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**Statement Before The**  
**Congressional Caucus On EMP**  
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Every Member of Congress should join the newly forming Congressional Caucus on EMP, and help it achieve this year what may well be the most important accomplishment of all your congressional careers--saving the lives of millions of Americans, and the existence of our civilization, from the clear and present danger posed by a nuclear or natural electromagnetic pulse (EMP) event. An electromagnetic pulse is like a super-energetic radio wave that can damage and destroy electronic systems across vast regions, potentially across the entire continental United States. EMP is harmless to people in its direct effects, but by causing the collapse of critical infrastructures that sustain our lives, by causing airliners to crash and vast industrial accidents for example, the indirect effects of EMP would be genocidal. EMP is a high-tech means of killing millions of people the old fashioned way--through starvation, disease, and societal collapse.

An EMP can be generated by a terrorist or rogue state nuclear missile, perhaps launched off a freighter near our shores to preserve anonymity, and burst at high-altitude over the United States. In this manner, a single crude nuclear weapon, lofted by a primitive short-range missile, could generate an EMP that would destroy electronics and electric power across the entire continental United States, causing the collapse of the critical infrastructures--power, transportation, communications, banking and finance, food and water--that are vital to the existence of modern society and the survival of the American people. Iran, the world's chief sponsor of international terrorism, openly writes about eliminating the United States with an EMP attack, has conducted live missile launches simulating EMP attacks, and has practiced missile launching from a vessel in the Caspian Sea. North Korea, China and Russia also make no secret of their preparations to destroy the United States with EMP. A ship-launched EMP attack by terrorists or rogue states would conceal the identity of the attacker, so we might never know who hit us.

An EMP can also be generated by the Sun. A solar flare or coronal mass ejection can generate a "great" geomagnetic storm similar to an EMP attack from a high-yield nuclear weapon, with equally catastrophic consequences. The last great geomagnetic storm was the Carrington Event of 1859, that caused widespread damage and fires in telegraph stations and other primitive electronics--none of which were then necessary for societal survival. No great geomagnetic storm has occurred since 1859 to threaten the existence of our increasingly electronic society. But such a storm is inevitable. Great geomagnetic storms are estimated to occur every century or so. Many scientists think we are overdue. Many believe there is a heightened risk of a great geomagnetic storm during the peak of the impending solar maximum, that will occur in 2012-2013. The solar maximum recurs every 11 years. It warrants repeating that a great geomagnetic storm is inevitable.

The above findings represent the mainstream scientific consensus, first established by the congressionally mandated EMP Commission, that examined the nuclear and natural EMP threat for eight years, delivering its final report to Congress in 2008. The National Academy of Sciences subsequently independently re-examined the EMP Commission's warnings about the consequences of a great geomagnetic storm, and arrived at the same conclusion, and endorsed the recommendations of the EMP Commission. In 2009, the Congressional Commission on the Strategic Posture of the United States re-examined the EMP threat from terrorists and rogue states, and likewise independently concurred with the EMP Commission's warning and recommendations. Through 2010, several other major U.S. government studies, including by the Department of Energy and an interagency study led by the Federal Energy Regulatory Commission, have again re-examined the nuclear and natural EMP threat, concurred with the EMP Commission's warning, and urged immediate implementation of the EMP Commission's recommendations. So there is an official consensus on the EMP threat within the U.S. Government studies, with no official study dissenting from the view that EMP is a potentially catastrophic threat that needs to be addressed urgently.

The EMP Commission warned that, given our current state of unpreparedness, within 12 months of an EMP event, about two-thirds of the U.S. total population, about 200 million Americans, would perish from starvation, disease and societal collapse. Other credible estimates foresee the loss of American lives in the aftermath of an EMP to be on the order of 80-90 percent of the total U.S. population, some 280 million lives lost.

The good news is that there is no excuse for the United States to be vulnerable to EMP. The EMP Commission provided a cost-effective plan, endorsed by all subsequent studies, that could within a few years protect U.S. critical infrastructures from the worst effects of EMP. Indeed, protecting the 300 most important high-energy transformers that are indispensable to the national power grid is estimated to cost \$100-200 million--about one dollar for every American life that would be saved. This alone is probably not sufficient protection, but it is the absolute minimum necessary to create the possibility of saving millions of American lives.

Unfortunately, since 2008, Congress has tried but failed to pass legislation that would implement the EMP Commission's recommendations. However, we are on the verge of victory. Last year, the House unanimously passed legislation to protect the national electric grid from EMP, cyber attack, sabotage, and natural disasters--but it narrowly failed in the Senate. Had the Congressional Caucus on EMP been in existence last year, the legislation would have been enacted, and our nation would already be on the path to EMP protection.

The Congressional Caucus on EMP can and will achieve this year:

--Passage of the SHIELD Act, recently introduced by Congressman Trent Franks and co-sponsored by Congressman Roscoe Bartlett, legislation designed to protect the national electric grid from nuclear or natural EMP. The SHIELD Act would implement one of the most important recommendations of the EMP Commission. The electric grid is the "keystone" of the critical infrastructures as everything, all the other critical infrastructures that sustain our economy and our existence as a modern society depend, directly or indirectly, upon electricity.

Enactment of the SHIELD Act and protection of the national electric grid will be a giant step forward toward securing our nation against the effects of an EMP catastrophe.

Other legislative initiatives that I hope the Congressional Caucus on EMP might support this year include:

--Establishment of an EMP Task Force, comprising as many of the original EMP Commissioners who are available to serve, to advise the Congress, Federal and State governments and the private sector on how best to implement the EMP Commission recommendations to protect the critical infrastructures. The EMP Commission was formerly the primary engine driving policymakers toward EMP protection and was the greatest concentration of scientific and technical expertise on EMP protection in the Free World. The termination of the EMP Commission in 2008--which termination was opposed by both the House of Representatives and the Department of Defense--deprived America of its best informed advocate and advisor on EMP protection, and left a vacuum of expertise on EMP which has still not been filled.

--Passage of a Sense of the Congress declaring nuclear and natural EMP to be a clear and present danger to national and homeland security deserving high priority attention, and urging the President to sign the draft Executive Order on EMP Protection written by the EMP Commission, but never enacted. President Obama, by the simple, single act of signing the Executive Order on EMP Protection, would with the stroke of his pen virtually ensure that our nation would become secure against an EMP catastrophe.

--Passage of legislation directing the Department of Homeland Security to include a nuclear or natural EMP event that threatens catastrophic consequences to the entire continental United States among its National Emergency Planning Scenarios. Unless and until the Department of Homeland Security officially recognizes the EMP threat by including it among the National Emergency Planning Scenarios, planning and training to protect our nation against EMP will continue to be neglected at the federal, state and local levels, and in the private sector.

--Passage of reporting requirements tasked upon the Secretary of Homeland Security and the Secretary of Defense: expressing the Sense of the Congress that civil-military authorities should give high priority to joint planning, preparation, and training for survival of the American people and recovery of the life sustaining critical infrastructures from an EMP event; tasking the Secretaries of Homeland Security and Defense to explain what, if anything, they are doing now to jointly plan and prepare for survival and recovery from EMP; and tasking the Secretaries to explain their future joint plans and preparations to avert the loss of millions of American lives from an EMP catastrophe. Most Americans assume that the Department of Homeland Security and the Department of Defense already have joint plans and preparations to save American lives and recover our society in the aftermath of a nationwide catastrophe. Unfortunately, this is a myth. In reality, the Defense Department and Homeland Security have laid no plans to save the American people from EMP or from any nationwide disaster, even while the Defense Department does routinely plan and prepare to rescue foreign citizens from major catastrophes, like the Indonesia tidal wave or the Haiti earthquake. Civil-military cooperation on EMP protection is urgently needed as only the Department of Defense has the resources to enable the

Department of Homeland Security to save millions of American lives and rebuild our nation in the aftermath of an EMP.

In concluding, I again urge every Member of Congress to please join the Congressional Caucus on EMP, and help implement the policies, planning, and technical safeguards that are so urgently needed--and in so doing realize what may well prove the crowning achievement of your congressional career by ensuring the survival of America.