



SPACE CYBERSECURITY WEEKLY WATCH

Week 38

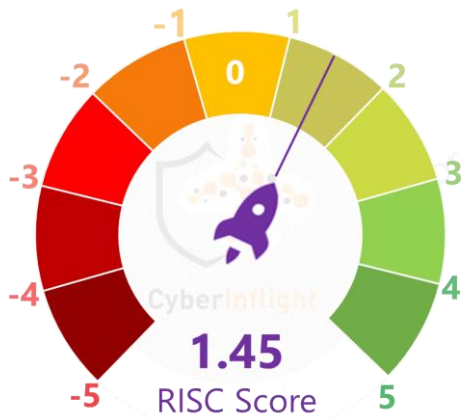
September 17 - 23, 2024

Timeframe : Weekly
of articles identified : 38
Est. time to read : 75 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.

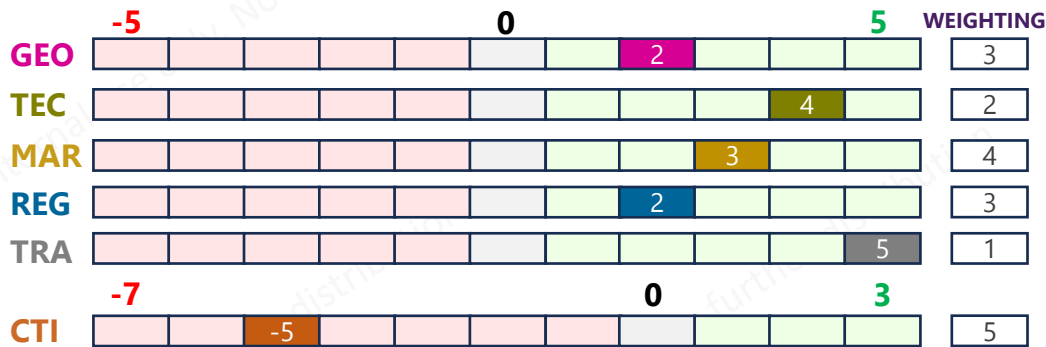
- **GEOPOLITICS**
- **TECHNOLOGY**
- **MARKET INTELLIGENCE**
- **REGULATION**
- **TRAINING & EDUCATION**
- **THREAT INTELLIGENCE**
- ★ **IMPORTANT NEWS**

RISC Score Assessment

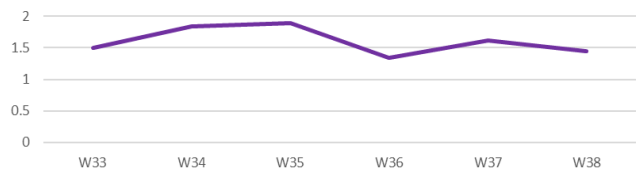


This week's RISC score is 1.45, a slight decrease from last week, primarily due to an increase in cyber-threats targeting critical infrastructure.

Overview & Resilience Index for Space Cybersecurity (RISC)



RISC Score Evolution



On the geopolitical front, US Space Operations Command (SPOC) has released a detailed report highlighting the growing geopolitical challenges in space. The report discusses the increasing competition among global powers for space dominance, particularly in the context of military and strategic operations. On the technological side, Integrasys has introduced a suite of advanced SATCOM solutions at the World Satellite Business Week (WSBW). These solutions are aimed at improving Geospatial Intelligence (GEOINT) and Space Domain Awareness (SDA) capabilities, enabling more precise satellite communications and space monitoring. On the market front, Aldoria Space has landed a pivotal contract with U-Space to enhance the safety and reliability of nano-satellite missions. The partnership will leverage Aldoria's advanced Space Situational Awareness (SSA) capabilities to monitor and ensure the safe operation of small satellites. On the regulatory front, the European Union's OSNMA initiative aims to create a multi-layered GNSS security system, designed to protect satellite navigation systems from interference, jamming, and spoofing attacks. On the threat intel side, a recent series of war games has highlighted the threat of Chinese cyberattacks aimed at crippling Taiwan's communication systems. The exercises demonstrated how such attacks could paralyze Taiwan's ability to respond in a military conflict, showcasing the importance of secure communications infrastructure. Lastly, the UK PNT leadership seminar on Position, Navigation, and Timing (PNT) will be held in the UK on November 20. The event will focus on enhancing national capabilities, providing a training platform for PNT professionals, and discussing the latest advancements in this critical sector.

GEOPOLITICS

Space Force highlights domain awareness and monitoring systems in budget plan

Space Force has released a detailed report highlighting the growing geopolitical challenges in space. The report discusses the increasing competition among global powers for space dominance, particularly in the context of military and strategic operations. As space becomes a contested domain, issues like space debris management, satellite security, and the weaponization of space are becoming more prominent. The report also outlines SPOC's future plans to ensure that the US maintains its leadership in space, with a strong focus on collaboration with international allies.

Link: <https://www.spoc.spaceforce.mil/News/Article-Display/Article/3908406>



Space operations command (SPOC) highlights global geopolitical challenges

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#SPOC #SpaceSecurity

Link: <https://www.spoc.spaceforce.mil/News/Article-Display/Article/3908406>



EU Space Agency launches its Commission cooperation / First EU Space Agency report from European Commission

The European Space Agency (ESA) has launched its Commission cooperation, marking a significant milestone in the history of the EU Space Agency. The report outlines the agency's mission and its commitment to advancing space exploration and research. It also highlights the agency's collaboration with the European Commission and its role in promoting space technology and innovation.

Link: https://www.esa.int/ESA/About/ESA_in_the_EU



TECHNOLOGY



INTEGRASYS unveils cutting-edge solutions for SATCOM at WSBW

Integrasys has introduced a suite of advanced SATCOM solutions at the prestigious World Satellite Business Week (WSBW). These solutions are aimed at improving Geospatial Intelligence (GEOINT) and Space Domain Awareness (SDA) capabilities, enabling more precise satellite communications and space monitoring.

Link: <https://spacewatch.global/2024/09/integrasys-pioneering-solutions-in-satcomm/>



Advanced Research and Innovation Center on SDA capabilities for GEOINT

The Advanced Research and Innovation Center (ARIC) has unveiled a suite of advanced SDA capabilities for GEOINT. These capabilities are designed to enhance the accuracy and reliability of satellite communications and space monitoring. The center's research focuses on developing cutting-edge technologies and solutions that address the challenges of space domain awareness.

Link: <https://www.aric.gov/Research/Advanced-Research-and-Innovation-Center-on-SDA-capabilities-for-GEOINT>



Orbital Technologies introduces first patented SDA solution for secure satellite services

Orbital Technologies has introduced its first patented SDA solution for secure satellite services. This solution is designed to provide enhanced security and protection for satellite communications, ensuring that data is transmitted securely and reliably. The company's research and development efforts focus on creating innovative solutions that address the needs of the space industry.

Link: <https://www.orbitaltechnologies.com/Orbital-Technologies-introduces-first-patented-SDA-solution-for-secure-satellite-services>



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TECHNOLOGY

Interstellar quantum communication and the Fermi paradox

Recent work in quantum communication has shown that quantum entanglement can be used to establish secure communication channels that are immune to interception. This work has implications for the development of secure communication systems for space-based applications. The article discusses the challenges of establishing secure communication channels in space and the potential for quantum communication to provide a solution.

Link: [Quantum communication for space-based applications and the Fermi paradox](#)

Space-based quantum communication and the Fermi paradox

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Link: [Space-based quantum communication and the Fermi paradox](#)

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Link: [Space-based quantum communication and the Fermi paradox](#)



REGULATION

★ A step toward multi-layered GNSS security: OSNMA's EU-led initiative

The European Union's OSNMA initiative aims to create a multi-layered GNSS security system, designed to protect satellite navigation systems from interference, jamming, and spoofing attacks. This program, which focuses on building resilience for the EU's GNSS infrastructure, is essential for ensuring the reliability of space-based services, which are increasingly vital for both civilian and military operations across Europe. **#OSNMA #GNSSResilience**

Link: <https://www.antcom.com/resources/velocity-magazine/a-step-toward-multi-layered-gnss-security>

Germany ready for space-based quantum communication and the Fermi paradox

Germany is ready to establish a secure communication system for space-based applications. The article discusses the challenges of establishing secure communication channels in space and the potential for quantum communication to provide a solution.

Link: [Germany ready for space-based quantum communication and the Fermi paradox](#)

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Link: [Space-based quantum communication and the Fermi paradox](#)



MARKET & COMPETITION

★ Aldoria lands crucial contract with U-Space, strengthening nano-satellite mission safety

Aldoria Space, has landed a pivotal contract with U-Space to enhance the safety and reliability of nano-satellite missions. The partnership will leverage Aldoria's advanced Space Situational Awareness (SSA) capabilities to monitor and ensure the safe operation of small satellites. By securing this contract, Aldoria continues to play a crucial role in the growing nano-satellite market, which is key for many new space ventures. **#NanoSatellites #SpaceSafety**

Link: <https://spacewatchafrica.com/aldoria-secures-key-contract-with-u-space-boosting-nano-satellite-mission-safety/>

France's space agency signs French government order under France 2030 initiative

As part of the French government's France 2030 initiative, the French Space Agency (CNES) has secured a significant contract from the French government to support the development and operation of a new generation of nano-satellites. This contract is a key component of the government's strategy to enhance the safety and reliability of small satellite missions. The project will involve the development of advanced SSA capabilities to monitor and ensure the safe operation of these satellites. **France 2030 Initiative**

Link: [https://www.cnes.fr/en/actualites/le-cnes-est-charge-du-developpement-et-de-l'exploitation-de-nouveaux-nanosatellites](#)

Planet Labs signs multi-year contract with German Space Agency

Planet Labs, a leading provider of satellite imagery, has entered into a multi-year contract with the German Space Agency (DLR) to provide high-resolution satellite imagery and data for a variety of applications. This partnership will support DLR's efforts to enhance the safety and reliability of small satellite missions. The contract will involve the development of advanced SSA capabilities to monitor and ensure the safe operation of these satellites. **Planet Labs**

Link: [https://www.planet.com/news/planet-labs-signs-contract-with-german-space-agency](#)

Aldoria Secures \$15.5M US Military Contract for Satellite Upgrade

Aldoria has been awarded a \$15.5 million contract by the US Space Force to upgrade the Small Business Technology Resources (SBR) program. This contract will focus on enhancing the safety and reliability of satellite missions. The project will involve the development of advanced SSA capabilities to monitor and ensure the safe operation of these satellites. **Aldoria Space**

Link: [https://www.aldoria.space/news/aldoria-secures-15-5-million-contract-for-satellite-upgrade](#)

Orbital ATK advances navigation to 30-40 MHz frequency

Orbital ATK has advanced its navigation capabilities to 30-40 MHz frequency, a key step in enhancing the safety and reliability of small satellite missions. This advancement will allow for more accurate and reliable navigation data, which is essential for the safe operation of these satellites. The project will involve the development of advanced SSA capabilities to monitor and ensure the safe operation of these satellites. **Orbital ATK**

Link: [https://www.orbitalatk.com/news/advance-navigation-to-30-40-mhz-frequency](#)

Space agencies award under France 2030 initiative project

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Link: [https://www.planet.com/news/planet-labs-signs-contract-with-us-space-agency](#)

Link: [https://www.aldoria.space/news/aldoria-secures-15-5-million-contract-for-satellite-upgrade](#)

Link: [https://www.cnes.fr/en/actualites/le-cnes-est-charge-du-developpement-et-de-l'exploitation-de-nouveaux-nanosatellites](#)

Link: [https://www.planet.com/news/planet-labs-signs-contract-with-us-space-agency](#)

Link: [https://www.orbitalatk.com/news/advance-navigation-to-30-40-mhz-frequency](#)

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MARKET & COMPETITION

AI/ML in Space Operations and Communications in US Armed Space Technology

The US Space Force is looking to use artificial intelligence (AI) and machine learning (ML) to enhance its operations in space. This includes using AI/ML to analyze data from satellites and other space-based sensors to detect and track threats. The US Space Force is also looking to use AI/ML to improve its communication systems, such as using AI/ML to optimize the routing of data through space-based networks.



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THREAT INTELLIGENCE

★ War Games reveal China's cyber attacks could cripple Taiwan's communications

A recent series of war games has highlighted the threat of Chinese cyber attacks aimed at crippling Taiwan's communication systems. The exercises demonstrated how such attacks could paralyze Taiwan's ability to respond in a military conflict, showcasing the importance of secure communications infrastructure. **#China #WarGames**



Link: <https://spacenews.com/war-game-chinese-attacks-communications-paralyze-taiwan/>

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TRAINING & EDUCATION



UK PNT Leadership Seminar Scheduled for 20 November

A leadership seminar on Position, Navigation, and Timing (PNT) will be held in the UK on November 20. The event will focus on enhancing national capabilities, providing a training platform for PNT professionals, and discussing the latest advancements in this critical sector. **#PNT #Seminar**

Link: <https://rntfnd.org/2024/09/21/uk-pnt-leadership-seminar-20-november/>



CyberInflight is a Market Intelligence company dedicated to the topic of Space Cybersecurity. The company provides strategic market and research reports, bespoke consulting, market watch & OSINT researches and cybersecurity awareness training.

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