Preface

This book took six years to compile. What began as a simple quest to compress a holistic account of the Pakistani nuclear program turned into a Rubik's cube. As a first-time writer setting out to pull together a balanced and objective account on a subject considered taboo for decades, I ran into the proverbial Clauswitzian "fog of war," where a maze of claims and counterclaims made the research difficult.

Like many aspects of Pakistan's politics and history, its nuclear story is awash with controversies and competing narratives. Yet, the most intriguing aspect during the course of this research was facing the challenge of the relentless disinformation campaign unleashed on the Pakistani nuclear program. Gore Vidal's famous quotation emphasizing that a "[d]isinformation campaign has metastasized to a level where myth threatens to overthrow history" aptly applies to the case study of Pakistan. This was one reason that galvanized my efforts in telling the story of the Pakistani nuclear program and my interest in writing this book.

In the case of new nuclear states—such as India, Israel, and Pakistan—the necessity to keep the nuclear weapons program covert in order to resist international proliferation pressures has added another layer of opacity. The habits that come with decades of secrecy do not disappear overnight just because the country has conducted a declared nuclear test. Furthermore, as with many developing countries, the Pakistan government does not open its national archives to outside scrutiny, especially on matters of national security. Even non-official accounts, such as newspaper and journal articles, are difficult to access with collections often incomplete.

On top of these challenges, reconstructing the Pakistani case is vexing because its nuclear history is still contested by those who took part in the program. As this study will show, the establishment of two rival organizations—the Pakistan Atomic Energy Commission (PAEC) and Khan Research Laboratories (KRL)—created an intense bureaucratic rivalry, in which members of both organizations have sought to highlight their own successes and minimize the accomplishments of the other.

While the rivalry has waxed and waned, it frequently led to poisonous interpersonal relationships. That bitterness has frequently affected the accounts of those who took part in the interlaboratory issues. Further, the deliberate attempt to compartmentalize the program has meant that very few individuals (perhaps none) have had a complete view of the effort. As with all accounts of Pakistani history, nuclear developments are also part of a broader pattern of civil-military relations, in which control over nuclear decisions has frequently been an indicator of political strength. Given the success of the nuclear program, military and civilian leaders have considerable interest in highlighting their role.

My experience as former director in Pakistan's Strategic Plans Division (SPD)—the secretariat of Pakistan's National Command Authority (NCA)—provides insight in terms of information and analysis. The last decade of my thirty-two years in the military were dedicated to the Pakistani nuclear program. It all began with a little-known event in Pakistan's nuclear history when President Ghulam Ishaq Khan and Prime Minister Nawaz Sharif resigned from their respective offices in July 1993, and handed over responsibility for the nuclear program to Chief of the Army Staff General Abdul Waheed. This charge eventually fell to Major General Ziauddin—Director General Combat Development Directorate—under whom I was posted from the end of 1993 until the SPD was formed.

In 2003, I joined the faculty at the Naval Postgraduate School (NPS) along with my close friend and colleague Dr. Peter R. Lavoy, who was at the time director of the Center on Contemporary Conflict (CCC) in the Department of National Security Affairs (NSA). Under his leadership, I was involved in several research projects on South Asia that included two major military crises—"The Kargil Conflict" and the "2001–2 India-Pakistan Military Standoff." Since that time, I have continued to work on a litany of research projects relating to South Asian security and strategic stability, including the completion of this book.

Dr. Lavoy was enthusiastic when I proposed researching this book. We began the research as coauthors. Our first task was to request from the Pakistan government and authorities in Islamabad cooperation and guidance in facilitating the research, including interviews, access to public documents, and archives. The proposal was accepted after careful coordination and processing in Islamabad, where Pakistani authorities laid strict rules for our interviews, which we respected. We were not allowed to interview serving scientists, or active-duty officials. Retired officials and scientists were cleared for interviews only if they were willing to talk voluntarily. On our part, we ensured that SPD carefully scrutinized our questionnaires for any sensitive matter or inadvertent overstepping. When necessary, authorities facilitated the research with "background briefings" by concerned government departments.¹

This book, then, relies on several types of source material in an attempt to overcome these challenges, while always being cognizant of their limitations. By far the most important contribution comes from interviews with key civilian leaders, military officers, and nuclear scientists. With the extraordinary approval of the Pakistani government, I was granted permission to interview for the first time many officials about their role in Pakistan's remarkable nuclear history. These interviews were compared with a variety of other sources. U.S. declassified documents provided considerable information about U.S. perceptions of the covert Pakistani effort, and showed the U.S. understanding of Pakistan's motivations and technical milestones at various periods of history.

There are wide arrays of Pakistani accounts discussing nuclear developments. Many of these accounts come from participants in the feud between Pakistan's two rival laboratories, with friendly journalists producing slanted accounts. A similar distortion is evident in many contemporary Pakistani articles. Reports in the U.S. press, while better, frequently lean toward sensationalism or showcase leaks that were provided with a clear policy agenda in mind. To navigate this hazardous terrain, the author has relied on his own personal knowledge of Pakistan's nuclear and military history to help ascertain what is true and what is merely propaganda. To the extent possible, this text will highlight these controversies and describe the evidence that led to conclusions when evidence is contradictory. In some cases, the evidence is too ambiguous to draw any conclusions.

Even with the assistance of interviews, there remains resistance to scrutiny. Several key officials did not yet believe it was time to write the history of Pakistan's nuclear weapons program. The Abdul Qadeer (A. Q.) Khan proliferation network scandal that became public in 2004 formed a backdrop for the interviews. Khan's role in Pakistan's nuclear developments, already divisive given the interlaboratory rivalry, became a national controversy in Pakistan. Many individuals approached for this study were wary of inserting themselves into

an arena of such contentious politics, fearing that whatever they said would be misunderstood or distorted. Such fears were accentuated by Western accounts that many Pakistanis felt demonized by the accomplishments of the nuclear program. When someone knocked on their door asking for an interview, they were understandably suspicious. Even so, a surprising number of individuals were willing to talk on the record. Some officials asked that portions or all of their interviews occur without direct attribution, and their wishes to remain anonymous have been honored in this text.

Despite these limitations, the book that follows provides the first comprehensive account of the Pakistan nuclear weapons program. While incomplete, as all histories are, this account substantially improves upon existing prior accounts. In part, it does so by assiduously following scholarly convention, which is too frequently discarded in works published in Pakistan. Throughout the text, on-the-record and anonymous interviews are cited directly. When information was provided on background, I have attempted to verify the information in a citable format. When clear written or interview evidence is not present, I have attempted to signal uncertainty or lack of clarity in the text. The hope is that this work is the first of many nuanced, scholarly, and clear-headed accounts on this topic. It does not seek to glorify or demonize those who took part in these decisions, but rather chronicle, as best it can, the role that numerous individuals from many organizations contributed to Pakistan's present nuclear capability.

Additionally, it is important to highlight that interviews conducted for this research would not have been possible without the approval of former president Pervez Musharraf, and with the consistent support of Lieutenant General Khalid Kidwai, director-general of Pakistan's SPD; both of whom were gracious enough to provide their own inputs at various times. No words can sufficiently thank them and the staff at SPD for their positive outlook and for providing all necessary assistance and guidance.

In 2007, Dr. Lavoy left his post at NPS, after which I carried the baton for completing this book. As a consequence, this work is devoid of the wisdom, quality, and style that Peter Lavoy would have provided as coauthor. He was dearly missed as I struggled to write, but his words of encouragement throughout these years strengthened my resolve to finish this book.

I owe a word of gratitude to all the others who made a great impact on this book over the past five years. First are the three editors who contributed to the completion of this book in no small order. Anya Erokhina, a graduate of the Monterey Institute of International Studies (MIIS) and aspiring scholar, helped me with both the research and writing of the initial draft. Mansoor Ahmed, now a lecturer at the Quaid-e-Azam University, Islamabad, did extensive research for all of these years; his contribution is exceptionally appreciated. Lisa Donohoe Luscombe helped compile and develop the final manuscript. The research team at the CCC helped me keep pace with narratives, events, and records of the interviews. Those who made an immense contribution include Christopher Clary, Adam Radin, Puja Verma, Kali Shelor, Rebekah Dietz, and Nick Masellis.

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