics. With 550,000 men, the army is among the largest in the world and by far the most dominant service in the Pakistani armed forces. Strategically, the Pakistani military benefits from the locations of its main cantonments. While many of India’s ground troops are based in the country’s interior and require a minimum of seven to ten days to deploy to their battle positions, the bulk of the Pakistan Army, including all of its armored/mechanized formations, are stationed in the east where they can mobilize and move to their wartime locations in as little as 72 hours.<sup>69</sup> More than 300,000 paramilitary troops are available to supplement the army and some are routinely incorporated into regular units. The Pakistan Air Force (PAF), with some 320 combat aircraft, is only small relative to India and has always prided itself on its training and professional competence.<sup>70</sup> Whether this traditional self-perceived edge in training, experience, and spirit is still valid or whether it would provide a significant advantage in combat under 21st century circumstances are both debatable questions. The small Pakistan Navy, historically lowest on the priority list for resources, would have difficulty preventing Indian attacks on

<sup>68</sup> Jehangir Karamat, “Leadership in a Disturbed Region: The Case of India and Pakistan” (speech at Dickinson College, Pennsylvania, April 26, 2005), <http://www.embassyofpakistan.org>.

<sup>69</sup> Ashley J. Tellis, “The Air Balance in the Indian Subcontinent: Trends, Constants and Contexts,” *Defense Analysis* 4, no. 2 (1986), 264.

<sup>70</sup> This figure (from the 2004–2005 *Military Balance*) does not include trainers or intelligence collection aircraft.

Karachi, but the high-quality boats and well-prepared crews of its submarine arm would present a significant threat to Indian surface ships.<sup>71</sup>

*Conventional and nuclear deterrence.* Pakistan's armed forces suffer from a number of critical deficiencies. Although the Indian numerical advantage is not as great as a superficial review of the raw data would suggest, the fact remains that Pakistan is outnumbered in terms of major combat formations as well as in almost every significant category of equipment.<sup>72</sup> Like the Indian Army, Pakistani ground forces have limited mobility, with armored or mechanized brigades representing only some 17.5% of the total available. There are also problems with much of the army's equipment. A large portion of the tank fleet is obsolete, air defenses are rudimentary, the mechanized infantry's vehicles are vulnerable, and communications gear has been generally inadequate. The army's command structure is also problematic since all nine corps are controlled directly from General Headquarters.<sup>73</sup> Training and education, though generally of high quality, suffer from the same institutional conservatism that afflicts India: an urgent search for "school solutions" that generates "careful but imitative" analysis rather than creative thinking beyond the tactical level.<sup>74</sup>

Joint operations constitute a major challenge for all three services. Despite the presence of a joint staff at the national level and discussion of interservice cooperation, the three services have traditionally trained and fought in near isolation from each other. For example, the lone PAF squadron dedicated to maritime strike missions presumably interacts closely with the navy, but the army and the air force disagree on priorities: the PAF is focused on air defense and deep strikes, while the army expects close air support for its tactical formations.

Pakistan's nuclear arsenal is central to its concept of deterrence. Although largely opaque, the Pakistani program seems to be very similar to India's in terms of actual weapons: 30–70 fission warheads in the 5–25 kiloton range, all of which use highly-enriched uranium.<sup>75</sup> Likewise, Islamabad's

<sup>71</sup> See *Jane's Sentinel Security Assessment—South Asia: Pakistan*, June 13, 2005.

<sup>72</sup> Commentators often note that Pakistan has more self-propelled artillery than India (240 Pakistani types to at most 30 Indian systems fielded). This is true, but the absence of self-propelled artillery is an isolated superiority with at best local impact, not a war-winning feature of the Pakistan Army.

<sup>73</sup> See *Jane's Sentinel Security Assessment—South Asia: Pakistan*, June 13, 2005.

<sup>74</sup> Stephen P. Cohen, *The Idea of Pakistan* (Washington D.C.: Brookings, 2004), 128; and Brian Cloughley, *A History of the Pakistan Army: Wars and Insurrections* (Karachi: Oxford University Press, 2000), 339–58.

<sup>75</sup> Estimates are drawn from the Carnegie Endowment for International Peace at <http://www.carnegieendowment.org> (est. 30–50 highly-enriched uranium warheads and 3–5 plutonium weapons), the Natural Resource Defense Council at <http://www.nrdc.org> (est. 48), the Arms Control Association at <http://www.armscontrol.org> (est. 30–50), and *Jane's Sentinel Security Assessment—South Asia: Pakistan*, April 27, 2005 (est. as many as 100).

stated goal is also “minimum credible deterrence,” defined not as a function of India’s inventory but rather based on Pakistan’s own assessment of its needs. In other important respects, however, the Pakistani approach to nuclear capability is the opposite of India’s. In the first place, where New Delhi looks north as well as west, Islamabad is focused solely on its eastern neighbor. Whether and how this traditional Pakistani view will change should Iran declare itself a nuclear power is unclear, but an overt Iranian nuclear capability is not likely to be welcome in Islamabad. Second, Pakistan’s leaders believe that their planning “benefits from a degree of ambiguity” regarding the country’s nuclear doctrine.<sup>76</sup> The government seems to view Pakistan’s nuclear warheads as weapons of war, not just tools of deterrence, a stance that implies the option of first use in a conflict. There are no stated criteria for when Pakistan might resort to nuclear weapons. Pakistani officials and commentators, however, often emphasize that the threshold is low, a “one-rung nuclear escalation ladder,” and express concerns that Indian modernization will drive the threshold still lower.<sup>77</sup> The four “red lines” that have undergone public scrutiny—significant loss of territory, significant damage to military forces, threat of economic strangulation, and threat to internal stability—are deliberately vague.<sup>78</sup> Even a cursory comparison between these unofficial thresholds and the Indian “limited war” concept, however, reveals much room for miscalculation by both sides. Third, Islamabad regards the army’s missiles as “the core of Pakistan’s nuclear weapons delivery systems.”<sup>79</sup> PAF aircraft could also be used, but missiles offer advantages of range and reliability, and their employment would not detract from other PAF missions. The mainstays of the Pakistani missile force are the Hatf-III (Ghaznavi) and Hatf-IV (Shaheen) SRBMs with ranges up to 290 and 650 kilometers respectively. Reaching out to 1,300 kilometers, the Hatf-V (Ghauri) allows the Pakistan Army to target most key Indian cities and military garrisons; and the Hatf-VI (Shaheen II), tested for the first time in 2004 with an estimated range of 2,200 kilometers, will cover almost all of India.<sup>80</sup> Command and control is exercised from the National Command Authority through the Strategic Plans Division to Strategic Forces Commands in each service.

<sup>76</sup> Mahmud Ali Durrani, “Pakistan’s Strategic Thinking and the Role of Nuclear Weapons,” Cooperative Monitoring Center, Occasional Paper, no. 37, July 2004, 28, 31.

<sup>77</sup> Shireen Mazari, “Nature of Future Pakistan-India Wars,” *Strategic Studies* 22, no. 2 (Summer 2002); and Rodney W. Jones, “Conventional Military Imbalance and Strategic Stability in South Asia,” South Asia Strategic Stability Unit Research Report, University of Bradford, no. 1, March 2005.

<sup>78</sup> Paolo Cotta-Ramusino and Maurizio Martellini, “Nuclear Safety, Nuclear Stability and Nuclear Strategy in Pakistan,” Landau Network-Centro Volta, February 11, 2002, <http://www.mi.infn.it>.

<sup>79</sup> Durrani, “Pakistan’s Strategic Thinking,” 20.

<sup>80</sup> Ibid.

*The military in society.* Though similar in many ways, two key characteristics differentiate the armed services of these South Asian rivals. The first is the Pakistan Army's role as the dominant political force in that country. While this condition has had a distorting effect on Pakistan's domestic and foreign policies, the army—given its preeminent political role—has the final say in the allocation of national resources and is accountable to no one but itself for decisions on equipment, doctrine, and strategy. This dominant role can also limit or exclude non-army inputs to national decisionmaking and reinforce military tendencies toward worst-case interpretations. Whether by actually governing or exercising a decisive influence behind the scenes, the army will almost certainly retain this paramount position through the remainder of the decade and probably well beyond.

Moreover, the infiltration of the Pakistan military (principally the army) into almost every other aspect of national life has accelerated since Musharraf assumed power in 1999. Approximately 1,000 active and retired officers have been placed in top political, commercial, and managerial positions under his tenure. On the one hand, such sinecures promote the military's institutional interests by giving senior officers a stake in the system and reducing incentives to dissent; on the other, they divert the military from its core functions, while providing endless opportunities for patronage, corruption, and friction with civil society. As such, this growing entrenchment weakens the country's tottering democratic institutions, taints the army's reputation, and angers many civilians.<sup>81</sup> The dominant position of Pakistanis from Punjab Province in the army (as in all government agencies) exacerbates these resentments in other parts of the country and leaves the army unrepresentative of the population at large.<sup>82</sup>

The second differentiating factor is the role of religion in Pakistan's armed forces. While utilizing Islamic ideals as motivational tools, the military has traditionally discouraged excessive religiosity; the modern Pakistani officer corps is generally pious but not extremist in its beliefs. Officers who demonstrate religious tendencies that might threaten the army's relatively secular institutional interests are reportedly weeded out at the mid-grade level.<sup>83</sup> The military, however, also reflects the society from which it springs, and religion has become a more prominent dimension of Pakistan's socio-political landscape since the mid-1980s.<sup>84</sup> Although the majority of Pakistanis are, as Musharraf maintains, pious but moderate, it is similarly

<sup>81</sup> Among many reports on this trend, see Massoud Ansari, "The Militarisation of Pakistan," *Newsline*, October 2004.

<sup>82</sup> "Govt Focus on Balochistan Uplift," *The Nation*, February 10, 2005.

<sup>83</sup> Cohen, *Idea of Pakistan*, 108.

<sup>84</sup> Khan, "Pakistan's Challenges"; and Cohen, *Idea of Pakistan*, 107–8.



evident that extremist elements have gained in numbers and influence in recent years. Little is known for certain of the impact this broad shift has had on the military (especially on the junior officers and *jawans*, or common soldiers), but they could hardly be entirely immune.<sup>85</sup> Personnel who have been involved with radical “jihadis” could be particularly vulnerable to “reverse osmosis,” whereby they absorb the violent views of their nominal clients.<sup>86</sup> Musharraf purged some officers from the military and the Inter-Services Intelligence Directorate following September 11 and has apparently taken additional measures in the wake of the December 2003 assassination attempts, which involved military personnel (albeit junior ones). The institutional culture of Pakistan’s armed forces has a powerful normative effect, however, and the financial and social benefits available to both serving and retired military personnel provide a strong incentive to stay within the rules. A “colonel’s coup” or similar disruption is therefore unlikely in the near term, but the attitudes of junior officers and the mid-term impact of extremist ideologies constitute important concerns for the country’s senior commanders.<sup>87</sup> The threat of a coup may be small, but sympathy for or tolerance of such extremist jihadi attitudes, if left unchecked, could undermine military discipline, erode the leadership’s ability to counter internal instability, and present a direct personal threat to individual senior officers.

### *Pakistan’s Military: Modernization at the Margins*

Pakistan’s military modernization efforts are aimed at incorporating incremental improvements to existing hardware rather than developing new doctrine. Even prior to the announcement of the “Cold Start” approach, Pakistani observers discerned India’s shift from a “space-oriented” to a “destruction-oriented” strategy, but the army so far sees no need to part with its “offensive-defense” or “riposte” strategy.<sup>88</sup> This operational concept calls for Pakistani ground forces to take the offensive, perhaps preemptively, across the border before India can mobilize its full might.<sup>89</sup> Seizing key terrain and unbalancing the enemy, the Pakistanis hope to blunt an Indian advance long enough to allow time for the international community to intervene. “We are very capable of an offensive defense,” Musharraf told the press in 2002,

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<sup>85</sup> Hasan Askari Rizvi, “Pakistan’s Strategic Culture,” in *South Asia in 2020: Future Strategic Balances and Alliances*, ed. Michael R. Chambers (Carlisle: U.S. Army War College, Strategic Studies Institute, 2002), 320.

<sup>86</sup> See Hasan Askari Rizvi, “Military and Islamic Militancy,” *Daily Times*, May 31, 2004.

<sup>87</sup> John Lancaster, “Pakistan Struggles to Put Army on a Moderate Course,” *Washington Post*, April 4, 2004.

<sup>88</sup> Khan, “Air Support Requirements of Pakistan Army.”

<sup>89</sup> General Mirza Aslam Beg, “Deterrence, Defence and Development,” *Defence Journal*, July 1999.

“We’ll take the offensive into Indian territory.”<sup>90</sup> Confident in this approach, Pakistan’s military leaders have dismissed India’s Cold Start concept. “Operating on interior lines in an offensive-defensive role,” writes a retired brigadier, “the Pakistan Army can give a befitting reply to an invading force at any place and time.”<sup>91</sup>

Given the army’s role in governance and the dominance of security concerns in Pakistan’s strategic thinking, the armed forces, especially the army, have an almost unquestioned claim on the state’s resources (note, for instance, that Pakistan’s defense expenditures were at least 4.5 percent of GDP in 2004). With a far smaller economy than India’s, however, the announced budget for 2005 amounts to some \$3.4 billion, a total that has grown each year since 2001. Combined with a \$1.5 billion U.S. military assistance package over the next five years, this figure will allow some modernization at the margins, but will not support extensive revamping of the armed forces. Unlike India, actual Pakistani defense expenditure tends to exceed the budget by \$100–\$200 million every year.<sup>92</sup>

This confidence in its existing doctrine, combined with resource constraints, has left the army with a modernization program limited primarily to select pieces of hardware. The most important equipment acquisition in recent years has been improved tanks. The bulk of Pakistan’s tank fleet is still composed of outdated Chinese models, but the purchase of 320 T-80UDs from the Ukraine has added enough relatively modern tanks to equip one armored division.<sup>93</sup> Upgrades for some older models and the introduction of a new tank, the Al-Khalid, means that slightly more than half of the army’s first-line tanks will be fairly modern variants within the next five years. These measures will enhance current capabilities and reduce India’s chances of gaining a local armor advantage—yet hardly represent a significant change beyond the tactical arena. Recent increases in the inventory of transport helicopters will assist in counterinsurgency operations, but would have no major impact in an India-Pakistan conflict. Other than additional anti-tank guided missiles, some Bell helicopters, and possibly some communications gear, it is not clear what other hardware the army may receive as a result of the restored defense supply relationship with the United States.

Modernization in the PAF was hobbled throughout the 1990s by U.S. sanctions, the high cost of European alternatives, and the inferiority of the

<sup>90</sup> Musharraf quoted in “India Sought to Weaken Me, Says Musharraf,” *Daily Times*, May 28, 2002.

<sup>91</sup> Brig. (ret.) A. R. Siddiqi, “Indian War-Games: An Overview,” *Dawn*, May 5, 2005.

<sup>92</sup> Figures from *The Military Balance 2004–2005*. Sherry Rehman has noted that the budget is practically opaque and allows for neither legislative debate nor detailed analysis, “Enigma of the Defence Budget,” *Dawn*, June 16, 2005.

<sup>93</sup> In addition, the army manufactures another relatively up-to-date tank under license from China.

available Chinese planes. After several deals for new fighters fell through, the air force leadership resorted to stop-gap measures, but now hopes that the first of 150 modern, “medium-tech” Sino-Pakistani JF-17 Thunder fighters will be delivered in 2006. The air force is also working with China to develop its first beyond-visual-range air-to-air missile. The key question for the PAF, however, concerns the number and model of F-16s it hopes to receive from the United States. A batch of new F-16s with appropriate air-to-air missiles could represent a substantial increase in Pakistan’s air combat and strike capabilities later in the decade. Pakistan is considering the purchase of either a Swedish or an American AEW&C aircraft that could enter into service between 2007 and 2010, and is also reported to have interest in the Chinese FT-2000 surface-to-air missile system, which would be used to counter Indian AEW&C platforms.<sup>94</sup> There seems to be little procurement activity, however, for less esoteric ground-based air defense weapons and sensors.<sup>95</sup>

The navy has another French Agosta 90B diesel submarine scheduled to arrive during 2005, bringing the number in this class to three and Pakistan’s submarine force to nine. Pakistan will attempt to replace its older boats with more of the Agosta 90Bs over the coming decade. The surface fleet expects to receive four new Chinese frigates by 2008, raising the total number of frigates from six to ten; the naval air arm is slated to benefit from the U.S. military assistance package with the provision of up to eight P-3C Orion maritime patrol aircraft capable of carrying Harpoon missiles. In addition, should one of the AEW&C acquisitions come to fruition, the navy is in line to receive several of these aircraft.

Pakistan’s strategic forces will continue to grow as its arsenal of ballistic missiles expands in both size and capability. As with Pakistan’s other modernization programs, improvements in missiles, warheads, and command systems will be incremental, increasing the quantity and quality of Pakistan’s military hardware rather than acquiring significant new capabilities. Furthermore, Pakistan must contend with serious impediments to modernization: budgetary restrictions, interservice rivalry, conservative military thinking, and limited absorptive capacity. Nonetheless, hardware modernization at the margins should suffice, for the near term, to sustain the minimum credible nuclear and conventional capabilities necessary to deter India. On the more dangerous internal security front, however, Pakistan will have to develop personnel policies that eliminate or neutralize any extremist sentiment within its armed forces and intelligence services. Moreover, Islamabad

<sup>94</sup> S. M. Hali, “Saab 2000 & Erieye AEW&C System,” *Pakistan Observer*, July 18, 2004; and Barbara Opall-Rome, “U.S. Offers Pakistan Radar Planes,” *Defense News*, December 6, 2004.

<sup>95</sup> Jamal Hussain, “PAF Begins to Narrow the Technological Gap Some,” Centre for Aerospace Power Studies, Karachi, October 2004, <http://www.caps.org.pk>.

will also have to find ways to cope with the jihadis themselves. These radical elements are too dangerous and unpredictable to retain as weapons in the state's arsenal. Pakistan's leaders, especially those in uniform, will have to craft plans to defang these groups and return to a national military strategy that relies on a combination of conventional forces and nuclear weapons to preserve the country's security, all while strengthening the economy and building democratic political institutions.

## Conclusions and Implications

This analysis suggests several sets of conclusions regarding the likely development of Indian and Pakistani armed forces over the next five to ten years.

### *The Near Term: Marginal and Symbolic Modernization*

The first set of conclusions relates to India, specifically how modernization will support several aspects of New Delhi's grand strategy in the foreseeable future. On the domestic security front, enhancements in infantry equipment (particularly in night-vision devices) are already proving their worth in counterinfiltration and counterinsurgency operations in Kashmir. Given the importance of internal security and counterterrorism for India, this change is not inconsiderable. Yet military modernization can at best help only to contain militancy; long-term solutions require policies that address local grievances and restore legitimate avenues for political expression. Even from the security force perspective, there are limits to the value of technology; instead, sharper and sustained focus on training, improved discipline, and more modern small arms will offer the best return on investment. Further abroad, military modernization programs have an important symbolic content for India's foreign policy: technically advanced military forces will help undergird New Delhi's efforts to achieve a more prominent role in the world order of the 21st century.

New Delhi's modernization projects and enhanced combat capabilities are intertwined with India's evolving place in Asia. Although the Indian Army remains focused on the western border, India will, for instance, soon have a credible aircraft and missile delivery means for nuclear weapons aimed at some major Chinese targets. In the face of possible Chinese encroachment, the Indian Navy will also look to construct new means of exerting its influence in the Indian Ocean and beyond. Although many of its new ships, aircraft, and systems will not be available until the next decade

(roughly sometime between 2010 and 2015), the PLA Navy is unlikely to present a substantial threat prior to that time frame.

The second set of conclusions concerns Pakistan's domestic problems. In addition to destabilizing violence between Sunni and Shia extremists, Pakistan faces difficult internal security problems along the entire Afghan border and, sporadically, in Sindh and Balochistan as well. Military modernization in the form of helicopters and improved infantry equipment will serve as useful tactical upgrades with immediate utility against terrorists and tribal troublemakers in these remote areas. The significance of technology, however, is limited, and the hardware improvements will only be effective if they are mated with low-technology basics such as training, leadership, and sustained attention to local grievances. Fighter aircraft, AEW&C platforms, submarines, and tanks have little relevance to these and other immediate internal threats, and Pakistan will need to allot domestic revenue and foreign assistance carefully in order to address the many pressing problems within its own borders.

Having examined each country separately, the third set of conclusions addresses the points where their modernization programs intersect. At the broadest level of analysis, the general "balance" that exists today will likely obtain for the near term. India will retain a numerical superiority sufficient to contain Pakistan in the conventional realm, but its ability to alter Pakistan's behavior, especially sub-conventional provocation, will likely be limited, for the next five years or so, to incremental improvements in conducting punitive strikes. India's quantitative advantage will not translate into the ability to inflict a rapid, convincing defeat on Pakistan. Instead, Pakistan's conventional forces will be able to impose sufficiently heavy costs in time, men, and equipment so as to dissuade India, in most cases, from attacking. At the same time, Pakistan's acknowledged nuclear capability and its ambiguous use criteria will induce caution in Indian thinking. India will thus have to overcome significant disincentives inherent in an attack on Pakistan, and will encounter serious problems in defining its war aims should New Delhi determine that an instance of provocation demands a military response. If war does break out, New Delhi may have to alter its initial aims in order to avoid a nuclear exchange.

### *The Mid Term: Possible Shift in the India-Pakistan Military Calculus?*

Moving past the short term (i.e., looking seven to ten years ahead), the India-Pakistan situation could shift to India's advantage. This shift will proceed from qualitative rather than quantitative improvements in the Indian armed forces. While the gross numerical ratios between Indian and Paki-

stan will probably remain similar for the foreseeable future, India's ability to employ its armed forces in a synchronized, synergistic fashion could increase significantly in the coming decade. This is not an inevitable outcome, and progress will be slow. Nonetheless, if New Delhi can overcome budget constraints, bureaucratic impediments, interservice rivalry, and conservative military cultures, then the Indian armed forces could be in a position to deliver a swift and crippling blow against Pakistan's conventional forces during a short, intense conflict.

Examining the specific services, the Indian Navy will maintain and probably increase its substantial advantages over its Pakistani counterpart. Overall, however, the two navies are peripheral to the outcome of a short India-Pakistan war. Although Indian officers would hope to incapacitate Karachi, such a move would only have a psychological impact in a war lasting only two to three weeks.<sup>96</sup> A blockade might even work to India's detriment by pushing Pakistani leaders closer to nuclear use. Likewise, a successful attack against a major Indian surface combatant by a Pakistani submarine might provide a morale boost to Pakistan but would have little material effect on the outcome of the conflict.

In the ground war, the Indian Army has the potential to repair some of its key deficiencies and make Cold Start a realistic option. By combining a larger, more mobile, and more lethal artillery component with improved command/control and intelligence, the army should be able to apply devastating firepower in select tactical locations in order to seize and hold critical pieces of terrain, and all within a time period short enough to be acceptable to Indian planners. Mobility and logistics challenges suggest that deep, sustainable penetrations across the border will remain difficult to accomplish, but a series of shallow advances followed by intense engagements with Pakistani mobile reserves could be enough to incapacitate the Pakistan Army's offensive combat power.

Successful ground assaults will depend on close cooperation with the air force, and IAF capabilities could see the most dramatic changes over the next several years. By 2008 or so, the cumulative effect of AEW&C and air-to-air refueling capabilities, large numbers of first-rate multi-role fighters, enhanced avionics, and superior air-to-air missiles could in aggregate give India a decisive advantage over the Pakistani air force. The missing ingredients are timely targeting intelligence, precision-guided munitions, and emphasis on joint operations. On the other side of the border, Pakistani acquisition of an AEW&C capability, a significant number of new fighters, and improved air-to-air missiles will even the odds somewhat, but the IAF

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<sup>96</sup> Rahul Bedi, "The Military Dynamics," *Frontline* 19, no. 12 (June 8–21, 2002).

would still hold the quantitative and qualitative capabilities necessary both to hold off the PAF and make a major contribution to the ground battle.

Strategic forces on both sides will continue to evolve at an incremental pace. Both will have more missiles and probably more nuclear warheads, but significant change will come only when one or both acquire a near-precision targeting capability and a suite of conventional warheads that will permit reliable destruction of targets such as bridges as well as airfields, supply depots, and other large sites. India may have a limited missile defense system, but this will do little to alter the nuclear dynamic in the subcontinent; the multiplicity of targets and the range of Pakistan's missiles means that the real impact would be marginal. Perceptions, however, could be important, and an extensive Indian missile defense system that appears to undermine Pakistan's ability to attack India could increase Islamabad's sense of insecurity.<sup>97</sup>

### *Implications for Regional Stability*

Finally, the respective military modernization schemes highlight two important points and raise a troubling question. First, India's numerical advantage is deceptive. India does enjoy a considerable conventional superiority over Pakistan—a superiority that is quantitative in almost every category and qualitative in several key areas of air and naval combat. This advantage, however, has been subject to frequent exaggeration on the basis of simplistic quantitative comparisons. In reality, deficiencies in mobility, logistics, doctrine, and military culture have compromised India's ability to translate its many advantages in specific items of equipment or overall manpower into the capability to inflict a decisive defeat on Pakistan's armed forces within the short time frame of a conventional war. Pakistan suffers from many of the same weaknesses, but given that Islamabad is the power on the strategic defensive, the effect is less debilitating.

Second, India's plans to modernize hardware and doctrine, if executed as intended, could change the force calculus within the next ten years. This outcome is, however, subject to numerous critical uncertainties. To achieve a transformational military effect, the Indian services will need a concatenation of successes across a broad array of disparate hardware programs. Such success must be combined with fundamental shifts in operational concepts and organizational outlook. Breakdown in one or more key areas could undermine the entire process. Moreover, Pakistani modernization, even at the margins, might suffice to stave off a partially upgraded Indian military.

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<sup>97</sup> Ashley J. Tellis, "The Impact of Missile Defence in Asia," *IISS Strategic Comments* 10, no. 6 (July 2004).

The question arising from the state of Indian-Pakistani military modernization programs revolves around perceptions—that is, how each side perceives its own capabilities as compared to the capabilities and intentions of the other. In the nuclear environment, an error in judgment by either government could have potentially devastating consequences. Indian strategists, for example, could overrate their own capabilities or underestimate Pakistan's progress in modernization and respond to a provocation with a "limited" military action that quickly spirals into an unpredictable escalatory cycle. Likewise Indian military commanders, assuming clear knowledge of Pakistan's nuclear thresholds and the ability to calibrate operations to avoid these, could find that their forces have inadvertently crossed a Pakistani nuclear "red line." On the other side of the border, Pakistan could easily miscalculate the likely Indian reaction to a provocative incident (as Islamabad did in 1965 and 1999). Contrary to common assumptions, the two sides do not necessarily understand each other as well as they think they do, and there exists broad scope for dangerous misinterpretation.

Furthermore, the security scene is complicated by the presence of non-state actors in the form of violent, jihadist groups. As happened twice during 2001–02, extremist groups pursuing their own agendas could conduct terrorist attacks that bring India and Pakistan into confrontation and possible war. Many Indians were dissatisfied with the results of New Delhi's "coercive diplomacy" during the 2001–02 crisis, and internal political pressures could prompt armed retaliation to a future provocation regardless of the state of military modernization. Although both countries have often shown remarkable restraint during previous confrontations, the dangers involved in misreading one another or in dismissing the threat of semi-independent jihadi groups are too great to ignore.

### *Considerations for the United States and Outside Powers*

Although India and Pakistan ultimately bear responsibility for the resolution of their disputes, or at least for the management of bilateral crises, outside powers can contribute to South Asian stability in significant ways. Most important is sustained, nuanced, and imaginative support for the normalization of ties between India and Pakistan. The general trajectory of relations has been favorable since 2003, but ties are fragile and near-term resolution of the historically burdened issues that divide the two is unlikely. The "ugly stability" of the past fifteen years is thus likely to continue, and both New Delhi and Islamabad must be prepared to cope with sudden crises for



the foreseeable future.<sup>98</sup> The United States and other outside actors can assist by helping to strengthen the limited set of existing confidence-building measures for conventional forces and by introducing new ones, especially in the area of nuclear risk reduction. The tenuous situation on the subcontinent also argues for extreme caution in arms sales by outside producers and a recognition of the long-term utility of many weapons systems and the psychological impact such deals can have on both sides of the border.

External powers should also seek ways to reduce the threat posed by radical non-state groups. This entails not only pressing for an unambiguous end to militant infiltration into Indian Kashmir and dismantling of the terrorist infrastructure, but also supporting both neutralization of the jihadis who threaten Pakistani society and assisting Islamabad in reconstruction of the civil institutions essential to stability and prosperity.<sup>99</sup> Finally, Afghanistan's success is vital for Pakistan's future. The two form a symbiotic pair and disturbances on one side of the border will quickly reverberate on the other. Conversely, success in reconstruction and governance in Afghanistan will ease pressures on Pakistan's fractured polity, contributing to Pakistan's stability and discouraging the extremists attempting to uproot both countries.

Beyond the challenge of averting India-Pakistan confrontations, military modernization in India can present opportunities for external actors. Washington's growing strategic partnership with New Delhi, for example, can form the foundation for mutually beneficial security cooperation in the broader Indian Ocean region. By building interoperability and accumulating operational familiarity, the United States can help streamline future multilateral military interaction with India in peacekeeping and humanitarian missions (such as the 2004 tsunami relief mission). The United States can also collaborate with New Delhi to strengthen India's military capacity so that India—by combating terrorism, piracy, proliferation, and other threats—becomes a key provider of security in the vital area between the Persian Gulf and the Straits of Malacca.

Indian and Pakistani military modernization aspirations, in many respects dependent on foreign involvement, thus present both challenges and opportunities for outside powers. Washington and other external actors, while avoiding costly and futile efforts to act as “balancers,” can play a useful role in influencing the choices New Delhi and Islamabad make, and more importantly, help craft an environment conducive to normalization and crisis containment rather than one of recurrent confrontation and potential conflict.

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<sup>98</sup> The term “ugly stability” is taken from Ashley J. Tellis, *Stability in South Asia* (Santa Monica: RAND, 1997), 5.

<sup>99</sup> Secretary of State Condoleezza Rice interview, March 16, 2005 at <http://www.state.gov>.