



SPACE CYBERSECURITY WEEKLY WATCH

Week 31

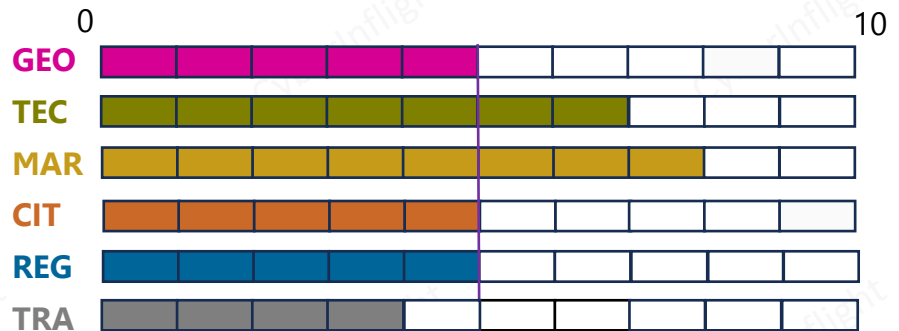
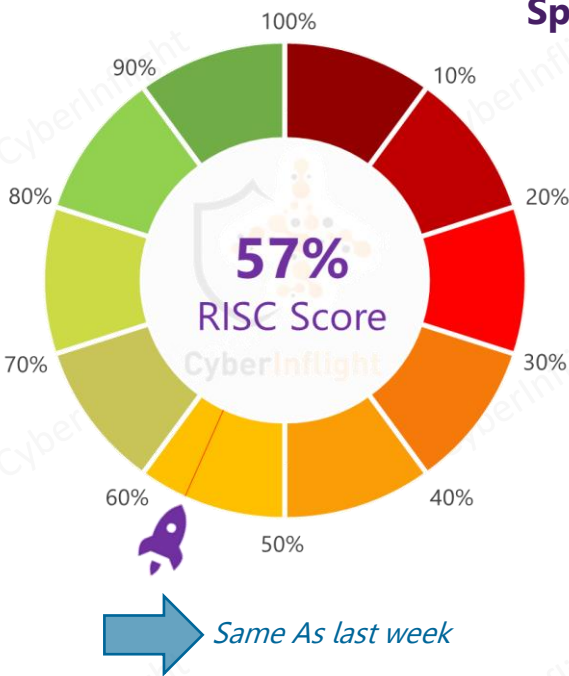
July 30 – August 5, 2024

Timeframe : Weekly
of articles identified : 36
Est. time to read : 75 minutes

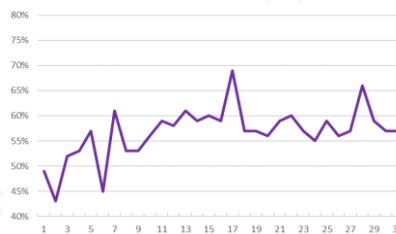
Articles, company's communications, whitepapers, academic works, podcast, and sources not to be missed on the topic of space cybersecurity over a specified timeframe.

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

Overview & Resilience Index for Space Cybersecurity (RISC)



RISC Score Evolution



After struggling to recover since the drop from W18 and finally rising on W28, the RISC score (the tool used to assess cybersecurity resilience in space) appears to be constant this week.

This week's RISC score is 57%. On the geopolitical front, the UK Space Command has hosted its inaugural space wargame, "Space Warrior", at the Defense Experimentation and Wargaming Hub in Southwick Park, Hampshire. The exercise aimed to integrate commercial space-based Intelligence, Surveillance, and Reconnaissance (ISR) with the UK's defense capabilities. On the technological side, oneNav has announced that its L5 signals are immune to jamming, representing a significant advancement in satellite navigation technology. This breakthrough promises greater reliability for critical applications, particularly in environments where signal interference can pose serious risks. On the market front, Intelsat and Levira, an Estonian-based company specializing in media distribution, management, production, and connectivity services, are joining forces to deliver high-throughput satellite service aimed at bolstering critical network connectivity for European businesses. On the regulatory front, The NIS2 and DORA regulations set the standards for cybersecurity and operational resilience to understand what these regulations entail, who they impact, and how your organization can ensure compliance. Lastly as interest in lunar exploration and cislunar activities expands, so does the need for tailored cybersecurity measures, a informative read which on unique challenges such as communication delays and spacecraft vulnerabilities, stressing the importance of developing specialized strategies to protect space missions from cyber threats.



GEOPOLITICS

Original Call for US MRF Leadership

A report from the US is calling for a new leadership structure for the US MRF, emphasizing the need for a more integrated and coordinated approach to space-based intelligence, surveillance, and reconnaissance (ISR) capabilities.

Link: [https://www.defencejournal.org.uk/britain-hosts-first-space-wargame/](#)



Britain hosts first space wargame

UK Space Command has hosted its inaugural space wargame, "Space Warrior", at the Defense Experimentation and Wargaming Hub in Southwick Park, Hampshire. The exercise aimed to integrate commercial space-based Intelligence, Surveillance, and Reconnaissance (ISR) with the UK's defense capabilities. **#UKSpaceCommand #SpaceWarrior**

Link: <https://ukdefencejournal.org.uk/britain-hosts-first-space-wargame/>



TECHNOLOGY

Secretary of Defense Announces US Space Development Agency (SDA) will lead development of space-based intelligence, surveillance, and reconnaissance (ISR) capabilities

The Secretary of Defense has announced that the Space Development Agency (SDA) will lead the development of space-based intelligence, surveillance, and reconnaissance (ISR) capabilities. This effort is part of a broader strategy to enhance the US's ability to monitor and understand the activities of potential adversaries in space.

Link: [https://www.defencejournal.org.uk/britain-hosts-first-space-wargame/](#)



New Space Force program to develop services for Electronic Warfare

The US Space Force is introducing a new electronic warfare service designed to enhance its capabilities in space and electronic combat. This advanced technology will improve the service's ability to disrupt enemy communications and operations in space, providing a significant tactical advantage.

Link: [https://www.defencejournal.org.uk/britain-hosts-first-space-wargame/](#)



UK Space Agency announces results of 2023/24 feasibility study on space data centres

The UK Space Agency has announced the results of its 2023/24 feasibility study on space data centres. The study highlights the potential benefits of processing data in orbit, including reduced latency and increased security, and outlines the next steps for implementation.

Link: [https://www.defencejournal.org.uk/britain-hosts-first-space-wargame/](#)



Continental Europe and US Launch Satellite New Zealand's satellite infrastructure

Continental Europe and the US have launched a satellite to support New Zealand's satellite infrastructure. This mission is a key step in enhancing the country's ability to monitor and understand the activities of potential adversaries in space.

Link: [https://www.defencejournal.org.uk/britain-hosts-first-space-wargame/](#)



oneNav claims jamming immunity for L5 signals

oneNav has announced that its L5 signals are immune to jamming, representing a significant advancement in satellite navigation technology. This breakthrough promises greater reliability for critical applications, particularly in environments where signal interference can pose serious risks. **#SatelliteNavigation #Jamming**

Link: <https://www.spatialsource.com.au/onenav-claims-jamming-immunity-for-l5-signals/>



Continental Europe, Quantum Exchange, & Microsoft Present Solution for Quantum Cybersecurity

The Continental Europe, Quantum Exchange, and Microsoft have presented a solution for quantum cybersecurity. This effort is part of a broader strategy to enhance the US's ability to monitor and understand the activities of potential adversaries in space.

Link: [https://www.defencejournal.org.uk/britain-hosts-first-space-wargame/](#)



TECHNOLOGY

ESA to test secure space-to-space and space-to-ground data transfer

ESA is set to perform an in-orbit demonstration of its secure data transfer system and ground handling in late November 2024. The initiative aims to enhance the security and reliability of data communications, ensuring safe and efficient data exchange between satellites.

[ESA to test secure space-to-space and space-to-ground data transfer](#)



ESA Space operations integrate secure ground-to-space ground network

ESA Space Operations has successfully integrated the ESA's secure ground-to-space network, enhancing the capability to receive and monitor satellite data securely. The integration will improve mission operations and ensure that data is always secure.

[ESA Space operations integrate secure ground-to-space ground network](#)



Quantum Computing enhances satellite services

Quantum computing is poised to revolutionize satellite services by offering unprecedented processing power and efficiency. The advancement could significantly improve data handling and communication in space-based applications, leading to more efficient mission operations.

[Quantum Computing enhances satellite services](#)



ESA and US conducting security vulnerability in space systems

ESA and the US are conducting a joint program of space and cyber intelligence, aimed at identifying security vulnerabilities in space systems. The initiative focuses on enhancing the security and reliability of space systems, ensuring the safe and effective operation of critical infrastructure.

[ESA and US conducting security vulnerability in space systems](#)



ESA and US explore advanced language model in space

ESA and the US are exploring the use of advanced language models in space, enabling a significant step in space-based AI capabilities. The technology is expected to enhance communication and data processing for space missions, leading to more efficient and secure operations.

[ESA and US explore advanced language model in space](#)



MARKET & COMPETITION

France 2 satellite now ready for commercial service

France 2, the first satellite in the world to be launched in the geostationary orbit, is now ready for commercial service. After a few weeks of testing, the satellite is now ready for commercial service. The first delivery of data will be a service from France 2 to the French government organization for the management of the French Republic, which will use the satellite with complete effect to provide an essential connectivity service during the summer season 2024 in France.

[France 2 satellite now ready for commercial service](#)



ESA signs \$100M US Navy contract for satellite services

ESA has signed a \$100 million contract with the US Navy to provide satellite communication services to the US Navy. The multi-year contract, awarded by the US Navy, is the largest contract in the geostationary orbit for space-to-ground communications services for the US Navy, ensuring reliable and secure data exchange between satellites and ground stations.

[ESA signs \\$100M US Navy contract for satellite services](#)



ESA Space Imaging partners to develop advanced space cameras

ESA Space Imaging has signed a partnership with ESA to develop advanced space cameras. The collaboration aims to enhance imaging capabilities for a variety of space applications, including Earth observation and scientific research, through advanced sensors and data processing.

[ESA Space Imaging partners to develop advanced space cameras](#)



MARKET & COMPETITION

USA announces \$1.5 billion contract for advanced satellite communications satellite
The United States has awarded a \$1.5 billion contract to provide advanced satellite communications satellite. This contract will support a range of applications, including mobile, and enterprise applications, and is part of the National Security Space Initiative (NSSI).



USA awards \$2 million defense space technologies contract
The United States has awarded a \$2 million contract to provide advanced defense space technologies. The contract will support a range of applications, including mobile, and enterprise applications, and is part of the National Security Space Initiative (NSSI).



USA Space Agency funds 10% government satellite work development
The United States has awarded funding for 10% government satellite work development. This funding will support a range of applications, including mobile, and enterprise applications, and is part of the National Security Space Initiative (NSSI).



France space giant Thales receives Israeli space contract for IIR
The French space giant Thales has received a contract from Israel to provide advanced satellite communications satellite. This contract will support a range of applications, including mobile, and enterprise applications, and is part of the National Security Space Initiative (NSSI).



USA announces \$100 million contract to support US Space Command investigation satellite work
The United States has awarded a \$100 million contract to support US Space Command investigation satellite work. This contract will support a range of applications, including mobile, and enterprise applications, and is part of the National Security Space Initiative (NSSI).



Intelsat and Levira AS team up to enhance European network connectivity

Intelsat and Levira, an Estonian-based company specializing in media distribution, management, production, and connectivity services, are joining forces to deliver high-throughput satellite service aimed at bolstering critical network connectivity for European businesses. For Intelsat, partnering with Levira showcases the benefits of satellite connectivity, which includes enhanced reliability, resiliency, and security. These advantages are increasingly vital in the face of natural disasters, geopolitical challenges, and cybersecurity threats. #Intelsat #Levira



Link: <https://spacewatchafrica.com/intelsat-and-levira-as-team-up-to-enhance-european-network-connectivity-2/>

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THREAT INTELLIGENCE



Exploring cislunar cybersecurity challenges

As interest in lunar exploration and cislunar activities expands, so does the need for tailored cybersecurity measures. The article highlights unique challenges such as communication delays and spacecraft vulnerabilities, stressing the importance of developing specialized strategies to protect space missions from cyber threats.

#LunarCyberDefense #SpaceTechSecurity

Link: <https://medium.com/the-cyber-operator/cislunar-cybersecurity-an-introduction-to-extra-orbital-space-challenges-part-1-7b5a862e14aa>

US Space Access Roadmap of January 2024 is unclear but has

The Department of Defense's (DoD) January 2024 report on space access, security, and control, titled "Space Access, Security, and Control: A Strategic Roadmap for the United States," outlines a comprehensive strategy for ensuring the United States' ability to access and control space. The report emphasizes the need for a robust and resilient space-based infrastructure, including the development of advanced space-based capabilities, such as satellite communications, navigation, and intelligence gathering. It also highlights the importance of maintaining a strong and secure space-based infrastructure, including the development of advanced space-based capabilities, such as satellite communications, navigation, and intelligence gathering.

Link: [https://www.defense.gov/Newsroom/Document-Collection/Space-Access-Security-and-Control-A-Strategic-Roadmap-for-the-United-States/](#)

Securing the Road to the Moon: protecting space-based assets from cyber threats

In space exploration and technology advances, it does the need to safeguard the critical infrastructure that supports our space-based activities, from satellite communications to remote control systems. The integration of advanced technologies across the space industry has opened new doors, but it also introduces new vulnerabilities. To protect our space-based assets from cyber threats, we must adopt a multi-layered approach, including the development of advanced space-based capabilities, such as satellite communications, navigation, and intelligence gathering. It also highlights the importance of maintaining a strong and secure space-based infrastructure, including the development of advanced space-based capabilities, such as satellite communications, navigation, and intelligence gathering.

Link: [https://www.spaceforce.mil/Portals/0/Documents/Securing-the-Road-to-the-Moon-protecting-space-based-assets-from-cyber-threats.pdf](#)

US Space Access Roadmap: US State and Central Bank

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Link: [https://www.defense.gov/Newsroom/Document-Collection/Space-Access-Security-and-Control-A-Strategic-Roadmap-for-the-United-States/](#)

Space-based assets vulnerability for NIS2 and DORA period

In light of the fact that a lot of critical infrastructure for various systems that support our space-based activities is now in space, the Department of Defense (DoD) has released a report titled "Space Access, Security, and Control: A Strategic Roadmap for the United States." The report outlines a comprehensive strategy for ensuring the United States' ability to access and control space. It emphasizes the need for a robust and resilient space-based infrastructure, including the development of advanced space-based capabilities, such as satellite communications, navigation, and intelligence gathering. It also highlights the importance of maintaining a strong and secure space-based infrastructure, including the development of advanced space-based capabilities, such as satellite communications, navigation, and intelligence gathering.

Link: [https://www.defense.gov/Newsroom/Document-Collection/Space-Access-Security-and-Control-A-Strategic-Roadmap-for-the-United-States/](#)



REGULATION

How the General Data Protection Regulation (GDPR) affects cybersecurity

In a world where the lines between the physical and digital are increasingly blurred, it's crucial to understand how the General Data Protection Regulation (GDPR) affects cybersecurity. The GDPR, which came into effect in May 2018, is a comprehensive data protection regulation that applies to all organizations that process the personal data of individuals in the European Union (EU) and the United Kingdom (UK). The regulation sets out a series of principles and requirements that organizations must follow to ensure that they are processing personal data in a lawful, transparent, and secure manner. It also gives individuals more control over their personal data, including the right to access, correct, and delete their data. The GDPR has had a significant impact on cybersecurity, as it has led to a number of new regulations and standards that organizations must comply with. These include the NIS2 and DORA regulations, which are discussed in the following sections.

Link: [https://www.cyberinflight.com/newsroom/2024/07/30/how-the-general-data-protection-regulation-gdpr-affects-cybersecurity/](#)



NIS2 and DORA: what you need to know to stay compliant and secure

Navigating regulatory compliance can be challenging, particularly for critical sectors in the EU. The NIS2 and DORA regulations set the standards for cybersecurity and operational resilience. This guide delves into what these regulations entail, who they impact, and how your organization can ensure compliance. #NIS2 #DORA

Link: <https://socradar.io/nis2-and-dora-what-you-need-to-know-to-stay-compliant-and-secure/>



TRAINING & EDUCATION



Space ISAC value of Space Summit, co-hosted by the Aerospace Corporation
Space ISAC's fifth annual Value of Space Summit (VOSS V), co-hosted by the Aerospace Corporation explores Geopolitical, Economic, and Cybersecurity Impacts on Global Space. VOSS V is an annual forum for Space ISAC, its members and partners, and will take place on September 24 and 25, 2024. #SpaceISAC #VOSSV
[Link: https://app.glueup.com/event/space-isac-value-of-space-summit-co-hosted-by-the-aerospace-corporation-107462/](https://app.glueup.com/event/space-isac-value-of-space-summit-co-hosted-by-the-aerospace-corporation-107462/)



Introduction to cybersecuring space systems with The Center for Space Security
The Center for Space Security is a center designed to engage cybersecurity professionals in the study and implementation of space systems, including the architecture and design, security, and operations. The center will provide a comprehensive overview of the space system architecture and the cybersecurity challenges that are associated with space systems. The center will also provide a comprehensive overview of the space system architecture and the cybersecurity challenges that are associated with space systems. The center will also provide a comprehensive overview of the space system architecture and the cybersecurity challenges that are associated with space systems.

