IN THE MONTHS prior to the 2012 presidential election in the United States, members of the Obama administration and sympathetic organizations inside the Beltway began floating the idea that the administration would pursue – after an Obama victory – further reductions in the US nuclear arsenal. With the ink still wet on the new START treaty, efforts to reduce the American arsenal to 1000 operationally deployed strategic nuclear weapons or, as some suggest, 500, is certainly premature. These efforts illustrate a poor understanding of nuclear deterrence theory and practice and the ramifications of a United States that lacks a credible nuclear deterrent. For those advocates of rushing headlong into an ever smaller nuclear arsenal, it may be time for a refresher on the role of the United States’ nuclear arsenal.

Back to basics
The first recorded example of deterrence illustrates that the concept dates to the earliest days of mankind. According to the book of Genesis, after creating the world, God planted the Garden of Eden and created man to dwell in it. To quote Genesis chapter 2 verses 16 and 17, “And the Lord God commanded the man saying, ‘of every tree in the garden you may freely eat; but of the tree of the knowledge of good and evil you shall not eat. For in the day that you eat of it, you shall surely die.’”

Today, the concept is defined by the Department of Defense Dictionary of Military and Associated Terms as “The prevention of action by the credible threat of unacceptable counteraction and/or belief that the cost of action outweighs the perceived benefits.” According to Dr. Strangelove, “Deterrence is the art of producing in the mind of the enemy the fear to attack.”

Deterrence’s success or failure is often determined by a simple formula. Credibility equals capability plus will. In the earlier example, God was capable of carrying out his coercive threat, yet Adam ignored God’s warning because he doubted his will to carry out that threat. Thus, deterrence failed. The spirit of deterrence is best encapsulated in the words of the Roman strategist Vegetius who wrote, “Si vis pacem para bellum.” If you desire peace, prepare for war. While the desire to deter adversaries and allies from taking undesirable actions is an old concept, it is all too often associated with the more recent advent of the atomic bomb.

In 1946, Bernard Brodie observed, “The chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them.” Brodie was among the first strategists to understand that nuclear weapons ushered in a new era of deterrence thinking and practice. No longer could great powers engage in total warfare because of the potential for a conventional conflict to escalate to nuclear war. Over the decades that followed, leading strategic thinkers at the RAND Corporation, like Bernard Brodie, Thomas Schelling, Herman Kahn, and others, devoted their careers to contemplating how best to deter the use of nuclear weapons.

By the 1960s, two clear schools of thought emerged. Thomas Schelling advocated a stable balance of terror in which both the United States and the Soviet Union were capable of launching a retaliatory strike should the other side attack first. By creating mutually assured destruction, proponents believed that neither side would attack. Thus, deterrence would succeed.

Herman Kahn, on the other hand, advocated the creation of a clear American advantage. This meant developing systems that could limit the damage caused by a Soviet attack. Hardened shelters, missile defenses, and a range of additional capabilities were required to achieve Kahn’s vision. In the end, the financial costs of Kahn’s approach were too great. This gave Schelling the greatest influence in defense policy. Thus, when Schelling wrote, “Deterrence rests today on the threat of pain and extinction, not just on the threat of military defeat,” he was absolutely correct.

Whether Schelling or Kahn offered a superior approach to strategic deterrence is largely unimportant. What is more important is the fact that strategic deterrence between the United States and the Soviet Union never failed. For half a century, two superpowers avoided a direct confrontation because they feared a conventional conflict would spiral out of control and lead to nuclear holocaust. In the end, the United States won the Cold War because Soviet socialism was no match for Western free market capitalism. Peace was kept because of the efforts of American and European Airmen, Sailors, and Soldiers who provided a credible nuclear deterrent.
The fact is simple; nuclear weapons are responsible for ending great power war. This is not a point of limited significance. As Admiral Richard Mies, former head of US Strategic Command, is fond of pointing out, between 1600 and 1945 an average of 1-2% of the world’s population perished each year because of war. Since 1945, that number has declined to 0.3%. This represents a 70-90% reduction in the number of conflict-related deaths. To be even more specific, between 1900 and 1945, 200 million people perished due to conflicts. Since 1945, 20 million have suffered a similar fate. That reduction is conflict related deaths is nothing to dismiss.

The point is an important one. Over the last sixty-five years, tens of millions of lives have been saved because of the strategic deterrent the United States provides North America and Europe. The nuclear arsenal’s role in the continued promotion of peace is something Americans and Europeans, beneficiaries of extended deterrence, should never take for granted.

Declining support for the nuclear arsenal

Although many Americans understood the role of strategic deterrence as an aspect of national security strategy during the Cold War, once the Wall fell and the Soviet Union collapsed, all too many citizens lost sight of the nuclear arsenal’s continued relevance. Seeing an opportunity, the same nuclear abolitionists who marched in the streets of Washington decades earlier – demanding disarmament – reinvigorated their efforts to eliminate the greatest tool of peace ever created. With the dramatic shift in the strategic environment that resulted from the Soviet Union’s collapse, there was good reason toresize the arsenal, but no reason to eliminate it.

Since 1991, the nuclear arsenal has declined by more than 90%. Soon, the United States will field 1,550 operationally deployed strategic nuclear warheads as part of an agreement with the Russians under the New START treaty. When nuclear abolitionists like Ivo Daalder and Jan Lodal write, “The reality has yet to sink in. US nuclear policies remain stuck in the Cold War, even as the threats the United States faces have changed dramatically,” they are illustrating that it is they, not the military, who have yet to move beyond the Cold War.

Ongoing efforts, such as the Deterrance Operations-Joint Operating Concept, clearly demonstrate that the services are actively engaged in revising deterrence strategy to address current and future threats. No organization better understands the evolution of nuclear deterrence than the US Air Force. In examining the efforts of US Strategic Command, Air Force Global Strike Command, and Headquarters Air Force, it is clear that these organizations are actively reexamining and updating the intellectual foundations of their strategic thinking.

However, the unending attacks on the utility of the arsenal have had their desired effect. Thus, some readers may not appreciate exactly how important the nuclear arsenal is to the preservation of American sovereignty, the nation’s vital interests, and the security of NATO. Yes, the current fight is focused on violent Islamic fundamentalism, but al Qaeda and other organizations like it do not pose an existential threat to America. Only nuclear armed states like Russia, China, North Korea – and a nuclear armed Iran – can do so.

Not only do American Airmen and sailors ensure that these countries dare not attack the United States or its allies, but they ensure that nuclear powers carefully consider every potentially provocative action they may desire to undertake. Let us reiterate a central point. Nuclear weapons are not only designed to deter the use of other nuclear weapons, but they are also effective in deterring and limiting conventional conflict. This is a point too many seeking to influence American foreign policy in the coming years seem to forget.

In part, it is because of the success of nuclear weapons that the worst threat NATO countries face comes from non-state actors like al Qaeda, who must resort to terrorism – a tactic employed by our weakest adversaries. We should be thankful al Qaeda is our problem. The threat was once much greater.

When a colleague from the US Air Force Academy recently said that the least desirable career fields for graduating cadets were those related to the nuclear enterprise, it was shocking and disappointing. Admittedly, broad support for the arsenal has declined within the intelligentsia of Boston, Washington, D.C., and on Capitol Hill. The focus on terrorism over the past decade has left nuclear forces neglected and in need of both intellectual reinvigoration and platform recapitalization. This is unlikely to change dramatically over the next few years. With difficult economic times facing the nation, the nuclear enterprise will find it difficult to obtain the fiscal resources required to refurbish and replace their systems.

The state of play in Washington

Congressional staffers and Air Force senior leaders offer reason for both concern and optimism. On the downside, nuclear weapons are an unpopular topic of discussion in Congress – even for those who support the arsenal. Unfortunately the arsenal largely generates apathy among the majority in Congress. This is a result of the arsenal’s success at providing a tangible peace. Thus, proponents do not have the critical mass of support required to ensure the nuclear complex receives the modernization funding the Obama administration and Senate Republicans agreed upon as part of the deal they struck to ensure passage of the New START treaty.

On the upside, Senate Republicans will neither support further reductions in operationally deployed strategic nuclear weapons, nor will they ratify the Comprehensive Test Ban Treaty. In the case of the former, this is because the proposed funding cuts to modernization violate their agreement with the administration. In the case of the latter, as the former head of US Strategic Command, General Kevin Chilton, once said of nuclear weapons, “...when you set one off, it’s a high energy physics experiment. It’s pretty hard to understand and explain in models...” Not surprisingly, many in the Senate are unwilling to trade the United States’ right to future nuclear tests for computer models that may be accurate.

And, while nuclear issues are an unpopular topic of discussion, there is a majority in the House and Senate – Democrats and Republicans – who are committed to ensuring that the United States maintains the most capable arsenal of any nuclear weapons state. The US Air Force leadership, which remains committed to a modern and capable nuclear force, is carefully navigating turbulent skies balancing support for the arsenal with the administration’s desire to reduce and eventually eliminate nuclear weapons.

Where the Air Force has fallen short is in effectively explaining to cadets at the Air Force Academy and the American public why strategic deterrence remains a core national security requirement. Thus, support for the arsenal has waned giving “global zero” advocates a legitimate chance to achieve their objectives.
Changing the state of play
Perhaps it is time for the US Air Force to take a lesson from the past. When, by the late 1970s, public support for the nuclear mission had ebbed, the USAF commissioned First Strike, a documentary that explained the role of nuclear forces in defending the nation. That documentary, albeit forgotten today, helped rebuild public confidence in the nuclear mission. It is certainly time for a twenty-first century remake of First Strike both for an American public and the citizenry of NATO allies.

This time, however, the number of potential threats is greater. Not only does Russia maintain an arsenal comparable to the American arsenal, but China is expanding its arsenal and developing both new warheads and more advanced delivery systems. North Korea, a clear adversary continues to launch small scale conventional attacks against South Korea, while also threatening Korean and American vital interests. Iran, another adversary, may soon possess nuclear weapons, which it is likely to deploy on an array of ballistic missiles.

There is nothing about the geostrategic environment of today or of the likely future that suggests nuclear weapons are less relevant to the defense of the United States and its allies than in the past. Contrary to the prevailing view, the nation’s nuclear forces are likely to increase in their importance to national security in coming decades. As the current economic crisis in Europe — and Japan’s lost decade — illustrate, neither can a country borrow its way to prosperity nor can it maintain both a large warfare and welfare state.

Eventually, debt must be repaid and both the warfare and welfare state must face fiscal realities. In the guns versus butter struggle that historically follows economic crisis, absent a clear threat, butter most often wins. The United States is starting to see this occur. Sequestration, the trigger mechanism from the Budget Control Act of 2011, is serving as an early example of this paradigm shift. For example, the baseline defense budget accounts for one of every seven dollars the federal government spends. In contrast, entitlement and welfare programs account for five of every seven federal-dollars.

If sequestration or something like it occurs in 2013, defense will bear half of the $1 trillion plus in federal budget cuts. Proportionally, defense cuts are four times greater than those of entitlement and welfare programs. This approach will continue in the years ahead as defense budgets decline in the face of a growing welfare state. This point is significant because those seeking to influence President Obama’s nuclear policy argue that conventional precision strike can take the place of nuclear weapons. What they do not acknowledge is that in an era of declining defense budgets, the Air Force and Navy can’t afford the precision strike capabilities their plans require.

Thus, with a smaller and less capable military, the nation will again rely on the nuclear arsenal to protect the nation’s vital interest — much as it did during the Eisenhower administration. The reality is the United States is unlikely to have the fiscal resources to build a conventional alternative to the nuclear arsenal. Americans and Europeans should never forget, our capitals are filled with monuments to the failure of conventional deterrence — which nuclear abolitionists fail to acknowledge.

Conclusions
At approximately $30 billion per year, the nuclear arsenal represents about five percent of the US defense budget. Given its ability to ensure American sovereignty, protect allies, prevent great power conflict, and deter or limit attacks on vital interests — the arsenal should be seen for the bargain that it is. Paradoxically, the most pressing test facing the US Air Force, owner of two of the three legs of America’s nuclear triad, is not derived from the budgetary challenges that are hindering modernization. For too long, nuclear strategy has been left to policy wonks from think tanks, universities, and corporations — most with too little relevant experience. The USAF should not cede the intellectual high ground to others. Instead, Airmen should make a compelling case for the arsenal they support.

Billy Mitchell and Hugh Trenchard were Airmen who played a central role in developing strategic bombing prior to World War II. As operators of the United States’ most power weapons, it is only logical for American Airmen to take their rightful place at the nuclear strategy table. To do this, the US Air Force must cultivate uniformed intellectuals who think deeply about adversaries of the United States and its allies and what motivates their behavior. Only by doing so can the proponents of nuclear deterrence — within the military — effectively persuade the American public and its leaders of the continued relevance of nuclear weapons.

Failing to effectively persuade the American public, Congress, and the White House of the continued importance of the nuclear arsenal and nuclear deterrence is, in large part, responsible for the decline in support. For too long it was taken for granted that those outside the military understood why these weapons served as the foundation of American and European security. That neglect was a mistake and it may cost the US Air Force and Navy over the next few years.

It is important to remember that nuclear weapons are a tool of the weaker. In other words, nuclear proliferation — North Korea and Iran are two examples — often occurs because a conventionally weaker country wants to deter a stronger adversary. In the case of North Korea and Iran, it is the United States they seek to deter. For the United States, this creates a problem. American decision-makers fundamentally do not understand how they think. Therefore, developing effective deterrence strategies is difficult — making it all the more important for the US Air Force and Navy to develop a cadre of intellectuals who understand the nation’s adversaries.

As China rises and becomes increasingly assertive, Western powers will require a far better understanding of their thinking than currently exists. Understanding how they value their core interests will prove crucial to anticipating their behavior and ensuring the success of strategic deterrence.

Although US Strategic Air Command (the Cold War era USAF nuclear command) is gone, the old SAC motto, “Peace is our profession,” is as relevant today as it was during the Cold War. The primary difference is that the West faces a more complex world where multiple nuclear-armed adversaries threaten the United States, its allies, and its interests. Thus, when advocates of global zero attempt to push President Obama toward a new round of nuclear arms reductions, they should think twice about the ramifications of their actions. [ ]