

Russia's Cyberwar on Ukraine Is a Blueprint for What's to Come

By Andy Greenberg

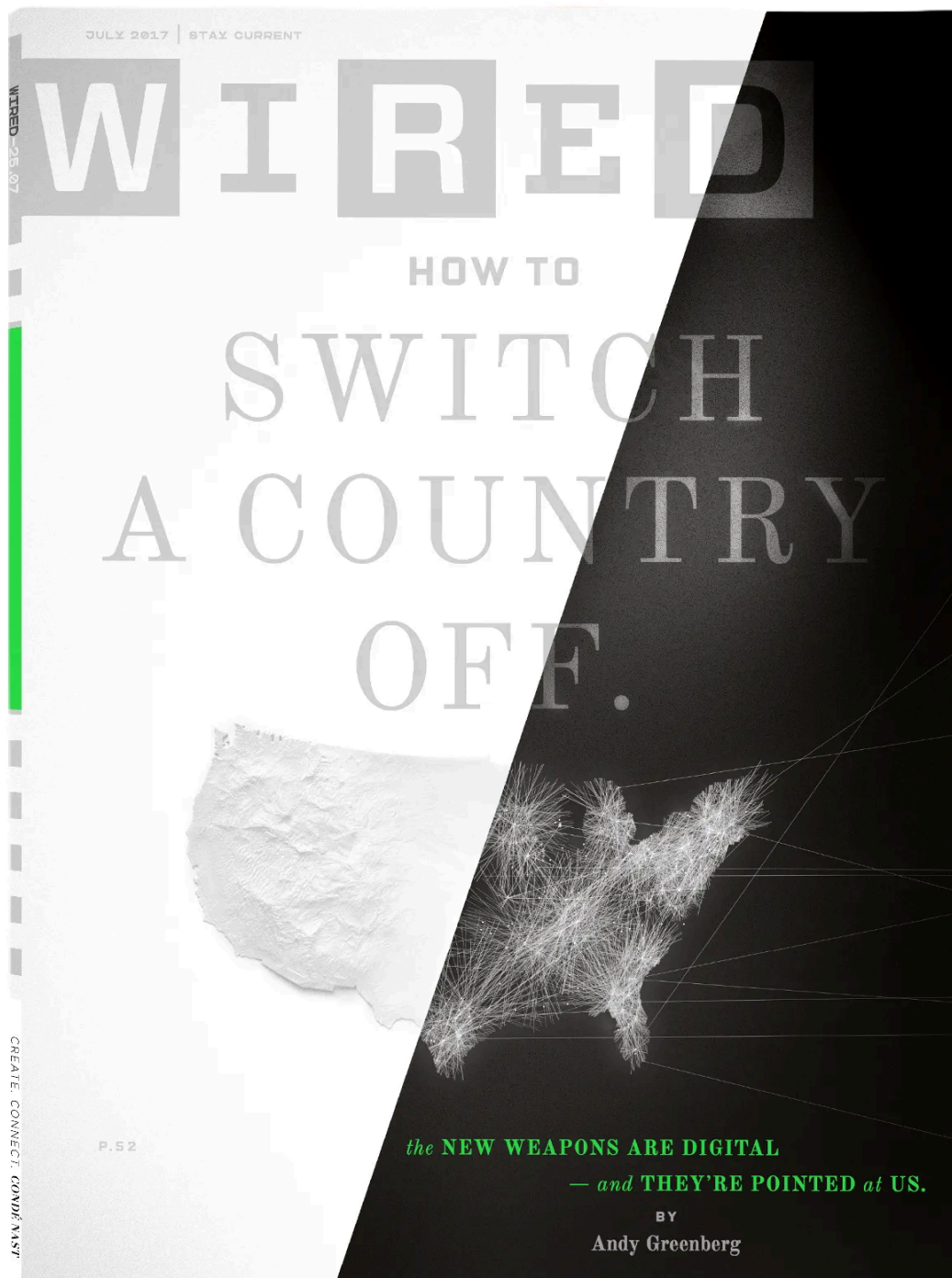
Published: 2017-06-20 · Archived: 2026-04-05 18:56:35 UTC

The clocks read zero when the lights went out.

It was a Saturday night last December, and Oleksii Yasinsky was sitting on the couch with his wife and teenage son in the living room of their Kiev apartment. The 40-year-old Ukrainian cybersecurity researcher and his family were an hour into Oliver Stone's film *Snowden* when their building abruptly lost power.

"The hackers don't want us to finish the movie," Yasinsky's wife joked. She was referring to an event that had occurred a year earlier, a cyberattack that had [cut electricity to nearly a quarter-million Ukrainians](#) two days before Christmas in 2015. Yasinsky, a chief forensic analyst at a Kiev digital security firm, didn't laugh. He looked over at a portable clock on his desk: The time was 00:00. Precisely midnight.

Yasinsky's television was plugged into a surge protector with a battery backup, so only the flicker of images onscreen lit the room now. The power strip started beeping plaintively. Yasinsky got up and switched it off to save its charge, leaving the room suddenly silent.



He went to the kitchen, pulled out a handful of candles and lit them. Then he stepped to the kitchen window. The thin, sandy-blond engineer looked out on a view of the city as he'd never seen it before: The entire skyline around his apartment building was dark. Only the gray glow of distant lights reflected off the clouded sky, outlining blackened hulks of modern condos and Soviet high-rises.

Noting the precise time and the date, almost exactly a year since the December 2015 grid attack, Yasinsky felt sure that this was no normal blackout. He thought of the cold outside—close to zero degrees Fahrenheit—the slowly sinking temperatures in thousands of homes, and the countdown until dead water pumps led to frozen pipes.

That's when another paranoid thought began to work its way through his mind: For the past 14 months, Yasinsky had found himself at the center of an enveloping crisis. A growing roster of Ukrainian companies and government agencies had come to him to analyze a plague of cyberattacks that were hitting them in rapid, remorseless succession. A single group of hackers seemed to be behind all of it. Now he couldn't suppress the sense that those same phantoms, whose fingerprints he had traced for more than a year, had reached back, out through the internet's ether, into his home.

The Cyber-Cassandras said this would happen. For decades they warned that hackers would soon make the leap beyond purely digital mayhem and start to cause real, physical damage to the world. In 2009, when the NSA's Stuxnet malware silently accelerated a few hundred Iranian nuclear centrifuges until they destroyed themselves, it seemed to offer a preview of this new era. "This has a whiff of August 1945," Michael Hayden, former director of the NSA and the CIA, [said in a speech](#). "Somebody just used a new weapon, and this weapon will not be put back in the box."

Now, in Ukraine, the quintessential cyberwar scenario has come to life. Twice. On separate occasions, invisible saboteurs have turned off the electricity to hundreds of thousands of people. Each blackout lasted a matter of hours, only as long as it took for scrambling engineers to manually switch the power on again. But as proofs of concept, the attacks set a new precedent: In Russia's shadow, the decades-old nightmare of hackers stopping the gears of modern society has become a reality.

And the blackouts weren't just isolated attacks. They were part of a digital blitzkrieg that has pummeled Ukraine for the past three years—a sustained cyberassault unlike any the world has ever seen. A hacker army has systematically undermined practically every sector of Ukraine: media, finance, transportation, military, politics, energy. Wave after wave of intrusions have deleted data, destroyed computers, and in some cases paralyzed organizations' most basic functions. "You can't really find a space in Ukraine where there *hasn't* been an attack," says Kenneth Geers, a NATO ambassador who focuses on cybersecurity.

Source: <https://www.wired.com/story/russian-hackers-attack-ukraine/>