

Introduction/Overview/EMP Protection:

EMP AND CME

Electro Magnetic Pulse
Coronal Mass Ejection

ELECTRO MAGNETIC PULSE DEFINITION

Electromagnetic Pulse (EMP) is an instantaneous, intense energy field that can overload or disrupt at a distance numerous electrical systems and high technology microcircuits, which are especially sensitive to power surges. A large scale EMP effect can be produced by a single nuclear explosion detonated high in the atmosphere, creating a signal 1 Million times stronger than normal.

CORONAL MASS EJECTION DEFINITION

An eruptive release from the solar corona (the Sun's outer atmosphere) of a large cloud of plasma containing several billion tons of material in which is embedded solar magnetic fields. Also, it refers to the plasma cloud or magnetic cloud itself.

POTENTIAL EMP THREAT SOURCES

- RUSSIA
- NORTH KOREA
- IRAN
- CHINA
- ISIS
- Etc., Etc., Etc.

EMP FACTS

- EMP Coverage
 - Blast Altitude Determines Coverage Area
 - Blast at 300 miles – No Power Cont. U.S.
 -
- 1962 EMP felt in Hawaii from 900 miles
- U.S. is Dependent on Electricity/Electronics
- Electricity was once a convenience, but now it is a necessity!

EMP VIDEO

EMP NUCLEAR BOMB THREAT



Link:

<http://delta.bobvawter.com/Presentations/emp.mp4>

EMP NOTE

EMP Blast Casualty Projections estimate hundreds of millions of people would die within one year from disease and starvation!

WHAT'S AFFECTED?

- Semiconductor Circuits
- Electrical Power Grid
- Batteries?
- Transportation
- Diesel Powered?
- Older Model Vehicles Possibly Less Likely to be affected

- Cont'd -

WHAT'S AFFECTED? (CONT'D)

- Communication Equipment
- Military Equipment
- Our Way of Life
- Frequency - DC to Daylight
- EMP Attack - U.S. Setback 100-200 years

WHAT TO PROTECT? (REDUNDANT EQUIP)

- Ham Radio(s)
- Handy Talkie(s)
- Emergency AM/FM/SW/Weather Radio
- SWR Meter
- Antenna Auto Tuner
- Multi-Meter – Oscilloscope
- Solar Controller - Solar Panels
- Electric Generator

- Cont'd -

WHAT TO PROTECT? (REDUNDANT EQUIP)

- Laptop Computer and Power Supply
- Computer Tablet and Charger
- WIFI Router - WIFI Modem?
- Cell Phone and Charger?
- Automobile Computer Backup Modules
- Batteries - Extra Batteries - Battery Adapters
- LED USB Powered Lights
- Battery Powered Clock/Calendar/Temp

- Cont'd -

WHAT TO PROTECT? (REDUNDANT EQUIP)

- Spare Rectifier Bridges
- Spare Voltage Regulators
- Spare Diodes
- Spare Resistors
- Spare Capacitors
- Anything Electronic You Want to Protect
- Anything Electrical You Want to Protect

FARADAY CAGE PROTECTION TIPS

- Demo Radio Inside Container
- Variety of Possible Designs
- Sealed Metal Container
- Insulate from Contact with Metal
- Nested Faraday Containers for Best Protection
- Use at Least 3 Layers Alternate Item-Insulator-Metal-Insulator
- Do Not Allow Metal to Metal Contact
- Do Not Use Ground Wire - Acts as Antenna

CREATING YOUR FARADAY CAGE

- Cost Effective Design
- Components to Use
 - New Trash Can(s) with Tight Fit Lids
 - Cardboard
 - Paint Cans - Cookie/Popcorn Tins
- Aluminum Foil
- Metal Tape
- Microwave Ovens?

CREATING YOUR FARADAY CAGE

Cans/Tins

Cardboard

Newspaper

Metal Tape



CREATING YOUR FARADAY CAGE



Use Metal Tape

Seal Holes



DO'S AND DON'TS

- Use New Non-Dinged Cans
- Insure Tight Fit
- Use Insulating Materials between Item and Metal
- Cover Holes and Rim with Metal Tape
- Nest 3 Layers (Layer inside Layer inside Layer)
- Insulate between Items and Layers
- Label Each Item/Container
- Using File Cabinet as Cage **NOT** Recommended

- Cont'd -

DO'S AND DON'TS

- Nest 3 Layers (Layer inside Layer inside Layer)
- Insulate between Items and Layers



- Cont'd -

DO'S AND DON'TS

Before beginning to shield your electronics and electrical devices remove the antennas and power cords. Remember, ground wires are not recommended to your shield since wires can act as an antenna for an EMP Pulse.



SUMMARY

- Build Your Faraday Cages – Now
- List Items to Protect
- Remove Antennas/Power Cords
- Locate Faraday Cage Components
- Trash Cans - Paint Cans - Cookie/Popcorn Tins
- Industrial Aluminum Foil
- Metal Tape
- Cardboard/Newspaper
- Label/List Inventory of Items Protected per Container
- Pray for a Future Without EMP

SUMMARY



REFERENCES

Presentation Online:

<http://delta.bobvawter.com/Presentations/emp.pdf>

(Cont'd)

REFERENCES

EMP Videos

<http://youtu.be/74jPBnWKJb4>

<http://youtu.be/daxuBBMRI8g>

<http://youtu.be/WpYYP31th14>

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REFERENCES

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<http://www.futurescience.com/emp/emp-protection.html>
- End of the American Dream
<http://endoftheamericandream.com/archives/what-are-you-going-to-do-when-a-massive-emp-blast-fries-the-u-s-electrical-grid>
- STARFISH PRIME
https://en.m.wikipedia.org/wiki/Starfish_Prime

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Questions?

End of Presentation