SPACE CYBERSECURITY WEEKLY WATCH

Week 37

September 5 – 11, 2023

Timeframe : Weekly

# of articles identified : 28

Est. time to read : 45 minutes

Articles, company's communications, whitepapers, academic works, podcast, and sources not to be missed on the topic of space cybersecurity over a specified timeframe.

- **GEOPOLITIC**
- **TRAINING & EDUCATION**
- **TECHNOLOGY**
- **THREAT INTELLIGENCE**
- **MARKET & COMPETITION**
- ★ **IMPORTANT NEWS**

Overview

This week an article by Matthias Popoff, Analyst at CyberInflight was published, presenting the major issues in space cybersecurity.

Also this week, the USSF has launched an effort to revamp its readiness in the face of threats from peer adversaries like China. The Pentagon's Office of Strategic Capital plans to come out with its first investment strategy later this year targeting what it has identified as critical technology areas. On the market front, TNO, the ICCS and a consortium of other European partners, collaborate in the LaiQa-project to develop global quantum internet enabled from space. This week, the ransomware group LockBit has leaked a tranche of data purloined from the UK's Ministry of Defense after an attack on a company called Zaun. On the technological front, Rokubun's new Galileo OSNMA embedded library delivers navigation message authentication. Finally, Erin Miller, Executive Director of the Space ISAC, talked about the Space ISAC, cyber threats in space, standards and regulations, future challenges on the Cybersecurity Today Show.

★ 🎉 CYBERINFLIGHT'S NEWS 🎉 ★

#ParoledExpert "L'espace : la frontière finale de la cybersécurité », une tribune de Matthias POPOFF, Analyste Marché de CyberInflight *(Trad.: #ParoledExpert "Space: the final frontier of cybersecurity", an article by Matthias POPOFF, Market Analyst at CyberInflight)*
It presents the major issues in cybersecurity as applied to space, a subject of vital importance at a time when technology and space are becoming increasingly interconnected. **#CyberInflight**
Link: https://cybercercle.com/paroledexpert-matthias-popoff-cyberinflight-08092023/

GEOPOLITIC

★ **Air Force, Space Force launch 'major' readiness revamp with threat of China in mind: Kendall**
The Department of the Air Force is launching a "major" and "comprehensive" effort to revamp its readiness in the face of threats from peer adversaries like China, according to the service's top civilian. **#USSF #US**
Link: https://breakingdefense.com/2023/09/air-force-space-force-launch-major-readiness-revamp-with-threat-of-china-in-mind-kendall/

Pentagon Office of Strategic Capital's investment strategy expected later this year
The Pentagon's Office of Strategic Capital (OSC), tasked with linking smaller tech and defense firms with sources of private capital, plans to come out with its first investment strategy later this year targeting what it has identified as critical technology areas, including artificial intelligence, biotechnology and quantum science. **#Quantum #Investment**
Link: https://breakingdefense.com/2023/09/pentagon-office-of-strategic-capital-investment-strategy-expected-later-this-year/

State Department looks to satellite communications for emergencies in embassies around the world

The State Department is focused on building out satellite communications that would allow it to have affordable and reliable communications via phones and laptops, particularly during emergencies, in U.S. embassies around the world, CIO Kelly Fletcher said Thursday. **#US #SATCOM**

Link: https://fedscoop.com/state-department-looks-to-satellite-communications-for-emergencies-in-embassies-around-the-world/

'How am I in this war?': The untold story of Elon Musk's support for Ukraine

Walter Isaacson is a professor of history at Tulane University, former editor of Time magazine and author of several biographies. This op-ed is excerpted from his latest book, "Elon Musk." **#Starlink #Ukraine**

Link: https://www.washingtonpost.com/opinions/2023/09/07/elon-musk-starlink-ukraine-russia-invasion/

New strategy for global cybersecurity cooperation coming soon: State cyber ambassador

The State strategy will build on the National Cybersecurity Strategy released by the White House in May. That document notably held up "international partnerships" as one of its five principles, or "pillars." Sub-themes called for the US to build coalitions to counter cyber threats, strengthen friendly countries' capabilities for cyber defense, and defend complex, globe-spanning supply chains for technology. **#US #CybersecurityStrategy**

Link: https://breakingdefense.com/2023/09/new-strategy-for-global-cybersecurity-cooperation-coming-soon-state-cyber-ambassador/

TRAINING & EDUCATION

Cybersecurity in, for and from space

The event "Cybersecurity in, for and from Space" is organised in Rome by Fondazione E. Amaldi, as ESA Business Applications Ambassador Platform for Italy, and the European Space Agency, in collaboration with the Italian Space Agency. **#ESA #Conference**

Link: https://www.eventbrite.com/e/cybersecurity-in-for-and-from-space-tickets-696777762807

Cybersecurity in Outer Space – A Q&A with Ambassador Sorin Ducaru

In an interview with FP Analytics, Ambassador Sorin Ducaru, Director of the European Union Satellite Centre (SatCen), discussed the risks that cyber operations pose to space-based assets and capabilities, particularly during armed conflict, and the multilateral and multisectoral efforts to address these challenges. **#Cybersecurity**

Link: https://digitalfrontlines.io/2023/08/22/cybersecurity-in-outer-space/

Qubesecure Selected to Present on Post-Quantum Cryptography Planning and Impact at World Knowledge Forum Next Week

Qubesecure™, Inc., a leader in post-quantum cryptography (PQC), today announced that it has been selected to present in two sessions at the World Knowledge Forum being held in Seoul, South Korea, next week. The World Knowledge Forum is for discussing and sharing knowledge to promote balanced global economic growth and prosperity. **#Qubesecure #Conference**

Link: https://www.bloomberg.com/press-releases/2023-09-07/qubesecure-selected-to-present-on-post-quantum-cryptography-planning-and-impact-at-world-knowledge-forum-next-week

⭐ **Cybersecurity Today TV Show - S4, E3 - The Intersection of Cybersecurity and Space Technology**

Ms. Erin M. Miller, the Executive Director of the Space ISAC (Information Sharing and Analysis Center), comes on the show to talk about the Space ISAC, cyber threats in space, standards and regulations, future challenges, and so much more. **#SpaceISAC**

Link: https://www.youtube.com/watch?v=wfQ6dvPPKFo

Space Systems and IoT: What Are the Biggest Cyber Threats?

Interview with Dick Wilkinson, CTO at Proof Labs, exploring the cyber threats in space and on the Internet of Things, and how they impact each of us. **#Interview #ProofLabs**

Link: https://www.proofs5.com/blog/piohrmann-on-cybersecurity/space-systems-and-iot-what-are-the-biggest-cyber-threats

TECHNOLOGY

etherWhere partners with Xona Space Systems to develop low power PULSAR + GNSS receiver

etherWhere's PULSAR + dual-based GNSS receiver will be a one chip, low power solution that integrates all four GNSS constellations while receiving and processing the Xona PULSAR signal simultaneously. **#GNSS #XonaSpaceSystems**

Link: https://news.satnews.com/2023/09/06/etherwhere-partners-with-xona-space-systems-to-develop-low-power-pulsar-gnss-receiver/

⭐ **Rokubun's new Galileo OSNMA Embedded Library delivers navigation message authentication**

By delivering data authentication, the free-to-use Galileo OSNMA assures users that the received Galileo navigation message comes from the system itself and has not been modified by, for example, a spoofing attack. To address this risk, Rokubun's ready-to-use library enables the Galileo OSNMA in embedded GNSS solutions. **#GNSS #Galileo**

Link: https://www.euspa.europa.eu/newsroom/news/rokubuns-galileo-osnma-library-delivers-navigation-message-authentication

Aegiq launching Atlas at DSEI

Sheffield-based quantum technology company Aegiq, is launching Atlas – a toolkit for a new breed of global, secure satellite networks – which it will present for the first time at DSEI 2023 in London next week. **#Quantum #QKD**

Link: https://www.advanced.co.uk/aegiq-launching-atlas-at-dsei.html

Pinpointing GNSS Interference from Low Earth Orbit

In the past decade, there has been a sharp increase in GNSS outages due to deliberate GNSS jamming. Receivers in LEO are uniquely situated to detect, classify and geolocate terrestrial GNSS jammers. This article explores two-step and direct geolocation of terrestrial GNSS jammers from LEO. **#GNSS #LEO**

Link: https://insidegnss.com/pinpointing-gnss-interference-from-low-earth-orbit/

Brussels View: Bringing New A-PNT Opportunities to Life

An in-depth performance assessment campaign was recently completed by the Joint Research Center (JRC) of the European Commission (EC). Four companies, OPNT, 7 Solutions SL, SCPTime and LMV, demonstrated timing services, while three others, Satellos, Locata and NextNav, demonstrated timing and positioning services. **#GNSS #PNT**

Link: https://insidegnss.com/brussels-view-bringing-new-a-pnt-opportunities-to-life/

THREAT INTELLIGENCE

⭐ **LockBit ransomware gang allegedly leaks MoD data after hit on supplier**

The LockBit ransomware operation has leaked a tranche of data purloined from the UK's Ministry of Defence (MoD) after an attack on a company called Zaun, a West Midlands-based supplier of metal fencing products that has supplied some of the UK's key installations, thought to include the Porton Down research unit in Wiltshire and the Faslane nuclear submarine base in Scotland. **#Lockbit #UK**

Link: https://www.computerweekly.com/news/366550812/LockBit-ransomware-gang-allegedly-leaks-MoD-data-after-hit-on-supplier

Is the US's Space Force Ambition Being Thwarted by Cyber Security Risks?

The US Space Force is scrambling to respond to spiraling security risks. In a recent speech at the McAleese Defense Program Conference in Washington D.C., the Chief of Space Operations revealed that those first cyberattacks we saw from Russia at the start of its war against Ukraine shed new light on the modern risks of lax security systems. Every individual and entity face the constant risk of an attack being made against them, whether they are simply scrolling through social media in a coffee shop, or planning to scale space operations in the fight for power. **#USSF**

Link: https://www.scamtimes.com/articles/6585a2923f901/is-the-uss-space-force-ambition-being-thwarted-by-cyber-security-risks.htm

How the Space Force's new targeting squadron will scope out adversary space and counterspace capabilities

The Space Force in August stood up its first squadron assigned to target adversaries' space assets and their supporting ground systems and communication links. And while the unit won't directly deploy capabilities that could jam, hack, or physically damage those systems, it will play a critical role in giving combatant commanders information on possible ways to do so. **#USSF #Delta7**

Link: https://defensescoop.com/2023/09/06/how-the-space-force-new-targeting-squadron-will-scope-out-adversary-counterspace-capabilities/

The Unsolved Mystery of the 2022 Texas Interference

This research analyzes the wide-area 2022 Texas GPS jamming incident using data from airborne receivers through Automatic Dependent Surveillance – Broadcast (ADS-B) and ground receivers at Continuous Operating Reference Stations (CORS). **#GNSS #Jamming**

Link: https://insidegnss.com/the-unsolved-mystery-of-the-2022-texas-interference/

MARKET & COMPETITION

Leonardo, allo studio una unit Space. E meno peso in Asia. (Trad.: Leonardo, a Space unit under study. And less weight in Asia)

The new division would bring together the high-growth potential but currently underperforming businesses namely the joint ventures with Thales (Telespazio, Thales Alenia Space and e-Geos. According to press rumors, the group is also considering the possibility of creating a sub-holding company for the most attractive segments on which to concentrate investments. **#Leonardo**

Link: https://www.spaceconomy360.it/industria-spatiale/leonardo-allo-studio-una-unit-space-e-meno-peso-in-asia/

SES Space & Defense Awarded U.S. Air Force Research Laboratory Contract to Support DEUCSI Program

SES Space & Defense, has been awarded a multi-year contract by the U.S. Air Force Research Laboratory (AFRL) to conduct a series of tests to integrate space broadband services across a multi-orbit satellite network in support of the Defense Experimentation Using Commercial Space Internet (DEUCSI) program. **#SES #AFRL**

Link: https://www.ses.com/press-releases/ses-space-defense-awarded-us-air-force-research-laboratory-contract-support-deucsi

US Space Force eyes partnerships for tactical satellite communications

That next generation suite of more resilient communication satellites and ground capabilities is known as the Protected Anti-Jam Tactical Satellite Communications family of systems, or PATS. Leveraging partnerships with allies is a top priority for the effort, according to the tactical SATCOM division within Space Systems Command. **#USSF #Satellites**

Link: https://www.defensenews.com/battlefield-tech/space/2023/09/01/us-space-force-eyes-partnerships-for-tactical-satellite-communications/

Eutelsat invests in Europe-focused space technology venture fund

Eutelsat has invested in French venture capital firm Karista's space technology fund to strengthen ties with startups across Europe, the satellite operator said Sept. 1. **#Eutelsat #Karista**

Link: https://spacenews.com/eutelsat-invests-in-europe-focused-space-technology-venture-fund/

⭐ **TNO and European collaborate to develop global quantum internet enabled from space**

TNO and the Institute of Communication and Computer Systems (ICCS) and a consortium of other European partners, join forces in the LaiQa-project (Leap in Advancing of critical Quantum key distribution-space components). Funded by the European Union, the project is expected to start in the beginning of 2024 and run for 3 years. **#Quantum**

Link: https://news.satnews.com/2023/09/07/tno-and-european-collaborate-to-develop-global-quantum-internet-enabled-from-space/

As DoD readies new commercial space strategies, industry frets funding gap

For the past several years, Defense Department and Intelligence Community (IC) leaders have been vocally touting their determination to take better advantage of cutting-edge commercial space technology. But so far, according to sources inside and outside the government, there has been less progress than hoped. **#US #Budget**

Link: https://breakingdefense.com/2023/09/as-dod-readies-new-commercial-space-strategies-industry-frets-funding-gap/

Geost payloads selected for Space Development Agency satellites

Geost, a supplier of optical sensor payloads for military satellites, announced Sept. 11 it won a contract to produce eight payloads for missile-tracking satellites that Northrop Grumman is building for the U.S. Space Development Agency. The payloads are designed to detect threats against satellite. **#Geost #Payloads**

Link: https://spacenews.com/geost-payloads-selected-for-space-development-agency-satellites/

Thales eyes new chapter in cooperation with Korea in cybersecurity, space sector even

The French defense company Thales Group hopes to deepen cooperation with Korean partners in the fields of cybersecurity and space technologies, taking the decades-long partnership to another level beyond the defense and other conventional sectors, its senior executive has said. **#Thales #SouthKorea**

Link: https://www.koreaherald.com/view.php?ud=20230911000692