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PwnSat: A Vulnerable-by-Design Satellite hardware and platform for AeroSpace Hacking

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PwnSat: A Vulnerable-by-Design Satellite hardware and platform for AeroSpace Hacking

PwnSat is the result of more than five years of research, and seeks to bridge the gap between traditional cybersecurity and the aerospace environment, offering for the first time on the planet a platform that is vulnerable by design and allows hands-on training without the need for expensive simulators or access to critical infrastructure.

This talk will explore the technical design of PwnSat, the communication protocols it implements (including CCSDS over LoRa and AX.25), and how the system replicates real-world mission scenarios involving a vulnerable Mission Operation Center (MOC), Ground Station, and Flatsat hardware.

Attendees will gain insight into how PwnSat is used to simulate and exploit real attack vectors in satellite communications, offering an unprecedented opportunity to train in a domain that has historically been inaccessible to most security professionals. Whether you're a pentester, aerospace engineer, or educator, PwnSat opens the door to practical satellite hacking like never before.

For more information about it:
https://pwnsat.org/docs/get-started/introduction/

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