



InfraGard National Disaster Resilience Council

2023 Annual Summit

Theme: “Solutions Now for Infrastructure Resilience”

December 5 & 6, 2023

In Person at the
San Pedro 1 Building University of Texas at San Antonio (UTSA)
506 Dolorosa St., San Antonio, TX 78204

*Hosted by
The National Security Collaboration Center (NSCC)
and
Joint Base San Antonio (JBSA)*

Agenda

(All times shown in Central Time Zone)

December 5, 2023

7:30 CT	Registration and Check-in Set up	NSCC, JBSA, and NDRC Advisory Group
8:00	Registration Opens	
8:45	Virtual Link Showcase Sponsors	
8:50	Call to take seats	MC
8:55	Virtual Link goes live	
9:00	Opening Remarks & Introductions	Mary Lasky, Chairperson NDRC
9:05	Presentation of the Colors	JBSA Honor Guard
9:09	National Anthem	Sarah Erps, Executive Assistant to the Commander, US Army Institute of Surgical Research
9:12	Invocation	Col Charles “ <i>Gladiator</i> ” Seligman III JBSA Senior Chaplain
9:15	Welcoming Remarks	Doug Farber, Board of Director Chair InfraGard National Member Alliance Introduced by Mary Lasky
9:20	Welcoming Remarks	FBI Acting Special Agent in Charge Douglas A. Olson Introduced by Bob Janusaitis
9:25	Welcoming Remarks	Dr. Taylor Eighmy, President UTSA Introduced by Dr. John Huggins, Act Dir UTSA NSCC
9:30	Welcoming Remarks	Brig Gen Russel Driggers Commander, Joint Base San Antonio Introduced by Michael “Apollo” Lovell
9:35	Keynote – Critical Mission to Detect, Deter, & Defeat Threats to US	LTG John Evans Jr. Commanding Officer, ARNORTH Introduced by Mary Lasky

Lt. Gen. John R. Evans, Jr., the Commanding General of U.S. Army North (Fifth Army), will provide the keynote on defending the homeland through integrated deterrence and protection of critical infrastructure.

10:20 Break

10:40 San Antonio Electromagnetic Defense Michael “Apollo” Lovell and
Blanche Dudoit, JBSA
Introduced by Steve Vollandt

11:20 Building Industry Resilience Brig Gen Guy Walsh, USAF (ret)
Introduced by Michael “Apollo” Lovell

The role of the Industrial Base in Resilience will be discussed.

12:00 Lunch

1:10 Legislative Remarks Congressman Don Bacon
Via a taped message

1:20 National Labs Presentation Focus on Infrastructure Resilience R&D
- Idaho National Lab – Testing update Robert “Bob” Tarwater
Introduced by Dr. John Higgins, Act Dir
UTSA NSCC

We have to move from “appreciating the problem” to “adjusting to reality” when it comes to disaster resilience. Through INL’s work in Consequence-driven Cyber-informed Engineering (CCE) and All Hazards Analysis, a framework for resilience planning and maturity emerges.

2:00 Overview of Advanced Energy Projects Dr. Brian Zook, Chief Scientist
Applied Power Division
Southwest Research Institute (SwRI)
Introduced by Michael “Apollo” Lovell

A robust electric-power grid is vital to our functioning society, something experienced directly by Texans during Winter Storm Uri in 2021. Dr. Zook will discuss a variety of R&D technologies being explored at Southwest Research Institute that could increase the resilience and recovery of the grid and related critical infrastructure.

2:40 AI Overview Dr. Kenneth Holladay, Technical Advisor
Southwest Research Institute (SwRI)
Introduced by Michael “Apollo” Lovell

Our society is being inundated with news and claims related to artificial intelligence. It is simultaneously hailed both as the solution to the world's problems and as a doomsday technology. Dr. Holladay will weave together thoughts on AI, tools, intelligence, wisdom, and ethics. Based on an easy to understand cognitive architecture model, we'll consider some of the questions that we should be asking about our use of AI.

3:25 Break

3:45 EMP Solutions Panel
David Winks, Facilitator
Tim Carty, EMP Shield
Terry Murch, TSS
Michael K. Brown, Advanced Fusion
Nathan Hansen, EMP Consortium

New innovative ways of protecting the different components of the electric grid from electromagnetic disturbances will be discussed.

4:30 NDRC Working Groups Update Steve Vollandt, Vice-Chair NDRC

4:50 Sponsor Presentations
Steve Vollandt, Facilitator
EMP Shield -- Tim Carty
TSS -- Terry Murch
ETS Lindgren – Bob Piemonte
Grid Clue – Tom Popik,
Foundation for Resilient Societies

5:50 Closing Remarks Mary Lasky

6:00 Reception and Sponsor Table

7:30 Departure / Clean-up

December 6, 2023

8:30 CT Registration opens

9:00 Opening Remarks Mary Lasky, Chairperson NDRC

9:05 Welcome Bob Janusaitis, President San Antonio IMA

9:10 Platinum Sponsor Presentation Tim Carty, EMP Shield

9:15 Presentation of 2023 Bill Harris Award Bruce Churchill, USN (ret)

9:30 Space Weather Seth Jonas, Lockheed

Introduced by Dr. George Baker

The Space Weather Advisory Group (SWAG) recently published a series of findings and recommendations to successfully implement the PROSWFIT Act (2020) and transform the national space weather enterprise. Dr. Jonas will highlight key findings and recommendations from the SWAG report, which are intended to inform improved national capabilities for space weather preparedness and resilience. He will also discuss future work of SWAG as it continues to engage stakeholders across the national space weather enterprise.

10:15 Protecting Critical Infrastructure: Joel Kellogg, ETS-Lindgren
The Resilient Substation Ryan Marietta, Center Point Energy
Introduced by Steve Volandt

Protection of critical infrastructure is paramount to the security and defense of the United States. CenterPoint Energy Houston Electric (CEHE), in collaboration with ETS-Lindgren, has developed a system for substation and transmission stations not only provides resilience from cyber threats and High-Altitude Electromagnetic Pulses (HEMP), Electromagnetic Pulses (EMP) and intentional electromagnetic interference (iEMI), but from a host of other events that could disrupt supply and delivery. This presentation will provide a high-level overview of a resilient substation system, shielding effectiveness, and system performance. Additionally, examples will be provided of how the system is deployed or could be deployed to provide a utility security from malicious attacks and a host of other events that can disrupt substation and transmission station operations and prevent reliable supply and delivery of power. Lastly, the presentation will highlight how it is possible to provide Mil-STD level protection while remaining flexible, easy to install and maintain, and cost effective.

10:45 Break

11:00 Human Assets Dr. Richard Randall and Bruce Churchill
Introduced by Michael “Apollo” Lovell

Two different approaches to looking at the human assets/workforce for our critical infrastructure. One looks at a sector approach and the other from the National Critical Functions.

11:30 China Communist Party vs US Gordon G. Chang
Introduced by Dave Hunt

The Communist Party of China thinks it is at war with America. At the heart of the Chinese war effort is a campaign to take down American networks. The U.S., already under assault, is not prepared for the cyber and other attacks that are to come.

12:00 US Strengths in face of CCP Facilitated by Bruce Churchill
Andrew R. Scott

Mike Carpenter
Dr. Keeper Starkey

The US Bill of Rights distinguishes us from totalitarian and communist regimes and through further exercise of the Bill of Obligations, as described by Richard Hass in his recent book, the strength of America resides within every citizen. The Bill of Obligations can and should be used as countermeasures to the 36 Stratagems threats that face our nation. By putting country first and empowering "We the People", overcoming adversarial actions will be a success.

12:30 Lunch

1:15 Resiliency Solutions Forum Facilitated by Dave Hunt
Michael Hainzl - Batteries
Mark Jones - Best Practices Guide
Bjorn Simundson – Water Advances

*Building and maintaining a resilient electric power system is a combination of design, components and maintenance policy. The Forum will introduce CISA's **Resilient Power Best Practices for Critical Facilities and Sites** guide document. We will explore system design considerations and maintenance best practices for the inclusion of renewable energy resources, energy storage and traditional engine-generators. An introduction to microgrids and battery energy storage technologies will explain the design and financial drivers that help determine if energy storage makes sense for a project.*

2:00 Commercial Resilience Initiative Joaquin Jaimes, Manager of
Emergency Preparedness, H-E-B
Introduced by Blanche Dudoit

Providing aid in times of need is the cornerstone of H-E-B's Helping Here philosophy, which promises to stand by communities during times of crisis. For more than 100 years, the company has demonstrated its commitment to communities in crisis by prioritizing people, operational sustainment, and community integration.

2:30 Emergency Communications Bob Smith, Facilitator
Sharon Halstead and Amanda Schell, FBI
AEP Survey
Chris Beck & Scott Blevins, EIS Council
BSX

The failure of communications is one of the most planned for – and least prepared for events based on a review of after-action reports, surveys, and field interviews. While most organizations have a planned redundancy for communications, there is an overreliance on traditional wired and wireless infrastructure. The private sector and government must explore options to maintain communications and stakeholder relationships during a communications failure. In a Black Sky event, restarting and reconstituting our electrical grids and other critical infrastructures will require effective communications. Present

communication systems are vulnerable to direct damage, and also rely on grid power. EIS has developed and piloted the BSX communication system, to allow grid and other infrastructure operators to effectively communicate and coordinate response and restoration operations.

3:15 Break

3:30 Johns Hopkins Applied Physics Lab
Mosaics - OT Protection

Camille Schumacher, APL
Joseph Maurio, APL
Introduced by Phil Froehlich

MOSAICS (More Situational Awareness for Industrial Control Systems) is a vendor agnostic cyber identification and response framework to address the cyber security of industrial control systems (ICS) against the rising threats from adversaries. A MOSAICS deployment implements advanced security orchestration and automation to detect, mitigate and recover from a cyber-attack on ICS networks which is combined with best available and applicable decision support, analytic, visualization, and information sharing tools. Pilot instantiations of the framework have been successfully deployed on military and civilian infrastructure systems.

4:00 AI Panel

Jodi Masters-Gonzales, Facilitator
Dr. Hans Mumm,
Dr. Kenneth Holladay
Jennifer Gold, AI-ISAC

The panel will explore the use of AI in the integration of the entirety of autonomous systems and the need for the US to create an autonomous infrastructure that can be secured and allow for technology growth and adoption. Currently, the US is in the lower percentile worldwide in autonomous systems and AI use, integration, and adoption. The panel will also consider the question is society ready for the fallout and unintended consequences of AI advancement and how do we prepare personally, ethically, and politically for a societal upheaval that could rival the industrial revolution?

4:45 Advanced Air Mobility: Resilience
Use Cases

Chelsea Treboniak
Introduced by Mike Carpenter

This session explores Advanced Air Mobility (AAM) with a focus on its resilience use cases. AAM represents the next frontier in transportation, where electric vertical takeoff and landing (eVTOL) aircraft and drones play a pivotal role in revolutionizing mobility and logistics. We will explore how AAM technologies are not only enhancing efficiency but also fostering resilience in various domains, including disaster response, healthcare, and transportation. Information showcases how AAM is shaping a more resilient and sustainable future.

5:15 Highlights from the Summit

Michael “Apollo” Lovell

5:25 Closing Remarks and Conclusion

Mary Lasky