INTRODUCTION
Current trends in weapons of mass destruction (WMD) and missile proliferation are mixed. The past two years have presented some of the most difficult challenges the nonproliferation community has faced. Yet these same challenges afford opportunities to intensify awareness that such threats are real and require high-level and sustained attention.

The interlocking web of multilateral treaties, regimes, and initiatives to address and to redress proliferation problems is growing ever tighter. Current and would-be proliferators are meeting strong opposition at every turn. For its part, the United States employs a variety of tools in its efforts to prevent the spread of WMD and missiles, including strengthened global regimes, diplomacy, sanctions, and enhanced regional security. Most other countries hold similar nonproliferation values and are steadily strengthening enforcement.

THE NATURE OF THE THREAT
The WMD proliferation threat is not a new phenomenon. Concerns about WMD date back at least to 1925, when the Geneva Protocol was negotiated to respond to the use of poison gas during World War I. Over the years, the threat to international security posed by WMD has steadily increased. Events in recent years illustrate the terror impact and destabilizing effects of such weapons: the use of chemical weapons in the Iran-Iraq war; the sarin gas attack in the Tokyo subway; Iraqi SCUD missile attacks during the Gulf War; North Korean and Iranian missile tests; and the nuclear weapon and missile tests conducted by India and Pakistan. These and further such acts pose immediate dangers to U.S. allies, to American troops abroad, and to civilians at home.

States seek to acquire WMD for a variety of reasons. For some, they represent prestige and power. In a world where civilian technology is growing vastly more useful and respected, some still view WMD as an avenue to demonstrate technological prowess and obtain international status. Some states seek WMD to deal with perceived regional threats or to gain an edge in future conflicts, realizing too late that the likelier outcome is a neighborhood arms race and international isolation. Chemical and biological weapons (CBW) are sometimes called “the poor man’s nuclear weapon,” and states that cannot obtain nuclear weapons have pursued CBW programs as a “second best option.”

These are faulty and dangerous rationales that ignore the vastly destabilizing impact of WMD and missiles on regional and global security. Those few who are pursuing WMD capability contravene the virtually global sentiment against WMD proliferation. Such global opposition is manifest in the Nuclear Non-Proliferation Treaty (NPT), the Chemical Weapons Convention (CWC), and the Biological Weapons Convention (BWC) — treaties that represent critical Proliferation barriers and that must be sustained and strengthened further.
A corollary to the WMD acquisition and demand side is the supply side. Even in the face of growing international recognition that WMD and missile proliferation is destabilizing, a number of states continue selling missiles, nuclear technology, and other WMD-related components to would-be or active proliferators. Their motivation is usually pure economics — hard currency for sales is a strong and, unfortunately, too often irresistible lure.

An inescapable reality is that some of the most horrifying scenarios spun about WMD proliferation involve not state actors, but terrorists and other non-state actors. Obtaining and deploying WMD with a devastating impact — especially biological weapons — remains far too easy for those with enough money and moral corruptness. International efforts to detect and thwart such actions are constantly being challenged by advances in technologies that make detection more difficult and by the relative ease with which certain WMD can be developed, hidden, and transported.

**PROLIFERATION CHALLENGES**

While the global community’s commitment to nonproliferation and related efforts remains steadfast, estimates are that more than two dozen countries may have or are seeking WMD capabilities. The following illustrate some of the more current and significant proliferation challenges facing the international community.

**A. Nuclear Weapons**

Iraq’s nuclear weapon program was discovered after the Gulf War. For six years, the UN Special Commission (UNSCOM) labored to determine the extent of this program and dismantle it. While UNSCOM destroyed virtually all of Iraq’s facilities and equipment, Iraq continues to hide documentation and some equipment relating to key aspects of its past nuclear activities. Moreover, the Iraqi government has yet to demonstrate that it no longer has nuclear weapon ambitions.

North Korea’s nuclear weapon program was revealed in 1994 after International Atomic Energy Agency (IAEA) inspectors found discrepancies in spent fuel reporting by the DPRK (Democratic People’s Republic of Korea). North Korea agreed, in the context of a bilateral Agreed Framework arrangement, to work with the United States toward full compliance with its nuclear nonproliferation obligations. However, delays in implementing the Agreed Framework and the emergence of other proliferation concerns with the DPRK make it unclear when the desired end point with the DPRK will be reached.

Iran, a party to the NPT, continues a procurement pattern for nuclear technologies and equipment inconsistent with a civilian nuclear program and is pursuing a nuclear weapon capability under the guise of a complete nuclear fuel cycle.

In May 1998, first India and then Pakistan defied global nonproliferation standards by testing nuclear weapons. India and Pakistan continue efforts through a variety of means to advance their nuclear weapon capabilities.

**B. Chemical Weapons (CW)**

Since the end of the Gulf War, Iraq has rebuilt key portions of its chemical production infrastructure for industrial and commercial use. In 1998, UNSCOM discovered that Iraq had weaponized the nerve agent VX, further reinforcing suspicions that Iraq retains a chemical weapons capability. Iran, a member of the CWC, has manufactured and stockpiled a variety of chemical weapons and continues efforts to procure equipment and materials designed for a more advanced and self-sufficient CW infrastructure.

Syria maintains an active chemical weapons program and has stockpiles of several nerve agents, but remains dependent on foreign suppliers for key elements of its CW program. Libya wants a CW capability and an indigenous CW-production capability, but remains heavily dependent on outside suppliers for precursor chemicals and other key CW-related equipment. Sudan has also been developing the capability to produce CW.

**C. Biological Weapons (BW)**

Iraq has admitted to an active and extensive BW program, but has not disclosed fully the extent of its BW efforts, indicating that Baghdad almost certainly intends to reconstitute its capability when
circumstances permit. Iran began a biological warfare program during the Iran-Iraq war and may have a limited BW stockpile.

D. Missiles

The DPRK is the most active missile proliferator. It is developing missiles of increasingly longer range — missiles eventually capable of striking parts of the United States. North Korea also actively exports missiles and missile production capability to Egypt, Iran, Pakistan, and Syria. Iraq likely retains a number of SCUD-type missiles and launchers and is developing two missiles that could be converted for longer ranges once UN sanctions are lifted.

Iran has a very active missile program, building SCUDs with North Korea's assistance, developing the No-Dong-based Shahab-3 medium-range ballistic missile, and seeking still more capable systems. India and Pakistan each are developing short- and medium-range ballistic missiles (in Pakistan's case with extensive Chinese and DPRK assistance). Libya continues to seek missiles and missile technology to augment its Soviet-supplied SCUDs, and Syria is building DPRK-designed SCUDs.

MEETING THE PROLIFERATION CHALLENGES

The nonproliferation efforts of the United States and other nations involve a number of reinforcing elements that together delay proliferators' efforts, narrow their choices, and channel and confine the potential threat.

Strengthening Regimes: The U.S. government works hard to strengthen global norms against proliferation, which are critical to creating the confidence other governments need to forego such options for themselves. Achieving entry into force of the Comprehensive Test Ban Treaty (CTBT), strengthening the BWC, negotiating a Fissile Material Cutoff Treaty, enhancing IAEA safeguards, and reinforcing the Nuclear Physical Protection Convention are among the major initiatives the United States is pursuing to strengthen further the global nonproliferation regime. These initiatives will complement existing agreements and treaties, such as the NPT and the CWC, as well as informal nonproliferation regimes, such as the Missile Technology Control Regime (MTCR), the Australia Group (AG), and the Nuclear Suppliers Group (NSG). The standards established by these agreements have made and will continue to make an important difference to the success or failure of our nonproliferation strategy. Adherence to agreements can impede problem behavior by creating legally binding constraints, by justifying sanctions, or by drying up sources of supply.

Diplomacy is a key part of nonproliferation efforts, particularly when dealing with the early stages of a proliferation threat. U.S. diplomatic activities range from quiet but concerted diplomatic communications, to sustained bilateral dialogue, to direct involvement of the most senior levels of the U.S. government. The United States looks to other governments to undertake similar diplomatic activity reinforcing shared nonproliferation standards.

In the case of North Korea, the United States encourages the DPRK to adopt responsible nonproliferation behavior, abide by the Agreed Framework on nuclear issues, curb its indigenous missile programs, and refrain from exporting missiles. With Russia and China, the United States has sustained and high-level dialogue to press them both firmly to cease cooperating with or supplying materials to countries of proliferation concern. Following the nuclear tests by India and Pakistan, the United States initiated high-level bilateral talks with both governments aimed at CTBT ratification, a cutoff in fissile material production, adoption of comprehensive export controls, and restraint in their nuclear and missile programs. The United States also raises international awareness of proliferation concerns by actively speaking out at the United Nations and other multilateral venues where these issues are addressed.

Sanctions and Other Inducements: Where diplomacy and dialogue are not an option, or to supplement diplomatic efforts, the United States, often in coordination with other countries, employs sanctions or otherwise identifies negative and positive inducements to alter countries' problem behaviors. This is the case with proliferation threats in Iraq, Libya, and Sudan. Sanctions are often criticized, but they
have proven to be an effective tool and to play a key role in allowing the United States and other nations to make clear that proliferation entails costs — political and economic.

Enhancing Regional Security: Recognizing that countries may be motivated to pursue WMD because of perceptions of regional security imbalances, the United States participates actively in a range of regional security initiatives in the Middle East, Latin America, Africa, and Asia. The combination of dialogue and cooperation and implementation of additional measures to enhance confidence and security among regional states can reduce further the incentives countries may have to acquire WMD or missiles.

Defense and Deterrence: Recognizing that best efforts to prevent proliferation will not always succeed, the United States also has under way an extensive counter-proliferation strategy that focuses on ensuring that U.S. troops abroad and other U.S. national security interests are protected if nonproliferation efforts do not fully succeed. Defensive planning is critical and can itself deter states from undesirable courses of action. Depending on the circumstances, counterforce or preemption might be appropriate responses. In between fall active defense measures, most prominently now, a national missile defense system.

CONCLUSION

While WMD proliferation presents a significant challenge to the United States, the challenge is being addressed. Our nonproliferation strategy will continue to combine efforts to reduce incentives to acquire WMD, convince those on the supply side that threats from proliferation dramatically outweigh economic benefits, and remind proliferators that their actions come with a high price. The key remains to identify proliferation threats at an early stage before costly countermeasures are needed, keep focused on reducing WMD and missile programs to zero, and control access to key technologies. There will be circumstances where nonproliferation efforts will not succeed, and in those cases active counter-proliferation and defense initiatives must be maintained.

Those who work to address proliferation challenges recognize the task can be daunting and that efforts to prevent proliferation are more important than ever before and also more difficult. The challenge is great, but the international community is increasingly focused on the threat and resolutely determined to contain it. A strong, comprehensive nonproliferation strategy will remain a centerpiece of U.S. foreign policy as we advance U.S. interests and global security into the next century.