

FTCN Replay: From Volunteer Fighter to Defense Entrepreneur

In a revealing episode of [“From the Crows’ Nest,”](#) host and AOC’s Director of Advocacy and Outreach Ken Miller sat down with Jack de Santis, a Croatian-born engineer whose extraordinary journey took him from civilian volunteer to Ukrainian military drone operator to defense technology entrepreneur. His story offers insights into the realities of modern electronic warfare and the human cost of technological limitations on the battlefield.

From Civilian to Combat Zone

De Santis’s path to Ukraine began with childhood memories of war in Croatia and a determination not to let history repeat itself. “Having lived through the war as a child, it left me with a very strong feeling of, I’m not gonna let anybody else do this again,” he explained. When Russia launched its full-scale invasion of Ukraine in 2022, de Santis saw parallels to his own experience.

Despite having no prior military experience, de Santis possessed a combination of skills that would prove invaluable: a background in computer hardware and software engineering, plus years of drone flying as a hobby. “I’ve always loved being an engineer and flying drones as a hobby turns out to be a very useful combo. And the Ukrainians found me very useful very, very quickly,” he said.

His first night in Ukraine was harrowing yet formative. Arriving in Kyiv at 2:30 AM during curfew, he was picked up by a Ukrainian major and driven through the eerily empty city. When air raid sirens began wailing, rather than feeling

terror, de Santis experienced an unexpected sense of purpose: "What I felt in that moment was just like I'm home. This is where I should be."

The Reality of Drone Warfare

De Santis quickly found himself training other Ukrainian soldiers in drone operations, working with a group called White Ghost. The informality of the Ukrainian military structure surprised him, particularly the lack of traditional military hierarchy and the ad hoc nature of operations.

His transition from trainer to frontline operator came suddenly when British foreign fighter Daniel Burke invited him to join the Dark Angels unit heading to Bakhmut. "He just asked me, I want to come with us to Bakhmut tomorrow. I just said, yeah, let's go," de Santis recalled.

Operating with limited resources, de Santis often worked with just a single drone, knowing that losing it meant potentially weeks without aerial support while fundraising for a replacement. The precarious nature of their equipment became painfully clear when electronic warfare systems targeted their operations.

The Devastating Reality of Electronic Warfare

One of the more harrowing moments of de Santis's service came during a planned offensive operation in the Zaporizhzhia region. Ukrainian forces had prepared a significant infantry advance supported by drone reconnaissance and kamikaze drones. However, Russian forces had anticipated the attack and deployed powerful electronic warfare systems.

"The Russians knew exactly when and where we were going to attack," de Santis explained. "As the infantry got into the range of Russian weapons and systems, they turned on their electronic attack system. And basically all the drones that were already in the air doing recon were lost."

The jamming was so intense that drones couldn't even take off from positions just meters away from operators. Communication systems failed, leaving infantry units blind and isolated in a kill zone. "You are just sitting there the entire day watching your friends getting killed one by one and there's just nothing you can do," de Santis said, describing the helplessness of being unable to provide support, call for medical evacuation, or even communicate with trapped soldiers.

From Battlefield to Boardroom

This devastating experience became the catalyst for de Santis's next chapter. Rather than accepting technological limitations as inevitable, he channeled his frustration into innovation. "That day was probably what set the foundations for Omira Systems and for what exists today," he reflected.

[Omira Systems](#), de Santis's defense technology company, focuses on developing counter-electronic warfare technology that can maintain communications even under intense jamming. The company recently secured a significant deal with Israel Aerospace Industries, marking a major milestone in bringing battlefield-tested solutions to market.

His experience also revealed critical insights about spectrum management during wartime. He said: "One big lesson I took away from Ukraine: It's not just about technology and drone warfare and communication. It's also about the spectrum, which is highly regulated in the West, in every country, and even the military. It's limited in terms of what it can do with the spectrum and what frequencies and bands it's allowed to use and all of that. And we really can't go into the next war with those handcuffs on our hands."

De Santis's journey from volunteer to entrepreneur illustrates both the human cost of technological gaps in modern warfare and the innovative potential that emerges from battlefield necessity. His story serves as a powerful reminder that behind every technological advancement in defense lies the experience

of those who have faced the consequences of its absence.