

South Asia Program

STIMSSN

THE WELLINGTON EXPERIENCE

A Study of Attitudes and Values Within the Indian Army

BY DAVID O. SMITH
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For Ellen and Courtney, Who shared my adventures in South Asia

And for Paul Wallace and Robin Remington, Professors (Emeritus) at the University of Missouri, partners in life and scholarship and both sadly deceased this year, who first kindled my interest in South Asia

Preface

I am pleased to present the Stimson Center South Asia Program's latest book by Stimson Distinguished Fellow Col (Ret.) Dave Smith, *The Wellington Experience:* A Study f the Attitudes and Values Within the Indian Army. This work builds on Col. Smith's many years of experience working on South Asia security issues inside and outside of the United States government and is the culmination of a multi-year research effort.

In the Stimson tradition of pragmatic inquiry, this book relies on novel research methods and data to generate sharp analytical insights that will be useful for policy makers as well as for future scholarship. These insights on organizational culture, doctrine, and strategic worldview portend real value for policymakers seeking to understand, engage, and build cooperative defense relations with the Indian military. Indeed, even past and future Indian military leaders might gain fresh perspective on their own institution by considering it from the vantage point of an outside analyst.

Sitting at the intersection of contemporary great power competition in the Indo-Pacific, nuclear instability, and environmental fragility, South Asia is a region of immense consequence for international security. It is also home to over twenty percent of the world's population and harbors the potential to be a future engine of global prosperity.

Owing to decades of thoughtful research and engagement, the Stimson Center's South Asia program led ably by Dr. Sameer Lalwani, continues to play a critical role in shaping strategic thinking, confidence building, and crisis management efforts, particularly in Washington D.C., Islamabad, New Delhi, and Beijing. I commend to you this book, and the wider research findings and analyses of our South Asia program.

As always, we are grateful to the institutions that continue to invest in our ambitious agenda. Our work would not be possible without the generous support of the Carnegie Corporation of New York, the John D. and Catherine T. MacArthur Foundation, and the U.S. Department of Energy's National Nuclear Security Administration.

Sincerely,

Brian Finlay President and CEO The Stimson Center

Author's Note

The field research for this project originally began in early 2016 and ended in late 2017. The study manuscript was completed in the spring of 2018. As with The Quetta Experience, the companion study that preceded this one and explored attitudes and values in the Pakistan Army, there was at first no plan to have it published. Although the Quetta study contained no classified information, it was based on interviews with U.S. Army foreign area officers who attended the Pakistan Army Command and Staff College at Quetta between 1977 and 2014. The author and study sponsor, Lawrence Livermore National Laboratory, deemed the sourcing of the study, rather than the content or judgments, to be sensitive. Thus a decision was taken not to publish the study and to restrict its circulation to U.S. government entities and a small number of South Asia specialists in the Washington-based think tank community who were enjoined not to disseminate the findings to outsiders. This was done solely from an abundance of caution that the findings and conclusions, many of them critical of practices at the Staff College—and by implication of the Pakistan Army-might make an already difficult and challenging year even more so for future U.S. students. After U.S. students were removed from Quetta in 2016, the study eventually was published in September 2018.*

Not long after The Quetta Experience was published, I began to consider whether the original decision not to publish the India study was made hastily—and wrongly—in a reflexive abundance of caution rather than on the basis of any objective analysis. This concern was further buttressed by the absence of adverse repercussions or feedback in Pakistan in response to the first study. To my knowledge, its publication did not provoke a single oppositional response from anyone in Pakistan, military or civilian. Secondly, during a tour of Indian think tanks in New Delhi and Mumbai in October 2018 to discuss The Quetta Experience, I discovered that many analysts in defense-oriented think tanks wanted me to conduct a similar study about the Indian Army using the same methodology. These requests were made mostly by retired senior military officers who were well aware that the Defence Services Staff College (DSSC) in Wellington and its Pakistani counterpart in Quetta are nearly identical in historical origin, pedagogy, curriculum, and institutional culture, and that a study of the DSSC might result in similar findings about the Indian Army. When these analysts asked if I had ever considered doing such a study, I demurred, remarking only that such a study would be "very interesting."

By September 2019, I had come to believe that the benefits of publishing *The Wellington Experience* greatly outweighed the potential risks. The original concern that publication might have adverse repercussions on future U.S. students at

^{*} David O. Smith, The Quetta Experience: A Study of Attitudes and Values within the Pakistan Army (Washington, D.C.: Woodrow Wilson International Center for Scholars, 2018

Wellington seemed overblown. First, it can be assumed that U.S. students attending a year-long foreign military course file reports to their higher headquarters about the course's quality and content; certainly we expect foreign students attending U.S. military schools and courses to do so. Second, considering my more than 30 years of personal experience in dealing with Indian Army officers and visiting Indian Army professional military education institutions, I was convinced that that the senior officers and directing staff at Wellington are much too professional to hold future U.S. students at the DSSC personally accountable for any criticism levied by their predecessors about the institution, however much they might personally disagree with them. It is a matter of historical record that even during periods of exceptionally poor U.S. bilateral relations with India and Pakistan, there has never been a case of harsh treatment meted out in retaliation to U.S. students at either Quetta or Wellington. The issue may well be moot, at least in the short term, as the novel coronavirus pandemic will almost certainly prevent U.S. students from attending Wellington in 2020-2021 and perhaps beyond.

But what really changed my mind about publishing the study were three momentous occurrences in India in the preceding seven months:

- A February 2019 terrorist attack at Pulwama in the Indian state of Jammu and Kashmir (J&K) that killed 40 Indian Central Armed Forces Police personnel and triggered a punitive Indian Air Force strike deep into Pakistani territory in Khyber-Pakhtunkhwa province. This resulted in a retaliatory Pakistan Air Force strike in J&K. These tit-for-tat airstrikes marked the first time in history that two nuclear-armed states have ever engaged in such provocative and potentially escalatory behavior.
- The overwhelming May 2019 victory of Narendra Modi in the Indian general election and the prime minister's subsequent decisions to appoint hard-line advocates of Hindu nationalism (*Hindutva*) to senior cabinet positions and to support illiberal, majoritarian political positions that have called into question the future of India's traditional secular and inclusive version of democracy.
- The Modi government's abrupt decision in August 2019 to withdraw Indian constitutional guarantees of statehood from J&K and bifurcate that state into two union territories governed from New Delhi. This was coupled with a draconian lockdown of the state by Indian military and other security forces—now more than a year old as of this writing—that has resulted in unprecedented human rights and economic crises in Muslim-majority areas of the state, heightened levels of violence with Pakistan along the Line of Control, and the near certainty that a newly radicalized generation of Kashmiri youth will pursue insurgency in the future, either in J&K or perhaps even in metropolitan India itself.

These issues and their implications are addressed directly or peripherally in the study findings. Nonetheless, although the results of the original study were briefed in 2018 to the Washington policy and intelligence communities and other interested government and military offices, the information was imparted at intermediate levels of those organizations and almost certainly has been lost in the collective memories of each agency as a result of a notoriously rapid turnover of personnel in the past two years. Thus, the study findings have likely been mostly forgotten at precisely the time when they might be most useful to senior policymakers and intelligence officials.

The study has now been updated and revised to more fully address these three issues and one other issue that was insufficiently addressed initially: the impact on the Indian military of China's growing military, economic, and regional political influence in Asia. In view of the ongoing Sino-Indian border dispute in Ladakh that began last May, the relative combat capabilities of both military establishments are more salient today than at any time since 1962. I had planned to visit New Delhi in March 2020 to visit those think tanks that had previously expressed interest in a study about Wellington and the Indian Army to preview my key findings and provide an opportunity for their analysts to rebut them before the book was published. Sadly, the ongoing pandemic made this impossible. However, the Stimson Center kindly arranged for me to make a virtual presentation of selected key findings to a small group of top-flight Indian academics and retired senior military officers. This was accomplished on June 2, 2020. Unfortunately, the limitations of this format, especially the agreed-upon 90-minute time limit, made it impossible to go into depth about the research and analysis that underpins the findings or even to address all the questions that were raised. Not surprisingly, my presentation received mixed reactions—a few that were negative, and many others that were positive. The areas of agreement, or at least those that resulted in no significant pushback, included my criticism of the lack of "jointness" in the Indian armed forces; the DSSC's curriculum, pedagogy, and organizational culture; attitudes about Pakistan, China, and civil-military relations; and the lack of preparedness of the Indian Army to operate in a nuclear environment. Two areas of significant pushback arose in response to findings that the Indian Army ignores its own counterinsurgency doctrine in J&K and that the extrajudicial killing of militants is an unspoken feature of that doctrine; and to findings in the nuclear area that reflect a basic lack of understanding about India's deterrence doctrine. As a result, I have revised the final manuscript to more fully sharpen my analysis in these areas of disagreement.

Two other peripheral areas of disagreement also became apparent during the virtual presentation. The first arose after I stated that that the Indian Army had not engaged in high-intensity combat since 1971, the Kargil operation notwithstanding because it involved only two divisions of the Indian Army plus combat support units. This drew a remonstrance from a retired senior officer that the army had

been "facing bullets" this entire time in J&K. Because this is clearly an emotive issue for Indian military officers, I wish to clarify the point I was trying to make. By high-intensity combat, I meant large-scale maneuver warfare against a similarly equipped and capable foe that requires the routine application of combined arms operations by ground forces, systematic cooperation with at least one other service, and sustained logistics operations—precisely the kind of warfare the Indian Army would face in any future war with Pakistan or China. Facing bullets is not the issue, and I continue to believe that my definition cannot in any way be construed to include the counterinsurgency operations that have been ongoing in J&K and elsewhere in India for decades, or incidents along the Line of Control in which the front-line forces of both sides are, for the most part, safely protected in bunkers during small arms, machine gun, mortar, and artillery firing.

Second, another retired military officer observed that there was a widely held belief in India that U.S. Army officers—presumably like me—are reflexively pro-Pakistan, perhaps implying that I was overly harsh and judgmental about the Indian armed forces. While that might arguably have been true of some of my former colleagues (though not me) before 9/11, it is no longer true today, largely because nearly every U.S. Army officer that served in Afghanistan in the past 19 years eventually concluded that Pakistan's duplicity in providing sanctuary on its territory to the Taliban while claiming to be a U.S. ally contributed to the deaths of hundreds of their soldiers. Furthermore, the objective findings of The Quetta Experience were critical of some aspects of the Pakistan Army and the Command and Staff College at Quetta. In The Wellington Experience, I have likewise aimed to be scrupulously objective, and wherever possible have cited the views of Indian defense analysts and retired senior military officers in lieu of offering my own opinion. I hope that any criticism the study levies at the DSSC or any service of the Indian armed forces will be taken, as it is intended to be, as carefully considered and constructive criticism that aims to promote positive change in an institution I greatly admire.

Annex B of the original study contains 29 transcribed interviews and end-of-tour reports of former DSSC students, the transcripts of which amount to 176 single-spaced pages. Much of this material is repetitious because of the nature of the structured interview technique. The transcripts also contain personal information about each U.S. student's background as well as personal comments made about people they met at the DSSC that are irrelevant to the findings of the study. To protect their privacy, the annex has been omitted.

Finally, I wish to thank Lawrence Livermore National Laboratory and the Department of Energy for sponsoring the original study and granting permission to publish the revised version. I also want to thank Sameer Lalwani and Elizabeth Threlkeld, senior fellows and, respectively, director and deputy director of the South Asia Program at the Stimson Center, for their support and assistance in making this book possible. Thanks also go to the two anonymous peer reviewers of

the revised study, to Polly Nayak, a distinguished fellow at Stimson, and to Colonel (ret) Jack Gill, formerly of the Near East and South Asia Center at the National Defense University, for their comments and suggestions that greatly improved the final product. Any errors of fact or analysis are mine alone.

Colonel (ret.) David O. Smith Alexandria, Virginia September 2020

Author's Biography

David O. Smith is a Distinguished Fellow with the South Asia Program at the Stimson Center, a nonpartisan policy research center in Washington, D.C. and an independent consultant to Sandia National Laboratories on issues related to South Asia. He regularly participates in quasi-official (Track 2) engagements with senior Pakistan and India officials sponsored by Lawrence Livermore National Laboratory, the Naval Postgraduate School in Monterey, California, and the Woodrow Wilson International Center and the U.S. Institute for Peace in Washington, D.C.

Smith retired from government service in May 2012 after serving in a senior executive position in the Defense Intelligence Agency. Prior to that he was Senior Country Director for Pakistan in the Office of the Under Secretary of Defense (Policy) in the Department of Defense. During thirty-one years of active duty service in the U.S. Army, he spent twenty-two years dealing with politico-military issues in the Near East and South Asia, including two, three-year tours of duty as U.S. Army Attaché in Pakistan. He retired as a colonel.

He is a graduate of the U.S. Army War College, U.S. Army Command and General Staff College, Armed Forces Staff College, and the Pakistan Army Command and Staff College. His most recent publication is *The Quetta Experience: A Study of Attitudes and Values Within the Pakistan Army*, published by The Woodrow Wilson Center in September 2018.

Executive Summary

August 2017 marked the 70th anniversary of U.S.-India diplomatic relations. Ironically, the first five decades of the relationship between the world's two largest democracies were marked by barely disguised hostility and estrangement because of India's foreign policy of nonalignment and the United States' Cold-War-based embrace of Pakistan. However, in the past two decades, four U.S. presidents from both political parties have identified India as a key strategic partner in Asia, resulting in a sharp downturn in U.S.-Pakistan relations and a concurrent upturn in U.S.-India relations.

Washington's strategic bet on India reflects a U.S. perception of converging strategic interests in promoting global and regional security, offsetting China's growing military and economic power in Asia, and protecting the sea lanes running through the Indian Ocean. This requires a capable Indian military establishment. But does one exist, and what can be expected from it in terms of warfighting capability, influence on regional stability, and impact on Indian government decision-making? Indian government restrictions on official U.S. contacts with Indian military personnel have limited our understanding of these issues.

In an effort to fill some of the resultant U.S. information gaps, this study examines the observations of U.S. military personnel who attended India's Defence Services Staff College (DSSC) at Wellington. Although the DSSC is a tri-service professional military education institution, this study focuses primarily on the Indian Army, the largest and most influential military service in India. Collectively, U.S. personnel at the DSSC had sustained interactions over an extended period of time with three distinct groups of Indian Army officers: senior officers (brigadier through lieutenant general), senior midlevel (lieutenant colonel and colonel), and junior midlevel (captain and major). The study focuses on the attitudes and values of the Indian Army officer corps over a 38-year period, from 1979 to 2017, to determine if there was change over time, and if so, to understand the drivers of that change.

Key findings of interest to the policy and intelligence communities include the following.

- The DSSC provides an adequate midcareer-officer education, but the college's approach to pedagogy sharply restricts useful learning and inhibits the development of critical thinking.
- Indian students at the DSSC are highly nationalistic, but do not display the type of Hindu nationalist ideology known as *Hindutva*. ¹ The high level of social cohesion evident within the Indian military establishment seems to limit the potential for factionalism based on religion, ethnicity, or social class, and there is no indication that traditional democratic and secular values within that establishment are threatened.

- From a U.S. perspective, the ground doctrine taught at the DSSC pays insufficient attention to combat support and combat service support functions, and fails to adequately address combined arms operations. More importantly, it fails to provide effective joint training.
- Despite two decades of increasingly close U.S.-Indian political and military relations, a high level of mistrust (and thinly veiled hostility) about the United States generally persists in all three groups of Indian officers.
- The intensity of Indian Army hostility toward Pakistan increased in every decade of the study. Although China is perceived as India's major long-term security threat, there is reluctance to characterize it as an enemy.
- Despite a deep-seated conviction that its internal security doctrine is effective, the Indian Army has yet to completely quell any of India's four long-running insurgencies.
- The Indian Army ignores its own counterinsurgency doctrine in Jammu and Kashmir, and the extrajudicial killing of militants is an unacknowledged feature of that doctrine.
- Indian students at the DSSC were observed to be consistently apolitical in all four decades of the study, but the post-independence Indian civil-military relationship is evolving as a result of increasing internal and external security challenges. There is growing frustration with the government's unwillingness to reform the Higher Defence Organization.²
- Despite a doctrinal assumption that Pakistan will employ nuclear and chemical weapons against India in a future war, the DSSC curriculum avoids any significant discussion of the effects of these weapons, and no meaningful training. The Indian Army appears unconcerned about the efficacy of Pakistani tactical nuclear weapons and totally unprepared to operate in a nuclear environment.

The implications of these findings are mostly negative for South Asian regional stability for the following reasons.

Despite the official rhetoric of both governments and burgeoning military sales, other inherent friction in the relationship makes it unlikely that the United States and India will become genuine strategic partners in the foreseeable future.

The actions of the Indian Army in Jammu and Kashmir and the abrogation of the erstwhile state's constitutional autonomy by the Modi government have accelerated the radicalization of a new generation of Kashmiri youth, rekindled an indigenous militancy once thought to have been defeated, and raised the level of violence along the Line of Control to levels not seen since 2003.

In the event of a future war with Pakistan or China, the Indian Army may not perform as well as it expects, and a failure against China might draw in the United States on India's side, with the attendant risk of horizontal military escalation in Asia.

There is no reason to expect that, in any future war with Pakistan, India will understand Pakistan's nuclear "red lines" or that the Indian armed forces will not inadvertently cross one or more.

Purpose of the Study

This study is the first systematic examination of the observations of U.S. Army foreign area officers (FAOs) and other military service officers who have attended the Defence Services Staff College (DSSC) in Wellington, India, a tri-service professional military education (PME) institution of the Indian armed forces.³ These officers are the only U.S. personnel—military or civilian, governmental or nongovernmental—ever to have had sustained interactions over an extended period of time with three distinct groups of Indian Army officers: senior officers (major general and lieutenant general), senior midlevel (colonel and brigadier), and junior midlevel (major and lieutenant colonel). The purpose of this study is to use their experiences at the DSSC as a vehicle to examine the attitudes and values displayed by the Indian Army officer corps over the 38-year period from 1979 to 2017 to determine if those attitudes and values have changed appreciably during this period, and if so, to identify the driver(s) of that change and determine their impact on the combat capability of the Indian Army.

This study should be seen as a companion to an earlier, similar investigation of the attitudes and values of Pakistan Army officers completed by the author in 2014 and published in 2018. The sponsors of that study, the Lawrence Livermore National Laboratory and the Department of Energy National Nuclear Security Administration, expressed interest in a similar study on Indian Army officers to facilitate a side-by-side comparison of the two groups. Accordingly, this study utilizes the identical methodology and nearly the same interview questions as the Pakistan study. The main difference between the two is that the enabling mechanism for the first study—the Pakistan Army Command and Staff College—is a single-service PME institution, and thus only U.S. Army FAO personnel were interviewed. Because the DSSC is a tri-service PME institution, U.S. Navy and Air Force officers who attended the school were also interviewed. However, this study focuses primarily on the attitudes and values of Indian Army officers in order to facilitate a more direct comparison with the findings of the Pakistan study.

Another major difference in the two studies is the relative level of U.S. policy salience of the study findings. The attitudes and values of the Pakistan Army officers in 2014 were (and continue to be) of enormous interest to both the U.S. policy and intelligence communities, in part because the military establishment dominates security and foreign policymaking in that country, and because the study addressed a number of specific questions of interest to senior officials. These included, for example:

- Whether demographic and other changes to traditional recruitment and socialization patterns made the Pakistan Army more susceptible to extremist Islamist influences;
- Whether events since 9/11 had changed the attitude of the Pakistan Army about the desirability of the United States as a security partner;

- Whether those events had altered the primary threat perception of the Pakistan Army from India to the internal security threat posed by violent extremist Islamist groups;
- Whether the Pakistan Army could be convinced or compelled to cease supporting Afghanistan-focused Islamist militant groups like the Afghan Taliban and affiliated groups, and India-focused groups like Lashkar-e-Taiba and Jaish-e-Muhammad;
- Whether the Pakistan Army might mount another coup against a freely elected civilian government; and
- What the Pakistan Army perceives to be the efficacy of strategic and tactical nuclear weapons.⁴

Because India's model of civil-military relations drastically circumscribes the influence of the Indian armed forces not only in the political realm but also in national defense decision-making and defense procurement, such questions are less applicable to the Indian Army except perhaps in the nuclear dimension and in issues related to the state of Jammu and Kashmir. Nevertheless, the United States has placed an enormous strategic bet on India. The last four U.S. presidents—Bill Clinton, George W. Bush, Barack Obama, and now Donald Trump—have embraced India as a key U.S. strategic partner in Asia largely because they perceive a convergence of strategic interests in promoting global security, regional stability in Asia, economic prosperity through trade and investment, and protection of the free flow of global trade and commerce through the vital sea lanes of the Indian Ocean. An unstated assumption of this policy is that India can also serve as counterweight to the growing political, military, and economic influence of China in Asia.

In stark contrast to the sharp recent downward trajectory of the U.S.-Pakistan relationship, the current velocity and trajectory of the U.S.-India relationship seem nothing short of breathtaking. In the six years since Prime Minister Narendra Modi came to power he has visited the United States six times. During a June 2017 visit, he emphasized that "our robust strategic partnership is such that it touches upon almost all areas of human endeavor. … We consider the USA as our primary partner for India's social and economic transformation in all our flagship programs and schemes." India has been designated a "major defense partner" of the United States, and sales of top-of-the-line U.S. military technology to India now exceed \$20 billion. A mutual target of reaching \$500 billion in bilateral annual trade has been set, a level that, if achieved, would exceed the current level of U.S.-Japan trade and bring it on par with the present level of U.S. trade with China.

Given the increasing security dimension of this burgeoning relationship, it is natural to have questions about the capability of the Indian armed forces in general, and especially the army, the largest and traditionally most important and influential service. Measuring military capability is an art rather than a science.

It encompasses more than quantifying factors like military strength, defense budgets, weapon systems, and planned modernization schedules. Other unquantifiable measurements must also be considered, such as morale, training, organizational effectiveness, and doctrinal and operational concepts. Accordingly, the attitudes and values of the officer corps of a service in which Washington apparently is placing so much reliance deserves closer scrutiny. For example:

- A growing number of observers in India and elsewhere are worried that elements of the ruling Bharatiya Janata Party that embrace Hindu nationalist ideology (*Hindutva*) are threatening India's traditional democratic and secular values.⁸ Has this kind of thinking spread to the Indian Army?
- India has long confronted militants in disputed Kashmir, in several parts of northeastern India, and in many locations throughout the country fueled by the Naxalite movement. Because of the inability of the police and paramilitary services to quell these rebellions, the Indian Army is often engaged in internal security operations. Does the current implementation of the Indian Army counterinsurgency doctrine help resolve or exacerbate the problem?
- Many western observers believe that with an army twice the size of Pakistan's and a defense budget seven times larger, India could easily defeat Pakistan in any future conventional war. What does the Indian Army believe about the prospects for military success against Pakistan, and are the views realistic or unrealistic?
- India has a long-standing border dispute with China, a country with an economy and military budget several times larger than India's. What is the view in the Indian Army about a future conflict with China, and how effectively might it perform in such a conflict?
- What is the attitude in the Indian Army about the efficacy of nuclear weapons in a future conflict with Pakistan, with China, or with both? How prepared is the army to operate in a nuclear, biological, or chemical environment?
- Does the Indian Army view the United States as an ally, a friend, a trustworthy security partner, or perhaps something else entirely?
- Right from independence, the civilian government of India took extreme steps to curb the power of the Indian Army, which under British control was seen as an instrument of colonial oppression. Is the post-independence Indian model of civil-military relations changing or evolving because of India's increasing internal and external security challenges and the Modi government's recent decision to name a chief of defence staff?

Unfortunately, despite the warm official rhetoric on both sides about a growing strategic partnership, an increasing number of military exercises among all three services of both countries, and frequent defense engagements at the highest levels of both military establishments, the answers to these and other questions about the Indian Army cannot be given with much confidence. The basic reason why this so is that U.S. diplomatic and military personnel lack all but the most superficial access to the Indian Army.9 There is little or no routine access to midgrade and lower-ranking officers—the next generation—and none at all to enlisted personnel, a situation that also exists in Pakistan. All access to the Indian Army is tightly controlled through the foreign division of the army's director general of military intelligence, and the same is true for the navy and air force through similar offices. Requests for visits to operational units are routinely disallowed unless they have been designated to participate in a forthcoming exercise with U.S. units. Requests by U.S. embassy personnel to visit operational areas like Kashmir are likewise routinely denied. Although occasional access is allowed for U.S. VIPs, such visits are normally limited to higher headquarters and safe rear areas. No social access to Indian Army personnel is allowed except for a very small number, perhaps no more than a hundred from all three services combined, of mostly high-ranking officers specifically vetted to attend events like embassy receptions, national day celebrations, and—very rarely—visits to attaché quarters, and only if a visiting U.S. VIP is being hosted. One former military attaché, when asked why this was so, indicated that it reflected not necessarily an absence of warmth in the bilateral relationship, but a degree of bureaucratic inertia. "Old habits die hard," he explained, "and despite assurances that the rules might be relaxed, they never are." Because the Indian Army is a large organization, and because it has an inflated officer evaluation system, almost any black mark on an officer's personnel file could be the reason for denial of a promotion, a command opportunity, or a prestigious or sensitive assignment. Therefore, few prudent Indian military officers are willing to take a chance by incurring foreign contacts that require an explanation to an Indian intelligence agency. Another former attaché explained succinctly that accredited diplomats like himself were "radioactive" to the Indian Army.¹⁰

Absent routine U.S. interactions with Indian Army personnel as a source of insight into the attitudes and values of the Indian Amy, this study has instead tapped into the recollections of the small number of U.S. Army FAOs and other service officers who have attended the DSSC in Wellington, long considered the most prestigious PME institution in India. For nearly seven decades since 1950, these personnel spent nearly a full year in daily contact with lower midlevel (major and lieutenant colonel) officers of the Indian Army, often working together long into the night on tactical problems and group projects. During their time at Wellington, many formed strong personal relationships with their Indian classmates as well as the college faculty (colonels and brigadiers) and the senior officers (major generals and lieutenant generals). A few developed strong personal attachments that lasted for decades after graduation. Yet virtually none of them were systematically debriefed

by their service or any agency of the federal government after returning home. Other than occasional end-of-tour reports that were filed away by their service personnel offices and mostly discarded when digital files replaced paper ones, there is very little record of their experience and insights available to the policy and intelligence communities in any searchable database. Nevertheless, in several ways this small group of officers, many long retired from government service, were and are better placed than U.S. embassy and military official personnel to understand—and explain to policymakers—the internal dynamics of the Indian Army.

Methodology

This study relies principally on structured interviews with U.S. Army foreign area officers (FAOs) who attended the DSSC as part of the in-country training phase of their FAO training. A small number of non-FAO U.S. Navy and U.S. Air Force officers who attended the college were also interviewed. When these U.S. officers are referred to in subsequent portions of the study they will be designated as "Students" with a capital 'S' to differentiate them from other DSCC students. They will be further identified by the year in which they graduated. Their names do not appear anywhere in the study or in annexes, and this was done deliberately. Although the study is unclassified, many graduates, especially those still on active duty who may return to India on assignment or work in a position that brings them into contact with Indian military officers, may be concerned that their candid comments about the DSSC might be a hindrance in establishing or furthering relationships. Therefore, all identities have been masked.

Critics of this approach may question the validity of relying on the recollections of a relatively small number of U.S. military personnel of sometimes decades-old events as the basis to make judgments about Indian Army attitudes and values. Such information, they might say, is dated and secondhand, and it would have been better if the author had interviewed Indian Army personnel personally. However, for the reasons detailed in the previous section, this would not have been permitted by the Indian Army. Even if it were, the interviews would have been limited to a relatively recent time frame. To emphasize a point made earlier, the primary purpose of this study is not to capture one snapshot in time of the Indian Army; instead, it is to determine if the attitudes and values of that institution have changed appreciably over time.

In defense of the study methodology, two points are germane. First, the Students' year in Wellington—what I have termed "the Wellington experience"—is not remotely analogous to a year spent at a U.S. college or university, or, for that matter, to any U.S. PME school they have previously experienced. As will be made abundantly clear below, the purpose of the DSSC is not merely to provide professional military training and education to midcareer officers; a major additional purpose is to evaluate their fitness for future promotion to the highest levels of the Indian Army. For Indian students, Wellington is a year-long crucible in which they are constantly being observed and tested. For those who aspire to high rank, it is a singular "make it or break it" moment in their military career. To make the experience even more difficult, a very high level of stress is deliberately induced by the senior officers and faculty at the DSSC that makes the entire year a grind for every student—military or civilian, Indian or foreign. Like comrades in combat or extremely difficult military courses like the U.S. Army Ranger School or U.S. Navy SEAL training, the Wellington experience is seared into the brain of every student, and the shared suffering results in a bonding experience that is indelibly imprinted into the psyche of each graduate. Thus, for most Students, the structured interview process brought out many memories, some long suppressed, that shed light on each of the five lines of inquiry.

Second, the Student interviews are only a part of the data used to make the final judgments. Several serving and retired U.S. government and military officials with long experience in India, former U.S. military attaches assigned to the U.S. Embassy in New Delhi, and subject matter experts on the Indian Army were also interviewed. In addition, many Students had retained their DSSC yearbooks and made them available to the author, who was able to extract useful information about student demographics, allied student participation, and bits of historical information about the college. Many yearbook articles written by Indian students over the years also provided useful insights into the institutional culture and pedagogy of the DSSC. A small number of Students also shared several relevant documents, professional journal articles by Indian military authors, and other memorabilia they had collected at the college. In the course of his research, the author also found a large body of DSSC reference materials, which allowed a more detailed examination of Indian Army doctrine and threat perceptions than would otherwise have been available from the memories of individual Students. Of particular interest in this area are those addressing internal security, joint operations, and the nuclear portions of the curriculum. Added to all of this are a variety of secondary sources, including many by Indian defense analysts and retired military and government officials, that corroborated, amplified, or provided additional context to the Student interviews.

The base year of the study is 1979, the earliest course in which a DSSC graduate was found. During the 38-year period from then until 2017, a total of 63 American students attended the DSSC, 37 from the army and 13 each from the navy and air force. Of these, 30 graduates were found, and the author conducted personal interviews with 26. Four others were living abroad and could not be interviewed. Three other graduates wrote end-of-tour reports that were obtained by the author. Thus, a total of 29 data samples covering 23 years of the 38-year study period were obtained. Significant gaps occurred early in the study period (1980-1983, 1985-1988, 1990-1991, and 1993), but in the last 20 years of the study period, gaps occurred only in 1996-1997, 2004, and 2013.

No attempt has been made to quantify the responses the Students provided to interview questions because the sample size is too small for meaningful statistical analysis. The responses were used only to identify broad patterns of behavior and attitudes in the three different subgroups of the Indian Army officer corps—senior officers, the faculty, and the Indian students—observed by the Students during the 38-year study period.

Each of the 26 personal interviews conducted by the author typically required between two and a half hours and three and a half hours to complete. The transcribed responses range from five to 12 single-spaced pages. The interview

summaries and three end-of-tour reports are in Annex B. Three additional data points were captured in the course of the interview process: personal accounts of the DSSC experience by foreign students from the United Kingdom, Australia, and Singapore. Their experiences generally tracked with those of the Students in the year they attended the DSSC, but are not included in the study.

The ability of Students to provide useful information about their DSSC experiences initially varied considerably. This phenomenon likely was influenced not only by how long ago they attended, but by their attitudes at that time. Some considered their year at the DSSC to be a seminal professional experience, while others saw it as merely another military course they had been ordered to attend—and endure—a very long time ago. Some arrived at the DSSC very well-prepared by a year of graduate study, consultation with earlier graduates, and 44 weeks of Hindi language training, while others showed up with almost no preparation or knowledge of India. Some used the year at Wellington to immerse themselves in Indian culture and society and participate in many extracurricular activities at the DSSC, while others grew restive—and sometimes angry—about the tedious administrative requirements imposed by the DSSC administration, the outdated military doctrine being taught, the relatively austere living conditions, and the separation from their families if they had elected to attend the course unaccompanied. One Student's attitude and behavior became so disruptive to the course that the DSSC commandant asked the U.S. Embassy to return him to the United States. Another Student barely escaped similar draconian action. As a consequence of these divergent attitudes toward the course, a few graduates had vivid memories of the experience while others retained almost no memories at all, unable without prompting to recall the names of instructors and students in their syndicates or even the name of the commandant. The latter were outliers in the data sample, but with a bit of prompting about the DSSC environment and the interview questions, even they managed to recall bits of useful information about the course and their interactions with their Indian student colleagues.

The study is designed to identify attitudes and values of the Indian Army officer corps in five general lines of inquiry, listed below. More detailed questions forming the basis of the personal interviews were developed by the author. The complete list of questions used in the study is in Annex C.

Demographic, Social, Cultural, and Organizational Factors, and Curriculum

How have the social status and class origins of Indian students and faculty at the DSSC changed over time? Are current students more conservative politically or religiously than earlier students? What is their level of social cohesiveness, and is there any potential for factionalism in the Indian Army based on religion, ethnicity, or social class?

Perceptions of External Threats and Friendships

Have the attitudes of Indian students toward Pakistan changed over time, and is Pakistan considered a greater or lesser threat than China? Similar questions were asked about the United States, China, Russia, Iran, Afghanistan, Saudi Arabia, and regional neighbors.

Perceptions of Internal Security Threats

Have the attitudes of Indian students toward extremist groups operating from Pakistani territory changed over time? Is India doing the same thing to Pakistan from Afghanistan? How effective is Indian Army doctrine in dealing with the multiple insurgencies in India? Has the internal security threat perception of the most recent generation of officers changed since the terrorist attack in Mumbai in 2008?

Attitudes toward the State and Its Institutions

Have the attitudes of students toward Indian state institutions evolved over time? What is the attitude toward the major political parties? Have the influences of the internet, news media, and social networking affected their attitude? Is the traditional civil-military relationship in India changing?

Attitudes toward Nuclear Issues

Have the attitudes of students and faculty concerning the employment of nuclear, biological, and chemical weapons evolved over time? What are their views about the efficacy of tactical nuclear weapons, and what kind of warfighting doctrine will be used as the basis of employment?

Background of the U.S.-India Relationship

August 2017 marked the 70th year of India's independence from Great Britain and the 70th anniversary of U.S.-India diplomatic relations. For the first five decades after 1947, the relationship was characterized by two prominent American scholars as ranging somewhere between "estranged democracies" and "distanced powers." The reason for such a troubled relationship—verging occasionally on close collaboration but mostly bending toward barely disguised hostility—derived principally from America's Cold War fixation that divided the world into two well-defined camps, one that looked toward the United States and another that looked toward the Soviet Union. In such a Manichean world view, there was little appetite for India's preferred neutrality, so the United States ultimately chose Pakistan as its principal South Asian partner.

As the world's newest and largest democracy, the United States believed India should have willingly embraced what Washington described as "the free world." However, even before independence, Jawaharlal Nehru, the man who became India's first prime minister and led his nation for the next 17 years, promoted an Indian version of what later became known as nonalignment. "We want to be friendly with the three principal powers—America, Russia, and England," he declared in 1946. "Personally, I think that in this worldwide tug-of-war there is on the whole more reason on the side of Russia, not always of course."14 Nehru's goal was an Asia whose destiny was firmly in Asian hands, a stance that presaged the later creation of the nonaligned movement. The Truman administration in 1947 was grappling with the twin tasks of rebuilding Europe and preventing Greece and Turkey from falling under Soviet domination, and it had little time to deal with the distraction of Indian independence. Within a few months, the broad outlines of Nehru's emerging foreign policy created tension with America in three areas. The first was India's support for the complete decolonization by France, Great Britain, and the Netherlands of their remaining imperial possessions in Asia, a policy also advocated by the USSR. The second was Indian resistance to membership in a Western-led bloc of nations that included those colonial powers. And the third was deep Indian resentment toward any nation practicing racial discrimination—for example, the United States. The first American ambassador to New Delhi, Henry F. Grady, bluntly told Nehru that the United States did not consider neutrality to be an acceptable position, and gave him a de facto ultimatum. Grady cabled the State Department in December 1947 that he had informed Nehru "that this is a question that cannot be straddled and that India should get on the democratic side immediately."15

Almost at the same time, the problem of the former Indian princely state of Jammu and Kashmir became another irritant. The causes of the Kashmir dispute between

India and Pakistan are too well-known to merit a lengthy discussion. ¹⁶ When fighting between India and Pakistan broke out late in 1947, the United States placed an embargo on both sides to avoid fueling an armed conflict it was trying to stop. The embargo was lifted only after a cease-fire agreement in January 1949. When U.N. action on Kashmir failed to result in the condemnation of Pakistan as the aggressor, Nehru angrily accused the U.S. and Great Britain of playing a "dirty role" in order to get military and economic concessions from Pakistan. ¹⁷ In fact, the United States had no stake in Kashmir and little time for Pakistan. It saw the problem merely as a dispute between two nations with which it desired friendly relations, not an issue involving vital U.S. interests. Of Nehru's visit to the United States in October and November 1949, Secretary of State Dean Acheson later wrote, "I was convinced that Nehru and I were not destined to have a pleasant personal relationship ... he was one of the most difficult men I have ever had to deal with." ¹⁸ Growing friction in the bilateral relationship, however, did not preclude Nehru from asking for substantial amounts of U.S. economic and military assistance.

The U.S.-Pakistan military supply relationship became the defining major irritant in the U.S.-India relationship after 1954, but there was friction with India over military assistance long before then. In January 1951, the National Security Council (NSC) outlined the first formal U.S. foreign policy for South Asia in the context of the Cold War and the Korean conflict. The bottom-line analysis was that if India was lost to Communism, all of Asia would quickly follow. The Truman administration, despite heavy misgivings, swallowed hard and offered Nehru a military assistance package in 1952, the most significant component being 200 Sherman tanks. Ironically, this prompted a complaint from Pakistan. A parallel request for 200 jet aircraft was shelved for a year when India had difficulty explaining why it wanted to spend so much of its aid allotment—\$150 million—on jet fighters at a time when it was also set to receive \$190 million in U.S. food aid. A package was later approved for 54 C-119 cargo aircraft.

Truman's successor, Dwight Eisenhower, was more inclined to embrace a willing Pakistan than a reluctant India. Building on the Truman strategy of containing the Soviet Union, Eisenhower's administration embarked on an aggressive policy of recruiting client states in a chain of regional alliances along the southern periphery of the Soviet Union. He realized a political price with India might be paid, but decided to take the risk. The NSC recognized that U.S.-Indian relations might suffer "an intensification of differences" and perhaps "more friendly Indian relations with the Soviet Union," but no major shifts in Indian foreign policy. On May 1954, the United States and Pakistan signed a *mutual defense assistance agreement*, and a short time later also became partners in the Southeast Asia Treaty Organization and the Baghdad Pact (later, the Central Treaty Organization).

The United States' choice of Pakistan as a strategic partner in South Asia justifiably angered Nehru and validated the NSC assessment that India might strike a friendlier relationship with the Soviet Union. Nehru flew to Moscow in the

summer of 1955, saying cryptically, "Countries make pacts and alliances often through fear of some other country or countries. Let our coming together be because we like each other and wish to cooperate and not because we dislike others and wish to do them injury."23 India now began to take a stance in the U.N. that was supportive of Soviet interests. In 1956, Nehru harshly criticized the British and French seizure of the Suez Canal while pointedly refraining to criticize the Soviet Union for invading Hungary, becoming the only non-Communist country to vote against a U.N. resolution calling for the withdrawal of Soviet troops. When India's stridently anti-American defense minister, Krishna Menon, approached Moscow for military equipment, the United States found itself in a dilemma: it didn't want a Soviet toehold in the Indian defense establishment, but was constrained from selling India anything significant because of the burgeoning U.S.-Pakistan relationship. The incoming Kennedy administration, in contrast, made improved relations with India a priority and tripled Eisenhower's 1960 level of development lending of \$135 million. But the move came too late; in 1962 Menon struck a deal to buy MiG-21 aircraft from the USSR.24

That same year, the Sino-Indian War created the opportunity to mend fences with Nehru. India inherited a disputed border with China at independence, but by 1954 the two countries had negotiated the Five Principles of Peaceful Coexistence (Panch Shila), by which they agreed to settle the border dispute amicably. Tensions eased and a popular slogan in India during the 1950s was "Hindi-Chini bhai-bhai," or "Indians and Chinese are brothers." However, China's annexation of Tibet in 1959 and India's decision to give the Dalai Lama sanctuary soured the bilateral relationship. After months of preliminary border skirmishing, China achieved strategic surprise in October 1962 by unexpectedly attacking India in force at two locations 1,000 kilometers apart along the McMahon Line. 25 The Indian Army's poor performance in response panicked the prime minister and demoralized the nation, prompting Nehru to write two desperate letters to Kennedy requesting 12 squadrons of fighter aircraft and a modern radar system. Before any U.S. response could be made, China abruptly declared a unilateral cease-fire and withdrew its forces.²⁶ Subsequently, in May 1963, Defence Minister T. T. Krishnamachari (Menon having been sacked) visited Washington and requested \$1.3 billion in arms—twice what U.S. Ambassador Galbraith had been discussing with Nehru and five times what the Pentagon was willing to accept. Although some equipment was delivered quickly, negotiations over the bulk of the package continued into early 1964, when President Lyndon Johnson counteroffered a package of \$500 million. Another new Defence Minister, Y. B. Chavan, wanted three squadrons of top-of-the-line F-104 aircraft, mostly because Pakistan had recently obtained one squadron. Again the Pentagon resisted, claiming it would eat up too much of the proposed package. The negotiation soured, and in September Chavan signed an agreement with the USSR for 45 MiG-21 aircraft and technical assistance in setting up factories to manufacture 400 more.²⁷ Following an inconclusive war between India and Pakistan in 1965, and with the United States gradually becoming more

and more involved in South Vietnam, the Johnson administration more or less walked away from South Asia.

The Nixon administration entered office in 1969 at the height of the Vietnam War, and was focused mainly on a strategy to disengage from a seemingly unending war that had badly divided the nation, weakened the military, and harmed its diplomatic position around the world. Dismissing the notion of monolithic Communism, Nixon and his national security advisor, Henry Kissinger, sought a diplomatic opening to China as a way not only to improve relations with Moscow and Beijing, but to pressure the government of North Vietnam to negotiate an end to the war. That road led directly through Pakistan, which had developed close military and political relations with China after the 1965 war with India and was willing to act as an intermediary. With the help of Pakistan's military ruler, General Yahya Khan, Kissinger made a covert visit to Beijing to begin a diplomatic process that culminated in Nixon's surprise trip there in February 1972.

Complicating this delicate diplomatic process was a steadily deteriorating political situation in Pakistan. In the December 1970 general election, the majority Bengali population of East Pakistan, which had long chafed under the thumb of Punjabi-dominated West Pakistan, won an outright majority of seats and demanded to form the government. Yahya was unable to broker a peaceful transfer of power and decided to crack down militarily on the restive Bengalis, a move since characterized as a genocide that drove millions of Bengali refugees into India. This in turn spawned an insurgency in East Pakistan that India quickly leveraged to its own advantage by providing support to Bengali guerillas, while ordering the Indian army to begin preparations to liberate East Pakistan by military force. To offset any potential U.S. support to Pakistan, Prime Minister Indira Gandhi signed a treaty of peace and friendship with the USSR in August 1971. She also issued an order to the Indian Army to liberate East Pakistan by force in December, but Yahya launched preemptive attacks on the Indian Air Force from West Pakistan on December 3, triggering a 13-day war from which India emerged as the clear winner.28

A minor episode of the 1971 war deeply embittered India toward the United States and continues to resonate to this day. This was a token gesture by Nixon and Kissinger to demonstrate U.S. support to Pakistan by ordering the USS *Enterprise* carrier task force into the Bay of Bengal. Although the war ended just one day after Task Force 74 transited the Straits of Malacca, major damage was done to the U.S.-India relationship. The gambit was widely interpreted as the harbinger of an American strategy to encircle India, and was seen by New Delhi as an implied nuclear threat. The *Enterprise* episode prompted an Indian variant of the Monroe Doctrine, the "Indira Doctrine," with two basic principles: that no foreign power would be allowed to cross the crest of the Himalayas, and that India would consider the presence or influence of any external power in the region as adverse to its interests unless that power recognized Indian predominance.²⁹

The 1971 war established a negative tone and downward trajectory in the U.S.-India relationship that persisted for two decades. If not technically a Soviet client state, India became an even harsher critic of the United States in the U.N., and a major defense partner of the Soviet Union, equipping all three of its armed forces primarily with Soviet weaponry. India echoed Soviet criticism of the U.S. position on Vietnam, formally recognized the Palestine Liberation Organization and the communist state of Kampuchea (Cambodia), and declined to criticize the 1979 Soviet invasion of Afghanistan. In return, the Soviet Union could be relied on to veto any western initiative on Kashmir. The establishment of a U.S. base on the British-owned island of Diego Garcia after the Iranian Revolution and Soviet invasion of Afghanistan was portrayed by the Indian media as another hostile U.S. action. These and other similar events further intensified Nixon's irritation when India tested a nascent nuclear capability in 1974 and declined to sign the Non-Proliferation Treaty (NPT) on the grounds that it was discriminatory and created two categories of nuclear states, the haves and the have-nots.

Although nuclear issues continued to dog the relationship throughout the 1990s, that decade also saw the beginning of a new era in U.S.-India relations because of three factors: the collapse of the Soviet Union, India's adoption of sweeping economic reforms, and growing concern about China as a long-term strategic threat.30 The fall of the Berlin Wall in 1989, the subsequent collapse of the Warsaw Pact as Eastern European states fell away from Soviet political control, and the formal dissolution of the Soviet Union in late 1991 suddenly left India bereft of a long-time superpower patron, cash-strapped and on the verge of economic collapse, and with the need to find a new source of high-technology weaponry. With New Delhi making bold moves to abandon India's moribund statist economy, barriers to improved relations with Washington slowly began to fall away. Prime Minister Narasimha Rao made a six-day visit to the United States in May 1994 that heralded the beginning of a significant improvement in relations. Joint Indo-U.S. steering committees were established in 1995 to coordinate exchange visits, technical assistance, and military exercises between the country's armed forces,31 and in 1997 a bilateral treaty was signed for the extradition of fugitive offenders, an important first step in improving bilateral cooperation on combating international terrorism and narcotics trafficking.

Progress was interrupted in May 1998, when India broke a 24-year self-imposed moratorium on nuclear testing by conducting five underground nuclear tests, and Pakistan followed suit 17 days later with six tests. These tests generated a global firestorm of criticism and set back decades of U.S. nuclear nonproliferation efforts in South Asia, leaving President Clinton little choice but to impose economic and military sanctions on both countries. The outbreak of fighting in early 1999 near Kargil along the Line of Control and the Clinton Administration's subsequent pressure on Pakistan to withdraw its forces from the disputed area created another opportunity to regain positive momentum in the relationship. In March

2000, President Clinton became the first U.S. president to visit India in 22 years. Immediately prior to this visit, the administration eased the nuclear sanctions on India. Clinton's five-day visit represented a major U.S. initiative to improve cooperation with India in a broad spectrum of areas: economic ties, regional stability, nuclear proliferation concerns, security and counterterrorism, environmental protection, clean energy production, and disease control. Prime Minister Atal Behari Vajpayee agreed to institutionalize the dialogue, and working groups were established to coordinate the various areas of cooperation and schedule regular bilateral "summits." Economic ties were a major focus of the visit, with U.S. companies signing agreements on \$4 billion in projects and Clinton announcing another \$2 billion in financial support for U.S. exports to India through the U.S. Export-Import Bank. Six months later in September, Vajpayee addressed a joint session of the U.S. Congress and was the guest of honor at a state dinner at the White House.³²

The new century began with the George W. Bush administration seeking to build on the positive momentum of the Clinton years. While Indian External Affairs Minister Jaswant Singh was meeting with National Security Advisor Condoleezza Rice in Washington in April 2001, the new president dropped by to invite him into the Oval Office for an informal exchange of views. Nevertheless, the catastrophic 9/11 attacks on New York and Washington proved to be a major test of the friendship. Although India offered the use of military bases to the United States, Pakistan, because of its strategic location controlling the land and air lines of communication into Afghanistan, was perceived as a far more valuable partner in the subsequent military operations to take down the Taliban government in Kabul. The dilemma for Bush was to find a way to maintain a newly rekindled relationship with Pakistan while not alienating India. This created an enormous problem when, in December 2001, India-focused militants from Pakistan staged an attack on the Indian Parliament, an action that brought the two nations to the brink of war.³³

The major breakthrough in the U.S.-India relationship came in July 2005, when President Bush and Prime Minister Manmohan Singh issued a joint statement resolving to establish a "global partnership" between the United States and India, through increased cooperation on numerous issues, including "full civilian nuclear energy cooperation."³⁴ Only weeks earlier, the two states signed a 10-year defense framework agreement calling for collaboration in multilateral operations, expanded two-way defense trade, increased opportunities for technology transfers and co-production, expanded collaboration related to missile defense, and established a bilateral defense procurement and production group.

This strong upward momentum in the relationship was further accelerated during the Obama administration. In an address to a joint session of the Indian Parliament in 2010, President Obama laid out the broad fundamental interests driving the U.S.-India partnership forward:

Now, India is not the only emerging power in the world. But the relationship between our countries is unique. For we are two strong democracies whose constitutions begin with the same revolutionary words—"We the people." We are two great republics dedicated to the liberty and justice and equality of all people. And we are two free market economies where people have the freedom to pursue ideas and innovation that can change the world. And that's why I believe that India and America are indispensable partners in meeting the challenges of our time.³⁵

This transformation in Washington's perception of India as its key strategic partner in South Asia was further undergirded by four major U.S. security interests: establishing a stable balance of power in Asia, reducing the threat posed by terrorism and religious extremism, curtailing nuclear proliferation in Asia, and protecting U.S. economic and political interests in the Asia-Pacific region.³⁶

Under Obama, the transformation of the bilateral relationship into a strategic partnership on par with NATO was nearly complete. Since 2008, U.S.-India defense trade increased from roughly \$1 billion to over \$20 billion, including the sale to India of 13 Lockheed Martin C-130 Hercules aircraft, 10 C-17 Globemaster and 12 P-8 Poseidon aircraft from Boeing, as well as 22 AH-64 Apache and 15 CH-47 Chinook helicopters. In December 2016, the United States and India signed a deal worth approximately \$732 million to provide the Indian Army with 145 M777 Howitzer guns. In 2012, United States and India launched the Defense Technology and Trade Initiative, under which the two sides launched seven joint working groups to explore collaborative projects and programs, and signed two science and technology government-to-government project agreements. President Obama and Prime Minister Modi issued the Joint Strategic Vision for the Asia-Pacific and Indian Ocean Region in January 2015. In 2016, the United States designated India a "major defense partner," launched a bilateral maritime security dialogue, and concluded a long-delayed logistics exchange memorandum of agreement.³⁷

The Trump administration seems committed to maintaining this strong upward trajectory and velocity in the bilateral relationship. During their first face-to-face meeting in June 2017, President Trump and Prime Minister Modi reiterated the convergence of strategic interests between India and the United States on a host of issues, with Trump accepting an invitation to visit India in 2018, which, though it was delayed until February 2020, made him the fourth consecutive U.S. president to visit New Delhi. This does not foreclose the possibility of future friction in the relationship. The current level of bilateral trade is heavily in India's favor, and leveling unbalanced U.S. export and import levels is a signature issue for Trump. The administration has already highlighted concern over the trade deficit with India (\$30.8 billion), tariffs (100 percent tariff on motorcycle imports), intellectual property concerns, market access for American companies, and continued Indian buys of advanced Russian military hardware. India, in turn, is concerned about

standards and technical regulations affecting its exports to the United States, and potential changes to the high-skilled visa programs (particularly H-1B). Also, Modi may be disappointed that the rapidly deteriorating U.S.-Russia relationship, something he undoubtedly expected to be more positive, might drive Russia and China closer together. Finally, doubts about U.S. staying power in Afghanistan may be at odds with Indian strategic interests in Central Asia. After comments from U.S. ambassador to the U.N. Nikki Haley about the United States potentially taking a more "proactive" role to de-escalate tensions between India and Pakistan, New Delhi stressed that this was a bilateral problem for Delhi and Islamabad to resolve. The State Department subsequently clarified that it had only encouraged "direct dialogue." ³⁸

The Defence Services Staff College

History and Significance

The DSSC arguably is the premier professional military education institution of the Indian armed forces. Although there is a National Defence College in New Delhi that was spun off from the DSSC in 1960, and which imparts national and international security training to senior military and civil service officers, it is a very small institution with the capacity to train only about 35 Indian Army officers a year, and then only after they have attained almost 30 years of service.³⁹ This means that slightly less than 15 percent of DSSC graduates will have any meaningful exposure to national level decision-making and the strategic level of warfare; for the remaining 85 percent, their year at the DSSC represents their only meaningful exposure to such matters.

This key deficiency in the education of Indian armed forces officers is recognized not only by the three services but by the government of India, which is taking action to rectify the situation. In 2013, the prime minister laid the foundation stone of the Indian National Defence University at Binola village in Gurgaon district, saying at the time that current challenges prompt a "reorientation of our strategic thinking and a reappraisal of our highest defence organization. ... It is imperative that the country's defence professionals remain abreast of the complex environment we face and the avenues that are available as a result of the enormous transition taking place in India. That is where this university comes in." Then-Defence Minister A. K. Antony added that when the institution is inaugurated in 2018 or 2019, its students will study "the contours of foreign conflicts and understand the relationship between defence and finance, between external and internal security and between defence and diplomacy," and be able to "look holistically at security challenges and frame policies based on informed research."40 Unfortunately, the institution was still under construction in 2020 and the opening date continues to slip farther into the future, reportedly due to "politico-bureaucratic apathy and wrangling."41

The DSSC's prestige is also based on a combination of other factors, including its heritage as a successor to the original Indian Staff College established in 1905, its roster of distinguished Indian alumni (including those from the Indian Staff College), and the circumstances surrounding the division of the British Indian Army's training establishment during the partition of 1947.

After a series of major debacles during the Crimean War revealed the need for a more professional officer corps, the British Army Staff College was established in 1858 at Sandhurst. It moved to Camberley in 1862 where it resides today. In 1868, a royal commission studied the question of establishing a counterpart institution in India, but the army's commander-in-chief vetoed it on several specious grounds:

that no suitable commandant or faculty could be found in India, that students in India would be unable to interact with Camberley students, that the War Office might not treat all graduates in the same way, that there was little opportunity in India to study European battlefields, and that the climate in India was not conducive to studies except in the hill stations.⁴²

By 1900, the Indian Army had grown to 150,000 officers and men, with about half its strength consisting of regular British Army units. 43 Yet only six slots annually were reserved at Camberley for Indian Staff Corps officers. When Field Marshal Lord Kitchener arrived as the commander-in-chief in India in 1902, he developed a plan to reorganize and increase the size of the Indian Army. With a new and larger requirement for trained staff officers, and knowing that Camberley would not be able to satisfy it, he determined to start his own school in India to train staff officers. The proposal was deemed unacceptable by the Army Council on the grounds that a staff college in India might foster another "school of thought" in the British Army. Kitchener replied furiously that there was no school of thought in the British Army except for the opinions of a few senior officers, and refused to back down. Within three years he managed to obtain sufficient funding for a staff college to open temporarily at Deolali while a more permanent facility was constructed at Quetta, a site chosen specifically for its proximity to the northwest frontier of British India. The first course consisted of 24 students, one-third from British Army units and the remainder from the Indian Army. The newly named Indian Staff College moved permanently to Quetta in 1907. Its roster of distinguished faculty members and graduates over the next 40 years includes eight field marshals and 20 four-star generals, including such luminaries as field marshals Bernard Law Montgomery, Sir Claude Auckinleck, Lord Slim of Burma, S. H. F. J. Manekshaw, and Ayub Khan, and generals Lord Ismay, Sir Douglas Gracey, and K. M. Kariappa, the first native-born commander-in-chief of the Indian Army. Five future commandants of the DSSC were also Quetta graduates: Verma, Gyani, Som Dutt, Har Prasad, and Maneckshaw.44

As the deadline for partition loomed in the summer of 1947, Field Marshal Auckinleck, commander-in-chief of the Indian Army, recommended dividing the army's personnel and assets between the two soon-to-be-independent states in the proportion of 70 percent to India and 30 percent to Pakistan, which were roughly the respective shares of Hindu and Muslim soldiers in the Indian Army. By July 1947 this division was well underway in the three agreed categories of personnel, moveable stores and equipment, and installations, with the overall percentages having been modified to 64 and 36. However, of the 46 training installations in British India, only seven were located in what was to become Pakistan. Of these, the Indian Staff College at Quetta was considered to be the crown jewel of the entire training establishment. Although two-thirds of the college's personnel and moveable stores ultimately were shipped to India, the prized 10,000-volume library remained intact at Quetta. Pakistan's military folklore maintains that

the sole remaining Pakistani member on the faculty, Lieutenant Colonel Agha Muhammad Yahya Khan, who later became commander-in-chief of the Pakistan Army and ruled Pakistan under martial law from 1969-1972, slept in front of the library door for several nights to prevent departing Hindu faculty members from taking any books with them to India.⁴⁶

Barely six weeks after independence, and while the horrendous experience of partition was ongoing, Brigadier S. D. Verma, once the senior Indian officer on the faculty at Quetta, received a message from the director of military training in New Delhi ordering him to establish a new staff college somewhere in India by April 1, 1948. Verma immediately set out to explore various sites, and eventually settled on Wellington, a hill station in the Nilgiri Mountains of the province of Tamil Nadu. He later wrote that Wellington was selected because it had a variety of terrain nearby—plains in the Coimbatore area, jungles in Mysore, and mountains surrounding it—but mostly because it had unused military housing. Wellington was remote, but so had been Quetta. After herculean efforts to recruit a faculty and prepare a curriculum, Verma succeeded in meeting the deadline, and the first Indian Staff College interim course began on April 5, 1948, with 50 students attending a 20-week course.⁴⁷ Prior to the beginning of that course, a British officer, Major General W. D. A. Lentaigne, was posted as commandant, a post he would hold for the next seven years. 48 Lentaigne moved quickly to transform the college into a joint training institution. The third course, beginning in May 1949, was the first to include an air force syndicate of eight officers, and the fourth course, in 1950, was the first with a navy syndicate of eight student officers. The first foreign students also arrived in 1950, including one American, and the name Defence Services Staff College was formally adopted. Beginning with the sixth course, students from civilian government agencies were allowed to attend.⁴⁹

Mission and Objectives

The purpose of the DSSC has changed several times over the years. In the original 1905 charter, the stated purpose of the Indian Staff College was "to train staff officers for the Indian Staff Corps and the same regulations, entrance requirements, and methods of training as those in force at Camberley were to be adopted." The original aim of the DSSC in 1950 was "to qualify officers for third grade appointments, and to permit selection of outstanding students for second grade appointments." Beginning with the third course, the course lengthened to 10 months and the aim expanded "to train officers for command and second grade staff appointments." By the fourth course, the aim was further expanded, adding "to promote inter-service cooperation and understanding of the problems of the other two services [navy and air force]." By 1998, the aim had further evolved "to train selected officers of the three services in command and staff functions in peace and war in own service, inter-service, and joint-service environment, as also to provide general education to enable to perform effectively in command and staff appointments." ⁵⁰

The present aim of the staff course is as follows.

To train selected officers of the three services in command and staff functions in peace and war in own service, inter-service and joint-services environment, and also to provide related general education to enable them to perform effectively in command and staff appointments and, with further experience, to hold higher command and staff appointments.

- Army Wing. To train selected officers to hold command and staff appointments in the rank of Major to Colonel in the Army and equivalent inter-service appointments and, with further experience, to hold higher command and staff appointments.
- Navy Wing. To train selected officers to hold command and staff appointments, both ashore and afloat, in the rank of Lieutenant Commander to Captain in the Navy and equivalent inter-service appointments and, with further experience, to hold higher command and staff appointments.
- Air Force Wing. To train selected officers to hold command and staff appointments in the rank of Squadron Leader to Group Captain in the Air Force and equivalent inter-service appointments and, with further experience, to hold higher command and staff appointments.⁵¹

Organization, Senior Officers, Faculty, and Students

Despite the fact that it is a tri-service institution, the DSSC has always been headed by a commandant from the Indian Army. Presently, the commandant is a lieutenant general. The college is divided into an administrative wing and three service wings, the latter headed by chief instructors (CIs) from the three services, each of whom is a major general or the service equivalent. The Army Wing consists of four divisions, each headed by a senior instructor (SI) who is a brigadier, and each division comprises seven syndicates headed by a directing staff (DS) member of the faculty who is a colonel.⁵² Each syndicate consists of 10 students, usually nine Indian students and one foreign student. When joint training is conducted, typically in the latter part of the course, joint syndicates are formed consisting of 10 students from each of the three wings and headed by a DS from one of the three services. The course lasts 45 weeks and is divided into six blocks of instruction known as tutorials that vary in duration from four to nine weeks each. There is a break of two or more days after each tutorial, and a longer break of approximately one week (midterm break) at the end of the fourth tutorial, generally in the second half of December.

Senior Officers. The commandant is the central figure at the DSSC, exercising a profound influence on the faculty, the curriculum, and student behavior. Early

in the history of the DSSC it was not unusual for the commandant, then a major general, to go on to higher command assignments and occasionally to rise to the highest position in the Indian Army, chief of army staff. More recently, due to grade inflation in the army, the position of commandant has tended to become a final posting before retirement, and very few commandants today are considered to be upwardly mobile.⁵³ The Army Wing CI is an upwardly mobile position, and many CIs are promoted and go on to a corps or area command. The same is true for the four Division SIs.

Directing Staff. Selection to become a member of the DSSC faculty, or Directing Staff (a faculty member is universally referred to as a DS), is highly competitive and appears to be based on a combination of demonstrated high performance in regimental duties and staff assignments, and good performance as a student at the DSSC, including an evaluation recommending future instructor duty. The latter seems to have the most weight in the selection process. A newly arrived DS typically is assigned to a DS training team in which he plans and helps direct major wargames and exercises. After gaining experience and seniority he is assigned as a syndicate DS and superintends the learning of students. Competition within the faculty is no less intense than among the student body because future upward mobility in the army is contingent on superior performance in this extremely demanding position. The first DSSC commandant, "Joe" Lentaigne, once observed, "It is not generally realized that the DSSC not only trains its students to be junior staff officers, but also trains its instructors to be high grade senior staff officers and formation commanders." Instructors to be high grade senior staff officers

Students. Another former commandant, Lieutenant General A. M. Sethna, observed in 1978, "It is seldom realized that whereas only 180 Army officers attend the staff course each year, some 2,000 would have been attempting to get there."56 The odds of selection are somewhat better today, but not much. Selection to the DSSC is based primarily on the outcome of a grueling series of competitive examinations. Every officer in the Indian Army, regardless of the source of his or her commission, must successfully complete a pre-commissioning course of instruction at the Indian Military Academy at Dehra Dun before receiving a permanent commission and entering the army as a junior officer.⁵⁷ Indian Army officers are thereafter grouped and managed for promotion and schooling according to their graduating class number, or "batch." After a few years of regimental duties as young officers, they eventually become eligible to take the DSSC competitive examination each year over a five-year period until they are either selected to attend or age out of the zone of eligibility. The examination consists of a series of written papers, the topics of which vary from year to year, designed to gauge a candidate's professional military knowledge and communication skills. The test is administered in English.⁵⁸ Since the Indian Military Academy graduates approximately 1,000 new army officers each year, and since the DSSC accepts approximately 250 army officers each year, the selection rate is roughly 25 percent.⁵⁹

Officers not selected to attend the DSSC will likely spend the remainder of their careers performing regimental duties and be trained for repetitive assignments in intelligence, logistics, or other functional career tracks. They will likely retire at no higher grade than lieutenant colonel. The army students attending the DSSC are overwhelmingly from the combat and combat support arms (infantry, armor, artillery, engineers, and signals), with relatively few from the logistics services. The DSSC presently has a capacity of about 450 students. The 2014 course, for example, was comprised of 419 Indian and 29 foreign students. Of the Indian students, 255 were from the army, 75 were from the navy, 83 were from the air force, four were civilians from Indian government agencies, and one each was from the border security force and the coast guard.

Curriculum

The DSSC curriculum has changed many times over the years to reflect the evolution of warfare and technological progress. An evaluation of the quality of the present curriculum will be made later in this study. Because of the competitive examination process, all Indian Army students arrive well-prepared academically to successfully complete the course. Foreign students arrive at Wellington about a month early and participate in a three-week orientation course that acquaints them with the organizations and staff duties of the Indian Army as well as the geography, history, and culture of India.

The college operates on a five-and-a-half-day schedule, Monday through Saturday. Each weekday, students attend classes for four and a half hours and are expected to study individually (i.e., do their "own time work," or OTW) for three and a half hours. No classes are scheduled on Saturdays, but students are expected to study for five hours on their own. The DSSC stresses that these are guidelines only, and that there will be many occasions when organized work is assigned (typically for exercises and wargames) all day and well into the night.

Approximately 50 to 60 percent of the DSSC curriculum is devoted to instruction in joint training subjects, with the remainder to service-specific subjects. All subjects taught at the DSSC use the basic teaching methodology inherited from the British Army. For American students, this is a major change from the method of instruction typically used in U.S. Army PME schools, the "teach, practice, master" model of instruction. For many, the difference is a major source of frustration and disillusionment with the course, because the syndicate DS is not really an instructor; instead he is a facilitator and discussion leader. The college assigns reference material for each class, and students are expected to read and master it on their own. The DS then guides a subsequent discussion of the topic and keeps the syndicate generally on track. Because the DS is a more senior officer with more extensive operational experience than the students, his opinion on any topic in practice is usually decisive in syndicate room discussions. The most important responsibility of the DS is to evaluate students'

demonstrated performance and assess their potential to serve in higher grades. Each syndicate DS also serves as the principal link between students and the SIs, wing CIs, and commandant.

Common instructional techniques used at the DSSC are the tutorial discussion and the tutorial exercise, in which the syndicate DS facilitates discussion among students who are expected to arrive in class having already mastered the information through self-study at home or in small group assignments referred to as indoor exercises or "subsyndicate work." These are supplemented by central discussions involving either the entire course or individual service wings, and formal group lectures by visiting guest speakers in the main auditorium. There are also indoor demonstrations and indoor model discussions in model rooms, so named because the central feature of each room is a very large "sandbox" for modeling terrain. The DS assigned to various training teams are responsible for preparing and leading these discussions and exercises. Students also occasionally travel away from the Wellington campus for outdoor demonstrations and outdoor exercises conducted in nearby training areas.

Other major parts of the course curriculum include the following.

Guest Speakers. Instruction is supplemented throughout the year by a large number of guest speakers from diverse backgrounds, including a mixture of senior leaders from the three services of the Indian armed forces, civilian officials of the Indian government and Tamil Nadu state government, academicians, civilian subject-matter experts, and occasional visiting foreign military or government officials. Topics on joint issues and national and international issues are imparted to the entire student body in the main DSSC auditorium; subjects of individual service interest are presented only to service wing personnel.⁶⁴

International Students Presentation. Each foreign student is required to make a 40-minute presentation on his or her country as a formal part of the course curriculum. This presentation takes place in the main college auditorium in front of the assembled staff, faculty, and student body. The college specifies that the following subjects be covered: history, geography, and culture; economy and industry; system of governance including the role of the judiciary; tourism and special places of interest; sports and recreation; the armed forces; and any other aspects of interest. The presentation is required to be made in the form of a multiscreen audiovisual show. Students are "guided" by their sponsor DS (who is also being evaluated, by DSSC senior officers), assisted by a designated team of Indian students, and are advised in the college's joining instructions to bring the needed materials/information from their respective countries to Wellington.

Dissertation. The DSSC is affiliated academically with the University of Madras, which awards the degree of Master of Science (in defence and strategic studies) to all student officers who successfully complete the course and write an acceptable

thesis. Students may submit three thesis choices from a list prepared by the DSSC, and a faculty committee selects the final topic.

Minor Research Project. This is a syndicate presentation on an approved military topic. The deliverables are an 8,000-word paper and a 90-minute briefing to the service wing or to the entire college.

Book Review. All students write a book review between 700 and 800 words during the year. The books are selected from the DSSC library and assigned to the students.

Forward Area Tour. This is a 10-day tour in October of forward Indian Army posts on the borders with Pakistan and China for Indian Navy and Indian Air Force students as well as foreign students. Students have the option to visit Jammu and Kashmir to see the Line of Control with Pakistan and the Chinese border in Ladakh; to Sikkim to see the border with China in that sector; or to Assam to see the borders with China, Bhutan, and Bangladesh.

Industrial and Demonstration Tour. In the early decades of the study period, this was a two-week rail trip to military installations (IAF Pune, the National Defence Academy, the Indian Army Artillery, Armor, and Telecommunications schools, the Rann of Kutch, the naval base at Visakhapatnam, and Eastern Naval Command) and industrial facilities at Bangalore. More recently, the tour has used civilian and military air transport to go further afield, for example to the Andaman and Nicobar Islands.

Evaluation of Students

The DSSC uses a comprehensive method of evaluation with numerous independent inputs. Syndicate rosters are "shuffled" after each tutorial is completed so that a student never has the same DS twice, and rarely will he have more than one or two of his fellow students twice in a syndicate during the year. Thus, each student receives six separate evaluations by six different syndicate DSs. Each student also receives midcourse and final evaluations from the division SI and wing CI. The year also includes several major wargames, each with a different operational focus and geographic setting. Students are assigned various command, staff, and controller positions in which their performances are observed and graded by their syndicate DS as well as by training team DSs who are considered to be the exercise "sponsors." Training team DSs submit inputs to the final student evaluation, as do the wing CIs and the commandant, who observe the exercises and receive periodic briefings by the students holding senior appointments. Every student is additionally graded on the quality of his or her participation in syndicate discussions and contributions made in division and wing discussions in the model rooms. Although not formally a part of the evaluation system, several American students were convinced that participation in team sports like cricket, field hockey, basketball, and volleyball, as well as traditionally military forms of recreation

such as riding, hunting, angling, and sailing, were closely watched by the senior officers and DS and included informally in final student evaluations. In addition to these purely subjective evaluations, the final student evaluation incorporates results from five written examinations called "revision exercises" administered at the end of the first five tutorial periods, as well as the grades received on the master's thesis, minor research paper, and book review.

After these various inputs are collated, students are formally counseled prior to the midcourse break by their CIs and SIs, and given suggestions to improve their performance. Foreign students are similarly counseled by the commandant and CIs before the midcourse break and at the end of the course. Beginning with the fourth course in 1951, five grades were awarded at the DSSC: A—exceptional, awarded to consistently brilliant officers with the capability to rise to the top of their profession both in command and staff; B—awarded to officers of above-average intelligence and character; C-awarded to officers willing to learn and understand staff work, and the majority of the course; D-below average, awarded to officers who could be employed on staff work, but with supervision; and F—failing. This was modified from the 23rd course in 1967 to seven grades: Distinguished the same as the old A; A—above average; B—high average; C—average; E—below average; F-failed; and R-returned to unit because of disciplinary reasons or lack of aptitude. 65 Students deemed to possess potential to return to the DSSC as a faculty member receive an "I" for instructor noted with their final grade. The final grade becomes the basis for the DSSC recommendation to each of the three service personnel departments for the student's next posting. For army students, this department is the office of the military secretary. The postings are announced at the end of the course in a presentation made to Indian students only. No foreign students are allowed to attend this presentation, although many subsequently learn informally where their classmates will be assigned. The most prestigious assignment and desired posting is to become a brigade major, which is equivalent to a combination of executive officer (second in command) and the operations and intelligence officers of a U.S. Army maneuver brigade. Typically, about 10 to 15 percent of the students who receive the top grade are assigned to this position after graduation, or are selected for foreign military schools equivalent to the DSSC.66

Study Observations

This section of the study is intended to be purely expository. It represents a summary of Student responses to the structured interview questions in the five lines of inquiry. Not every response by every interviewee is given. The responses were selected to represent a broad spectrum of opinion over time and to illustrate the general consensus of Student opinion. In this section there is no attempt to analyze, make judgments about, or determine any implications of the responses; that will be done in the "Key Findings" section.

The Wellington Experience: Demographic, Social, Cultural, and Organizational Factors, and Curriculum

Senior Officers

The Students described a spectrum of interactions with several commandants and service wing CIs over the 38 years covered in the study. The overwhelming majority of the commandants were described as remote figures who rarely interacted with students other than in large group settings or at special events like foreign student national days. In contrast, the CIs were generally much more visible in the daily life of the college. They were friendly and approachable, and many of them made concerted efforts to reach out socially and professionally to foreign students. The 2012 Student noticed that the Navy Wing CI had a habit of spending a part of each day in wing syndicate rooms observing classes. Sometimes he merely observed, while at other times he questioned students about course material, and on occasion would take the lead in the "summing up" of wing discussions.⁶⁷

That one of the two invariably played the role of "good cop" while the other played "bad cop" was a common Student observation. The roles diverged depending on the personalities of the commandant and CI. One notable commandant, Lieutenant General V. P. Malik, elected to play the good cop, at least with foreign students. The 1995 Student had frequent interactions that he described as friendly and professionally stimulating. Malik, who later became chief of army staff (the last DSSC commandant to do so), seemed to have a genuine interest in the U.S. Army and how it operated. The Student considered Malik to be "ahead of his time, thoughtful, and not reflexively anti-American" as were other senior officers at the DSSC. The Student was frequently called to the commandant's office, sometimes to answer very specific questions about U.S. Army doctrine and at other times just to chat about a range of military topics. Malik often asked for his opinion of the DSSC curriculum, and when the Student occasionally replied with a negative assessment

the commandant accepted his views without taking offense. "He treated me differently at Wellington from the other foreign students," was his final assessment.⁶⁸

In contrast, the 2002 Student was warned in New Delhi by embassy personnel that the commandant did not like Americans. He found this to be true. The commandant maintained an "icy" attitude toward him throughout the course, and once publicly corrected his wife at a social function when she mispronounced the Hindi word for greeting (*Namaste*). This Student's relationship with the Army Wing CI was exactly the opposite, warm and friendly, and he visited the CI's office "at least a dozen times" to discuss topics related to the U.S. armed forces. The CI was "easy to talk to" and careful to spend an equal amount of time with the other western students. This Student's relationship with the four division SIs in the Army Wing were similarly cordial. ⁶⁹ The 2016 Student considered the commandant to be a highly visible presence at the DSSC, but thought him to be "extremely arrogant and highly critical of America." He was also prone to making "five-minute rants" on various topics, including, on one occasion, a tirade about American interventionism around the world. In contrast, the division SIs were far more approachable, and "you could go to see them in their offices any time."

The 1998 Student recalled that the commandant and Army Wing CI had exactly opposite temperaments. The CI always tried to "push the envelope" in a positive way. A frequent visitor to the syndicate rooms, he was willing to listen carefully to the opinions of students who differed with the school's solution to tactical problems, but in the end was always careful to emphasize the correct application of Indian Army doctrine. Once, the Student was selected for a command position in a major exercise and came up with a "typical American solution" based on his U.S. Army armor training and previous operational experience. The CI patiently listened to his briefing, complimented him on its "boldness and dynamic solution to the problem," but observed that while it might work in an American context it would not work in India. Indian Army soldiers, he explained, were less flexible than American soldiers, and required very simple solutions in order to execute them properly.⁷¹

Conversely, other CIs took on the role of "bad cop" in enforcing DSSC customs and traditions. The 2014 Student remembered his CI "constantly yelling" about something most of the time, and talking to the students "like they were second lieutenants rather than field grade officers." When these tirades occurred in large group settings, the foreign officers were usually dismissed while the Indian officers had to endure the brunt of the CI's anger. Such occasions were typically instigated by relatively minor infractions of college protocol: tardiness to class, improper parking of vehicles, falling asleep in class or in the auditorium, and minor dress code violations.⁷²

Occasionally, U.S. and Indian military cultures collided sharply. The 2014 Student recalled the day he was scheduled to give a briefing in his syndicate room on a special project. As his classmates filed into the room he noticed the

commandant standing in the hallway. Walking up to him, he said casually, "Hey Sir, I'm about to give a briefing on a project. Would you like to come in and join us?" The commandant froze, gave him a penetrating stare, and replied coldly, "Two things—never again address me as 'Hey Sir,' and never invite me into a syndicate room. If I want to come in, I will." The Student opined that the rigid hierarchy of the Indian Army and certain aspects of South Asian culture created a toxic climate at the DSSC, in which Indian students could never be candid with their superiors and felt they had to say things they thought the superiors wanted to hear.73 "Information always flowed downhill from the top of the hierarchy," he opined, and "it never flowed from the bottom upward."74 The 1992 Student encountered a milder version of this early in the course, when one of his division SIs, a martinet who apparently had no understanding of western military culture, called him to his office to caution him that cheating was not tolerated in the DSSC. He knew the Student possessed a personal computer and was worried it might provide an unfair advantage over the Indian students.75 The 2011 Student A noticed a difference in tone in the interactions that occurred between DSSC senior officers and foreign students versus those with Indian students. The seniors paid special attention to the officers from western Englishspeaking countries, but projected a stern façade toward Indian students. The Student interpreted this as an Indian version of "tough love," and noted that they exhibited a similarly stern demeanor toward DSs.76

The 1995 Student noticed a patronizing attitude by the senior officers, and even some of the DSs, toward the Indian students. He eventually concluded this was a manifestation of the Indian Army's institutional culture in which there was reluctance on the part of commanders to trust subordinates. It was not unusual, he explained, for an Indian battalion commander to take over a platoon-level operation if he thought the platoon leader was making a mistake. The Indian Army, he emphasized, had a zero-defect mentality that corroded efficiency and inhibited the training of junior leaders. He explained with an anecdote: One of the DSSC guest speakers that year was a hardline right-wing Bharatiya Janata Party (BJP) politician who made virulently anti-Muslim and anti-Christian remarks during his presentation.⁷⁷ The Student, who normally ignored such remarks, was so incensed that he asked a pointed question that prompted a caustic reply from the speaker. Afterward, several DSs came up to him to apologize, including a Christian DS who had also been offended by the speaker's remarks. Another DS opined that the students at the DSSC were too young and professionally immature to be exposed to such narrow-minded people. The Student could not fathom this attitude. If midcareer Army officers were too immature to be exposed to political attitudes that were freely available on television and radio, he thought, when would the senior officers ever consider them to be ready?⁷⁸

Directing Staff

Nearly every Student surveyed considered the DSSC faculty to be composed of highly professional and competent officers. A few were effusive in their praise. The 1979 Student considered them all "very professional, and all real gentlemen. They seemed to have read everything in the college library about military issues and could talk about any country's armed forces with ease and familiarity. They were aware of all the latest military trends and technologies, especially those in the U.S. armed forces." He noted they had collegial relationships both with their students and the senior officers, and attributed this to the continuing influence of many retired British military expatriates then living in the surrounding area that were a fixture in the college mess. The 1984 Student concurred. The DS were "really good. ... They knew their stuff backward and forward, and knew how to communicate it. They were the best and brightest of the Indian Army." He considered them to be well above the level of professionalism of the faculty at U.S. Army PME institutions.79 The 1992 Student characterized them as a group of "hard-working professionals," although he also noted, "Some were jerks that were dismissive of student opinions and experiences," and others "were not good listeners." Some, but by no means all, he considered to be progressive in their thinking and open to creative solutions that differed from the approved DSSC approach.80

This mostly positive attitude about the DS has diminished in the more recent courses, possibly reflecting the expansion in size and capacity of the DSSC over the past two decades. The 2010 Student A considered only 50 to 60 percent of the DS to be "positive" in their engagement with the students, with the remainder either "arrogant" or "shaky" in professional knowledge. He nevertheless thought they were upwardly mobile because an assignment to the DSSC faculty was considered to be a plum assignment in the Indian Army, and success at Wellington marked them for future promotion. Perhaps, he thought, this was why they seemed so wary of the senior officers, often becoming visibly "nervous" in their presence. 81 The 2000 Student freely admitted that his mostly negative opinion of the DS was colored by their blatant disregard of the fact that "plagiarism was rampant and condoned" at the DSSC. "They looked and acted professional," he said, "but lacked the moral courage to take on cheating and truly prepare their students for the next war." Whenever there was an examination, he explained, the syndicate DS would eventually leave the room and allow the students to cheat. He also noted that in the Indian Army, performance as an instructor at the DSSC was far more important than regular military duty. As a result, the DSs in his division were uniformly "scared" of the division SI because he had the power to make or break their careers by giving them either a good or bad evaluation on their annual confidential report. Such an inordinate level of fear of senior officers was "unusual" in the Student's experience as a U.S. military officer. As a group, they "loved to talk about big-picture issues, but were reluctant to reward anything but the school solution on exercises and in war games. They only paid lip service to alternative

thinking."⁸² The 1989 Student thought about half of the DSs, mostly those who had studied at foreign military courses, were amenable to "out-of-the-box" solutions to assigned problems. The rest were "dogmatic" and would never deviate from the recommended DSSC solution. Even those slightly more accommodating than the others had to be very careful, he continued, because the division SI might "crack the whip on them." Whatever their demonstrated potential in the past, it was as important for the DS to perform well at the college as it was for the students if they craved further promotion.⁸³

On a day-to-day basis, the syndicate DS was in absolute control of the syndicate room, and several respondents cited examples of abusive or idiosyncratic behavior. The 2003 Student laughed heartily when he recalled his bad start with his first syndicate DS. The cause of friction was an assignment to write a 1,000-word essay describing himself. After the Student turned it in, the DS called him to his office and ordered him to rewrite it in blue ink. The essay had been written with black ink, a color that the DS explained was reserved for the exclusive use of the Wing CI. When it was rewritten in blue ink and resubmitted, he was again summoned by the DS and told that it should not have been written on lined paper. He was told to go to the college stationery shop to purchase unlined paper and resubmit it. When the requirement was submitted for the third time, the DS gave him what amounted to a children's book on cursive writing and informed him that writing in block letters was not allowed. Thus, the assignment had to be redone a fourth time. At this point the Student angrily stormed out of the DS's office saying he had not come to the DSSC to waste his time on such useless pedantic tasks that bore no relationship to the real world.84

The 2016 Student thought many DSs were fixated on trivial issues. He recalled an occasion when he was criticized for holding a wooden pointer incorrectly during a briefing. There was no creativity or unconventional thinking allowed in the syndicate rooms, he continued, and some DSs mocked or berated students if they exhibited it.⁸⁵ However hard the DS might be on western students, they were even tougher on the Indian students. Both the 2005 Student and the 2008 Student noted that if the Indian students did good work, the DS would push them to do even better. Students not meeting the expected standard were put under additional pressure and scrutiny. "They were on them all the time," and there was little praise even for students doing very good work.⁸⁶ This was likely another variant of the "tough love" approach employed by the senior officers that permeated every level of the DSSC.

The 2011 Student B considered the treatment of students by the syndicate DS to be degrading. From the first day to the last day of the course, "the students were treated more like first-year officer cadets than like O-4s and O-5s [majors and lieutenant colonels] with an enormous amount of combat experience." As examples, he wrote that one DS routinely shouted at the students, telling them they were "acting like a bunch of women in a fish market," ordered them to stand

up and sit down again just for the sake of it, and in one case directed an entire division to hand-copy a 10- to 15-page pre-lecture handout because he didn't think the students had properly studied the class reference materials. The DSs segregated themselves from their students in every setting (college socials, field trips, wargames, auditorium seating, and even toilets), and seemed to take pride in disciplining and stressing students to make them feel inferior. The Student concluded that the DSSC was intended to be a rite of passage similar to basic training rather than a PME course. Although the Indian officers took it all in stride, he opined that the DS attitude and behavior deeply offended virtually every foreign officer. 87 The 2011 Student A stated laconically that there was "more than a touch of theatricality in such behavior." They all employed the "tough love" approach with students, but he recalled that when he first arrived at the college front gate to sign in to the course, he encountered a group of DSs who insisted he, his wife, and their three children first accompany them to the college mess to cool off after the long journey and have a meal. Many other DSs, including his sponsor, had attended a military course in the United States or had relatives living there, and these officers regularly sought him out to discuss their experiences. These same officers could also be tough disciplinarians who roamed the lecture halls sharply reminding students caught napping to pay attention. This was ironic, he laughed, because months later he saw a newspaper picture of an Indian Army officer sleeping during a lecture at the National Defence College in New Delhi—and it was his own DS.88 Every member of the DS was under just as much scrutiny by the senior officers at the DSSC, he explained, as their students—and under just as much if not more pressure to perform well. A few were aware that the standards they were required to maintain had little application in the real world. One DS in 1999 admitted, in a rare moment of candor, that the pedagogy at the DSSC "was an old-school style of learning." Many aspects of the course, particularly the staff duties component, emphasized only rote memorization and an overly tedious application of the lessons being imparted.89

Students

Nearly every Student emphasized that their Indian classmates had survived a punishing array of competitive examinations in order to be selected to attend the DSSC. Most thought they constituted the top 10 to 25 percent of the Indian officer corps. ⁹⁰ Many Indian students delighted in regaling them with "war stories" about how difficult the written examinations had been and how hard they had prepared for them. The written examinations covered much of the material in the DSSC curriculum, and the 2015 Student was told that versions of the examinations routinely circulated in the Indian Air Force. In a sense, he thought that students selected for the DSSC "had already done the course" before they arrived at Wellington, and that only a minority, perhaps 10 to 20 percent, were genuinely interested in learning or interacting with the faculty and other students. A large majority, 80 to 90 percent, realized they had to do the coursework, but considered their time at

the college to be a "year off" because they were virtually guaranteed to graduate unless they made a grave mistake or misbehaved. 91 The 1992 Student divided his classmates into three groups: the top third was hard-working, exceptionally dedicated to their profession, and would likely perform exceptionally well in any army in the world; the middle third was less professionally motivated, and possessed English skills markedly inferior to those in the top third; and the bottom third had even worse English skills, were defensive in personal interactions with the DS, unfriendly to the foreign students, and performed "questionably" in major exercises.92 The DSSC was the gateway to future command opportunities and onward promotion in the Indian Army, explained the 2014 Student, and the biggest challenge was simply "getting in." Once at the DSSC, many students considered themselves on the path to upward mobility and used the year to relax, spend more time with their families, and do just enough work to graduate. The Student opined that this attitude was the likely basis for the numerous minor infractions that so infuriated the senior officers.93 The 2007 Student B noted clear differences between the professional focus of the three services: army students were rigidly focused on counterinsurgency operations in Kashmir and northeastern India, while navy and air force students were primarily interested in expeditionary operations and more focused on the South Asia region as a whole.94

Indian Student Demographics

Every Student was asked about the ethnicity of his Indian classmates, but none could offer any specific data. Many observed that a large majority were from the northern India "Hindi belt," with only a small minority from southern India. Others noticed that a large number of Indian Navy officers came from the southern Indian state of Kerala. One Student observed that many army officers were Punjabi Hindus with Sikh wives. 95 Nearly all noted the large number of Sikhs and how few Muslims were at the college. These observations on ethnicity are in line with the results of the 2011 Indian census (the latest data available), which showed an overall ethnic composition in India of 72 percent Indo-Aryan (northern Indian), 25 percent Dravidian (southern Indian), and 3 percent Mongoloid and other.

The 2011 census also showed the religious affiliation of Indians to be 79.8 percent Hindu, 14.2 percent Muslim, 2.3 percent Christian, 1.7 percent Sikh, and 2.0 percent other religions. Annex H shows that of the Army Wing students, Sikhs constituted roughly 17.3 percent, Christians 1.7 percent, Muslims 0.7 percent, and Parsis 0.1 percent. Presumably, the remaining 80.2 percent of Army Wing students were Hindus, roughly in line with the proportion of the general population. Sikhs in the Army Wing, however, constituted roughly 10 times their proportion in the general population, while Muslims constituted only one-twentieth. The 2008 Student observed that the few Muslim officers knew they would never be promoted beyond the rank of colonel because their loyalty to the state was suspect, and that "except for the Sikhs, you generally had to be a Hindu to get ahead in the Indian Army."

DSSC student demographics cannot be discussed separately from the wider issue of Indian Army demographics, which has remained an extremely sensitive issue since partition, as a result of the extremely low representation of Muslims in the Indian armed forces. Consequently, no meaningful statistics are publicly available on the class composition of the army, or of any other service. Shortly after January 1949, the government of India announced it had decided to abolish class composition based on fixed percentages, and that army recruitment would be open to all classes, with none being denied the opportunity to serve. Every chief of army staff and minister of defence since then has reiterated this policy whenever they are asked a question about army demographics. The only publicly available estimates of class composition of the Indian Army are by Steven I. Wilkinson, and are limited to data from the 1950s and 1980s, in the table below.

Class Percentage	1951	1981
Punjab Hindu	16	26
Punjab Sikh	26	18
Rajput	7	6
Mahratha	6	5
Muslim	2	1
North Indian Hindu	2	2
Kashmiri Pandit	2	1
Christian/Anglo-Indian	5	4
Uncategorized/Unknown	16	7
Himachali	1	1
Garhwali	1	1
Dogra	1	1
Coorgi	2	1
Telegu	1	1
Parsi	2	1

At partition, the British Indian Army was composed of approximately one-third Muslim soldiers. The Armed Forces Reconstitution Committee that divided the army between India and Pakistan in 1947 assumed that all the Muslims would opt for Pakistan, but a surprising number of them—215 commissioned officers and 339 viceroy's commissioned officers (later called junior commissioned officers)—chose India. By 2003, the Muslim class composition of the army had declined to an estimated 2 percent, with only two officers having risen to the rank of lieutenant general and six to major general in the five decades since independence.¹⁰¹

After the 1857 mutiny of the East India Company army, the company was dissolved and India was ruled directly by Great Britain. A new army was recruited on a class

basis but organized into pure-class regiments as a "divide and rule" technique. The fixed principle of the officer corps, inculcated first by British and later by Indian officers, was secularism, because otherwise the army might be drawn into communal conflict and tear itself apart. 102 At independence, Prime Minister Nehru elected to continue the practice of having the majority of the army's infantry battalions as "fixed-class" units. For example, a typical Punjab regiment battalion contains two companies of Sikhs and two of Dogras; the typical Jammu and Kashmir Rifles battalion has one company each of Dogras, Sikhs, Muslims, and Gurkhas. But within five years of independence, Nehru grew concerned about the rapidly declining number of Muslims serving in the armed forces in what was theoretically supposed to be a secular state, "In our Defence Services," he wrote, "there are hardly any Muslims left. In the vast Central Secretariat of Delhi, there are very few Muslims. Probably the position is somewhat better in the provinces, but not much more so. What concerns me most is that there is no effort being made to improve this situation, which is likely to grow worse unless checked." His prophecy came true sooner than he could have imagined when Minister of State for Defence Mahavir Tyagi disclosed that by 1953, "the percentage of Muslims in the Armed Forces which was thirty-two per cent at the time of Partition has come down to two. To correct this state of affairs, I have instructed that due regard should be paid to their recruitment." Three decades later, in 1985, the percentage had not improved, and may have been even lower. George Fernandes, the minister of defence at the time, candidly admitted that "the Muslim is not wanted in the Armed Forces because he is always suspect—whether we want to admit it or not. Most Indians consider Muslims a fifth column for Pakistan."103 This was mostly glossed over at the DSSC with anecdotes about other aspects of diversity in the armed forces. One that was frequently cited was an observation made about the 1971 war with Pakistan that the chief of army staff was a Parsi (General Sam Manekshaw), the general officer commanding-in-chief of Eastern Command was a Sikh (General Jagjit Singh Aurora), and his chief of staff was Jewish (Major General J. F. R. Jacob). 104

Students' Social Class and Caste Composition

The Students likewise offered very little information about social class composition or the caste background of their classmates. Most said many of their classmates came from military family backgrounds but could not precisely define what this meant. ¹⁰⁵ The 2001 Student opined that several subjects of conversation at the DSSC seemed "taboo." These included communalism, the treatment of women in India, and discussions of caste. While never openly discussed, these topics always seemed to be just beneath the surface. Caste was usually dismissed as being no longer applicable in elite Indian circles, but it was clearly evident in arranging marriages, and it occasionally surfaced at the college. During the Foreign Area Tour, for example, one high-caste Brahmin officer always made it a point to eat alone rather than with anyone from a lower caste. Similarly, there appeared to

be few Dalits, or untouchables, in the course despite the fact that admission to the armed forces is open to all Indians regardless of caste. ¹⁰⁶ The 2003 Student mentioned that warrior ethnic groups and castes like Jats, Rajputs, and Marathis predominated, and everyone made Sikhs the butt of their jokes. ¹⁰⁷ The Sikhs, possibly because they realized their martial tradition was the reason they were so numerous in the Indian armed forces, always took this ribbing in good humor. The 2007 Student A considered them all to be "well-rounded and well-focused," who "lived up their reputation as a warrior class." ¹⁰⁸ The 2008 Student noticed that many Hindu students expressed derogatory racial thoughts. One student from the state of Manipur in northeastern India was thought to look "Chinky" [sic] and southern Indians were referred to as "blacks." ¹⁰⁹ He thought this attitude harkened back to the 19th-century British notion of "martial races." They considered themselves to be among the martial races while their colleagues from northeastern and southern India were not. ¹¹⁰

Although he could provide no specific data, the 2007 Student B opined that both the DS and the Indian students came from predominantly middle-class backgrounds, and that there were more students from lower social classes in the army than in the navy and air force. Upper-class Indian families, he said, typically did not send their children to the military. His impressions are confirmed by scholar Stephen Cohen, who has noted the steadily changing social class composition of the Indian army since 1947, observing that the officer corps has become more middle-class and careerist, with fewer of the most highly qualified officers opting for the combat arms. By the middle of the 1970s, according to Cohen, the "best and brightest" Indian students from the most prestigious private schools began to choose employment in foreign firms, followed in second place by employment in Indian firms. In their places, the sons of junior commissioned officers and enlisted soldiers have increasingly filled the ranks of the National Defence Academy. 112

All the Indian students clearly knew the caste and social status of their classmates. The 1984 Student noticed a clear distinction between those whose fathers had been officers and those whose fathers had been junior commissioned officers (equivalent to a U.S. Army noncommissioned officer), although they were never openly criticized or discriminated against. One of the British officers attending the course had a father who had been a sergeant in the British Army. He was nicknamed "Ronnie the Jat" by his classmates, a term implying that he had a less than exalted family background. The 1995 Student observed that only a few of his classmates, perhaps between 10 and 20 percent, had "family money" that allowed them to live slightly better than their peers. This was relatively easy to determine in 1995: those with family money could afford to buy cars (usually the small, Indian-make version of the Suzuki known as the Meruti), while the others made do with a motorcycle or motor scooter. He caste and social status of their classification between those whose fathers had been junior commissioned officers.

It must be emphasized, however, that social class, caste, and communal distinctions in the Indian Army are all but obviated by the power of Indian military

traditions and the professional ethos ingrained in every cadet from the first day he enters the National Defense Academy. The British Indian Army traditionally viewed itself as the glue that held India together. This attitude was socialized into every cadre of native-born officers entering before World War II. "As a group," noted Cohen, "Indian officers were extremely conscious that the military was free of caste and communal discord, and could not help but compare the orderliness of the military—despite the diversity of classes—with the disorder of civil society. Their professional outlook reinforced their feeling of the superiority of the military way of life." After independence this attitude was further reinforced by the first generation of military leaders. The overwhelming view of the officer corps is probably best expressed by former Minister of Defence Y. B. Chavan: when it comes to the defense of India, "we are all Kashatriyas now." 116

Religiosity

Although 80 percent of the DSSC student body was probably Hindu, not a single Student commented on religious orientation or practices. This does not mean that religion was unimportant to Hindu students, only that it was not openly observed or discussed at the DSSC. Because Hinduism exhibits tremendous diversity and variance, it is exceptionally difficult to define its tenets. Unlike the monotheistic religions of Judaism, Christianity, and Islam, Hinduism has no official clergy, no centralized authority or bureaucratic structure, and no unified system of beliefs enshrined in a creed.¹¹⁷ The point to emphasize is that none of the Students attending the DSSC in the past 20 years mentioned knowing any classmates that adhered to the Hindu-nationalist ideology commonly known as *Hindutva* that is associated with the BJP.¹¹⁸

Cheating and Creative Thinking

With one exception, every Student highlighted the ubiquity of cheating, which was most frequently defined as the use of "previous course knowledge," or PCK (the collected solutions to earlier DSSC courses), but could also take other forms. This behavior spanned the entire 38-year study period and was so prevalent that it must be considered a part of the DSSC's institutional culture. The 1979 Student was the only respondent to deny any knowledge of its existence, but even he noticed that everyone strived to get the DSSC solution, that "innovation was not always rewarded," and that the college solution was not always thought by the students to be the "right solution," or even the best solution. Most respondents echoed the description of the 1984 Student, who described cheating at the DSSC as "massive and extraordinary. "I was shocked and appalled," he recalled, "What about being an officer and a gentleman? To them it [cheating] was perfectly alright." Whenever a test was handed out in the syndicate room, the DS initially sat at his desk, but invariably would leave the room for an extended period of time. As soon as the door closed, the atmosphere turned chaotic as questions were raised,

answers were called out, and students walked around looking at others' answers and discussing disagreements. The practice seemed futile to him because it made little difference in the many tactical exercises and wargames in which the students were assigned command and staff positions. There was no PCK, he concluded, that could compensate for poor leadership and communication skills, or inferior staff management techniques.¹²⁰ The evolution of technology in the last two decades revolutionized the use of PCK. The 2011 Student A observed that even when a DS was in the syndicate room, the answers to examination questions were freely passed by cell phone text messages, and that as soon as the DS left the room, the students invariably circulated the remaining answers verbally.¹²¹

The most ubiquitous use of PCK occurred not in the syndicate rooms but in student quarters, where assigned tactical problems were to be worked out by small groups of students and presented to the entire syndicate the next day. The 2001 Student described a typical "sub-syndicate session," in which

the requirement was for a small group of syndicate-mates, usually three or four, to meet in the evening to prepare the solution for an exercise that would be discussed in class. In this example, the requirement was to produce an operations order for a brigade attack. Class ended each day around 1330. The Indian officers typically had a long lunch followed by rest and recreation until at least 1700. The sub-syndicate group met sometime after 1900 but generally spent most of the early evening hours socializing, having snacks, and discussing other subjects. Usually at around 2200 the discussion turned to the next day's requirement. On this occasion, the officer in charge of the group said he already had the PCK and would take care of bringing the orders to class. Around midnight, the Student received a frantic telephone call from this officer asking him to come back to his quarters. It seems that the Indian officer couldn't get the floppy disk containing the PCK to open on his computer. The use of personal computers at Wellington was a relatively new innovation and few Indian students were proficient in their use. The Student helped him open the disk on his computer and departed.122

The 2012 Student observed that although the DS constantly warned the students not to use PCK, it was so freely available that everyone used it at least to get "95 percent of the required solution and then 'tweak' the remaining 5 percent." Creativity, he noted, was not prized, and in fact was an impediment during group work. It was never overtly stifled, he continued, but was subtly discouraged because the use of PCK actually made a DS's job easier since the requirements submitted were always doctrinally correct. Everyone at the DSSC, he concluded, "was just playing a big game." The focus on both sides was on getting "the right answer as the school defined it." The process of thinking about a problem and arriving at a workable solution "was not as important as getting the school solution." 123

The 2006 Student was asked if he thought the use of PCK violated the professional ethos of the Indian Army, one tenet of which is Discipline and Integrity. He responded that there seemed to be a mental separation between the kind of behavior that was necessary at the DSSC and what was expected in the field formations. He considered the DSSC environment to be an anomaly. Egregious instances of cheating were occasionally punished. The 1998 Student recalled that thesis dissertations were freely available for purchase in Coonor, a town near Wellington, where a cottage industry had sprung up to provide academic support to DSSC students. One student was summarily dismissed from the course for purchasing a dissertation. This was discovered by the DS assigned to review the submission, who instantly recognized it as the very one he had written as a student years earlier. To make matters worse, the student had not bothered to fix any of the typographical errors or make any effort whatsoever to alter the text. 125

In the 2000 yearbook, *The Owl*, one Indian student wrote an article satirizing conduct and the use of PCK. Although written in an obvious tongue-in-cheek style, his observations are illuminating.

The discussions in the college are very conservative and are strictly bound by the limits set by the 'greens' and the 'DS notes.' The answers to questions raised are well defended and are as laid down in the previous class notes. This pattern often results in a few officers feeling left out of the proceedings because they either do not have the aptitude for memorizing key points in the ancient Indian tradition or they do not have previous class notes that predict the exact pattern of questions and answers. ... After all, if the same was not taught in the previous course it must be highly blasphemous to raise the issue during this course! ... The concept of 'self-learning' is alien to our culture. ... The Minor Research Project presentations are more an exercise in coordination than anything else. After all, planning and coordination of the presentation is what requires maximum time and imagination. The scripts are already available from the previous courses and things cannot change drastically over a period of one year. ... Dissertations are something that the students always appreciate because they contribute immensely to the free time available at weekends. ... There is scope for borrowing copiously from the wisdom of the previous course here too.126

Two Students offered differing explanations for the ubiquity of PCK. The 2011 Student A opined that the Indian Army was fixated on the correct application of doctrine rather than imaginative thinking on the part of its officer corps. India's two most likely enemies, China and Pakistan, were unlikely to achieve strategic surprise over India because of the limitations that Himalayan terrain imposed on the former and the adverse conventional military balance that constrained the latter. Because the Indian Army's existing force structure and doctrine were

considered to be adequate to deal with even a two-front situation, DSSC students only had to correctly apply the existing doctrine to be successful, not to waste time and sow confusion by thinking creatively about it. The 2014 Student's explanation was even simpler: PCK was a matter of personal survival. The daily college requirements were too many and too onerous to handle without it. He admitted using it himself, the alternative being to work five or six hours a night—every night, including weekends—to solve the requirements. No one could maintain such a pace indefinitely. With PCK, the work could be done in an hour or less. Even the DS recognized the dilemma, and some even recommended that students "use it constructively" rather than relying on it for everything, a recommendation that was usually ignored.127 The 2017 Student elected not to use PCK, but related an anecdote illustrating the heavy price he often paid for this decision. During the minor staff duties block of instruction, his DS posted on the college computer network a voluminous mass of paperwork related to the construction of a new building on the DSSC campus. Because of several design changes, a change of contractors, shoddy construction, bad weather, and many other reasons, the building took years to build and was greatly over budget. The student requirement was to write a "minute," a brief memorandum, to the commandant explaining what had happened and why. Reading the hundreds of pages of posted materials, extracting the pertinent points, and then drafting the minute in the correct military format using correct abbreviations took him 10 hours. Indian students using PCK completed the requirement in less than one hour.128

Cheating at the DSSC is not a new phenomenon, and greatly predates the period of this study. In describing his experience at the Indian Army Staff College in Quetta in 1945 (when the institution was still controlled by the British Indian Army), retired Pakistan Army Lieutenant General M. Attiqur Rahman, a former corps commander in Lahore and military governor of West Pakistan and Punjab, remembered, "Another revealing aspect was that the British officers did not worry about their gradings too much and seldom tried to find out the Directing Staff solutions beforehand." Presumably the Indian and Muslim students did both. And retired Indian Army Lieutenant General M. L. Chibber observed, after the Indo-China war in 1962,

Another thing which some of us tried to promote was to get rid of an obsession in our Army—the search for the right solution. It was not infrequent that a Directing Staff in charge of an exercise would end up his briefing to his colleagues by saying, 'Well, gentlemen, the solution we have to sell is the one in the Pink,' and he would explain it. With such an ethos it was natural for the students to try and guess what would be acceptable to the Directing Staff. Our crusade was to inculcate self-confidence in the student that no matter what the problem, he would find a workable solution. Search for the so-called Directing Staff solution makes an officer indecisive.¹³⁰

This study has dwelt at length on the subject of cheating for two reasons. First, it was the subject most frequently cited by Students as the most negative aspect of their DSSC experience. Second, and more importantly, it highlights the tension between the professed objectives of the DSSC as an institution for the professional development of midlevel officers of the Indian Army and the army's use of the college as an evaluation mechanism to determine future promotion potential. The implications of this dichotomy will be further addressed in the "Key Findings" section.

DSSC Evaluation System

The most obvious justification for any form of cheating is to better one's grade. The question is why do Indian students feel under such pressure to excel that they knowing and willingly violate the army's stated ethos? Every Student was asked what the Indian students considered to be the purpose of the DSSC. Many responses were a minor variation on the 2003 Student's, who explained that the true purpose of the course was not to impart a quality professional military education, but only to determine which students would finish in the top 10 percent, be favorably considered for prestigious assignments after the course, and become the next generation of senior officers. In effect, he continued, the DSSC was the gateway to future promotion in the Indian Army, and it was this simple fact that explained why the use of PCK was so endemic among his classmates.¹³¹ The 1984 Student emphasized that because of artificial grade inflation in the Indian armed forces during the 1980s, any officer who graduated from the DSSC was likely to retire at the grade of brigadier, but only the top-ranking students had any hope of promotion to general officer rank.¹³²

Because DSSC performance so heavily impacts the future direction of each student's career, the purpose of the course appears to be primarily to evaluate promotion potential and only secondarily to impart a broad military education. This explains much of the "abusive" DS behavior that so many Students found distasteful. A major part of a DS's responsibility in each tutorial period is to evaluate the ability of students to perform under stress. This is why class participation is so important. The best students are expected not only to know the assigned material, but also to be able to articulate it whenever called on unexpectedly, and to defend their position logically and effectively whenever a DS chose to play the role of devil's advocate. Nothing was more stress-inducing, thought the 1989 Student, than being called upon in a central model discussion. He described model discussions as being held in a large hall, in the center of which is an elaborately fashioned terrain model depicting the tactical situation being discussed. All the students in the wing are seated in ascending rows around the terrain model. At the very top of the hall is a series of windows which allow senior officers to observe how students describe key terrain features, explain the tactical situation, brief the friendly and enemy orders of battle, propose a workable scheme of maneuver,

and critique a previous student's comments. Every student knows that his or her response is being observed not only by his own syndicate DS, but by every other DS in the wing, by every division SI, by the wing CI, and at times even by the commandant, all of whom will provide inputs into the student's final evaluation. A good grade is based on the ability to correctly apply doctrinal principles, not to demonstrate creativity or out-of-the-box thinking. The ability to stand in front of a large audience without notes, answer questions correctly and succinctly, and logically defend a proposed solution is highly rewarded. And finally, students with superior English skills have an obvious advantage. ¹³³

At the end of the course, all DSSC students are rank-ordered on an order-of-merit list, and a top finish is doubly rewarded. Not only are the top-finishers identified as being in the running for senior officer rank, they are rewarded with career-enhancing assignments after graduation. Nearly every Student identified the most coveted follow-on assignment for Army Wing officers as becoming a brigade major, or BM, in an infantry or armor brigade. There is no U.S. Army equivalent to this position, but it is roughly a combination of the roles of brigade executive officer (second in command), brigade operations officer, and brigade intelligence officer. Other desirable assignments were thought by the 2005 Student to be (in order): second in command of his home regiment or battalion, general staff officer (Grade 2) at division or higher headquarters, the Rashtriya Rifles (a paramilitary organization, but only if it involved command), and deputy assistant adjutant and quartermaster general of a brigade (a combination of brigade adjutant and logistics officer). In all positions, an assignment to a unit in an operational area like Kashmir was considered to be more prestigious than to a unit in a routine garrison environment.134 Only the 1984 Student provided any information on the precise relationship between grades and follow-on assignments:

Only seven students that year received an 'A,' and they all received BM jobs. There was a sliding hierarchy among these receiving a 'B,' the most common final grade. Those with a high B also got BM jobs and were additionally designated as being qualified to return to DSSC as a DS. If a student received a 'C', he would get a GSO-2 job if he was a captain, and perhaps a major might get a DQ position. At the end of the course, the Indian Army Military Secretary came to announce to each student his next assignment. Only a very small number of students were dissatisfied or thought their performance in the course had not been fairly evaluated.¹³⁵

Every Student was asked if any Indian students were disappointed in their final grade or complained that they had not been fairly evaluated. None cited a single instance of surprise or disappointment. Many Students indicated that it was apparent early in the course who would be the top contenders. The 1979 Student said that the top-finishers were readily "identifiable," and "known" at the beginning of the course both by the DS and by their fellow students. Almost certainly they had

established a reputation for excellence at the Indian Military Academy and in other army courses. Doing well at the DSSC, therefore, was expected of them, almost as if they had been "bred for it." The 2000 Student observed "signaling" about who was doing well simply by the assignment of senior positions during major wargames. Some students, he thought, arrived at Wellington with a reputation as someone destined for future success. It was not apparent why these students always got the plum assignments and others who seemed equally worthy did not. Even when the "comers" did not distinguish themselves in their senior positions in wargames, they always seemed to get another chance at redemption. The 2000 Student eventually concluded that in the Indian Army, individual reputation, regardless of how it was earned, marked people either for success or failure. It was the Hindu concept of karma, or predestination, based on behavior in an earlier life and applied to the Indian Army. 136

Sometimes the intensity of competition brought out the worst in the top contenders. The 2016 Student recalled that after each tutorial period the students in each syndicate were asked to rank each other in order from top to bottom. The Student said that one of his syndicate mates in the first tutorial period had been helpful to him at the beginning of the course. Therefore, he had ranked him at the top. When he revealed this choice to another student in the syndicate he was told, "You have made a mistake. Only the first assessment counts. That student will never help you again." He was correct—that student never again offered the Student any assistance for the remainder of the course. 137

The 2007 Student A probably offered the best summary of the true purpose of the DSSC: "To serve as a selection tool for future promotion; to reinforce the correct application of doctrine; to keep the students 'in the box'; and to reinforce the [Indian Army] 'party line." 138

Common Characteristics of Top Finishers

Not every Indian student at the DSSC aspired to finish at the top of the class. The 2011 Student A believed that only 30 percent of the students arrived at Wellington determined to compete for a slot at the top of the class, while the remainder "were just happy to be there" and did just enough to get by. The 2015 Student thought the number contending for top honors was even smaller. He divided his classmates into two groups: the "thinkers" numbered between 10 and 20 percent and strove to develop professional expertise that would be helpful to them in their future assignments; the "coasters" made up the remaining 80 to 90 percent and thought the DSSC was just another hurdle to be surmounted. Every Student was asked if he could identify any common characteristics of the top finishers in their course, and nearly everyone had a slightly different opinion. A wide sampling of responses follows.

1979 Student: Bright, "thought leaders" among their peers; from "good families," often with a military background; "always front and center, invariably selected for senior positions in college wargames"; and "well-spoken but cautious in their

opinions and other observations, probably because they knew there was a lot riding on their performance."

1992 Student: Good oral and written English skills, good professional reputations earned at the National Defence Academy and Indian Military Academy ("the anointed ones"), families had privileged social backgrounds, and membership in a higher caste.

2000 Student: "Well-read" in the military profession and familiar with current events; intelligent, critical thinkers (even though this was not expected, required, or even rewarded by the college); and good oral and written English skills.

2006 Student: Combat arms officers, "very driven" (meaning they were self-starters), "bright" and determined to excel at the DSSC, selected for senior positions in the major wargames, constantly tested by the DS and invariably performing well, possessing strong oral and written communications skills. Being able to give a good briefing was critically important at the DSSC.

2007 *Student* **A**: Received high scores on the six end-of-tutorial examinations, awarded valor medals from operational assignments, had attended foreign schools, were selected for senior positions during major exercises, and were good at giving oral briefings or recitation in wing discussions. "In sum, they looked the part, delivered the part, memorized the PCK, and were well-polished."

2007 *Student B:* High-caste Hindus or Sikhs, good performance on operational assignments in difficult areas like the Line of Control, highly intelligent with good "street smarts," good communication skills, and good performance in major exercises.

2008 *Student:* Acted and looked professional, were either athletes (especially in golf, field hockey, and cricket) or sportsmen (hunting, fishing, sailing, or riding), looked sharp in uniform, demonstrated good briefing skills, and were able to think quickly on their feet. "Bravado and showmanship" also counted for a lot.

2010 Student A: Mostly Kargil veterans, projected confidence in their professional competence, were not overly concerned about DS opinions of their solutions or about their place on the final college order-of-merit list, had extensive operational experience besides Kargil, possessed innate intelligence, competitive (finishing high enough to receive a BM assignment), and had overseas military experience (foreign schools or U.N. peacekeeping operations).

2016 Student: Seemed to "know their stuff," networked and curried favor with the DS. If they were not selected for a senior position they volunteered for menial exercise jobs no one else wanted, and "made sure they were seen" during discussions and briefings. Many at the top were in the special forces and took an entirely different approach to the course. They were all highly respected for the arduousness of their service and their many valor awards. "They did stuff right and never failed to give their candid opinion."

DSSC Curriculum

In the first decade of the study period, the DSSC operated on a quarterly basis, but at some point in the early 2000s the course was reorganized into the present tutorial system. ¹³⁹ Although Annex E provides the list of subjects taught in the three service wings, the 2011 Student B's end-of-tour report included a detailed exposition of how these subjects and other major DSSC events were integrated into the six tutorial periods. For this reason it is quoted at length:

The academic year was broken up into 6 tutorials of lengths varying from 5 to 11 weeks, with a 3-day weekend between each tutorial (the first two breaks were 4 days for the international officers). The first tutorial was a "joint" tutorial which covered basically the same topics as the international orientation: basic overviews of each service, staff writing, and basic doctrine, as well as a service-specific week on the various roles of airpower. There were 2 days dedicated to leadership training, which consisted of generic leadership theory but unfortunately provided very little practical leadership instruction applicable to future commanders. There were also numerous evening social functions such as mess dinners, division and syndicate cocktails, and happy hours which allowed the staff and students to start getting to know each other.

The second tutorial was essentially a single-service tutorial, with the air wing occupied primarily with various airpower employment exercises. Four of the six weeks were dedicated to air wing exercises and wargames along the themes of appreciation writing, weaponeering, and air campaign planning. The first public speaking exercise—a 5-minute extemporaneous briefing—was also conducted during this tutorial, as well as an assignment to hand-write an extemporaneous service paper within a 2.5-hour time limit. The intent of both of the latter exercises was to judge how well officers could organize and present a coherent argument on a given topic without the ability to cheat or copy a submission from a previous year. The American International Student Presentation, described in detail below, was also presented at the end of this tutorial.

The third tutorial was another service-centric tutorial with briefings on Indian Air Force law, logistics, maintenance, performance appraisals, and management of enlisted personnel. Because most of the topics were specific to the IAF, they had very little relevance for the international officers and we were excused from several of the briefings. The major deliverables of the tutorial were a week-long air defense exercise, a 20-minute prepared briefing, and the presentation of the first of several "minor research projects"—1.5-hour briefings on various topics

presented by a group of 12 officers to the rest of the air wing. The high-light of the tutorial was the 10-day Forward Area Tour (FAT), described below, during which all AF, Navy, and international officers got to visit forward army posts on the borders with either Pakistan or China.

The fourth tutorial was only 5 weeks long for the international officers, and for the Air Wing consisted almost entirely (25 of 27 duty days) of AF-Navy or AF-Army joint wargames focused on maritime air and amphibious operations, mountain warfare, air defense, and air transport operations. The duty day during exercises and wargames was typically 10-12 hours long, but unfortunately a significant amount of time was wasted with little or no activity, and there was very little learning value in the exercises due to the extensive amount of cheating and heavily scripted results. Most international officers utilized the wasted time during the wargames to write our dissertations, which needed to be completed by the end of November. There were two additional weeks of classified briefings for the Indian officers at the end of the tutorial, while the international officers had a 25-day mid-term break. Most international officers utilized the break to travel around India and the region.

The fifth tutorial began with the Industrial Demonstration Tour (IDT), a 15-day tour of military bases and industrial facilities throughout India, which is described below in more detail. The remainder of the tutorial was dedicated to joint instruction, exercises, and wargames focused on low-intensity conflict, amphibious operations, NBC warfare, and disaster management. The tutorial culminated in the final wargame of the course, a 3-week tri-service wargame where the college was divided into countries closely resembling India and Pakistan fighting an air campaign, amphibious landing, and a largescale tank battle for control of a disputed border area very similar to Punjab. The wargame was intended to be the culmination of everything we'd learned during the year and our chance to demonstrate our new skills as commanders and staff officers, but it turned out to be similar to all previous exercises, with enormous amounts of wasted time, heavy scripting, rampant cheating, and minimal independent thought or creative planning. During this tutorial we were also required to present a dissertation defense, which consisted of a 10-minute power point briefing followed by a 20-minute question and answer session with students and staff.

End-of-Tutorial Examinations. Each tutorial ended with the students taking a comprehensive examination of the material covered during the tutorial. The tests were primarily fill-in-the-blank, true-false, or

multiple choice, with a few short-answer questions for good measure, and were designed to examine Indian officers' ability to memorize excruciatingly minute and irrelevant detail rather than to evaluate their understanding of general concepts which would benefit them in future command or staff appointments. Some of the questions were completely irrelevant to anything. For example, one of the test questions in the Navy wing was "Who were the winners of female doubles tennis at the Indonesian Open?" Many of the test questions involved spelling out acronyms, performing trigonometry calculations, and filling in blanks with words picked from the most obscure and unimportant sections of the guest lectures. When I asked the DS why this was the case, they said the entire Indian education system is designed to overload the students with as much information as possible in the hopes that the students will retain at least half of it, and that 50% is a passing score in most Indian education institutions. What it meant for the internationals was that after the first test most officers no longer studied for the exams as it would've been physically impossible and professionally useless to memorize the type of information being examined. On the first test, for which we'd all dedicated a significant amount of study time, the average score for international officers in the Air Wing was in the 30-40% range, but we never received the results of any exams after the first test, so we don't know how we did thereafter. However, we took consolation in the DS's assurance that each exam counted for less than 2% of our total end of course marks. and statements to the effect of "Don't worry, you're in the 66th staff course, and no one in the previous 65 courses has ever failed DSSC."140

Nearly every Student commented on how much reading was assigned on a daily basis and how many work requirements were placed on the students. In an office call with the Army Wing CI, the 2017 Student A was invited to give his opinion of the course curriculum, and in an attempt to be diplomatic replied only that it was "challenging." The CI immediately seized on this comment and replied animatedly, "Yes! It is, and it is meant to be challenging." At that moment the Student realized for the first time that the jam-packed DSSC curriculum was intentionally designed to put the students under such intense pressure that if they were able to cope with the resulting stress they would never face a challenge in the army they could not overcome. It would be a stain on the honor—the *izzat*—of the college and the army if a DSSC graduate failed to perform satisfactorily in a subsequent posting. The college, he concluded, "was deliberately designed to be a boot camp for field-grade officers." ¹⁴¹

General Assessment of the Curriculum. Prominently displayed on the DSSC website is a quotation by a former commandant of the DSSC, Lieutenant General F. N. Bilimoria: "It is here at the Staff College, the 'think tank' of the services, that

the middle piece officers of the Indian Armed Forces and selected civil servants upgrade their knowledge from the mechanics of soldiering to the level of conception of ideas in the sphere of military, socio-political, economic and scientific fields, and integrate them into the larger aspects of national life."¹⁴² Not a single U.S. Student (or western foreign student) agreed with this description of the DSSC. To the contrary, the 2010 Student B offered in rebuttal a quotation from the Delta Division SI: "This institution exists to teach officers how to do proper staff work, and not how to be leaders, planners or war-fighters … they will get that in a later course."¹⁴³

This was not the isolated opinion of a single brigadier, but has long been the opinion held by Indian Army senior officers at the DSSC. This tension between the proper amount of tactical and strategic content in the course surfaced in 1999 at one of the regularly scheduled conferences between the commandant and wing CIs to discuss the curriculum and other routine issues at the DSSC. At this conference, both the Navy Wing CI and Air Force Wing CI recommended that joint training should be done primarily at the strategic level of warfare instead of the tactical level because, in their opinion, the college's emphasis on tactical-level instruction was causing the students to form an inaccurate picture of the importance and proper application of airpower. The Army Wing CI disagreed strongly, arguing that the mission of the DSSC was to train majors through colonels for their next 10 to 15 years of service, a time most of them would work primarily at the tactical level. Before they worked at the strategic level, he continued, they would receive specialized training to prepare them for operations at that level. The commandant decided on a compromise. Since the three services had differing opinions about the issue, he decided that the Navy and Air Force wings could conduct more training at the strategic level while the Army Wing continued to focus on the tactical level. He also decided to allow the Air Force Wing to conduct a joint strategic/operational Army/Air Force exercise to expose Army students to the U.S. AirLand Battle concept.144 Since 1999, the Army Wing curriculum has focused primarily on land warfare operations at the tactical level and occasionally at the operational level of warfare, but the strategic level of warfare is left almost exclusively to guest speakers and individual or group research projects. The 2006 Student estimated the breakdown of the course to be approximately 70 percent tactical, 20 percent operational, and only 10 percent strategic.145

The 1979 Student observed that the quality of the education imparted at the DSSC was "not top notch," that there was "not much rigor" in the course, and that the techniques employed were "old and regimented." Most operational procedures taught at the college reminded him of old World War II techniques that had been brought forward into the modern age. 146 The 1984 Student noticed that many course reference materials were a mixture of "local" (Indian), United Kingdom, and United States army field manuals, with the only difference being that they had locally printed DSSC covers. Thus, the doctrinal material being taught did

not always fit the equipment actually fielded in the Indian Army. All in all, he considered that the course seemed to be designed to prepare graduates "to fight the WW II way with a 1945-era British Army force." According to the 2001 Student, the Army Wing focus was mostly on infantry units and tactics with far less attention paid to artillery and logistics. Preparing for a "ditch cum bund" operation on the plains of Punjab against Pakistan was the most frequently emphasized operation. Like many other Students, he thought the doctrine was outdated and laughed that he had learned how to plan and execute British Army World War I tactics. Whatever doctrine the Indian Army had, he said, was a rehashing of what the British Army had left behind in 1947—"But the Brits have moved on."

A large of amount of time in each service wing—85 duty days in the Air Force Wing alone—was allotted to single- or multi-service wargames. In the Army Wing there were typically six major exercises, two in a plains environment against an opponent closely resembling Pakistan, with one game focused on offensive operations and another on defensive operations; two exercises in a mountainous environment against an opponent closely resembling China, also with one game focused on offensive operations and another on defensive operations; and two joint exercises, the largest being an amphibious operation on an island closely resembling the Andaman and Nicobar Islands, with an opponent resembling China. Army Wing students were assigned leadership and staff positions, usually on one of three teams: the friendly side, the enemy side, and the control team. Once again, the most detailed description of how exercises were conducted is from the 2011 Student B end-of-tour report:

All exercises were heavily scripted, with each side receiving a 30-40 page scenario for their country and then being tasked with writing a command estimate or appreciation, developing courses of action (COAs), and progressing the war either through power point slides or a sand model. The staff would have a "recommended solution" to which students were expected to adhere. The planning phase consisted of producing long written military appreciations done separately by each service, then stitching them together into a joint operational plan as best as possible. If the students deviated from the recommended solution, the staff would force them to change the COAs to match the script. The control team, which was also made up of students, would tailor results to ensure adherence to the recommended solution. For example, during one game the red air force would have clearly decimated the blue force based on their appreciation of the situation and well-developed campaign plan, but instead of letting the plan play out, the staff arbitrarily assigned 15 percent casualties to both sides so that the game would progress as per the college solution. Because of this, there was very little free thought or initiative exercised during the wargames, and cheating was again the norm, with most deliverables

and solutions copied from previous years' submissions. The 10- to 12-hour duty day would typically consist of 10-12 officers in one room either surfing the internet, watching movies, or working on other college assignments, while one or two officers would find last year's solution and simply change the names and dates to match the current setting. The exercises were also focused primarily on tactical rather than operational or strategic levels, with corps or regional command chiefs discussing minute details such as the placement of a single artillery piece or whether an infantry squad should move up the north or south ridge of a mountain. O-4/O-5 officers would concentrate most of their intellectual energy on detail that would typically be handled by an E-4/E-5 in the US military.¹⁴⁹

The 2016 Student opined that the major exercises changed very little from year to year. He once saw a five-year-old piece of PCK that contained the correct exercise solution. A student from Afghanistan was so frustrated that he approached a navy DS and told him, "I have not learned one thing I can take back to my own country and use. All we do is talk about Kashmir and Pakistan." The consensus view of the curriculum by many foreign students was probably summed up by a British officer who observed, "We stopped doing this 50 years ago." 150

<u>Combined Arms Operations</u>. The U.S. Army defines combined arms operations as "the synchronized and simultaneous application of arms to achieve an effect greater than if each arm was used separately or sequentially. Combined arms integrates leadership, information, and each of the warfighting functions and their supporting systems. Used destructively, combined arms integrates different capabilities so that counteracting one makes the enemy vulnerable to another." In considering their evaluations of Army Wing curriculum it should be emphasized that nearly every U.S. Army Student in the past three decades had high-intensity combat experience either in the first Gulf War, in post-9/11 operations in Afghanistan and/or Iraq, or in all three. By contrast, the last high-intensity combat operation undertaken by the Indian Army occurred in the 1971 Indo-Pakistan War, the 1999 Kargil operation notwithstanding.¹⁵²

The 1998 Student opined that the ability to integrate maneuver, firepower, and logistics taught at the DSSC was "not anywhere near U.S. Army standards." The procedures being taught were more along the lines of bringing the various arms and support services together on the battlefield rather than genuinely integrating and synchronizing their capabilities. Only infantry and armor units were habitually task-organized for tactical operations, while artillery "was just out there" in support with very few preplanned target sets identified to support the selected scheme of maneuver. 153

The 2006 Student, a military intelligence officer, stated that the integration and synchronization of maneuver, firepower, and logistics support taught in

the syndicate rooms was "not practiced" in the college wargames and exercises. Tactical intelligence, for example, was taught using U.S. Army field manuals that outlined the IPB (intelligence preparation of the battlefield) method, but the much older British system of "appreciation of the situation" was used in all exercises and wargames. Thus, intelligence did not play a major role in the basic planning process.¹⁵⁴

The 1992 Student noted that the Indian doctrine was quantitative—almost mechanical—and fixated on the apportionment of combat power. Artillery planning mostly involved the allocation of firing units to the maneuver forces; engineer planning was concerned with the number of mines needed for minefields; and armor planning, like artillery, involved the allocation of relatively small numbers of tanks to supported infantry units. Instead of massing armor units and employing them at a decisive place and time on the battlefield, the Indian approach was to allocate small numbers of tanks, sometimes as few as four, to infantry companies to use as they saw fit. 155

The 2015 Student considered the service doctrines taught at the DSSC to be "adequate, but incomplete in terms of logistic support." In the latter, he explained, mostly "there was just an arm wave," meaning that it was assumed that the logistical system would provide whatever was required whenever it was needed. The details of combat service support, he emphasized, were conspicuously lacking in most exercises and wargames. ¹⁵⁶

To Students with extensive combat experience, the doctrinal foundation for the procedures being taught was puzzling. The 2010 Student A considered it unlike anything he had ever seen. It was "heavy on calculations" of relative combat power, and poor in integrating and synchronizing that combat power to make it a genuine combat multiplier. Everything was in massive infantry formations that invariably would result in heavy casualties on a modern battlefield. "They just throw infantry at obstacles," he explained, and there was little consideration of the use of airpower, whether it involved rotary-wing or fixed wing platforms. Everything seemed to be an amalgamation of ground force doctrines borrowed from other countries, and the intelligence estimate of the situation briefed in major exercises generally consisted only of the rote memorization of key terrain features and avenues of approach. He ascribed such things to a "shortcut mentality" in the Indian Army: "They want to jump ahead quickly without understanding the implications of the changes that are being made or why they should be made at all."157 This troubled some of the Indian students as well. Many of his classmates thought much of what was taught in the course was "BS," said the 2002 Student, and that if it was practiced that way on the battlefield "they would never survive." As a helicopter pilot, he was appalled to learn there was virtually "no concept" of close air support to the ground maneuver arms, and little discussion of what might be involved in future forms of warfare.158

Joint Training. For an institution that prides itself on being a joint PME institution, the 2015 Student thought "they [the DSSC] were hopefully prescriptive" in

their understanding of jointness, which was always referred to at the college as "jointmanship." He joked that in Hindi, "joint is spelled A-R-M-Y and everything was Army-centric." All the planning in joint exercises was done in segregated service cells. Once, he suggested that instead of working in segregated planning cells the air force officers should be parceled out to each of the army planning cells where their expertise would be more readily available. "We don't do it that way," was the curt response given to the suggestion by one DS. 159 The 2012 Student pointed out that in every joint exercise, "the navy guys just did the navy stuff," and the other services just did theirs. He had no memory of ever working together with army students in any joint exercise. Jointness was something he thought was more of an aspiration in the Indian military than a reality.¹⁶⁰ The 1992 Student recalled that the major joint exercise at the end of the school year, an amphibious operation, involved mainly presentations by each service about their capabilities and contributions to the final plan. All the actual work done in the joint syndicates was accomplished by separate service teams working on a service-specific portion of the plan and then briefing it to the other service teams. The school solution called for the three service inputs to be integrated into a single plan and then for "joint de-confliction" to be performed. It never was. 161

The Students offered several reasons for this lack of genuine jointness at the DSSC. The 2007 Student B opined that the senior officers and faculty were "struggling" to make the transition from the legacy principles of British Commonwealth military forces to what the United States military forces were doing in Iraq and Afghanistan. He opined that the joint training portion of the curriculum did a "decent job of getting the three services together on the same sheet of music—it was certainly good for the navy and air force officers"—but the joint doctrine being taught and the joint exercises themselves were only "marginally relevant" because of what he described as service stovepiping, the independent and uncoordinated development of service operations plans after the initial guidance was given.¹⁶² The 1989 Student thought the DSSC paid only lip service to joint training because India had no need to project combat power outside the Subcontinent. Therefore, there was no compelling need for joint warfighting commands like those of the United States. In any case, he continued, none of the three services were willing to give up any tangible service prerogatives in the name of jointness. Whenever there was a real need for interservice cooperation, it could be achieved mostly through liaison relationships at the personal level, relationships that had been forged earlier at the DSSC.163

The Indian students freely admitted that the Indian armed forces weren't very good at joint operations because of service stovepiping, infrequent coordination, and too little de-confliction. The 2016 Student said that occasionally these failures were pointed out by the DS, but nothing ever changed. The implicit DSSC narrative seemed to be that because the Indian armed forces were greatly superior in quantity, they would prevail in any future war with Pakistan. The reasoning

was this: "We have more people and equipment, we have fought three wars with Pakistan and never lost, and we will move too fast for them to respond." He noted that the possible use by Pakistan of nuclear weapons against India in such an eventuality was never discussed. This was echoed by the 2017 Student A, who thought the general attitude in the Army Wing about jointness could be summarized as follows: "We're not an expeditionary army; we know who the enemy will be; we know the terrain; we don't need this stuff (jointness)." Elaborating on this thesis, he concluded that the Indian Army's pride was involved in the DSSC's feeble attempts to emulate U.S. joint doctrine: "They don't want to learn from anyone else and this is the reason they tend to cherry-pick aspects of doctrine from western countries that fit the way they already do things. In their heart of hearts, they feel their way is actually superior to ours, but recognize and are envious of the fact that we have more toys than they do."

The joint portion of the DSSC curriculum did provide a degree of insight into the organizational culture of the three Indian services. The 2010 Student A was asked if any of the three differed in their approach to jointness. He replied that the Indian Air Force was more professional, modern, and "relaxed" than the other services, the Indian Navy was a close second, and the Indian Army was by far the "most fixated" on the traditional way of doing business and was the service least open to jointness. ¹⁶⁶ The 2012 Student also commented on service differences, observing that each service wing operated at a different pace and with different cultural norms. The Army Wing worked longer hours than the Navy Wing, which in turn worked longer hours than the Air Force Wing. He surmised that perhaps because the latter two services were more technical than the army, they were also more casual about military traditions and minor staff duties. The army students and the DS were much more conservative in their outlook, were more deferential to their seniors, and more resistant to change than their service counterparts. ¹⁶⁷

2. Perception of External Threats and Friendships

Background

India's strategic situation changed on several occasions during the period of this study. In the study's baseline year of 1979, the U.S. image in India was beginning to recover from the extremely fraught years after the 1971 Indo-Pakistan War. Indira Gandhi's 19-month "Emergency Raj," during which she had ruled India by decree, ended in 1977. She was ousted in a general election that year and replaced as prime minister by Morarji Desai, who maintained India's close relationship with the Soviet Union but also attempted to mend fences with the United States. A 1978 visit to India by President Jimmy Carter and his mother, Lilian, who had once worked as a Peace Corps volunteer in India, as well as a lengthy visit by U.S. Army Chief of Staff Bernard W. Rogers (during which he visited the DSSC), were helpful in refurbishing Washington's badly tattered image. A military coup in Pakistan in

1977, the 1979 execution by hanging of ousted leader Zulfikar Ali Bhutto, and the burning of the U.S. Embassy in Islamabad by students from a nearby university that same year led to a period of U.S. estrangement from Pakistan, and this also aided in the process of reconciliation with New Delhi. But two major events at the end of 1979 derailed the process. The first was the Soviet invasion of Afghanistan in December 1979, which was followed almost immediately by Gandhi's January 1980 return to power. Her new government pointedly refrained from supporting a U.N. resolution calling for the "immediate, unconditional, and total withdrawal" of foreign troops from Afghanistan. A year later, at the end of a December 1980 visit to New Delhi by Soviet Premier Brezhnev, a joint communiqué was issued calling for the dismantling of the U.S. military base on the Indian Ocean island of Diego Garcia, but pointedly refraining from any mention of Afghanistan.¹⁶⁸ The Reagan administration's subsequent embrace of General Zia's military government in Pakistan and the resumption of massive amounts of U.S. military assistance to Pakistan—the price extracted by Zia for allowing the United States to use Pakistani territory to assist the Afghan mujahedeen in combating the Soviet occupation in Afghanistan—immediately put the United States back in the dock as far as India was concerned.

The U.S.-India relationship remained fraught throughout the 1980s until the imposition of Pressler Amendment sanctions on Pakistan in 1990 and the collapse of the Soviet Union a year later created another opportunity to heal old wounds. 169 The 1995 Student considered the entire decade of the 1990s to be a time of enormous transition in India. The government was in the early years of relaxing the socialist economic policies that had handicapped India's economic development for decades; the collapse of the Soviet Union had cost India its principal military supplier; and the relatively easy victory of U.S.-led coalition forces in the first Gulf War made many Indians doubt the efficacy of a military establishment largely equipped with the same weaponry as the Iraqi Army. This was also the time when the Indian military establishment began to respond positively to the Kicklighter initiatives, the brainchild of a previous USARPAC commander to build a closer military-to-military relationship. Despite the dramatic improvement in relations since then, nearly every Student surveyed would probably have agreed with the assessment of the 2005 Student that "the jury is still out on whether the two countries can be genuine partners."170

Perception of the United States

Every Student was asked whether the United States was perceived by India as a friend, an enemy, or something in between. A sampling of their responses shows little unanimity of opinion: "a friend of India"; "in the middle—neither a friend nor an enemy"; "a nation friendly to India"; "guarded friendship"; "friendly, but not a friend"; at times "a friend, an ally, a partner, and a potential enemy"; "partner, not a friend or an ally"; "friend for sure" (but caveating the degree of friendship

as "neutral leaning toward positive"); and "a friend you can get something from, but have to give nothing in return."

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Most Students (but not all) reported being treated courteously by senior officers, the DS, and their Indian classmates. DSSC guest speakers, however, were almost uniformly critical of U.S. regional and global foreign and military policies, and occasionally about U.S. domestic policies related to racial discrimination or the poor treatment of minorities. Many guest speakers exhibited a strong "anti-American bias" in their remarks, recalled the 1979 Student, and many classmates felt free to criticize U.S. domestic issues, "Cuba and U.S. racial problems" being the two most frequently mentioned. He learned not to be defensive or argumentative, and resorted frequently to the use of "Yes, but ..." and then pointing out similar issues related to Indian regional hegemony and racism in South Asia. The 1989 Student couldn't recall a single speaker saying "anything nice about the United States," but remarked that the atmosphere was different in the syndicate rooms, where many Indian students took great care to apologize for the negative opinions expressed by guest speakers. He was amazed one night late in the course when one of the two students from the Soviet Union stood up and replied to a guest speaker that it was not right to criticize the United States for everything bad happening around the world. The 1994 Student emphasized that if he heard the term "American bully" once he heard it a hundred times during his year in Wellington. One guest speaker used Operation Desert Storm as an example of the United States bullying a smaller state—Iraq—for invading Kuwait. Another brought up Vietnam in the same context, and a third opined that the United States frequently used its immense economic power to bully smaller countries into submission. Many of his classmates wondered why the U.S. Navy operated in the Indian Ocean, emphasizing that "It's named the Indian Ocean," presumably as an illustration of why the U.S. Navy had no business being there. More than a decade later, many Indian naval students remained mistrustful about the U.S. naval presence in the Indian Ocean: "They wanted us out and themselves to be in charge" of that area. 173

Every Student interviewed emphasized that the main cause of irritation to Indians was the U.S.-Pakistan relationship. When the U.S. Embassy in Islamabad was burned in November 1979, the commandant called the 1979 Student to his office to assure him that his family was safe in Wellington. At the end of the call he could not refrain from observing sarcastically, "You choose your friends [referring to Pakistan] very strangely." The majority of Students also observed that the 1971 USS *Enterprise* incident had neither been forgotten nor forgiven. More than a decade after the 1971 war with Pakistan, memories of it were still raw, with many Indian students complaining that "the United States came to the aid of Pakistan" and that "ultimatums were given [to India by the United States] and we had to back down [before achieving a complete victory]." In every decade since, the *Enterprise* incident has resurfaced as an egregious example of American perfidy, and there

persists to this day the unspoken fear that in the event of a future war with Pakistan, the United States will similarly act to deny India the fruits of victory.¹⁷⁴

The 1998 Student categorized his Indian classmates belonging to one of three groups in their perception of the United States. Approximately a third saw the United States in a positive light, with only minor disagreements when a topic like the first Gulf War was brought up. Nearly everyone considered the 1990-1991 U.S. campaign to liberate Kuwait from Iraqi occupation to have been a great mistake that had upset the equilibrium of the Middle East. Another third was neither pronor anti-American, and the last third had a "nonaligned mindset" that seemed to be a carry-over from the Nehruvian foreign policy of the 1950s and 1960s. Students in the first two groups, he said, had the common characteristic of having traveled abroad, either because of family ties, attending a foreign military school, or participating in a U.N. peacekeeping mission. Those in the pro-U.S. group, he added, were usually among the top finishers in the course. 175 The 2005 Student estimated that between 10 and 15 percent of his classmates held strongly anti-U.S. views but that a clear majority held much more positive views. Like the 1998 Student, he observed that the anti-U.S. group lacked foreign exposure through military courses or peacekeeping assignments while those with a pro-U.S. bent had a more cosmopolitan worldview because of such experiences. This was particularly true, he said, of navy officers from Kerala and West Bengal.¹⁷⁶

This Student also noticed a pronounced "chip on the shoulder" attitude from many Indian students about the competency of the U.S. military compared to the Indian armed forces. The 2001 Student discerned little respect for the military prowess of the United States. "You guys are cowards and you always run away," was a commonly expressed opinion, usually illustrated with references to Korea, Vietnam, Lebanon, and Somalia. "You haven't fought anybody real in years." On one occasion the Student was accosted at a social function by a drunken Indian student who remarked on the cowardice of Americans in general and challenged him to a fistfight. "He was accommodated," the Student noted dryly. 177 The 2007 Student A perceived that many Indian students believed the Indian Army was at least "on par" with the U.S. Army, if not actually superior. These students considered the United States "a genuine threat to the globe" because it was "an undisciplined power" whose actions often had unintended worldwide repercussions. The Student considered this attitude to be a typical example of Indian cognitive dissonance in which the United States was criticized in one breath for blundering into Vietnam and Iraq and destabilizing entire regions, and in the next breath for not doing more to offset the growing Chinese presence in the Indian Ocean and elsewhere. His American course mate that year echoed this view, noting that many Indian officers exhibited a "fragile superiority," meaning they thought the Indian military system was superior to that of the United States but did not want to be put in a situation where they might be proven wrong.¹⁷⁸ The 1992 Student ascribed a nativist attitude to the Indian press, which displayed a

clearly anti-American bias and ignored events in the United States except those it wished to criticize. Much of the Indian news, he thought, sounded like "a lot of Soviet-inspired disinformation." Because the Indian media downplayed the first Gulf War in 1990-1991, there was little understanding of U.S. military capabilities. Many Indians thought American soldiers were poorly disciplined and badly led, and had prevailed because of technology rather than military prowess. Most believed that if the Indian Army had technology equal to that possessed by the U.S. Army it would be a far superior force. 179

The events of 9/11 demonstrated the fragility of the post-Kargil boost in the bilateral relationship. The DSSC response to that event was genuine and heartfelt, according to the 2002 Student. There was an immediate outpouring of support, with many students sending him flowers and letters of condolence. A few walked up to him the next day in the hallway to hug him and express sorrow for what had happened. This initial demonstration of empathy changed overnight, first to bewilderment and then to anger, when the Bush administration turned down India's offer of base rights and made a decision instead to compel Pakistan to join the U.S.-led coalition to wage the Global War on Terror. Many warned the Student that Pakistan would "use" the United States, and that the relationship would not end well. "We know America will recover," said one student, "but it is how you come out of it and with what alliances that matters." The "twenty percenters," he explained (the top Indian students), realized that the United States had made a tough decision to embrace Pakistan because it controlled the ground and air lines of communication into Afghanistan, and India did not.¹⁸⁰

Perception of Pakistan

Unlike the ambivalence concerning the United States, there was clear unanimity of opinion about Pakistan—it was and is India's most clearly defined enemy. During the study period, India and Pakistan fought two minor wars over the disputed Siachen Glacier region¹⁸¹ and Kargil, went to the brink of general war in 2001-2002, intermittently exchanged small arms and artillery fire along the Line of Control since the 1990s, and endured several other major crises. However, in the first decade of the study period, relations with Pakistan were relatively tranquil despite the minor clash over Siachen. Pakistan's policy with India under Zia in the 1980s was to "freeze" the contentious Kashmir issue while confronting the Soviet invasion of Afghanistan. The indigenous insurgency in Kashmir had not yet begun, and the situation along the Line of Control was quiescent. The situation changed dramatically in the next three decades as the salience of the threat Pakistan posed to India grew, and the priority of that threat in comparison to China, India's other putative enemy, evolved steadily.

Reflecting the relative absence of acrimony in the early years of the study, the 1979 Student judged that his classmates thought Pakistan had not sufficiently rebuilt its armed forces after the disastrous 1971 defeat to pose any major threat to India.

There was concern about a nuclear-armed Pakistan, possibly because of India's 1974 nuclear explosion, but there was as yet no evidence that Pakistan was pursuing a nuclear capability. The question invariably posed to him was, "Why are they [Pakistanis] your friends and not us?" To the 1984 Student, the overwhelming attitude was, "We'll only go to war with Pakistan if they attack us," "They have nothing we want," and "The last thing we need in India is more Muslims," referring to the prospect of reversing the 1947 partition of British India. 183

Feelings hardened in the early 1990s, reflecting the support Pakistan provided to an indigenous insurgency in Kashmir that began in 1989. The 1992 Student said his classmates believed that the Pakistan Army was "the source of all evil" in the region; without it, Pakistan would be a friendly and more successful nation. It was unambiguously perceived to be India's most likely opponent in any future war, and India's aim in that war would be to "destroy the Pakistan Army" to end its political domination over the country and prevent any future conflicts. Indian students generally admired the bravery and discipline of Pakistani soldiers, but were contemptuous of Pakistani officers that they considered to be "effete and too politicized" to be good warriors. "The best army in the world," they said, "would be one composed of Pakistani soldiers led by Indian officers. 184 The 1998 Student observed that Pakistan was perceived as India's mortal enemy and the "root of all evil" in the Subcontinent, but was surprised to find little visceral hatred toward the people of that country. Instead, the most common attitude was that Pakistan was simply "envious of India" because it was a successful democracy with a larger and faster-growing economy. Pakistan did what it did because it was seeking to curb the growth of Indian military power and political influence in South Asia. He estimated that one-third of the class had some form of contact with Pakistanis while traveling abroad, and many openly admitted that individually they were fine people.185

By the turn of the century, the feelings about Pakistan had noticeably hardened. The 2000 Student thought the most commonly expressed attitude was "white-hot hatred," noting that the subject could not be discussed rationally because Pakistan was "devious, corrupt, and guilty of fomenting jihad in Jammu and Kashmir." This was the "top-to-bottom attitude" among all three groups of Indian officers at the DSSC. Of course, he emphasized, these attitudes were expressed in the context of the recently concluded 1999 Kargil war. The Pakistan Army was castigated and disparaged for lying about "mujahedeen fighters" being responsible for the seizure of Indian outposts on the Line of Control despite incontrovertible evidence of the regular army's involvement. Furthermore, it was guilty of dishonorable conduct by "not being decent enough" even to claim their dead, since to do so would constitute prima facie evidence of the army's involvement. The Indian students were also contemptuous of the supposed corruption in Musharraf's military dictatorship, and evinced great criticism of his "crore commanders." Pakistan Army officers were widely referred to as "deri wallahs," meaning "bearded ones." They

used to wear neatly trimmed beards, but at the time many were considered to be extremist Islamists who wore long beards.¹⁸⁶ The 2001 Student attended the daily border-closing parade at the Wagah border post between Lahore in Pakistan and Amritsar in India. He was amazed by the elaborately choreographed display of hostility displayed by both sides. Remaining behind to discuss the ceremony with the local Pakistani commander, he learned that frequent joint rehearsals were necessary to put on "a good show." During a subsequent visit to a unit on the Indian side of the Line of Control he was equally surprised to hear Indian officers describe military operations as a "kabuki show": "We shoot at them, they shoot at us, but we both know exactly where each other's positions are so very few soldiers are hurt."¹⁸⁷

The 2001-2002 border crisis, in which the fully mobilized Indian and Pakistan armies faced each other for nearly eight months, provoked an even stronger emotional response. The 2002 Student remembered sitting through many diatribes by his classmates about the wickedness and sinful nature of Pakistan and how it was the epicenter of terrorism and a genuinely "evil entity." He thought there was genuine hatred for the country, with at least 80 percent of his classmates considering Pakistan to be the major threat facing India. The only exceptions came from a relatively small number of students who had served with Pakistani officers in U.N. peacekeeping missions, a group that included most top students in the course. They genuinely respected the military capability of the Pakistan Army, but were confident that the Indian Army would prevail in the event of war, albeit with heavy losses. Many Indian students welcomed the mobilization, believing it to be the precursor to a full-scale war with Pakistan. Common refrains were "We want to finish this, we're done [with tolerating Pakistani terrorism], and we're tired of the continuous enmity." Later, they were "miffed" at their civilian leaders for not giving them the "go signal" to attack. "It was a missed opportunity" because the Pakistan Army "needed to be taught a lesson." An attack in 2001 or 2002, they thought, might have convinced Pakistan to abandon terrorism as a tool of regional influence.188

The 2010 Student A believed that virtually every Indian student considered Pakistan, not China, to be India's principal enemy. This attitude derived from the Mumbai terrorist attack in 2008 and the fact that many students had fought at Kargil early in their army careers. He saw a duality in the Indian perception of its two most likely enemies. Pakistan was presumed to be the most likely threat, but that threat was viewed as neither strategic nor existential because the Indian armed forces could easily handle a conventional war with Pakistan as a result of its quantitative superiority in nearly every category of combat power. Thus, Pakistan was a tactical threat whereas China was a long-term strategic threat. The Student concluded from the college wargames and syndicate-room discussions that a future war with Pakistan would unfold in this manner: a Pakistan-sponsored terrorist attack on India would eventually occur; India would retaliate by sending its armored

forces across the international border to seize small chunks of Pakistani territory; the international community would pressure India to halt the war before Pakistan's nuclear threshold was reached; and a final settlement would require Pakistani concessions on terrorism in exchange for the return of territory. A second fascinating duality he observed was that many Indian students admitted that their best friends in U.N. peacekeeping missions were Pakistani. "We're the same except for religion," they said, noting that many aspects of both cultures were identical, and the languages nearly so. The 2001 and 2002 Students made identical observations. 189

Perception of China

The first two decades of the study period coincided with a period of enormous political and economic reform in China guided by Deng Xiaoping and a group of reformist political allies. Their goal, summarized as the "Four Modernizations" of agriculture, industry, science and technology, and the military, was designed to put China on a path to becoming a global superpower. This had obvious regional implications for India. In April 1998, the author accompanied U.S. Army Chief of Staff General Dennis Reimer to India on a visit to his Indian counterpart, General V. P. Malik. During the visit, Minister of Defence George Fernandes hosted a briefing by the three Indian service chiefs, the main takeaway being India's concern about the emergence of China and the need to match its growing military capacity. 190

China, despite its nuclear capability, was not considered in 1979 to be militarily or economically capable of posing an existential threat to India. The general attitude of DSSC students was "distrust of Chinese motives" along the still-disputed northern border. Students in the Army Wing were grudgingly respectful of China's performance against the Indian Army in 1962, and worried about a similar future embarrassment. Memories of that war were painfully evident when the current commander of the 8th Mountain Division, a unit that had suffered large casualties in that war, was a guest speaker in 1984. He assured the students, "This [embarrassment] will never happen to us again," but little thought appeared to be given to the prospect of China being on track to pose a strategic threat. A decade later, China was still viewed as a secondary threat to that posed by Pakistan, and then only along the contested borders. China's economy and military capability were growing, but not to a level that threatened India's regional dominance. China was the thinly disguised Chandol Desh, the notional enemy in the DSSC mountain warfare exercises, and there were occasional references to Chinese support to Naxalite militants.191

By the turn of the century, DSSC senior officers, the DS, and guest speakers universally perceived China to be India's largest strategic threat and the clear motivation behind the Indian Navy and Air Force modernization plans. The 1999 Student noted a divergence in opinion between the Indian students who remained preoccupied with Pakistan as the major threat and the senior officers and DS who seemed more worried about China. Publicly, China was referred to

as a "competitor of India rather an enemy." Coincidentally, or perhaps as a consequence of this ambivalent attitude, the DSSC did not conduct any exercise in which the *Chandol Desh* was engaged in a full-scale war with India. The mountain warfare exercises were always in the context of a minor incursion into disputed territory that had to be eliminated. The friendly force operations were limited to minor operations aimed at regaining a specific piece of territory belonging to India. In the low-intensity conflict scenarios involving *Nark Desh* (Pakistan), *Chandol* was assumed merely to be providing limited support to *Nark* forces. In making the comparison between these two countries, Indian officers routinely referred to Pakistan as being little more than a "yipping little dog" while India considered itself on par with China in terms of its place in the region. Nevertheless, only the more "visionary students"—the "twenty percenters"—considered China to be the major threat facing India, with many privately expressing frustration with classmates who were "obsessed with Pakistan."

Although the Chinese military and economy continued to grow at a rapid pace, the 2005 Student did not perceive that China was regarded as the main threat to India. The Indian students, he explained, had less respect for the military professionalism and competence of China's People's Liberation Army (PLA) than for the Pakistan Army. They had more respect for China's growing naval power projection capability. The major joint exercise at the DSSC that year was an amphibious operation to regain the Andaman Islands that had been seized by Chandol. Because Indian Army doctrine was largely based on a quantitative assessment of resources, any land war with China meant the sheer numbers of the PLA merited respect. As the first decade of the new century ended, the threat from Pakistan remained "real and visceral" to most of his classmates, while the threat from China was not perceived to be as great, and certainly was not existential. He added that the old Nehruvian slogan of Hindi Chini bhai ("India and China are brothers") continued to resonate with many students. The 2007 Student A discerned a degree of symbiosis: both India and China were reaping the benefits of economic reforms, there was a burgeoning trade relationship between them, and everyone had great confidence that the lingering border dispute could be managed without conflict.¹⁹³

It was not until 2011 that China clearly began to be perceived by all three groups at the DSSC as "India's biggest threat." The 2011 Student A noted that few of his classmates had ever had any interaction with Chinese people, and that Chinese behavior puzzled them. He also had difficulty understanding why India was so preoccupied with China's conventional military capability when the avenues of approach into India led across the enormous Tibetan plateau and through the rugged Himalayan Mountains. He did notice, however, a growing concern about the prospect of a two-front war with Pakistan and China that might expand into a three-front situation if the Chinese Navy continued to grow, modernize, and operate in strength in the Indian Ocean. Still, there remained a curious reluctance to declare that China was an "enemy" of India, with many students

still preferring to label it merely a "competitor." There was a lot of discussion about various Chinese regional stratagems like the "string of pearls," in which China was seeking to build or gain access to ports along the Indian Ocean sea frontier, and the Belt and Road Initiative projects designed to enhance Chinese economic power throughout Asia. The major challenge for the Indian armed forces seemed to lie in the maritime domain, and the strategy required was a combination of naval modernization and new shipbuilding. Apparently not to be outdone by the navy, the army was beginning to modify its ground forces doctrine along the northern border from the traditional "defensive attrition model" to one that featured the rapid forward movement of offensive forces, the apparent objective being to take the offensive early against any Chinese ground incursion. To this end, it was in the process of modernizing artillery and creating a rapid-response airborne regiment. 194

Also in 2011, a new reference book on China was issued to DSSC students. As may be seen in the extracts below from a section titled "Indian Perception of China," it laid out a curiously ambivalent assessment of the threat to India posed by China:

India has a strategic and cooperative partnership with the People's Republic of China which has been further progressed during high level visits in 2009-10. The two countries are seeking to build a relationship of friendship and trust, based on equality, in which each is sensitive to the concerns and aspirations of the other. However, at one extreme are some who see China as incorrigibly aggressive and expansionist, posing a perennial threat to India. At the other extreme are those who perceive it as a benign neighbour and an ancient civilisation that has been exploited in the past. But, the majority of Indians seem to carry in their minds a more mixed picture, with both positive and negative ingredients. The irritants that constantly plague Sino-Indian relations are as under: - (a) Boundary dispute. (b) Dalai Lama issue. (c) China's assistance to Pakistan's Missile and Nuclear weapon programme. ... As far as India is concerned, it cannot be ignored that every major Indian city is within reach of Chinese missiles and this capability is being further augmented to include Submarine Launched Ballistic Missiles (SLBMs). ... The armed forces of both the nations are engaged in building greater understanding through joint military exercises, regular defence dialogues since 2007 and exchange of military delegations. India has obviously taken note of China's statement in the White Paper on China's National Defence in 2008 that it will never seek hegemony or engage in military expansion now or in future. Meanwhile India has also taken note of the double digit growth in Chinese defence expenditures over the previous 20 years, which has led to significant modernisation of its armed forces, both in terms of quality and quantity. In the same White Paper, China has stated its objective to develop strategic missiles and space based assets, enhance its blue water capabilities for the navy and upgrade infrastructure, reconnaissance, surveillance and quick response capabilities in the border areas. India believes that this will affect the overall military environment in the neighbourhood of India and hence it needs to monitor the defence modernisation of China carefully. 195

The 2016 Student noted the absence of urgency in confronting China militarily either on land or at sea despite the fact that it was moving swiftly to build a capability to challenge India in many new areas and from several new directions. There was growing concern about Chinese success in establishing a permanent naval presence in the Indian Ocean by gaining guaranteed access to ports in Africa at Djibouti, in Pakistan at Gwadar, in Sri Lanka at Hambantota, and in Burma at Kyaukpyu. Although they were confident in being able to defeat the Pakistan Air Force in any future conflict, a few students expressed concern that China might provide Pakistan enough high-technology aircraft to offset India's qualitative and quantitative edge over the PAF. By now there was also no disputing the fact that India had been "left behind" in the past decade and was clearly behind China in most measures of economic and military power. Now in the DSSC wargames, the China-like opponent was no longer *Chandol*, but "Yellowland" if the principal enemy was the Pakistan-like opponent and "Redland" if it was the only opponent. 196

Shortly after the 2017 course ended, on June 16, China attempted to extend a road southward in Doklam, a territory claimed by both China and Bhutan. India was concerned that a road in this region might allow China to cut off Indian access to the northeastern states. Claiming to have acted on behalf of Bhutan, with which it has a "special relationship," New Delhi moved troops into the area to prevent any further work on the road. After 73 tense days of face-to-face confrontation, the two sides agreed on August 28 to pull back more or less simultaneously. Prime Minister Modi subsequently visited China in September 2017 for a BRICS summit, and on the sidelines of the summit met with Chinese president Xi Jinping. The two agreed to reaffirm ties and carry forward an agreement made earlier that year that differences between them should not be allowed to become disputes.¹⁹⁷

More recently, beginning in May 2020 and still ongoing at the time of this writing, have been a series of Chinese border incursions at multiple locations along the LAC in Ladakh in the eastern section of Jammu and Kashmir. Ashley Tellis notes that these actions suggest a high degree of premeditation and top-level approval for the military's activities that might be linked to India's August 2019 decision to change the political status of Jammu and Kashmir. The current crisis also reveals, in his opinion, that China has scant respect for India's efforts to freeze the status quo along the LAC or New Delhi's attempts to avoid the appearance of collusion with the United States against Beijing. By treating New Delhi's recent actions in Jammu and Kashmir as a provocation, China is now confronting India with the

difficult choice of either accepting a new status quo on the LAC or escalating through force if the negotiations presently under way are unsuccessful.¹⁹⁸

Perception of the Soviet Union/Russian Federation

No single event changed India's strategic situation so abruptly and profoundly as the 1991 collapse of the Soviet Union, depriving New Delhi of its major superpower patron, calling into question the reliability of its main source of military weaponry, and causing a genuine crisis of confidence in the Indian worldview.

Reversing the order of his assessment of the Indian attitude toward the United States, the 1979 Student characterized the prevailing attitude toward the Soviet Union as being "a friend, but not friendly." There were no Russian students at Wellington that year, and even though many Indian students had studied in Moscow and other places in Russia, he detected little affection for the country and no admiration at all for the Soviet system. The standing joke at the DSSC was that the USSR didn't want to send students to Wellington because it would have to send two—one to watch the other. On the other hand, the USSR was a reliable supplier of military hardware. The 1984 Student thought the Soviet Union was looked on favorably by "just about everybody at Wellington," although the ideological dichotomy between the Soviet Union and United States (and India) in terms of democratic practices was rarely addressed. 199 Everything changed abruptly in 1991. The 1992 Student characterized his year at Wellington as a period of external and internal turmoil in which many of the traditional underpinnings of India's foreign and domestic policy were in flux. Not only did the Soviet Union collapse, the insurgencies in Kashmir and northeastern India increased in intensity. He reported that the mood of many of his classmates was gloomy and that they were pessimistic about the country's direction and worried about the future: "Their world was falling apart, the Soviet Union was gone and India itself seemed to be coming apart at the seams."200

Nevertheless, a degree of Soviet (now Russian) influence persisted at the DSSC throughout the 1990s. One Student estimated that 50 percent of the students in the Navy Wing were from what he called "the Russian School," meaning they operated naval platforms obtained from the Soviet Union and had trained on them in Russia. Analysis Poke Russian, liked Russia, and were "not rude but not friendly either" toward the western students. Another Student described a general attitude at the DSSC that Russia had been and was still a better friend to India than the United States. It was a more reliable weapons supplier and did not make unreasonable demands on India as the price of a military relationship. It had always stood behind India in its wars with Pakistan, unlike the United States, which always sanctioned or embargoed military equipment to both sides. Perhaps the new Russia was no longer a genuine friend, but neither could it be construed as an enemy. Still another Student said that Russia was "an old friend that had fallen on hard times and now provided India with crappy military equipment."

Nevertheless, he detected a certain amount of affection for the country, which was seen as an all-weather friend, an attitude that was especially prevalent in the Indian Navy where many officers had traveled to Russia to attend military courses or to pick up ships in Vladivostok. There was much less of this attitude among Indian Air Force students, who derisively referred to their MIG-21 fleet as "lawn darts" for the frequency with which they crashed during air operations. ²⁰²

In the last decade, the perception of Russia has become decidedly more varied, with many Indians viewing Moscow as a "friend" that is easier to deal with than the United States, and others seeing it only as just another "business partner" or a "supplier" of military equipment to India that is rugged and reliable but generally inferior to similar western systems. Only a small number thought Russia might become a "partner" of India once again. ²⁰³

Perceptions of Other Friends

Afghanistan. Not a single Student perceived India as having any strategic interest in Afghanistan that was not derived from its proximity to Pakistan. Before 9/11, India had backed the Northern Alliance, a Tajik-led confederation of non-Pashtuns fighting to contain the Pakistan-backed Taliban movement from spreading to the north of the country. There was little or no discussion about Afghanistan, even by DSSC guest speakers, other than to note that it provided "strategic depth" to Pakistan. The post-9/11 U.S. invasion to take down the Taliban government was applauded at the time, although several Indians observed that achieving stability in that difficult country probably would mean accommodating Pakistani interests. More lately, India has concurred with the U.S. objective of achieving Afghan stability, but is concerned that an eventual U.S. withdrawal will leave the country too dangerous for any large Indian presence to remain. At the same time, Afghanistan is seen as a country offering India the opportunity to gain a degree of strategic leverage over Pakistan. ²⁰⁴

<u>Iran.</u> There was very little discussion of Iran throughout the study period. Relations with Tehran were not especially close because until the 1979 Iranian Revolution it was a part of the global U.S. chain of alliances surrounding the Soviet Union. More recently, Iran has become a major energy supplier for India. Although a small number of Navy Wing students saw it as a potential competitor and threat to Indian energy security, it was otherwise widely considered to be a country "sidelined" by the United States, but a good ally of India that afforded India a reliable gateway through the port of Chabahar to trade with Central Asia. ²⁰⁵ Relations have since cooled as a result of pressure on India from the United States to curtail oil purchases. In 2016, India imported around \$12 billion worth of oil from Iran, but by 2019 the level had fallen nearly to zero. ²⁰⁶

<u>United Kingdom.</u> Several Students recalled "an absolute love-hate relationship" with the former colonial power, and characterized Indian student feelings about the United Kingdom as "very complicated." Many Army students cherished their

regimental roots to the British Indian Army while simultaneously criticizing harsh British actions against the Indian independence movement. The 1994 Student noticed only "unacknowledged admiration" by Indian students who occasionally observed that the only institutions that truly "worked" in India were those that the British left behind in 1947, a conspicuous example being the Indian railroad system. They also liked British military equipment because the technical manuals were clearly written. (Russian manuals by comparison were poorly written and nearly impossible to understand because the English translations were so bad.) The 1999 Student thought Britain exercised a lot of influence on Indian Army doctrine, but was regarded militarily as at least one full step down from the United States. The historical "special relationship" between the British Army and the Nepalese Gurkhas that has also survived in the Indian Army was an added "special dimension."

Smaller South Asian States. Four Students mentioned the well-known quotation by Lord Curzon, an Indian viceroy in the early 20th century, who famously observed that India's sphere of influence stretched from the Straits of Malacca in the east to the Red Sea in the west, and that most Indian students agreed with the premise. Although Lord Curzon's name was rarely invoked directly, many DSSC guest speakers discussing India's geostrategic location mentioned the "near abroad" and the "far abroad" in the context of defining Indian regional interests, with the former being defined as the Indian Ocean and the latter some undefined distance beyond it, presumably on the Asian mainland. Description of the strain of the strain of the latter some undefined distance beyond it, presumably on the Asian mainland.

The overwhelming majority of Indian students considered regional South Asian states like Nepal, Bangladesh, Sri Lanka, Bhutan, and the Maldives to be "little brothers" to an Indian "big brother," which was and deserved to be the regional leader—if not a regional hegemon—because of its population, economy, and military power. The 1994 Student thought they had "delusions of grandeur" that were not merited, despite India being an ancient civilization that still possessed good human capital. He emphasized that India's military had a very long way to go before it became a first-rate military power. ²¹⁰

Several Students noted attitudes of condescension, arrogance, and even racism in references to the smaller countries of South Asia. The 2000 Student observed that his Indian classmates "looked down their nose" at Bangladesh, had been "stung" by the poor performance of the Indian peacekeeping force in Sri Lanka a decade earlier, and considered that Nepal was almost a part of India because the southern half of the country, known as the Terai, was practically a part of the Indian state of Uttar Pradesh. The 2002 Student observed the same attitudes, but noted that many "twenty percenters" objected to such a patronizing attitude toward their smaller neighbors. India, they said, did not deserve any respect it had not earned by its behavior. The 2007 Student A heard his classmates complain that India was a great country with a great military, but that it had the misfortune to be stuck in a "neighborhood of clowns": Pakistan was a bad actor, Nepal was full of Maoists

and Naxalites and was "an albatross around our necks," and Bangladesh was "a basket case." The 2008 Student thought the other South Asian students were treated as though they had nothing useful to contribute. Their Indian classmates were dismissive of the Bangladeshis and always commented on the dark complexions of Sri Lankans behind their backs.²¹¹

By the end of the period of this study, India clearly considered itself "a rising world power" that ultimately would become a global power on par with the United States, China, and Russia. The 2014 Student observed that when one guest speaker expressed skepticism that India would achieve this aim, many students became visibly upset. As for South Asia, the Student thought India saw itself as responsible for maintaining regional peace and stability, but that there were steadily growing problems. Sri Lanka was becoming an irritant because of its increasingly close relationship with China. In fact, the Sri Lankan students left the course early that year because of violent demonstrations against their country in Tamil Nadu. Growing Chinese influence in Nepal was also becoming a concern. Proficiency in English appeared to influence how the DSSC regarded other countries that sent students there. In Southeast Asia, for example, Malaysia alone was respected; in Africa, only Nigeria; and in the Middle East, the DSSC apparently did not seem to care what impression it made on Arab students. Saudi Arabia, for example, was openly criticized for fostering terrorism in many regions around the world by its support for Wahabi Islam.212

3. Perceptions of Internal Security Threats

Background

During the period of this study, four significant insurgencies were taking place in India: in Jammu and Kashmir (J&K), involving the state's disaffected Muslim population; in northeastern India in the "Seven Sisters" states of Assam, Meghalaya, Tripura, Arunachal Pradesh, Mizoram, Manipur, and Nagaland, involving several ethnic separatist groups; in the states of Haryana and Punjab and several adjoining states, involving Sikh separatist groups; and in several districts of a large area running roughly southwest from the states of Bihar and Orissa to Andhra Pradesh, involving an ideology-driven Naxalite-Maoist movement. The Sikh separatist Khalistan movement is now largely discredited and is mostly (but not completely) inactive, but the other three are ongoing. In addition, many smaller terrorist groups operate within India. It is beyond the scope of this study to outline in detail the causes of these insurgencies or the aims and grievances of the various groups involved. The purpose of this line of inquiry is to discern the attitudes that were expressed about them by Indian students at the DSSC, explicate the course curriculum on internal security subjects taught at the college, and describe the doctrinal approach taken by the Indian Army in internal security operations.

Attitudes About Insurgency

Most of the Students agreed that outside of a few well-delineated areas, India was a relatively peaceful country with a mostly benign personal security situation that did not adversely affect their travels. Only the 1979, 1984, and 1995 Students mentioned travel restrictions due to militancy. For the most part, despite the ongoing insurgencies in J&K and the northeast, those areas were routinely visited by Students during the Forward Area Tour.

The Khalistan Issue. While the 1984 course was underway, Prime Minister Indira Gandhi ordered an Indian Army operation to clear, by force, a group of Sikh militants that had occupied the Golden Temple complex in Amritsar, Sikhdom's holiest shrine. Despite heavy casualties among Indian troops who had been ordered to keep physical damage to the temple to a minimum, Operation Blue Star inflicted many civilian casualties and caused a great deal of damage to the temple complex.²¹³ The 1984 Student reported that an angry nationwide reaction by the Sikh community eventually spread to the DSSC and caused dramatic flare-ups between Sikhs and non-Sikhs, and among Sikh students as well. Many members of the DS had to intervene to stop the emotional, often acrimonious "discussions" that took place in the syndicate rooms. The situation eventually necessitated a closed-door, Indian-students-only session in which the commandant "laid down the law" on the subject. The Student thought the prospect of expulsion from the course was sufficient to keep a lid on the situation, which remained emotional and raw for weeks afterward. It deteriorated further after the assassination of Prime Minister Gandhi by members of her Sikh bodyguard a few months later. This led to widespread rioting and communal violence all over India. In one incident, a Sikh military officer was pulled off a train and killed by an enraged Hindu mob. In another, troops of the Sikh Light Infantry Regimental Center mutinied and began to march on New Delhi, but were quickly surrounded and disarmed by other Indian Army troops without incident. When the course concluded, Sikh officers departing by train were provided armed guards to ensure their safety. The Student recalled no instance of Pakistan being blamed for the act or any other meddling in Indian internal affairs.214

Despite the 1984 death of the Khalistan movement's leader, Jarnail Singh Bhindranwale, the power of the dissidents was not completely broken. The violence continued sporadically for a decade and resulted in nearly 20,000 deaths. The Golden Temple was occupied twice more, in 1986 and 1988. This time in response, police commandos rather than Indian Army troops were called in to reestablish control of the temple complex. In stark contrast to the heavy-handed army approach, Operations Black Thunder I and II employed a variety of security forces, full media coverage that highlighted the militant desecration of the temple area, and siege tactics rather than direct assaults to minimize casualties. Both times, the Sikh militants were compelled to surrender with fewer casualties on both sides and far less damage to the temple. By 1994, the prospect of an independent

Sikh-ruled state no longer seemed possible, although a final terrorist act took place in 1995 when a suicide car attack in front of the heavily guarded state secretariat building killed Beant Singh, the Congress Party chief minister of Punjab. ²¹⁵ Although the movement has been largely quelled inside India, the government remains concerned about Pakistan attempting to reinvigorate the insurgency and that the Sikh diaspora, particularly in North America, continues to agitate for an independent Khalistan. ²¹⁶

The Kashmir Insurgency. The roots of the present insurgency originated in 1986, when the state's ruling National Conference Party struck a political deal to cooperate with the ruling Congress Party in the 1987 state election. At the same time, a new party, the Muslim United Front (MUF), was formed to contest the election. The MUF garnered widespread support from pro-independence activists, disgruntled Kashmiri youth, and the pro-Pakistan Jamaat-i-Islami. Although the MUF received 31 percent of the vote, it won only four seats to the NCP/Congress's 66. Convinced that the election had been rigged to prevent the central government from losing control of the state, the MUF protested the incoming results, and many of its members were arrested by the new government along with leading militants from the Jammu and Kashmir Liberation Front.²¹⁷ Violence broke out throughout the state, and New Delhi requested that the Indian Army provide assistance in containing it. The state would be governed from New Delhi under president's rule for the next six years while the initially spontaneous and indigenous insurgency was eventually coopted by Pakistan's Inter-Services Intelligence Directorate (ISI), which provided training, support, and sanctuary both to the Kashmiri militants and to Pakistani groups seeking common cause with them. 218

During the period of this study, Kashmir was not a salient issue in the first decade because President Zia of Pakistan had earlier made a conscious decision to "freeze" the situation after the Soviet invasion of Afghanistan. Nevertheless, the overwhelming attitude about the disputed territory of J&K at the DSSC was that "It's ours—all of it—and [regarding the portion of Kashmir held by Pakistan] we want it." A portion of that territory that had been ceded to China in 1963 was a particularly sore point because Pakistan was accused of giving something away it had not owned in the first place. 219 The security situation in the Indian state of J&K deteriorated steadily after the outbreak of the indigenous insurgency in 1989. However, the 1992 Student reported that the general attitude among the Indian students, many of whom had served on the Line of Control, was that this was not a genuine insurgency but a rebellion fomented by Pakistan with the intention of destabilizing the area and tying down large numbers of Indian security forces. The Student noticed "tremendous anxiety" on the part of several classmates that the Indian Army would not be successful in quelling the insurgency.²²⁰ This perception of national anxiety was echoed by the 1995 Student. Several foreign trekkers had been kidnapped in 1994 and held hostage for several weeks before being killed. The local and national police forces were regarded as ineffective in

containing the violence, infiltration across the Line of Control was being aided and abetted by Pakistan, the Indian army was unable to stop it, and the Rashtriya Rifles paramilitary force had not yet been formed to deal with the steadily deteriorating situation. The Student noted that his classmates seemed to believe that the traditional feeling of "Kashmiryat" was fraying badly, if not entirely broken.²²¹

By the end of the decade, it was clear to most observers that local support had waned and that Pakistan's external intelligence agency, the ISI, had taken control of the insurgency. A major military operation was undertaken in 1999 in the Kashmir Valley, the main Muslim-majority part of the state, aimed at defeating Pakistani-sponsored militants being infiltrated through the Line of Control separating the disputed territory. For "100 percent of the Indian students," the 1999 Student explained, Kashmir was a completely settled issue—"All of it belonged to India. Full stop!" He recalled no guest speakers addressing the issue, perhaps because this attitude was so ingrained in Indian popular thought. A considerable number of Indian students, perhaps 30 to 50 percent, had served in J&K, but only a few were willing to discuss their experience in any detail. One Indian friend, however, showed him pictures of his unit's military operations. The pictures were of dead bodies said to be infiltrating militants in several villages. "The novelty had long ago worn off," he said, but service in Kashmir was "honorable and important for the country," and offered the opportunity to kill the jihadis that posed an existential threat to India. Repeated tours of duty became onerous in certain elements of the Indian Army, especially for commandos (equivalent to U.S. Army Special Forces troops), and many of those who attended the course displayed a marked level of fatigue.

The lessons imparted at the DSSC from the Indian Army's experience in Kashmir could be distilled into three principles: "win the hearts and minds" of the local population; work with the local civilian administration to rebuild schools and other damaged institutions; and employ overwhelming force to insulate the local population from insurgents. However, the 1992 Student also emphasized that the unambiguous DSSC narrative about Kashmir was that it was strictly a military problem caused by Pakistan that had to be solved militarily. The senior officers, the DS, and several guest speakers supported this narrative and allowed no countervailing views. Therefore, classical counterinsurgency doctrine was de-emphasized, and low-intensity warfare techniques relying on the application of kinetic military force were taught, the preferred solution being to kill the militants operating in the Kashmir Valley rather than attempt to win their hearts and minds. The discussions in the syndicate rooms seemed not to be tied to the actual situations in either Kashmir or the northeast, according to the Indian students who had served in both environments. Although many were "disdainful of the course materials provided in support of the curriculum," challenging the "school solution" was a high-risk strategy for Indian students, so they invariably kept their opinions to themselves rather than risk raising such a thorny issue with their DS.222

This kinetic approach to counterinsurgency became ingrained at the DSSC over the years. The "problem," echoed the 2000 Student, was that the Indian Army and supporting security forces in J&K employed "only LIC [low-intensity conflict] tactics, to be frank," and "they really believed they had it right."²²³ The 2005 Student recalled that the Kashmir insurgency was a case study during a tutorial period that included internal security operations, and was also the setting for a mini-wargame. He thought the Indian security forces operations were evaluated in a reasonably objective manner, although the political mistakes by the government that had ignited the insurgency in the first place were glossed over, with all of the blame ascribed to Pakistan. India had been able to defeat the "homegrown militants," and only the constant infiltration of foreign fighters from Pakistan kept the pot boiling.²²⁴

The general attitude expressed by DSSC students during the final decade of the study period was that the militancy in J&K was contained, that the major threat had passed, that the current level of unrest was "manageable," and that if not for the continuing support provided to infiltrating militants by the Pakistan Army, the problem would have been completely resolved. Pakistan Pakistan Army, the DSSC by this time had served there at one time or another, and many gladly provided examples of recent successes in containing the militancy. The general attitude about duty in Kashmir was positive because it was considered the best way to get credit for combat experience, the prerequisite for promotion and good assignments in the Indian Army.

In 2017, a recurring topic of discussion was the death of Burhan Muzaffar Wani, a 22-year-old Kashmiri militant and the commander of a militant group called Hizbul Mujahideen, and its aftermath. Wani was popular among Kashmiris because of his active use of social media and his daring operations. After being killed in an encounter with Indian security forces on July 8, 2016, he instantly became a local folk hero. Widespread protests erupted in the Valley of Kashmir that lasted for nearly half a year. More than 90 people died in the violence, and more than 15,000 civilians and 4,000 security personnel were injured. A large part of the state was placed under a complete curfew for 53 days. The 2017 Student visited Srinagar on the Forward Area Tour, where his group met with the XV Corps commander, the officer responsible for military operations in the contested area surrounding the Valley of Kashmir. The officer admitted during a question-and-answer session that there was "basically no civil-military relationship in the state of J&K." Poor governance and poor civil administration, he said, was something the Indian Army could not fix by itself. 226

Since Wani's death in 2016, the insurgency has revived, particularly the domestic component. In 2016, 30 locals and 100 foreign militants were killed; in 2017, 80 locals and 120 foreigners were killed; and in 2018, 150 locals and 90 foreigners were killed, with the number of local militants killed exceeding the number of foreigners for the first time since 2000. According to an unnamed senior J&K

police officer, the lowest number of active militants across the state was 78 in 2013, while in 2019 the number exceeded 450.²²⁷

The Naxalite-Maoist Insurgency. The Naxalite insurgency began as a communist peasant revolt in the late 1950s/early 1960s, and evolved into a blend of ethnic-, caste-, and class-based political violence across the poorest states in eastern India. The movement derives its name from the small village of Naxalbari in the state of West Bengal. Naxalism's objective is to seize power in a protracted armed struggle against big landlords and petty government officials. It often opposes the implementation of development projects such as roads, railroads, schools, and hospitals in affected areas in order to demonstrate the ineffectiveness of the state. The movement evolved in three separate phases: the late 1960s through 1973, the late 1970s through 1994, and a third and most significant phase beginning in 2004, reaching a peak of violence from 2005 to 2011 and declining precipitously after 2014.²²⁸

<u>The Northeast Insurgency.</u> The numerous insurgencies originating in northeastern India in the past 70 years defy a short summary. The Treaty of Yandabo signed on February 24, 1826, ended the first Anglo-Burmese War, a clause of which stated that the Assam, Manipur, Rakhine (Arakan), and Taninthayi (Tenasserim) coasts, south of the Salween River, would accede to British India. A fundamental reason for the many revolts by various insurgent groups in the northeast is that Assam (which includes the present-day Indian states of Assam, Meghalaya, Nagaland, and Mizoram) and Manipur were never a part of Burma. Thus, militants in many parts of northeast India consider the treaty illegal and have waged war for decades to restore their freedom and sovereignty.

The Nagaland insurgency predates Indian independence. An accord was signed with the governor of Assam state in 1947, but a dissident faction eliminated the movement's moderate elements, and in 1956 a full-scale insurgency broke out. The Indian Army has been involved ever since in countering ambushes, assassinations, and sporadic raids. The movement levies "taxes" on the population by extortion, and it serves as a regular employment avenue for Naga youth. Peace talks with a faction of the guerrillas led to the 1975 Shillong Accord, which was repudiated by a section of the rebels that subsequently formed the Nationalist Socialist Council of Nagaland, and which split into two factions in 1988. A cease-fire was signed in 1997.

Manipur was an independent kingdom until it was conquered by the British in 1891. It became a part of the Indian federation in 1949, but a movement began in 1956 to establish an independent state for all the Meitei peoples of eastern India. The movement was communist-led after 1966, and a local People's Liberation Army was formed to gain independence. The group was decimated by the Indian Army in 1981, and a vacuum in leadership has been filled by a variety of foreign groups like Pakistan's ISI, and it continues to operate at a low level from sanctuaries in Thailand.

In the state of Mizoram, the Mizo National Front was supported by China until the late 1970s, and found sanctuaries in Bangladesh and Myanmar. Cooperation between Myanmar and India finally ended the rebellion in 1986. ²²⁹ More recently, the insurgency continues at a relatively low level, with the state of Manipur being the area of most concern. According to the Indian government, 23 civilians were killed in incidents related to insurgency in northeast India in 2018. This number was much higher in 2014, at 212 civilian deaths, partly due to insurgency activities against the national general elections that year. ²³⁰

In Assam, illegal immigration from Bangladesh in 1971 and afterward has altered the demographics of the state. Between 1991 and 2011, the share of Assamese speakers fell from 58 percent to 48 percent, while the share of Bengali speakers rose from 22 percent to 29 percent. Assamese speakers fear the loss of their identity, and this in turn has fueled unrest and sparked militancy. The United Liberation Front of Assam was formed in April 1979 to establish a sovereign state of Assam through armed struggle. Other groups, like the All Assam Students Union and All Assam Gana Sangram Parishad, led a popular uprising from 1979 to 1985 to drive out illegal immigrants from Bangladesh. During this period, 855 people died and the infamous Nellie and Khoirabari massacres took place, claiming the lives of 2,191 people and 100-500 people, respectively. The Assam Accord of 1985 between representatives of the government of India and the leaders of the Assam Movement ended this period of agitation. A fundamental aspect of the Assam Accord was that foreigners who came to Assam on or after March 25, 1971, would continue to be detected and expelled. Three decades later, growing concern over the Modi government's National Registry of Citizens (NRC) and Citizenship Amendment Act (CAA) has also fueled unrest in the large Muslim community in the state.²³¹

Most Students responded to questions about the Naxalite and northeastern India insurgencies with a shrug, saying there was very little discussion of either one at the DSSC. The sole exception was the 2007 Student B, who said the course spent "a fair bit of time" discussing counterinsurgency operations in northeastern India. The Naxalite problem in this region was also mentioned frequently, most likely because 2007 was the middle year of the violent third stage of the Naxalite movement. The most common attitude expressed by Indian students was that these movements were "simmering," but largely confined and "under control." Most saw them as properly being the responsibility of the police and paramilitary forces rather than the Indian armed forces, although the Indian Air Force routinely is tasked with providing helicopter support to the police for counterinsurgency operations, and considered the mission to be a routine support requirement.²³²

DSSC Curriculum on Internal Security Operations

Very few Students surveyed had any detailed recollection about the DSSC's internal security curriculum. Among those who did was the 2000 Student, who

estimated that 70 percent of the entire course was devoted to conventional military operations, with 30 percent devoted to internal security operations. Fivesixths of this portion of the curriculum was devoted to low-intensity-conflict (LIC) operations against militants, and the remainder to U.N. peacekeeping, humanitarian and disaster relief, and aid to civil operations. Of the LIC component, he observed that India did not employ a true interagency (whole-of-government) approach to such operations, and that a major shortcoming was intelligence support. The government's civilian Intelligence Bureau was responsible for domestic intelligence operations, and he gained the impression from talking to his Indian classmates that cooperation by civilian agencies with the Indian military (and the reverse) was often lacking. The case studies used in this tutorial period were the 1950s Malaya campaign fought by the British Army, the Indian experience in Sri Lanka in the 1980s, and Kashmir. The Sri Lankan case was taught mostly by veterans of that operation who pointed out that the underlying political problems that were never resolved were beyond the ability of the Indian Army to settle, and were largely to blame for the failure of that operation.233

This depiction of the internal security curriculum was generally corroborated by the 2005 Student, who estimated that 20 percent of the course—one full tutorial period—was devoted to various forms of internal security operations: military aid to civil authorities, humanitarian operations, international peacekeeping, and LIC operations to deal with domestic insurgencies. During this tutorial period, one guest speaker was the commandant of the Indian Army Counterinsurgency and Jungle Warfare School, who spoke of the necessity of WHAM (i.e., winning the hearts and minds of the local population) as an essential part of gaining the upper hand in dealing with militancy. The tactics associated with LIC operations were cordon and search operations, establishing control of major villages and towns, and route clearance on the roads linking them. However, he noted these were military tactics only, and not the "whole-of-government approach" that the United States employed when conducting counterinsurgency operations. The tutorial period included vignettes of tactical operations in a series of case studies that mostly focused on company- and battalion-sized operations. The Indian peacekeeping force deployed to Sri Lanka in 1987 was one such case study. It was universally considered to have been a "botched" operation. The commandant had commanded troops in this operation, and although his experience likely colored how the material was presented, the Student thought the weaknesses inherent in the operation were addressed objectively.234

The 2011 Student A opined that the curriculum at the DSSC never referred specifically to counterinsurgency, only to LIC in the context of internal security operations, and was focused almost exclusively on the tactical application of LIC doctrine. Four case studies were addressed. The first was Operation Blue Star, which emphasized two lessons learned in that operation: never underestimate both the domestic blowback created by kinetic operations and the need to focus

on winning the hearts and minds of locals in the operational area. The second case study was about the Naxalite rebellion in central India, in which another lesson learned was employing overwhelming military force to restore a sense of normalcy to the lives of people in the operational area. The third case study was the rebellion in Nagaland in northeastern India, which had similarities to the Naxalite rebellion in that it emphasized the need for security forces to understand communal and caste distinctions in the local population. The fourth case study focused on Kashmir after 1989. The lesson illustrated here was about WHAM and the importance of understanding that the militants and supportive population were fellow countrymen. Military action, therefore, should seek to remove, not reinforce, the causes of the insurgency. Surprisingly, the Student noticed that the Indian security forces' response to the 2008 Mumbai terrorism incident was never discussed in this tutorial period, nor was there any discussion of the potentially disaffected Muslim minority community in India.²³⁵

Aid to the Civil Authority. This component of the curriculum was derived from the British colonial experience, and continues to be taught at the DSSC because it is still employed extensively in India. Between 1961 and 1970, the Indian Army was called out in aid to civil operations on no fewer than 476 occasions.²³⁶ The 1984 Student recalled an exercise with a scenario depicting a mutiny by local police forces in an unnamed part of India. The 1994 Student remembered a discussion in which a brigadier, presumably a division SI, stood up in front of the class and opined that the best way to deal with a mob that was beyond the ability of the police to contain was not to shoot over their heads, but to "shoot directly into the middle of it." Another exercise scenario depicted an operation in the Northeast Frontier Agency in which the army assumed the civil policing function in order to allow the police to perform "cordon and search operations" to find and capture militants. The general attitude about providing "aid to the civil" in such situations was that it was a necessary part of the Indian Army's mission set, but was also a distraction from the primary mission of protecting the country from external enemies as "the force of last resort." Because the civilian authorities were always in overall charge, many Indian students opined that such operations were "doomed to fail" and "might even become an embarrassment" because they were "inherently restrained by civil authorities from being successful." Presumably this meant that the full resources of military power had to be used with great restraint in an internal setting.237

The Sri Lankan Peacekeeping Operation. A frequently cited case study was the experience of the Indian peacekeeping force (IPKF) deployed to Sri Lanka between 1987 and 1990 to end the civil war between minority Tamil separatists of the Liberation Tigers of Tamil Eelam (LTTE) and the majority Sinhalese government and military. The force was not expected to become involved in significant combat operations, but within a few months the IPKF became embroiled in heavy combat with LTTE forces. By early 1988, four full divisions were involved, and the force

ended up suffering more than 4,000 casualties, of which 20 percent were officers and 12 percent were junior commissioned officers.²³⁸

Although this case study was used for years, there was a degree of ambivalence discerned by several Students about delving too deeply into it. One Student recalled that his DS quickly discouraged any in-depth discussion of the operation. Like the 1962 war with China, it seemed to have been another embarrassing episode for the Indian Army that was best forgotten. Another gained the impression that applying the proper doctrinal principles of LIC was more important than learning any lessons from India's involvement. A third considered that there was a general acknowledgement by his Indian classmates that the operation had failed, not because of the military's efforts, but because the civilian politicians "messed it up."²³⁹

Extrajudicial Killing During LIC Operations. Although presentations on law of land warfare are given every year at the DSSC by guest speakers, the 2003 Student related an anecdote about a Sikh classmate who had served in a unit conducting counterinsurgency operations in J&K who showed him photographs of dead militants killed by his unit. The student said the normal procedure followed with captured militants was to incarcerate them in a local civilian jail. If no one claimed them as family members within a few days, this was accepted as prima facie proof that they were infiltrators from Pakistan. Eventually, he claimed, they were removed from the jail and killed. The Student did not know if this meant they were killed by local police or by Indian military personnel. During the Foreign Area Tour to the state of J&K, the 2008 Student observed that the military briefings given by Indian Army units on the Line of Control invariably featured a picture of a soldier holding the severed head of a purported Pakistani infiltrator.²⁴⁰

Police and Paramilitary Forces. The 1984 Student recalled that the internal security curriculum included several presentations on Indian police and paramilitary forces such as the Central Reserve Police Force (which everyone considered to be "just about useless"), the Border Security Force, and the newly raised Indo-Tibetan Border Police, for which there was a classified, Indian-students-only presentation. The 1994 Student did not remember very much about police operations, but noticed that virtually no respect was shown by the army to the local Indian Police. He once observed an incident in which a colonel's car was illegally parked in the nearby town of Coonor. A policeman was in the process of berating the driver for illegal parking when the colonel returned. The car departed, but within a few hours three army trucks carrying soldiers from the Madras Regimental Center in Wellington drove into town, confined the town police chief in his own jail, and scoured the town, beating up any policeman they found. The situation escalated the next day when three trucks of reserve policemen arrived in town, resulting in an armed standoff. 242

Four components of the Central Armed Police Forces are involved in internal security operations in India. The Central Reserve Police Force was created in 1965 by the Ministry of Home Affairs to supplement state police resources. As of

1999, there were 128 Central Reserve Police battalions, including six peacekeeping battalions raised in 1979 with the task of maintaining communal harmony and controlling communal riots. The force is lightly equipped, but an increment of weapons is given for various roles when necessary. The peacetime role of the Central Reserve Police Force includes maintenance of law and order, internal and border security, guarding vulnerable points, anti-dacoit operations of an interstate nature, peacekeeping in communally disturbed areas, and relief operations in response to natural calamities or otherwise.

The Border Security Force came into being in December 1965, when the 1962 war with China highlighted the need for a separate force under central government authority to guard the Indo-Pakistan border while the army was involved elsewhere. Its responsibilities include manning the Indo-Myanmar and Indo-Bangladesh borders as well. It is also employed in the aid of civil authorities for the maintenance of law and order as well as disaster relief, and functions with the army both in peace and war. In peacetime, almost 25 percent of the force functions directly under the operational control of the army. ²⁴³

The Rashtriya Rifles (RR) was raised in 1990 as a specialized counterinsurgency and counterterrorist force to relieve the regular army of its counterinsurgency/ counterterrorism commitment and ensure its availability for the primary task of defending against external attack. Although it is considered a paramilitary force, the RR consists of personnel on deputation from all arms and services of the Indian Army. For example, 36 RR is a battalion-sized force with approximately 50 percent of its manpower coming from the Garhwal Rifles, 30 percent from Artillery, and the rest coming from Engineers (one engineer platoon), Signals (one communication platoon), Electronics and Mechanical Engineers (one field repair increment), the Army Service Corps (one mechanical transport platoon), Ordnance, and the Army Medical Corps. The 65 RR battalions each have manpower strength of 1,200 compared to a standard army infantry battalion of 840, but the ability to field six RR companies facilitates the counterinsurgency/counterterrorism mission. Continuity of operations is affected by the fact that 50 percent of each RR battalion rotates back to the army annually.²⁴⁴

The Assam Rifles has a heritage that dates to 1835, when it was raised as the Cachar Levy to guard settlements and tea estates. It gained federal status in 1937 and functioned under the governor and inspector general of police in Assam until September 1947, when it became a separate entity. Since August 1948, it has been headed by a serving army officer. Commanded now by a lieutenant general, the force comprises 31 battalions and has the missions of securing the northeastern sector of the international border; maintaining law and order in the tribal areas of Arunachal Pradesh, Nagaland, Mizoram, and Manipur; maintaining internal security in other areas as required; and performing counterinsurgency operations in Nagaland, Manipur, and Mizoram. It has also been deployed outside northeastern India in Sri Lanka and J&K.²⁴⁵

Indian Army Counterinsurgency Doctrine. As noted above, most if not all Students observed that the Indian Army's approach to combatting insurgency is not the U.S. Army counterinsurgency (COIN) doctrine used in the post-9/11 operations in Iraq and Afghanistan, but more akin to what they understood as LIC featuring mostly kinetic operations. None mentioned, however, that the Indian Army definition of LIC actually encompasses COIN. Using extracts from a College of Combat (now the Army War College) seminar on low-intensity conflict held in March 1992, it is defined as follows:

The term LIC covers a wide variety of armed conflicts for political purposes. It could embrace insurgency, guerilla warfare, terrorist or anti-drug ops, trans-border raids and even peacekeeping ops which may generate low intensity conflicts. Beginning in the late 1960s, a rapid rise in the incidence of LIC has made this lower end of the overall conflict spectrum more complex and presented some of the more intractable security problems globally. In terms of mil involvement, LIC may include the following categories of operations: (a) Foreign Internal defence. This essentially relates to counter insurgency ops in a friendly country at their request. This will include ops of the type conducted by us in Maldives in 1989. (b) Counter terrorism. This would involve all actions taken to prevent/counter terrorism such as anti-hijacking, hostage rescue, protection of threatened personnel etc. (c) Peacekeeping operations. These may or may not be part of an international agreement. (d) Aid to Civil Authority. This is for maintenance of law and order, an aspect which is familiar to all. (e) Counter Insurgency Operations. Such as being conducted in Nagaland, J&K Assam and Punjab. (f) Special Operations. As undertaken by the IPKF in Sri Lanka. (g) Peacetime Contingency Operation. These encompass raids, border control, domination of geographically defined areas, mounting of specific one time operations and other limited use of force.246

In 2006, the Indian Army published a capstone doctrinal manual categorizing all forms of armed conflict above the level of peace and below the threshold of general war as "sub-conventional operations." In his foreword to the Doctrine of Sub Conventional Operations (DSCO), Chief of Army Staff General J. J. Singh noted that the document "encapsulates our collective wisdom and philosophy that we have acquired over almost five decades in fighting such warfare." He characterized its fundamental principle as an "iron fist with velvet glove," defined as employing a humane approach toward the population in the conflict zone, using overwhelming force only against foreign terrorists, allowing indigenous militants the opportunity to rejoin the mainstream, and ensuring "a scrupulous respect" for human rights and civil law.²⁴⁷

Subconventional conflict operations, under the new doctrine, are defined as armed conflicts above the level of peaceful coexistence and below the threshold of war. They include low-intensity conflicts such as proxy wars, insurgencies, terrorism, and border skirmishes. Insurgency is defined as an organized armed struggle by

a section of the local population against the state, usually with foreign support. Possible causes of insurgency include ideological, ethnic, or linguistic differences, politico-socio-economic reasons, and fundamentalism or extremism. The document further notes that interference by external forces or inept handling of the situation may act as a catalyst to provide impetus to the movement.²⁴⁸

The DSCO lays out several general principles for developing an overall counterinsurgency strategy. Chapter 5, "Winning Hearts and Minds," can be considered the prime directive for the Indian Army in conducting such operations: "Since populace comprises the centre of gravity, winning their hearts and minds is central to the success of sub conventional operations. To achieve this, it is imperative that military operations besides being undertaken with a humane approach must also be supplemented by developmental activity coupled with imaginative public information and perception management initiatives." Chapter 7, "Human Rights," reinforces this principle: "Respect for Human Rights emanates from the very essence of human behaviour and interaction. The Indian Army has nurtured Human Rights with care and compassion for over two centuries and holds these Fundamental Rights as one of its most cherished values." Both chapters are underpinned by the doctrine's Annex B, "COAS Ten Commandants," which were promulgated to the army in 1993: "1. No rape; 2. No molestation; 3. No torture resulting in death or maining; 4. No military disgrace; 5. No meddling in civil administration; 6. Competence in platoon/ company level tactics in counterinsurgency operations; 7. Willingly carry out civic action with innovations; 8. Develop media interaction; 9. Respect Human Rights; 10. Only fear God, uphold Dharma and enjoy serving the country."249

Whether called subconventional operations or low-intensity conflict, the Indian Army counterinsurgency doctrine has a distinctive Nehruvian philosophical foundation. This was insisted upon by the country's first prime minister, who inherited an ongoing insurgency in northeastern India at the time of independence. He believed that the militants were Indian citizens, however disaffected and misguided they might be, and should not be treated as enemies. The point of counterinsurgency, he insisted, was to end it, not exacerbate the conditions that brought it about. This emphasis on winning hearts and minds strictly limits the use of artillery, air support, and several measures previously used by the British, such as collective punishment and "promenades" (baramptas), to overawe the populace. An order from the chief of army staff to troops deploying to Nagaland in the 1950s stated, "You must remember that all the people of the area in which you are operating are fellow Indians. They may have different religions, may pursue a different way of life, but they are Indians and the very fact that they are different and yet part of India is a reflection of India's greatness. ... You are not here to fight the people in the area but to protect them."²⁵⁰

LICO: The Indian Operational Style. The DSCO provides the overarching strategic guidance for the Indian Army's counterinsurgency doctrine, but specific counterinsurgency tactics, techniques, and operational procedures are taught in

Indian Army PME institutions like the DSSC. For this reason, two other reference books in use at the DSSC are quoted at length below.

The first reference book points out that the Indian armed forces have a distinctive operational style that has been "perfected over four decades of hands on experience ... [which] merits a detailed look for it is primarily responsible for the repeated success gained by our forces in such operations." Historically, the style was initially borrowed from the British Malaya model and adapted to Indian conditions. Its five distinctive features include:

- 1. Infantry predominant operations. The Indian Army employs lightly armed infantry, paramilitary, and police units for counterinsurgency and counterterrorism operations. When other arms and artillery are employed they are used in the dismounted role as infantry. "Indian troops are highly disciplined and humane in their approach. Using manpower (as opposed to technology) highlights the basic Indian approach of 'discrimination'. ... It is the application of ground troops alone which can distinguish between insurgents and civilians. Bombing from the air or artillery can never be discriminate."
- 2. Area saturation force ratios. In 1990, analytical techniques were applied to the Indian Army LIC campaigns in the northeastern states to compare security force levels with the assessed insurgent force levels in those areas. The finding was that whenever the security force/insurgent ratio reached 19:1, the security forces were able to contain the insurgency at the existing level, and further escalation or spread was arrested. If the ratio was 30:1, an operational breakthrough immediately followed. In Nagaland and Manipur it took the form of the Shillong Accord in 1975; in Mizoram it took the form of the Laldenga Accord, which led to the surrender of arms by the Mizo National Front; in Punjab it broke the back of the Punjab Terrorist movement. "Similar operational techniques are now beginning to yield very palpable results in J&K. The back of the militants has largely been broken."
- 3. The psychological dissuasion approach. "The moment any violent incident or insurgent strike occurs in a particular area, the villages and habitation centres in the vicinity are subjected to intensive cordon and search operations. These involve collecting the local population together and screening them thoroughly for presence of insurgents. These do serve to harass the civilian population and cause them hardship. ... Over a period of time such operations tire out the civilian population. In a simple process of operant conditioning, they begin to refuse support and information to the insurgents. ... The Indian Army has followed a highly successful psychological dissuasion approach (that almost functions like operant behavioral conditioning) to turn the population against continuation of the militancy or insurgency. This approach is so much more humane when compared with the body count approach of the Vietnam era. It has proved successful time and again campaign after campaign."

- 4. Winning hearts and minds. The positive aspect is far more important than the negative aspect of the psychological dissuasion model; this is a concurrent and sustained effort to win the hearts and minds of the civilian population through extensive civic action program in which the army and the air force operate to foster local development through free medical treatment; construction of places of worship, schools, roads, bridges, and playgrounds; and training local youth in trades and skills like carpentry or carpet weaving; and make a conscious effort at all times to foster respect for the local customs, traditions, and language. "Troops are strictly educated and sensitised towards the aspect of human rights and the need to befriend the local people and gain their trust. It is this facet, which invariably has been the key determinant of success in the Indian Army's LIC campaigns."
- Rival gang operations. "Another feature of Indian LIC operations has been the constant effort at mobilising ex-underground (UG) or reformed militant elements for organising the defence of the civilian populations and combating the insurgents. ... The same methodology was used with varying degree of success in Punjab, Sri Lanka and now in J&K. In Sri Lanka, the rival Tamil organisations of the EPRL provided invaluable operational and intelligence support to the IPKF. In J&K, a number of anti-militant local outfits like Kuka Parreys Ikhwan-ul-Musalmoon, Muslim Mujahadeen of Yousuf shah and smaller outfits like the Gujjar group of the National Liberation Army, Hussani commandos and Kashmir Liberation Jehad Force have been actively assisting the security forces. ... The creation of such rival groups often provide intelligence windfalls and even effective operational support in dominating insurgent affected areas. They can be crucial for locating and destroying insurgent hideouts and capturing/eliminating key militant leaders (especially those who have been terrorizing the civil population, committing atrocities like rape, public torture and extortions)."253

LIC Procedures and Tactical Operations. The information below is extracted from a second reference book that describes the Indian Army's approach to LIC.

PRINCIPLES OF LIC

Intelligence. Intelligence is the single most important prerequisite to formulate military strategy and tactics in LIC situation. Deficiency in intelligence system cannot be compensated by superior man-power and weapons since the dissidents are mobile, elusive, difficult to identify and employ efficient intelligence and counter intelligence measures. ... Intelligence in LIC environment has two important aspects; anticipatory intelligence and contact intelligence. While anticipatory intelligence envisages identification of potential threat areas; cultivating long term sources; collection of intelligence about

dissidents organisation, bases, weapons and equipment; the degree of population support enjoyed by them and infiltration in the militant's organisation; contact intelligence would commence once the Army is deployed. Therefore, there is a need to have a system wherein the exchange of information and contact between civil and military provides both anticipatory and contact intelligence.

Unity of Effort. LIC invokes the art of harmonising the application of numerous pressures and influence in resolving the intrinsically complex problem. In LIC the combined and concurrent use of political and economic measures, social reforms, psychological operations and dissemination of information along with military operations will pay dividends. An integrated thrust to the ameliorate problems and aspirations of the people by various agencies is absolutely essential. However, the role of various players will keep changing with the development of situation. While the army may be the main player in the initial stages, its role should gradually decrease with the degradation in fighting potential of the militants and the other players should then assume the role of main player(s).

Unified Command. The British had successfully combated insurgency in Malaya in 50s. Some of the principles adopted by them are still relevant. The Governor General, Gen Sir Gerald Templer was not only the political head but also directed the military aspects of the operations including activities of the police forces. He took all economical, political, social and such other decisions which are essential to carry out CI ops. It is desirable to adopt the Malayan model. However, in the context of the evolution of our political and bureaucratic system it may not be possible to do so. Therefore, the alternative is to have a cohesive apparatus of govt machinery for coordinating all activities under a single permanent authority to bring about a fusion in military, police, PMF intelligence agencies and civil functions. In the absence of a single point control, weak kneed and vague policies generated by their own compulsions would lead to weakened and delayed response from various agencies. This would also cause fissures in the system, therefore, there is a need for a unified command to orchestrate the functioning of all agencies including the intelligence agencies involved in combating LIC.

Major Features of LIC:

(a) Protracted operations. There are no 'quick fix' solutions and it requires tremendous amount of skill, wits, patience and sustained efforts to combat LIC.

- (b) Political dominance. While political objectives will affect military operations, formulating military strategy and tactics would be the prerogative of Army. However, commanders and staff must understand the implications of political objectives and their impact on military operations.
- (c) Requirement of Large Resources. In LIC, there is a requirement of disproportionately large resources in terms of troops, equipment and economic backing compared to that of the dissidents. This is evident from our own experience in J&K, NE and Sri Lanka, US Vietnam and the erstwhile USSR in Afghanistan.
- (d) Defeat the Military wing of dissidents. The aim of military operations would be to make the military option of the dissidents unviable. Their military wing has to be defeated and brought to its knees for any meaningful outcome. Till this happens, the dissidents have little or no compulsion for a negotiable settlement.

Winning of Hearts and Minds. So far winning of hearts and minds of people in CI was left to the SF [security forces] generally. In our context this responsibility cannot be of Army any more. In our system all economic and political actions are controlled by the administration apparatus of the region in the form of Governor/Chief minister and his advisors who would mostly be bureaucrats or police men. Army has no economic or administration where withal to indulge in winning of hearts and minds of people. The Army's efforts in this context should, therefore be limited to ensure that the operations carried out by them do not further alienate segments of uncommitted population. In so far as winning over those segments which have come under the influence of the insurgents or preventing uncommitted mass from going over due to economic or political deprivation is concerned, this is a matter to be left to civil administration and authorities. In this context, therefore, it is imperative that while on one hand, commanders at every level ensure that no such action of their troops is accepted which may alienate the uncommitted section of the population, it is at the same time equally essential that they make it clear to the general population that their activities are strictly to control military action of the insurgents. Any political or economic dispensation must be asked for by insurgents from the civil or political authority.

Psychological Operations. The success gained by Army in marginalising the militants needs to [be] backed by well thought out psychology operations. Otherwise the success achieved by Army may be short lived. The dissidents fully exploit the gains achieved by psychology

operations. Even after gaining experience in LIC since independence, we do not have any dedicated 'psychology operation' organisation and seem to be paying lip service to this important aspect.

Media. Media is a potent weapon in a democratic set up to build Army's image and mold population attitudes and perceptions. The militants exploit media to their advantage to create awe and panic in the population. ... Just as we are aggrieved of the press so is the press of the Army. The journalists lack understanding, experience and implications of reporting on matters military. PROs [public relations officers] are not adequately qualified and superseded officers are posted. Adverse comments in the press tend to put field commanders on the defence and often avoid the media men for fear of being misquoted. Generally damage is done by the press by printing adverse comments in catchy headlines whereas the regrets/rebuttals are printed only in small letters which catches nobody's attention. Therefore, it is time that both Army and the media carry out introspection and the two arrive at a meeting point so that the media does not nitpick the Army for its actions in LIC.

Measures for Conducting Successful Military Ops in LIC. The aim of military ops in LIC is to cause maximum destruction on the military wing of the militants and make military option unviable. In the initial stages the militants enjoy a fair degree of preparation and are eager to display their military might till they realise the futility of their actions. While launching military ops, the whole area/city should be divided into sectors and sub sectors. All possible escape routes must be blocked dedicated task forces must be empowered against known bases and concentrations of militants. Simultaneously military ops should be launched in each sector from multi-directions with overwhelming superiority of troops and using all available means. Aim should be to flush out the militants, sanitise the area/city and ultimately marginalise them. Thereafter, measures suggested in succeeding paras should be noted for further conducting successful military ops.

Establishment of Op Bases. A grid of bases must be established in known areas of militant strongholds and other sensitive areas. This would force the militants to shift. Constant pressure must be maintained by aggressive and sustained actions to keep them on the run. This would impose caution on militants and restrict their movement. The op bases may be shifted when their utility in a place is reduced.

Ambushes and counter Ambushes. Ambushes are effective means of neutralising the militant. These must be laid after deliberate planning and assessing the pattern of activities of militants. In built up areas, ambushes should be mobile and may not stay at a place for more than five to six hours. Surprise is the key factor. Troops must be trained to exercise self-discipline and be able to 'lie doggo' without talking, whispering, coughing or clearing their throats. Vigilance and aggressive spirit are vital for countering militant ambushes.

Cordon and Search. Large scale cordon and search ops do not yield results proportionate to the resources employed. Instead, point cordon and search launched based on timely information will pay dividends. Prolonged stay of troops in cordon is undesirable since it causes inconvenience to locals and complacency sets in troops manning the cordon.

Isolation of Urban Areas and Resources Control. It is desirable to isolate militants from urban areas but it is easier said than done particularly where large towns/cities are involved. As far as possible, we must prevent militants access to towns by carrying out intensive patrolling in outlying areas and conducting successful raids on militants in towns to deter the militants from entering urban areas. In additions, impose curfew and restrictions on local movement for limited hours. Surprise checks should be carried out by establishing vehicle check points. Critical items like arms, ammunition, certain chemicals and other articles which can help militants in making must be strictly controlled. Identification passes can also be issued. The activities of skilled persons should be monitored and premises of suspected persons/traders should be frequently searched. Activities of production, supply and distribution of essential commodities should be monitored.

Speculative Fire: It is useful to resort to speculative firing on suspected targets particularly in built up areas. Though it results in expenditure of ammunition, lot of casualty can be saved if proper speculative firing drills are perfected.

Surgical Actions. The militants would have sanctuaries either across the international border (IB) or in adjoining state/town. While actions against sanctuaries across the IB are outside the scope of this study, surgical actions must be carried out against their sanctuaries by para commandos NSG based on hard intelligence. However, detailed coordination and understanding with adjoining state(s) must be established well before the military ops are launched.

Neutralisation of Extremists Organisations. The militants must be considered as guided Youths and not misguided. So their org should be treated with contempt. Militants and their leaders should be the

prime targets of the armed forces. Their romantic, adventurous, saviors and heroic image should be shattered so that it does not hold attraction for the other to take up arms. Following is suggested to achieve this: (a) Militants are divided, bought, pacified or simply bludgeoned into submission. (b) Infiltrate and cause fissures in militants org. (c) Deny engagements in places favourable to him. (d) Offers of amnesty from a position of strategy. (e) Interests of the community are not sacrificed under pressures from militants. (f) There should be no inhibition in killing a friend who has taken up arms against the authority for he will not hesitate in killing our persons.

Legal Aspects. Military ops in LIC situation are generally against people who belong to the land and are governed by the provisions of the law of the land. Unlike full-fledged war, the military has to operate within the provisions of law. Depending upon the circumstances, certain provisions of law are invoked that confer additional powers to the SF. Hence all ranks must be educated appropriately regarding the legal aspects and provisions of the law that are applicable in LIC scenario. When operating in a foreign land the law of that land will be applicable.

Human Rights and Amnesty Organisations. Human rights and Amnesty International people also op in the areas where military ops are being conducted in LIC environment. It is essential that all levels understand and conduct themselves in an exemplary manner so as to avoid adverse publicity by the people of these orgs. The militants or Anti national Elements (ANE) will always try and project cases of atrocity and high handedness on the part of the SF."²⁵⁴

Student Attitudes about Internal Security Operations. The 2007 Student A was surprised at the lack of interest at the DSSC in the American experience with counterinsurgency in Afghanistan. Whenever the subject came up, he explained, the DS confined the discussion to "high-level stuff" about the country or changed the subject completely. The attitude implied that the Indian experiences in Sri Lanka and J&K had more lessons to offer. The Student was similarly puzzled by the unwillingness of anyone to address the situation of the approximately 200 million Muslim inhabitants of India. The general attitude of his Indian classmates was that while they were well-treated, the absence of more than a bare handful of Muslim officers in the course and their apparent inability to achieve high rank in the Indian Army was seen by many as evidence that they did not belong to a martial class and were not interested in military service or any other service to the nation. He also noted that the Indian students were proud of their army's reputation for successfully fighting militants compared to other countries, for example the United States, which had failed to defeat insurgencies in Vietnam, Iraq, and Afghanistan despite

devoting vast resources to the task. They didn't particularly relish counterinsurgency assignments, but their most commonly expressed attitude was that it was "part of being in the army." ²⁵⁵

In the course of research for his master's thesis, the 2017 Student circulated a survey questionnaire to every Indian student in the Army Wing. 56 responded. 75 percent of respondents agreed or strongly agreed with the statement "Counterinsurgency tasks distract from the military's primary mission of external defense," and only 16 percent disagreed. Given this result, he was puzzled by the lack of any meaningful discussion about the Kashmir insurgency. Despite the self-congratulatory tone of the reference materials and the pride in the Indian Army's so-called good performance, he thought the doctrine was "missing a piece" at the strategic level. The tactics were well-defined and well-enunciated, but did not include a way ahead or an overall strategy for success. In J&K, the Indian security forces had fought militancy for 28 years with little or no headway. It was seen by everyone at the DSSC as "a never-ending thing." ²²⁵⁷

Although there was a lot of discussion about—and blame ascribed for— Pakistan's use of proxy forces in Kashmir, there was virtually no discussion of India employing the same tactic in retaliation, although according to one of the 2001 Student's friends, a commando, India occasionally used "counter-infiltration teams to go across the Line of Control to disrupt militant operations on the Pakistan side." The 2011 Student A also recalled that in one of the major exercises in a mountain setting, the friendly forces were allowed to play the use of a "friendly terrorist force" to operate on the enemy side of the border to attack enemy forces and conduct sabotage operations. It was not until 2017 that the subject was openly discussed. The 2017 Student said a frequent topic of conversation among the Indian students was whether India should actively attempt to destabilize Balochistan to punish Pakistan for supporting terrorism in J&K. The catalyst was a thinly veiled threat made by Indian National Security Advisor Ajit Doval in a widely reported speech in February 2014, in which he said, "You [Pakistan] can do one Mumbai, you may lose Balochistan." Some students were conflicted about this statement. During a presentation of their minor research paper to the Army Wing, a group of Indian students studying "Instability in Pakistan" concluded that the best outcome for India was a prosperous and stable Pakistan, but refused to rule out the Indian destabilization of Balochistan as a potential lever to influence Pakistani behavior. After the Student raised his hand and pointed out the illogicality, one of the Indian students approached him afterward and admitted the group had ignored the obvious contradiction, and now that it had been pointed out he agreed that destabilizing Balochistan would yield nothing positive for Indian security. The original minor research paper conclusion of trying to have everything both ways was interpreted by the Student to be vintage "gut-level emotionalism."258

4. Attitudes Toward the State and Its Institutions

Background

Civil-military relations in India contrast starkly to those in neighboring Pakistan, whose military has ruled the country for nearly half of its existence and continues to exercise enormous influence over foreign policy and national security decision-making. Several factors account for the divergent trajectories. India was the far larger country and possessed the bulk of the military establishment left behind by Great Britain, and thus had little reason to consider Pakistan a major threat to its sovereignty.²⁵⁹ But the most fundamental difference was the attitude of the two countries' founders toward the colonial military establishments they inherited. Mohammad Ali Jinnah, the leader of a smaller and weaker state whose two wings were separated by a thousand miles of hostile territory, quickly became disillusioned by the results of partition and concluded that the new Indian state was attempting to throttle and choke his new state.260 Only a strong military establishment, he realized, could guarantee Pakistani sovereignty. Jawaharlal Nehru, on the other hand, considered the British Indian Army to be an instrument of colonial oppression, and greatly mistrusted its officer corps. "How different was the behavior of a person acting as an individual and obeying his own impulses from his behavior as an official or a unit in the army!" he wrote in his autobiography. "The soldier, stiffening to attention, drops his humanity and, acting as an automaton, shoots and kills inoffensive and harmless persons who have done him no ill. ... The soldier is bred in a different atmosphere, where authority reigns and criticism is not tolerated. So he resents the advice of others, and, when he errs, he errs thoroughly and persists in error. For him the chin is more important than the mind or brain."261

Nehru had justifiable reasons for such concern. On May 9, 1947, Brigadier (later General and Chief of Army Staff) K. M. Cariappa called on Lord Ismay, the chief of staff to the viceroy, Lord Mountbatten, to suggest that power be transferred to the British Indian Army in June 1948 with either Jinnah or Nehru as its commander-in-chief. Ismay told Cariappa that the idea was not wholly impractical, but might be dangerous because army rule throughout history had proven to be tyrannical and incompetent. Armies, he emphasized, should always be the servants of the state and not the masters. "It is hard to know," Ismay told Mountbatten the next day, "whether Cariappa in putting forth this idea was ingenuous and ignorant or ingenuous and dangerous." ²⁶²

Almost certainly aware of this exchange, Nehru moved decisively at the outset of independence to "coup-proof" his fledgling government from any conceivable military threat. The first major blow to the former autonomy and influence of the new Indian Army occurred on Independence Day, August 15, 1947, when the position of commander-in-chief was abolished. A short time later Nehru made the former commander-in-chief's official residence in New Delhi the prime minister's official

residence. Other administrative changes followed to deliberately reduce military influence in the government's decision-making process. The head of the army was removed from the cabinet, and all three services were placed under the oversight of a civil-service-dominated Ministry of Defence. The government warrant of precedence was reordered to upgrade the positions of government civil servants while simultaneously downgrading those of senior military officers. In 1948 the army chief was co-equal with justices of the Supreme Court, but senior to chief ministers outside their states; by 1951 the army chief became junior to Supreme Court judges; and by 1963 he was junior to chief ministers at all times. Other steps taken included limiting the terms of senior generals, which caused them to retire at relatively young ages; diversifying entry into the army by creating the National Defence Academy to mix officer cadets from all three services, and locating it far away from the Indian Military Academy at Dehra Dun; taking counterintelligence out of the military's purview and assigning the civilian Intelligence Bureau to monitor senior officers; and raising a new regiment, the Guards, that was recruited from all over India with no regard for class composition, and making it senior in precedence to every other regiment of the army. Finally, because the British Indian Army was so heavily recruited from the undivided province of Punjab, all but one army chief selected between 1947 until 1977 was a non-Punjabi. 263

Nehru's hostility to the Indian military was also evident in his choice of the inept Sardar Baldev Singh to be the first minister of defence. Singh was a man so lacking in knowledge about military affairs that the ministry was in effect run by an Indian civil service officer, H. M. Patel, who later became finance minister in the government of Morarji Desai. Such indifference to military affairs continued until 1957, when Nehru chose a close political confidante, Krishna Menon, to become defence minister. 264 At first the appointment was greeted with joy by the army, but attitudes quickly soured when it became apparent that the ultra-leftist Menon was no friend of the military establishment. Despite the earlier Chinese occupation of Tibet in 1950 and an encroachment into Ladakh in 1959, Menon refused to consider the possibility of hostile Chinese intentions toward India, and steadfastly declined to fund the armed forces adequately despite readiness having declined steadily since the first Kashmir war in 1947-1948. General K. S. Thimayya, who was named chief of army staff (COAS) in 1957, publicly warned of the army's growing deficiencies in men and equipment. Menon took this as an affront to his authority and accused the COAS of being pro-western. Thimayya in turn accused Menon of being a communist. Both men were right. Thimayya then resigned, but Nehru, who wished to avoid a political crisis, asked him to withdraw the resignation. Menon afterward sought to promote more pliable generals. When Thimayya retired in 1961, the prime minister selected P. N. Thapur as COAS and a noncombat arms officer, B. N. Kaul, to command IV Corps in northwestern India. At his retirement, Thimayya told his audience, "I hope that I am not leaving you as cannon fodder for the Chinese. God bless you," words that returned to haunt his listeners later that year when China attacked all along the disputed border and humiliated an unprepared Indian Army. 265

The 1962 war with China was a badly needed wake-up call for Nehru. Under strong political pressure because of the army's lackluster performance, he cleaned house in the defence ministry, beginning with Menon; accepted an offer of military assistance from the United States; and made enough reforms in the defense establishment for India to gain a stalemate with Pakistan in the 1965 war and a complete victory in 1971. There has since been very little change in the civil-military relationship, which has been characterized as follows by scholar Stephen Cohen: "Not only does India have civilian control, it has almost crushing civilian dominance over a very powerful and large military."266 In the opinion of former COAS General V. P. Malik, the Indian military continues to be sequestered from the highest levels of decision-making, yet it is often called upon to pick up the pieces for civilian decisions gone awry. Although several recommendations for reform after the 1999 Kargil conflict were accepted at the highest levels of government, little actual improvement in the military's standing or in the organization of the armed forces has occurred.267 Malik suggests that although the military is committed to civil supremacy, it remains dissatisfied with a secondary role in strategic decision-making.268

Curriculum

Almost nothing in the DSSC curriculum directly addresses domestic politics, governance, or civil-military relations. The only student reference that remotely addresses these issues is a 2002 manual, *Higher Defence Organization in India*. ²⁶⁹ This reference supports a one-and-a-half-hour division discussion generally scheduled in the fifth tutorial. The manual's three sections address the Organisation for Higher Direction of War in India, the Organisation and Functions of the Ministry of Defence, and a very brief description of the Ministry of Defence (Finance). It has six annexes: (A) Relations between Political and Military Spheres, (B) Organisation for Higher Defence Control and Composition and Functions of Agencies and Committees [in the areas of defense and national security decision-making], (C) Higher Defence Organisation, (D) Components of Ministry of Defence and Organisations under It, (E) Outline Organisation of Department of Defence, and (F) Outline Organisation of DRDO [the Defence Research and Development Organisation].

Likewise, there is very little discussion of any but the most innocuous political topics by college guest speakers. Annex F lists the topics and speakers for four different years (1992, 1998, 1999, and 2000). In 1992, two speakers addressed domestic issues. One spoke about the Indian constitution and the Indian budget, and the other, the comptroller general of India, gave his view of the state of the nation. In 1998, three guest speakers addressed civil administration, the Indian judiciary and constitution, and tax planning. In 1999 and 2000, there were no speakers that addressed domestic issues.

All study respondents were asked if there were discussions of domestic political issues or current events in their syndicate rooms on a regular basis. Only the 2012

Student responded affirmatively to the question.²⁷⁰ The overwhelming response was that Indian students at the DSSC were either "apolitical" or "agnostic" toward domestic political issues, with the single exception of the government's funding of the military.271 A common attitude about civilian governance was that "Politicians sometimes are complete idiots, but we do what we are told." The military, most students believed, was "the glue that holds the country together." When pressed to explain in more detail why this was so, the Student responded with a list of characteristic attitudes most students expressed about the military as an institution: It was "disciplined, organized, professional, realistic about the country's problems, proud and patriotic, honest, not corrupt, above the law to a certain extent, and apolitical and proud of it." The mission of the armed forces, he concluded, was twofold: to hold the country together and to be prepared to destroy the Pakistan Army.²⁷² One Student pointed out that his classmates were "not very political," perhaps because so few of them were able to vote. He noted the absence of a system for absentee balloting in India, saying that most military people ignored elections unless they happened to be stationed in their home states and could vote there.273

Attitudes Toward Civilian Control of the Military

The overwhelming attitude among Indian students throughout the study period was that tight civilian control of India's military was a source of pride, especially when compared with Pakistan, which had suffered three military coups and whose democracy was widely seen as dysfunctional. This did not mean students agreed reflexively with everything that government civilians did. Nevertheless, the clearly subordinate position of the Indian armed forces to the civilian government was well-accepted and considered to be a positive aspect of Indian democracy. One Student thought it freed the army and other services from political machinations and left them mostly alone to focus their attention on safeguarding India.²⁷⁴ Another Student thought the reason why the Indian military so readily accepted its subordinate role was because the military lifestyle was greatly superior to the lifestyles of most other Indians. For example, military cantonments were clean, orderly, and had ample green spaces that many large cities lacked. Additionally, the government paid respect to military professionalism and provided quarters, rations, and pay to the armed forces that were superior to those of most Indians. All in all it was considered to be a good bargain.²⁷⁵ The 1989 Student noted, however, that tight civilian control over the military sometimes worked against improving military-to-military relations with the United States. Military cooperation with foreign military services, he noted, was an area in which neither the service chiefs nor the Ministry of Defence had any meaningful influence. This was a policy space reserved exclusively for the Ministry of External Affairs, and until that ministry agreed, no military exercises, exchanges, or other bilateral military programs could occur.276

Attitudes Toward Civilian Politicians

Acceptance of a strictly subordinate position in the civil-military relationship did not mean that Indian students at the DSSC were reluctant to criticize civilian politicians or their decisions. The 1979 Student noted a near-unanimous feeling among his classmates that civilian politicians were mostly "all fools." They did not consider the military to be under the "government's thumb" despite its clearly subordinate position. This was demonstrated during and after the 2001-2002 border crisis with Pakistan, when a Student observed that many of his classmates complained quite openly about the quality of civilian decision-making during the crisis. "What could they have been thinking?" was a common complaint about the government's decision to mobilize and deploy the entire Indian Army to the international border and then take no action to punish Pakistan for its alleged involvement in the December 13 attack on parliament. The Student recalled no other specific criticism of Prime Minister Vajpayee's decision-making, opining that criticizing government officials by name in front of foreign officers may have been a taboo subject, or perhaps it was another example of resignation.

The major political event in 2004 was the return to power of the Congress Party after a six-year absence. The new prime minister was Manmohan Singh, a greatly respected figure who was credited with instituting major economic reforms in India in the early 1990s when he was minister of finance. Indian students also expressed "deep reverence and respect" for India's Muslim president, Abdul Kalam, a scientist who had earlier been an instrumental figure in India's missile program. They did not, however, show "a lot of love" for the leader of the Congress Party, the Italian-born widow of assassinated Prime Minister Rajiv Gandhi. There was a "great deal of disenchantment" with the ousted ruling party, the BJP, because its leadership was perceived to have "backed down" to Pakistan during the 2001-2002 border crisis. All in all, according to the 2005 Student, the primary interest of the Indian students was not so much any political differences between the two parties, but what the party in power might do financially for the military. Some students expressed the need for more ex-military personnel to participate in government so that the civilian decision-makers, who sadly lacked and badly needed military expertise, had it more readily available. The most common view was that the army's role was to defend the nation while the civilian government's role was to provide the military the resources needed to do so—which a few Indian students noted it often failed to do.280

A decade later, in 2014, many Indian students welcomed the election of Narendra Modi as prime minister because it was widely assumed he would be more "heavy-handed" toward Pakistan. The previous Congress government was seen as too weak and hesitant in that area, while Modi projected an air of strength and purpose. Many students participated in his "Clean Up, India" day, a visible reminder that the new government was prepared to clean up not only the country, but the old ways of doing things in government as well. Modi was widely viewed as

bringing strong managerial skills into the national government. As chief minister of Gujarat he had gained a reputation for being friendly to business, eliminating waste and inefficiency, and moving the economy forward.²⁸¹ There was not a single mention by any Indian student of *Hindutva*, the Hindu nationalist ideological foundation of the BJP.²⁸² Earlier in the period of this study, Indian students consistently expressed disdain and mistrust for politicians in caste- and religion-based parties, with virtually none believing that the answer to India's problems lay in a religiously based or authoritarian government.²⁸³

Lower-ranking civilian officials who were guest speakers at the DSSC were accorded much less respect than the more senior figures. Many Indian students chuckled at the appearance of many civilian speakers who visited the college. Unlike Indian military officers who always wore western dress even on nonmilitary social occasions, these officials were always in native garb and were laughed at as *babus*, a term of disparagement referring to indigenous clerks who can write English but usually have inadequate command of the language. Officials from the Indian Foreign Service and Indian Administrative Service, however, were widely admired for their education and English skills.²⁸⁴

Attitudes Toward the Ministry of Defence and Senior Military Officers

Indian students were nearly as reticent in their opinions of Ministry of Defence officials and senior military officers as they were of civilian politicians, although the 1979 Student opined that they had the same attitude toward government bureaucrats in the Ministry of Defence as they had about civilian politicians.²⁸⁵ This was confirmed by the 1992 Student, who noted that while there was often a reluctance to criticize political figures, there was no reluctance about criticizing civilian bureaucrats in the Ministry of Defence, and particularly those in the Defence Research and Development Organisation (DRDO), the organization responsible for developing and building indigenous weapon systems and other types of military equipment.²⁸⁶ The level of corruption in the Ministry of Defence in the recently concluded Bofors scandal was often cited in this regard, ²⁸⁷ as was the DRDO's problems in developing an indigenous Indian battle tank, the Arjun. Similar criticism was leveled about the Vijayanta, an Indian variant of the British Chieftain main battle tank. All in all, there was "heartfelt frustration" with the Indian defense procurement system. The high level of frustration even spilled over to visiting Chief of Army Staff General S. F. Rodrigues. During a question-and-answer period after his talk, one Indian student stood up and pointedly asked when the army was ever going to get equipment that worked properly. Rodrigues responded by icily calling into question the professionalism of the officer for asking such an impertinent question. That ended the session.²⁸⁸

The annual Industrial and Demonstration Tour provided the opportunity to show-case India's indigenous defense production infrastructure, but also an opportunity

for Indian students to vent their frustration. The 2000 Student noted a clear difference between government-owned and -run industrial enterprises and those run by civilian businessmen. For example, the government-owned Mahindra automobile plant "looked like Czechoslovakia in 1975—dirty, dusty, and unsafe—while the new Tata Motors plant looked like something out of Silicon Valley." He also noticed that nearly everything provided by India's indigenous defense industrial base was of inferior quality, even smaller items like boots and uniform accessories. During a visit to the Hindustan Aeronautics Limited (HAL) complex in Bangalore in 2015, an Indian Air Force student whispered in his ear, "Now you know why we have problems." The student explained that in his squadron it had taken HAL more than 18 months to rebuild an engine sent in for depot-level repair. The same thing was said about design flaws and major development delays with the Arjun main battle tank and the light combat aircraft developed for the Indian Air Force. Nevertheless, several others pointed out that the system had worked well enough to defeat Pakistan three times (1965, 1971, and 1999 at Kargil). ²⁸⁹

Other than the single exception mentioned above, there was little overt criticism of senior military officials. In fact, the 2001 Student opined that there was far less criticism of the Indian service chains of command than what could normally be found in U.S. military organizations. The sole exception was the air force's role during the Kargil War. The attitude of several army participants was that they had been let down by their own side force because of service restrictions that prevented any aircraft from crossing the Line of Control. "If we had had more air support," several classmates observed, "our friends wouldn't have died."²⁹⁰

Besides this and grievances about the DRDO, the only military subject that truly evoked frustration among Indian students was India's Higher Defence Organization (HDO). The HDO consists of the president as the constitutional commander-in-chief of the military, with the prime minister controlling defense policy through a Cabinet Committee on Security that is informed by the expertise of a national security council, formed in 1998. A politically appointed defence minister supervises the Ministry of Defence with the help of the Defence Minister's Committee. This body includes inputs from the Chiefs of Staff Committee, whose chairman is the most senior service chief, but is appointed for only a few months at a time. The secretary of the Chiefs of Staff Committee is the chief of integrated defence staff, who also heads the nascent Integrated Defence Staff that administers the military's two tri-services commands, the Strategic Forces Command (which exercises authority over India's nuclear and missile forces), and the Andaman and Nicobar Islands Command. Some joint planning is conducted within the Integrated Defence Staff, but in practice each service chief not only administers and plans for, but commands, his own force. Real leadership in the Ministry of Defence rests with the defence secretary, a senior bureaucrat from the Indian Administrative Service. The secretary's role is so all-encompassing that he controls not only defense finance, production, and research and development, but also the branches of the military through their respective service chiefs, who were made subordinate to him through the 1961 Government of India Transaction of Business Rules.²⁹¹

The Integrated Defence Staff was a recommendation that emanated from the Kargil conflict. It was generally considered by the Indian students to be an organization with little actual power to coordinate service activities because each of the three service chiefs exercises near-complete control of his own service. Many students wanted the armed forces to adopt a "chief of defence staff" model to better coordinate service budgets and enhance joint operations—another key recommendation of the Kargil Commission yet to be implemented. Only two joint commands have as yet been formed, and the general consensus of Indian students was that little additional progress was likely to occur because both the civilian and uniformed military bureaucracies feared that such steps might diminish the present influence of the Ministry of Defence or impinge on current service prerogatives. In fairness, many students considered the present situation to be satisfactory and were of the opinion that "what we are doing now works." They saw no urgency to make a change because the Indian armed forces were not organized for large-scale force projection.

While the above views about the HDO issue are anecdotal, the 2017 Student A's master's thesis provided some actual data on the topic. In the course of his research the Student circulated a survey questionnaire that 56 of the 250 Army Wing students returned. On two questions about whether the current HDO was adequate for (1) crisis management and (2) strategic planning, 13 percent agreed and 79 percent disagreed with the first question, while 15 percent agreed and 80 percent disagreed with the second. On two questions about whether a chief of defence staff is necessary for (1) improved jointness and (2) adequate strategic planning, identical results were obtained for both questions: 97 percent agreed and 2 percent disagreed.²⁹³

Attitudes Toward the Media

In the first two decades of the study period, Wellington was an isolated hill station where daily newspapers arrived from Bombay or Madras (now Mumbai and Chennai) three or four days late. There was no television, no radio except the government-controlled All India Radio, and the only access to English language news was with a short-wave radio receiver. With the DSCC library filled with mostly "ancient books," many Students were surprised to find that their classmates, though avid readers, had an extremely narrow frame of reference on issues reported by the heavily slanted Indian media.²⁹⁴ By the end of the 1990s, six English language channels were available on satellite television, daily newspapers were delivered each day, and the college had internet service, which, though initially unreliable, would be fixed by the end of the next decade and lead to an exponential growth in social media penetration of the Indian market. Where formerly the

Indian government had controlled nearly all media, all students at the DSCC can now get their news from a variety of nongovernment sources. This newly open and vibrant media landscape did not hesitate to criticize the Indian government or the military. This was perfectly fine with the students who likewise saw a free press as another matter of pride. There was no thought that the press was being disloyal by criticizing the military occasionally, as this was considered to be its mission.²⁹⁵

The DSSC provides a small block of instruction on media relations, and the subject is addressed occasionally by guest speakers. A reference book titled Media— Handout covers subjects such as the role of the media in a democracy, conditions for the existence of a free media, and reasons for conflict between the media and the government (including the military). In the last subject area, the book points out that "Perhaps the very first lesson taught to a trainee journalist is to be wary of what is disseminated to him by a Public Relation Officer or Organization. A common perception is that Public Relations releases conceal more than they reveal. If the fact that we live in an age of disinformation, media manipulation & propaganda, is also taken into account, the natural wariness of the journalist can be well understood." In another section titled "Organization and Functions of the Directorate of Public Relations" (an organization of the Ministry of Defence), the book addresses the role of military public relations officers and notes the desired end: "The need for projecting the correct image of the Army & avoiding adverse publicity cannot be over emphasized. The main objective of publicity is to stress upon the people that the Armed Forces are well equipped & well trained, that they are in a high state of readiness & that their welfare is being looked after adequately. PR is not publicity, it is much more than that. It is a sustained, deliberate & well planned effort to build up the image of the Armed Forces."296

In the last decade of the study, student attitudes toward the media became more negative largely because of what was construed as negative coverage of the Kashmir insurgency. The 2006 Student noted complaints about media coverage of human rights violations by the security forces. Kashmir was a difficult mission, his classmates complained, and the press had little understanding of military operations: "Pakistan instigates the situations, we respond to them, and then we are criticized by the press." Although leverage of the media was taught to be a major component of LIC operations, there was little discussion about how the military might engage with the media to positively influence the hearts and minds of the people. Many agreed that the media should be kept out of war zones because it showed an "adverse" attitude to the Indian armed forces, and a few expressed the view that the government ought to have a special branch devoted to censoring the media. They cited the example of the 2008 Mumbai terrorist attack, in which local television stations broadcast pictures showing locations where people had taken refuge in the Taj Hotel. This seemed strange to the 2016 Student because in his opinion the Indian media rarely criticized the military establishment.²⁹⁷ The 2017 Student considered the Indian Army to be decades behind the U.S. Army in

media management as it had no public affairs specialists, no information operations personnel, and no psychological operations units.²⁹⁸

5. Attitudes Toward Nuclear Issues

Background

A detailed discussion of India's quest for nuclear weaponry is beyond the scope of this study.²⁹⁹ One point that should be emphasized, however, is that despite the fact that India is embarked on a program to develop and field a nuclear triad with land, air, and sea components residing in the Indian armed forces, inputs from the Indian military are consciously and conspicuously excluded in development and employment issues.

In the early days of the program, this was fine with a military establishment that eschewed any role in nuclear matters and was reluctant for the country to go nuclear at all. Two years after the 1964 Chinese nuclear test, the first director of a newly created Ministry of Defence think tank, the Institute for Defence Studies and Analyses, wrote a trenchant analysis of the issues facing India in its consideration of whether to pursue a nuclear weapons option. Retired Major General Som Dutt, who had recently retired as commandant of DSSC, argued that such a move would push Pakistan closer to China, be too costly for India, risk the loss of India's moral stature in the international community, make India a nuclear target of China, and risk the possibility that Pakistan might seek to match such a capability. Retired COAS General J. N. Chaudhri was similarly ambivalent: "As an effective weapon [the nuclear device] is a long way away. Faced with this position, the increased study of nuclear tactics in every branch of military affairs seems desirable but without cutting into the need to improve conventional strategy and tactics." In the ensuing parliamentary debate, however, virtually no one asked the military's view or suggested a significant role for the military in shaping nuclear policy. The military also was completely excluded from the decision-making surrounding the 1974 peaceful nuclear explosion. As former Ministry of Defence Secretary K. B. Lall told a U.S. scholar in 1984, "The test arose not out of a defence program ... If it was a defence project, there should have been some discussion ... I know up to May 1973 that ... the Chairman of the Chiefs of Staff, the Defence Secretary, the Defence Minister [were not] involved. ... It did not arise out of thinking from the Defence Ministry or on security counts. It arose out of the ... scientific community." A former Atomic Energy Commission chairman remarked later, "One thing we learned is never to allow the military or the bureaucrats to have a role in the nuclear program. The Indian program never took the army into confidence. We didn't discuss details with them. It wasn't a military program."300

The absence of military input into the decision to test a nuclear weapon had enormous consequences for India's strategic situation. It engendered precisely what Dutt feared might come to pass, a matching Pakistani nuclear program and

arsenal. As American scholar Ashley Tellis observed, "The single and incontrovertible manifestation of New Delhi's [conventional military] superiority was India's ability—however notional—to threaten assets throughout the depth of Pakistan's territory while remaining immune from any comparable attack directed against India. ... The addition of long-range missile-delivered nuclear weapons to Pakistan's arsenal, however, has also altered the larger strategic equations in the greater South Asian region. ... Pakistan has now extended its strategic reach to the depths of the Indian heartland, thereby forever erasing the last bastion of immunity that India once enjoyed." Tellis also pointed out that not only are the Indian armed forces services kept at a distance from major national security decisions, they are even further removed from the nuclear weapons program. All decisions in this area are made, many orally and not officially documented, by the prime minister, with the advice of a few close advisors who may or may not appear on any organizational chart. To the degree that the Ministry of Defence is involved in nuclear issues, it is solely through the DRDO, headed by the scientific adviser to the defence minister. India's civilian policymakers appear to have consciously decided to sacrifice any potential increase in operational coherence and efficiency that might stem from unobstructed military involvement in nuclear command and control and operations for the safety that comes with restricted military participation occurring primarily under conditions of extreme emergency.³⁰¹

Nevertheless, the study of nuclear warfare began relatively early at the DSCC. The 6th course in 1952-1953 devoted four periods of study to theoretical training in nuclear, biological, and chemical (NBC) warfare. Beginning with the 8th course in 1954-1955, eight periods were allotted to a cursory study of nuclear warfare, and by the 13th course in 1959-1960 this was increased to 75 periods lasting for a two-week period. The commandant introduced the subject by stating it was the policy of the government of India to use nuclear power only for peaceful purposes and that the studies were undertaken purely to understand the concepts. During the first phase of instruction, the students were provided with factual data on the quantitative and qualitative effects of nuclear weapons and the problems connected with target selection and analysis. This was done in joint syndicates in each of the three service wings. In the next phase, the students worked out the impact of nuclear weapons on each of the three services. In the Army Wing, the focus was on the employment of nuclear weapons in a tactical role. Most of the material for this syllabus was obtained from Commonwealth countries, with the bulk coming from the United Kingdom. In March 1962, the college's Joint Training Committee considered increasing the time allotted to NBC studies, but elected to maintain the existing level. By the 16th course in 1963-1963, the amount was reduced to 50 hours in the Army Wing, 39.5 hours in the Navy Wing, and 38 hours in the Air Force Wing. In the 24th course in 1968, nuclear medicine and nuclear strategy were added to the curriculum. Beginning with the 28th course in 1971, the NBC curriculum was further modified to add more hours of nuclear warfare in the Army Wing, bringing the total to 70½ hours (26½ hours on nuclear warfare

tactical aspects, 39 hours on nuclear warfare and civil defense, and 5 hours on biological and chemical warfare).³⁰²

Nuclear Curriculum During the Study Period

Possibly because India's peaceful nuclear explosion in 1974 increased international scrutiny—and criticism—about its being the first state to introduce nuclear weapons in South Asia, the NBC curriculum at the DSSC has decreased almost to zero.³⁰³ With the exception of five respondents, none of the Students recalled anything about the subject other than that it was discussed occasionally in Indianonly classes or when foreign students were absent from the college during the Industrial and Demonstration Tour or the Extended Mid-Term Break in December.

The 1994 Student A recalled one tutorial discussion on NBC defense operations that lasted two hours. He remembered asking his DS a question about the kind and effectiveness of Indian Army mission-oriented protective posture (MOPP) suits, but receiving no answer. The 1998 Student recalled a very limited NBC component amounting to no more than eight hours of instruction that focused on preparing a "downwind message" to warn adjacent units about nuclear fallout in the event of a nuclear explosion in the area of operations. The reference materials used were copies of unclassified U.S. Army field manuals on nuclear weapons that were likely obtained by Indian students attending the U.S. Army Command and Staff College in Leavenworth, Kansas.304 The instruction, he continued, focused mostly on chemical weapons and protecting soldiers with MOPP clothing. The Indian Army apparently had very little MOPP gear, and most of what it did have was old Soviet-era suits that were not useful in the hot Indian climate. At a demonstration at the engineer school in Pune, the Student was surprised to see a U.S. first-generation MOPP suit, but had no idea where it had come from. The 1999 Student could not recall anything in the curriculum that addressed nuclear warfighting other than two guest speakers who briefly addressed the subject: retired Air Commodore Jasjit Singh of the Institute for Defence Studies and Analyses spoke on "Nuclear Strategy Challenges to India," and the commandant of the Indian Army School of Artillery spoke on "Future Concepts and Development of Artillery including Nuclear Background." The 2001 Student recalled "token NBC training" that included a tabletop exercise involving the preparation of downwind messages to warn adjacent units of nuclear and chemical events on the battlefield. No "greens" were issued, the papers that provided the DSSC solutions to exercises. He also remembered seeing old U.S. Army training films on chemical decontamination and the effects of nuclear weapons. As a former Chemical Corps officer who had attended the chemical officer career course at Fort McClellan, Alabama, he recognized a slide presentation on chemical warfare that was taken directly from U.S. Army Field Manual 3-1. The 2005 Student similarly described a mini-exercise lasting "not more than a few hours" in which students learned how to write and disseminate a downwind fallout message to warn other units of the

effects of a nuclear explosion in their vicinity. The overall tactics for operating in a nuclear or chemical environment were basically to "button up and continue to fight through it."³⁰⁵

This omission of any meaningful treatment of NBC subjects in recent courses seems confusing in that the college's joining instructions for international students clearly include "nuclear warfare and guided and ballistic missiles" and "NBC warfare" in a list of Joint Items of Instruction. 306 The 2017 Student A, the most recent DSSC graduate interviewed, provided what is likely the best description of the present DSCC curriculum on NBC subjects. Nothing on this subject, he said, is provided to foreign students, and everything in this area taught at the college is classified "Indian-students-only." He also noted that a major wargame, Exercise Dragon Strike, was conducted during the time foreign students were away from the college on the Industrial and Demonstration Tour. He could provide no information about the exercise other than to say it had a China focus. Nothing in any of the other wargames involved NBC issues. He laughed, however, in recalling that even some of the classified NBC blocks of instructions were available on the college's internal computer network. Just for fun he once logged into the site to look at a requirement involving the response to a nuclear explosion of a certain yield at a certain location. The requirement was to prepare various messages to inform adjacent units and a downwind message for example, a radioactive fallout warning based on the speed and direction of winds. Such reports and information on how to prepare them were completely unclassified in the United States or NATO nations. During the Industrial and Demonstration Tour visit to the Indian Army Engineer School at Pune, a demonstration of nuclear and chemical decontamination procedures was conducted in the context of a conventional offensive "ditch cum bund" operation in which a nearby nuclear explosion created the need to decontaminate vehicles. The soldiers involved in the demonstration wore the Indian Army version of MOPP gear. The school also displayed prefabricated modular components for what was billed as an "NBC building," presumably to provide protection from radioactive fallout for command and control nodes.307

Reference Materials

A perusal of reference materials provided to DSCC students in recent years included the following items, one of which appears to be a copy of part of an unclassified U.S. Army field manual used during the Cold War.

SD5B, Staff Officer's Handbook—Formats (Wellington: DSSC, July 2007).
This reference contains formats for six NBC reports: "NBC 1: Observer's Report, NBC 2: Evaluated Data, NBC 3 Report: IMDT [Immediate] Warning of Expected Contamination, NBC 4 Report: Recce, Monitoring & Svy Report, NBC 5 Report: Area of Actual Contamination, and NBC 6 Report: Detl Info on Chem or Biological Attack."

• Reference Manual C&FAF 1D, *Pakistan Armed Forces*, July 2009. This is an 84-page manual containing the order of battle and strength figures of the Pakistan Armed Forces. A section on NBC Capabilities of Pakistan states the following (p. 13):

NBC Policy. Though there is no formal NBC policy of Pakistan, however, it remains Indo-centric and Pakistan reserves the right to first use of the nuclear weapons. The broad policy could be as under:

- (a) India specific/Indo-centric.
- (b) Nuclear 'first strike' is part of nuclear doctrine.
- (c) Targeting doctrine a combination of 'counter-force' and counter-value (city) doctrine.
- (d) Cgy [Contingency?] to employ NBC weapons in a counter-force mode in own territory exists in desert sector.
- (e) Land missiles to be mainstay of nuclear force.
- (f) Thresholds should not be formal part of declared or proclaimed nuclear policy. Ambiguity must be built in to create uncertainties, thereby putting the onus of establishing the thresholds on enemy.

Nuclear Threshold. These could be:

- (a) Pakistani territorial integrity and sovereignty at stake (space threat).
- (b) Degradation of armed forces beyond acceptable limits (military threat). Reduction of war stamina beyond recoupable limits.
- (c) Economic strangulation.
- (d) Threat to strategic assets.

Nuclear Capability

Fissile Material. It is estimated that Pakistan may be in possession of 725-740 kg of highly enriched uranium sufficient to assemble 37-46 nuclear devices of normal yield (20 kt) and plutonium for one to two cores of nuclear weapons. Pakistan has attained production capability of approximately 60-70 kg of HEU per year for 2-3 devices of 15-20 kt per year.

Chemical Weapons (CWs), page 14

Status. Pakistan is a signatory to Chemical Weapons Convention

(CWC) held on Oct 28, 1997. It has declared the CWC that it does not possess CWs.

CW Programme. Nothwithstanding its rhetoric, it is known that Pakistan has pursued CW programme since early 1970s. Pakistan has been making efforts to build offensive and defensive CW capabilities.

Status of the Programme. Apparently, Pakistan has made considerable headway in setting up laboratory scale production facilities for nerve agents (sarin and soman) and mustard gas (nitrogen mustard). Defense Science and Technology Organization (DESTO) Laboratories in Karachi is primarily involved in R&D, while DESTO Chattar are responsible of weaponisation and storage. Besides DESTO. The Karachi CBW Research Institute of the University of Karachi's HEJ Institute of the Chemistry and Duad Khel Chemical Plant, Lahore are also believed to be involved in CW related activities. However, it lacks indigenous capability to produce on a large scale the main precursor chemicals for these agents. To make up for this lacuna, it has been importing precursor chemicals from Europe and lately from China on a large scale. There is number specific information on current stockpile of CW held by Pak Army.

Protective Measures. A large quantity of gas masks, casualty bags, protective clothing and protective suits (for AF pilots) were procured from the West and China though there was no indication/provocation in the form of possession/deployment of CW agent by India. Training in NBC warfare is being imparted to Pak Army in a systematic manner over the last few years.

High Altitude Warfare Schools at Qalandarchi, KD Fort is a major NBC warfare training center.

It is also possible that the Hatf series of SSM may be used as CW delivery platforms.

Reactivation of CW. It has been reported that traces of EPTA were found in soil samples from Golra and Sinala areas of Pakistan. EPTA is possibly a component of nerve gas, which is a matter of concern, as it brings about a revival of the Pakistani CW programme.

Biological Weapons (pages 14-15)

Status. Pakistan is a signatory to the Biological Weapons Convention.

Weaponisation. DESTO laboratories have established R&D facilities to carry out work on BW agents. The laboratory is known to have

undertaken work on BW agents, namely anthrax, taularemia, dysentery, typhoid, and cholera and has achieved considerable success in producing virulent strains of cholera. The laboratory is also known to have undertaken studies related to dispersion and environment profiles of areas falling along the Indo-Pak border. It had undertaken a project to transmit diseases using bedbugs and ticks and carriers. It has developed a BW kit for Pak armed forces for rapid detection of some of the known bacteriological agents.

A strong indicator of the BW programme came in the late 1970s when a viral hemorrhagic fever (VHF) broke out and killed, besides civilians, many members of a local hospital in Karachi.

Pakistan has not yet been able to solve the problem of storage and filling of shells with BW agents.

Present capability. It is assessed that Pakistan is not in a position now to use BW agents in a conflict. However, the threat of use of these agents in future to create fear psychosis in the civilian population cannot be ruled out."

- Reference Manual C&FAF 1C, *Area Analysis Study—Pakistan*, June 2009. This contains a short section on Pakistani nuclear weapons: "Steps are being taken towards enlarging in capabilities: (a) Stepping up yield to megaton levels. (b) Acquire tactical nuclear weapons. (c) Develop a second strike capability" (p. 14).
- Draft Report of Indian Nuclear Doctrine (as published by National Security Advisory Board).
- Nuclear Warfare Amplification Notes, SKP, DS (Ops 1) (Wellington: DSSC, Feb 2008). This amplifies material contained in another reference not included in the package for that year. This was referred to as "67 General Staff Pamphlet Nuclear Operation Tactics." It listed the following annexes: "A, Principles of War in Nuclear Environment, B, Concept of Defence; C, Different Concepts of Mobile Defence in a Nuclear Setting; D, Mobile Defence at Brigade Level; E, Nuclear, Biological and Chemical Warfare Reporting Organisation; F, Damage Control after an Enemy Nuclear Strike; G, Use of Helicopter-borne Forces in the Offensive Role in a Nuclear Setting; H, Notes on Training for Nuclear Warfare; and J, Modification of Fd Defs."

Attitudes About Nuclear Weapons

Several Students opined that any discussion of nuclear weapons or nuclear issues by Indian students in the presence of foreign students was "taboo," and that many seemed to be "scared" about an accidental slippage of information whenever the subject was raised. Despite their reluctance, occasional opinions were expressed about nuclear issues that appeared in the media or were brought up by the DS or guest speakers, and these are summarized in the following points.

<u>The 1974 Peaceful Nuclear Explosion</u>. India is a sovereign nation with the absolute right to build and test a nuclear weapon. Because the Indian nuclear program is focused on the peaceful uses of nuclear energy, its No First Use doctrine and primary reliance on conventional military superiority over Pakistan allows it to "hold the moral high ground" on the nuclear issue despite being the first regional state to demonstrate a nuclear capability in 1974 and test weapons in 1998.³⁰⁸

The 1998 Nuclear Test Series. The 1998 Student recalled that during the spring 1998 Golden Jubilee of the DSSC, several guest speakers made the point that India needed to openly test its nuclear capability to remove any ambiguity that might exist in the minds of its enemies. This had been an election issue, and the victorious BJP included this point in its election manifesto. When the Student returned to New Delhi after graduation, he informed embassy personnel that he was sure India was planning to test very soon. The test occurred one or two days later and surprised U.S. policymakers and the U.S. intelligence community, which had failed to discover the preparations being made. The overwhelming attitude about the tests was quiet pride in the achievement. Everyone thought that "it was the right thing to do." This was in stark contrast to the great jubilation in Pakistan when it tested a similar capability a few days later. The 1999 Student was told that this contrast was due to the fact that India's nuclear capability had been revealed almost a quarter-century earlier in 1974, so the 1998 test series was really "not that big a deal." He recalled no discussions about No First Use or any other aspect of nuclear doctrine. He also recalled a discussion in the syndicate room about the impact of the tests on relations with China, but nothing about their impact on the India-Pakistan relationship.309

The Likelihood of Pakistan Using Nuclear Weapons. There was an awareness of the Chinese and Pakistani nuclear programs, the former seen as mostly strategic and focused on the United States, and the latter as more likely focused on tactical applications and aimed at India. The Pakistani nuclear tests, coming as they did right on the heels of the Indian 1998 nuclear test, were a "wake-up call" to many Indians who had thought Pakistan was bluffing about having a nuclear capability. Many Indian students were concerned that India's conventional military edge might now be irrelevant, and there was no longer any bravado about calling Pakistan's nuclear bluff.³¹⁰

<u>The Likelihood of India Using Nuclear Weapons</u>. In the context of a future Chinese invasion of northern India, a few students opined that nuclear explosions might be useful to block the small number of useable roads through the steep Himalaya Mountain passes. India's possession of nuclear weapons was never admitted or discussed, and one Student was told by his DS sponsor: "We may have them, but we would never use them."

The 2001-2002 Border Crisis. There was clear nuclear signaling by both sides during the eight months of what eventually resulted in a standoff, but none of the Indian students took the Pakistani nuclear threat very seriously. As the crisis dragged on, there were occasional discussions in syndicate rooms about nuclear issues. Pakistan's nuclear arsenal was not seen to be a sufficient deterrent against Indian punitive military action. It was assumed that Pakistan might use nuclear weapons on India in the event of a general war, and that India would retaliate massively in accordance with its stated nuclear doctrine. There was also great confidence that the United States would intervene before Pakistan used its nuclear arsenal and "take care of it" in some unspecified way. If not, India could survive a nuclear war while Pakistan would be totally destroyed. When the crisis passed, the lesson apparently learned by many Indian students was that Pakistan was bluffing by threatening to use its nuclear capability and was successfully deterred by India's nuclear capability. Any use by Pakistan of nuclear weapons, they said, would result in the total annihilation of the Pakistani state, "and they know that." "Behind the scenes," another Student thought that many of his classmates were doubtful about India being able to deter Pakistan from the first use of nuclear weapons in the event of another conflict. They seemed to want India to achieve clear parity with Pakistani nuclear developments.312

<u>Nuclear Threat to India from the United States</u>. Many students considered that the United States had "threatened" India with nuclear weapons, this being said in the context of the frequent complaints about the USS *Enterprise* entering the Bay of Bengal in the 1971 war with Pakistan.³¹³

<u>Nuclear Non-Proliferation Treaty (NPT)</u>. There were occasional complaints by Indian students that the NPT discriminated against India by locking it out of the international nuclear system.

Reaction to Pakistani Tactical Nuclear Weapons Development. During April 2011, Pakistan conducted a highly publicized test of a short-range missile called the Nasr that was designed explicitly to deliver a tactical nuclear weapon in the event of a future Indo-Pakistan war. Nothing was ever said or discussed at the DSSC about this development. All the major exercises were assumed to be conventional, and the DS dismissed any hypothetical use by Pakistan of a nuclear weapon on Indian troops or soil. During wargames, however, the subject of Pakistan's growing arsenal of tactical nuclear weapons was raised very subtly. Nothing overt was ever mentioned, but if the Indian students became too aggressive in their planning during wargames involving a Pakistan-like opponent, the DS quickly reminded them to think very carefully about the impact of such moves as deep and massive air strikes on a nuclear-capable opponent. This was taken to be a thinly veiled device to remind them of Pakistan's nuclear threshold. Such interventions by the DS led to occasional frustration and grumbling.³¹⁴

Key Findings

So far this study has attempted to be descriptive and expository, eschewing value judgments about the DSSC, its curriculum, or the attitudes and values displayed by the three groups of Indian Army officers being observed. The comments made about these subjects by Students were selected to demonstrate both a spectrum of views and the general group consensus. None were chosen to be overtly provocative, only to illustrate the wide variety of Student experiences and observations over four decades. From this point onward, however, I will attempt to synthesize the data collected and formulate a number of subjective findings about the DSSC and the attitudes and values of the Indian Army.

One point to bear in mind when considering the findings is that in every year of the study, three distinct military generations were simultaneously interacting at the DSSC: the senior officers (commandant and wing CIs) from one military generation; the DS and division SIs (colonels and brigadiers) from a second; and the Indian students from a third. For example, the study's midpoint year is 1998. At that time, the senior officers were from what might be termed the 1960s generation. They entered the army approximately in the middle of that decade, and their attitudes and values were largely shaped by the political and military events they lived through during their adolescence, primary and secondary education, and first 10 years of military service. Born in the 1950s, they grew up in a newly independent India with a stable political government presided over by one of the country's revered founding fathers. Their views on foreign policy and national defense were influenced by India's foreign policy of nonalignment, the 1962 war with China, and two wars with Pakistan in 1965 and 1971. The DS and SIs that year were from the 1970s generation. Entering the army in the middle of that decade, they were too young to have directly experienced the wars with China and Pakistan. They did experience, however, the passing of the founding generation of leaders, the maturation of a close India-USSR military relationship, growing estrangement from the United States, and the period of authoritarian rule under Indira Gandhi. The Indian students were from the 1980s generation. They entered the army around the time of the Khalistan militancy and experienced the assassination of Indira Gandhi and the COAS, the rise and fall of Rajiv Gandhi, the collapse of the Soviet Union, the beginning of the Kashmir insurgency, and combat service as part of a peacekeeping force in Sri Lanka.

The point is this: the attitudes and values of each of these three groups were influenced by the different experiences of their youth and early years of military service, although the intensity and impacts of those experiences undoubtedly varied among individuals. The impact of South Asia political and strategic culture appeared to remain a constant, however. The cultural propensity to reflexively obey and venerate elders (such as higher-ranking officers), the importance of doing well in the course, and the DSSC's role in evaluating promotion potential

combined, in the case of many Indian students, to keep serious disagreements with senior officers and the DS mostly to themselves. This often made it difficult for the Students, most of whom lacked regional experience in South Asia at the time they attended the DSSC, to determine if generational differences existed between the three groups or if their differences were merely rooted in individual personality traits.

The goal of this study is to identify general areas of convergence or divergence in the attitudes and values of the Indian Army officer corps over time. Therefore, unless where stated otherwise, the attitudes and values discussed in these findings will apply equally to all three groups of officers observed at the DSSC.

1. The Wellington Experience: Demographic, Social, Cultural, and Organizational Factors, and Curriculum

The DSSC provides an adequate midcareer officer education, but the college's approach to pedagogy sharply restricts useful learning and inhibits the development of critical thinking.

On paper, the DSSC curriculum resembles its counterpart institutions in western countries, but the actual practices it rewards (conventional thinking) and overlooks (cheating) inculcate in the majority of graduates a strong preference for orthodoxy and conservative military thinking that discourages flexibility and creativity. The well-documented cheating that occurs at the DSSC does not adversely affect the college's evaluation process, but it stultifies military learning, especially by less well-educated students who doggedly pursue the prized "DSSC solution" rather than take the risk of creative thinking. The cultural tendency to defer to seniority and officers of higher rank inhibits freedom of discussion in the syndicate rooms, magnifies the influence of the faculty, and creates a toxic learning environment at the DSSC that makes it almost unthinkable to question a senior officer's opinions and decisions, or, for that matter, Indian Army doctrine. Whether this environment exists in the Indian Army is beyond the ability of this study to determine, but it is reasonable to conclude that it does, and the hypothesis is certainly deserving of further study.

Although technology has advanced and military doctrine has evolved over the years, the pedagogy—the theory and practice of teaching³¹⁵—used at the DSSC has not. As was amply illustrated by the Student observations, the DSSC pedagogy features the rote memorization and regurgitation of massive amounts of factual data, much of it trivial and irrelevant; an inordinate concentration (at least in the Army Wing) on the tactical rather than the operational or strategic levels of warfare; the inflexible application of doctrinal principles; and a none-too-subtle

discouragement (if not outright disparagement) of unorthodox thinking. A related problem is the DSSC's emphasis on the evaluation of a student's potential for higher rank rather than the inculcation of a broad, progressive professional military education designed to improve his performance. For the top 10 percent of DSSC graduates, those who are better educated and possess enough natural talent to succeed in their profession despite such impediments, the damage inflicted by the DSSC is transitory. However, the vast majority of graduates, probably 80 percent, will not receive much if any additional professional military education beyond the DSSC. For them, the damage is permanent. The question is, why does the Indian Army allow this situation to persist year after year without change?

Much of the scholarship focusing on the pathologies of military organizations, particularly about the Indian military, coalesces around explanations of civil-military relations, political choices, social structure, organizational culture, or even strategic culture.³¹⁶ While valid, other evidence suggests the answer is partially rooted in deeper socio-cultural traditions. This statement is not intended to disparage what unarguably is one of the world's great civilizations. Instead, it is the answer given by a former Indian Foreign Service officer and Parliamentary member of the Rajya Sabha, Pavan K. Varma, in trying to explain India and its cultural traditions to outside audiences.³¹⁷ Varma's book, *Being Indian*, suggests that several aspects of DSSC pedagogy are derived not from British military traditions but from Indian culture, which may account for many of the behaviors observed by Students at the DSSC.³¹⁸

Varma's discussion of positional status explains the observed reverence for and unwillingness to question higher authority. He writes, "[w]hen a person's entire worth is dependent on the position he occupies on a hierarchical scale, the assertion of status (and its recognition by others) becomes of crucial importance. In order to preserve status one has to be seen to be above those below, and below those above".319 Cheating and plagiarism might be accounted for by Varma's assessment that Hinduism "does not have an unambiguous or single ethical centre, and accepts a moral relativism that refuses to be straitjacketed by simplistic notions of right and wrong. ... Right and wrong is far more related to efficacy than to absolutist notions of morality."320 The lack of critical thinking is because "[g] ood students from good institutions are proficient but rarely inquisitive; they are capable of diligently mastering facts, but ill-equipped to question premises. ... When the pursuit of a degree becomes the sole object, rather than the desire of knowledge, it is not surprising that in South Asia traditionally teaching discourages independent thinking".321 There is also substantial evidence to the contrary of an Indian argumentative tradition, skepticism, accepted heterodoxy, and asking difficult questions,322 but Varma's account offers a better explanative of the specific behavior observed at DSSC.

I have consciously used the term "South Asian" rather than Varma's "Indian" to describe the cultural traditions and practices observed at the DSSC because many

if not all of them were also observed in my previous study of the Pakistan Army Command and Staff College at Quetta. In that study, because I had not yet read Pavan's book, I attributed the practices to "pernicious cultural traditions" without linking them either to Pakistani culture or a wider South Asian cultural tradition.³²³ Although I have no data about the Bangladesh Defence Services Command and Staff College at Mirpur to support this conclusion, I would hypothesize the same practices to be in evidence there.

The DSSC student body greatly under-represents Muslims as a proportion of their percentage of India's population.

Few subjects are as sensitive in the Indian armed forces as the low number of Muslims in service. In the Indian Army, Muslims likely constitute no more than 2 percent of the total force, and no statistics at all are available about the percentage in the officer corps. Annex H shows that Muslim students generally constituted less than 1 percent (0.7 percent, to be precise) of the DSSC Army Wing, about one-twentieth of their representation in the general population of Army Wing students in a given year.³²⁴ The 2008 Student observed that the few Muslim officers he met knew they would never be promoted beyond the rank of colonel because their loyalty to the state was suspect, and that "except for the Sikhs, you generally had to be Hindu to get ahead in the Indian Army." This generalization was confirmed by former Minister of Defence George Fernandes in 1985 when he candidly admitted that "the Muslim is not wanted in the Armed Forces because he is always suspect—whether we want to admit it or not. Most Indians consider Muslims a fifth column for Pakistan."³²⁵

This gross under-representation of Muslims in the Indian armed forces has obvious adverse internal security implications. Currently, the two longest-running insurgencies in India are in J&K, the only Muslim-majority state in India, and in northeastern India, where the state of Assam is 31 percent Muslim. Both are fueled in part by the heavy-handed treatment Muslims receive from the police and military forces from which they are, with few exceptions, systematically excluded. Deep-seated prejudice against Muslims in India is not unique to the Indian armed forces, where the only unit with any significant Muslim representation is the J&K Light Infantry Regiment, at approximately 50 percent.³²⁶ It also pervades India's paramilitary and police forces, intelligence apparatus, and many parts of the federal and state government bureaucracies. In Assam, the Assam Rifles paramilitary force contains only 1,275 Muslims, about 2.5 percent of its personnel. There are virtually no Muslims in the Intelligence Bureau or Research and Analysis Wing, two agencies within the Ministry of Defence, because Muslims are implicitly excluded from sensitive security services as a matter of practice. And in the Border Security Force, the Central Industrial Security Force, and the Central Reserve Police Force, the ethno-religious composition ranges from 3.8 to 5.5 percent for Muslims. An examination of other security forces finds that promotions and prestigious assignments are reserved principally for upper-caste Hindus.³²⁷

These figures are generally corroborated by the 2006 Sachar Committee report, which noted that India employed 1.9 million people in various security agencies including the three armed services, but provided data only for the 520,000 employees of the Border Security Force, Central Armed Police Forces, Central Industrial Security Force, and Sashastra Seema Bal (part of the CAPF; prior to 2001 it was named the Special Service Bureau). The share of Muslims in these agencies was found to be 3.6 percent at the higher and 4.6 percent at the lower levels/categories of employment. Taking all the agencies together, 96 percent of Muslim employees were employed at the lower levels, with only 2 percent in the top two tiers. The same was found to be true in other parts of the Indian bureaucracy. For example, of about 1.4 million people employed by Indian Railways, only 64,000 were Muslim, a representation of 4.5 percent. The committee also found that the share of Muslims in the Indian Administrative Service, Indian Foreign Service, and Indian Police Service in 2006 was only 3 percent, 1.8 percent, and 4 percent, respectively. Additionally, Muslims holding high-level appointments in these agencies mostly received them as "specially promoted candidates," while the Muslim share of positions awarded through competitive examinations was only 2.4 percent, 1.9 percent, and 2.3 percent, respectively.328

According to estimates of population growth by the Pew Research Center, India currently ranks second to Indonesia as the world's most populous Muslim state with 176 million Muslims, slightly more than Pakistan. Pew predicts that by 2050, India will become the most populous Muslim state in the world with more than 310 million Muslims.³²⁹ Since the Modi government was returned to office in 2019 it has begun a series of controversial actions that have roiled the Muslim community. These include stripping the state of Jammu and Kashmir's autonomy under Article 370 of the Indian constitution, beginning a national registry of citizens (NRC), and passing a citizenship amendment act (CAA) that provides a pathway to Indian citizenship for undocumented immigrants but does not include Muslims. The example of neighboring Pakistan should be a warning of what might happen. There, after two decades of political subordination to and economic domination by the Punjabi-dominated establishment, the Bengali population of East Pakistan became so alienated from the state that it eventually rose up (with Indian help) and threw off the yoke of its oppressor.

No evidence was observed at the DSSC of the type of Hindu nationalism known as **Hindutva**.

Prior to 2014 it would not have occurred to me to explore the notion of religious nationalism in the Indian armed forces, however much that notion was (and still is) of interest to U.S. policymakers and intelligence professionals concerning Pakistan's armed forces. This is largely because for the first 17 years after independence, India was led by Jawaharlal Nehru, a staunchly secular pluralist who wove those values into the fabric of the new nation and ensured the commitment of the Indian armed forces to them. For nearly seven decades, those secular and

pluralistic values undergirded Indian nationalism and were the twin pillars of Indian stability.^{33°} Since the rise to power of Prime Minster Narendra Modi in 2014, such values have come under siege with the rise of *Hindutva* within India and an upsurge of religious revivalism and nativism in other parts of the world.^{33¹} Aparna Pande notes that the new rising middle class in India is more conservative, outwardly religious, demonstratively supportive of Hindu beliefs like cow protection, and increasingly seeks to impose its beliefs on other communities. The concurrent rise of political Islam, including some violent extremist strands, in other parts of the Subcontinent and elsewhere in the world only serves to strengthen the roots of Hindu revivalism.^{33²}

Because it is axiomatic that a military establishment tends to reflect the society from which it springs,³³³ a specific question about *Hindutva* was asked of every Student who attended the DSSC from 2014 to 2017. The responses were that while many DSSC students welcomed the election of Narendra Modi, it was not because of any connection to or affinity for *Hindutva* but because they hoped the new prime minister would be tougher on Pakistan than Manmohan Singh, his predecessor, who was widely perceived as weak and hesitant in contrast to Modi's image of strength, energy, and purpose. Many students in 2014 participated in Modi's "Clean Up, India" day, a visible reminder that the new government was prepared to clean up not only the country but also the old ways of doing things in government. Modi was also widely viewed by DSSC students as a reformer who would bring strong managerial skills into the national government, having earned a reputation when chief minister of Gujarat for being friendly to business, eliminating waste and inefficiency, and moving the state's economy forward.³³⁴ There was not a single mention by them of *Hindutva* as a source of admiration or inspiration.

The high level of social cohesion evident within the Indian Army seems to limit the potential for factionalism based on religion, ethnicity, or social class, and there is no indication that the Indian Army's traditional democratic and secular values are threatened.

This is perhaps a corollary to the above finding. Nearly every Student remarked on the near-complete absence of attention to or discussion of issues related to religion, ethnicity, caste, or social class other than to occasionally tease each other or joke in a good-humored fashion, with Sikhs the most frequent target. Nearly every Student considered their Indian classmates to be singularly "apolitical" and disengaged from the day-to-day tracking of domestic political issues. They were rarely critical of individual political figures, even when these were prominently featured in the media. Although Hindus constitute the largest majority of students at the DSSC, any discussion of religion or caste was generally considered to be disrespectful and impolite. The few Muslim DS and students were treated politely and with the appropriate courtesy and respect due their military rank.

Perhaps the easiest way to explain the near-complete absence at the DSSC (and presumably within the Indian Army) of the religious, ethnic, and social frictions

currently roiling India is to consider the Indian armed forces—the three services grouped together—as its own distinctive class. As previously discussed, the word "class" is defined by the Indian Army as "a type of Indian recognized as distinct from others by the Army authorities for purposes of recruitment and organization. The basis of the distinction may be difference of race, language, religion, caste, domicile, or two or more of these."³³⁵ Years of socialization into the ethos of the Indian Army (and the other two services as well)—which begins at the National Defence Academy and is systematically reinforced at the Indian Military Academy, in the regiments, at higher formations, and even in the militant cantonments and bases—creates over time a strong sense of military identity and Indian nationalism that transcends and eventually overpowers the "class" mores from which each individual member originates.

From a U.S. perspective, the ground doctrine taught at the DSSC pays insufficient attention to combat support and combat service support functions, and fails to adequately address combined arms operations.

Shortly after the conclusion of the 2001-2002 Twin Peaks crisis with Pakistan, the Indian Army began to develop a new ground doctrine designed to shorten the time required to mobilize and deploy for war with Pakistan. This new doctrine became widely known as Cold Start or, more recently, as "Pro-active Operations." The intent of this doctrine is to punish any future Pakistani-connected terror attack on Indian soil by enabling the Indian Army to quickly mobilize a number of armor and mechanized formations known as integrated battle groups positioned in the vicinity of the international border and to launch multiple swift, shallow offensives to capture territory along a broad front before Pakistan Army units near the international border can occupy defensive positions in strength. Nothing of the doctrine is taught at the DSSC, perhaps because the Indian Army was long reluctant to openly acknowledge its existence.³³⁶ However, this is not a major shortcoming of the institution because the tactics, techniques, and procedures for offensive operations are indeed taught at the college. The problem is not teaching Cold Start; the problem is teaching a dated version of offensive operations.

Second only to cheating and the rigid enforcement of petty rules by the administration, the antiquated land forces doctrine taught at the DSSC was the greatest source of frustration to the Students, particularly those from the U.S. Army, as virtually all of those who attended after 1991 had experienced high-intensity ground combat during the first and second Gulf Wars and in Afghanistan, with many serving multiple deployments. In contrast, no Indian student, faculty member, or senior officer at DSSC or elsewhere in the Indian Army has experienced high-intensity ground combat since the 1971 war with Pakistan, the sole exception perhaps being a few who participated in the 1999 Kargil operation that involved two Indian Army divisions in a brief campaign.³³⁷ Perhaps unfairly, many Students joked about learning how the British Army operated in World War II, with one waggishly substituting World War I. What puzzled them most was that with few

exceptions, the American experience in the two Gulf Wars and Afghanistan was of little professional interest at the DSSC. Whenever Students tried to bring it up, their combat experience was generally dismissed as being irrelevant to the Indian environment.

The reasons behind the rigid application of Indian Army doctrine were explained earlier. What remains puzzling—and this has obvious implications in the event of any future war with Pakistan or China—is why the ground forces doctrine taught at the DSSC so ineffectively addresses combined armed operations, what the U.S. Army defines as "the synchronized and simultaneous application of arms to achieve an effect greater than if each arm was used separately or sequentially." Many Students observed that the Indian Army ground doctrine taught at DSSC was mostly mechanistic in the sense that the procedures were focused on the steps required to bring the various arms and support services together on the battlefield rather than to integrate and synchronize them into a ground tactical plan. Only infantry and armor units were habitually task-organized for tactical operations. Little attention was paid to military intelligence other than to perform a detailed analysis of terrain. The same was true for artillery, army aviation, and combat engineer units, where the focus was quantitatively determining the requisite numbers of firing units, helicopters, and mines to be allocated to maneuver units. Instead of massing armor and employing it at a decisive place and time on the battlefield, the DSSC approach was to allocate small numbers of tanks—sometimes as few as four—to infantry companies to use as they saw fit. Despite teaching the U.S. Army practice of intelligence preparation of the battlefield, or IPB, and the military decision-making process, the much older and more cumbersome British system of the "appreciation of the situation" was practiced in exercises and war games. As a consequence, intelligence played only a minor role in the planning process. Logistics was taught, sometimes in excruciating detail, but it was rarely portrayed accurately in college exercises and major wargames, with one Student explaining that mostly "there was just an arm wave," meaning that it was assumed that the logistics system would automatically provide whatever was required when and where it was needed. Perhaps this omission is partially explained by the relatively small number of Indian Army logisticians selected to attend the DSSC. As Annex D illustrates, their number typically was only 10 or 11 percent of Army Wing students in a given year, whereas infantry, artillery, and armoured corps officers alone sometimes made up two-thirds of Army Wing students.

The DSSC fails to provide effective joint training.

Taken at face value, the joint curriculum at the DSSC (as shown in Annex D) looks quite comprehensive. Joint subjects constitute approximately one-half of the course, and much learning takes place in joint syndicates presided over by DS from all three services. The training culminates in a major exercise, usually an amphibious operation to liberate an Indian island seized by a force very similar to that fielded by China. In actual practice, however, the DSSC utterly fails to impart

a true sense of "jointmanship"—the DSSC term for jointness338—in its graduates, and teaches few things actually practiced by the Indian armed forces. Most Students agreed that the major joint exercise at the end of the school year mainly involved meticulously prepared and over-rehearsed presentations by each service about its capabilities and contributions to the final plan. All the actual work done in the joint syndicates was accomplished by separate service teams working on service-specific portions of the plan that were then briefed to the other service teams. The school solution called for the three service inputs to be integrated into a single plan and then for a process of "joint de-confliction" to be performed. How and where this process of joint de-confliction was to be accomplished and by whom was never made clear, as the process was never practiced. The 2015 Student, an air force officer, once suggested that air force officers should be parceled out to each of the army planning cells where their expertise would be available early in the planning cycle. "We don't do it that way," was the curt response given by one DS to this request. The 2012 Student, a navy officer, had no memory of ever working together with army students in a joint exercise. He thought jointness was more of an aspiration in the Indian military than a reality.339

Why does such a situation exist in an institution that from its very inception was supposed to create synergy among the three services by putting the best and brightest among them together in one location for a year? The standing joke among the Students was that jointness in Hindi is spelled A-R-M-Y, and the preeminent size and influence of the Indian Army, which zealously guards its hegemony in the military establishment, is a major part of the problem. The fact that the commandant of the DSSC has always been an army lieutenant general is another manifestation of the problem. This assessment is corroborated by Indian scholar Anit Mukherjee, who describes what he terms the "I will go it alone" syndrome, a single-service approach to warfare that allows each service maximum autonomy in operations while paying lip service to jointness. This syndrome reflects the unwillingness of any of the three services to make any meaningful commitment to joint operations. The problem starts at the very top of the military, according to retired Admiral Arun Prakash: "The COSC [Chiefs of Staff Committee] system is meaningless and a waste of time." This was recognized earlier by the Naresh Chandra committee in 2012, which recommended the creation of a permanent chairman of that committee.340 A second and probably greater problem is India's Higher Defence Organization itself, which reflects a conscious decision by politicians to exclude the military from all but a symbolic involvement in key national security decisions. The reasoning behind this will be addressed later. The point to be emphasized is that because India seems to have made a conscious decision not to adopt a truly joint military system, there is little incentive for any of the services, and certainly not the army, to give up any existing perks.341

Indian students freely admitted to the Students that the Indian armed forces were not very good at joint operations because of service stovepiping, infrequent

coordination, and a joint de-confliction system that places more reliance on personal relationships between service leaders than on a formal process. Another disincentive for change is the widely held view that because the Indian armed forces are superior in quantity and quality they will prevail in any future war with Pakistan. A third reason pointed out by the 2017 Student A is that the Indian Army is not an expeditionary force and therefore has no requirement to project sizable land forces beyond the territorial limits of the Subcontinent. Elaborating on this thesis, he also thought the pride—the *izzat*—of the Indian Army was entangled in what he considered to be a feeble attempt by the DSSC to replicate U.S. joint doctrine.

Finally, several retired senior Indian military officers have said repeatedly that the problems of a lack of jointness described above are exaggerated and that the personal relationships established at the DSSC between the officers of different services are sufficient to ensure adequate interservice cooperation whenever it becomes necessary.³⁴² This might have been true four decades ago when India decisively defeated Pakistan in 1971. But India may well have to face in the future a far more competent opponent in China which is currently embarked on improving its own level of joint operations. To hold that personal relationships established at the DSSC decades earlier are an adequate substitute for meticulously planned and coordinated joint operations that are rigorously rehearsed and frequently updated strains credulity.

2. Perceptions of External Threats and Friendships

After decades of increasingly close U.S.-Indian political and military relations, a high level of mistrust (and thinly veiled hostility) about the United States exists in all three groups of officers at the DSSC.

Possibly the most surprising finding of this study is that all three groups of officers at the DSSC mistrust the United States, which is considered to be neither an ally, a true friend of India, nor a trustworthy security partner. This finding would not have been surprising anytime in the first two decades of the study, but in light of the hyperbolic official rhetoric both sides have used in the past decade to describe the bilateral relationship, it is disappointing to say the least. Possibly the most insightful characterization of the current state of the relationship came from one of the most recent DSSC graduates, 2017 Student A, who characterized the Indian military's perception of the United States as a friend from whom one can get many things, but to whom nothing needs to be given in return.³⁴³

The principal reason for such a persistent level of mistrust over time is obviously the United States' relationship with Pakistan. This relationship has been on a sharply downward trajectory since 2011, but that fact seems not to have made any discernible impact on Indian students' perception of the direction of the U.S.-India relationship (at the time of the interviews conducted for this study). The

difficulty of forgiving and overcoming these slights is likely due to the strength of persistent historical memory. Even after 70 years, the experience of partition continues to poison India-Pakistan relations and in large measure fuels the Kashmir insurgency. Another example is the USS *Enterprise* sortie into the Indian Ocean in 1971, which continues to be seen by India as a nuclear threat made by the United States. In all four decades of the study period, the *Enterprise* incident repeatedly resurfaced as the classic example of American perfidy, symbolizing perhaps an unspoken fear that in the event of a future war with Pakistan the United States would intervene similarly to deny India the fruits of victory.

The intensity of hostility toward Pakistan increased in every decade of the study.

At the beginning of this study, Pakistan was seen as a truncated state that had been humbled militarily by India in the 1971 war that created Bangladesh. The Soviet Union's invasion of Afghanistan in 1979 dramatically changed the strategic landscape of South Asia, rekindling a moribund U.S.-Pakistan military relationship and providing economic space in the 1980s for Pakistan to launch a weapons-of-mass-destruction program to match India's. The 1990s saw Pakistan undertake a sustained effort to leverage the Kashmir uprising to its advantage, match India's 1998 nuclear tests, and launch the abortive Kargil operation. In the 2000s, both sides mobilized for general war and stood eyeball-to-eyeball along the international border for eight months while a terrorist attack on Mumbai effectively ended a promising comprehensive dialogue on many bilateral issues. And the 2010s brought a reinvigorated insurgency in Kashmir that India blames almost entirely on Pakistan, along with renewed fighting along the Line of Control (LoC). Two major terrorist incidents in Jammu and Kashmir that India blamed on Pakistan led in 2016 to an Indian "surgical strike" on Pakistan's side of the Line of Control and in 2019 to a much deeper Indian air strike purportedly on terrorist camps in the Pakistani province of Khyber-Pakhtunkhwa. In the past three years, such incidents have also sharply ratcheted up the level of LoC ceasefire violations by both sides.

Despite China being universally acknowledged as India's principal long-term threat, Pakistan continues to dominate day-to-day Indian Army thinking as a short-term threat requiring immediate attention. Two disturbing new elements make this situation increasingly dangerous. The first is the fact that many observers consider Pakistan to be the fastest-growing nuclear power in the world. It currently possesses the world's sixth-largest nuclear arsenal with an estimated 120 weapons, and is estimated to be producing enough fissile material for 20 new weapons a year. At this rate, Pakistan could surpass the United Kingdom, China, and France within a decade to become the third-ranking nuclear power. Many of its nuclear weapons are designed explicitly to be used in a bewildering variety of short-range ballistic and cruise missile systems advertised for use against India in the event of a future war, and Pakistan appears to be emulating

India's desire to field a nuclear triad. The second disturbing element is what several Indian military analysts have referred to as the "accumulated outrage" of decades of standing by impotently while Pakistan repeatedly uses terrorist proxies to attack the Indian state.³⁴⁵ A recent example that illustrates the danger is a bombastic statement by India's Chief of Army Staff General Bipin Rawat threatening to "call the (nuclear) bluff of Pakistan. If we have to really confront the Pakistanis, and a task is given to us, we are not going to say we cannot cross the border because they have nuclear weapons. We will have to call their nuclear bluff."³⁴⁶ Whether Pakistan is truly bluffing or is deadly serious about the use of its tactical nuclear weapons is a subject deserving careful and dispassionate analysis by the Indian armed forces.

China is universally perceived as India's major security threat, but there is a curious reluctance to characterize it as an enemy.

At the beginning of the study, despite its nuclear capability and history of boundary disputes along the McMahon Line, China was not considered a major threat by India. However, memories of the 1962 war were still fresh in the thinking of the senior officers, many of whom had personally witnessed the Indian Army's shameful performance, and several Students noted fears of another "embarrassment" at the hands of the People's Liberation Army. One reason China was not considered a major threat in the first decade of the study was the poor state of its economy. According to the International Monetary Fund, in 1980 China's per capita gross domestic product (on a purchasing-power-parity basis) was approximately \$302, about half of India's \$566. Deng Xiaoping's economic reforms had barely begun, and Indian reforms were still a decade in the future. In the next three decades the tables turned drastically. During the period between 1980 and 2014, China's average GDP growth rate was 9.8 percent compared to India's 6.23 percent. In this 35-year period, the Chinese growth rate exceeded 10 percent 16 times, while India managed the feat only once. The International Monetary Fund estimates that in 2018 the per capita GDP for China will be approximately \$17,188, about twice that of India's \$7,932.347 As China's economic resources have grown, so too have the quality of its armed forces and military production capacity.

The growth of India's perception of China as a significant threat generally has mirrored this economic comparison. There also has been a generational component in the perception, with the senior officers and DS at the DSSC arriving at the conclusion first while their students remained fixated on Pakistan for at least another decade. There was an additional divergence in service perceptions of the threat, with Navy Wing officers focused closely on the growth of Chinese maritime capability, the "string of pearls" strategy of establishing ports around the periphery of the Indian Ocean, and growing capability to contest the sea lanes in the vicinity of the Straits of Malacca. Army Wing officers, in contrast, maintained their traditional fixation on the ground threat emanating through the Himalayas from Tibet.

Despite all this, there is a curious reluctance to embrace the notion that China is a clear enemy, with many preferring to label it only a "competitor," a term that if applied to the United States would constitute a vast improvement in the perception of all three generations of DSSC officers. This ambivalence in the salience of the Chinese threat is captured in polling data compiled by the Pew Global Attitudes Survey. Just before the 2017 military standoff on the Indian-Chinese border at Doklam, only 56 percent of Indians believed China's growing military power was bad for India, while only 51 percent thought China's growing economy (with which India runs a trade deficit) did not bode well for their country. Contrast that with Pakistan, where disdain cuts across party lines with BJP and Congress party supporters expressing similar levels of negativity—70 percent and 63 percent, respectively.³⁴⁸ Perhaps the explanation lies in three factors: the absence of an emotional component in the India-China equation like the one that exists between India and Pakistan, the fact that China has become India's largest trading partner,³⁴⁹ and a perhaps undeserved confidence (given incidents like Doklam) that India's border dispute with China can eventually be resolved amicably.

In the last decade, concern has grown in the highest levels of government that India might one day have to fight a ground war on two fronts, against Pakistan on its western border and against China on its northwestern and northeastern borders.350 To that end, the Indian military has begun to raise new units, acquire air transportation assets, and build new infrastructure for the purpose of fighting a major conventional ground war with China. A decision was taken by the government in 2013 to sizably augment the Indian Army's end-strength via the creation of a new 70,000- to 90,000-strong Mountain Strike Corps. The government has also undertaken a vast road- and rail-building program along the 2,500-mile Line of Actual Control, all while expanding airfields and constructing or refurbishing a number of advanced landing grounds at various high-altitude staging points from Ladakh to Arunachal Pradesh. Planned force structure enhancements also include an emphasis on developing an airborne assault capability specifically tailored for a Himalayan theater of operations. New Delhi is acquiring not only AH-64 Apache attack and CH-47 Chinook troop transport/heavy-lift helicopters, but also U.S. military transport aircraft such as the C-130 and the C-17 Globemaster, both of which India has test-landed successfully at high-altitude airstrips along the India-China border. India's new Apaches—the second squadron of which has been specifically earmarked for India's northeastern border with China—will provide critical rapid firepower support to isolated Indian troops facing off against larger-scale PLA encroachment. The Chinooks, which can airlift both India's new M777 155 mm howitzers and its lighter mountain guns, are viewed as critical to flowing artillery assets from one mountainous subtheater to another.351

The problem is that none of this is reflected in the DSSC's Army Wing curriculum, which continues to feature relatively small-scale mountain warfare exercises that are always in the context of a minor incursion into disputed territory that has to

be eliminated, with friendly force operations limited to minor offensive operations aimed at regaining a specific piece of territory belonging to India. It would seem prudent for the college to begin to include larger-scale exercises featuring the employment of the platforms now being acquired, and airborne and mechanized formations of the Mountain Strike Corps now being built.

Indian interests in Afghanistan are derived almost solely from Pakistan.

Not a single Student perceived that India had any strategic interests in Afghanistan other than those derived from Pakistan. They all responded that there was little or no discussion about Afghanistan, even by DSSC guest speakers, other than to note occasionally that the country provided "strategic depth" to Pakistan. This seemed curious to them because the United States has maintained a continuous military presence in Afghanistan for nearly two decades, and India has committed substantial economic resources to the Kabul government. It should be noted that a major Indian presence in Central Asia predated the U.S. post-9/11 involvement in Afghanistan. India has long maintained a presence at Farkhor Air Base in Tajikistan since the mid-1990s, first to provide support to the anti-Taliban Northern Alliance, and then to support Indian relief and reconstruction efforts in Afghanistan.352 In December 2016, Modi paid a visit to Tajikistan and issued a joint statement with the country's president highlighting "Tajikistan's role in the Central Asian region as a mainstay against the forces of extremism, radicalism and terrorism," and agreeing to advance trade via the Chabahar port in Iran, which India is constructing as an alternative to a route to Afghanistan through Pakistan.353

India's political profile in Tajikistan is significant, and the Indian Air Force's presence at Farkhor has been a constant sore spot for both China and Pakistan because India is the only country besides the United States, Russia, and Germany ever to have had a military base in Central Asia. This presence has long provided ammunition to Islamabad's increasingly strident claims that India seeks to encircle Pakistan and deny it the strategic depth deemed so important to its national security.

India's Pakistan-centric view of Afghanistan is confirmed by U.S. scholar C. Christine Fair, who has identified three Indian interests in Afghanistan: (1) that Pakistan has raised, supported, and trained several militant groups in Afghanistan like Lashkar-e-Taiba that operate in India; (2) that India needs Afghanistan as a platform to monitor and possibly influence activities in Pakistan; and (3) that Islamist militant groups in Afghanistan and Pakistan are partially driving a resurgence in India of Hindu nationalism that threatens India's secular traditions." Since 2014, India's relationship with the government of Afghanistan has undergone a shift due to the declining security situation and negotiations by the United States and Taliban on a withdrawal of U.S. forces, a process from which the Afghan president has notably been excluded. The core drivers of India's current Afghanistan policy appear to be to ensure that Pakistan does not manipulate the

terms of the peace talks to undermine Indian interests, safeguard Indians working there and Indian missions in the country, and prevent Pakistan's security agencies from using Afghan soil to train anti-India militants. While the direction of Indian policy after the expected U.S. withdrawal will be determined by the nature of the withdrawal and the following balance of power between Kabul and Islamabad, New Delhi will not be a central player in the country's politics, neither is it likely to be a peripheral bystander.³⁵⁵

3. Perception of Internal Security Threats

Despite a deep-seated conviction that its internal security doctrine is effective, the Indian Army has yet to completely quell any of India's four long-running insurgencies.

Many Students attending the DSSC in the last decade were puzzled by the general absence of interest by all three officer groups about the post-9/11 U.S. counterinsurgency experience in Iraq and Afghanistan. And despite the fact that the Indian Army LIC doctrine includes many of the same techniques that were incorporated into U.S. Army counterinsurgency doctrine by General David Petraeus and successfully employed to defeat an insurgency in Iraq, they were puzzled by why LIC exercises at the DSSC featured mostly kinetic operations. The 2007 Student A noticed that his classmates took inordinate pride in what they considered to be their army's reputation for successfully fighting militants compared to countries like the United States, which had failed to defeat insurgencies in Vietnam, Iraq, or Afghanistan despite devoting vast resources to the task.356 This attitude was most recently on display in a conversation the author had with a retired senior military officer with extensive command experience in J&K, who disputed this and every other key finding in this line of inquiry. After noting that the Indian Army had been in the business of counterinsurgency for decades—"[we] have been practicing it longer than the Americans"—he admitted that if an army is employed for such a long time [on counterinsurgency tasks] and at such a large scale, "aberrations can happen, but they are personal, not institutional." Considering the length of time and the scale of the operations, "the Indian Army's human rights record is pretty good." "We are much better off than what the Americans have done in Vietnam or Iraq." He further stressed that it was not the army's job to "solve the problem" in J&K, but to keep violence low enough to make enough space for a political process and noted, "[i]t is the political process that has not succeeded in J&K." While not denying that the Indian Army was doing "things that it shouldn't do," he concluded that did not make "the institution the party to the problem."357

Part of the explanation for this common attitude is rooted in the high level of distrust toward the United States discussed earlier. Another part is likely an Indian variant of *schadenfreude*, the feeling of pleasure or self-satisfaction that comes from witnessing the failure or humiliation of another, in this case toward anything unsuccessfully undertaken by the United States. But the question that

needs to be explored is why the Indian Army believes its internal security doctrine is superior to others when the historical evidence supports a contrary conclusion.

In the 73 years since independence, the Indian Army has engaged in one external and four internal counterinsurgency campaigns. The single external counterinsurgency operation occurred in Sri Lanka between 1987 and 1990, when an Indian Army peacekeeping force suffered more than 4,000 casualties—of which 20 percent were officers—in a failed attempt to end a Sri Lankan civil war between minority Tamil separatists and the majority Sinhalese government and military.³⁵⁸ Although the operation was used as a case study for several years at the DSSC, several Students commented that the DS typically refrained from delving too deeply into it, and even the Indian students considered it to have been, like the 1962 war with China, another embarrassment for the Indian Army that was best forgotten.

Of the four internal counterinsurgency operations, only one might charitably be considered as successful—the Khalistan insurgency. But even that may not be completely extinguished, and several small militant groups have recently received support from Pakistan's Inter-Services Intelligence Directorate, and militancy may yet resurface in the future. The two longest-running insurgencies—in northeastern India and the Naxalite movement, which have been underway, respectively, since before independence and since the 1950s—can be considered at best as "simmering" but largely confined and "under control." The last—Kashmir—is still going strong after 30 years, and in the past three years has become greatly reinvigorated.

The attitude of the Indian government toward secessionist movements in general and the often profoundly different levels of coercive force used against them is explained by scholar Ahsan I. Butt, who observed two factors at work when dealing with secessionist movements. The first is an attitude that secessionism cannot be tolerated because concessions made to any group are likely to stimulate additional demands from other restive ethnic or religious groups. In a state as heterogeneous as India, such concessions would lead to a domino effect and the eventual internal destruction of the state. The second factor is that the government often considers secessionism an external rather than an internal problem. He points out that Indira Gandhi once observed about Kashmir, "If there is friendship, well, all the borders can be soft, not just Kashmir." But the absence of friendship with India by Pakistan and China along their disputed borders with India means that India cannot afford to compromise with separatists and must take every step to ensure their defeat, lest the security of the state be threatened.

The second factor also drives government decision-making about the proper level of coercive force to employ against secessionist groups. Butt notes that in the case of Assam during the period 1985-1992, the state was fairly restrained in its use of force because unlike in the Kashmir and Khalistan insurgencies there was no evidence of state-level foreign interference, and in any case the only state nearby was Myanmar, which could pose no real threat to India. As one journalist

observed, "In Kashmir, it's perceived as a war against Pakistan. In Punjab also, it was supported across the border. If ULFA [United Liberation Front of Assam] was let's say a Muslim group, my impression is that it [the Indian use of force] would have got more amplification."³⁶⁰

The Indian Army largely ignores its own counterinsurgency doctrine in Jammu and Kashmir.

A detailed analysis of why India has failed to quell the Kashmir insurgency after nearly three decades of effort deserves its own study. It is unfair to blame the Indian Army for poor political decisions made about Kashmir by the nine governments from four political parties that have held office since the insurgency first began at the end of 1989. Governmental decisions over three decades were largely responsible for the initial motivation for the insurgency, and they must accept the lion's share of the blame for the poor performance of the various intelligence organizations and police forces deployed in the state and the inability to implement an effective "whole-of-government" approach to solving the problem. As the XV Corps commander—responsible for military operations in Kashmir—candidly admitted in 2017, there is still no effective civil-military relationship in the state of J&K, and poor governance and civil administration cannot be fixed by the Indian Army.³⁶¹

What the Indian Army must accept responsibility for in Kashmir, however, are the things that are under its control, including the implementation of its own doctrine in dealing with the insurgency. And here it has clearly fallen short, with both regular units of the Indian Army and the Rashtriya Rifles ignoring the most basic doctrinal lessons learned in other insurgencies where they performed more successfully. The army's doctrine for subconventional operations, promulgated in 2006, has as its de facto prime directive the need to win the hearts and minds of the population in the areas affected by the insurgency. In the three decades since the insurgency began in 1989, the army has occasionally embraced the WHAM approach, but since 2016 has pointedly ignored it. Butt explains that because of the perceived Pakistani connection to events in Kashmir, the immediate response of the Indian government to the outbreak of the indigenous insurgency was brutal force.

In January 1990, a large group of unarmed civilians gathered at Gawakdal Bridge to protest searches conducted at Chota Baza and Guru Bazar that morning. The protesters were shot at with live ammunition from either side of the bridge, and more than a hundred died in what is considered one of the worst massacres in Kashmiri history. In fact, just three days later in late January, Indian security forces killed more than three hundred unarmed protesters. ... When Maulvi Mirwaiz Farooq, chief preacher at Jamia Masjid in Srinegar, was assassinated in May 1990, his funeral procession passed through Islamia College, where the Sixty Ninth Battalion of

the CRPF was stationed. The security forces fired at the crowd and killed between sixty and one hundred people ... As a close aide of Governor Jagmohan said, "They just went berserk and emptied all the bullets they had." ³⁶²

A more recent controversial measure employed by security forces in the Valley of Kashmir since then has been the use of pellet guns—pump-action shotguns that fire a cluster of small, round, metal pellets with high velocity over a wide area. One cartridge can contain up to 500 pellets. Pellet shotguns by their very nature are inherently inaccurate, and the effects of their use are indiscriminate. Although they were first used in 2010, the J&K government admitted that 6,221 persons received pellet gun injuries, including 782 eye injuries, between July 2016 and February 2017. Amnesty International issued a briefing in September 2017, "Losing Sight in Kashmir: The Impact of Pellet-Firing Shotguns," that documented cases of 88 people whose eyesight was temporarily or permanently damaged by metal pellets between 2014 and 2017, with another 14 deaths attributed to pellet injuries since July 2016.³⁶³ So much for winning hearts and minds. Such techniques were defended staunchly by the last COAS, who in 2017 stated, "This is a proxy war and proxy war is a dirty war. It is played in a dirty way. The rules of engagements are there when the adversary comes face-to-face and fights with you. ... You fight a dirty war with innovations. ... People are throwing stones at us, people are throwing petrol bombs at us. ... I have to maintain the morale of my troops who are operating there."364

It must be noted that the COAS chose not to characterize the situation in J&K either as an insurgency or a militancy, but as a proxy war. This attitude corroborates observations made by Students at the DSSC that the overwhelming attitude within the army about Kashmir is that Pakistan was and is presently the proximate cause of the insurgency, and that it continues to provide support and sustainment.³⁶⁵ It is undeniable that Pakistan quickly leveraged the 1989 insurgency for its own purposes, and has for decades provided support and sustainment to extremist groups infiltrating into J&K.³⁶⁶ As the quotation above by General Rawat Bipin illustrates, it fuels within the army a narrative that the situation in J&K is not an insurgency where WHAM is central to winning, but a proxy war to be fought with no such consideration. This fosters the attitude among both military and police units that Pakistan, not poor governance, is the proximate cause of the situation, and that local Kashmiri militants are not disaffected or misguided citizens but traitors to their country who deserve harsh treatment. This lends an emotive potency to Kashmir that was and remains absent in every other counterinsurgency campaign. This situation is likely exacerbated by the absence of significant numbers of Muslims in the J&K police and, with few exceptions, the military units deployed there.

Thus, the army's record in Kashmir demonstrates exactly the opposite of the Nehruvian approach. The abuses of the Kashmiri civilian population by the army

and Rashtriya Rifles, including rape, torture, murder, and disappearances, have been widely reported for the past 20 years in the international media and by credible organizations like the U.S. Department of State, Amnesty International, Human Rights Watch, the Jammu and Kashmir State Human Rights Commission, the International Tribunal on Human Rights and Justice in Indian-Administered Kashmir, and the Association of Parents of Disappeared Persons.³⁶⁷ The details in their reports are inflammatory and need not be repeated here. The point to be stressed is that WHAM is conspicuously absent as a guiding principle in the army's counterinsurgency operations in Kashmir. Because of this dismal human rights record, the Burhan Wani incident in 2016 radicalized a new generation of Kashmiri Muslims and rekindled a genuinely indigenous insurgency. The recent actions by the government to strip the state of its special constitutional status under Article 370 of the Indian Constitution seem guaranteed only to add more fuel to the fire.

Extrajudicial killing (EJK) of militants is an unacknowledged feature of Indian Army internal security doctrine.

Law-of-land warfare presentations proscribing the extrajudicial killing of militants were an annual staple of DSSC guest speakers, but a small number of the Students' classmates admitted that the practice occurred frequently in Kashmir. The most notable example was an anecdote about a Sikh student who showed photographs of dead militants killed in his unit's operations. The normal procedure for dealing with captured militants, he told the Student, was to incarcerate them in a local civilian jail. If no one came to claim them as family members within a few days, this was accepted as prima facie proof that they were infiltrators from Pakistan. Eventually they were removed from the jail and killed either by local police or military personnel. Another Student related that the military briefings given by Indian Army units on the Line of Control typically featured pictures of a soldier holding the severed head of a purported Pakistani infiltrator.³⁶⁸

The routine EJK of insurgents in Kashmir was (and presumably still is) facilitated at least partly by laws like the 1990 Armed Forces Special Powers Act (AFSPA) that give the army and police sweeping powers to arrest, detain, question, and even kill offenders or suspected offenders. According to the AFSPA, in an area that is proclaimed as "disturbed," an officer of the armed forces is empowered to "fire upon or use other kinds of force even if it causes death, against the person who is acting against law or order in the disturbed area for the maintenance of public order, after giving such due warning." These draconian laws allow for oversight and accountability of army personnel by civilian authorities in theory, but this is almost never done in practice. The prosecution of army personnel under the AFSPA requires a state government to seek permission from the central government before proceeding, something that is routinely denied.³⁷⁰

Even when an EJK incident is officially brought to the attention of military authorities, justice is routinely flouted. The well-known Macchil incident provides an illustration. Three civilians were lured to an army camp near Kupwara and killed in a "fake encounter" in April 2010 in the Macchil sector of the Line of Control. They were described by the Army as foreign militants killed while trying to infiltrate the Line of Control from Pakistan. When their bodies were exhumed from a local graveyard, their families identified them as three missing men from Nadihal village in Rafiabad. The news triggered massive protests across Kashmir. After an enquiry, the army initiated general court martial proceedings against the commanding officer of 4 Rajputana Rifles as well as a captain and three enlisted men, eventually convicting them in 2014 and sentencing them to life terms in jail. This was the first case in Kashmir where army personnel were punished for involvement in a fake encounter. An armed forces tribunal later set aside the sentence on the grounds that "There was absolutely no justification for a civilian to be present at such a forward formation near LoC, that too during the night when the infiltration from across the border was high." The ruling ignored the fact that the three slain men were lured to Macchil by an army source on the pretext of giving them jobs.371

EJK is not confined solely to J&K. In July 2016, the Supreme Court of India, in a decision ordering an investigation into 1,528 cases of alleged EJK in Manipur state, ruled that the AFSPA does not provide immunity to security force personnel who use excessive or retaliatory force, and that every alleged EJK incident should be investigated. The confession of a Manipuri policeman in January that he had acted on orders to kill more than 100 suspected militants between 2002 and 2009 exposed how the police had adopted the army's identical and illegal practice.³⁷²

Recently, the central government has come under increasing pressure from not only human rights organizations but also political parties and even state governments to soften provisions of the AFSPA. Several rounds of high-level discussion have occurred between the Defence and Home ministries on the "need to remove or dilute at least some provisions" of the AFSPA in line with recent Supreme Court judgments on EJK and the recommendations of expert committees over the years. However, this was strongly resisted by the last Indian Army COAS, who stoutly defended the human rights record of his troops. "I do not think time has come to even rethink on AFSPA at the moment," he said recently, "We have never been strong in applying the force the way it could be applied (under AFSPA). We are very concerned about human rights. We are absolutely concerned about collateral damage. So do not get too much concerned because we are taking adequate measures and precautions. … The AFSPA is an enabling provision which allows the Army in particular to operate in such difficult areas and let me assure you that the Army has got quite a good human rights record."³⁷³

4. Attitudes Toward the State and its Institutions

Indian students at the DSSC were observed to be consistently "apolitical" in all four decades of the study.

Although this finding seems mundane, it represents victory for a goal set by Jawaharlal Nehru at the country's founding: the complete political defanging of the Indian military establishment. As described earlier, Nehru viewed the British Indian Army as a tool of colonial suppression that needed to be kept in check after independence by an ever-vigilant civilian government. His lack of confidence in the nascent military establishment he inherited was quickly made evident by decisions to eliminate the office of commander-in-chief, downgrade the warrant of precedence of general officers, and keep even the most senior generals from participating in government councils dealing with national defense. He reaped what he sowed in 1962 when the Chinese People's Liberation Army made short shrift of the poorly equipped and trained Indian Army that was led by generals selected more for their pliability and political loyalty than military competence.

In the aftermath of the 1962 war, Nehru realized he had gone too far and had to find a middle ground in which the Indian Army remained under firm civilian control yet was still properly trained, equipped, and led by a highly professional officer corps. The situation existing today amounts to nothing less than an informal social contract between the government and the military establishment. It works in this manner: the three services are granted professional respect, above-average pay and emoluments, sufficient government funding to field modern weapons systems, and virtually complete autonomy in the selection and promotion of officers, training, and the other internal workings of their establishments. In return, the government retains effective control of national defense decision-making, with a few senior general and flag officers allowed token representation on key defense councils and committees. Both sides are satisfied with the result, and it is this informal social contract that is at the heart of why the Students observed so little overt interest in politics by their Indian classmates.

In fact, the overwhelming attitude observed among Indian students at the DSSC was that India's tight civilian control of its military is a great source of national pride, especially when compared with Pakistan, which has suffered three military coups and whose democracy is widely seen as corrupt and dysfunctional. This does not mean that students automatically agreed with everything their civilian masters did, such as when the military was not allowed to strike Pakistan in 2002 or when restraints were occasionally placed on military units involved in counterinsurgency operations, but virtually everyone accepted the clearly subordinate position of the Indian armed forces to the civilian government and considered this to be a positive aspect of Indian democracy. All in all, it was considered by virtually all the Indian students observed at the DSSC to be a good bargain.

This relative level of satisfaction with military emoluments and the compliant attitude toward the defense bureaucracy may be misleading in that it masks increasingly severe recruitment and personnel satisfaction problems within the wider Indian military establishment. A 2007 study showed a deficiency of 11,238 officers in the army, 1,399 in the navy, and 1,528 in the air force. The shortage was attributed to changing socioeconomic trends, a vibrant economy that offered more rewards than military service, and inadequate periodic pay increases. The problem was not confined to the military services. In the period 2002-2007, the report noted that more than 1,000 scientists resigned from the DRDO compared to fewer than 400 in the five years before 2002.³⁷⁴

The explanation for this discrepancy between what was observed at the DSSC and the situation within the wider services is explained by the fact that students at the DSSC represent the "winners" in the military system, approximately the top 25 percent of midcareer officers in their respective services. All are likely to retire at the grade of brigadier or other service equivalents, and many will go on to serve as general and flag officers. What is the situation of the other 75 percent of officers who do not reach the DSSC? They will see their career prospects severely diminished, and the majority will likely retire in the grade of lieutenant colonel or the service equivalent. Failure to reach the DSSC is often traumatic for many such officers and their families. As another study noted, "Since, in the forces, rank determines all other personnel parameters, including retirement, the failure to make a promotion becomes a traumatic experience and results in demotivating and de-energizing the majority of otherwise excellent men. As one officer who missed a promotion for the rank of colonel mentioned, 'The world is never the same after supersession. It shatters the officer, impacts the spouse, and even the children feel the difference."375 Therefore, increasingly, they leave the service prematurely while it is still not too late to begin a second career to provide economic security for their families. On the other end of the scale, the intake of highly qualified officer candidates for the National Defence Academy and the short service commission Officers Training Academies is also becoming problematic. A former defence secretary noted that while the number of applicants to those schools was increasing, "where we find it difficult is that we cannot lower the selection criteria. So the number of people who are selected is less."376

Whether the Indian officer corps will continue its traditional apolitical stance in the future remains to be seen. In sharp contrast to the decades-old government stance of keeping the military at arm's length, the Modi government's muscular version of Hindu nationalism prominently features holding up the armed forces as the example of selfless devotion to duty for the rest of the nation, in effect politicizing it. In the 2019 general election that took place shortly after the Pulwama incident, for example, the defense minister made a point of publicly welcoming seven retired military officers who had joined the BJP.³⁷⁷ This close embrace of the military by one political party and the increasing participation of retired

senior officers in partisan politics may be a cause for alarm. Even General Rawat admitted that the politicization of the armed forces in India may be getting out of hand. "The military should be somehow kept out of politics," he observed during an event in New Delhi sponsored by the United Service Institution. "Of late, we have been seeing that politicisation of the military has been taking place. I think we operate in a very secular environment. We have a very vibrant democracy where the military should stay far away from the polity."³⁷⁸

The post-independence civil-military relationship in India is evolving in response to increasing internal and external security challenges.

If the government and military appear to be satisfied with the present structure of civil-military relations in India, other Indian observers consider it to be dysfunctional in ways that diminish the efficiency of the armed forces. Anit Mukherjee sees the present relationship as contributing to a lack of civilian expertise in the government on military issues at both the political and bureaucratic levels, and an institutional design within the Ministry of Defence in which the military is kept under strong bureaucratic control, but which allows too much autonomy over activities the military considers to be within its domain. Civilians, he continues, allow this situation to persist because they believe India does not face an existential threat, and therefore the current model is efficient enough to deal with existing threats. In any case, there is little political salience on military issues in India's electorate, and a reluctance on both sides to change the status quo.³⁷⁹

This highlights the fact that while the Indian Army normally plays a minor role in national defense and foreign policy decision-making, it wields enormous, even decisive, influence in certain policy areas, the most prominent being issues related to J&K. In a recently published book, How India Sees the World: Kautilya to the 21st Century, former Foreign Secretary Shyam Saran disclosed that India and Pakistan nearly came to an agreement on demilitarizing the Siachen Glacier in 1989, 1992, and 2006, but each time, a final agreement was opposed by the Indian Army. For example, the two sides agreed in the spring of 2006 to authenticate the actual ground position line on the Siachen Glacier, and to sign an annexure with maps marking exactly where Indian and Pakistani troops held positions. But at the final meeting of the Cabinet Committee on Security (CCS), on the eve of India-Pakistan defence-secretary-level talks at which the draft agreement was to be discussed, two key members, National Security Advisor M. K. Narayanan and Army COAS General J. J. Singh intervened at the last minute to cancel the proposal, saying that Pakistan could not be trusted, there would be political and public opposition to any such initiative, and India's military position in the northern sector vis-à-vis both Pakistan and China would be compromised.380

The influence of the Indian Army also trumps that of the elected J&K government in the conduct of the counterinsurgency campaign in the state. According to a Kashmiri journalist speaking at a Washington think tank in 2017, "The corps

commander in Srinagar is more powerful than the Chief Minister [of J&K] and the [federal government] Director General of Police."³⁸¹ Carin Fisher, formerly of the Center for Peace and Development and the J&K Rural Development Association, agrees with this assessment, and notes that the army has long exercised more control of decision-making in J&K than the state's elected government, largely by forging alliances with hardline elements of the Congress Party during the Manmohan Singh years, and more recently with the Modi government. One manifestation of this is the fact that the J&K Assembly announced recently that the Indian Army illegally occupies 53,750 acres of land in the state, in addition to the 62,500 acres of land the local government handed over to the army for firing ranges in Ladakh in 2016. These two pieces of land exclude what the armed forces has held legally since 1989—hundreds of camps, three corps headquarters, several brigade headquarters, and many other smaller garrisons.³⁸²

The acceptance of military officers to a subordinate position in relation to civilian policymakers does not mean that a growing number of officers in the more recent military generations do not believe in a slightly rebalanced civil-military relationship. This attitude was confirmed in 2017 Student A's master's thesis on the topic of civil-military relations and higher defence reforms in India. To the statement on a survey questionnaire, "Strategic decisions [in India] should only be made by senior politicians," only 23 percent replied affirmatively while 71 percent replied negatively. To the statement, "The Military should have a larger say in strategic decisions," 98 percent replied affirmatively while none replied negatively. To the statement, "I trust politicians to make good strategic decisions," 26 percent replied affirmatively while 46 percent replied negatively. And finally, to the statement, "The military should have more access to members of parliament to provide advice on policy making," 84 percent replied affirmatively while only 11 percent replied negatively.³⁸³

The Modi government is responsible for accelerating the pace of evolution in the traditional civil-military relationship. Dovetailing with its subtle politicization of the military's image was Modi's decision in December 2016 to abandon the principle of seniority in selecting the COAS. Previously, the only other time this occurred since before the 1962 war with China was Indira Gandhi's controversial choice of Lieutenant General A. S. Vaidya over Lieutenant General S. K. Sinha in 1983.³⁸⁴ She made the decision because the latter had made it known that he favored a political settlement of the Golden Temple occupation rather than the use of military force. Modi's choice of General Bipin Rawat, who was junior to two other generals, put in place a COAS who was not shy about publicly displaying his opinion on controversial issues. Early in his tenure, he set the tone for the army's counterinsurgency operations in J&K by awarding a commendation to a major under investigation by an army court of inquiry for tying a local Kashmiri to the hood of an army jeep and using him as a human shield to protect himself from stone throwers.³⁸⁵

General Rawat's public comments on issues outside his portfolio occasionally created friction with elected political figures. At a press conference in Delhi a day before Army Day in 2018, he criticized the education system in J&K, calling for major changes because in his opinion the madrasas and mosques in the state were spreading disinformation about the army. The J&K minister for education issued a stern rebuke, advising the COAS not to make "unnecessary comments beyond his constitutional mandate and trespass his defined mandate. ... Those people [the army] who are not concerned with education tell us whether there should be one map or two maps in the schools. We are not going to accept this. Let them do their job. Perhaps they are not doing their job properly because of which we are suffering."386 More recently, the general publicly criticized violence during the recent nationwide protests over India's recently passed citizenship law, saying "leaders are not those who lead masses in arson and violence." His remarks were immediately seized on by opposition political party leaders as inappropriate for a senior military leader in a constitutional democracy. Brijesh Kalappa, a spokesperson for Congress, tweeted, "Army Chief Bipin Rawat speaking against #CAAProtests is wholly against constitutional democracy. If Army Chief is allowed to speak on political issues today, it also permits him to attempt an Army takeover tomorrow!!"387

There is growing frustration with the government's unwillingness to reform the Higher Defence Organization.

Former COAS General V. P. Malik's account of Indian decision-making at the highest levels demonstrates that while the present Indian HDO functions relatively effectively at managing sudden crises, its strategic planning is done largely without military involvement and often lacks clear military objectives connected to a political end state.³⁸⁸ This was the basis for much of the frustration observed in 2002 and 2003 when the Indian government was generally considered by the Indian students at the DSSC to have "dithered" for months before ultimately deciding not to undertake a punitive strike against Pakistan for its presumed connection to the December 2001 attack on the Indian Parliament.

When former Viceroy and first Governor General of India Lord Mountbatten, with the assistance of his Chief of Staff Lord Lionel Ismay, created the HDO in 1947-1948, they considered the need for a permanent chairman of the Chiefs of Staff Committee, but on reflection thought it might take 10 or 12 years for the senior officers in all three services to become professionally mature enough to occupy such a position. In 1960, Mountbatten raised the issue with Nehru and recommended naming a chief of defence staff. Defence Minister Menon objected strongly, and when he departed in 1962 Mountbatten again raised the issue to no avail, and the original system put into place has persisted ever since.³⁸⁹ Simply put, governments over the years were satisfied with the old system, and the services wanted neither jointness nor a chief of defence staff with a mandate to enforce it.

Yet the issue of making drastic changes to the HDO has been on the table ever since the 1999 Kargil war with Pakistan. A major review of the management of national security was undertaken after that conflict when a Kargil Review Committee (KRC) headed by the late K. Subrahmanyam was appointed. His report, From Surprise to Reckoning: The Kargil Review Committee Report, made far-reaching recommendations on nuclear deterrence, national security management, intelligence reform, border management, defense budgeting, use of airpower, counterinsurgency operations, integrated manpower policy, defense R&D, and media relations. The CCS then appointed a group of ministers to study the Kargil report and recommend measures for implementation. In turn, the group set up four task forces on intelligence reform, internal security, border management, and defense management, and recommended sweeping reforms to the existing national security management system. The CCS accepted all its recommendations, except for one, creating the position of chief of defence staff, or CDS.³⁹⁰ The position would theoretically rank second to the defence minister and be on the same level as the defence secretary to ensure true joint cooperation between the civilian military bureaucracy and the Indian military. It would also supplant much of the authority of the three service chiefs and, as in the United States, serve as the apex level of military advice into national security decision-making.

On this subject, the 2017 Student A's master thesis questionnaire is again relevant. On two questions about whether the current HDO is adequate for (1) crisis management and (2) strategic planning, 13 percent agreed and 79 percent disagreed with the first question while 15 percent agreed and 80 percent disagreed with the second. On two questions about whether a CDS is necessary for (1) improved jointness and (2) adequate strategic planning, identical results were obtained for both questions: 97 percent agreed and only 2 percent disagreed.³⁹¹

In a dramatic Independence Day speech from the ramparts of the Red Fort on August 15, 2019, Prime Minister Modi announced that a CDS would soon be named as head of the three services. A subsequent announcement made in November stated that the Prime Minister and his CCS would soon make the appointment, and that a committee chaired by National Security Advisor Ajit Doval had been holding meetings to decide on the structure and specific responsibilities of the position. According to the recommendations of this committee, the CDS would be no older than 64 years, two years more than the age limit for services chiefs. A subsequent announcement stated the "CDS will have all powers of a secretary-level officer. The files need not go through defence secretary and the CDS will be empowered to send it directly to the defence minister."392 On January 1, 2020, General Bipin Rawat officially became India's first CDS, but without a promotion to a five-star rank. This means he will be "first among equals" within the Indian military hierarchy, but without command authority over them. He is also concurrently designated as the secretary of a newly created Department of Military Affairs (DMA) within the Ministry of Defence, which will give him direct access

to the Minister of Defence. The precise organization and areas of responsibility of the new department are still being worked out, and nothing has as yet been approved by parliament. But the devil is always in the details, and it remains to be seen whether the new CDS will be sufficiently empowered to impose real jointness on what will almost certainly be three very reluctant service chiefs, or whether he will ultimately become a ceremonial military figurehead like Pakistan's chairman of the Joint Chiefs of Staff Committee.

Anit Mukherjee warns of three potential pitfalls facing the new CDS. First, the DMA is a uniquely Indian creation for which there is no precedent among the world's democracies; second, the department is seemingly based on an assumption that military and defense affairs can be differentiated without creating confusion and bureaucratic turbulence; and third, the military's education policies and short and rapid tenure system do not augur well for the ability to properly staff the new department.³⁹³ Mukherjee and other Indian defense analysts also note that the remit of the new CDS includes creating several joint theatre commands. At the present time the Indian armed forces have only two joint commands and 17 single service commands, seven each for the army and air force and three for the navy. General Rawat apparently has decided to begin with low-hanging fruit, creating joint commands for logistics and a joint air defence command that combines the resources of the army and the air force, and will leave the much thornier issue of creating joint regional commands for a later time.³⁹⁴

5. Attitudes Toward Nuclear Issues

Despite a doctrinal assumption that Pakistan will employ nuclear (and chemical) weapons in a future war, the DSSC avoids any significant discussion of their effects, provides no meaningful NBC training, or allows any discussion of nuclear issues.

The DSSC maintains a tightly controlled veil of secrecy over how it addresses NBC issues, or whether it addresses them at all despite the fact that this is included on a list of subjects studied in the college joining instructions. Other than the occasional guest speaker presentation, no overt discussion of the subject is allowed during the lengthy periods of time foreign students are on the campus. Whatever is taught presumably occurs only during the two-week period that the foreign students (and all Indian Navy and Air Force students) are away on the Industrial and Demonstration Tour. Admittedly, nothing is known about what is discussed or what kind of wargame is played, but the name of one wargame mentioned, Operation Dragon Strike, leads to the conclusion that it is probably China-focused.

India has currently deployed seven nuclear-capable systems: two aircraft, four land-based ballistic missiles, and one sea-based ballistic missile, and at least five more nuclear systems are in development. Approximately 150 nuclear warheads have been produced.³⁹⁵ Given the fact that three of the world's nine nuclear powers are in or border the Subcontinent, and that two of them are hostile to India,

two weeks is clearly an insufficient amount of time for the DSSC to devote to the subject in a country well on its way to operationalizing a nuclear triad of land, air, and sea nuclear weapons.

Such discussions at the DSSC are more necessary than ever since India began signaling that it may be reevaluating both its declared policy of No First Use of nuclear weapons and its nuclear warfighting doctrine. In August 2019, Indian Defence Minister Rajnath Singh suggested that the country's long-standing pledge not to use nuclear weapons first may come under review should future circumstances demand it. Speaking at Pokhran, where India conducted a series of nuclear tests in 1998, Singh said, "Till today, our nuclear policy is 'no first use." He added: "What happens in future depends on the circumstances."396 MIT professor Vipin Narang has long suggested that India's No First Use pledge was a myth.³⁹⁷ He notes, for example, a 2016 book in which former National Security Advisor Shivshankar Menon stated, "There is a potential gray area as to when India would use nuclear weapons first against another NWS [nuclear weapon state]. Circumstances are conceivable in which India might find it useful to strike first against an NWS that had declared it would certainly use its weapons, and if India were certain that adversary's launch was imminent."398 More recently, he and a colleague, Christopher Clary, have also suggested that Indian nuclear strategists might find it attractive to add a new menu item to the choices available to the government in the event of a future war with Pakistan. This would provide an off-ramp to India's current state of strategic paralysis following Pakistan's development of tactical nuclear weapons. The Indian dilemma is this: in the context of its declared nuclear doctrine, a massive retaliation strike against Pakistani cities (countervalue) is not seen as a credible option to respond to Pakistan's use of one or two tactical nuclear weapons, while a tit-for-tat response effectively cedes escalation dominance to Pakistan. A third option, a preemptive counterforce strike designed to eliminate Pakistan's nuclear arsenal in one stroke, could be construed as consistent with the current doctrine and offer New Delhi a far better choice in dealing with Pakistan's nuclear threat.³⁹⁹

The Indian Army appears unconcerned about the efficacy of Pakistani tactical nuclear weapons in a future war.

Based on Pakistan's current and anticipated weapons deployments, *The Bulletin of the Atomic Scientists* estimates that its nuclear stockpile could grow to 220-250 warheads by 2025,⁴⁰⁰ making it the world's fifth-largest nuclear weapon state. Much of the recent growth has been in the realm of short-range systems, so-called tactical nuclear weapons, that Pakistan maintains are designed explicitly to deter India from launching a ground attack into Pakistan. The reference materials provided to DSSC students clearly state that Pakistan can be expected to use nuclear weapons against India if certain thresholds are passed, and that chemical weapons might also be used, but none of these capabilities are portrayed in the numerous exercises and wargames played with a thinly veiled Pakistan-like opponent. This ostrich-head-in-the-sand approach to NBC poorly serves Indian Army students

who may bear the brunt of them in a future war. This curious attitude appears to be based on several dubious assumptions:

- That Pakistan is a rational state actor that knows India can survive a nuclear war but that Pakistan will be utterly destroyed;
- That Pakistan is "bluffing" about its threat to use short-range nuclear systems against Indian Army forces attacking across the international boundary; and
- That even if Pakistan is not bluffing, the sheer size of the Indian Army will allow it to sustain high casualties and continue to operate in an NBC environment.

All three assumptions are rooted in ignorance about the effects of nuclear weapons, a subject that was once studied in great detail at the DSSC in the 1950s and 1960s, but which all but disappeared after the 1974 nuclear test. Not even unclassified information about nuclear effects is discussed by guest speakers. This seems a critical omission given the steadily increasing size of both nations' nuclear arsenals and the likely impact on conventional military operations. A recent study by 10 scholars with unimpeachable credentials writing in the journal Science Advances predicted that in a nuclear exchange in which India used 100 weapons and Pakistan used 150, the fatalities on both sides could total 50-125 million people. In addition, nuclear-ignited fires in both countries could release between 16 to 36 Tg (1 Tg = 10 million-million grams) of black carbon in smoke, depending on the yields used. This smoke would rise into the stratosphere, spread globally within weeks, and decrease planetwide sunlight by 20 to 35 percent, cooling the entire global surface by 2° to 5°C and reducing precipitation by 15 to 30 percent, with even larger regional impacts. Recovery from such an event would take more than 10 years and result in agricultural productivity declines of 15 to 30 percent on land and 5 to 15 percent in the oceans, causing mass starvation and worldwide collateral fatalities.401

This unwillingness to discuss the potential effects of a nuclear exchange may also be rooted in the steadily increasing level of hostility toward Pakistan observed in all four decades of the study, and perhaps is compounded by the sense of "cumulative outrage" about Pakistan's use of proxies against India in J&K. However, the most curious aspect about the Indian attitude is the notion that Pakistan is somehow bluffing about nuclear first use and would refrain from using its nuclear arsenal even if it was facing the decisive defeat of its conventional forces. Bombastic declarations by Indian Army senior officers about calling Pakistan's nuclear bluff are unhelpful if not foolish. All such assumptions need to be thoroughly analyzed, tested in wargames, and addressed in all Indian Army PME institutions, and most certainly by the DSSC.

The Indian Army is totally unprepared to operate in an NBC environment.

The Indian Army is not equipped, trained, or in any other way prepared to survive and operate in an NBC environment. Although the tank fleet and infantry

fighting vehicles are mostly of Soviet/Russian origin and engineered to survive in an NBC environment, supporting artillery is mostly of the towed variety and cannot survive, nor can the wheeled vehicles of any of the other supporting arms and services. Because the army lacks sufficient numbers of mission-oriented protective posture suits and has only a very small decontamination capability, even if tanks and infantry fighting vehicles were able to survive and fight for a short period after a nuclear strike, their crews likely would be unable to refuel, rearm, and refit them. And the likelihood that the army command and control system is sufficiently hardened to survive the electromagnetic pulse (EMP) created by the use of battlefield nuclear weapons by Pakistan is unknown, but highly doubtful.

Implications for the Future Of U.S.-India Relations

What then can be concluded from this study's findings about the attitudes, values, and behavior of the current and next generation of senior Indian Army officers, and what might be their impact on the U.S.-India relationship? Many analysts might be tempted to say, "nothing at all," because despite the evolving civil-military relationship in India noted above, civilian primacy over the military establishment almost certainly will remain firmly in place. Unlike the implications of the counterpart study of the Pakistan Army, there is far less scope for the role of the Indian Army as an independent actor in the Indian polity. This does not imply, however, that it is completely without influence in government or that its actions in Kashmir and its combat capability are irrelevant to the regional dynamics of South Asia. The issues in which the attitudes and training of the Indian Army officer corps could affect U.S.-India relations and other events in South Asia include the following.

Despite the official rhetoric of both governments, the United States and India are unlikely to become genuine strategic partners.

On the surface, relations between the United States and India converge on almost every issue: on democratic values, on increasing bilateral trade, on granting India a larger role on the world stage, on the challenge posed by China, on the desire for peace and stability in Asia, and on the security of the sea lanes running through the Indian Ocean. The list goes on and on. But lurking just beneath the surface and mostly concealed by a thin veneer of warm official rhetoric runs a deep vein of Indian mistrust rooted in India's long history of nonalignment and fears of American unreliability related to Pakistan. Although the Trump administration, like its three predecessors, has fully embraced India, it is not at all clear that the embrace is welcome in India. As some Indian academics point out, why should India tether itself to a declining power led by an anti-globalist administration that has already admonished India about its position on climate and trade issues, one that appears reluctant to continue championing the liberal economic world order it created and that has benefited India for two decades, and one whose closest alliance partners in NATO and security partners in East Asia now see it as unreliable? With the Trump administration's protectionist policies likely to impact Indian businesses and professionals, blindly placing a strategic bet on a potentially protectionist and isolationist United States could be foolhardy. 402 Beyond the realm of academia, there remain deep reservations about the United States in three key areas: formal strategic alignment, military-to-military relations, and bilateral trade.

The United States' main motivation for closer ties with India has always been China. China already has one proxy in the game in Asia, Pakistan, and India is reluctant to play the role of Washington's cat's paw with Beijing, where it could become the theater of action in a future proxy war. It is far from clear that Washington would risk nuclear war with China on India's behalf. Here again, the Trump administration's constant carping about its NATO alliance partners and its curious reluctance to stand up to Russia on a variety of issues fails to inspire very much confidence in New Delhi. India has also made it clear that a relationship with the United States will not impact other long-time relationships with countries that Washington abhors. These include Russia, Iran, and even North Korea. In her book, *Our Time Has Come: How India Is Making Its Place in the World*, Alyssa Ayres, a senior fellow for India, Pakistan, and South Asia at the Council on Foreign Relations and a former Obama administration official, noted that New Delhi refused to shutter its embassy in North Korea in 2017 despite strong U.S. pressure to isolate Pyongyang diplomatically. Ayres is "absolutely convinced that India will always and only strike its own course. ... I don't think India ever wants to be a formal U.S. ally because it sees alliance relationships as too constraining." 403

In June 2016, at the conclusion of the third summit between President Obama and Prime Minister Modi, a joint statement announced the recognition of India as a U.S. major defense partner. Three years later, neither side really knows what this means. The U.S.-Indian military-to-military relationship languished for years because of India's reluctance to sign various memoranda of agreement to safeguard classified U.S. information, operate together, or provide spare parts. Although this situation has eased in recent years, concerns remain on the U.S. side about India's ability to protect the increasing amount of U.S. high-tech equipment and other classified materials. India's other military partners, principally Russia, represent a clear national security risk to increased military partnership. India presently is seeking to consummate a \$5.2 billion purchase of the Russian state-of-the-art S-400 air defense missile system, which may lead to a showdown with Washington over sanctions under the Countering America's Adversaries Through Sanctions Act (CAATSA), and it routinely expresses an intention to partner with Russia on next-generation military capabilities. The remarks of a retired senior military officer illustrate this point. He admitted there will always be "some amount of trust issues" between the two countries because of the way the United States "behaves as a superpower in the international system" and because of India's desire "to retain its strategic autonomy." He went on state that because U.S. weapon systems are not always the best, because other options are available, and because "India looks for strategic control in terms of technology" it will always seek to diversify its defense supply. He noted in conclusion that [former Acting Assistant Secretary of State for South and Central Asia Alice Wells is incorrect that CAATSA sanctions will change India's mind about buying from Russia. 404 Therefore, it seems clear that the protection and degree of sharing vital technology will continue to remain a major bone of contention. If the United States is expected to respect Indian sovereignty, India must in turn respect U.S. hesitation to go further in sharing its most sensitive military technology. 405

Bilateral U.S.-India trade in 2019, the most recent year for which figures are available, was approximately \$92 billion—\$34 billion in exports and \$56 billion in imports—representing an imbalance of slightly more than \$23 billion in India's favor.406 For comparison, scholars of the Brookings Institution note that U.S.-South Korean trade is one-third larger even though the South Korean economy is 40 percent smaller than India's. Former Acting Assistant Secretary of State for South and Central Asia Alice Wells has noted that India still has "significant tariff and non-tariff barriers, subsidies, localization policies, restrictions on investment, and intellectual property concerns that limit market access and impede U.S. exporters and businesses from entering the Indian market." The entire issue is complex and the areas of contention are often interrelated, which explains the difficulty in reaching a compromise. Alyssa Ayres has identified eight specific areas of friction between the United States and India in the area of trade relations. They include deficits and tariffs, agricultural products, intellectual property rights, investment barriers, Harley-Davidson motorcycles, medical devices, the digital economy, and visas in services trade.407

The two most recent senior leader engagements illustrate the difficulty in resolving this area of friction. Negotiators from both countries have worked since 2018 on a deal that would lower Indian barriers to American products and restore Indian access to the Generalized System of Preferences (GSP) that allows goods to enter the United States tariff-free. This was supposed to be the centerpiece of the "Howdy Modi" visit to Houston in September 2019, but not only was the Indian prime minister unsuccessful in persuading President Trump to restore the GSP, he failed to get the United States to withdraw a decision to reduce H1-B visa quotas for Indian professionals and roll back a steep hike in the fee. These failures were especially galling in the context of India's ongoing economic recession. In effect, Modi returned to New Delhi with little to show for the visit except a bit of pageantry and warm rhetoric. The same thing occurred during the "Namaste Trump" visit to India in February 2020. The collapse of pre-visit negotiations to strike at least a partial deal on trade attests to the entrenched stubbornness of both parties. "Both sides are attuned to their own political imperatives and not where the other side might have an area of accommodation," said Nisha Biswal, president of the U.S. India Business Council, and assistant secretary of state for South and Central Asia in the Obama administration. "It is hard, then, to find where the common ground is where a deal could be struck." Instead Trump, like Modi, had to settle for pageantry, photo ops at the Taj Mahal and the Gandhi Memorial, and more warm rhetoric. 408 If the U.S.-India trade relationship is ever to meet its full potential, then it must likely be rooted not in a grand bargain but in a series of incremental bilateral agreements that eventually level the playing field for both sides.

<u>Implications for the United States</u>. U.S. policymakers need to moderate their expectations about Indian willingness to join—and fully participate in—a genuine strategic partnership. The U.S.-India civil-nuclear agreement is perhaps

a cautionary tale about what to expect in the future. Originating with a joint statement by Indian Prime Minister Manmohan Singh and President George W. Bush on July 18, 2005, India agreed to place all its civilian nuclear facilities under International Atomic Energy Agency safeguards in exchange for the United States working on its behalf toward full civil nuclear cooperation. Both sides expected to benefit, India by eventually being allowed into the international nuclear "club" and the United States by selling nuclear power plants to India. Today, nearly a decade on, only India has benefited from the deal. There is as yet no sign of a single concrete contract between an American company and the Indian authorities to build a reactor. 409 What India seems to want from the United States is technology, the higher-end the better, and it will likely judge the relationship almost entirely on what the United States is willing to release; New Delhi is also unwilling to become Washington's cat's paw in a new "Great Game" with China; it is far from clear that the rampant economic protectionism that both the United States and India pursue can be overcome; and New Delhi's crackdown in Kashmir and moves to marginalize Muslims throughout India are likely to create increasing political friction in the U.S. Congress over issues like human rights, religious freedom, and the commitment to democratic values. 410 It should also be recognized that the scope and pace of the bilateral military-to-military relationship will always be held hostage to civilian policy decisions of the Ministry of External Affairs. As James Carafano of the Heritage Foundation has stated, perhaps the best that can be hoped for is a new form of strategic relationship "that delivers the benefits of allied status without the formal architecture that goes with it."411 Whether anyone other than India can benefit from such a scheme remains to be seen.

The actions of the Indian Army in J&K have rekindled an indigenous militancy once thought defeated, and fueled a level of Line of Control violations not seen since 2003.

Poor political decisions by the ruling Congress party led to an indigenous 1989 uprising by Muslims in Kashmir. Similarly poor decisions by the ruling BJP party and a local Kashmiri Muslim party, the People's Democratic Party (PDP), contributed to a rekindling of that indigenous insurgency in the years following the 2014 general election won by the PDP in Kashmir and by the BJP in Jammu. For many Kashmiris this was the "final straw" in their disaffection. Perceiving they had nothing left to lose but their lives, many took to the streets to protest the heavy hand of the security forces, and a small number embraced terrorism. The tipping point was reached in July 2016 by a decision of the J&K Police and Rashtriya Rifles to kill rather than capture one such young militant commander, Burhan Wani. As a result,

...A society that was exhausted by violence and gun culture has suddenly started justifying it. Finally, a decade of mishandling Kashmir has fundamentally damaged the liberal political space that could have politically and ideologically countered the return of militancy.

Even the moderate Hurriyat faction finds it difficult today to converse with the youngsters thronging Kashmir's dark alleys and war-torn mofussil towns, shouting for *azadi* [freedom], throwing stones, and ready to die.⁴¹²

This situation has been doubly exacerbated by harsh measures used by security forces against the civilian population in Kashmir and by the Modi government's decision to strip the state of its constitutional status under Article 370 of the Indian Constitution and divide it into two new union territories ruled from New Delhi.

There is little reason to expect that the army will be any more successful in stamping out the newly invigorated insurgency than it has been in the past. The insurgency will likely continue and may even increase in intensity once the draconian constraints on the Muslim districts of the former state that have been in place since August 5, 2019, have been partially or fully lifted. Certainly the situation will continue to poison relations between India and Pakistan, and increase the chance of war with the omnipresent risk that a miscalculation by one or both sides can escalate the situation to the nuclear level. After all, it is not only India that views its enemy through the distorted lens of emotionalism; Pakistan sees India through a similar distorted prism and has, if anything, an even worse record of predicting Indian military actions.⁴¹³

What is new in J&K is the increased number and intensity of violations along the LoC. Although all statistics about these violations are suspect, there were approximately 6,000 firing incidents in 2002 and 3,000 in 2003. After negotiations between the BJP government and the Musharraf regime led to an agreed cease-fire in November 2003, the number of incidents in 2004 plummeted to four. In contrast, according to Indian Army figures Pakistan violated the cease-fire 405 times in 2015, 449 in 2016, and 860 times in 2017, with 147 in December alone, the most in any year since the 2003 agreement. Pakistan counters by claiming that Indian troops violated the cease-fire agreement more than 1,900 times last year, with more than 75 violations in January 2018.⁴¹⁴

The catalyst for the drastic increase in 2017 incidents was the attack on an Indian Army camp at Uri on September 18, 2016, in which four militants alleged by India to belong to the Pakistan-linked Jaish-e-Muhammad terrorist group killed 17 Indian soldiers. Although the attack might have been in retaliation for the role of the Indian Army in the death of Burhan Wani two months earlier, Indian Army leaders saw it as a dramatic new escalation by Pakistan requiring an equally dramatic response to redeem the *izzat* (honor) of the army. "It's time we snatched the tactical advantage away from Pakistan by countering such an attack and showed them what the Indian army is capable of doing," said military analyst Lieutenant General Vijay Kapoor. "The reaction to the Uri attack must be swift," echoed former Army Deputy Chief of Staff Lieutenant General Raj Kadiyan. "This sort of situation in which we keep getting hit cannot go on indefinitely." The response

was not long in coming. On September 29, the Indian Army conducted what it described as "surgical strikes" on "launch-pads" used by militants preparing to "carry out infiltration and conduct terrorist strikes inside Jammu and Kashmir and in various metros in other states."

The recent terrorist attack that killed 40 Indian CRPF personnel at Pulwama in February 2019 and triggered tit-for-tat air-strikes by both sides—the first time in history that two nuclear-armed states have engaged in such provocative behavior—has only exacerbated the fraught situation.

Implications for the United States. The situation in Jammu and Kashmir has aggravated the level of hostility along the LoC to the point where it is arguably worse than at any time since late 2003. However, as a result of the dramatically diminished U.S.-Pakistan relationship since 2011, the ability of the United States to act as a catalyst for negotiations between Pakistan and India has been greatly reduced. In late 2003, the United States had good relations with both Pakistan and India, had played a key role only a year earlier in de-escalating the 2001-2002 border crisis, and was able to play a positive role in negotiating a cease-fire along the LoC. Today, the United States has lost much of its leverage over Pakistan and seems disinclined to restrain India, which it sees as operating from the moral high ground on the terrorism issue. President Trump's first tweet of 2018 was a blistering attack on Pakistan in which he accused the country of providing only "lies and deceit" about supporting terrorist groups on its soil in return for \$33 billion of U.S.-provided security assistance since 9/11. The administration has since suspended all military assistance to Pakistan and all but a fraction of its formerly robust economic assistance. 416 Even if this were not the case, neither Pakistan nor India seem inclined to climb down from maximalist positions on the LoC and the status of J&K. Should the situation deteriorate much further, the prospect of further military actions that could escalate to general war will only increase.

In the event of a future conventional war with Pakistan or China, the Indian Army is unlikely to perform as well as it expects.

With a military establishment twice the size of Pakistan's, a defense budget seven times larger, and a gross disparity in the ratio of combat power in nearly every category, many western observers—and certainly the Indian Army officer corps—believe the Indian Army will easily defeat Pakistan in any future conventional war. India may indeed prevail, but the attitude that the victory will be an easy one is not warranted and likely to be proven wrong on some future battlefield.

"Bean counting," the quantitative measurement of weapons systems as a basis for assessing combat capability, has been used frequently in the past. It should be thoroughly discredited by now, but there is a large element of this in how India perceives the relative combat ratios with Pakistan. Recent military history has seen over and over again how smaller armed forces that are more innovative, flexible, and adaptable have prevailed over larger and better-equipped armed forces. One need only look at the wars of Israel, the two Gulf Wars, and the U.S. experience in Vietnam to see the flaws of bean counting. Because of

the shortcomings in the Indian PME system outlined in this study, the combat effectiveness of the Indian armed forces is likely to be less than the sum of its individual service parts. This negative synergy is due not only to problems in the HDO and the resultant lack of interservice cooperation, but to many other factors observed at the DSSC: the absence of effective combined arms and joint training, the discouragement of critical thinking, the rigid application of doctrine, the lack of attention paid to logistics, the cultural reverence for and unwillingness to question higher authority, the emotional blinders in assessing Pakistani capabilities, and the PCK culture.

Added to all these factors is the undeniable fact that no Indian officer of any rank has experienced high-intensity combat since 1971. I define "high-intensity combat" as large scale maneuver warfare against a similarly equipped and capable foe that requires the routine application of combined arms operations by ground forces, systematic cooperation with at least one other service, and sustained logistics operations. In any future war with Pakistan or China, this is what the Indian Army must do-and do it very competently-to achieve victory. This definition does not include the counterinsurgency operations that have been ongoing in J&K and elsewhere in India for decades nor the firing incidents along the LoC from which the frontline forces of both sides for the most part are safely protected in bunkers during incidents of small arms, machine gun, mortar, and artillery firing. This is intended in no way to disparage the courage and fortitude of the gallant soldiers serving in such assignments, but merely to indicate that the operations do not meet the definition of high-intensity combat. Indian Army officers schooled to rely on the DSSC solution may find that no PCK is available to provide the correct solution in a future war with either Pakistan or China.

This is not to say that the Pakistan Army is markedly superior to the Indian Army. Many of the PME weaknesses seen at Wellington were similarly observed at Quetta. But the Pakistan Army made several changes to its conventional defense planning for the eastern border following the 2001-2002 border crisis with India. During that crisis, a three-week delay between the government's order to mobilize and deploy its force to the international border and the time required for the Indian Army strike corps to move into position allowed Pakistan more than enough time to respond militarily and appeal to the international community to intervene before India could bring its full military might to bear. This deeply frustrated the Indian Army, which believed the delay created enough of a time gap between mobilization and the commencement of military operations for India's political leadership to lose its nerve and back down in the face of international pressure. To prevent this from happening in the future, the Indian COAS unveiled a new ground forces doctrine known as Cold Start in April 2004, the goal of which is to allow the army to launch a retaliatory conventional strike against Pakistan before the international community can intercede, and at the same time be so narrowly limited in scope to keep below Pakistan's nuclear threshold.417

The greatest advantage Pakistan has over India is that in any future war it will be strategically on the defensive and enjoy the advantage of operating on interior lines. Since 2002 it has increased the size of its armor forces and redeployed them along the international border to reduce the time needed to move into position to blunt a Cold-Start-style attack. Additionally, war reserve ammunition and other logistic stocks have been pre-positioned further forward, the command and control system has been hardened, and, most importantly, most combat units are permanently stationed on or very near their anticipated wartime positions, making it nearly impossible for India to gain strategic surprise. Although the role of the Pakistan Navy will be negligible in any conventional war, the Pakistan Army and Air Force have at long last learned how to operate together as a result of their operations in the federally administered tribal areas in the past decade. And although Pakistani officers also have not seen high-intensity combat since 1971, two entire generations of the Pakistan Army's younger officers have spent virtually their entire professional lives fighting a skilled and determined foe in the western part of the country. Not only have these junior and midlevel officers learned combat leadership skills, the Pakistan Army for the first time has a truly professional noncommissioned officer corps.

With China, however, India's situation is nearly reversed. Despite a lack of transparency in Chinese defense spending, it appears that Beijing spends between four and five times as much on defense as New Delhi. The People's Liberation Army Air Force (PLAAF) now possesses almost as many fourth-generation fighters (over 600) as the entire fighter inventory of the Indian Air Force, has 50 diesel-electric submarines in comparison to India's 14, and approximately 1,550 multiple rocket launch systems in comparison to India's 214. The Indian Air Force is just now beginning to induct fifth-generation aircraft in its inventory, but its current strength of 30 squadrons is far short of the 42 that are authorized and considered the minimum number required for a two-front war with China and Pakistan. The Indian Navy's Maritime Capability Perspective Plan for 2012-2027 envisions a force of 200 warships and 500 aircraft required to control its Indian Ocean domain in the face of encroachments from Pakistan and China. However, the navy currently operates just 140 warships and 220 aircraft.

India's defense budget exacerbates this problem. India had the world's third largest military budget last year, behind the United States and China, however, in terms of GDP it fell from 2.7 percent in 2010 to 2.4 percent in 2019. Other structural problems complicate the situation such as the fact that pension and personnel costs consume nearly half the total budget. Commenting on the 2019-2020 defence budget, Air Marshal Nirdosh Tyagi, a former deputy chief of air staff, said, "[l]ast defence budget had increase of just about 7.7 percent over the previous year. Inflation and rupee depreciation more than neutralized this. Thus, no increase in real terms." This occurred despite a Parliament Committee Report in 2018 which highlighted serious deficiencies faced by the Indian military. In that year, India's

Vice Chief of Army Staff, Lieutenant General Sarath Chand pointed to the possibility of a two-front war and said India did not have sufficient funds for emergency necessary purchases, and the army did not have sufficient war reserves to fight a high-intensity war for more than ten days.⁴²⁰

And although India has a localized strength advantage along the Line of Actual Control, China has a clear advantage given its enormous infrastructure improvement made in the Tibet Autonomous Region, the natural geographic advantages of that area in moving forces horizontally over the 2,500-mile length of the border, and the ever-widening gap in the conventional military balance. In such a conflict, airpower will likely be the decisive factor, and Air Marshal B. S. Dhanoa noted in 2017, "Our numbers are not adequate to fully execute an air campaign in a two-front scenario. The probability of a two-front scenario is an appreciation which you need to do. But, are the numbers adequate? No."421 As defense analyst Franz Gady concludes succinctly, "India cannot win a two-front war and should not plan for one. Preventing such an eventuality should be a key aim of Indian diplomacy and global strategy."422

Implications for the United States. Assuming that it does not escalate to the nuclear level, a future India-Pakistan war carries minimal risk for the United States given the current adverse trajectory of U.S.-Pakistan relations and corresponding positive trajectory of U.S.-India relations. There almost certainly will be, however, an atmosphere of crisis and fear that mandates robust diplomatic (but not military) engagement with both sides. A failure by the Indian Army to decisively defeat the Pakistan Army carries few attendant risks for the United States. But the same cannot be said about a future India-China war. Any significant failure by the Indian Army against the PLA in a manner reminiscent of 1962 will almost certainly create a crisis situation in which the United States could be pulled in on the Indian side not just diplomatically, but potentially militarily as well. This may lead to enormous geopolitical risks of escalation for the United States not only in South Asia but in other Asian and maritime theaters as well.

There is no reason to expect that in a future war India will understand Pakistan's nuclear "red lines."

The emotionalism infecting India and Pakistan about each other's actions and the motivations for them distorts any attempt at an objective analysis of each side's probable reaction. In this, Pakistan traditionally has been the worst offender. In 1965, it badly misjudged the state of public opinion in the Valley of Kashmir and convinced itself that India would not respond to Operation Gibraltar, the covert infiltration of regular soldiers into the area to foment a revolt, by attacking across the international border to open a second front. Similarly in 1971, the Pakistan Army deployed its forces for a counterinsurgency campaign in East Pakistan (now Bangladesh) while dismissing the possibility that the Indian Army might attack in strength to support the Bangladeshi militants. And the third example occurred in 1999 during the abortive Kargil operation, when the Pakistan Army

discounted the possibility that India would respond with a robust ground and air campaign to eject it from the heights seized earlier in the winter. The Indian Army is not immune from similar wishful thinking, particularly when a COAS blithely dismisses the possibility that Pakistan is "bluffing" about the use of short-range nuclear systems to blunt any robust attack across the international border.

The problem, of course, is that such a plan requires Indian military leaders to know precisely what Pakistan's nuclear thresholds are and to carefully calibrate military actions on land, sea, and air to stay well below them. Therein lies the rub. Pakistan's nuclear "red lines" are deliberately ambiguous in order to create doubt about exactly where they lie. The clearest articulation came from Lieutenant General Khalid Kidwai in 2004, when he outlined the following general conditions under which nuclear weapons could be used: India attacks Pakistan and conquers a large part of its territory; India destroys a large part of Pakistan's land or air forces; India blockades Pakistan in an effort to strangle it economically; or India pushes Pakistan into a state of political destabilization or creates large-scale internal subversion in the country.⁴²³

Any one of the three Indian military services might deliberately or inadvertently cross one or more of the red lines in the course of wartime operations. At the height of the second phase of the border crisis in May 2002, the author asked a Pakistani Major General in the Inter-Services Intelligence Directorate if anyone in its Analysis Directorate had ever assessed what would be India's response if Pakistan employed a nuclear weapon first. His answer was not reassuring: "I suppose it would be a massive holocaust." Taken aback by his unexpected candor, I suggested this might be a good time to explore the issue in more detail. He simply shrugged his shoulders and replied, "When it's war, it's war." This echoed an earlier exchange with then-Major General Kidwai, the head of the Strategic Plans Division, the custodian of Pakistan's nuclear arsenal, on the same topic. During a visit to Joint Staff Headquarters by a group of visiting U.S. Air War College students, one of them asked Kidwai if he thought a nuclear war between Pakistan and India was winnable. He answered with the observation that nuclear weapons were not warfighting tools but "instruments of deterrence." If one side crosses the nuclear threshold, "We don't know the effect, but we do know it will be a disaster."424 No doubt General Kidwai is correct. No doubt also that similar questions should be asked, debated, and objectively wargamed not only within Indian PME institutions, but in service headquarters and the Ministry of Defence. There is little indication, however, that this is occurring now or will occur in the future.

Many Indian defense analysts and retired senior military officers discount U.S. fears of inadvertent escalation to the nuclear level in a future war with Pakistan, noting a wide gap of perception between India and the United States regarding the use of nuclear weapons. India, they claim, sees the purpose of nuclear weapons as being limited to deterrence and not for warfighting. As one analyst explained, India has a no first use policy and its strategy is deterrence by punishment.

Because Pakistan is seen as a fundamentally rational actor, two retired senior military officers rejoined that Islamabad was bluffing about the use of tactical nuclear weapons and that it would never be so foolhardy as to let deterrence fail and "we won't let it happen either."⁴²⁵

Such complacent thinking is potentially dangerous. In an excellent book about U.S. problems with nuclear command and control and nuclear safety, Eric Schlosser warns of the "Titanic Effect," that is, the more impossible something is thought to be, the more likely it is to occur.⁴²⁶ The view that nuclear deterrence cannot fail and that nuclear weapons are not for warfighting is belied by the fact that India has already deployed seven nuclear systems, is working on five more, and it in the process of operationalizing a complete nuclear triad.

Implications for the United States. In the event of a war escalating to the nuclear level in South Asia, Pakistan would almost certainly be utterly destroyed, but India would emerge significantly damaged as well. A nuclear exchange in South Asia, even if relatively limited in scale to a few hundred detonations on both sides, would create a situation unprecedented in human history. The demands placed on the United States and world community for humanitarian assistance would be enormous, and far beyond anyone's ability to provide more than relatively token amounts of food, medicine, or medical facilities given the enormous need. India, as a U.S. strategic and economic partner, would likely be so reduced in every category of economic and military power as to be rendered irrelevant in strategic terms for decades, a situation that would benefit only China.

Comparison Between Wellington and Quetta

Foreign Area Officers who travel in India and Pakistan are most often struck not by the differences between the two countries, but by their similarities. Basic Hindi and Urdu are similar in grammar and simple vocabulary, so whether they studied Urdu or Hindi they quickly discover they can converse at an elementary level in both countries. They also find the same music, food, Bollywood movies, and occasionally the same festivals. The stark contrast between dirty, chaotic cities and clean, well-regulated military cantonments is the same in both, as are the British military traditions that are venerated in both armies. Only the dominant religions are different, but Hindu and Sikh shrines are found in abundance in Pakistan, as are Muslim architectural gems like the Taj Mahal and mosques beyond counting all over India.

It was stated at the beginning of this study that the final product should be seen as a companion investigation to an earlier, similar study of the attitudes and values of Pakistani officers at the Pakistan Army Command and Staff College in Quetta. The sponsors of that study, Lawrence Livermore National Laboratory and the Department of Energy National Nuclear Security Administration, expressed interest that a similar study be performed with Indian Army officers to facilitate a side-by-side comparison of the two groups. Such a comparison between the staff colleges at Quetta and Wellington will now be briefly summarized along each of the five lines of inquiry used in both studies. Contrary to the author's expectation at the beginning of the India study, the two PME institutions are startlingly alike in almost every line of inquiry except for the second, and even there the intensity of attitudes of one side about the other are eerily comparable.

The Staff College Experience: Demographic, Social, Cultural, and Organizational Factors, and Curriculum

Since both institutions spring from the same parent, it is not surprising that the same pedagogy derived from the British Commonwealth model is found at each. Both institutions also employ an identical competitive examination routine to select students, and the officers who are selected likewise come from nearly identical arm and service backgrounds.⁴²⁸

Demographically, in both institutions fewer officers with elite backgrounds are choosing the military profession, so the overwhelming majority of selectees come from the middle and lower-middle classes. Large numbers also come from self-described military backgrounds. Although the Pakistan Army is often accused at

Wellington of being Punjabi-dominated, in reality the officers at Quetta mirror the demographics of the nation as a whole, and the same is true for Wellington with two notable exceptions: Sikhs are vastly over-represented and Muslims are vastly under-represented. While a higher level of religiosity was noted at Quetta than at Wellington, in both institutions the top finishers—those destined for eventual promotion to general officer ranks—were found to be moderate in religion and secular in their attitudes toward the military profession. Also observed at both is what was described in the Pakistan study as "pernicious cultural influences," but is more accurately described in the India study as "negative cultural behaviors." At Wellington, the various forms of cheating such as the use of previous staff college solutions to exercises, tests, and research papers is referred to as using PCK, or previous course knowledge; at Quetta, the practice is equally ubiquitous and is called using *chappa*. The use of these techniques is so prevalent that it has become a part of each institution's organizational culture. 429 Also common to both institutions is the unwillingness on the part of the DS and senior officers to tolerate much if any creativity or unconventional thinking in exercises or syndicate room discussions, and the evaluation process in both reinforces the already strong cultural propensity not to question the opinions expressed by senior officers.

Doctrinally, both institutions are army-centric and teach an outdated ground doctrine the Students thought was more suited to World War II than the modern battlefield. Both were thought by them to be deficient in inculcating an appreciation for the roles of intelligence, combined arms operations, logistics, and aviation support. Despite the fact that Wellington is ostensibly a tri-service institution committed to inculcating a sense of "jointmanship" in all three services, perhaps only the more army-centric Quetta pays less lip service to that notion.

2. Perception of External Threats and Friendships

In this line of inquiry, a clear difference in threat perception exists with Pakistani officers who consider India to be an existential threat and embrace China as the country's most reliable ally, while Indian officers perceive China to be a longer-term but more manageable strategic threat while they remain fixated on Pakistan as a lesser but more immediate threat. At both Quetta and Wellington the intensity of feeling and high level of emotionalism among all three groups of officers about each other was identical, with Students at both institutions observing that each side perceived the other as "evil." This emotive lens was likewise observed in wargames and exercises where both sides overestimated their own capabilities while simultaneously underestimating those of their putative enemy. Ironically, another similarity was that the top finishers in each institution, typically those who had served abroad in U.N. peacekeeping missions or attended foreign PME institutions where they had come in contact with each other, did not exhibit such emotive views. Many admitted to the Students that they shared many cultural traditions, interacted socially, and became good friends in such external settings.

Another common attitude observed at both institutions was a high level of anti-U.S. feeling by guest speakers and varying degrees of animosity toward the United States exhibited by all three groups of officers. At Wellington, the United States was generally seen as "neither an ally, a true friend of India, nor a trustworthy security partner." This was also true at Quetta with the exception that since 2011, the United States has been perceived as posing a direct military threat to Pakistan. At Wellington, the root of this attitude is primarily the U.S. relationship with Pakistan that has waxed and waned over the years, while on the Pakistani side it is what many consider to be a series of U.S. betrayals of a Cold War ally in the 1965 and 1971 wars with India and the imposition of nuclear and other sanctions after the Soviet Union withdrew from Afghanistan. More recently, this attitude has been reinforced by the U.S. embrace of India as a counterweight to China in Asia.

3. Perception of Internal Security Threats

Both India and Pakistan face a multiplicity of internal security threats, four in each. Pakistan's major internal security threat emanates from the tribal areas west of the province of Khyber-Pakhtunkhwa, but another insurgency in Balochistan has flickered on and off since independence, ethnic and sectarian violence has been endemic in Karachi for three decades, and there is countrywide sectarian violence fomented by anti-Shia groups. India also contends with four: in the state of Jammu and Kashmir, in northeastern India, a Naxalite movement in several eastern and south-central states, and the Khalistan insurgency, which may not be completely extinguished. An obvious major difference, however, is that Pakistan has long employed proxy groups to wage war against India over the disputed territory of Jammu and Kashmir.⁴³¹

Doctrinally, there is a superficial similarity at Wellington and Quetta to internal security operations, with the overarching doctrines termed respectively Sub-Conventional Operations and Sub-Conventional Warfare. Both institutions employ guest speakers to teach the laws of land warfare and adherence to the Geneva Conventions, yet students in both frequently admit to the extrajudicial killing of captured militants, and reference books in both refer to low-intensity conflict when teaching how to address counterinsurgency. Surprisingly, at Quetta the reference materials for this block of instruction include an article by Colonel G. D. Bakshi, "Low Intensity Conflict Operations: The Indian Doctrinal Approach," that is also in Wellington reference materials. The emphasis at Quetta, unlike at Wellington, is predominantly on kinetic operations followed by a lengthy (if not indefinite) military presence in areas cleared of militants. This reflects the reality that even if Pakistan fully embraced U.S. counterinsurgency doctrine, it would be unable to execute the classic "clear, hold, and build" COIN model because of the absence of governmental institutions and reliable local security forces in the tribal areas to protect civilians when the army withdraws. Although Quetta reference

materials occasionally acknowledge the need to win hearts and minds of the local population, and this may be the prime directive in Wellington, the Pakistan Army's preferred technique in practice is to evacuate all civilians from the affected area—sometimes millions of people, and sometimes for many years—in order to use kinetic operations freely on militants who remain in the operational area.

4. Attitudes Toward the State and its Institutions

Despite the fact that the civil-military relationships in India and Pakistan are complete polar opposites, the attitudes about the state and its institutions have much in common. Students at both Wellington and Quetta expressed similarly positive opinions of democracy and negative opinions (bordering on contempt) for civilian politicians and media coverage of military operations. There was a reluctance on the part of both groups to criticize senior officers in the military chain of command, although in Quetta it was permissible to criticize former chiefs of army staff like Yahya Khan, Zia ul Haq, and Musharraf, who have been discredited politically. Students at Wellington were more likely to be critical of senior officials in the Ministry of Defense and defense production organizations like the DRDO than their Pakistani counterparts. This is almost certainly because in Pakistan, retired general officers with a great deal of military service and knowledge of military requirements rather than civilian politicians and government bureaucrats play key decision-making roles in the Ministries of Defence and Defence Production. Serving lieutenant general officers also head Pakistan's major domestic defense production facilities, Heavy Industries Taxila and Pakistan Ordnance Factories. Thus, although Pakistan these days is a much poorer nation than India with a much smaller economy and defense budget, it usually gets better products from its indigenous defense industry that actually fulfill military requirements and user needs.

Unlike at Wellington, students at Quetta seemed mostly satisfied with their country's Higher Defence Organisation and were not bothered about the absence of jointness in the armed forces. However, this undoubtedly reflects the army-centric nature of the Quetta course and the gross disparity in the size and political influence of the Pakistan Army compared to the much smaller size and total absence of political influence of the Pakistan Navy and Pakistan Air Force. Although there is a Chairman of the Joint Chiefs of Staff Committee in Pakistan that has rotated in the past (but not in the last two decades) among the three services, the office is mostly ceremonial, with little real power over the three service chiefs and virtually none whatsoever over the more powerful COAS.

5. Attitudes Toward Nuclear Issues

This is a line of inquiry in which it is nearly impossible to gauge student attitudes on either side because both Wellington and Quetta maintain a tightly controlled veil of secrecy over how they address NBC issues, or whether they address them

at all. In neither institution, other than during an infrequent guest-speaker presentation, was any discussion of the subject allowed in the presence of foreign students. Anything taught about NBC presumably occurs only during the periods when foreign students are away from both campuses.

The Pakistan study found a complete lack of awareness about the connection between the tactical use of nuclear weapons, their potential strategic impact given the relatively short distances involved in the India-Pakistan case, and the likely Indian reaction to Pakistani "first use" of nuclear weapons in a future war. Nor was there any understanding (or worry about it if there was) of the long-term implications of conducting nuclear warfare against a contiguous state—for example, of the long-term environmental and immediate radiological effects that would be caused by the prevailing west-to-east wind patterns of the subcontinent. The most commonly expressed attitude was that in the event of a future nuclear war with India, "We'll all go down together," apparently discounting any connection between Pakistan's tactical use of nuclear weapons and the resulting "strategic" consequences. The students did realize that the use of tactical nuclear weapons was controversial, and that if not done correctly—defined as using the weapons only in extremis and only on Pakistani territory—the world would condemn Pakistan and make it a global pariah. There was little comprehension that India's formal nuclear doctrine (first announced in 1999) stipulates that any nuclear attack on Indian troops will automatically result in a massive nuclear retaliation against the attacker.

One area of commonality at both institutions was on how a war between them would unfold. Students at Wellington and Quetta both thought that any future conflict would be relatively short and that the international community would eventually bring enough pressure (presumably on India) to defuse the situation before it escalated to the nuclear level. Quetta students assumed that if India attacked Pakistan, the Pakistan Army and Pakistan Air Force would try to stabilize the situation conventionally and counterattack at a weak Indian position to gain territory to use in a postwar negotiation. Only if the counterattack failed and the country faced military defeat would tactical nuclear weapons be used. Doctrinal materials at Wellington make an explicit assumption that Pakistan would use tactical nuclear weapons in such a situation, yet no tactics, techniques, or procedures for operating in an NBC environment were taught.

Concluding Thoughts

This study has focused on the top 25 percent of the Indian Army officer corps, those who successfully passed the examination process required to enter the DSSC and are expected to reach the highest levels of their profession. It was stated earlier that the attitudes and values of the remaining 75 percent of the officer corps, those who did not attend the college, are unknown and likely will never become known because of the inability of U.S. interlocutors to gain access to them. Similarly, the attitudes of the largest part of the army, the junior commissioned officers and enlisted soldiers, will remain unknown for the same reason. The attitudes and values of these groups are important to understand because any military organization tempts fate if the cohort of senior officers at the top becomes alienated from the attitudes and values of the majority of their subordinates, a situation that would irreparably damage organizational cohesion and discipline. The case of the Iranian armed forces before the 1979 revolution is one of many examples that can be cited in this regard. However, this does not appear to be the case in the Indian Army. To the contrary, the views expressed by Indian students at the DSSC have demonstrated a high level of uniformity and persistence over time, and they seem congruent with those prevalent in the country as a whole. Almost certainly, they coincide with the majority of the other officers in the Indian Army.

This study has also highlighted three growing concerns about the future of the Indian Army and the nation as a whole. The first is whether or not the traditional apolitical and secular orientation of the officer corps is sustainable. One of India's founding fathers and its first prime minister considered the military establishment inherited at independence to be a tool of colonial oppression that had to be brought under firm civilian control. In this, Jawaharlal Nehru succeeded spectacularly. The problem today is that Nehru could scarcely have envisioned there might ever be in New Delhi an authoritarian, nativist, nonsecular government bent on marginalizing the country's large Muslim community in the name of establishing a Hindu *rashtra*, or that such a government would have control of a compliant military fully obedient to its orders. Nehru's worst nightmare may now be on the verge of becoming a reality, and it remains to be seen whether the officer corps can remain insulated from the new political currents sweeping through India.

A second concern is that although the Indian military remains under tight civilian control, its actions in Jammu and Kashmir have profound political consequences. All predictions about events in South Asia are fraught, but in this case there is little reason to expect that the army will be any more successful in the future in stamping out the insurgency than it has been in the past three decades. Coupled with the recent legislative initiatives directed against the Muslim population nationwide, the situation practically guarantees there will be another terrorist

attack sometime in the future, perhaps in J&K or perhaps in another part of India. This situation will continue to poison relations between India and Pakistan and increase the chance of war, with the omnipresent risk that a miscalculation by one or both sides might escalate the situation to the nuclear level. After all, it is not only India that views its enemy through a distorted lens of emotionalism; Pakistan sees India through a similar prism and has, if anything, an even worse record of predicting Indian military action.

Two recent trends that lend urgency to this concern are the sharp increase in the number and intensity of cease-fire violations along the LoC and the increased willingness of India to employ military force against Pakistan in retaliation for terrorist attacks. Two attacks on Indian Army installations by militants belonging to Jaish-e-Muhammad, the first against Uri in September 2016 and the second against Pulwama in February 2019, prompted Indian military strikes on Pakistan, the latter hitting a target deep inside Pakistan, that responded with a retaliatory airstrike in J&K, marking the first time that two nuclear armed states have ever conducted airstrikes on each other's territory. As long as the Kashmir insurgency persists and the LoC remains aflame, the likelihood of another militant attack on an Indian military installation exists. It is almost certain that India would hold Pakistan accountable whether the event was perpetrated by an infiltrator or a local Kashmiri insurgent. If another Indian punitive strike on Pakistan exceeded the scope and depth of the Balakot attack, and if Pakistan again retaliated in kind, it is unclear that escalation could be controlled. A clear illustration of the potential ramifications is found in the statement by the Indian chief of army staff in 2018: "If we have to really confront the Pakistanis, and a task is given to us, we are not going to say we cannot cross the border because they have nuclear weapons. We will have to call their nuclear bluff."432 Whether or not Pakistan is truly bluffing or is deadly serious about the use of nuclear weapons to protect its sovereignty in the event of a fourth general war with India is a subject deserving more careful and dispassionate analysis by the Indian armed forces than has yet been exhibited. Wellington is certainly one venue in which such discussion, analysis, and war gaming of potential scenarios ought to be taking place.

A third concern harkens back to a question that was raised in the first part of this study. The enhanced U.S.-India relationship is premised on an assumption by the United States that India will be able to play a positive role in offsetting the growing military and economic power and political influence of China in Asia in the next century. Can the Indian armed forces fulfill this role militarily? Put another way, the question is this: Is India a strategic asset for the United States or a strategic millstone around the neck in the event of a future confrontation with China? Indian defense analyst Ajai Shukla does not say so explicitly, but his analysis tends to support the latter interpretation. Because his criticism of the Indian armed forces is congruent with many of the key findings of this study, his assessment of the state of the three Indian services is quoted at length:

Given the stovepipes in which the army, navy and air force operate, there is little appetite or time for inter-service training, although lip service is always paid to the need for it. Each of the three services tends to structure, equip, plan and prepare for single service operations. The air force, for example, accords far greater priority to equipping itself with air defense fighters than with ground support aircraft. Its stranglehold over attack helicopters, including tank killers such as the Apache AH-64E, means the army's armored divisions must coordinate with the air force for integrating these assets into the land battle. Similarly, the navy focuses far more on capital warships—frigates, destroyers, aircraft carriers and submarines—than it does on amphibious warfare vessels that are crucial for exercising control over India's numerous island territories....The 1.2 million strong army has simultaneously too many personnel and too little firepower. It needs to shed 200,000-300,000 personnel and divert the savings into battlefield fire support, especially artillery and light attack helicopters. It will need to compensate for manpower reductions with investments in real time surveillance and command systems. The navy, which aspires to be a key security provider in the Indian Ocean, needs more surveillance assets, including satellites, long-range shore-based radar, and long-range maritime surveillance aircraft such as the manned P-8I Poseidon and the unmanned Sea Guardian drone. Its surface warship fleet is badly short of helicopters for anti-submarine and airborne early warning roles. Minesweepers are badly needed. The conventional submarine force (diesel-electric SSKs, as well as air-independent SSPs) needs to be boosted from the current 15 to the planned 24 boats. Also essential is a line of six nuclear attack submarines (SSNs) that are under development, but could take another decade to enter service. A third aircraft carrier is proposed to be built indigenously but is awaiting official sanction. The Indian Air Force (IAF) badly needs to provide mid-life upgrades for its fighter fleet—especially Sukhoi-30MKI and Jaguar aircraft—while simultaneously pushing through the long-delayed procurement of 114 multi-role fighters from the global market. The IAF must also take ownership of the Tejas light combat aircraft (LCA) and the eponymous Advanced Medium Combat Aircraft (AMCA) projects, which are currently making slow progress under the Defense Research & Development Organization (DRDO). A large number of Tejas fighters are needed to replace the IAF's obsolescent MiG-21 and MiG-27 fighters, most of which have retired without replacements, with the squadrons having been "number-plated." The IAF also badly needs more force multipliers, particularly air-to-air refueling tankers and airborne warning and control systems (AWACS).433

Many of the weapon systems and platforms to fix these deficiencies are in the procurement pipeline, but as this study has shown, the Indian defense budget is inadequate to fulfill all the needs in a timely manner and the indigenous production capability is too inefficient because of its onerous bureaucratic rules and lack of military expertise. Whether the new CDS system that has been put into place recently will be sufficiently empowered to cut through the twin bureaucratic Gordian knots of inefficiency and service stovepiping are likely to remain open questions for some time to come.

While the Indian armed forces appear to be dithering, India's major threat—China—has embarked on a massive restructuring and modernization of its armed forces. It is beyond the scope of this study to provide a comprehensive assessment of the current and growing disparities in military capability between India and China, but a few extracts from the U.S. Department of Defense annual report to Congress on military and security developments in China illustrate the growing problem that India (and the United States) must confront in the coming years:⁴³⁴

- "In 2018, China's arms sales increased, continuing a trend that enabled China to become the world's fastest-growing arms supplier during the past 15 years. From 2013 through 2017, China was the world's fourth-largest arms supplier, completing more than \$25 billion worth of arms sales. China sold military equipment worth more than \$10 billion to the Middle East. Saudi Arabia, Iraq, and the United Arab Emirates accounted for most of China's arms sales in the region. The Indo-Pacific region was China's second-largest regional arms market, with more than \$8 billion worth of arms sales, more than \$5 billion of which was to Pakistan" (27).
- "People's Liberation Army—Army. Throughout 2018, the PLAA continued to adapt to structural and command changes which occurred in 2017. Each group army (roughly a U.S. corps-level equivalent) is now standardized and includes six combined-arms brigades that serve as the PLAA's primary maneuver force. ... Combined-arms brigades' subordinate combined-arms battalions have become the PLAA's basic tactical unit for joint operations. The PLAA has also staffed and restructured these new battalions to enable them to conduct independent operations. Combined-arms battalion commanders now have staff officers who assist in the development and implementation of plans and orders in addition to new reconnaissance and service support assets. The PLAA delineates its combined arms battalions into three types: heavy (tracked armored vehicles), medium (wheeled armored vehicles), and light (high-mobility, mountain/jungle, air assault and motorized battalions)" (32, italics added for emphasis).
- "People's Liberation Army—Navy. The PLAN is the region's largest navy, with more than 300 surface combatants,

submarines, amphibious ships, patrol craft, and specialized types Modernization of China's submarine force remains a high priority for the PLAN. The PLAN currently operates four nuclear-powered ballistic missile submarines (SSBN), six nuclear-powered attack submarines (SSN), and 50 conventionally powered attack submarines (SS) By the mid-2020s, China will likely build the Type 093B guided-missile nuclear attack submarine. This new SHANG-class variant will enhance the PLAN's anti-surface warfare capability and could provide a more clandestine land-attack option China's investments in its amphibious ship force signal its intent to develop expeditionary warfare capabilities. The PLAN has five large YUZHAO-class (Type 071) amphibious transport docks (LPD), with three more under construction or outfitting during 2018 China's first domestically built aircraft carrier was launched in 2017, completed multiple sea trials during 2018, and will likely join the fleet by the end of 2019. The new carrier is a modified version of the Liaoning but is similarly limited in its capabilities due to its lack of a catapult launch system and a smaller flight deck than the deck on U.S. carriers. China began construction of its second domestically built aircraft carrier in 2018, which will likely be larger and fitted with a catapult launch system" (35-36).

• "People's Liberation Army—Air Force. The PLAAF and PLAN Aviation are the largest aviation forces in the region and the third largest in the world, with more than 2,700 total aircraft (not including trainer variants or UAVs) and approximately 2,000 combat aircraft (including fighters, strategic bombers, tactical bombers, multi-mission tactical, and attack aircraft). In 2017, Lieutenant General Ding Laihang assumed the post of PLAAF commander and exhorted the service to build a truly "strategic" air force capable of projecting airpower at a long range. The PLAAF continues to modernize and is rapidly closing the gap with Western air forces across a broad spectrum of capabilities. This trend is gradually eroding U.S. longstanding, significant technical advantages against China in the air domain" (40, italics added for emphasis).

I have been critical of many aspects of the Indian Army in this study. This criticism is not intended in any way to be mean-spirited; it is made in the hope that it will be taken—and hopefully heeded—as constructive criticism that deserves a fair and dispassionate hearing. The single most important change that must be made by the government of India and the senior leadership of the armed forces is to recognize the growing military power of China and take concerted measures to ameliorate it in South Asia. The Indian Army and the other services know perfectly well as consummate military professionals that a state's publicly stated intentions are not as relevant as its demonstrated military capabilities. I have

stated my belief that it is not in the cards for India and the United States to become genuine allies. But taking mutual cooperative steps to address the steadily growing threat of Chinese military power in Asia such as improving military interoperability, joint contingency planning, and modest levels of military exchanges and exercising does not require a formal alliance. What it does require, however, is the recognition of a common threat and the willingness to do something about it. Overblown rhetoric by political leaders and hollow, symbolic gesturing do not fulfill this requirement.

Endnotes

- 1. Christophe Jaffrelot writes, "Hindu nationalist ideology, first codified in the 1920s by V. D. Savarkar in *Hindutva: Who Is a Hindu?*, defines India culturally as a Hindu country and intends to transform it into a Hindu rashtra (nation-state)." See Christophe Jaffrelot, "The Fate of Secularism in India," in *The BJP in Power: Indian Democracy and Religious Nationalism*, ed. Milan Vaishnav, (Washington, DC: Carnegie Endowment for International Peace, 2019), 53.
- 2. Despite the government's recent decision to name a chief of defense staff to centralize military inputs into government decision-making, it is too early to determine if this represents genuine reform.
- 3. Few of the U.S. Navy and U.S. Air Force officers attending the DSSC, especially in the early years of the study, were FAOs of their service, whereas all U.S. Army attendees were. Technically, an FAO can be a commissioned officer from any of the four branches of the U.S. armed forces. FAOs are intended to be regionally focused experts in political-military operations who possess a unique combination of strategic focus; area knowledge; political, cultural, sociological, economic, and geographic awareness; and foreign language proficiency in at least one of the dominant languages in their specified region. FAOs will typically serve in embassies overseas as defense attachés or security assistance officers. They may also serve as political-military planners in a service headquarters, the Joint Staff, major commands, unified combatant commands, or agencies of the Department of Defense. They may also serve as arms control specialists, country desk officers, liaison officers, and Personal Exchange Program officers to host nations or coalition allies. Their roles and responsibilities are extensive and varied. They advise senior leaders on political-military operations and relations with other nations, provide cultural expertise to forward-deployed commands conducting military operations, build and maintain long-term relationships with foreign leaders, develop and coordinate security cooperation, execute security assistance programs with host nations, and develop reports on diplomatic, information, military, and economic activities. Each service has its own process for developing FAOs to address its specific needs (Foreign Area Officer Association, http://www.faoa.org/FAO-What-is-a-FAO).
- 4. David O. Smith, "Attitudes and Values of the Pakistan Army: A Study from the Perspective of American Students Attending the Pakistan Army Command and Staff College from 1977 to 2014," Lawrence Livermore National Laboratory, 2014. The sponsors of the study made a conscious decision not to publish the study, but to limit its distribution to interested personnel throughout the policy and intelligence communities. The study findings were briefed to the National Security Council staff, the National Intelligence Council, the departments of State and Defense, the NESA Center of the National Defense University, the Asia-Pacific Center for Strategic Studies, the U.S. Central and Pacific Commands, and a handful of Washington think tanks on the condition that they not be further disseminated or quoted without permission. The study was eventually published in 2018 under the title *The Quetta Experience: A Study of Attitudes and Values within the Pakistan Army* (Washington, D.C.: Woodrow Wilson International Center for Scholars, 2018).
- 5. In a 2018 New Year's Day tweet, President Donald Trump said the United States had "foolishly" given Pakistan more than \$33 billion and received only "lies and deceit" in return. This was quickly followed by decisions on January 2 to withhold \$255 million in coalition-support funding reimbursements, and on January 4 to indefinitely suspend military assistance, both foreign military financing and coalition support funds, until Pakistan made acceptable progress against Afghan-focused groups like the Taliban and Haqqani network that have been allowed sanctuaries in Pakistan (Nick Wadhams and Iain Marlow, "U.S. Withholds Pakistan Security Aid Over Terrorism Concerns," *Bloomberg Politics*, January 4, 2018, https://www.bloomberg.com/news/articles/2018-01-04/u-s-withholds-security-aid-to-pakistan-over-terrorism-concerns).
- 6. The Indian Express, "Modi-Trump White House Meeting: Full Text of Joint Statement Issued by India and U.S.," June 27, 2017, http://indianexpress.com/article/india/pm-narendra-modi-donald-trump-white-house-meeting-full-text-of-joint-statement-issued-by-india-and-us-4723844/.
- 7. Ministry of External Affairs, Government of India, "Brief on India-U.S. Relations," June 24, 2017. According to the U.S. Census Bureau trade statistics, U.S. bilateral trade in 2019 with India, Japan, and China was approximately \$92, \$218, and \$557 billion, respectively. https://www.census.gov/foreign-trade/balance/c5330.html; https://www.census.gov/foreign-trade/balance/c5880.html; and https://www.census.gov/foreign-trade/balance/c5880.html; and <a href="ht

- 8. See, for example, Ashok Swain, "Why I'm Not Celebrating Independence Day in Modi's India: Under the Prime Minister's Stewardship, A Secular India is Now Veering towards a Hindu India," Daily O, August 15, 2017, http://www.dailyo.in/voices/independence-day-amit-shah-hindu-rashtra-modi-congress-democra-cy-secularism/story/1/18972.html.
- 9. The basis for this statement and the rest of the information in this paragraph comes from interviews with several former military attachés assigned to the U.S. Embassy in New Delhi from 2004 to the present. Their names have been withheld since several of them are serving officers.
- 10. Interviews with five American DSSC graduates who later served in India as military attachés. Many American students at the DSSC were warned by their Indian classmates near the end of the course that while they had been able to interact socially at Wellington, they would never be able to do so in the future without obtaining official permission from the Indian Army, which they would be loath to request.
- 11. In the 1950s and early 1960s, the 10-month course began in the middle of one calendar year and finished in the next calendar year, with the start and end dates occasionally varying by a few weeks. From 1963 to 1985, the course began and finished in the same calendar year. Since 1986, the course has begun in the last week of June and finished in the first week of May the next year. All Students are identified by the year in which they graduated.
- 12. The first U.S. Army students began attending the DSSC in 1950 and attended intermittently throughout the decade. Since 1958, one student has attended every year (although one withdrew without finishing). U.S. Navy students began attending in 1965 and generally have attended every other year since then. U.S. Air Force students began attending in 1991 and also attend every other year, alternating with Navy students. See Annex A.
- 13. See Dennis Kux, *India and the United States: Estranged Democracies* (Washington, D.C.: National Defense University Press, 1992); and Steven Philip Cohen, *India: Emerging Power* (Washington, D.C.: The Brookings Institution, 2001). Cohen titles a section of one chapter "India and the United States: Distanced Powers" (269).
- 14. Kux, India and the United States, 50-51.
- 15. Robert J. McMahon, *Cold War on the Periphery: The United States, India, and Pakistan* (New York: Columbia University Press, 1994), 40.
- 16. The best general history of the roots of the dispute is Alistair Lamb, *Kashmir: A Disputed Legacy* (Karachi: Oxford University Press, 1993). A more recent history by an equally respected historian is Stanley Wolpert, *Shameful Flight: The Last Years of the British Empire in India* (Karachi: Oxford University Press, 2006). Another fine account is Sumit Ganguly, *Conflict Unending* (New York: Columbia University Press, 2002).
- 17. Kux, India and the United States, 61.
- 18. Ibid., 70.
- 19. NSC 98/1, The Position of the United States with Respect to South Asia, 22 January 1951.
- 20. Ibid., 88.
- 21. Ibid., 111-112.
- 22. Author's italics. This was an executive agreement, not a treaty ratified by the U.S. Senate. One of the more enduring myths in U.S.-Pakistan relations is that the two sides agreed to a formal treaty relationship.
- 23. Quoted in Stanley Wolpert, *Roots of Confrontation in South Asia: Afghanistan, Pakistan, India and the Superpowers* (New York: Oxford University Press, 1982), 142. Wolpert considered the U.S. alliance with Pakistan to be "surely the worst single blunder in U.S. South Asian policy and easily the most costly," noting that the United States would spend billions of dollars in the next decade arming both sides and ending up being reviled by both after the 1971 Indo-Pakistan War.
- 24. Kux, India and the United States, 170, 186, and 200.
- 25. The McMahon Line remains the effective boundary between China and India, although its legal status is disputed by China, which claims 25,000 square miles south of the line as part of the Tibet Autonomous Region. China recognizes a Line of Actual Control that closely approximates the McMahon Line.

- 26. Two excellent accounts of the Sino-Indian War are Neville Maxwell, *India's China War* (Garden City, NY: Anchor Books, 1972); and John Kenneth Galbraith, *Ambassador's Journal: A Personal Account of the Kennedy Years* (New York: Signet Books, 1970).
- 27. Kux, India and the United States, 213 and 230.
- 28. An excellent account of these events is by Gary J. Bass, *The Blood Telegram: Nixon, Kissinger, and a Forgotten Genocide* (New York: Alfred A. Knopf, 2013). A good account of both the 1965 and 1971 wars with India from Pakistan's perspective is Shuja Nawaz, *Crossed Swords: Pakistan, Its Army, and the Wars Within* (Karachi: Oxford Press, 2008).
- 29. Steven Philip Cohen, India: Emerging Power, 135-137.
- 30. Peter Blood, CRS Issue Brief for Congress: India-U.S. Relations, IB93097 (Washington, D.C: Congressional Research Service, March 8, 2002), 2.
- 31. At a dinner at the U.S. Ambassador's residence in New Delhi in November 1990, Vice Chief of Army Staff General S. F. Rodrigues (later the chief of army staff) challenged visiting Lieutenant General Claude Kicklighter, commander of U.S. Army Pacific in Honolulu, to come up with a plan for improved U.S.-India military relations. Kicklighter returned in April 1991 with a comprehensive proposal now known as the "Kicklighter initiatives," which included a common strategic vision and a set of concrete steps that might be taken to expand the bilateral military relationship (Sumit Ganguly, Brian Shoup, and Andrew Scobell, eds., U.S.-Indian Strategic Cooperation into the 21st Century: More Than Words [New York: Routledge, 2007], 68.)
- 32. Blood, India-U.S. Relations, passim.
- 33. For a more detailed account of the problem this attack caused in U.S. relations with India, see David O. Smith, "The 2001-2002 Standoff: A Real Time View from Islamabad," in Zachary Davis, ed., *The India-Pakistan Military Standoff: Crisis and Escalation in South Asia* (New York: Palgrave MacMillan, 2011).
- 34. This led to the 123 Agreement, now known as the U.S.-India Civil Nuclear Agreement, a joint statement issued on July 18, 2005, by Prime Minister Manmohan Singh and President George W. Bush under which India agreed to separate its civil and military nuclear facilities and to place all civil nuclear facilities under International Atomic Energy Agency (IAEA) safeguards. In exchange, the United States agreed to work toward full civil nuclear cooperation with India. This took three years, as it required amending the Atomic Energy Act of 1954, developing a civil-military nuclear separation plan in India, drafting an India-IAEA safeguards (inspections) agreement, and granting an exemption for India by the Nuclear Suppliers Group. The United States-India Nuclear Cooperation Approval and Non-proliferation Enhancement Act was signed into law on October 8, 2008. (The White House [Bush administration], "President Bush Signs H.R. 7081, the United States-India Nuclear Cooperation Approval and Nonproliferation Enhancement Act," October 8, 2008, https://georgewbush-whitehouse.archives.gov/news/releases/2008/10/20081008-4.html).
- 35. The White House (Obama administration), "Remarks by the President to the Joint Session of the Indian Parliament in New Delhi, India," November 8, 2010, http://www.whitehouse.gov/the-press-of-fice/2010/11/08/remarks-president-joint-session-indian-parliament-new-delhi-india.
- 36. K. Alan Kronstadt and Sonia Pinto, U.S.-India Security Relations: Strategic Issues, R42948 (Washington D.C.: Congressional Research Service, January 24, 2013), 4.
- 37. U.S. Embassy and Consulates in India, "U.S.-India Defense Relations," December 8, 2016, https://in-usembassy.gov/u-s-india-defense-relations-fact-sheet-december-8-2016/.
- 38. Tanvi Madan, "Order from Chaos, When Modi Meets Trump: Where Do U.S.-India Relations Stand?," The Brookings Institution, June 23, 2017, https://www.brookings.edu/blog/order-from-chaos/2017/06/23/when-modi-meets-trump-where-do-u-s-india-relations-stand/.
- 39. The first course for senior officers of the Indian Army was conducted by the DSSC in 1951, when the college conducted a six-week senior officer course attended by 25 brigadiers. Established in New Delhi in 1960, the National Defence College (NDC) has never increased its capacity. Approximately 85 students 35 from the Indian Army, five from the Indian Navy, 10 from the Indian Air Force, 15 from various Indian civil services, and 20 from foreign countries attend a 47-week course at the NDC that is divided into two terms, each with three study subjects, and a midcourse foreign tour. The subjects are the Socio-Political Study of India; Economy, Science, and Technology; the International Security Environment; Global Issues;

India's Strategic Neighborhood (the Indian Ocean, ASEAN, Africa, Central Asian Republics, and Afghanistan) and India's Immediate Neighborhood (China, Tibet, Myanmar, SAARC countries, and Pakistan); and Strategies and Structures for National Security. The subjects are unchanged since 2001, although there are minor variations in the countries listed. (1989 Student, interview by author, June 21, 2017. This Student is also an NDC graduate). See also NDC Journal-2001, vol. 23 (New Delhi: National Defence College, 2002), iii-vi; and the National Defence College, http://ndc.nic.in/index.aspx?AspxAutoDetectCookieSupport=1. The Indian Army has another senior PME institution that was formerly known as the College of Combat until it was redesignated in 2003 as the Army War College (AWC). It is an all-arms tactical training institution for army officers, and performs the additional function of evaluating army doctrinal concepts related to tactics and operational logistics. It is affiliated with Madras University, which awards a master's of philosophy in war studies. According to the latest information about AWC courses furnished to the author by the U.S. Embassy in New Delhi, the AWC teaches three courses for officers: a junior command course primarily for captains and majors, a senior command course for lieutenant colonels and colonels in line to command battalions, and a six-week higher-defence orientation course for colonels and higher, as well as foreign officers, to introduce them to "the nuances of higher command [and] to facilitate their holding higher command and staff appointments."

- 40. Hill Post Wire, "India Can Be Net Provider of Security in Region: PM," May 23, 2013, http://hillpost.in/2013/05/india-can-be-net-provider-of-security-in-region-pm/80749/.
- 41. Rajat Pandit, "52 Years On, Still No Sign of National Defence University," *Times of India*, September 16, 2019, http://timesofindia.indiatimes.com/articleshow/71142205.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst.
- 42. R. D. Palsokar, Defence Services Staff College, Wellington India, 1947-1987 (Wellington, India: DSSC, 1987), 9-10.
- 43. Judith Brown and William Roger Louis, *The Oxford History of the British Empire*, *Volume IV: The Twentieth Century* (London: Oxford University Press, 1999), 4.
- 44. Command and Staff College Quetta, *A Century of Excellence* (1905-2005), Faculty of Research and Doctrinal Studies, 2005, 1-2 and 304; and Palsokar, *Defence Services Staff College*, 21.
- 45. Nawaz, Crossed Swords, 20, 30.
- 46. This story was told to the author many times while attending the Pakistan Army Command and Staff College. Actually, a decision had earlier been made in army headquarters to allow Pakistan to keep the entire library at Quetta because a defense library of equivalent size in New Delhi was designated to go to India. Nevertheless, the new Indian Army Staff College in Wellington had no library at all when it first opened (Palsokar, *Defence Services Staff College*, 27).
- 47. Verma's choices for the location of a new staff college were limited to stations in India that had vacant housing. These included Kamptee near Nagpur, Deccan College in Pune, Barnes School in Deolali, some empty barracks in Belgaum, empty hospital wards in Jalahali near Bangalore, and "a few barracks and empty BOR family quarters in Wellington near Madras." Verma had no other staff to assist him in setting up the new staff college besides an adjutant who joined him in December in 1947. The first faculty member joined in January 1948, and the two men worked night and day to get the first course ready to begin by April 1948 (S. D. Verma, "To India Staff College," in B. S. Subhok, DSSC: An Overview, Golden Jubilee Year Booklet, DCCS, 1998).
- 48. "Joe" Lentaigne had a legendary reputation for bravery in the British Army. He commanded 111 Brigade of the famous "Chindit" force that was created and led by Orde Wingate, and succeeded Wingate in command when he was killed in a plane crash in 1944. In battle with the Chindits during the Burma campaign, Lentaigne was "mentioned in dispatches" four times and awarded the Distinguished Service Order and senior levels of the Orders of the Bath and the British Empire. He had also served on the faculty at Quetta, attended the Imperial Defence College in 1946, and was director of military operations and deputy quarter-master general at Indian Army headquarters in 1947. His vision animated the new DSSC for the next seven years, including its conversion from a predominantly army institution to an inter-services one (Palsokar, Defence Services Staff College, 52).
- 49. Palsokar, Defence Services Staff College, 59-61.
- 50. Subhok, DSSC: An Overview.

- 51. DSSC, Foreign Student Joining Instructions for 64th course, 2008. This document is also the basis for describing the organization of the college and the general description of the curriculum.
- 52. The Navy Wing consists of only one division of eight syndicates, and the Air Force Wing has two divisions, each comprising four or five syndicates.
- 53. This comment is based on numerous Student interviews. The last DSSC commandant to become chief of army staff was V. P. Malik, in 1997.
- 54. The faculty is a male-dominated institution. Although female military and civilian students may attend the DSSC, to the author's knowledge no female officer has yet been assigned as a DS there.
- 55. Palsokar, Defence Services Staff College, 63-64.
- 56. A. M. Sethna, "The 'Psc' and the 'MSc," The Owl (DSSC yearbook), 1978.
- 57. Officers commissioned by the two officer training academies at Chennai and Gaya in Bihar receive only short service commissions that limit their service to 14 years. These officers are not eligible for a pension or to attend the DSSC. The officer training academy at Gaya is presently slated for closure due to lack of intake (Dinakar Peri, "Gaya's Officers Training Academy to Shut Down," *The Hindu*, December 22, 2019, https://www.thehindu.com/news/national/gayas-officers-training-academy-to-shut-down/article30374211.ece).
- 58. The system of competitive examination was reinstituted in 1950 for the first time since 1947 and included six subjects: Tactics A, Tactics B, Administration and Morale, Military Law, Current Events, and Military History. In Tactics A, the required knowledge included organizations and characteristics of infantry and armored divisions and the fighting arms, while Tactics B required an appreciation (in U.S. military parlance, an estimate of the situation) of an assigned tactical problem and writing operational orders to implement the solution. The qualifying score for each of the six papers was 40 percent of possible marks, but an overall average score of 50 percent for all papers was the minimum qualifying score. An officer failing in three attempts was no longer considered eligible to attend. As of 1986, the examination basically still covered these six subjects, with each paper having to be completed in three hours (Palsokar, *Defence Services Staff College*, 93, 245).
- 59. There are five sources of commissioning for the Indian Army. The National Defense Academy near Pune is the primary source. It is a three-year program leading to a college degree and imparting basic military training to cadets who wish to enter any of the three services. All graduates must then take training at one of the three service schools where they are commissioned. For example, NDA graduates wishing to enter the Indian Army must complete a course of study at the Indian Military Academy (IMA). Other commissioning sources include various army cadet colleges and officer training academies, the graduate direct entry program, the technical graduates entry program, and the university graduates entry stream (Army Training Command, A Quest for Excellence: Training the Indian Army, Simla, 1998, 61).
- 60. The Indian Army announced in 1966 the following desired percentages for its students at the DSSC in the various arms and services: Armoured Corps, 9 percent; Artillery, 16 percent; Engineers, 10 percent; Signals, 5 percent; Infantry, 40 percent; Army Service Corps, 5 percent; Army Ordnance Corps, 3 percent; Corps Electrical and Mechanical Engineering, 2 percent; Others, 10 percent (Palsokar, *Defence Services Staff College*, 196). See Annex D for more precise figures on army student branches.
- 61. Foreign students attending the DSSC are variously referred to at the college as "international" or "allied" students, although that term does not connote any formal political association between their country and India.
- 62. Extracted from the 2014 edition of the DSSC yearbook, The Owl.
- 63. See Annex E for specific subjects covered in joint, army, navy, and air force training.
- 64. Annex F lists the Joint and Army Wing guest speakers and the subjects presented in four courses.
- 65. Palsokar, Defence Services Staff College, 185-186.
- 66. The most desirable post-DSSC foreign schools for these graduates are the army staff colleges of the United States, Great Britain, Canada, and Australia. See Annex G for a typical post-DSSC assignment pattern.
- 67. 2012 Student, interview by author, June 30, 2017.
- 68. 1995 Student, interview by author, November 28, 2017.

- 69. 2002 Student, interview by author, April 12, 2017.
- 70. 2016 Student, interview by author, February 7, 2017.
- 71. This CI was a corps commander in the 2001-2002 crisis with Pakistan, and his propensity for pushing the envelope got him into hot water. He was relieved of command when, without orders from his higher headquarters, he moved his corps too close to the international border for the comfort of the government (1998 Student, interview by author, May 17, 2016).
- 72. 2014 Student, interview by author, February 8, 2017.
- 73. Stephen Rosen notes that certain patterns of authority in Indian political and strategic culture derived from the Indian social structure create such a situation. The issue of South Asian culture and its impact on the DSSC will be addressed in more detail in the Key Findings portion of the study. See chapter 2 of Stephen Peter Rosen, *Societies and Military Power: India and Its Armies*, (Ithaca, NY: Cornell University Press, 1996), 33-60.
- 74. 2014 Student, interview by author.
- 75. 1992 Student, interview by author, May 17, 2016.
- 76. 2011 Student A, interview by author, August 11, 2016.
- 77. The Bharatiya Janata Party (in English, the Indian People's Party) is a pro-Hindu political party and is the political wing of the radical pro-Hindu group Rashtriya Swayamsevak Sangh. The BJP is generally considered to advocate for the greater integration of Hinduism within the Indian state, which can take on a range of ideas from Hinduism occupying a "first among equals" cultural superiority all the way to remaking India as an exclusive domain for Hindus. See Milan Vaishnav, "Religious Nationalism and India's Future," in *The BJP in Power: Indian Democracy and Religious Nationalism*, ed. Milan Vaishnav, (Washington DC: Carnegie Endowment for International Peace, 2019): 8-9.
- 78. 1995 Student, interview by author.
- 79. 1984 Student, interview by author, May 20, 2016. This Student's DS sponsor was a recent graduate of the U.S. Army Command and General Staff College.
- 80. 1992 Student, interview by author.
- 81. 2010 Student A, interview by author, September 2, 2016.
- 82. 2000 Student, interview by author, August 12, 2016.
- 83. 1989 Student, interviews by author, June 30, 2016, and June 21, 2017.
- 84. The correct colors of ink to be used at the DSSC were blue for students, red for the DS, black for CIs, and green for the commandant (2003 Student, interview by author, May 17, 2016).
- 85. 2016 Student, interview by author.
- 86. 2005 Student, interview by author, August 12, 2016; and 2008 Student, interview by author, January 11, 2017.
- 87. 2011 Student B, end-of-tour report.
- 88. 2011 Student A, interview by author.
- 89. Staff duties, in Indian Army parlance, refer to the style, abbreviations, formats, spelling, and other minutiae associated with writing operational orders, administrative orders, and general correspondence (1999 Student, interview by author, May 17, 2016).
- 90. As stated earlier, the actual selection rate to the DSSC is approximately 25 percent.
- 91. 2015 Student, interview by author, June 22, 2017.
- 92. 1992 Student, interview by author.
- 93. 2014 Student, interview by author.
- 94. 2007 Student B, interview by author, February 28, 2017.

- 95. 1998 Student, interview by author, August 8, 2016.
- 96. Central Intelligence Agency, *The World Factbook*, 2016 edition, https://www.cia.gov/library/publications/the-world-factbook/geos/in.html; Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India, http://www.censusindia.gov.in/2011census/C-01.html; and *The Indian Express*, "Census 2011: Hindus Dip to Below 80 Percent of Population; Muslim Share Up, Slows Down," https://indianexpress.com/article/india/india-others/indias-population-121-09-crores-hindus-79-8-pc-muslims-14-2-pc-census/.
- 97. 2008 Student, interview by author.
- 98. There are three types of units in the Indian Army: pure (one class), mixed company (several classes in one unit), and totally mixed (open to all classes). Class in the Indian Army is defined as "a type of Indian recognized as distinct from others by the Army authorities for purposes of recruitment and organization. The basis of the distinction may be difference of race, language, religion, caste, domicile, or two or more of these" (P. K. Gautam, *Composition and Regimental System of the Indian Army: Continuity and Change* [New Delhi: Institute of Defence Studies and Analyses, 2008], 5).
- 99. Steven I. Wilkinson, *Army and Nation: The Military and Indian Democracy Since Independence* (Cambridge, MA: Harvard University Press, 2015), 6-7.
- 100. Ibid., 93.
- 101. A. G. Noorani, "Muslims in the Forces," Countercurrents.org, October 13, 2003, in a review of Omar Khalidi, *Khaki and the Ethnic Violence in India: Army, Police and Paramilitary Forces during Communal Riots* (New Delhi: Three Essays Collective, 2003), http://www.countercurrents.org/comm-noorani131003.htm. The Indian Air Force has had one Muslim air chief marshal, the Indian Military Academy has had one Muslim commandant, and the National Defense Academy has had two (Amit R. Saksena, "India's Muslim Soldiers: Muslims Are Underrepresented in India's Army. But This Should Not Be Allowed to Skew Recruitment," *The Diplomat*, May 20, 2014, http://thediplomat.com/2014/05/indias-muslim-soldiers/).
- 102. The 1857 mutiny is referred to by a variety of names, among them the Sepoy Mutiny, the Indian Mutiny, the Great Rebellion, the Revolt of 1857, the Indian Insurrection, and India's First War of Independence. The British took many other measures to prevent any recurrence of mutinous behavior. Complete regiments of British soldiers were dispatched to India, artillery units were entirely manned by British soldiers, classes involved in the Mutiny were not allowed into the new army, and classes that had remained loyal, including Muslims from Punjab, were heavily recruited. See Stephen P. Cohen, *The Indian Army: Its Contribution to the Development of a Nation* (New Delhi: Oxford University Press, 1990), 54 and passim; and Wilkinson, *Army and Nation*, 21.
- 103. Jawaharlal Nehru, *Letters to Chief Ministers* 1947-1964: *Volume* 3, 1952-54 (New Delhi: Oxford University Press, 1988), 375-376; and Noorani, "Muslims in the Forces."
- 104. Richard Sisson and Leo E. Rose, *War and Secession: Pakistan, India, and the Creation of Bangladesh* (Berkeley, CA: University of California Press, 1991), 234.
- 105. Only the 1989 Student, 2000 Student, and 2005 Student offered percentage estimates of military family backgrounds, with the 1989 and 2005 Students estimating 50 percent and the 2000 Student estimating only 20-25 percent. The difference likely reflects varying definitions of what constitutes a "military background." Direct lineal family descent would yield a smaller estimate while membership in a wider clan network would yield a higher estimate. Both may be correct.
- 106. 2001 Student, interview by author, August 28, 2016.
- 107. 2003 Student, interview by author. The sociology of India is too complex for any short discussion of the interface of caste, religion, and occupation as a means to define India's large number of communities. In Hinduism there are traditionally four *varnas*, or social classes. These are also referred to generally as castes: Brahmins are priests, scholars and teachers; Kashatriyas are rulers, warriors and administrators; Vaishyas are agriculturalists and merchants; and Shudras are laborers and service providers. Dalits are outside caste distinctions. The Jats referred to by the 2003 Student are a traditionally agricultural community in Northern India and Pakistan. Their *varna* is Vaishya and their religion can be either Muslim, Hindu, or Sikh. The British traditionally considered them to be among the best of the so-called martial races.

- 108. 2003 Student, interview by author; and 2007 Student A, interview by author, January 31, 2017.
- 109. A racist slur used against people from Northeast India, the term "chinky" has been described by journalists and academics alike. See Alana Golmei, "Let's Talk about Racism: Don't Call Us 'Chinky, Momo, Chowmein,' Says a Northeastern Woman," *Hindustan Times*, May 23, 2017, https://www.hindustantimes.com/india-news/let-s-talk-about-racism-don-t-call-us-chinki-momo-chowmien-asks-a-northeastern-woman/story-SJckp4InptNV6Te29dIltJ.html; Thongkholal Haokip, "From 'Chinky' to 'Coronavirus': Racism Against Northeast Indians During the Covid-19 pandemic," *Asian Ethnicity*, 2020.
- 110. 2008 Student, interview by author, January 11, 2017. This refers to the martial races concept employed by the British to recruit the reorganized army after the 1857 Mutiny. The "martial races" supposedly were those who were strong and willing to fight, while nonmartial races were more sedentary (and generally were darker-skinned). The theory was also rooted in which classes fought against British rule in 1857 and which remained loyal. The concept was accepted in India because there was already a precedent in Indian culture, as one of the four orders (*varnas*) in the Vedic social system of Hinduism is known as Kashatriya, literally "warriors." For a more detailed discussion see Philip Mason, A *Matter of Honor: An Account of the Indian Army, Its Officers and Men* (London: Papermac, 1974), 341-361.
- 111. 2007 Student B, interview by author.
- 112. Cohen, The Indian Army, page 215.
- 113. 1984 Student, interview by author.
- 114. 1995 Student, interview by author.
- 115. The official ethos of the Indian Army is as follows: "Espirit-de-Corps: The spirit of comradeship and brotherhood of the brave, regardless of caste, creed or religion. The motto is, 'One for all and all for one'! Spirit of Selfless Sacrifice: The tradition is never to question, but to do or die for the three 'Ns'; Naam, i.e. name-honour of the unit/Army/Nation, 'Namak' (salt), i.e. loyalty to the Nation, and 'Nishan,' i.e. the insignia or flag of his nit/regiment/Army/Nation which the soldiers hold afloat willingly. Valour: Fearlessness in combat and in the face of the enemy even when fighting against great odds or even when facing sure death. Non-discrimination: The Indian Army does not discriminate on account of caste, creed or religion. A soldier is a soldier first and anything else later. He prays under a common roof. It is this unique character, which makes him bind in a team despite such diversity. Fairness and Honesty: The spirit of honesty and fair play. He fights for a just cause that extends even to the enemy (prisoner or wounded). Discipline and Integrity: Discipline and integrity impart the feeling of patriotism, honesty and courage under all circumstances, however strong be the provocation otherwise. Fidelity, Honour and Courage: He is a man on whose shoulders lies the honour and integrity of his nation. He knows that he is the last line of defence and he cannot fail the Nation. Death to Dishonour: A close bond amongst soldiers forces them to choose death to dishonour. The concept of 'Izzat' (honour) in the clan/unit enables them to shun the fear of death; to be called a coward in the peer group is worse than death" (Indian Army, https://www.indianarmy.nic.in/site/formTemplete/frmtempsimple.aspx?MnId=Vejx3Dkml+ud3YmcKc6B/A==&ParentID=RuQ+vVM57FirJYXrHRLBHA).
- 116. Cohen, The Indian Army, 190.
- 117. See Louis Renou, ed., *Hinduism* (New York: George Braziller, 1962); and Gavin Flood, *An Introduction to Hinduism*, (New York: Cambridge University Press, 1996).
- 118. The BJP traces its roots to the Bharatiya Jana Sangh (Indian People's Association), which was established in 1951 as the political wing of the pro-Hindu group Rashtriya Swayamsevak Sangh (National Volunteers Corps). It advocated rebuilding India in accordance with Hindu culture and the formation of a strong unified state. It subsequently reorganized as the BJP under the leadership of A. B. Vajpayee, L. K. Advani, and M. M. Joshi. The BJP advocates Hindutva, or "Hindu-ness," an ideology that seeks to define Indian culture in terms of Hindu values. It was highly critical of the secular policies and practices of the Congress Party. See Christophe Jaffrelot, *Hindu Nationalism: A Reader*, (Princeton, NJ: Princeton University Press, 2007).
- 119. 1979 Student, interview by author, September 21, 2016. There may have been a slightly different organizational culture in the Navy Wing. 1994 Student B didn't recognize the term PCK but said it was always referred to as "the gouge," a term widely used in the U.S. Navy to refer to essential information not widely known. It existed in the Navy Wing, he said, but was never shared with him.

- 120. 1984 Student, interview by author.
- 121. 2011 Student B, end-of-tour report.
- 122. 2001 Student, interview by author.
- 123. 2012 Student, interview by author.
- 124. 2006 Student, interview by author, August 28, 2016.
- 125. 1998 Student, interview by author.
- 126. U. V. Talur, "What They Do Not Teach at the Staff College," The Owl, 1999-2000 edition, 42-43.
- 127. 2011 Student and 2014 Student, interviews by author.
- 128. 2017 Student, interview by author, September 7, 2017.
- 129. M. Attiqur Rahman, "The Staff College as I Knew It," Platinum Jubilee pamphlet (Quetta: Staff College, 1980), 141.
- 130. The reference to "the Pink" refers to the color of paper used to print the DSSC solution (Palsokar, *Defence Services Staff College*, 183).
- 131. 2003 Student, interview by author.
- 132. A brigadier in the Indian Army is not considered a general officer. General officer ranks begin at major general (1984 Student, interview by author).
- 133. 1989 Student, interview by author. A close analogy to the central model discussion may be found in the 1973 film, *The Paper Chase*, in which first year Harvard Law School students are relentlessly put through their paces by a brilliant but unemotional professor in order to weed out those who lack the ability to perform acceptably.
- 134. 2005 Student, interview by author.
- 135. The Student noted that the 1982 American student had done so well on the course that he received the designation of instructor on his final report. Although Indian students receive a confidential report, only a portion is revealed to them. Foreign students receive a formal evaluation to take back to their home country (1984 Student, interview by author).
- 136. 1979 Student, 1995 Student, and 2000 Student, interviews by author.
- 137. 2016 Student, interview by author.
- 138. 2007 Student A, interview by author, January 31, 2017.
- 139. The author did not discover the precise year this occurred. The 2001 Student was the last to mention that his course was organized in quarters.
- 140. 2011 Student B, end-of-tour report. Although this student was describing the Air Force Wing, the tutorial periods of the Army Wing would have been similar with the exception that joint exercises would typically have been in Army-Air-Force joint syndicates until the final tri-service exercise near the end of the course.
- 141. 2017 Student, interview by author.
- 142. Defence Services Staff College, "DSSC History," http://www.dssc.gov.in/dssc-history.html.
- 143. 2010 Student B, end-of-tour report.
- 144. Minutes of a commandant's conference held on November 30, 1999. As mentioned earlier, the commandant of the DSSC is always an army officer.
- 145. 2006 Student, interview by author.
- 146. 1979 Student, interview by author.
- 147. 2001 Student, interview by author. The "ditch cum bund" operation is Indian Army shorthand to describe a ground operation to cross a major irrigation canal, a common terrain feature on the plains of Punjab.
- 148. The Pakistan-like opponent was called *Nark Desh* and the friendly force, presumably India, was called *Swarg Desh*. The students who spoke Hindi translated these into "Country of Hell" and "Country of Heaven,"

respectively. The China-like opponent was simply called Chandol Desh, with no apparent moral connotation.

- 149. 2011 Student B, end-of-tour report.
- 150. 2016 Student, interview by author.
- 151. U.S. Army, Unified Land Operations, Doctrine Reference Publication 3-0, Washington, D.C., May 6, 2012.
- 152. The Kargil War was a two-month operation in June-July 1999 involving only two Indian Army infantry divisions augmented by large amounts of artillery.
- 153. 1998 Student, interview by author.
- 154. 2006 Student, interview by author.
- 155. 1992 Student, interview by author.
- 156. 2015 Student, interview by author.
- 157. 2010 Student A, interview by author.
- 158. 2002 Student, interview by author. The 1995 Student likewise agreed there was no meaningful role for army aviation in exercise planning.
- 159. 2015 Student, interview by author.
- 160. 2012 Student, interview by author.
- 161. 1992 Student and 1998 Student, interviews by author.
- 162. 2007 Student B, interview by author. The Student considered the Indian Air Force to be the most progressive of the three Indian military services. He considered that much of the air force doctrine taught at the DSSC was clearly designed to support the Indian Army's Cold Start ground doctrine. In the event of a future conflict, he said, Indian Air Force doctrine would have as its first priority the mission of stopping and stabilizing counteroffensive ground operations conducted by the Pakistan Army; the second priority would be to provide air cover to Indian Army forces counterattacking those Pakistani ground forces; and the third priority would be to initiate a campaign of rapid and deep air strikes against Pakistani Air Force operating bases. There was a general assumption that the SU-30 MKI aircraft provided by Russia and being built under license in India would allow the Indian Air Force to gain and maintain air superiority over the Pakistan Air Force. ISR (intelligence, surveillance, and reconnaissance) was a distant fourth priority, but was beginning to receive more emphasis in the Indian Air Force.
- 163. 1989 Student, interview by author.
- 164. 2016 Student, interview by author.
- 165. 2017 Student, interview by author.
- 166. 2010 Student A, interview by author.
- 167. 2012 Student, interview by author.
- 168. Wolpert, Shameful Flight, 183.
- 169. The 1992 Student characterized his year at Wellington as a period of external and internal upheaval in which many traditional underpinnings of Indian foreign and domestic policy were in flux. Its staunchest external friend and supplier of military goods, the Soviet Union, collapsed; the insurgency in Kashmir increased in intensity; another insurgency in northeastern India similarly increased; and the intervention in the Sri Lankan civil war was coming to be viewed as a great mistake. The student reported that the mood of many of his classmates was gloomy, that they were pessimistic about the direction of the country, and that they lacked optimism about the future. "Their world was falling apart," he said. "The Soviet Union was gone and India itself seemed to be coming apart at the seams" (1992 Student, interview by author).
- 170. 1995 Student and 2005 Student, interviews by author.
- 171. In order, 2010 Student A, 2012 Student, 2005 Student, 2001 Student, 1979 Student, 2007 Student B, 2014 Student, 2015 Student, and 2017 Student, interviews by author.

- 172. 1989 Student, interview by author. According to the Student, there were two students from the Soviet Union attending the DSSC that year: "They pretended to be real army officers," but most western students assumed they were intelligence officers from the GRU. Neither spoke English very well, and they likely had been sent to India on short notice and with little preparation. The commandant knew they couldn't keep up in class and encouraged the western students to give them a hand, and "they were treated with kid gloves and separate standards." They had their families with them, seemed open and friendly, and were embraced by the western foreign students. During the Reagan years, the Department of Defense printed an annual unclassified booklet on glossy paper about the "Soviet Threat." When the student gave the Soviet students a copy, he was surprised to receive in return a similar Soviet publication about the "American Threat." Both laughed.
- 173. 1994 Student and 2007 Student B, interviews by author.
- 174. 1984 Student, 1992 Student, 1998 Student, 2005 Student, and 2017 Student, interviews by author.
- 175. 1998 Student, interview by author.
- 176. 2005 Student, interview by author.
- 177. 2001 Student, interview by author. The Student recalled that the theme of U.S. cowardice was even applied to the USS *Enterprise* event of 1971. "We didn't blink and you ran away" was the rejoinder.
- 178. 2007 Student A and Student B, interviews by author.
- 179. 1992 Student, interview by author.
- 180. 2002 Student, interview by author.
- 181. The fighting on the Siachen Glacier has been ongoing since April 1984, when the Indian Army launched Operation Meghdoot to occupy the bulk of the glacier. The conflict stems from the U.N.-mediated cease-fire in the 1949 Kashmir war that demarcated the cease-fire line between India and Pakistan up to point NJ9842 at the foot of the glacier. The largely inaccessible terrain beyond this point was not considered to be worth the effort to further demarcate. Both countries maintain a continuous presence at heights over 6,000 meters (20,000 feet), and at least 2,000 men have died in what Stephen Cohen frequently described over the years at conferences, seminars, and informal gatherings (several times in the author's presence) as the "struggle of two bald men over a comb."
- 182. 1979 Student, interview by author.
- 183. 1984 Student, interview by author.
- 184. 1992 Student, interview by author. The 1989 Student also observed the attitude that the Pakistan Army was a dark force with malign intentions toward India, and noted that *Nark*, the name used for the Pakistan-like notional enemy force in college exercises, was derived from a Hindi word meaning "power of darkness." Conversely, *Swarg*, Hindi for "heaven," was the friendly force in most exercises.
- 185. 1998 Student, interview by author.
- 186. 2000 Student, interview by author. General Pervez Musharraf seized power in a military coup in November 1998. *Crore* is a South Asian numerical measure equal to 10 million. Thus, the reference to "*crore* commander" is a pun to describe a corrupt corps commander.
- 187. 2001 Student, interview by author.
- 188. 2002 Student and 2005 Student, interviews by author.
- 189. 2001 Student, 2002 Student, and 2010 Student A, interviews by author.
- 190. This presentation caught everyone in the U.S. delegation by surprise, as it marked the first time India had openly identified China as its major strategic threat.
- 191. 1979 Student, 1984 Student, and 1992 Student, interviews by author.
- 192. 1999 Student and 2000 Student, interviews by author.
- 193. 2002 Student, 2005 Student, 2008 Student, and 2007 Student A, interviews by author.
- 194. 2011 Student A, 2012 Student, and 2014 Student, interviews by author.
- 195. C&FAF 2C, Area Analysis Study China (Wellington: Defence Services Staff College, August 2011), 58-59.

- 196. 2015 Student, 2016 Student, and 2017 Student, interviews by author.
- 197. Elizabeth Roche, "Second Anniversary of Doklam Standoff, A Look Back," *LiveMint*, August 28, 2019, https://www.livemint.com/news/india/second-anniversary-of-doklam-standoff-a-look-back-1566969504886.
 https://www.livemint.com/news/india/second-anniversary-of-doklam-standoff-a-look-back-1566969504886.
 https://www.livemint.com/news/india/second-anniversary-of-doklam-standoff-a-look-back-1566969504886.
 https://www.livemint.com/news/india/second-anniversary-of-doklam-standoff-a-look-back-1566969504886.
 https://www.livemint.com/news/india/second-anniversary-of-doklam-standoff-a-look-back-1566969504886.
 https://www.livemint.com/news/india/second-anniversary-of-doklam-standoff-a-look-back-1566969504886.
 https://www.livemint.com/news/india/second-anniversary-of-doklam-standoff-a-look-back-1566969504886.
 https://www.livemint.com/news/india/second-anniversary-of-doklam-standoff-a-look-back-1566969504886.
 https://www.livemint.com/news/india/second-anniversary-of-doklam-standoff-a-look-back-1566969504886.
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- 198. Ashley J. Tellis, "Hustling in the Himalayas: The Sino-Indian Border Confrontation," *Carnegie Endowment for International Peace*, June 4, 2020, https://carnegieendowment.org/2020/06/04/hustling-in-himalayas-sino-indian-border-confrontation-pub-81979.
- 199. 1979 Student and 1984 Student, interviews by author.
- 200. 1992 Student, interview by author.
- 201. The Indian Navy connection to Russia remains robust. In January 2018, negotiations began to acquire four stealth frigates, two built in Kaliningrad and two built in Goa. The acquisition will bring the total number of Russian stealth frigates to 10; India currently operates six frigates purchased between 2003 and 2013, three each of the Talwar Class and Teg Class. Russian technical assistance to India's indigenous nuclear submarine program is also immense. India's first nuclear submarine, the INS *Arihant*, could be operated only with Russian personnel assisting (*First Post*, "India to Negotiate Price for Russian Warships Next Week: Move Could Boost New Delhi's Ties with Its Most Important Defence Ally," January 11, 2018, http://www.firstpost.com/india/india-to-negotiate-price-for-russian-warships-next-week-move-could-boost-new-delhis-ties-with-its-most-important-defence-ally-4298021.html).
- 202. 1994 Student, 1999 Student, and 2000 Student, interviews by author.
- 203. 2008 Student, 2015 Student, and 2017 Student, interviews by author.
- 204. 1994 Student, 2001 Student, 2007 Student B, 2014 Student, 2016 Student, and 2017 Student, interviews by author.
- 205. 1979 Student, 2012 Student, and 2016 Student, interviews by author. In May 2016, Indian Prime Minister Narendra Modi paid a high-profile visit to Tehran, where India agreed to invest \$500 million in the Chabahar port development and regional road and rail connectivity with Afghanistan and Central Asia. With a plan to further invest an additional \$16 billion in the Chabahar, a free trade zone was also signed by both countries (Mohammed Pervez Bilgrami, "Iran's Relations with India," Center for Iranian Studies (IRAM), June 15, 2017, https://iramcenter.org/en/irans-relations-with-india/.
- 206. *Times of India*, "Highly Gratified by Cooperation from 'Great Friend' India on Iran: U.S.," August 1, 2019, https://timesofindia.indiatimes.com/business/india-business/highly-gratified-by-cooperation-from-great-friend-india-on-iran-us/articleshow/70476043.cms.
- 207. 1979 Student, 1989 Student, 1994 Student, and 1999 Student, interviews by author.
- 208. These were the 1979 Student, the 2000 Student, and the 2006 Student, and 2011 Student A.
- 209. 2010 Student A, interview by author.
- 210. 1994 Student, interview by author. As an example, he described his experience on the Industrial and Demonstration Tour, which was supposed to showcase Indian technology. He came away thinking that the only technology displayed was primitive, that the Indian transportation infrastructure was poor, and its manufacturing capability primitive at best. During a day at sea with the Indian Navy, he noted that the ship had no working emergency lights, that its fire extinguishers were not maintained, that the seals on watertight doors were badly deteriorated, and that rusty patches were painted over without scraping and priming.
- 211. 2000 Student, 2002 Student, 2007 Student A, and 2008 Student, interviews by author.
- 212. 2014 Student and 2011 Student A, interviews by author. 2007 Student A and 2007 Student B stated that in making other comparisons with the United States, Indian students usually ignored gross domestic product statistics, concentrating instead on the producer price index, in which the comparison was more favorable for India. All were proud of India's economic growth rate, which was much greater than that of the United States. India, they said, was destined to catch and eventually surpass China within a decade, and there was optimism that within 20 years India would reach economic parity with the United States.
- 213. The climax of the operation occurred on June 6 following a harrowing battle in which Indian troops

taking heavy casualties from the heavily fortified Akal Takht, a shrine located within the temple complex, elected to shell the shrine with 105 mm tank shells. This perceived defilement of the Golden Temple caused hundreds of Sikhs in the Army to mutiny. The outrage of the Sikh community throughout India eventually resulted in the assassinations of Prime Minister Gandhi in October 1984 and the chief of army staff two years later (Sir Mark Tully, "Operation Blue Star: How an Indian Army Raid on the Golden Temple Ended in Disaster," *The Telegraph*, October 22, 2014).

- 214. 1984 Student, interview by author.
- 215. Paul Wallace, "Khalistan Movement: Fragmented But Reviving?," (unpublished manuscript). Wallace, perhaps the preeminent U.S. scholar on the Indian Punjab, states that between 1981 and 1994, violence from the Khalistan movement resulted in 19,359 total deaths (11,684 police and civilian and 7,675 terrorist deaths). His data was compiled from National Integration Council, Ministry of Home Affairs, Government of India, *Profile of Violence in Punjab*, December 31, 1991, Annexure 1.
- 216. Seshadri Chari, "Kartarpur and Khalistan: Why Pakistan Army Has Been So Eager to Open Corridor with India," *The Print*, November 8, 2019, https://theprint.in/opinion/kartarpur-khalistan-why-pakistan-army-is-eager-to-open-corridor-with-india/317532/;; and *The Express Tribune*, "Khalistan Movement Stages Anti-India Rally," September 21, 2017, https://tribune.com.pk/story/1512915/khalistan-movement-stages-anti-india-rally/.
- 217. *India Today* journalist Inderjit Badhwar witnessed the rigging. In his account, "As the results came in, the victorious new government was busy arresting top MUF leaders ... on charges of anti-national activities. ... Chunks of the valley ... were under virtual curfew even as votes were being tabulated at some counting stations five days after they had been cast." (Praveen Donthi, "How Mufti Mohammad Sayeed Shaped the 1987 Elections in Kashmir," *The Caravan*, March 22, 2016, https://caravanmagazine.in/vantage/mufti-mohammad-sayeed-shaped-1987-kashmir-elections.)
- 218. Ayesha Ray, The Soldier and the State in India (New Delhi: Sage Publication India, 2013), 121.
- 219. 1984 Student, interview by author. The Sino-Pakistan Agreement of 1963 established an agreed international border between the two countries. China ceded 750 square miles of territory to Pakistan, and Pakistan recognized Chinese sovereignty over 2,050 square miles of territory in Northern Kashmir and Ladakh which it had never occupied or administered.
- 220. 1992 Student, interview by author. The Student arrived in India about six weeks after the assassination of Prime Minister Rajiv Gandhi. He thought this was symptomatic of a deteriorating internal security environment in which there were two simultaneous insurgencies going on in the west and east of the country, and the traditional dominance of national parties like Congress was threatened by regional and religious-based political parties like the BJP, which many classmates pointed out to him was "gathering bricks" to build a Hindu temple on the ruins of a Muslim mosque it had torn down in the village of Ayodya, a situation that enflamed communal tensions all over the country. The perceived decline in the traditional vision of India as a secular state further demoralized many of them.
- 221. 1995 Student, interview by author. The concept of Kashmiryat can be defined as a general expression of solidarity, resilience, and patriotism regardless of religious differences of the many diverse peoples that make up the state of J&K. This had evolved because of Kashmir's geographic and cultural isolation from the rest of India by the Himalayan Mountains, the harsh winter climate, and a history of foreign invasion. As an example, he cited the fact that much of the Hindu Pandit community that had once lived and worked side by side with Muslims in the Valley of Kashmir had been ethnically cleansed from their traditional homes and forced to move to the Hindi-majority area of Jammu.
- 222. 1992 Student and 1999 Student, interviews by author.
- 223. 2000 Student, interview by author.
- 224. 2005 Student, interview by author.
- 225. Between 2001 and 2011, annual terrorist incidents fell from 2,084 to 119, civilian deaths fell from 1,024 to 33, security forces deaths fell from 628 to 31, and terrorist deaths fell from 2,345 to 117. (South Asia Terrorism Portal, https://www.satp.org/datasheet-terrorist-attack/fatalities/india-jammukashmir).
- 226. 2007 Student B, 2014 Student, and 2017 Student A, interviews by author.

- 227. South Asia Terrorism Portal.
- 228. For a more comprehensive history, see Thomas F. Lynch III, "India's Naxalite Insurgency: History, Trajectory, and Implications for U.S.-India Security Cooperation on Domestic Counterinsurgency," *Strategic Perspectives* 22, Institute for National Strategic Studies (Washington, D.C.: National Defense University Press, 2016), 7-9.
- 229. S. S. Chandell, *Blood and Guts: The Saga of the Indian Army* (New Delhi: Indian Army Headquarters, 2004), 201.
- 230. Statista, "Number of Civilians Killed Due to Insurgency Incidents in Northeast India from 2014 to 2018," September 23, 2019, https://www.statista.com/statistics/1036409/civilian-deaths-northeast-india-insurgency/.
- 231. Northeast Today, "A Brief History of Assam, Assam Movement & Assam Accord and the Implementation of NRC & CAA," December 23, 2019, https://www.northeasttoday.in/a-brief-history-of-assam-assam-movement-assam-accord-and-the-implementation-of-nrc-caa/.
- 232. 2000 Student, 2002 Student, 2007 Student B, 2008 Student, and 2015 Student, interviews by author.
- 233. 2000 Student, interview by author.
- 234. 2005 Student, interview by author.
- 235. 2011 Student A, interview by author.
- 236. Ray, The Soldier and the State in India, 127.
- 237. 1984 Student, 1994 Student, 1998 Student, and 2001 Student, interviews by author.
- 238. Rajesh Rajagopalan, *Fighting Like a Guerrilla: The Indian Army and Counterinsurgency* (New Delhi: Routledge Taylor and Francis Group, 2008), 86-148; and Chandell, *Blood and Guts*, 198.
- 239. 1989 Student, 2001 Student, and 2002 Student, interviews by author.
- 240. 2003 Student and 2008 Student, interviews by author.
- 241. More recently, these are collectively referred to as the Central Armed Police Forces, which includes the Central Reserve Police Force, the Border Security Force, the Central Industrial Security Force, Sashastra Seema Bal, the Indo-Tibetan Border Police, and the Assam Rifles.
- 242. 1994 Student, interview by author.
- 243. DSSC, Armed Police Forces (Wellington: DSSC, March 1999), 1-2 and 8.
- 244. DSSC, Territorial Army and Para Military Forces (Wellington: DSSC, March 1999), 45; and Syed Ata Hasnain, "Rashtriya Rifles: The Story of Independent India's Finest Military Experiment," Swarajyamag, July 23, 2017, https://swarajyamag.com/defence/rashtriya-rifles-the-story-of-independent-indias-finest-military-experiment.
- 245. DSSC, Territorial Army and Para Military Forces, 31-32.
- 246. DSSC, "Low Intensity Conflict Operations: Problems of Definition. Extracts from College of Combat Seminar," in *Armies in Low Intensity Conflict (LIC)* (Wellington: DSSC, March 2002), 3-4.
- 247. Army Training Command, Integrated Headquarters of Ministry of Defence, *Doctrine of Sub Conventional Operations (DSCO)*, December 2006, ii-iii.
- 248. Ibid., 65-66. Curiously, for many years after the publication of this capstone document, older reference materials continue to be in use at the DSSC that use the term "low intensity conflict" to describe operations below the level of general war.
- 249. Ibid., 44, 53, 66. The commandments were promulgated by either General S. F. Rodrigues or General B. C. Joshi, both of whose tenures included part of 1993.
- 250. Rajesh Rajagopalan, *Fighting Like a Guerrilla: The Indian Army and Counterinsurgency* (New Delhi: Routledge Taylor and Francis Group, 2008), 146.
- 251. DSSC Reference Book, Armies in Low Intensity Conflict, 5-11
- 252. In J&K, the 2019 security force/insurgent ratio has reached an astonishing 1,667:1 (750,000 to 450).

- 253. These five extracts were lightly edited to condense the main features.
- 254. DSSC, Low Intensity Conflict Operations, Reference Book LICO2 (Wellington: DSSC, December 1998).
- 255. 2007 Student A, interview by author.
- 256. 2017 Student A provided the author with a copy of his master's thesis, "Civil-Military Relations and Higher Defence Reforms in India: Analysis and Recommendations for the Future."
- 257. 2017 Student, interview by author.
- 258. 2001 Student, 2011 Student A, and 2017 Student, interviews by author.
- 259. The division of the British military establishment in India resulted in approximately 64 percent going to India, along with the overwhelming majority of the depots, schools, and defense production infrastructure, and 36 percent going to Pakistan (Nawaz, *Crossed Swords*, 30).
- 260. Stanley Wolpert, Jinnah of Pakistan (Islamabad: Oxford University Press, 1984), 352.
- 261. Quoted in Cohen, India: Emerging Power, 104-105.
- 262. M. J. Akbar, Nehru: The Making of India (London: Viking [Penguin Group], 1988), 407.
- 263. The only Punjabi appointed chief of army staff during this period was P. N. Thapar (1961-1962), who was selected purely because of Defence Minister Krishna Menon's belief in his pliability (Cohen, *India: Emerging Power*, 170-172; and Wilkinson, *Army and Nation*, 20-25).
- 264. As another example of his indifference to the armed forces, Nehru did not visit the DSSC for the first time until 1958, 11 years after independence.
- 265. Akbar, Nehru, 549-552.
- 266. Stephen Cohen, "Civilian Control of the Military in India," in Claude Welch, Jr., ed., *Civilian Control of the Military* (Albany, NY: State University of New York Press, 1976), 47.
- 267. Prime Minister Narendra Modi announced on August 15, 2019, that India would soon have a chief of defence staff. Issues related to India's Higher Defence Organization and recent evolution in the civil-military relationship will be addressed in more detail later in this study.
- 268. V. P. Malik, India's Military Conflicts and Diplomacy: An Inside View of Decision Making (Noida, Uttar Pradesh: Harper Collins, 2013).
- 269. This reference book was used at least through 2014 and probably has remained in use until this year when the government decided to create the new position of Chief of Defence Staff. It will almost certainly be modified before the 76th course in 2020-2021.
- 270. Each day in the syndicate room typically began with a discussion of current events. Indian political issues were occasionally discussed, but the Student considered his classmates to be interested in politics without being "political" in the sense of belonging to or supporting any political party. Intense political partisanship did not seem to be the norm for Indian military personnel (2012 Student, interview by author).
- 271. The Fifth Pay Commission had recently approved a major pay increase for military personnel, boosting individual pay by as much as 50 percent in some cases. Many students who had arrived at the college without cars had immediately gone out to buy them, as well as computers (1998 Student, interview by author).
- 272. 1992 Student, interview by author.
- 273. 2005 Student, interview by author.
- 274. 1998 Student, interview by author.
- 275. 2008 Student, interview by author.
- 276. 1989 Student, interview by author. This Student later served as a military attaché in India.
- 277. 1979 Student, interview by author.
- 278. 2003 Student, interview by author.

- 279. 2000 Student, interview by author.
- 280. 2005 Student, interview by author.
- 281. 2014 Student and 2015 Student, interviews by author.
- 282. See Vaishnav, 2019, 1.
- 283. 1992 Student, interview by author.
- 284. 1989 Student, interview by author.
- 285. 1979 Student, interview by author.
- 286. India's defense production establishment employs 180,000 workers and consists of 52 DRDO laboratories, nine defense public sector units, and 41 ordnance factories with an annual budget of \$10.5 billion (Anit Mukherjee, *The Absent Dialogue: Politicians, Bureaucrats, and the Military in India* (New York: Oxford University Press, 2020), 122-123.
- 287. A major political scandal involving India and Sweden that implicated several members of the Indian and Swedish governments, including Prime Minister Rajiv Gandhi, in receiving kickbacks in a \$1.4 billion deal for the sale of 410 field howitzer guns to India by the Swedish defense firm Bofors.
- 288. 2000 Student, interview by author. Among the many issues with the Arjun was that it was too wide to be used in many parts of the Indian railroad system and too heavy to cross many Indian highway bridges.
- 289. 2000 Student and 2015 Student, interviews by author.
- 290. 2001 Student, interview by author.
- 291. Derived from "Higher Defence Organization," a lecture presented during the DSSC's 72nd course.
- 292. 1999 Student and 2011 Student A, interviews by author.
- 293. 2017 Student A, "Civil-Military Relations and Higher Defence Reforms in India." A copy of this thesis was made available to the author.
- 294. 1979 Student, 1992 Student, and 1994 Student A, interviews by author.
- 295. 1999 Student, interview by author.
- 296. Italics added for emphasis (DSSC, Media Handout, 63rd course, 2007-08, 5 and 14).
- 297. 2006 Student, 2011 Student A, 2014 Student, and 2016 Student, interviews by author.
- 298. 2017 Student, interview by author.
- 299. Two excellent books about India's nuclear weapons program and issues arising from it are George Perkovich, *India's Nuclear Bomb: The Impact on Global Proliferation* (Berkeley, CA: University of California Press, 1999); and Ashley Tellis, *India's Emerging Nuclear Doctrine* (Santa Monica, CA: RAND Corporation, 2001).
- 300. Perkovich, India's Nuclear Bomb, 128-131, 152, and 177-178.
- 301. Tellis, India's Emerging Nuclear Doctrine, 45 and 286-287.
- 302. Palsokar, Defence Services Staff College, 75, 84, 156, 190-192, 194, and 200.
- 303. India considered such criticism to be unfair because its nuclear program was entirely indigenous. When the 1992 Student expressed surprise at this attitude because India had conducted a nuclear test in 1974, he was immediately "corrected" on this point. India had not conducted a test, an Indian student explained, it had only conducted a "peaceful nuclear explosion" (1992 Student, interview by author).
- 304. For example, U.S. Army, Staff Officers' Field Manual: Nuclear Weapons Employment Doctrine and Procedures (Unclassified), FM 101-31-1, February 1968.
- 305. 1994 Student A, 1998 Student, 1999 Student, 2001 Student, and 2005 Student, interviews by author. Also, see Annex F.
- 306. DSSC, Joining Instructions for 67th course, 2011-2012, paragraph 7.
- 307. 2017 Student, interview by author.

- 308. 1979 Student, 2005 Student, and 2007 Student A, interviews by author.
- 309. 1998 Student, 1999 Student, and 2005 Student, interviews by author.
- 310. 1998 Student and 2000 Student, interviews by author.
- 311. 1979 Student and 1998 Student, interviews by author.
- 312. 2001 Student, 2002 Student, 2005 Student, and 2007 Student B, interviews by author.
- 313. 1992 Student, interview by author.
- 314. 2011 Student A and 2015 Student, interviews by author.
- 315. Pedagogy includes the theory and practice of teaching, the strategies employed in order to teach, the specific interaction of teacher and students, the instructive content used, the combined goals of the learner and teacher, and the way the content is presented and delivered to the learner. Tara Barton, "Pedagogy In Education," *Serve Learn*, July 1, 2019, https://servelearn.co/blog/pedagogy-in-education/.
- 316. On civil-military relations see Mukherjee, *The Absent Dialogue*. On political choices, see Stephen P. Cohen and Sunil Dasgupta, *Arming Without Aiming: India's Military Modernization* (Brookings Institution Press, 2013). On social structure, see Stephen Peter Rosen, *Societies and Military Power: India and Its Armies* (Cornell University Press, 1996). On organizational culture, see Elizabeth Kier, "Culture and Military Doctrine: France between the Wars," *International Security*, Vol. 19, No. 4 (Spring, 1995), 65-93 and Rajesh Rajagopalan, *Fighting Like a Guerrilla: The Indian Army and Counterinsurgency*, (New Delhi: Routledge, 2008). On strategic culture, see George Tanham, Indian Strategic Culture, *Washington Quarterly*, 15 (1), 1992, 129-142 and Alastair Iain Johnston, *Cultural Realism: Strategic Culture and Grand Strategy in Chinese History* (Princeton, NJ: Princeton University Press, 1995).
- 317. Pavan K. Varma is a former member of the Indian Foreign Service who served in Moscow, in New York on the Indian mission to the United Nations, and as the Indian high commissioner in Cyprus. More recently, he was press secretary to the president of India, spokesman for the Indian Foreign Office, and director of the Nehru Centre in London. His book is *Being Indian*: The Truth about Why the Twenty-First Century Will Be India's (London: Viking Penguin Press, 2004).
- 318. To be sure, there is also substantial evidence of an Indian argumentative tradition, skepticism, accepted heterodoxy, and asking difficult questions. See Amartya Sen, *The Argumentative Indian: Writings on Indian History, Culture and Identity,* (New York: Farrar, Straus and Giroux, 2005).
- 319. Ibid., 21, 24
- 320. Ibid., 76, 78, and 103
- 321. Ibid., 129-130
- 322. See Amartya Sen, The Argumentative Indian: Writings on Indian History, Culture and Identity, (New York: Farrar, Straus and Giroux, 2005).
- 323. Smith, The Quetta Experience, 17, 89.
- 324. By contrast, Sikh students constituted 17.3 percent of Army Wing students at the DSSC in a given year.
- 325. To be fair, it should be pointed out that retired Lieutenant General Syed Ata Hasnain served as the Indian Army's military secretary after commanding XV Corps in Srinagar and XXI Corps in Bhopal. He is the son of another Muslim officer, Major General Syed Mahdi Hasnain, and retired in 2013.
- 326. Muslims are found in fixed-class subunits of the following infantry regiments: Grenadiers, J&K Light Infantry, J&K Rifles, Ladakh Scouts, and a few armored units (Gautam, *Composition and Regimental System of the Indian Army*, 44-45).
- 327. Kim H. Tran, "The Influence of Identity: An Examination of Diversity in India's Security Forces," *Columbia Undergraduate Journal of South Asian Studies*, http://www.columbia.edu/cu/cujsas/Volume%20I/Issue%20II/Kim%20H%20Tran%20-%20The%20Influence%200f%20Identity.pdf.
- 328. The Rajinder Sachar Committee, appointed by Prime Minister Manmohan Singh, was a high-level committee tasked with preparing a report on the social, economic, and educational status of the Muslim community in India (Sachar Committee, Cabinet Secretariat, Government of India, Social, Economic and Educational Status of

- the Muslim Community of India Prime Minister's High Level Committee: A Report, November 2006, 165, 167-168).
- 329. Pew Research Center, "10 Countries with the Largest Muslim Populations, 2010 and 2050," April 2, 2015, http://www.pewforum.org/2015/04/02/muslims/pf_15-04-02_projectionstables74/.
- 330. See Vaishnav, 2019, 6-7.
- 331. Sidharth Bhatia, "This Will Be the Year of Peak Hindutva," *The Wire*, January 4, 2018, https://thewire.in/210344/hindutva-india-2018-bjp-rss-sangh/.
- 332. Aparna Pande, "Secular India vs. Hindu Nationalism," *Huffington Post*, January 5, 2015, https://www.huffingtonpost.com/aparna-pande/secular-india-v-hindu-nat_b_6397778.html.
- 333. Rosen, 1996, Chapter 1, 1-32.
- 334. 2014 Student and 2015 Student, interviews by author.
- 335. Gautam, Composition and Regimental System of the Indian Army, 5.
- Rawat in an interview with *India Today* magazine. Subsequently asked why he had done so, he replied, "[We] know that the future wars will be short and intense and, when short and intense wars are the future forms of combat, you have to be prepared to move fast....The other reason for coming out with this was, to communicate to the rank and file and field commanders the kind of preparations they have to carry out for future combat. That is the messaging that was meant to that statement that I made." Sandeep Unnithan, "We will cross again," *India Today*, January 4, 2017, https://www.indiatoday.in/magazine/interview/sto-ry/20170116-lt-general-bipin-rawat-surgical-strikes-indian-army-985527-2017-01-04 and Ajai Shukla, "Why General Bipin Rawat Acknowledged the Cold Start Doctrine," *The Wire*, January 20, 2017, https://thewire.in/diplomacy/cold-start-pakistan-doctrine.
- 337. The Indian Army commenced offensive operations at Kargil on June 6, 1999, and concluded them on July 11. Prime Minister Vajpayee announced the end of Operation Vijay on July 14.
- 338. Jointness is the term used in the U.S. armed forces to describe cross-service cooperation in every military endeavor ranging from research, procurement, planning, and the final execution of operations. It is achieved either through informal coordination between the services (as in World War II through 1985) or in a hierarchy where an overall coordinator adjudicates and decides disagreements (since 1986, after enactment of the Goldwater-Nichols Department of Defense Reorganization Act).
- 339. 1992 Student, 2012 Student, and 2015 Student, interviews by author.
- 340. Mukherjee, The Absent Dialogue, 165.
- 341. The latest manifestation of the "go it alone" syndrome is a decision by the Indian Army to purchase six Apache attack helicopters from the United States. The IAF bought 22 Apaches in 2015 and operates them in the Western Air Command. The Army Apaches will be distributed among three Strike Corps along the international border with Pakistan. Apaches are designed for destroying enemy tanks, but now India plans to fly them in the same general area with pilots from two different services in separate command chains and to maintain them in separate logistics branches. Sandeep Unnithan, "The Tough Road Ahead: Armed Forces," *India Today*, January 31, 2020, https://www.indiatoday.in/magazine/the-big-story/story/20200210-the-tough-road-ahead-armed-forces-1641453-2020-01-31.
- 342. Zoom conference with the author, June 2, 2020. Under the rules of the conference, the participants cannot be named.
- 343. 2017 Student A, interview by author. I tend to agree with this characterization of the relationship and provide my reasons in the "Implications for the Future of U.S.-India Relations" section.
- 344. David O. Smith, "The Management of Pakistan's Nuclear Arsenal," *The Nonproliferation Review* 21, no. 3-4 (September-December 2014), 275-294. But time moves on. Pakistan's nuclear arsenal has grown from an assessed 120 nuclear warheads in 2014 to 160 as of April 2020 according to Kristensen and Korda, "Status of World Nuclear Forces."
- 345. This is a term the author first heard used in 2014 during a bilateral engagement with Indian and Pakistani security analysts. The rules of that engagement preclude any further attribution or identification of the participants.

- 346. Hindustan Times, "Ready to Call Pakistan's Nuclear Bluff, Says Army Chief Bipin Rawat," January 12, 2018, https://www.hindustantimes.com/india-news/ready-to-call-pakistan-s-nuclear-bluff-army-chief-bip-in-rawat/story-4IaODMvEShEFoDLsiVSpLJ.html.
- 347. Statistics Times, India vs. China GDP, http://statisticstimes.com/economy/china-vs-india-gdp.
 php; and International Monetary Fund World Economic Outlook, April 2015, <a href="http://www.imf.org/external/pubs/ft/weo/2015/01/weodata/weorept.aspx?pr.x=31&pr.y=6&sy=1980&ey=2020&scsm=1&ss-d=1&sort=country&ds=.&br=1&c=924%2C534&s=NGDP_RPCH%2CNGDPD%2CNGDPDPC%2CPPPGD-P%2CPPPPC&grp=0&a=.
- 348. Southern Indians were decidedly less negative about Pakistan, with only 36 percent expressing a very unfavorable opinion, compared with 68 percent in the east, 69 percent in the north and 77 percent in the west. Even more remarkable, 30 percent of southern Indians reported a favorable view of Pakistan compared with 6 percent in the north and east and 3 percent in the west (Bruce Stokes, Dorothy Manevich, and Hanyu Chwe, "India and the World," *Pew Global Attitudes and Trends*, November 15, 2017, https://www.pewresearch.org/global/2017/11/15/india-and-the-world/.
- 349. Bilateral trade between India and China is approximately \$70 billion annually, making China India's number one trading partner, followed in order by the UAE, United States, and Saudi Arabia (Lily Kuo, "China is Now India's Top Trading Partner And One of Its Least Liked," *Quartz Media*, March 3, 2014, https://gz.com/183134/china-is-now-indias-top-trading-partner-and-one-of-its-least-liked/).
- 350. COAS General Deepak Kapoor announced at an Army Training Command doctrine seminar in late December 2009 that the Indian Army must prepare for a two-front war (Gurmeet Kanwal, "A Very Tight Spot: India Faces a Huge Security Challenge with the Possibility of a Two-Front Conflict," *The Daily O*, March 28, 2019, https://www.dailyo.in/politics/india-s-security-threat-india-pakistan-india-china-china-pakistan-cpec-kashmir-masood-azhar-jihadis/story/1/30888.html.
- 351. Daniel Kliman, Iskander Rehman, Kristine Lee, and Joshua Fitt, "Imbalance of Power: India's Military Choices in an Era of Strategic Competition with China," *Center for a New American Security*, October 23, 2019, https://www.cnas.org/publications/reports/imbalance-of-power.
- 352. Yasmeen Aftab Ali, "A Sustainable Solution for Afghanistan," *Pakistan Today*, June 5, 2017, https://www.pakistantoday.com.pk/2017/06/05/a-sustainable-solution-for-afghanistan/.
- 353. Srividhya Iyer, "Narendra Modi Strangles Pakistan Strategically, Enhances Ties with Tajikistan President Rahmon," *India.com*, December 17, 2016, https://www.india.com/news/india/narendra-modi-strangles-pakistan-strategically-enhances-ties-with-tajikistan-president-rahmon-1710624/.
- 354. C. Christine Fair, "India in Afghanistan, Part I: Strategic Interests, Regional Concerns," *Foreign Policy*, October 26, 2010, http://foreignpolicy.com/2010/10/26/india-in-afghanistan-part-i-strategic-interests-regional-concerns/.
- 355. Avinash Paliwal, "The 'India Question' in Afghanistan," *Lawfare*, October 6, 2019, https://www.lawfareblog.com/india-question-afghanistan.
- 356. 2007 Student A, interview by author. At that time Petraeus' success in Iraq had not yet been demonstrated.
- 357. Zoom conference with the author, June 2, 2020. Under the rules of the conference, the participants cannot be named.
- 358. The 1988 Indian Army operation in the Maldives was not a counterinsurgency operation. It was strictly a conventional military operation involving 1,600 soldiers to defeat a group of 80 armed mercenaries that had seized control of the capital of Male.
- 359. According to a leading U.S. scholar specializing in Indian Punjab, at least seven terrorist groups have been active since the collapse of the Khalistan insurgency in the 1990s. They operate internationally from Lahore, Pakistan, with funding and direction from the ISI. The groups are the International Sikh Youth Federation, Babbar Khalsa International, Khalistan Tiger Force (or Khalistan Terror Force), Khalistan Zindabad Force, Khalistan Liberation Force, Dal Khalsa International, and Khalistan Commando Force (Paul Wallace, "Khalistan Movement: Fragmented but Reviving?," draft manuscript, November 13, 2017).
- 360. Ahsan I. Butt, Secession and Security: Explaining State Strategy Against Separatists (Ithaca, NY: Cornell

University Press, 2017). See Chapter 3, "India's Strategies against Separatism in Assam, Punjab, and Kashmir, 1985-1994," 83-124.

- 361. 2017 Student A, interview by author.
- 362. Quoted in Butt, Secession and Security, 114.
- 363. Amnesty International, "Six Things You Should Know about Pellet Shotguns in Kashmir," https://web.archive.org/web/20181223025949/https://amnesty.org.in/six-things-know-pellet-shotguns-kashmir/.
- 364. Madhyamam, "We Facing a 'Dirty War' in J&K: Army Chief Gen Bipin Rawat," May 28, 2017, https://www.indiatvnews.com/news/india-dirty-war-in-j-k-has-to-be-fought-with-innovative-ways-gen-bipin-rawat-383507.
- 365. Comments supporting this point were made by the 1992 Student, 1999 Student, 2007 Student B, 2008 Student, 2014 Student, and 2017 Student A.
- 366. Smith, The Quetta Experience, 75-76 and 105-106.
- 367. The U.S. Department of State has published an annual human rights report since 1999 (https://www.state. gov/j/drl/rls/hrrpt/); BBC News, "Kashmir Graves: Human Rights Watch Calls for Inquiry," August 25, 2011, http://www.bbc.com/news/world-south-asia-14660253; Amnesty International, "India: 'If They Are Dead, Tell Us' - 'Disappearances' in Jammu and Kashmir," March 2, 1999, https://web.archive.org/web/20080605063730/https:// www.amnesty.org:80/en/library/info/ASA20/002/1999/en; and Caitlin Huey-Burns, "Amnesty International Cites Human Rights Abuse in Kashmir," U.S. News and World Report, March 28, 2011, https://www.usnews.com/news/ articles/2011/03/28/amnesty-international-cites-human-rights-abuse-in-kashmir. Perhaps the most voluminous study of the human rights situation in Jammu and Kashmir, and probably the most damning indictment of the Indian Army because it gives the names of officers associated with many incidents, is Structures of Violence: The Indian State of Jammu and Kashmir by the International Peoples' Tribunal on Human Rights and Justice in Indian-Administered Kashmir and the Association of Parents of Disappeared Persons. The report contains the details of 333 cases and provides the names of 972 individual perpetrators, including 464 army personnel, 161 paramilitary personnel, 158 Jammu and Kashmir police personnel, and 189 government gunmen. Among the alleged perpetrators from the Indian Army are one major general, seven brigadiers, 31 colonels, four lieutenant colonels, 115 majors, and 40 captains. The report can be found at https://jkccs.files.wordpress.com/2017/05/structures-of-violence-e28093-main-report.pdf.
- 368. 2003 Student and 2008 Student, interviews by author.
- 369. These acts have a long and controversial history in India. In addition to the 1990 act covering Jammu and Kashmir, similar acts were passed for Assam and Manipur in 1958 and for Punjab and Chandigarh in 1983. All have been upheld by India's Supreme Court. For a history of these acts and the ongoing debate about their application and legality, see Vivek Chadha, ed., *Armed Forces Special Powers Act: The Debate*, Institute for Defence Studies and Analyses Monograph Series no. 7, November 2012 (New Delhi: Lander's Books, 2013).
- 370. According to a Ministry of Defence document, about 50 cases were sent to the ministry by the J&K government since 2000 asking for approval to prosecute army personnel. Not a single case was approved. According to this document, in 2001, sanction was denied to prosecute soldiers involved in the killing of one person during military operations; in 2005, two cases were received for death during an encounter and another during retaliatory fire; in 2006, 17 cases were received for killing after abduction, apprehending and killing, death and apprehending of a civilian, outraging the modesty of a woman, disappearance of two civilians, rape of a woman, death of a civilian in operations, death of a civilian in retaliatory fire, beating of civilians, maltreatment, disappearance of a civilian, illegal detention of civilians, abduction of a civilian, and death of a civilian after abduction; in 2007, 13 cases were received related to torture and killing, apprehending and killing, rape of a woman, custodial death, three cases of disappearance of civilians, fake encounter leading to the death of one person, and killing of a civilian; in 2008, three cases were received for detention and killing of a civilian, disappearance of a civilian, theft, and molestation and rape; in 2009, two cases were received for disappearance and death under custody; in 2010, four cases were received involving the killing of a civilian, custodial death, and two cases of killing of a civilian; in 2011, two cases were received for kidnapping of civilians; in 2013, three cases were received involving the killing of "suspected terrorists" and two cases involving killings of civilians; in 2014, two cases were received involving civilian killings; in 2016, the cases received involved the killing of two civilians and causing injury to two civilians; and in 2017, the cases received involved the killing of three civilians for indiscriminate firing on protesters (Wasim Khalid, "Logical Conclusion': Of 50 Cases Sent to New Delhi of Army Men Committing Murder,

- Rape, Abduction, Torture, Not One Cleared for Prosecution," *Kashmir Reader*, February 3, 2018, https://kashmirreader.com/2018/02/03/logical-conclusion-of-50-cases-sent-to-new-delhi-of-army-men-committing-murder-rape-abduction-torture-not-one-cleared-for-prosecution/.
- 371. The Indian Express, "Macchil Killings: Tribunal Suspends Life Sentence of Five Army Personnel," July 27, 2017, http://indianexpress.com/article/india/machil-fake-encounter-armed-forces-tribunal-suspends-life-imprisonment-of-five-armymen/.
- 372. Human Rights Watch, World Report 2017, India: Events of 2016, https://www.hrw.org/world-report/2017/country-chapters/india.
- 373. Sajin Saju, "Army Concerned about Human Rights, But Time Hasn't Come for Any Rethink on AFSPA: General Bipin Rawat," *The Indian Express*, January 29, 2018, http://indianexpress.com/article/india/general-bipin-rawat-afspa-human-rights-jammu-and-kashmir-northeast-indian-army-5042370/.
- 374. Vijay Mohan, "Payback Time for the Armed Forces," Spectrum, *The Tribune India*, July 8, 2007, https://tribuneindia.com/2007/20070708/spectrum/main1.htm. By 2018, the deficiency in the army had been reduced to 7,764 officers in the grades of lieutenant through lieutenant colonel (Vaibhav Walia and Dr. Balu L, "Factors Affecting Work Motivation of Permanent Commissioned Officers in the Indian Army," *International Journal of Innovation & Advancement in Computer Science* 7, issue 3 (March 2018): 92).
- 375. Rakesh Kumar Jaiswal, Satyabhusan Dash, J. K. Sharma, Abhishek Mishra, and Suryatapa Kar, "Antecedents of Turnover Intentions of Officers in the Indian Military: A Conceptual Framework," *The Journal for Decision Makers* 40, issue 2 (April-June 2015): 151.
- 376. Quoted in Mohan, "Payback Time for the Armed Forces."
- 377. Mukherjee, The Absent Dialogue, 287.
- 378. India TV, "Military Should Be Kept Out of Politics: Army Chief General Bipin Rawat," December 6, 2017, http://www.indiatvnews.com/news/india-military-should-be-kept-out-of-politics-army-chief-general-bipin-rawat-415618.
- 379. Mukherjee, The Absent Dialogue, 5, 7.
- 380. This account was generally confirmed by former Pakistan Foreign Minister Khurshid Mahmud Kasuri in his 2015 memoir *Neither a Hawk nor a Dove.* (See Suhasini Haidar, "India, Pakistan Nearly Agreed on Siachen Three Times: Shyam Saran," *The Hindu*, September 6, 2017, http://www.thehindu.com/news/national/india-pakistan-nearly-agreed-on-siachen-three-times-shyam-saran/article19631457.ece#!). Mukherjee identifies four occasions (in 1989, 1992, 1994, and 2005-2006) when there was near-agreement on a Siachen withdrawal plan (Mukherjee, *The Absent Dialogue*, 252).
- 381. The event took place on September 12, 2017. Under the rules governing the event, neither the organization nor the identity of the journalist can be disclosed.
- 382. Carin Fisher, interview by author, August 22, 2017; and Hilal Mir, "Essay: In the Kashmir Valley Insurgency is a Way of Life," TFT World, January 26, 2018, https://www.trtworld.com/opinion/essay-in-the-kashmir-valley-insurgency-is-a-way-of-life-14724.
- 383. 2017 Student A, "Civil-Military Relations and Higher Defence Reforms in India."
- 384. Dinakar Peri, "In Surprise Move, Lt. Gen. Bipin Rawat Appointed Next Army Chief," *The Hindu*, December 17, 2016, http://www.thehindu.com/news/national/In-surprise-move-Lt.-Gen.-Bipin-Rawat-appointed-next-Army-Chief/article16896802.ece.
- 385. Madhyamam, "We Facing a 'Dirty War' in J&K."
- 386. Majid Jahangir, "Minister Hits Back at Gen Rawat for Education Revamp Remark," *The Tribune*, January 13, 2018, http://www.tribuneindia.com/news/jammu-kashmir/minister-hits-back-at-gen-rawat-for-education-revamp-remark/528149.html.
- 387. Vishnu Som, "Controversy over Army Chief's 'Political' View on Citizenship Law Protest," NDTV, December 26, 2019, https://www.ndtv.com/india-news/army-chief-general-bipin-rawat-says-on-citizenship-law-protests-leaders-are-not-those-who-lead-masse-2154552.
- 388. Malik, India's Military Conflicts and Diplomacy, 33-34.

- 389. Mukherjee, The Absent Dialogue, 49-50.
- 390. Business World, "The Slow Pace of Defence Reforms," September 22, 2017, http://businessworld.in/article/The-Slow-Pace-Of-Defence-Reforms-/22-09-2017-126812/.
- 391. 2017 Student A, "Civil-Military Relations and Higher Defence Reforms in India."
- 392. The Republic, "PM Modi-led CCS to Decide on Chief of Defence Staff (CDS)," November 20, 2019, https://www.republicworld.com/india-news/general-news/pm-modi-led-ccs-to-decide-on-chief-of-defence-staff-cds-sources.html; and *India Today*, "Govt Announces India's First Chief of Defence Staff to Bring Better Synergy between Forces," December 24, 2019, https://www.indiatoday.in/india/story/govt-announces-india-first-chief-of-defence-staff-1631123-2019-12-24.
- 393. Anit Mukherjee, "Three pitfalls of CDS, Dept of Military Affairs and Why It Should Make Us Skeptical," *The Print*, March 6, 2020, https://theprint.in/opinion/three-pitfalls-of-cds-dept-of-military-affairs-and-why-it-should-make-us-sceptical/376468/.
- 394. Sandeep Unnithan, "The Tough Road Ahead: Armed Forces," *India Today*, January 31, 2020, https://www.indiatoday.in/magazine/the-big-story/story/20200210-the-tough-road-ahead-armed-forces-1641453-2020-01-31.
- 395. Hans M. Kristensen and Matt Korda, "Status of World Nuclear Forces," *Federation of American Scientists*, April 2020, https://fas.org/issues/nuclear-weapons/status-world-nuclear-forces/.
- 396. Ankit Panda, "Indian Defense Minister: 'Circumstances' May Lead to Review of Nuclear 'No First Use' Policy," *The Diplomat*, August 18, 2019, https://thediplomat.com/2019/08/indian-defense-minister-circumstances-may-lead-to-review-of-nuclear-no-first-use-policy/.
- 397. Vipin Narang, "Five Myths about India's Nuclear Posture," *The Washington Quarterly* 36, no. 3 (Summer 2013): 150-151.
- 398. Shivshankar Menon, *Choices: Inside the Making of Indian Foreign Policy* (New Delhi: Penguin Random House India, 2016), 110.
- 399. Vipin Narang and Christopher Clary, "India's Counterforce Temptation," *International Security* 43, no. 3 (Winter 2018): 7-9.
- 400. Hans M. Kristensen and Robert S. Norris, "Nuclear Notebook: Pakistani Nuclear Forces, 2016," *Bulletin of the Atomic Scientists* 72, issue 6 (2016): 368-376.
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- 405. Keith Webster, "Trump Must Act Now on U.S.-India Defense Relations. Realizing the Full Potential of the New Major Defense Partner Status Means Acting Now," *The Diplomat*, January 26, 2018, https://thediplomat.com/2018/01/trump-must-act-now-on-us-india-defense-relations/.

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- 407. Alyssa Ayres, "A Field Guide to U.S.-India Trade Tensions," *Council of Foreign Relations*, February 13, 2020, https://www.cfr.org/article/field-guide-us-india-trade-tensions.
- 408. Quoted in Ana Swanson and Vindu Goel, "As Trump Visits India, a Trade Deal Remains Elusive," *The New York Times*, February 25, 2020, https://www.nytimes.com/2020/02/25/business/economy/trump-india-trade-deal.html.
- 409. Suhasini Haidar, "Forging a New Nuclear Deal," *The Hindu*, February 3, 2018, http://www.thehindu.com/opinion/lead/forging-a-new-nuclear-deal/article22637628.ece.
- 410. External Affairs Minister Subrahmanyam Jaishankar stated that he would not attend a meeting in Washington if Congresswoman Jayapal was present. This was in response to her earlier sponsorship of a bipartisan resolution calling on the Indian government to uphold basic human rights in Kashmir by lifting the communications blackout imposed on Kashmir since August, ending detentions without charges, and respecting religious freedom (Pramila Jayapal, "India's Foreign Minister Refused to Meet Me. I Won't Stop Speaking Out on Human Rights," *Washington Post*, December 25, 2019, https://www.washingtonpost.com/opinions/2019/12/23/indias-foreign-minister-refused-meet-me-i-wont-stop-speaking-out-human-rights/. See also "India Rejects Scathing US Religious Freedom Report as 'Biased'," *BBC News*, April 29, 2020, https://www.bbc.com/news/world-asia-india-52467564. The annual report of the United States Commission on International Religious Freedom (USCIRF) places India alongside Pakistan, China and North Korea. This is the first time India has been placed in this category since 2004.
- 411. Quoted in Moore, "Strengthen the U.S.-India Relationship."
- 412. Happymon Jacob, "Living in Denial on Kashmir," *The Hindu*, July 14, 2016, http://www.thehindu.com/opinion/lead/Living-in-denial-on-Kashmir/article14486818.ece.
- 413. Pakistan was caught off-guard by Indian military decision-making in 1965, 1971, 1999, and 2001. There is little reason to believe it will do better in the future.
- 414. Ajai Shukla, "Viewpoint: India and Pakistan Up the Ante on Disputed Border," *BBC News*, January 30, 2018, http://www.bbc.com/news/world-asia-india-42856494; and Happymon Jacob, "The Unquiet Front," *The Indian Express*, February 8, 2018, http://indianexpress.com/article/opinion/columns/the-unquiet-front-5055338/.
- 415. Rahul Bedi, "Indian Army's Anger over Kashmir Killings," *BBC News*, September 19, 2016, http://www.bbc.com/news/world-asia-37404332; and *BBC News*, "Kashmir Attack: India 'Launches Strikes against Militants," September 30, 2016, http://www.bbc.com/news/world-asia-37504308.
- 416. Eighteen months after his 2018 tweetstorm tirade against Pakistan, President Trump welcomed newly installed Prime Minister Imran Khan to the White House. This was seen as a reward for a positive effort on the part of Pakistan to bring the Afghan Taliban to the negotiating table to discuss a potential settlement in Afghanistan that would allow the United States to withdraw a large portion of its forces from that country. (See *The White House* [Trump administration], "Remarks by President Trump and Prime Minister Khan of the Islamic Republic of Pakistan Before Bilateral Meeting," July 22, 2019, https://www.whitehouse.gov/briefings-statements/remarks-president-trump-prime-minister-khan-islamic-republic-pakistan-bilateral-meeting/.) Thus, the sharp decline in the U.S.-Pakistan relationship has been arrested temporarily. Both sides seem determined to find a way to build a permanent relationship that does not overpromise and underdeliver. Understanding that such a relationship will likely be hostage to future events in Afghanistan, a recently published white paper by the Middle East Institute, "Pathways to a Stable and Sustainable Relationship between Pakistan and the United States," which represents the combined thinking of an expert group of independent academics, policy analysts, and retired government officials with many years of experience in U.S.-Pakistan, provides a template for what might be achieved in terms of developing a bilateral relationship based on the shared convergence of limited interests.
- 417. Smith, "The 2001-2002 Standoff: A Real Time View from Islamabad"; and Walter Ladwig, "A Cold Start for Hot Wars?: The Indian Army's New Limited War Doctrine," *International Security* (Winter 2007-2008), 162.
- 418. IHS Jane's assesses the Chinese and Indian defense budgets at, respectively, \$217.078 billion and \$56.718 billion (in constant dollars). (See Craig Caffrey, "China Defense Budget," Jane's Defense Budgets, March 5, 2019; and "India Defense Budget," Jane's Defense Budgets, February 26, 2019.)

- 419. See *The Military Balance* 2019 (London: Institute for International Strategic Studies, 2019), 222–319; and Franz-Stefan Gady, "Ajai Shukla on the Current and Future State of India's Military," *The Diplomat*, September 25, 2019, https://thediplomat.com/2019/09/ajai-shukla-on-the-current-and-future-state-of-indias-military/.
- 420. "Trends in World Military Expenditure, 2019," Stockholm International Peace Research Institute, <a href="https://www.sipri.org/media/press-release/2020/global-military-expenditure-sees-largest-annual-increase-de-cade-says-sipri-reaching-1917-billion and Rajeswari Pillai Rajagopal, "Why India's New Defence Budget Falls Short," Observer Research Foundation, February 14, 2019, https://www.orfonline.org/research/why-indias-new-defense-budget-falls-short-48077/. See also Laxman Kumar Behera, India's Defence Budget, 2019-2020, IDSA Issue Brief, 8 July 2019.
- 421. Quoted in Abhijan Rej, "The Sobering Arithmetic of a Two-Front War," *Observer Research Foundation*, March 14, 2018, https://www.orfonline.org/expert-speak/the-sobering-arithmetic-of-a-two-front-war/.
- 422. Gady, "Ajai Shukla on the Current and Future State of India's Military."
- 423. Smith, "The 2001-2002 Standoff: A Real Time View from Islamabad," 168.
- 424. David O. Smith, "The U.S. Experience with Tactical Nuclear Weapons: Lessons for South Asia," in Michael Krepon and Julia Thompson, eds., *Deterrence Stability and Escalation Control in South Asia* (Washington D.C.: Stimson Center, 2013), 87.
- 425. Zoom conference with the author, June 2, 2020. Under the rules of the conference, the participants cannot be named.
- 426. Eric Schlosser, Command and Control: Nuclear Weapons, the Damascus Accident, and the Illusion of Safety, (New York: The Penguin Press, 2013), 313.
- 427. For example, Basant is a Punjabi festival featuring kite-flying that marks the beginning of spring and is celebrated in both countries.
- 428. A comparison of the 2010 classes at Quetta and Wellington, respectively, shows the following percentages of arm and service backgrounds of army students: armoured corps, 8/8; artillery, 18/17; air defense, 6/4; engineers, 7/13; signals, 7/6; infantry, 40/38; aviation, 2/3; and logistics, 11/12. Only in the case of engineers does a difference greater than two percentage points exist.
- 429. This is not to say that the United States is perfect in this regard. Cheating admittedly has occurred in U.S. military PME institutions, most notably at the service academies. However, when it occurs, the senior leadership of those institutions ruthlessly expunges it, often by expelling the offenders. The main difference between this and what was observed at Quetta and Wellington is that cheating and plagiarism are not a part of any U.S. PME institution's organizational culture.
- 430. The events in 2011 that generated this feeling included the Raymond Davis affair, in which a U.S. CIA contractor shot two Pakistanis whom he perceived as a threat; the raid that killed Osama bin Laden, which was considered an affront to Pakistani sovereignty; a number of WikiLeaks revelations that embarrassed the Pakistan Army; and an airstrike on a border post that killed two dozen Pakistani soldiers. Since then, the U.S. has been viewed as a military threat because of a perception that it intends to seize or neutralize Pakistan's nuclear arsenal.
- 431. The Pakistan Army has from the very beginning employed proxy forces against enemies. In 1947, Masood tribal levies were sent into Jammu and Kashmir, and in August 1965 several thousand regular army troops dressed as Kashmiri locals were again infiltrated into the state. The efficacy of such operations was demonstrated in the decade-long use of Afghan mujahedeen to oust the Soviet Union from Afghanistan, and similar support rendered to India-focused militants has been ongoing in Kashmir since 1989.
- 432. Hindustan Times, "Ready to Call Pakistan's Nuclear Bluff, Says Army Chief Bipin Rawat," January 12, 2018, https://www.hindustantimes.com/india-news/ready-to-call-pakistan-s-nuclear-bluff-army-chief-bip-in-rawat/story-4IaODMvEShEFoDLsiVSpLJ.html.
- 433. Gady, "Ajai Shukla on the Current and Future State of India's Military."
- 434. U.S. Department of Defense, Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2019 (Washington DC: Office of the Secretary of Defense, 2019).



Annex A

U.S. Students Identified as Attending the DSSC, 1979-2017

YEAR	U.S. ARMY	U.S. AIR FORCE	U.S. NAVY
1979	х		Interviewed
1980	Х		
1981	X		
1982	Х		
1983	Х		Х
1984	Interviewed		
1985	Х		х
1986	Transition year		
1987	х		
1988	Х		Х
1989	Interviewed		
1990	Х		Х
1991		Х	
1992	Interviewed		Х
1993	Х	х	
1994	Interviewed		Interviewed
1995	Interviewed	Х	
1996	Х		Х
1997	х	х	
1998	Interviewed		Х
1999	Interviewed		
2000	Interviewed		
2001	Interviewed	х	
2002	Interviewed		Х
2003	Interviewed		Х
2004	Х		
2005	Interviewed	х	
2006	Interviewed		х
2007	Interviewed	Interviewed	
2008	Interviewed		
2009	EOT* report		
2010	Interviewed		EOT* report

2011	Interviewed	EOT* report	
2012			Interviewed
2013	Х		
2014	Interviewed	Interviewed	
2015	Х		
2016	Interviewed		х
2017	Interviewed	Interviewed	
TOTAL	36	10	15
Data Samples Obtained	21	4	4

^{*}EOT = end-of-tour

Annex B

Study Data Inputs (Omitted)

ANNEX B of the original study contains twenty-nine transcribed interviews and end of tour reports of former DSSC students, the transcripts of which take up 176 single-spaced pages. Much of this material is repetitious because of the nature of the structured interview technique. The transcripts also contain personal information about each U.S. student's background and personal comments made about people they met at the DSSC that are irrelevant to the findings of the study. To protect their privacy, the annex has been omitted.

Annex C

Interview Questionnaire

Initial Preparation and Context. When did you arrive in India? How well prepared were you for the course and what to expect in India? How were you received at the college? What major military or political events occurred during the year you attended the course, and what local concerns were discussed by Indian students during tea breaks and other occasion?

1. The Wellington Experience, Demographic Changes, and Social Issues.

- Who were the senior officers—the Commandant, Army Wing Chief Instructor, and Division Senior Instructors—and what personal interactions did you have with them? What was your perception of the Commandant's vision for the college? How did he treat the faculty and students? Was he a major presence in the daily life of the college? How great was his influence on the faculty and students?
- What is your perception of the level of professionalism of the Directing Staff? Of the Indian Army students?
- What was the selection criteria for Indian students attending the course? Did the different services use the same or different criteria?
- What was the view of the Indian students about the purpose of the course? What did they think was the primary purpose of the course: to impart professional knowledge, or to evaluate the students for onward career progression?
- Did the college encourage creative thinking and innovative solutions to problems?
- What is your perception of the ability of Directing Staff and students to freely express their views?
- Briefly describe the college curriculum. What subjects were emphasized? How did it compare to the general curriculum used at the equivalent U.S. service school? How much joint training was provided? How much combined arms training? How much of the instruction was for Indian students only?
- Did you observe instances of students cheating or otherwise employing unauthorized techniques to improve their performance in the course? Was there any punishment for students who were caught doing this?

- What was the evaluation system used to rate students? Were there any particular characteristics common to the top finishers?
- Did you observe any dissatisfaction among Indian students when they received their end-of-course evaluation and assignment?
- What was your perception of the social class and ethnic origin of Indian students and Directing Staff? Was it representative of the country as a whole or were certain classes or ethnic groups over- or under-represented?
- How many students came from families with a tradition of military service? If the latter, were their fathers commissioned officers, junior commissioned officers, or ordinary soldiers?
- What was the general level of religiosity of faculty and students you observed? Were there any apparent distinctions based on social class, caste, or confessional group?

2. Perceptions of External Threat and Friendship.

- What was the general attitude of the faculty and students towards the United States? Pakistan? China? USSR/Russia? Afghanistan? Iran? Other SAARC countries? Southeast Asian countries? Gulf Arab states? Central Asian countries? Were these countries considered to be Friends, Enemies, or something in between?
- What other countries sent students to the Staff College? How were these students treated by the faculty and students?
- Did you notice any difference in the attitudes of Directing Staff and students who had attended foreign military schools, participated in international peacekeeping operations, or had otherwise lived/studied abroad, and those who had not?
- What was the perception of Directing Staff and students about India's strategic position in South Asia?
- Which country was perceived by Directing Staff and students as posing the greatest long-term threat to India's strategic interests? The greatest short term threat?
- What was the attitude expressed by Directing Staff and students about other generic or transnational threats such as regional water issues, climate change, cyber warfare, etc?

3. Perceptions of Internal Threat and Friendship.

 Describe the DSSC curriculum on internal security operations, low intensity conflict, or other sub-conventional military operations. How

- many hours were devoted to these topics? What references or other doctrinal materials were used?
- What was the attitude of Directing Staff and students to past or present internal security operations in Jammu & Kashmir, Punjab, the northeastern areas, or any other part of India?
- How many Directing Staff and students had direct experience in such operations? Did they consider it a positive or negative experience?
- Are internal security operations considered a distraction from more traditional military missions? Did some Directing Staff and students express a contrary position?
- Did Directing Staff and students express any views about the presence of foreign extremist militant and sectarian groups operating in India such as Lashkar-e-Taiba and Jaish-e-Muhammad. What were their views about domestic insurgent groups like the Naxalites or others?
- What was considered to be the root cause of internal security problems in India?
- Did any Directing Staff or students admit to having direct knowledge of direct or indirect support provided by India to similar Pakistanfocused groups in Afghanistan such as the Baloch Liberation Army?
- Are covert operations to destabilize Pakistan seen as an acceptable form of retaliation for Pakistan's support to India-focused radical groups? Are they considered to be a net strategic asset or a net strategic liability?

4. Views of the State and its Institutions.

- Were any opinions expressed by Directing Staff and students about Indian political figures and institutions: the President, Prime Minister, leaders of major secular and religious political parties, federal and provincial legislative bodies, the judiciary, and the media (print, radio, television)?
- What was their perception of the overall performance of the government during the year you attended the college? Were the Indian students generally supportive or negative in their opinions?
- What was your perception about the freedom of the media to criticize the government?
- Were the Directing Staff or students critical of the performance of the Ministry of Defense, the Chiefs of Staff Committee, or defense institutions like DRDO?

- Were students critical of Indian service military leadership or organization in any area?
- What was the attitude by Directing Staff or students of the overall civil-military relationship during the year you attended the college?
- Were faculty and students optimistic or pessimistic about the future direction of India?

5. Attitudes Toward Nuclear Issues.

- Describe the college curriculum on nuclear operations. How many hours were devoted to this issue? Was there a wargame or other form of practical exercise in which the employment of nuclear or chemical weapons was discussed?
- What reference materials were provided for these subjects and what was their probable source?
- How knowledgeable were the Directing Staff about these subjects?
- Did the Directing Staff and students express any views about the efficacy of nuclear weapons in a future conflict with Pakistan?
- Did the Directing Staff or students make any reference about unit training being conducted in these areas?
- Was there any discussion about the Pakistani nuclear program or the military's leadership of it?
- Was there any discussion about the safety and security of Pakistani nuclear weapons, or about the command and control of these weapons?
- Was there any discussion about a doctrine for the use of Indian nuclear weapons?
- Was there any discussion about India's announced nuclear doctrine?
 Was there skepticism expressed about India's public pledge not to be the first country in South Asia to use a nuclear weapon?
- Was there any discussion about potential redlines for the use of Pakistani nuclear weapons?
- What was the students' attitude about nuclear and related confidence-building measures that have been struck with Pakistan?

Annex D

Indian Army Students

Course Composition by Arm/Service/Regiment

)									
	1949		1962		1987		1992		2000		2005		2010	
Armoured Corps	4	7%	7	%8	26	11%	24	11%	13	%9	16	2%	19	%8
Artillery	4	7%	19	22%	53	23%	47	20%	34	15%	29	12%	42	17%
Air Defence Artillery	*		*		*		*		6	4%	10	4%	7	4%
Engineers	2	2%	12	14%	14	%9	17	%8	24	10%	31	13%	32	13%
Signals	4	7%	10	12% 10	10	4%	3	1%	9	3%	16	7%	14	%9
Infantry	30	20%	30	35%	117	51%	124	22%	122	52%	115	47%	95	38%
Army Aviation	*		*		*		*		2	2%	7	3%	7	3%
Army Service Corps	7	12%	4	2%	3	1%	5	2%	8	3%	10	4%	11	4%
Army Ordnance Corps	4	7%	0		1	<1%	3	1%	3	1%		4%	9	3%
Corps Of Electrical And Mechanical	,	~ %	c	4%	2	7%	0	%	000	%	9	%	10	4%
Engineering	-	-)	2	1	2	1	2))))	5	2	2
Corps Of Military Intelligence	*		*		3	1%	0		_	<1%	2	%	_	<1%
Army Medical Corps	3	2%	0		0		0		0		0		0	
	09		85		230		225		232		245		248	
Totals**														
* Not Yet In Existence														
** The Totals Are Not Official Statistics; The Numbers Were Obtained From An Examination Of Class Pictures In The Annual Staff College Yearbook, The Owl.														

Note: Indian Army infantry regiments are named for specialized functions, provinces, and traditional ethnic groups in India ("classes").

Infantry Regiments in order of precedence:

- Gorkha Rifles
- Garhwal Rifles
- Brigade of the Guards
- Bihar Regiment
- Parachute Regiment
- Punjab Regiment
- Madras Regiment
- Grenadiers Regiment
- Maratha Light Infantry
- Rajputana Rifles
- Rajput Regiment
- Jat Regiment

- Sikh Regiment
- Sikh Light Infantry
- Dogra Regiment
- Kumaon Regiment
- Jammu & Kashmir Rifles
- Jammu and Kashmir Light Infantry
- Assam Regiment
- Mahar Regiment
- Mechanised Infantry Regiment
- Naga Regiment
- Ladakh Scouts
- Arunachal Scouts

Annex E

DSSC Curriculum

1. Joint Subjects

- (a) Orientation course for foreign and civilian student officers (21 days prior to the commencement of the course).
- (b) Basic army, naval and air instructions.
- (c) Counter surface force operations and air defence.
- (d) Forward Area Tour (Naval and Air Wings and all foreign and civilian students).
- (e) Certain aspects of operations of war exercises (Army/Navy/Air Force).
- (f) Airborne/Air transported operations (Army/Air).
- (g) Army/Air telephone battles.
- (h) Nuclear warfare and guided and ballistic missiles.
- (j) Selected campaign studies.
- (k) Specialised types of warfare.
- (1) Navy/Air maritime studies.
- (m) Study of selected foreign countries or areas.
- (n) Economic survey of India—a few selected and topical aspects.
- (o) Strategy of warfare.
- (p) Electronic warfare.
- (q) Defence management.
- (r) Industrial and Demonstration Tour, including exercises with the fleet.
- (s) Aid to civil authorities.
- (t) Amphibious operations and joint planning.
- (u) Works procedure.
- (v) Leadership.
- (w) Land/Air warfare.
- (x) Dissertation.
- (y) Guest lectures on selected wide-ranging topics.
- (z) Minor research projects on selected topics.
- (aa) NBC warfare.

- (ab) Prepared talks.
- (ac) Exposure to state civil administration.
- (ad) International relations.
- (ae) STAFFEX (all students proceed for a day at sea).

2. Army Wing Subjects

- (a) Minor and major staff duties including staff procedures.
- (b) Study of arms and services.
- (c) Intelligence.
- (d) Administration in war and peace.
- (e) Operations of war.
- (f) Operational exercises.
- (g) Training.
- (h) Specialised types of warfare.
- (j) Nuclear warfare—army aspects.
- (k) Military law.
- (l) Information warfare.

3. Naval Wing Subjects

- (a) Staff duties (Service writing, principles and conventions, letters and signals).
- (b) Staff papers (various types of appreciations, different versions of orders and instructions, formulation of naval staff requirements, service paper, statement of case, briefs, tour notes, PQs, minutes of meeting, etc).
- (c) Studies in international strategic environment with special reference to maritime strategy and principles of war.
- (d) Maritime warfare (missile warfare, naval aviation, undersea warfare, mine warfare, electronic warfare, LND, trade warfare).
- (e) International maritime law.
- (f) General maritime studies (Including studies of maritime history, foreign names, and naval technology.
- (g) Administration and logistics (logistics, naval law, naval works procedures, and personnel management).
- (h) Classified studies on the Navy.

4. Air Wing Subjects.

- (a) Minor and major staff duties including staff procedures.
- (b) Role and organisation of the Indian Air Force.
- (c) Weapon planning.
- (d) Counter surface force operations.
- (e) Study of air campaigns.
- (f) Air defence.
- (g) Air wargame.
- (h) Electronic warfare air aspects.
- (j) Air force law.
- (k) Nuclear warfare air aspects.
- (l) Performance appraisal series.
- (m) Creative writing.
- (n) Maintenance and administration.
- (o) Wing administration.

Annex F

Joint DSSC/Army Wing Guest Speakers and Topics

1. 1992 Joint College Guest Speakers

- Lieutenant General A. S. Kolkat, GOC-in-C ARTRAC and DGPS, Analysis of the IPKF Operation in Sri Lanka.
- Air Marshal (ret) K. D. Chandha, Future of Air Power.
- K. Subramaniyam, India's Threat Perceptions.
- Michael Mandelbaum, U.S. Foreign Policy in the Middle East and South Asia after the Gulf War.
- Mohit Sen, United Communist Party of India, USSR.
- Vice Admiral V. S. Shekhawat, FOC-in-C Eastern Naval Command,
 Sea Power in the Indian Ocean Context and the Defence of Our Island
 Territories.
- David Evans, Australian High Commission, Australia.
- Lieutenant General K. S. Brar, GOC-in-C Eastern Command, Concept of Operations in the Eastern Command.
- S. Sathikh, Vice Chancellor University of Madras, Creativity.
- N. A. Paikhivala, Senior Advocate Supreme Court, Facets of the Indian Constitution and Reflections on the Budget.
- A. G. Noorani, West Asia including Iran and Afghanistan.
- Lieutenant General V. K. Sood, VCAS, Internal Threats and Their Implications on National Security.
- Lieutenant General R. Sharma, DCAS (T&C), Latest Concepts and Doctrines for Employment of Mechanized Forces in the Indian Subcontinent.
- Air Marshal P. Singh, AOC-in-C Western Air Command, Latest Developments in the Air Defence Environment.
- Major General A. Mukerjee, Addl MS (B), Air Defence of the Tactical Battle Area.
- Dr. Prahalada, Project Director DRDL Hyderabad, Missiles and Their Future Development.
- C. G. Somiah, Comptroller and Auditor General of India, The State of the Nation.
- Air Commodore (ret) Jasjit Singh, Director IDSA, Nuclear Strategy.
- J. D. Sullivan, Director, Program in Arms Control, Disarmament, and International Security, Peace in the Post Cold War Era.

- Lieutenant General (ret) M. L. Chibber, Leadership in the Indian Context.
- Admiral L. Ramdas, CNS, Changing World Order and the Challenges in the Indian Ocean.
- Air Chief Marshal, N. C. Suri, CAS, National Security and Air Power.
- General S. H. F. J. Rodrigues, COAS, Indian Military Strategy for the 90s.
- Field Marshal S. H. F. J. Manekshaw, Indo-Pak War 1971.
- S. K. Singh, Pakistan.

1992 Army Wing Guest Speakers

- Major General Jameel Mahmood, Attack Helicopters.
- Lieutenant General S. G. Mookerjee, SO-in-C, Communication Challenges to the Indian Army in 2010.
- Lieutenant General Jagdish Singh, DG Artillery, Emerging Trends in the Employment of Artillery in the Indian Context in 2010.
- Lieutenant General R. P. Agarwal. DGOS Indian Army, Ordnance Support Concepts and Plans.
- Major General V. P. Malik, ADG (OL) Indian Army, Logistics Problems of the Indian Army in 2010.
- Lieutenant General R. Narasimhan, MS, Career Management of Officers in the Army.
- Lieutenant General V. N. Kapur, E-in-C, Combat Engineer Support for Forward Formations.
- Lieutenant General K. K. Mehra, DG EME, Engineering Support Philosophy 2010.

2. 1998 Joint College Guest Speakers

- Professor Kittu Reddy, Aurobindo Ashram, The Concept and Practice of Dharma: The Relevance to the Armed Forces.
- Rear Admiral (ret) K. R. Menon, Sea Power in the Indian Context.
- A. Nagarajan, IAS, Special Commissioner and Commissioner of Prohibition and Excise, Chennai, Civil Administration.
- J. P. Ribeiro, IPS, former DG Police Punjab, The Challenges of Religious Fundamentalism and Terrorism.
- Dr. N. R. Madhava Menon, Director, National Law School of India, Bangalore, Indian Judiciary and Constitution.
- Air Marshal V. Patney, AOC-in-C Western Air Command, Latest Development in AD Environment with Special Reference to Air with Space Management.
- Muchkand Dubey, IAS (ret), former Foreign Secretary, India's Foreign Policy Vision for the Future.

- S. N. Shukla, IRS, Commissioner of Income Tax, Tax Planning for Better Personal and Financial Management.
- Commodore Uday Bhaksar, Associate Director IDSA, Nuclear Strategy: The Challenges to India's Policy on NPT and CTBT.
- Air Commodore (ret) Jasjit Singh, Director IDSA, Defence of India in the 21st Century.
- Professor U. V. Kadam, Associate Professor, National Law School of India,
 War Crimes and the International Court of Justice.
- Group Captain (ret) A. G. Bewoor, Operation Cactus.
- Dr. Prahlada, Project Director DRDL, Integrated Missile Development Program and the MTCR.
- Rear Admiral R. Chopra, Defence of Offshore Assets and Security Policy of Offshore Oil Installations.
- Ambassador of Indonesia Gator Suwardi, Security Environment in SE Asia and the Role of ARF.
- Ambassador of Palestine Dr. Khalid el-Sheikh, Peace Prospects in West Asia.
- V. A. Thomas, Group Director ISRO, India's Space Research Programme:
 Objectives and Prospects.
- Lieutenant General A. Mukerjee, DG AD Arty, Trends and Developments in AD Arty.
- Professor Surgit Mansingh, JN University, China Now and 25 Years Hence.
- Brigadier (ret) G. B. K. Reddy, Internal Security: Macro Level Perspective.
- Lieutenant General Ravi Elipe, GOC-in-C Eastern Command, Combatting Insurgency in Northeast India.
- Ambassador of Israel Dr. Yehoyada Hain, Peace Prospects in West Asia.
- Lieutenant General (ret) Gurbir Man Singh, The Law of War and Its Impact on the Conduct of Operations.
- Michael Ducreaux, ICRC Consultant, The ICRC: Its Role in Conflict.
- Lieutenant General (ret) Depindar Singh, IPKF Operations in Sri Lanka.
- High Commissioner of U.K. Sir David Gore Booth, U.K.'s Vision of the Changing World Order in the 21st Century.
- Virendra Diyal, Member Human Rights Commission, Human Rights.
- Lieutenant General S. Padmanabhan, GOC-in C Northern Command, Achievements and Problems of LIC Operations in the Northern Command.
- Ambassador of Japan Sakutaro Tanino, Emerging Status of Japan in the 21st Century.
- Air Marshal V. K. Bhatia, AOC-in-C Central Air Command, Optimal Employment of Air Assets.
- Lieutenant General (ret) Satish Nambiar, U.N. PKO in Former Yugoslavia.

- Major General R. S. Nagra, Army HQ, U.N. PKO: Staff Aspects.
- Major General C. T. Chari, DG Works, Provisions of Works Services.
- Gen Hendryk Suski, CGS Polish Armed Forces, Role of Poland in the World Order.
- Gen (ret) K. V. Krishna Rao, Governor of J&K, India's Security Concerns with Reference to Kashmir.
- Air Chief Marshal S.K. Sareen, Chm Chiefs of Staff Committee, Golden Jubilee Address.
- Admiral V. Bhagat, CNS, Golden Jubilee Address.
- General V. P. Malik, COAS, Golden Jubilee Address.

1998 Army Wing Guest Speakers

- Lieutenant General A. N. Sinha, Engineer-in-Chief, Combat Engineer Support to the Indian Army.
- Lieutenant General S. S. Sethi, DG Arty, Emerging Trends in Artillery.
- Major General S. S. Puri, ADG, LWE Indian Army HQ, Quartering, Accommodation and Movement.
- Major General D. B. Shekatkar, ADGMI Indian Army Hq, Perspective Planning in the Indian Army with Particular Reference to Force Structuring and Doctrine Development.
- Major General J. S. Kand, ADG MI, Indian Army Hq, Military Intelligence:
 Problems and Challenges with Focus on Strategic and Operational Level
 Warfare.
- Major General V. K. Chopra, ADG FP, Indian Army Hq, Financial Management.
- Major General Hari Prasad, ADG Systems, Indian Army Hq, Management of Border in LC Environment.
- Major General R. L. Magotra, Trends in C3I.
- Major General A. Natarajan, ADG Army Aviation, Indian Army Hq, Army Aviation: Army HQ Perspective and Challenges.
- Major General S. G. G. Kuma, ADG Signals, Indian Army Hq, Communications: Trends and Challenges.
- Brigadier H. S. Chahal, PMO CIDSS, Indian Army Hq (no subject given).
- Brigadier T. M. Sridharan, Deputy Military Secretary, Indian Army Hq, Appraisal System.
- Brigadier M. G. Kadam, DJAG, HQ Southern Command, Military Law Clarifications.
- Major General P. S. Nagra, GOC HQ ATNKK and G Area, Organization and Functioning of Area HQ.

- Lieutenant General A. Mukerjee, DG AD Arty, Indian Army Hq, Trends and Developments in AD Arty.
- Lieutenant General Yuvraj Mehra, Military Secretary, Indian Army Hq,
 Career Management of Officers.
- Brigadier D. G. Merchant, Commandant CMP School, Indian PKO in Somalia.
- Colonel V. Suresh, U.N. PKO in Cambodia.
- E. N. Ram Mohan, GD BSF, Role and Functioning of Provisional Forces and Central Police Organizations.

3. 1999 Joint College Guest Speakers

- Rear Admiral K. R. Menon (ret), Sea Power in the Indian Context.
- Brigadier F. F. C. Bulsara and Group Captain AG Bewoor, Operation Cactus.
- M. K. Narayanan, The Intelligence Network—Our Successes and Failures.
- Rear Admiral R. Chopra, FODAG, Defense of Offshore Assets.
- Air Marshal V. Patney, AOC-in-C Western Air Command, Airspace Management, Coordination, and Control.
- Lieutenant General A. Mukerjee, Director General AD Arty, Latest Trends in AD Artillery.
- Rear Admiral Y. Prasad, FOCWF, Fleet AD Concept and Doctrine.
- Brigadier K. S. Sindhu, Dir DIPAC, Recce by Satellites, Space Research, and Space Applications in the Indian Armed Forces.
- Air Commodore R. V. Kumar, Air Maintenance.
- Shri K. Raghunath, Foreign Secretary, India's Foreign Policy.
- Shri N. N. Vohra, Morals and Ethics in Public Life.
- Renuka Choudhary, Women in Indian Society and Politics.
- Field Marshal S.H. F. J. Manekshaw, Leadership and Character.
- Lieutenant General K. M. Sethi (ret), Prestige and Morale of the Armed Forces.
- Air Vice Marshal R. A. Mason (ret), U.K., Air Power in the [New] Millennium.
- Dr. Prahlada, Director, Defence Research and Development Laboratory, Integrated Guided Missile Development.
- Dr. John Ooman, Professor Thomas Joseph, Role of Society in Accidents.
- Professor Surjit Mansingh, China, Now and in 25 Years.
- H.E. Lyonpo Tshering, Ambassador of Bhutan, Indo-Bhutan Relations.
- Lieutenant General V. Oberoi, GOC Army Training Command, Offensive Operations Development.
- Shri C. G. Bijlani, Principal, Railway SC, Management of Indian Railways during Mobilization.

- H.E. Mangala Moonesinghe, Ambassador of Sri Lanka, Sri Lanka Beyond Ethnic Strife.
- Brigadier N. Kumar, Joint Judge Advocate General, International Humanitarian Law, Geneva Conventions.
- Brigadier P. S. Mann, Commandant CIJW School, CIJW Capsule.
- Shri J. N. Dixit, Indian Foreign Service (ret), Indo-Pakistan Relations.
- Lieutenant General Depinder Singh (ret), International Peacekeeping Ops/Insurgency.
- Air Commodore Jasjit Singh (ret), Nuclear Strategy Challenges to India.
- Lieutenant General I. K. Verma, CI Ops.
- Brigadier G. B. K. Reddi (ret), Internal Security Strategic Perspective.

1999 Army Wing Guest Speakers

- DG Artillery, Emerging Trends in Artillery.
- ADG OL, Logistic Support in Combat Zone.
- ADG FP, Indian Army Financial Management.
- DGMI, Military Intelligence Problems and Challenges.
- GOC 28 Infantry Division, Management of LG Environment.
- ADG Systems, Strategic C4I2.
- SO-in-C, Col Commandant Corps of Signals, Command and Informatic Challenges.
- Cmdt School of Arty, Future Concepts and Development of Arty, including Nuclear Background.
- GOC 36 Infantry Division, Employment of RAPID Division.
- Adjutant General, Philosophy of Personnel Management.
- GOC 21 Corps, Maneuver Warfare, Employment of a Strike Corps.
- Engineer-in-Chief, Combat Engineer Support.
- Commandant CME Pune, Combat Engineer Support in Unconventional Ops.
- DGOS, Overview of Ordnance Services.
- Military Secretary, Officer Career Management.
- DCOAS, National Security Perspective in 2015.
- GOC ATNKK&G Area, Organization and Function of Area HQs.

4. 2000 Joint College Guest Speakers

- T. N. Seshan, IAS (ret), Bureaucracy, Armed Forces, and the Constitution.
- Dr. Vasant Dhar, Artificial Intelligence.
- Professor Gopalji Malviya, University of Madras, Methodology of Writing a Dissertation.

- M. K. Narayanan, former Director IB and Chairman JIC, The Intelligence Network: Our Success and Failure.
- Lieutenant General S. Padmanabhan, GOC-in-C Southern Command, J&K After Kargil.
- Lieutenant General (ret) V. R. Raghavan, India's Nuclear Strategic Challenges.
- Lieutenant General K. Mukerjee, DG AD Arty, Trends and Developments in AS Artillery.
- Rear Admiral M. R. Chopra, FODAG, Defence of Offshore Assets, Security Policy of Offshore Oil Installations, and Exploitation of EEZ.
- Major General D. Kumar, CSO Eastern Command, Integrated Information Network for the Armed Forces.
- Sadhguru Jaggi Vasudev, The Art of Effortless Living.
- Lieutenant General Chandra Shekhar, VCOAS, Operation Vijay (Kargil).
- Professor Surjit Mansingh, China, Now and 25 Years Hence.
- J. F. Ribiero, IPS (ret), Role of the State in Preservation of National Security.
- Major General R. J. Jung, C/S HQ Allied Force Baltic Approaches, European Integration-Security and Economic Dimensions.
- B. Rahman, Director Inst for Tropical Diseases, Indo-Pak Relations.
- Major General C. Narain, DG Works, Provision of Works Services.
- Dr. P. S. Goel, Director ISRP, Indian Space Research Programme and Space Applications.
- Air Marshal S. S. Gupta, AOC-in-C Maintenance Command, Self Reliance Through Indigenization.
- Air Vice Marshal A. K. Goel, CI Air Wing, Hijacking of IC 814 and Indian Response.
- Lieutenant General D. D. Shekatkar, GOC 4 Corps, Combatting Insurgency in the Northeast.
- Vice Admiral A. Pasricha, NM FOC-in-C, Operations in the Eastern Seaboard.
- Ambassador of Japan Hirabayashi Hiroshi, The Emerging Status of Japan in the 21st Century.
- General (ret) S. Roy Chowdury, Member Rajya Sabha, Leadership and Motivation including Psychological Aspects.
- Vice Admiral R. N. Ganesh, FOC-in-c Southern Naval Command, Ethics and Leadership.
- Admiral Sushil Kumar, CNS, Address to Course.
- Air Chief Marshal A. Y. Tipnis, Address to Course.

2000 Army Wing Guest Speakers

- Major General R. L. Malhotra, ADG Systems, C4I2/C3I Energing Concepts.
- Lieutenant General Vinay Shankar, GD Artillery, Trends in Artillery.
- Lieutenant General Prakash Gokran, SO-in-C, Communications and Information Challenges to Indian Army in 2010.
- Lieutenant General A. N. Sinha, Engr-in-C, Combat Engineering Support to Indian Army.
- Lieutenant General R. K. Sawney, DGMI, India's Security Environment.
- Lieutenant General M. S. Shergill, DGMF, Mechanized Operation—Strike Corps.
- Lieutenant General S. S. Grewal, Philosophy of Personnel Management and Workshop on Communication Relationship.
- Lieutenant General S. S. Hehta, DCOAS (P&S), Revolution in Military Affairs.
- Major General Hari Prasad, Addl MS (A), Military Secretary Matters and Management of DSSC.
- Lieutenant General I. K. Varma, MS, Career Management of Officers.
- Brigadier Ashok Khosla, PMP Plan AREN, TCS 2000.
- Colonel V. K. Suri, Deputy Commander ACE, EMI/EMC and Spectrum Management.
- Brigadier A. K. Saini, Commander 1 Signal Group, EW Organization, C2
 Systems, and employment in support of Own Operations.

Annex G

Post-DSSC Assignments*

- 1. Of 239 Indian Army students appearing in the 1998 edition of *The Owl*, the following post-course assignments were identified:
 - Brigade Majors: 27 (11 percent)
 - General Staff Officer Grade 2 (GSO-2): 24 (10 percent)
 - Deputy Assistant Adjutant and Quartermaster General (DQ): 26 (11 percent)
 - Rashtriya Rifles (paramilitary): 24 (10 percent)
 - Unspecified Regimental Duties: 118 (49 percent)
 - Non-regimental Staff/Command: 15 (6 percent)
 - PME School/Other: 5 (2 percent)
- * Extracted from *The Owl*, 1998 Course. In the many editions of *The Owl* reviewed by the author, this was the only year in which post-DSSC assignments were listed.
- 2. The assignments are listed in the order of perceived prestige and desirability. An assignment as brigade major was clearly the first choice of every Indian student.
- 3. The second most desirable assignment in the opinion of several American students was a toss-up between GSO-2 and DQ, an opinion that surprised the author since in the U.S. Army an assignment in an operations position is always preferred to an administrative position.
- 4. The third most desired assignment, to the paramilitary Rashtriya Rifles, might also be surprising to some readers, but duty in that force is usually in Kashmir, which for many years has been relatively quiet and generally safe for officers. Because of the beauty of Kashmir, extra allowances for combat duty and family separation, and (for some) the opportunity to make even more money from corruption, duty there is considered by many Indian officers much more preferable to returning to their regiment to perform routine peacetime duties. The corruption issue is addressed elsewhere in the study.
- 5. Non-regimental staff and command is far less desirable than staff and command positions in one's own regiment.

ANNEX H

Minority Community Representation in the Defence Services Staff College Army Wing*

Year Surveyed 1979	1979	1994	2000	2000 2005 2006 2007	2006	2007	2008	2010	2008 2010 2011**	2012	2012 2014	2015	2015 Totals	Average (%)
Christians	4	4	3	2	3	4	3	2	2	4	1	5	37	1.2
Muslims	0	-	2	2	0	5	0	4	2	-	0	2	22	0.7
Parsis	0	-	0	0	2	0	0	0	0	0	0	0	3	0.1
Sikhs	33	52	47	38	41	35	35	50	14	44	55	42	513	17.3
Total Army Wing students	186	228	232	245	270	275	255	249	250	260	255	260	2965	

^{*} These figures are not official and should be taken as illustrative only. They were determined by the author's count of minority community surnames in the DSSC yearbook, The Owl.

^{**} The 2011 Student A mentioned there were 4 Christians and 1 Muslim officer on the DSSC permanent staff.

THE WELLINGTON EXPERIENCE

A Study of Attitudes and Values Within the Indian Army

The Wellington Experience: A Study of Attitudes and Values Within the Indian Army by Col. David O. Smith (retired) offers an in-depth analysis of India's premier professional military education institution and challenges some conventional wisdom on the Indian armed forces. Based largely on structured interviews of U.S. military personnel who attended India's Defence Services Staff College at Wellington over a nearly four-decade period, this work explores the Indian military's training and education, a range of socio-cultural and organizational dynamics, internal and external threat perceptions, and attitudes towards the state and security issues. Insights from this analysis apply far beyond Wellington and carry implications for the doctrine, readiness, and role of India's armed forces; for India's approach to great power competition; for regional strategic stability; and for the future of the Indo-U.S. defense relationship.

This work is especially valuable as the companion to a previous study by Col. Smith of Pakistan's Command and Staff College at Quetta, entitled *The Quetta Experience* and published in 2018 by the Woodrow Wilson Center for International Scholars. Read together, these two volumes reveal many key similarities between the two institutions and their armed forces, as well as notable differences. The Stimson Center's South Asia program has focused on regional security dynamics for nearly 30 years and is pleased to add to this tradition of analytical, policy-relevant inquiry through the publication of *The Wellington Experience*.

