Dear Colleague:

On the same day, the 9/11 Commission Report asked our country to look in the rear view mirror to find out why America failed to prevent that terrorist attack, Congress was warned that we are vulnerable and virtually unprotected against an EMP attack that could damage or destroy civilian and military critical electronic infrastructures triggering catastrophic consequences that could cause the permanent collapse of our society. The Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack reported on July 22, 2004 that "the current vulnerability of our critical infrastructures can both invite and reward an [EMP] attack if not corrected."

A single unsophisticated nuclear missile detonated at high altitude could produce an EMP attack that damages or destroys electronic systems across the entire continental United States. Satellites in low earth orbit would also be damaged. Millions of Americans could die from starvation and disease as an indirect consequence of an EMP attack that disrupts the infrastructures for transportation, medical services, food and water.

However, the most important finding of the EMP Commission is that this threat can be greatly mitigated at modest cost and in 3-5 years. Responding to the EMP Commission report, *The Wall Street Journal* editorialized on August 12, "All we can say is, we hope someone in Washington is paying attention." America's technological superiority could be our Achilles' heel unless we do pay attention to the EMP threat.

The EMP Commission report provides a detailed blueprint for safeguarding U.S. military forces and civilian infrastructures from a catastrophic EMP attack. I look forward to working with you to implement the steps necessary to implement the Commission's recommendations. Accordingly, I have attached my article, "Preventing an Electronic 9/11," for Military Information Technology magazine and the Executive Summary of the EMP Commission Report.

Sincerely,

Roscoe G. Bartlett

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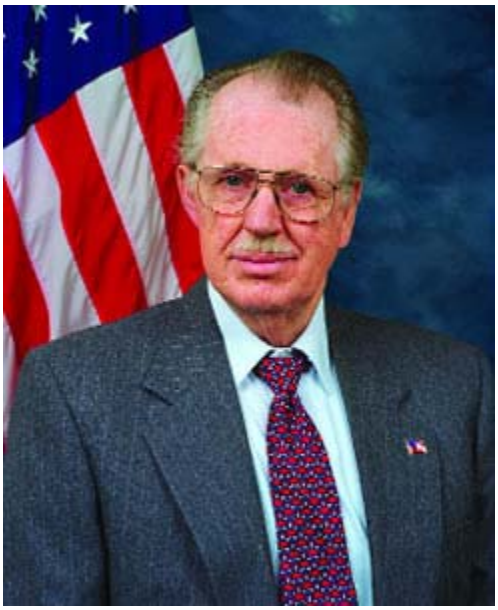
View From the Hill



A single nuclear weapon could produce an electromagnetic pulse attack that damages or destroys electronic systems across the entire continental United States.

By Representative Roscoe G. Bartlett, R-MD

Imagine the only people you could communicate with are those within your visual range or within the sound of your voice. Imagine the only way you could travel was to walk or ride a bike. Imagine no electricity, working telephones or computers; no fuel for cars or airplanes, no running elevators, no heat or light for houses and buildings, no running water and after a few days, no food. Imagine that you had to live under these conditions for weeks, months or even years.

An electromagnetic pulse (EMP) attack could inflict this catastrophic scenario across the entire United States. The same day the 9/11 commission released its final report, Congress and the nation were warned: "The current vulnerability of our critical infrastructures can both invite and reward an [EMP] attack if not corrected." That was the unanimous conclusion by nine of America's most respected experts in nuclear weapons and military and civilian infrastructure, in the "Report of the Commission to Assess the Threat to the United States from Electromagnetic Pulse Attack," which was released on July 22.

Where the terrorist airliner attacks of 9/11 killed thousands, a terrorist EMP attack could

indirectly kill millions and conceivably cause the permanent collapse of our entire society. An EMP attack is achieved by launching a nuclear missile and detonating it at high altitude tens or hundreds of kilometers above the target. The blast, through a variety of physical mechanisms, generates an electromagnetic pulse from the detonation point through the atmosphere to the earth's visible surface, all the way out to the horizon.

Thus, a single nuclear weapon could produce an EMP attack that damages or destroys electronic systems across the entire continental United States. Satellites in low earth orbit would also be damaged. "EMP is one of a small number of threats that can hold our society at risk of catastrophic consequences," the report stated. "It has the capability to produce significant damage to critical infrastructures and thus to the very fabric of U.S. society, as well as to the ability of the United States and Western nations to project influence and military power."

The commission found terrorists or other adversaries could project an EMP attack "without having a high level of sophistication." A short-range Scud missile launched from a freighter off our coast would suffice to deliver an EMP attack against the United States. Scud missiles are inexpensive and widely available on the world market.

International Dangers

EMP poses a growing threat. At least eight to nine countries currently have EMP capability. More actors may acquire this capability in the next 15 years. Terrorists could steal a nuclear weapon, purchase one from the black market or be given a bomb by a rogue state.

While any nuclear weapon will generate EMP, even "super EMP" nuclear weapons of special design may be available to terrorists. According to the report, "Certain types of relatively low-yield nuclear weapons can be employed to generate potentially catastrophic EMP effects over wide geographic areas and designs for variants of such weapons may have been illicitly trafficked for a quarter-century."

Consider Iran. The leading sponsor of international terrorism, Iran is also defying the efforts of the United Nations to restrain its nuclear ambitions. Iran has successfully tested launching a Scud missile from a vessel in the Caspian Sea. Given the gross inaccuracy of the launch mode, a Scud armed with a nuclear weapon would probably be unable to hit even a very large target, like a city. However, an EMP attack is not dependent upon missile accuracy.

Moreover, Iran has conducted a number of flight tests of its Shahab III medium range missile, which have been described as failures by the Western media because the missiles did not complete their ballistic trajectories, but were deliberately exploded at high altitude. Iran has described these same flight tests as successful. Is the West misinterpreting Iran's purpose for these missile flight tests?

The EMP commission conducted a worldwide survey of foreign military and technical open source literature and found the international community is well aware of EMP and its military potential. States aware of the military potential of EMP attack include Egypt, Israel, Taiwan, Pakistan, India, Iran and North Korea. The panel also found that "China and Russia have considered limited nuclear attack options that, unlike their Cold War plans, employ EMP as the primary or sole means of attack." An article written in English about EMP was recently

published in a Chinese-language technical journal.

These findings by the EMP commission contrast sharply with the position of the Clinton administration, which dismissed the potential threat from EMP. In late April 1999, I was among a bipartisan delegation of 10 House members who traveled to Vienna under the leadership of Rep. Curt Weldon, R-PA, in an effort to reduce tensions between the United States and Russia as a result of Operation Allied Force, the NATO bombing campaign in Yugoslavia.

We met with three of our Russian counterparts on the Duma International Affairs Committee, including its chairman, Vladimir Lukin, and senior Communist Party member Aleksandr Shabonov. On May 2, the Russians chastised the United States for military aggression in the Balkans and warned Russia was not helpless to oppose Operation Allied Force.

Lukin said, "If we really wanted to hurt you with no fear of retaliation, we would launch an SLBM [submarine launched ballistic missile] and detonate a single nuclear warhead at high altitude over the United States and shut down your power grid and communications for six months or so."

Shabonov added, "And if one weapon wouldn't do it, we have some spares."

Accurately identifying the source of a ballistic missile launched from the ocean could be difficult. After that wakeup call, I introduced legislation to analyze the potential threat from EMP under Title XIV of the fiscal 2001 defense authorization bill. The nine-member EMP Commission, chaired by William R. Graham, former science advisor to President Reagan, also included John Foster, Earl Gjelde, Robert Hermann, Henry Kluepfel, General Richard Lawson, Gordon Soper, Lowell Wood and Joan Woodard.

Commissioners were selected for their expertise on EMP phenomenology, nuclear weapons design and U.S. military and civilian infrastructures. The commission labored for two years to assess the EMP threat terrorists, rogue states or others might pose to the United States. The commission tasked the intelligence community, the Department of Defense and others to help in its work. The commission sponsored experiments that had never previously been performed to evaluate the vulnerability of modern electronics to EMP.

Reducing Vulnerability

The most important finding of the EMP commission is this: "Correction is feasible and well within the nation's means and resources to accomplish." Safeguarding the United States from EMP attack can be accomplished at relatively low cost.

"The nation's vulnerability to EMP gives rise to potentially large-scale, long-term consequences can be reasonably and readily reduced below the level of a potentially catastrophic national problem by coordinated and focused effort between the private and public sectors of our country," the report said. "The cost for such improved security in the next three to five years is modest by any standard—and extremely so in relation to both the war on terror and the value of the national infrastructures involved. The appropriate response to this threatening situation is a balance of prevention, protection, planning and preparations for recovery ... a number of these actions also reduce vulnerabilities to other

serious threats to our infrastructures, thus giving multiple benefits."

The EMP commission has provided Congress with the equivalent of a detailed blueprint for safeguarding our nation against a catastrophic EMP attack. Commission recommendations provide specific strategic, operational, tactical and technical guidance for improving the security against EMP of U.S. military forces and civilian infrastructures, including the infrastructures for power, communications, transportation, government, finance and banking, emergency medical services, and food and water. The destruction of these infrastructures and our inability to recover them would kill millions of Americans the old-fashioned way, through starvation and disease.

Will government and industry heed the recommendations of the EMP commission? Or will the pattern of America's growing vulnerability and collective denial by our leaders repeat, until, as with Pearl Harbor and 9/11, an unimaginable catastrophe teaches us the hard way?

One way to keep us focused on reducing the threat from EMP is legislation I have written with Representative Weldon, vice chairman of the House Armed Services Committee, to establish the EMP commission on a permanent basis. This commission would serve as a watchdog and advisor to the Congress, DoD, the Department of Homeland Security and industry to see the necessary steps are taken to defend the United States against EMP attack.

EMP Commissioner Lowell Wood calls EMP attack a "giant continental time machine" that would move us back more than a century in technology to the late 1800s. Responding to the EMP commission report, The Wall Street Journal editorialized on August 12, "All we can say is, we hope someone in Washington is paying attention."

America's technological superiority could be our Achilles' heel unless we pay attention to the EMP threat.

Representative Roscoe G. Bartlett is chairman of the House Armed Services Subcommittee on Projection Forces.