Contents

Foreword

The accelerating worldwide advance of technology and knowledge creates rapidly expanding opportunities for humankind—opportunities that have been of great benefit to the developed world, and especially to the United States. But the advance of technology also provides opportunities for increasing numbers of states to build weapons that in minutes to hours can cause levels of destruction that once took years of warfare with massive forces. Further, more states actually are building such weapons, or positioning themselves to be able to build them quickly. The evidence of this half-century trend is clear and compelling. The nuclear weapons tests carried out by India and Pakistan in May 1998 and Iraq's continued resistance to UN efforts to eliminate its program for weapons of mass destruction are recent reminders.

Some hope that the proliferation of weapons of mass destruction will ultimately lead potential aggressors to conclude that war has become too dangerous. But centuries of history, including the past five decades, lead most observers of the international scene to be deeply skeptical that a more proliferated world would be more peaceful. It seems more likely that highly destructive wars would increase as the number of actors armed with these weapons rises. Thus, efforts to limit or roll back proliferation remain a national priority.

There is reason for some optimism about the outcome of such efforts. Looking back, international nonproliferation efforts, coupled with the self-restraint exercised by many nations, have been surprisingly effective. Predictions made decades ago of the number of states that would have weapons of mass destruction by 2000 have proven pessimistic. While the large majority of the world's states are now capable of building weapons of mass destruction, only a minority appear to have done so, or to be purposely moving toward such weapons.

Many factors are involved in explaining this divergence between

capabilities to build such weapons and the choice to do so. Among the most important is the belief that the major states will continue to play their post–World War II role of keeping sovereign states from conquering or destroying one another. But proliferation raises the risk involved in intervention, and the end of the global contest for power with the former Soviet Union causes some to believe that the outcomes of regional wars are less important to the United States. This combination could undermine confidence in the capability and the will of the United States to continue to play the key stabilizing role the world has come to expect of it.

I believe the United States will continue in its stabilizing role for at least three reasons. First, U.S. political leaders, whatever their political philosophy, have always found it difficult to keep the nation on the sidelines in the face of massive violence or destabilizing developments. Second, the United States will seldom, if ever, find it in its national interest to be deterred from standing up to aggression. Third, I believe that the United States remains willing to accept risks—even large risks—for an important cause. And the prevention, suppression, and defeat of aggression backed by the use or threat of weapons of mass destruction will continue to be seen as important to the peace and stability that serve U.S. national interests. In addition to the more immediate costs of failing to deal with such aggression, history tells us that such failures are likely to lead to a far more proliferated, dangerous, and less cooperative world.

Thus, the United States is and should be committed to deterring and, if need be, to defending against aggression, especially when backed by weapons of mass destruction. The military forces needed to do this will include nuclear forces that provide a credible threat of devastating retaliation for the use of weapons of mass destruction. At the same time, minimizing the risks posed to the forces and citizens of the United States, its allies, and other nations when confronting such aggression will require other substantial preparations—preparations that increase the power of deterrence by further reducing an aggressor's confidence that the gain from such attacks is worth their potentially very high costs. These preparations will include better ways to prevent attacks with weapons of mass destruction, to interdict such attacks when launched, and to reduce the effects that such attacks can have on their targets. They are also likely to include substantial changes in how the United States organizes, deploys, and operates its forces when faced by such threats.

The preparations that the United States must make are neither cheap nor easy. The effort required may come at the cost of other things with more obvious appeal. Thus, making the needed preparations will require a keen understanding of the larger dangers posed by continued prolif-

eration of weapons of mass destruction, and what must be done to reduce them.

This collection of essays contributes to that crucial understanding. It presents a variety of perspectives on important policy and strategy problems posed by the continued proliferation of weapons of mass destruction. These problems and their solutions are substantially different from those posed during the Cold War, when the United States and the Soviet Union confronted each other with massive arsenals of nuclear weapons.

I hope the reader will reflect on the insightful essays presented here. And beyond that, I hope that other policymakers and experts will be encouraged to contribute further to the understanding of this broad and important topic. Better and more up-to-date analysis and understanding of the challenges posed by the proliferation of weapons of mass destruction are vital to finding paths to a safer and better world.

General Larry D. Welch, USAF (ret.)
April 1999
Alexandria, Virginia