SPACE CYBERSECURITY WEEKLY WATCH

Week 8

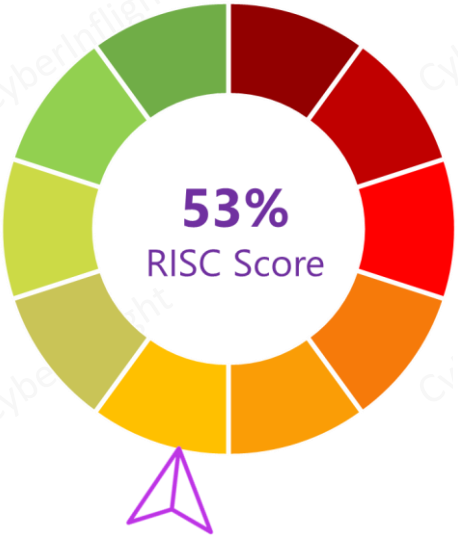
February 20 – 26, 2024

Timeframe : Weekly
# of articles identified : 29
Est. time to read : 50 minutes

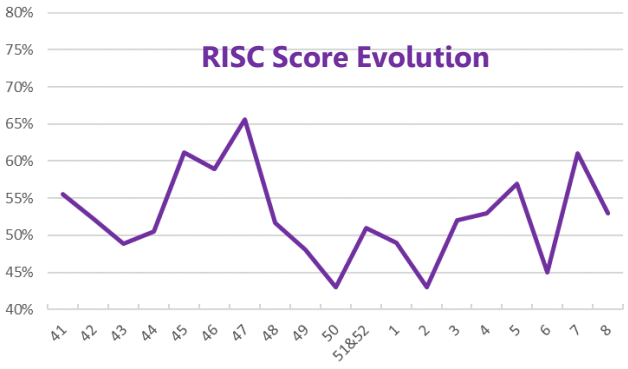
Articles, company's communications, whitepapers, academic works, podcast, and sources not to be missed on the topic of space cybersecurity over a specified timeframe.

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

Overview & RISC Score



Decrease from last week (from 61% to 53%)



After a rising period since the start of 2024, W6 has shown a decrease, W7 has shown an increase and W8 has shown a small decrease again.

This week's RISC Score is 53 This week, a study by the New York Times reveled the intelligence partnership between Washington and Kyiv where the US helps with tracking Russian troop movements and supporting spy networks. On the market front, the Pentagon has long pursued augmented GPS capabilities, including using allied backup systems, but is now looking for a potential partnership with a promising company to reduce GPS dependence. On the threat intelligence side, pilots flying the over Norway have been seeing a sharp spike in disturbances of navigation caused by Russian electronic warfare units located on the Kola Peninsula. Norwegian Communication Authority says it has received about disturbances to the GPS navigation 44 days in 2024. Moreover, iDirect Government's Communication Signal Interference Removal (CSIR) technology has been named a Finalist for the 2023 Satellite Technology of the Year Award organized by Via Satellite. CSIR mitigates interference and meets the specialized needs of military and government SATCOM users by delivering uninterrupted secure communications on any radio frequency. Last but not least, EU Member States, with the support of the European Commission and ENISA, the EU Agency for Cybersecurity, published a report on the cybersecurity and resiliency of Europe's communications infrastructures and networks.

GEOPOLITIC

The Spy War : How the C.I.A Secretly Helps Ukraine Fight Putin

Now entering the third year of the war, the intelligence partnership between Washington and Kyiv is a linchpin of Ukraine's ability to defend itself. The C.I.A. and other American intelligence agencies provide intelligence for targeted missile strikes, track Russian troop movements and help support spy networks. **#CIA #Surveillance**

Link: https://www.nytimes.com/2024/02/25/world/europe/cia-ukraine-intelligence-russia-war.html?searchResultPosition=1

MARKET & COMPETITION

The Race to Back Up Vulnerable GPS

While the Pentagon has long pursued augmented GPS capabilities, including using allied backup systems, it is now scoping a burgeoning commercial market promising innovative options to reduce GPS dependence.
#SpaceForce #GPSAlternatives
Link: https://spacenews.com/the-race-to-back-up-vulnerable-gps/

Firstpost Defence Summit : Investing in Tech - AI, Quantum Computing, Cyberwarfare - Need of Hour, Says Defence Min Rajnath Singh

India will invest heavily in technology in the defence sector, revealed Union Minister of Defence, Rajnath Singh, while speaking at the Firstpost Defence Summit in New Delhi as the chief guest. The Minister said that although success is not guaranteed, in the next 20-25 years, India will grow so strong that no one can imagine now. "That's why we are promoting defence technology development and introducing Technology Development Fund" **#India #Investment**
Link: https://spacewatch.africa/global-leader-in-quantum-safe-encryption-arqit-partner-cacheoft-to-bring-cyber-product-to-the-us-public-sector/

Space DOTS CEO Bianca Cefalo Shares Company Vision for In-Orbit Testing and Data

Space DOTS is a U.K.-based space startup working to pioneer a paradigm shift in space materials qualification to expedite the process for the space industry. Bianca Cefalo, CEO, talks about adjusting company strategy with customer feedback, fundraising, and building up a company while navigating the new cyber challenges in the sector. #SpaceDOTS #Securing
Link: https://www.satellitetoday.com/startups/2024/02/22/space-dots-ceo-bianca-cefalo-shares-company-vision-for-in-orbit-testing-and-data/

THREAT INTELLIGENCE

Electronic Warfare : Russia's GPS Jamming in Poland

Russian tests with special electronic systems resulted in GPS interferences over Poland last month. According to a report on the website of the Middle East Media Research Institute (MEMRI), on January, Global Positioning System (GPS) disturbances were recorded over the eastern territory of Poland, particularly covering the Suwałki Gap. **#Russia #Jamming**
Link: https://defence-industry.eu/electronic-warfare-russias-gps-jamming-in-poland/

Russian Jamming Is Now Messing up GPS Signals for Norwegian Aviation Practically Every Day

Pilots flying the Finnmark region see a sharp spike in disturbances of navigation caused by Russian electronic warfare units located on the Kola Peninsula. In the far north, Norwegian Communication Authority says it has received about disturbances to the GPS navigation 44 days in 2024. That is practically every day. **#Russia #Jamming**
Link: https://thebarentsobserver.com/en/security/2024/02/russian-jamming-now-messing-gps-signals-norwegian-aviation-practically-every-day

A Cyberattack Against Satellite Infrastructure in the United Arab Emirates

Anonymous Sudan claims to target Star Satellite Communications Company PJSC and Al Yah Satellite Communications.
#Anonymoussudan #Cyberattack
Link: https://t.me/s/AnonymousSudan/671

A Indian Government Website Has Been Down

Garuda From Cyber targets the website of North Eastern Space Applications Centre (NESAC). Anonymous Sudan claims to target Star Satellite Communications Company PJSC and Al Yah Satellite Communications.
#Garudafromcyber #Cyberattack
Link: https://t.me/garudafromcyber/1067

TECHNOLOGY

iDirect Government CSIR Technology Named Finalist For Via Satellite's 2023 Satellite Technology of The Year Award

iDirect Government's Communication Signal Interference Removal (CSIR™) technology has been named a Finalist for the 2023 Satellite Technology of the Year Award organized by Via Satellite. With increasing spectral usage and frequency overlap, CSIR mitigates interference and meets the specialized needs of military and government SATCOM users by delivering uninterrupted secure communications on any radio frequency. **#Contest #CSIR**

Link: https://spacewatchafrica.com/idirect-government-csir-technology-named-finalist-for-via-satellites-2023-satellite-technology-of-the-year-award/

Breaking The Cosmic Silence : Quantum Communications Across Interstellar Space

Imagine a future where we can communicate seamlessly across the vast distances of interstellar space, bridging the gap between stars and potentially connecting with extraterrestrial civilizations. A team of physicists at the University of Edinburgh's School of Physics and Astronomy has used mathematical calculations to demonstrate that quantum communications across interstellar space could be possible. **#Quantum #Communications**

Link: https://www.cysecurity.news/2024/02/heres-why-robust-space-security.html

Royal Navy Works on GPS-Free Technology For Advanced Navigation At Sea

The Royal Navy has worked with scientists to progress on the next set of quantum technology experiments. The Office for the Chief Technology Officer (OCTO) supported specialists from the University of Birmingham and the DstI to conduct quantum experiments that may pave the way for advanced positioning and navigation tools while at sea. **#Quantum #UK**

Link: https://redefining-society.podcast.simplecast.com/

Scientific Systems Advances non-GPS Navigation Technology for Military Use in GPS-Denied Areas

Scientific Systems has announced the advancement of ImageNav, an image-based navigation software designed for use in environments where GPS signals are compromised. With over a decade of development and funding exceeding $45 million, ImageNav offers an alternative to traditional GPS navigation for military operations, particularly in contested environments where electronic jamming poses a threat to GPS reliability. **#ImageNav #ScientificSystems**

Link: https://redefining-society.podcast.simplecast.com/

Arqit and CableFree Deliver World's First Quantum-Safe 5G Cellular Technology Products

Arqit, a leader in quantum-safe encryption, and CableFree, a leader in 5G Radio solutions, have recently announced the availability of integrated quantum-safe cellular technology products for Private 5G networks using Symmetric Key Agreement. **#Quantum #Arqit**

Link: https://www.benzinga.com/pressreleases/24/02/g37234096/arqit-and-cablefree-deliver-worlds-first-quantum-safe-5g-cellular-technology-products

Chinese PLA Navy's Type 055 Destroyer Kianyang Is Now Operational

According to information published by Global Times on February 16, 2024, the Chinese People's Liberation Army (PLA) Navy has successfully brought its eighth Type 055 large destroyer to operational readiness. The ships boast advanced electronic warfare and countermeasures, including dual-band radar systems for enhanced detection and tracking capabilities, particularly against stealth targets and for anti-satellite operations. **#China #ElectronicWarfare**

Link: https://redefining-society.podcast.simplecast.com/

Space Hacks : AI Protects Aerospace Systems from Cyber Threats Part 1

Imagine a world where space missions are safe from cyberattacks! Explore the growing concern of cyber threats in the aerospace industry and how AI is revolutionizing cybersecurity, protecting rockets, satellites, and critical infrastructure from potential attacks. **#Video #Aerospace**

Link: https://www.youtube.com/watch?v=-UWYT1wWgM

UK Skynet : A Vital Link in Strategic Military Communications

Skynet is the United Kingdom's military communications satellite system. Since its inception, it has been the cornerstone of the UK Armed Forces' global communications capability, providing secure and reliable strategic and tactical communications. **#Skynet #UK**

Link: https://newspace.im/index.php/2024/02/25/uk-skynet-a-vital-link-in-strategic-military-communications/

Laser Communications: The Next Frontier in Secure, High-Speed Satellite Links

While traditional satellite communications rely on radio frequency (RF) signals, there is growing interest in laser communications, especially for uplink, downlink, and satellite-to-satellite links. This article will focus on uplinks and downlinks. **#LaserLinks #Communications**

Link: https://newspace.im/index.php/2024/02/26/laser-communications-the-next-frontier-in-secure-and-high-speed-satellite-links/

TRAINING & EDUCATION

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Report on the Cybersecurity and Resiliency of the EU Communications Infrastructures and Networks

EU Member States, with the support of the European Commission and ENISA, the EU Agency for Cybersecurity, published a report on the cybersecurity and resiliency of Europe's communications infrastructures and networks. This marked another major step in the coordinated work at EU level on the security of telecommunications, and complements the work already done on 5G cybersecurity. **#EU #Report**

Link: https://www.captechu.edu/degrees-and-programs/doctoral-degrees/space-cybersecurity-phd

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