AMERICAN FOREIGN POLICY COUNCIL

US Would Be Wise To Prepare For EMP Attacks On Its Cities

November 28, 2017 **Ilan I. Berman** *The Hill*

Related Categories: Energy Security; Military Innovation; Missile Defense; China; Iran; North Korea; Russia

Imagine that a hostile nation - say, North Korea - fires a nuclear-tipped missile at the United States. The missile detonates in the upper atmosphere above a major American city such as Los Angeles, releasing a cascade of charged electrons that damages and destroys all technology and electrical systems within line-of-sight of the explosion. Vital infrastructure on the country's Western seaboard is incapacitated. Large swathes of California and parts of Nevada lose power. Stores, social services and emergency functions that rely on electricity begin to break down, as disorder spreads and the death toll climbs.

Such a scenario isn't the plot of the latest Hollywood blockbuster, although it well could be. It is, rather, the projected outcome of a man-made electromagnetic pulse (EMP) event of the type that a growing number of America's adversaries are capable of creating.

Of course, the phenomenon of EMP is not new. It was first discovered well over half-a-century ago as an unintended byproduct of U.S. nuclear testing in the 1940s. Nevertheless, over the decades, a lasting solution to this challenge has proven elusive, for at least two reasons.

The potentially catastrophic consequences of an EMP event have made the issue a difficult one to broach, as a matter of public policy. Debates over the probability of such an occurrence, meanwhile, has led more than a few observers to minimize the associated risk - and to ridicule those who argue for preparedness.

Yet such complacency is ill-advised. The threat of electromagnetic pulse is both real and potentially devastating. More than a dozen years ago, in 2004, the congressionally-mandated Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack, colloquially known as the EMP Commission, concluded that the damage caused by an EMP to the United States "could be sufficient to be catastrophic to the nation." Moreover, given America's lack of protection against the phenomenon, the commission noted, "our current vulnerability invites attack."

The costs of such an attack, should one occur, are staggering. Leading experts, including John Holdren, who served as science and technology advisor to President Obama throughout his two terms in office, have pegged the costs associated with national recovery from an EMP-type event at some $2 trillion annually for a protracted process that could last as long as a decade.

It is hardly surprising, therefore, that America's adversaries have invested in the development of EMP weapons. Indeed, every single one of the main state-based threats currently arrayed against the United States (Russia, China, Iran and North Korea) has devoted considerable time and effort to the creation of such capabilities. The battlefield readiness of these technologies is shrouded in secrecy, but the devastating effects of an EMP event, should one occur, require that American policymakers take the possibility seriously - and, to the extent that they can, to take steps to guard against it.

In its 2004 report, the EMP Commission argued that the United States should undertake a national effort to reduce the vulnerability of interdependent infrastructure. "Most critical infrastructure system vulnerabilities can be reduced below the level that potentially invites attempts to create a national catastrophe," it noted. "By protecting key elements in each critical infrastructure and by preparing to recover essential services, the prospects for a terrorist or rogue state being able to achieve large-scale, long-term damage can be minimized."

And yet, today, the recommendations of the EMP Commission remain largely an unfunded mandate, a casualty of partisan politics and a lack of political consensus that have conspired to thwart the emergence of a national plan for the robust protection of critical infrastructure. While a number of Congressional initiatives have attempted to address America's vulnerability to EMP attack (notably, the 2013 SHIELD Act and the 2014 GRID Act), U.S. infrastructure for the moment remains largely unprotected against the EMP threat.

This should be seen for what it is: a significant, and bipartisan, failure of government. As the EMP Commission noted, "A crisis such as the immediate aftermath of an EMP attack is not the time to begin planning for an effective response."

Rather, the time to do so is now, ahead of any potential EMP event, and with the understanding that serious, sustained investments in the resiliency of our national infrastructure would diminish not only the impact of EMP weapons, but also their appeal in the calculus of America's adversaries.

Ilan Berman is senior vice president of the American Foreign Policy Council in Washington, D.C. He is the editor of The Logic of Irregular War: Asymmetry and America's Adversaries, out this month from Rowman & Littlefield Publishers, from which this article is drawn.
