



PRESENTED BY:
JONATHAN HOLLERMAN



THREAT VECTORS:

A PRESENTATION ON THE CURRENT
THREATS FACING AMERICA AND
OUR MODERN WAY OF LIFE.

Mar 11, 2022



NORMALCY BIAS



Noun - a cognitive bias which leads people to disbelieve or minimize threat warnings. Consequently, individuals underestimate the likelihood of a disaster, when it might affect them, and its potential adverse effects.

JONATHAN HOLLERMAN

Former Military - SERE Specialist
(Survival, Evasion, Resistance, and Escape)

#1 Bestselling Author on Survival and
Preparedness

President of Grid Down Consulting

Vice President of EMPact America

Member of the STG
Secure the Grid Coalition

Member of the EDTF
Electromagnetic Defense Task Force



THREAT MATRIX



CLIMATE CHANGE
future extreme weather and global famines

MASSIVE FINANCIAL COLLAPSE
total collapse of the American economy

PANDEMIC
a naturally occurring event or biological terrorism

PHYSICAL OR CYBER ATTACK
on US critical infrastructure & the electric grid

SOLAR FLARE OR EMP ATTACK
total destruction of the US electric grid



Rising
Sea Levels

Extreme
Weather

Flooding

Food
Production

Famine

Chaos

CLIMATE CHANGE

FINANCIAL COLLAPSE



Complete Collapse of Financial
Banking System



Hyperinflation – Weimar Republic



Loss of US Dollar as the World's
Reserve Currency



Debt Clock – 30 Trillion
US Unfunded Liabilities – 164 Trillion



PANDEMIC

BIOTERROR



NATURAL
OCCURANCE



*COVID-19
DEATHS

0.0028

330 Million

0.00047

130 Million

(Working Class 20-50)

GRID DOWN EVENTS

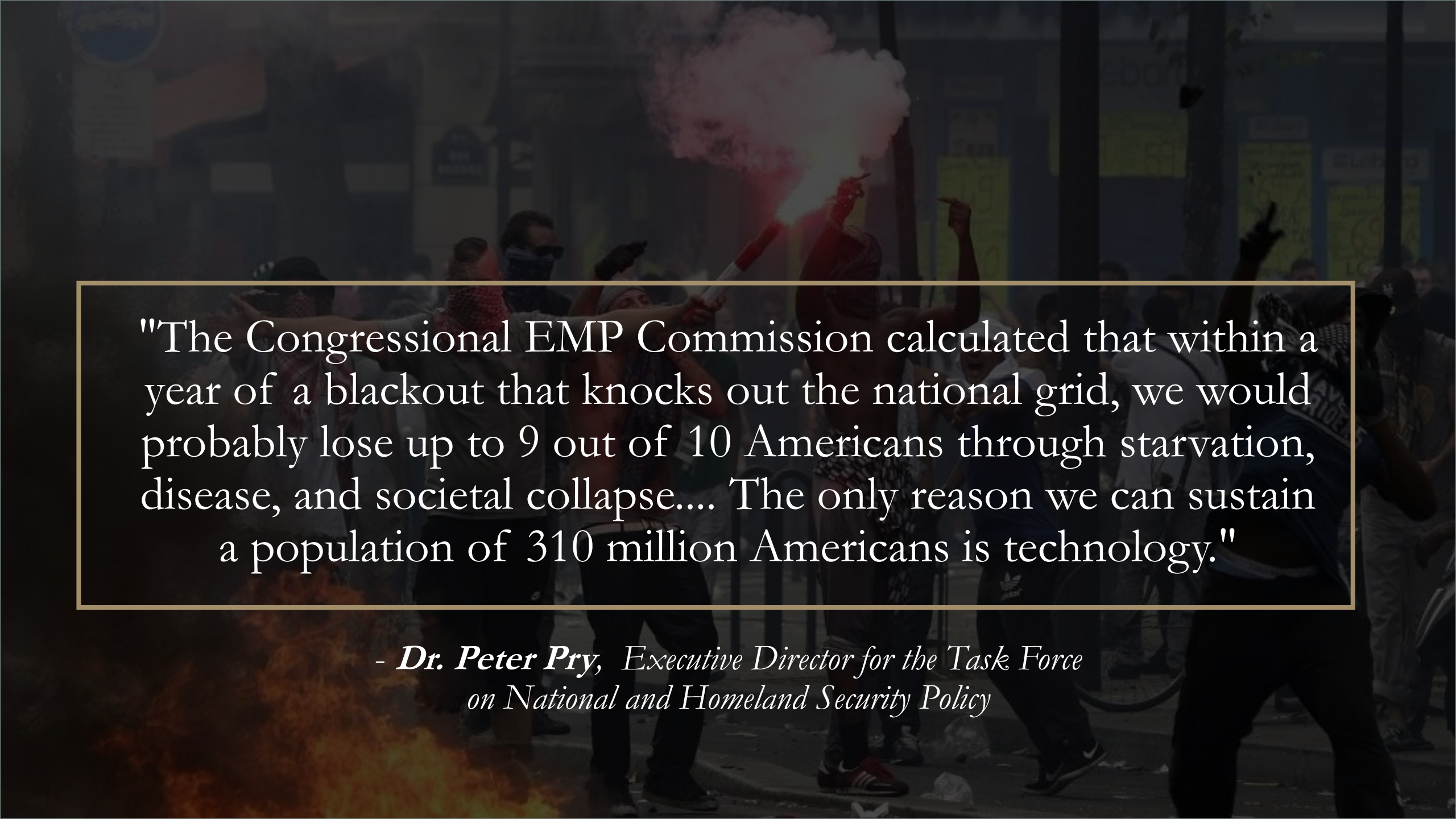
A satellite view of Earth at night, showing city lights and a grid of event categories. The background is a dark blue satellite image of the Earth, with city lights visible as bright yellow and orange spots. The text 'GRID DOWN EVENTS' is prominently displayed at the top in a large, white, serif font. Below the title, there are four rounded rectangular boxes, each containing a category of event: 'PHYSICAL', 'CYBER', 'SOLAR FLARE', and 'EMP'. The boxes are arranged vertically and are set against a dark background that matches the satellite image.

PHYSICAL

CYBER

SOLAR FLARE

EMP



"The Congressional EMP Commission calculated that within a year of a blackout that knocks out the national grid, we would probably lose up to 9 out of 10 Americans through starvation, disease, and societal collapse... The only reason we can sustain a population of 310 million Americans is technology."

- *Dr. Peter Pry, Executive Director for the Task Force
on National and Homeland Security Policy*

AMERICA'S ACHILLES HEEL



PHYSICAL ATTACK

Metcalf Substation

No Standardized
Security Measures

Increasing Attacks

Squirrel !!!

"Destroy nine interconnection substations and a transformer manufacturer and the entire United States grid would be down for at least 18 months, probably longer."

- Internal memo, Federal Energy Regulatory Commission



CYBER ATTACKS

ESPIONAGE

Botnets and Spear Phishing

SABOTAGE

Impact Software and Systems

CYBER WAR

Destroy Critical Infrastructure

QUANTUM and AI

Extreme Unknown Risks



“There shouldn’t be any doubt in our minds that there are nation states and groups out there that have the capability to [flip the switch on our electric grid]... It is only the matter of when and not if we are going to see something traumatic.”

Admiral Michael Rogers, Commander, US Cyber Command - Nov 20, 2014



politics LIVE TV

Energy secretary says adversaries have capability of shutting down US power grid

By Chandelis Duster, CNN
Updated 11:37 AM ET, Sun June 6, 2021



Energy secretary: US adversaries have the capability to shut down our power grid 02:13

(CNN) — Energy Secretary Jennifer Granholm on Sunday warned in stark terms that the US power grid is **vulnerable to attacks**.

Asked By CNN's Jake Tapper on "State of the Union" whether the nation's

CONTENT BY COMPARECARDS

- Experts say these are the best credit cards of 2021
- 7 cards Charging 0% Interest Until Nearly 2021
- Earn unlimited 1.5x Miles for every dollar spent on all purchases
- Cash In On These Cashback Cards (Get \$200 Fast)
- The Best Credit Cards for People with Excellent Credit

CONTENT BY LENDINGTREE

- Lock in a 2.06% APR Refinance Rate Before The Fed Meets

The U.S. government thinks China could take down the power grid

INSURANCE JOURNAL

Federal Energy Regulator Warns on Cyber Attacks on Power Grid

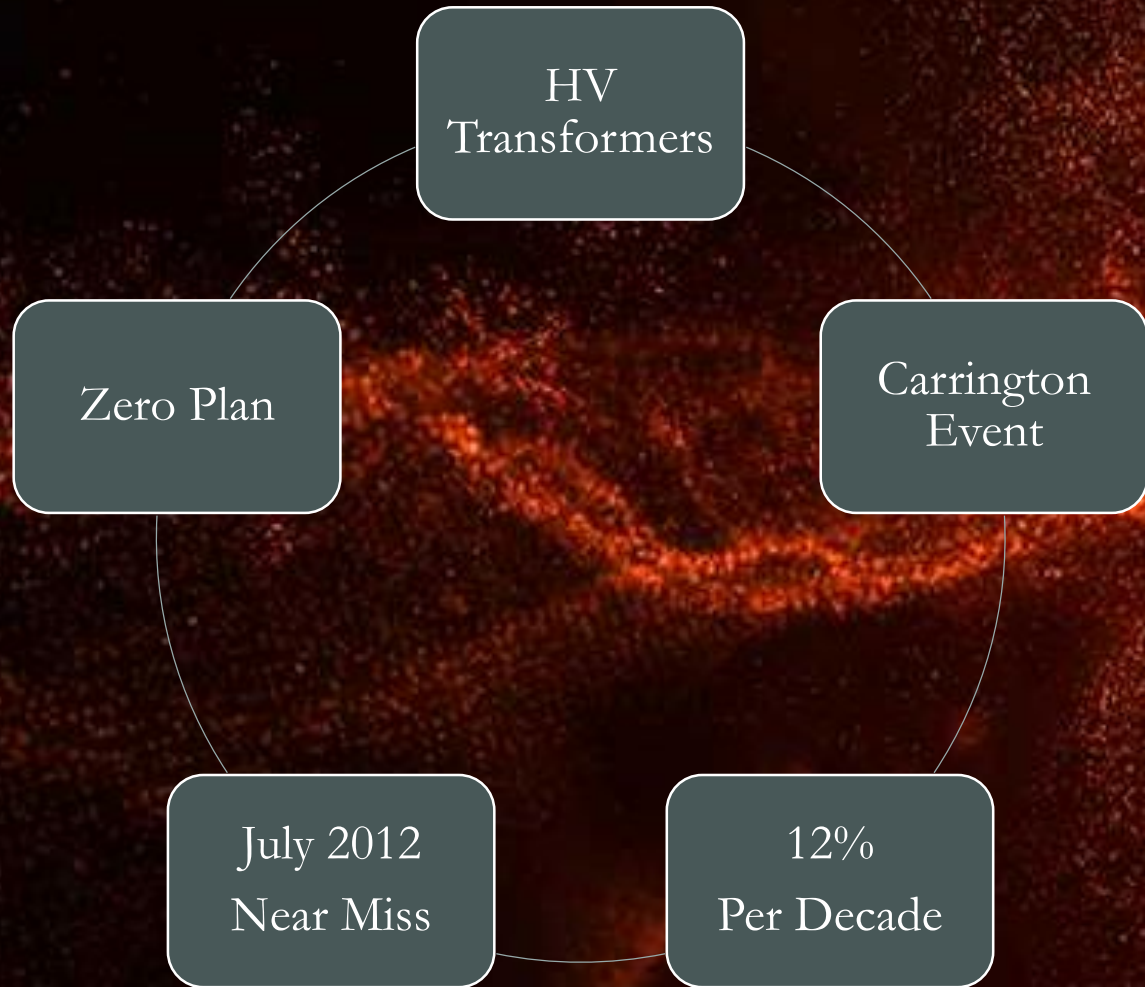
By Ari Natter | March 28, 2018

Forbes

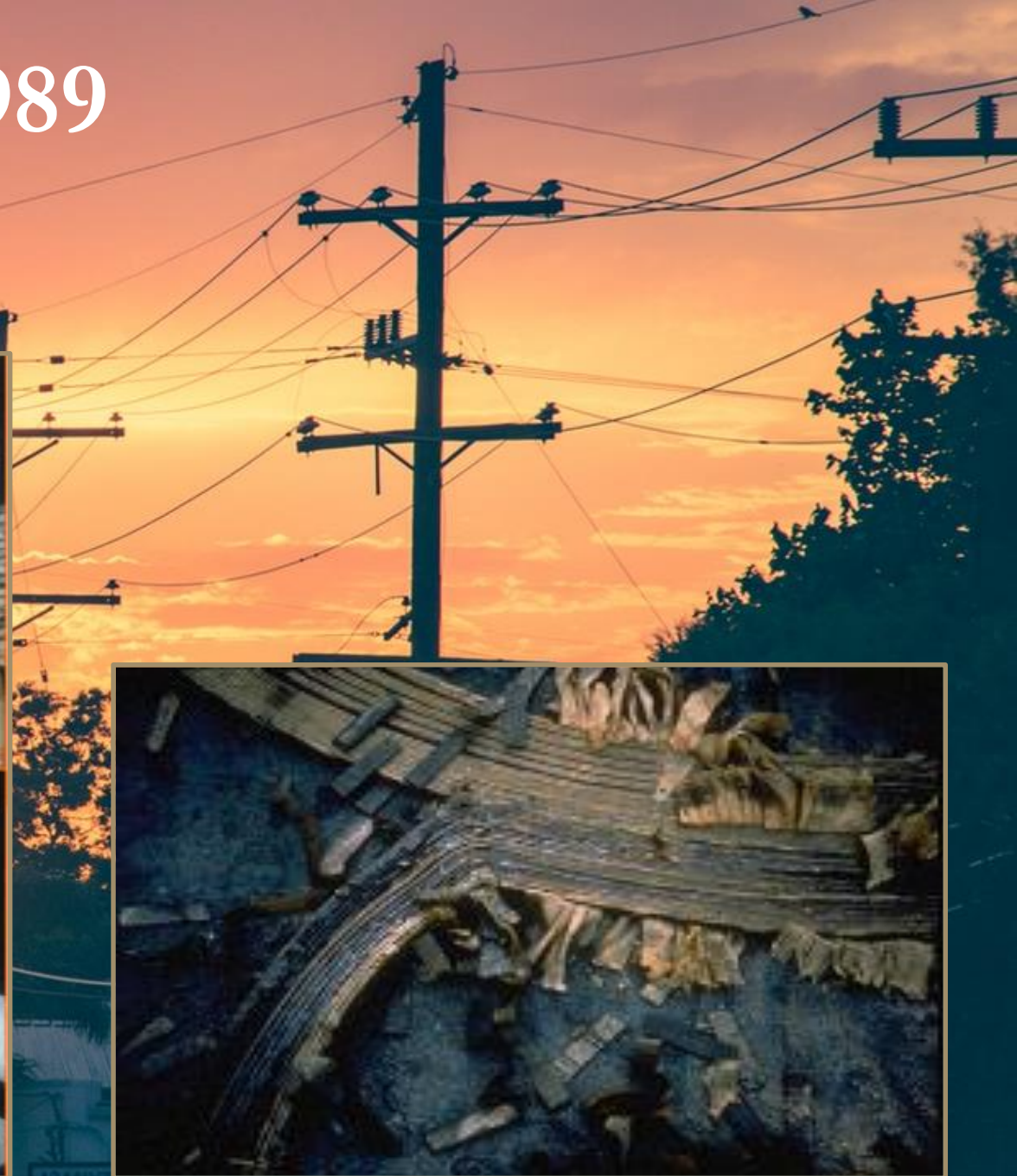
Here Are The Clever Means Russia Used To Hack The Energy Industry

Mar 28, 2018, 06:00am

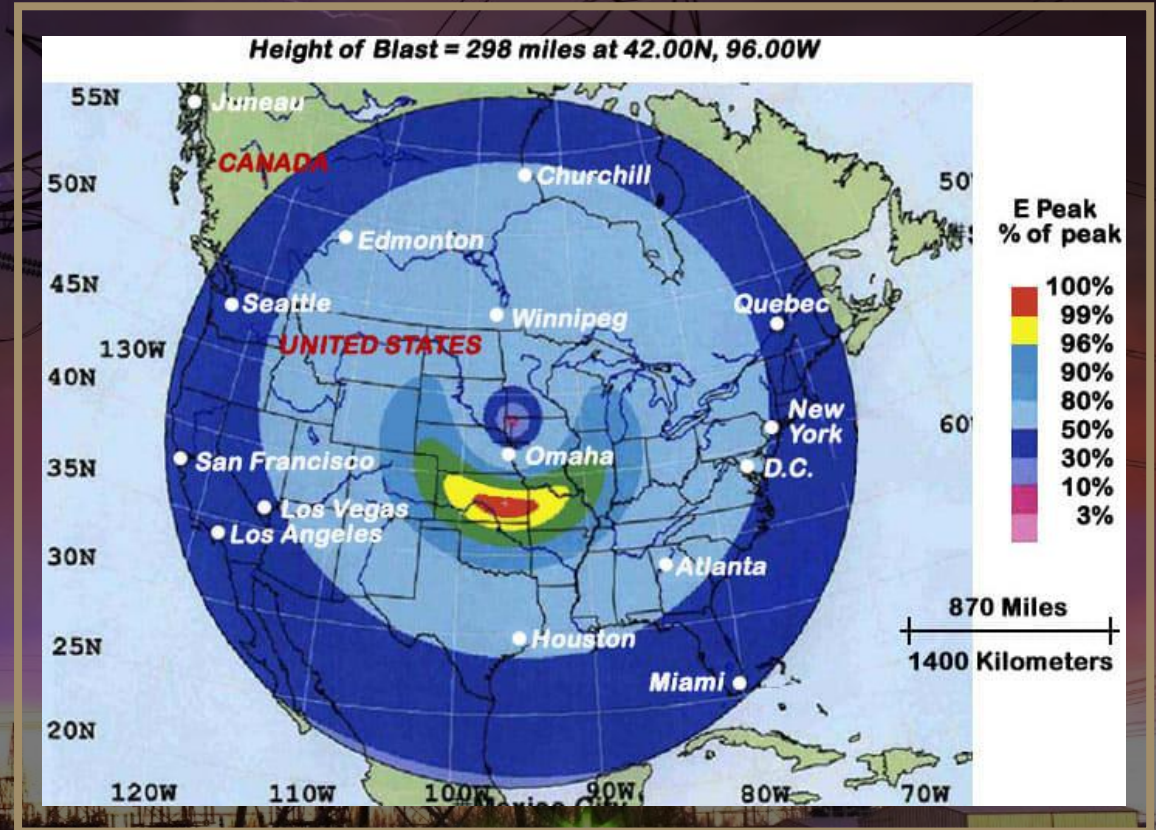
SOLAR FLARE



QUEBEC BLACKOUT 1989



EMP ATTACK



Destroys
Electronics

Future
Warfare

9 out of 10
Dead

Mad Max

No Plans
in Place

ACTIVITIES OF THE COMMITTEE ON
HOMELAND SECURITY AND
GOVERNMENTAL AFFAIRS

REPORT

OF THE

COMMITTEE ON HOMELAND SECURITY AND
GOVERNMENTAL AFFAIRS
UNITED STATES SENATE

AND ITS

SUBCOMMITTEES

FOR THE

ONE HUNDRED FOURTEENTH CONGRESS



MARCH 28, 2017—Ordered to be printed

U.S. GOVERNMENT PUBLISHING OFFICE
WASHINGTON : 2017

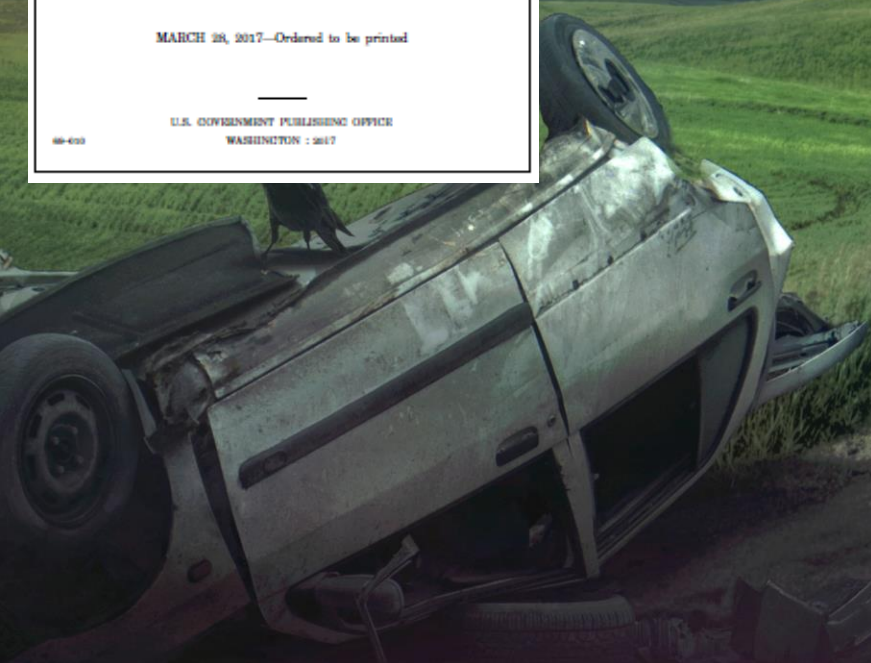
C. CRITICAL INFRASTRUCTURE

The United States depends on its critical infrastructure, particularly the electric power grid, as all critical infrastructure sectors are to some degree dependent on electricity to operate.¹⁶ A successful nuclear electromagnetic pulse (EMP) attack against the United States could cause the death of approximately 90 percent of the American population.¹⁷ Similarly, a geomagnetic disturbance (GMD) could have equally devastating effects on the power grid.¹⁸ Chairman Johnson has made it a priority to examine the threats, both man-made and natural, to the country's critical infrastructure.

¹⁶U.S. Dep't of Energy, Office of Electricity Delivery & Energy Reliability, *Cybersecurity*, <http://energy.gov/oe/services/cybersecurity> (last visited Sept. 21, 2016).

¹⁷Critical National Infrastructures, Report of the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack (Apr. 2008), <http://www.empcommission.org/docs/A2473-EMP-Commission-7MB.pdf>.

¹⁸Gov't Accountability Office, GAO-16-243, *Critical Infrastructure Protection: Federal Agencies Have Taken Actions to Address Electromagnetic Risks, But Opportunities Exist to Further Assess Risks and Strengthen Collaboration* (2016), <http://www.gao.gov/assets/680/676030.pdf>.



MILLIONS WOULD DIE...

“Surely, the Government has a plan...right?”



There is NO Plan!

Lessons Learned

- Participants noted the benefits of developing more formal protocols and agreements and coordinating with private partners, federal, regional, state, local, academic, and non-governmental organizations.
- Current planning does not include any contingencies for very long term or extremely wide spread power outages.
- A loss of electronic based communications capability would make maintaining situational awareness difficult at best. Public Information and Warning is heavily dependent on electronic based media.
- We are a highly interdependent society.



February 2011

INSS
INSTITUTE FOR NATIONAL STRATEGIC STUDIES
National Defense University

STRATEGIC FORUM

Small Nuclear Reactors for Military Installations: Capabilities, Costs, and Technological Implications

by Richard B. Andres and Hanna L. Breetz

“Currently, domestic military installations receive 99 percent of their electricity from the civilian power grid.”

“Most military bases have backup power that allows them to function for a period of hours or, at most, a few days on their own. If power were not restored after this time, the results could be disastrous. First, military assets taken offline by the crisis would not be able to help with disaster relief.”

www.ndu.edu/inss

SF No. 262 1

CENTER FOR STRATEGIC RESEARCH

NORTH AMERICAN ENERGY RELIABILITY CORPORATION

NERC

Self Regulation

Self Interest

Unaccountable

Shareholder Driven

Zero Plan



Electricity Subsector
Coordinating Council



Edison Electric
INSTITUTE





PROJECT AURORA

No Authority

No Follow Through

Industry Insiders

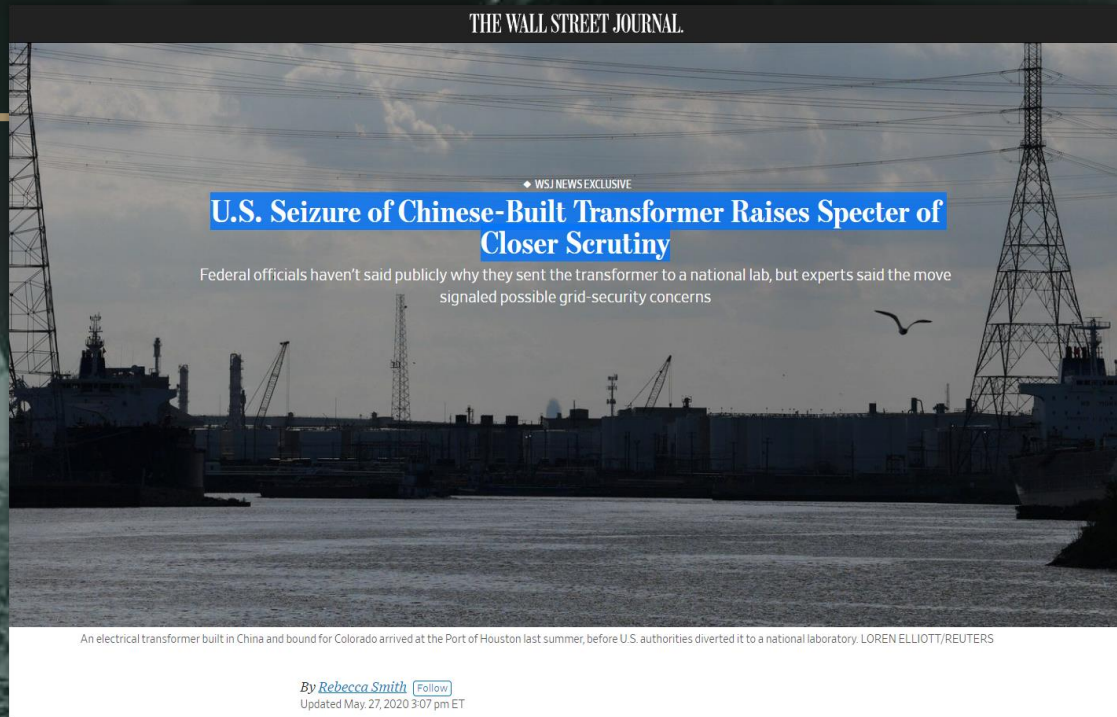
Zero Plan



FERC

FEDERAL ENERGY RELIABILITY COMMISSION

CHINESE TRANSFORMERS



“They found hardware that was put into that that had the ability for somebody in China to switch it off.”[10]

Latham Saddler, Director of Intelligence Programs at NSC
July 16, 2021

A Tale of China, EMP and Transformers – America’s Achilles Heel



(AFP via Getty Images)



By **Henry F. Cooper**

Friday, 16 July 2021 08:13 AM

[Current](#) | [Bio](#) | [Archive](#)

WHY CAN'T "THEY" FIX GRID SECURITY?

- ◆ **The regulatory structure of “the grid” is mind-numbingly complex.**
 - More than 60 state, federal and quasi-governmental regulators
 - Often conflicting agendas
 - The regulators don't always communicate
 - Federal Government has no direct authority over “the grid”
 - State governments only cover distribution (and possibly generation) in their state
- ◆ **In 2020 the electric utility industry spent \$107 million in lobbying and political contributions (U.S. Congress Only).**
 - Members of the Senate Energy and Natural Resources Committee got over \$1 million \$97,921 average per committee member
 - Members of the House Energy and Commerce Committee got over \$443,100. \$8,205 average per committee member
- **Federal Lobbying in the past 10 years: \$1.2 Billion**
- **Federal Political “contributions” in the past 10 years: \$149.5 Million**
- **These figures don't include State or Local contributions...**



NORMALCY BIAS



Noun - a cognitive bias which leads people to disbelieve or minimize threat warnings. Consequently, individuals underestimate the likelihood of a disaster, when it might affect them, and its potential adverse effects.

THREAT MATRIX



NATIONAL GRID DOWN EVENT

HUMAN DESPERATION – A feeling of complete hopelessness and a life out of control with no end in sight

STARVATION – A complete lack of ANY food resources or distribution leading to mass starvation and death

LIVING WITHOUT RULE OF LAW – (WROL) No government, military or civil authority to keep the peace or restore order

ANARCHY AND CHAOS

GRID DOWN PROGRESSION



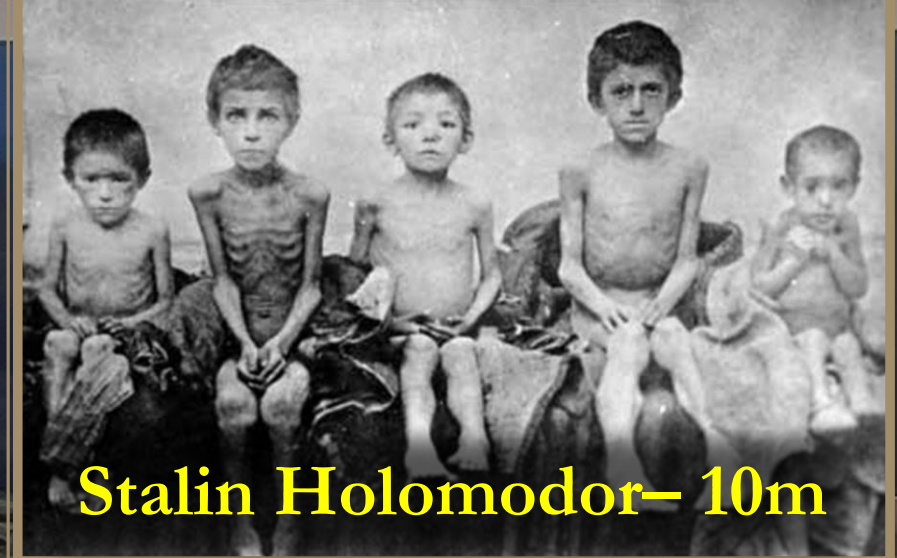
HISTORICAL CONTEXT

Chinese Famine – 50m



From
1860-2016

128 Million
people died
from starvation
worldwide



Stalin Holomodor – 10m

Holocaust – 9m

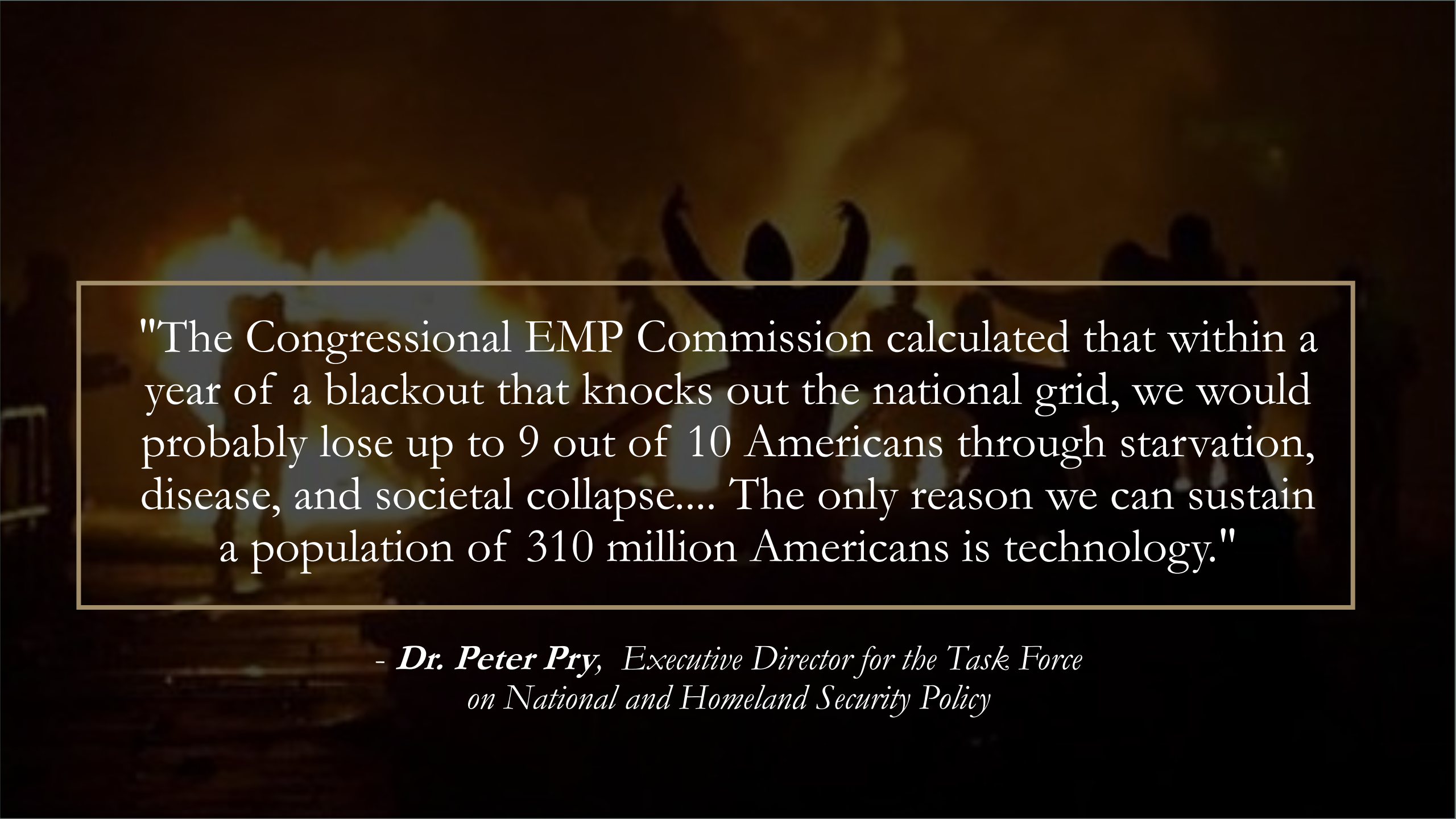


African Continent – 4m



Bengal Famine – 3m





"The Congressional EMP Commission calculated that within a year of a blackout that knocks out the national grid, we would probably lose up to 9 out of 10 Americans through starvation, disease, and societal collapse.... The only reason we can sustain a population of 310 million Americans is technology."

- *Dr. Peter Pry, Executive Director for the Task Force
on National and Homeland Security Policy*

HUMAN DESPERATION



Wide Range of Manifestation

Normalcy Bias is Shattered

Feelings of Complete Despair

Inability to cope with the New World

Human Desperation is: Unquantifiable – Unexplainable – Evolving – Irrational – Unreliable ---- **It will become the new normal.**

STARVATION

Not possible to feed America without electricity – not even partially...

Every aspect of our modern food distribution system requires electricity

Homesteading life skills have disappeared from society

Farmers: 1920 → 30% of 106m pop.
2020 → 2% of 330m pop.

Average adult eats 1 ton food annually
Mass Starvation Will Happen!

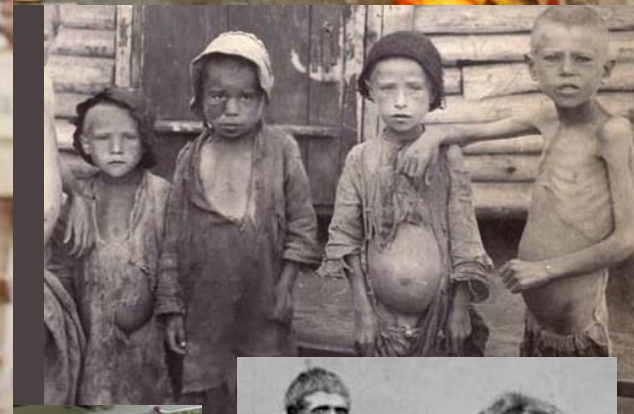
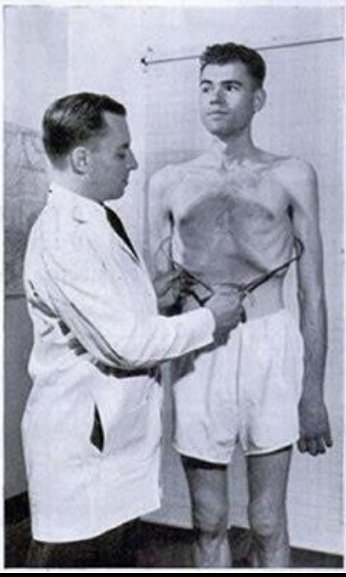




FIGURE 8.5. Minnesota volunteers at mealtime. Copyright 1950 by the University of Minnesota Press. Reprinted by permission.



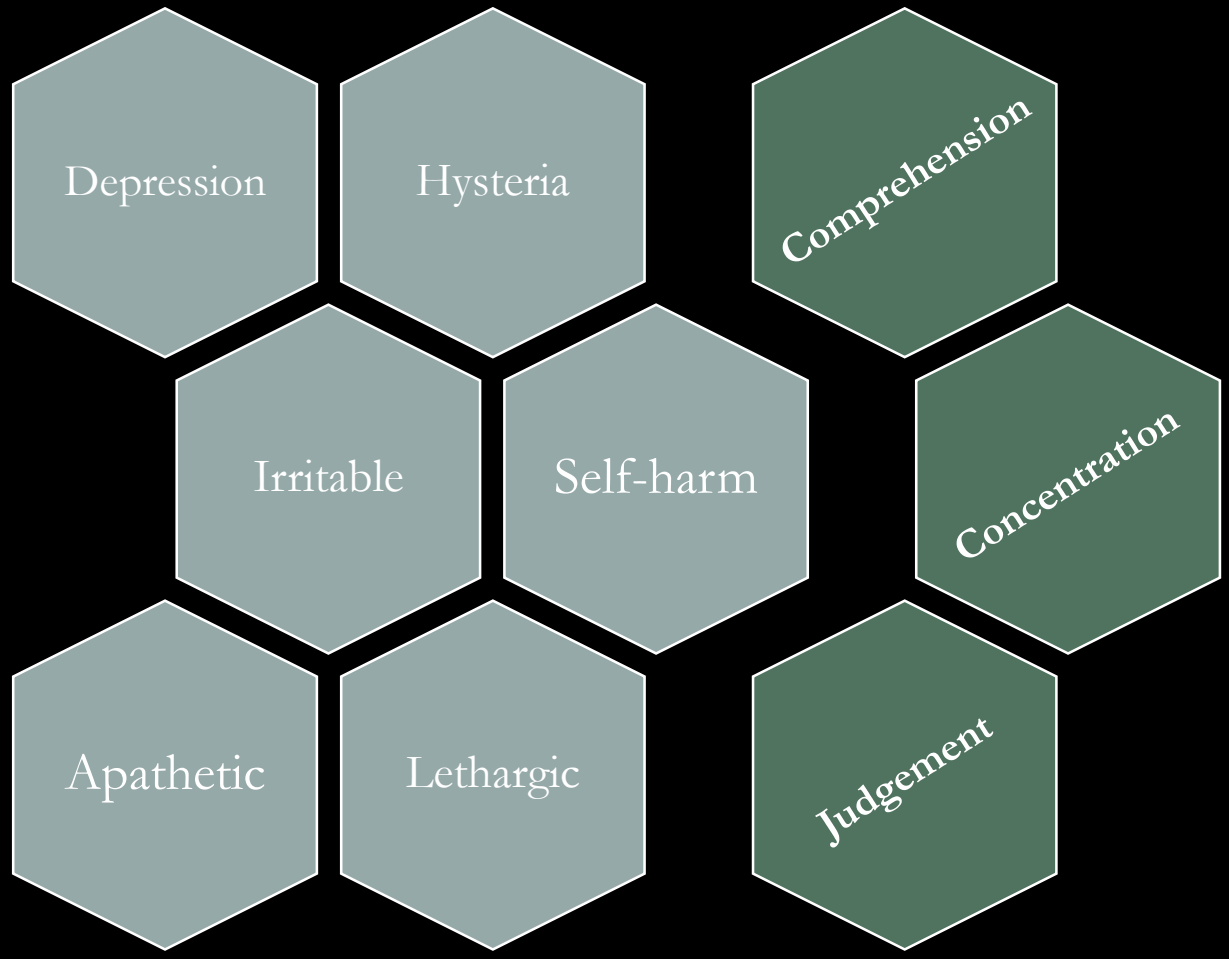
MEN STARVE IN MINNESOTA
 CONSCIENTIOUS OBJECTORS VOLUNTEER FOR STRICT HUNGER TESTS TO STUDY EUROPE'S FOOD PROBLEM
 Above:
 Conscientious objectors during starvation experiment. Life magazine - July 30, 1945. Volume 19, Number 5, p. 43.
 Credit: Wallace Kirkland/Time Life Pictures/Getty Images.
 Left:
 Dr Ancel Keys measures the chest width of James Plaughter.



STARVATION EFFECTS

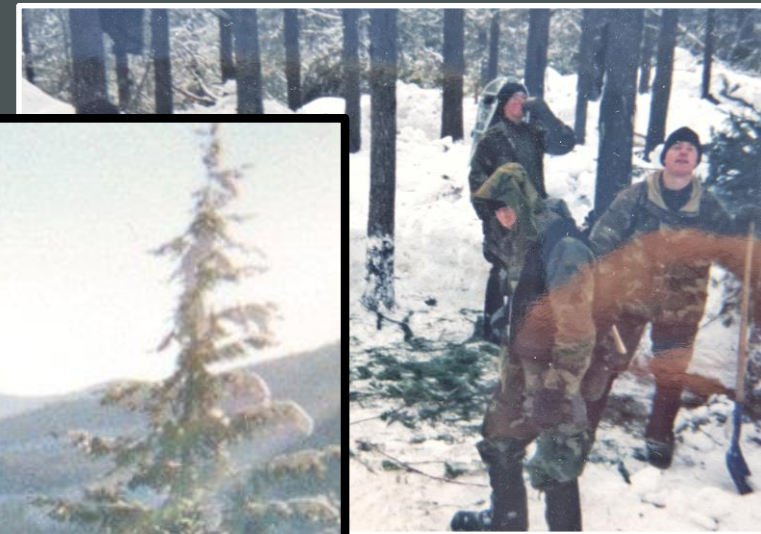
EXPERIENCED...

DECLINE IN:



MINNESOTA STARVATION EXPERIMENT

A Personal Anecdote



USAF SERE
CLASS 97-02

FAM-MOBILE
PHASE

JAN 1997

WROL

WITHOUT RULE OF LAW



No Law Enforcement



No Government



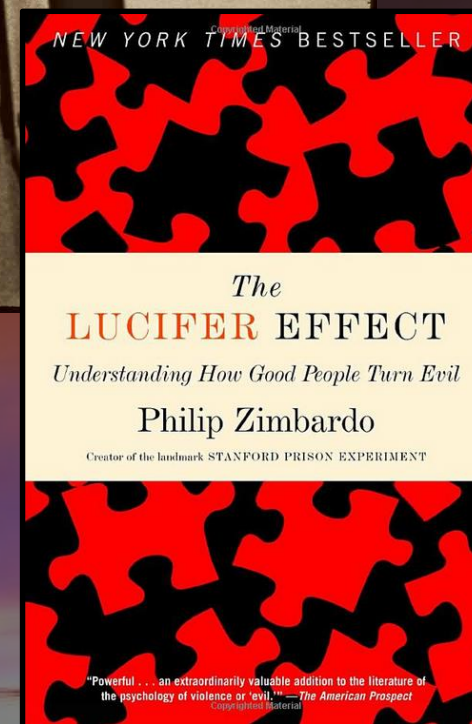
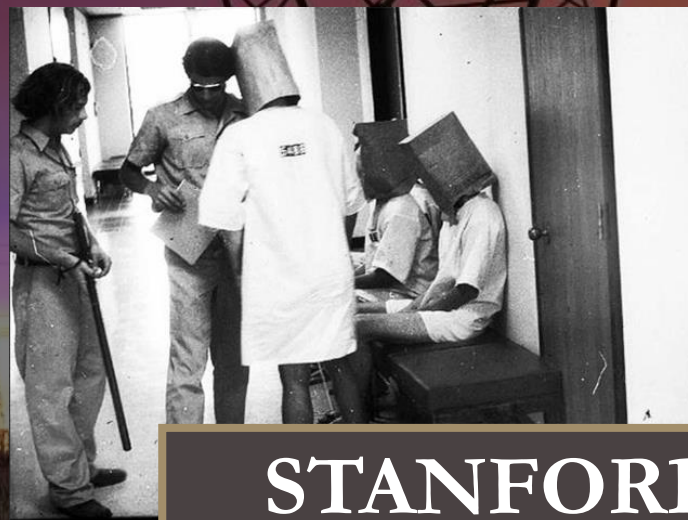
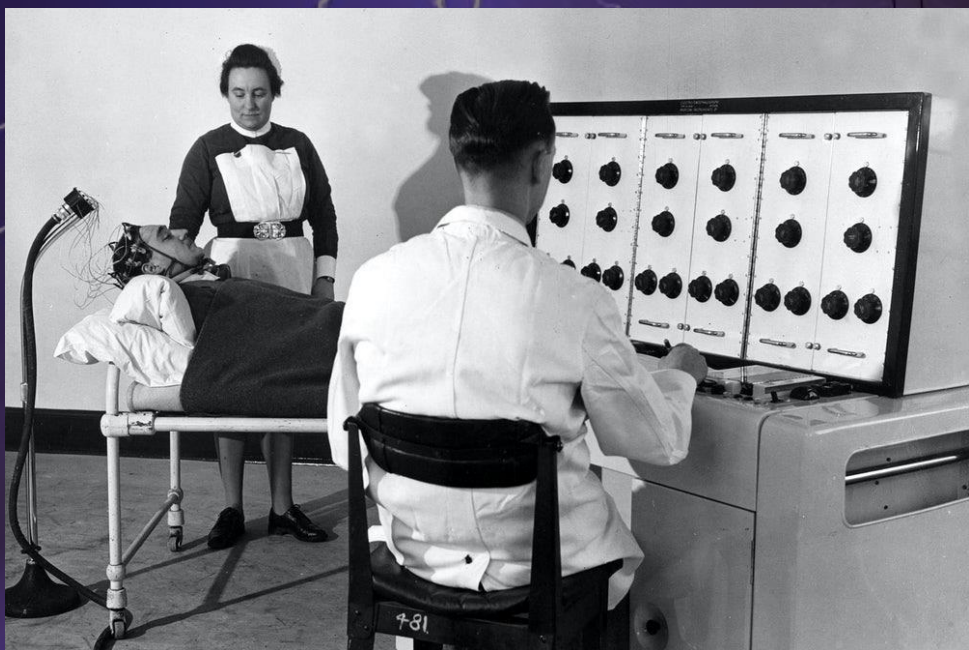
No Military



NO RULES !



MILGRAM'S STUDY

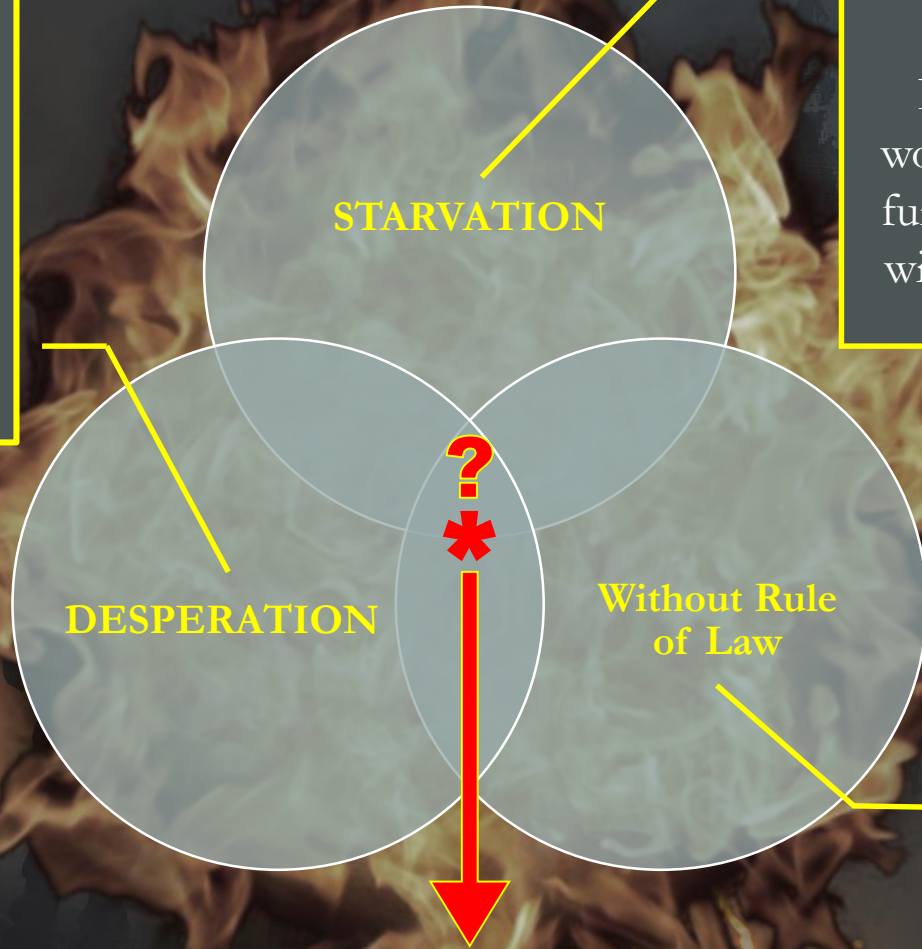


STANFORD PRISON EXPERIMENT

Example: Hurricane Katrina

Hopelessness, despair and lack of options to provide basic needs for self and loved ones.

It is not uncommon for desperation to create violence.



Examples: Chinese Famine and Holodomor

It is important to note that in every instance of world famine the last century, there was rule of law functioning in some fashion (even if authoritarian), with consequences for breaking the law or stealing.

Examples: Somalia (1990's) and Vikings

There are very few examples of societies without any civil authority ruling over their populace within the last century. When absent, anarchy and warlords are the norm.

Never in modern history have we seen all three factors present, while also at their peak intensity and severity...

COMBINING THE THREATS

RECAP

There are multiple, verifiable disaster scenarios that could radically change/endanger your life.

These scenarios are far more likely to happen in your lifetime than you imagine(combined ratio).

The government and military are unprepared and underequipped to respond to severe crisis.

The problems are unlikely to be fixed due to analysis paralysis and government dysfunction.

Do you have a plan to feed, provide for, and protect your loved ones in these scenarios.

Catastrophic ignorance exists on the effects of human desperation and starvation in disaster scenarios.

THANK YOU

 JONATHAN HOLLERMAN

 www.GridDownConsulting.com

 JonathanHollerman@Protonmail.com



For more information on the various threats, please visit the following organizations...



empactusa.org



securethegrid.com



gridsecuritynow.org



emptaskforce.us