# FTCN Replay: The Threat to GPS Most Americans Don’t Know About

An invisible threat is quietly undermining one of America’s most critical technologies — and most people have no idea it’s happening.

That was the warning from Dana Goward, President of the **Resilient Navigation and Timing Foundation**, who joined host Ken Miller on a recent episode of **From the Crows Nest**. Goward discussed the growing dangers of GPS jamming and spoofing, the real-world consequences already playing out in conflict zones, and why the United States remains dangerously unprepared.

## More Than Just Navigation

Most people think of GPS as a tool for getting from Point A to Point B, but Goward explained that the reality is far more complex.

GPS satellites are, at their core, precision clocks. Their signals synchronize cell phone towers, process financial transactions, and coordinate industrial systems. Because GPS chips can cost as little as $5 or $6, the technology has been quietly embedded in nearly every sector of modern life — often in ways that aren’t immediately obvious.

“GPS has become, as the National Security Council has said, a single point of failure for all kinds of things,” Goward said.

That ubiquity means a disruption is rarely contained to one sector. Failures can cascade across interconnected systems in ways that are difficult to predict and even harder to stop.

## Jamming vs. Spoofing

Goward drew a clear distinction between the two primary methods of GPS interference.

Jamming is straightforward: Flood the airwaves with noise near the GPS frequency and receivers stop working. Spoofing is more insidious. Rather than blocking a signal, a spoofer transmits false GPS-like signals that trick a receiver into believing it is somewhere it is not. What once required significant technical expertise can now be accomplished with a software-defined transmitter costing just a few hundred dollars.

“A relatively proficient hacker can, on their own, cause a GPS or other satellite navigation receiver to think that it’s someplace where it’s not,” Goward said.

He offered a striking real-world example: Celebrity chef Guy Fieri lost approximately $1 million worth of tequila when hijackers spoofed the GPS on a delivery truck, redirecting the driver to a location where the cargo could be stolen.

## A Global Problem

The danger extends well beyond American roads. Aviation safety data shows dense clusters of GPS interference around the Strait of Hormuz, a critical chokepoint for global oil shipments. The interference has contributed to a near-halt in maritime traffic through the region.

Aircraft have been shot down and ships have run aground or collided as a result of GPS interference, Goward said. Consequences for those responsible remain minimal.

“The general consensus is this is going to continue for the indefinite future. Well, why is that? It’s very easy to do, very inexpensive. It hits the West exactly where the West is most vulnerable in technology,” he said.

Goward also pointed to a little-remembered episode from

November 2021, when Russian state media warned that Moscow could shoot down all 32 GPS satellites and “blind NATO” if the alliance interfered in Ukraine. He called it the first clear instance of GPS blackmail.

## The Threat at Home

The problem is not limited to foreign adversaries or overseas conflict zones. Accidental GPS interference has already disrupted air traffic at Dallas-Fort Worth and Denver airports. A European Union survey found nearly 500,000 signals capable of interfering with satellite navigation — only about 10% of which were deemed intentional.

The United States lacks both the infrastructure to reliably detect interference and the legal framework to respond quickly. Local law enforcement has no authority to act; only the Federal Communications Commission does.

“We don’t even have a process to go and terminate the interference if and when it’s detected,” Goward said.

## What Needs to Change

Goward said the solution is a layered navigation architecture that does not rely solely on satellites but instead combines space-based signals, terrestrial broadcast systems, and fiber-optic timing networks. Several allies, including South Korea, the United Kingdom, and France, have already moved in this direction. The US has not.

He called for a single empowered federal authority to lead civilian GPS policy and warned against waiting for disaster to force action.

“This has the potential to be much worse than 9-11,” Goward said. “We don’t want to be around the day after GPS gets turned off. It’s a near existential threat to America.”