

EMP Ignorance Is Bliss

Kelsey Atherton in “Electromagnetic Pulses Are The Last Thing You Need to Worry About in a Nuclear Explosion” (Foreign Policy July 21, 2020) describes my Task Force on National and Homeland Security (a congressional advisory board) as among the culprits exaggerating the threat from EMP, dismissed by Atherton as “one of America’s weirdest strategic obsessions.”

High-altitude electromagnetic pulse (HEMP) is generated by a nuclear weapon detonated exo-atmospherically, at an altitude of 30-400 kilometers. No blast or fire or radioactive fallout from a nuclear explosion in the vacuum of outer space reaches the surface of the Earth, only the HEMP. A single nuclear weapon can generate a HEMP field covering much of North America that would blackout electric grids and other life-sustaining critical infrastructures, paralyze unprotected military forces, and blind radar and satellite National Technical Means needed to identify the attacker.

The obvious strategic advantages and threat from a nuclear HEMP attack have worried the Pentagon for decades, and are a growing concern given the emergence of new technologies like nuclear Super-EMP weapons and increasingly powerful Non-Nuclear EMP weapons in the hands of Russia, China, North Korea, and potentially Iran.

Atherton is a classic example of an “instant EMP expert” who knows nothing about EMP but unwisely offers uninformed opinions to the public anyway, akin to a medical quack peddling fake cures and false hope to cancer victims. Contrary to Atherton, EMP is a very real threat that could kill millions of Americans.

Since 1963, every Democrat and Republican administration and Congress has rightly supported Defense Department programs investing billions of dollars to protect U.S. strategic forces and C3I from the paralyzing effects of EMP attack. Yet, contrary to Atherton, the national electric grid and other life-sustaining critical infrastructures, including those vital to military power projection, have never been protected.

Atherton makes no mention of the bipartisan Congressional EMP Commission and the bipartisan Congressional Strategic Posture Commission, comprising the nation’s foremost experts on EMP, nuclear weapons and strategy. Both Commissions independently warned potential adversaries, including terrorists, could use one or a few nuclear weapons to make an EMP attack that would blackout the national electric grid and other life-sustaining critical infrastructures, bringing America to its knees.

The EMP Commission warns an EMP attack could kill millions of Americans, up to 90% of the population, from starvation, disease, and societal collapse. And the EMP attack could be executed anonymously, by satellite or launched from a freighter or even using a balloon—so the U.S. would not know against whom to retaliate.

If a Super-EMP weapon is used, which generates field strengths exceeding U.S. military hardening standards, U.S. retaliatory forces could be paralyzed.

Atherton describes as “laughable” that adversaries could or would make a nuclear EMP attack using one or a few weapons, instead of making a large-scale nuclear attack that blasts U.S. cities. But Atherton is obviously unfamiliar with the military doctrines of Russia, China, North Korea, and Iran that describe doing exactly what Atherton denies, making nuclear EMP attacks as a dimension of Information Warfare, Cyber Warfare, and Electronic Warfare. (See the EMP Commission report *Nuclear EMP Attack Scenarios and Combined-Arms Cyber Warfare* July 2017.)

Atherton appears ignorant of Non-Nuclear EMP weapons, like the USAF CHAMP, that are widely available now, even to terrorists, that could be used to inflict a nationwide blackout.

Atherton appears ignorant of the natural EMP threat from the Sun. A solar superstorm, like the 1859 Carrington Event, is inevitable, likelihood estimated by NASA to be 12% per decade, which could blackout electric grids and life-sustaining critical infrastructures worldwide, putting at risk the lives of billions.

It is disappointing that Foreign Policy would publish an article on EMP by someone as ignorant as Atherton, whose views are contradicted by real experts such as Dr. William Graham, Dr. James Schlesinger, and Dr. William Perry.

Graham served as Chairman of the EMP Commission, was on the defense science team that discovered the nuclear EMP phenomenon after the 1962 STARFISH PRIME high-altitude nuclear test, worked on protecting U.S. military systems from EMP since 1963, was President Reagan’s White House Science Advisor and ran NASA. Schlesinger and Perry Co-Chaired the Strategic Posture Commission, that warned a nuclear EMP attack by rogue states or terrorists is a real possibility that needs to be addressed urgently. Schlesinger was former Secretary of Defense and Director of CIA. Perry was President Clinton’s Secretary of Defense.

Atherton’s article is replete with basic errors of fact parading ignorance of EMP:

--In his first paragraph, high-altitude EMP (HEMP), the subject of Atherton’s article, was not a factor in the Hiroshima and Nagasaki atomic bombings. No HEMP was generated because both bombings were fused for low-altitude atmospheric detonations. Significant HEMP requires detonation at high-altitude, above 30 kilometers.

--Atherton references a National Public Radio interview with Jeffrey Lewis who found “laughable” a warning by Ambassador R. James Woolsey, former Director of Central Intelligence, that North Korea could make an EMP attack on the United States. Lewis is a political scientist and academic who knows nothing about EMP, but is often cited as an expert on everything nuclear by an equally ignorant press.

--North Korea has the last laugh on Lewis and Atherton, Atherton apparently ignorant that North Korea described its H-bomb, successfully tested in September 2017, as being capable of delivering a Super-EMP attack. Shortly after the H-bomb test, North Korea published a technical article “The EMP Might of Nuclear Weapons” accurately describing a Super-EMP nuclear weapon. The Congressional EMP Commission warns in its 2017 reports that North Korea could make an EMP attack on the U.S.

--Atherton asserts falsely that civilian critical infrastructures vital to U.S. military operations are hardened against EMP. Some telecommunications are protected, but not against Super-EMP effects, and the electric grid and other civilian critical infrastructures are unprotected.

--Atherton wrongly implies most military forces are protected against EMP, when very few are protected to 50 kilovolts/meter, and none against Super-EMP effects (above 50 kvs/meter). Even strategic forces may no longer be adequately protected, according to the Congressional EMP Commission.

Atherton wrongly implies that EMP is the “obsession” of individuals and small unofficial groups, ignoring the work of the Congressional EMP Commission, the Congressional Strategic Posture Commission, and the USAF Electromagnetic Defense Task Force that all contradict Atherton’s absurd assertion that EMPs “are the last thing you need to worry about in a nuclear explosion.” These official groups, funded by the Defense Department with access to classified information and the best expertise on nuclear weapons and their effects, all agree that the first, most likely, and perhaps only necessary nuclear attack on the U.S., its overseas forces and allies, might be an EMP.

For the real story about EMP, see the unclassified EMP Commission reports at www.firstempcommission.org

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