11th Royal Institute of Navigation
GNSS Conference
Baška, Croatia

Critical Infrastructure Resilience

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The World Depends on Critical Infrastructure, GNSS, and PNT
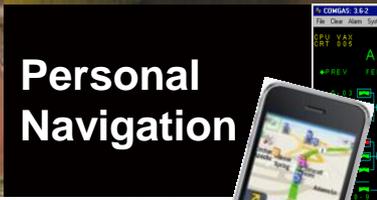

Petroleum Industry

Power Grids

Precision Agriculture

Space Applications

Surveying & Mapping

Personal Navigation

Industrial Control

Telecom

Air Traffic Control

Supply Chains

Financial Markets

Emergency Services

Transit Operations

Shipping & Maritime Applications

Operationalizing Resilience

- Foundations of Resilience

- Emerging Technologies and Resiliency

- Policy Matters

- Critical Infrastructure Resiliency & Sector Interdependencies

- Possible Overreliance on GPS

- Contingency Plans

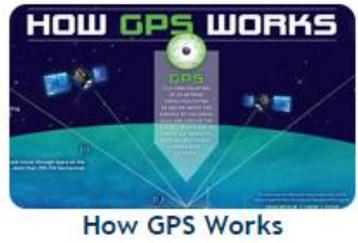# What Should Resilience Mean to the PNT Community?

- Rapidly recover from any disruptions and restore the essential functions of the economy, society, and government, as quickly as possible.

- Therefore outages/disruptions are significantly mitigated by introduction and adoption of best practices and independent P/N/T sources such that a disruption is by and large a non-event.

- Back-up

- Best Practices

- How accurate is GPS?
- How vulnerable is GPS to malicious jamming?

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Radionavigation-Satellite Service
- *Jan 6:* Best Practices for Improving the Operation and Development of GPS Equipment Used by Critical Infrastructure

VIEW MORE ➡

Featured Content

What is GPS?

HOW GPS WORKS

How GPS Works

DANGER
LOW CLEARANCE

Truckers: Don't Use Consumer GPS Devices!

GPS JAMMERS

GPS Jamming is Illegal

Guidance for Critical Infrastructures

- Best Practices for Improving the Operation and Development of GPS Equipment Used by Critical Infrastructure (PDF)
- Best Practices for Improved Robustness of Time and Frequency Sources in Fixed Locations (PDF)
- Best Practices for Leap Second Event Occurring on 31 December 2016 (us-cert.gov)

Useful Content

- Service Outages & Status Reports
- Civil GPS Performance Data
- *UPDATED* Interface Specifications
- Other Technical Documentation
- Public Presentations
- Congressional Legislation & Funding

Summary

- Critical Infrastructure, GNSS, and PNT Infrastructure

- Continuously Improve Receivers Found in Critical Infrastructure

- Continuously Improve Timing-Dependent Systems and Networks

- Ensure PNT Definitions and Policies Remain Current and Useful

- Examine Complementary/Back-up Options

- Conclusion

For more information, visit: www.gps.gov
www.dhs.gov/critical-infrastructure

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