

Unit I

Conceptual Frameworks

As all the recent presidential administrations have acknowledged, a terrorist attack using a weapon of mass destruction is one of the most acute threats to U.S. and international security. Thousands of chemical and biological weapons, huge quantities of weapons-related materials and expertise are scattered all across the globe, and substandard security at nuclear facilities in Europe, Central Asia, Russia, and Pakistan increase the risk of terrorists seizing highly enriched uranium to make crude, but devastating, nuclear explosives. The possibility that a terrorist group or a rogue nation could acquire and use weapon of mass destruction (WMD) to inflict unthinkable levels of death and injuries is more than a theoretical discussion, especially in the aftermath of the September 11 terrorist attacks. A number of intelligence sources in the United States, Europe, and elsewhere, as well as news media reports, have confirmed that terrorist groups like al Qaeda have attempted to acquire WMD materials and capabilities.

This volume provides a unique compilation of the enduring concepts and practical issues facing the United States when it contemplates the WMD threat and the international, federal, state and local challenges to designing and implementing effective measures against a determined enemy. We begin with five chapters in this section that define key terms and address importance strategic and policy debates. Authors explain how the new forms of terrorism affect the post-9/11 security environment and introduce the notion that weapons of mass destruction could give terrorists short-term, asymmetric attack advantages over conventional military forces. First, Brigadier General (retired) Russell Howard and Margaret Nencheck, an Intelligence Officer in the Virginia Army National Guard, describe eight distinguishing characteristics of a new type of terrorism that has a significant potential to produce catastrophic damage virtually anywhere in the world. They note how modern terrorist groups

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like al Qaeda and Hezbollah have developed a global reach, and how their networked, cellular structure facilitates multiple income streams and logistics support. Perhaps more worrisome are the strategic objectives of these modern terrorists groups, many of whom are determined to acquire nuclear, radiological, chemical, and biological weapons of mass destruction. Their analysis emphasizes key changes in the terrorist threat since the Cold War decades that require adaptive and innovative responses. The past decade of the fight against terrorism has shown that continued changes are imperative if we hope to defeat this adaptive, elusive threat.

Next, Brian Jenkins—a senior advisor to the president of the RAND Corporation and Director of the National Transportation Security Center at the Mineta Transportation Institute—considers how terrorism has changed over the past four decades. He describes how terrorists have developed new ways of funding themselves beyond state sponsorship, along with new models of organization which enable them to more effectively evade intelligence and law enforcement efforts to disrupt their global campaigns of violence. However, despite these reflections of how terrorist organizations have evolved, and despite a number of acknowledged strategic results that some terrorists have achieved, Jenkins notes that to date, no terrorist organization has achieved its long-term objectives. This is a paradox of terrorism, he concludes. Terrorists often succeed tactically and thereby gain attention, cause alarm, and attract recruits. But their struggle has brought them no success measured against their own stated goals. In that sense, terrorism has failed, but the phenomenon of terrorism continues.

The next three chapters offer complementary views on the nature of the global WMD terrorism threat. First, Bruce Hoffman, Professor and Director of the Center for Peace and Security Studies and the Security Studies Program at Georgetown University, examines the WMD threat post-9/11, especially from al Qaeda and associated jihadists. His chapter outlines how we face a two-fold threat: one from al Qaeda itself, given the grandiose ambitions spanning chemical, biological, radiological and nuclear weapons—evidence of which was uncovered by our forces in Afghanistan. But we also face a threat from associated jihadists who are attracted to these weapons not for their putative killing potential, but due to the profoundly corrosive and unsettling psychological effects even a limited attack can have on a targeted society. From this perspective, Hoffman then focuses on the case of Kamal Bourgass, an Algerian who trained in al Qaeda camps, and plotted to stage an attack in Britain using ricin (a poison that can be made from the waste left over from processing castor beans). He notes that Bourgass' intent was not to kill—as one would assume about a terrorist using biological weapons—but rather, for

the psychological blow it would deal to British society, causing fear and panic and undermining confidence in government and the authorities. Clearly, understanding the motivations and strategic intentions of terrorists is a critical component of comprehending the true nature of the WMD terror threat.

In the next selection, James Forest—an associate professor at the University of Massachusetts, Lowell, and a senior fellow at the Joint Special Operations University—provides a framework for assessing the threat of WMD terrorism by incorporating the attributes of specific weapons, terrorist groups and their operating environments. His research indicates that there are a variety of opportunities for terrorists to acquire materials that can be used for a WMD. The easiest category of materials includes chemical precursors used for industrial purposes; the most difficult are the biological agents and the nuclear materials. And the availability of radiological materials seems to have grown over the last decade, though they are not yet as accessible as chemicals. These opportunities, combined with indications of intent on the part of at least a few terrorist groups, lead to the current state of concern about the global threat of WMD terrorism. However, there are also many factors that help explain why we have not yet seen a WMD terrorist attack of significance. For example, terrorists have to overcome a wide variety of technical, logistical, and tactical challenges—and as a rule of thumb in the world of terrorism, the more complex the weapon and the attack plot, the higher the likelihood of failure. This is one of several reasons why the majority of terrorist attacks prefer to use basic, easy to deploy kinds of weapons, like car bombs, roadside IEDs, and suicide bombers.

Finally, Rutgers University adjunct professor Leonard Cole draws from the case of the 2001 anthrax attack in the United States to identify four lessons which inform our national plans for counterterrorism, emergency preparedness and response. First, the volume of a chemical or biological agent can be very small yet have an enormous impact; the ripple effect of even a small bioterrorism attack on a shopping mall in rural Ohio must therefore be anticipated, and coping with a collapse of public activity and services should be part of a national plan. Second, the effectiveness of the U.S. mail as a disseminator of anthrax was a surprise—we must analyze our current assumptions to identify and prevent other potential surprises of this type. Third, the first professional to see each anthrax victim was a primary care or emergency physician. This has implications for training and preparedness exercises that go beyond first responders, and include postal workers, teachers, store managers, bus drivers, train conductors, and others. And finally, the victims of the attack were from both urban and rural areas, thus demonstrating that preparedness must not be limited to heavily populated areas.

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Together, the chapters of this introductory section provide a conceptual overview of themes and security challenges addressed more fully throughout the remainder of the volume. Certainly, understanding the threat from a macro-strategic perspective should be a high priority for policymakers, law enforcement and intelligence professionals, and local first responders. Nurturing this perspective must therefore be a primary goal of security-related education and training programs throughout the United States.

Second Edition

WEAPONS *of* MASS DESTRUCTION

and TERRORISM

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