## EMP Shield Presentation February 26, 2022

Electromagnetic pulse can occur naturally and it can also be man made. Examples of naturally occurring EMP are solar flares and nearby lightning strikes to name two. Man made examples are that the US and other military have low yield nuclear weapons intended to produce small localized EMP events. They also have larger weapon systems that can knock out larger areas, the extent of which is highly classified. What are the implications for amateur radio operators?

Amateur radio operators operate in various environments. From their home "ham shacks" and chasing storms in personal vehicles being two. What can hams do to protect their gear and perhaps their broader electrical system components? Think protect your stuff with a robust and very fast "whole home/vehicle" surge protector. There is a product on the market that addresses these needs. It is called EMP Shield.

Many of you are aware that Kathy and I recently did a shopdominium build. We researched market offerings to protect our electronics and we installed EMP Shield devices on our generator and all three 200A service panels. We also purchased their 12v unit for use on vehicles. To explain how this product works I am going to roll two YouTube videos.

EMP Shield DIY install whole home Lighting and surge protection.

EMP Shield Vehicle Installation Instruction - Electromagnetic Pulse Protection on Police Car.

How do they work? In short, EMP Shield reacts in "less than 500 trillionths of a second" to shunt EMP to ground so that it does not fry sensitive electronics. EMP Shield has an impressively documented testing process proving their method:

## **EMP Shield Testing**

Yesterday our own Jerry Keisler sent me the table that is being handed out now. The source for that table is <u>Electromagnetic Pulse (EMP) Protection and Resilience Guidelines for Critical Infrastructure and Equipment.</u> The link to this entire 133 page US government produced study will be included on the document we will put on the Club website so that you can read over the entire paper.

It is my intention to continue to polish and improve upon this presentation and I will present it again another 2-3 times in 2022 so that anyone that missed the first presentation can catch it in the new and improved version.