# SPACE CYBERSECURITY WEEKLY WATCH

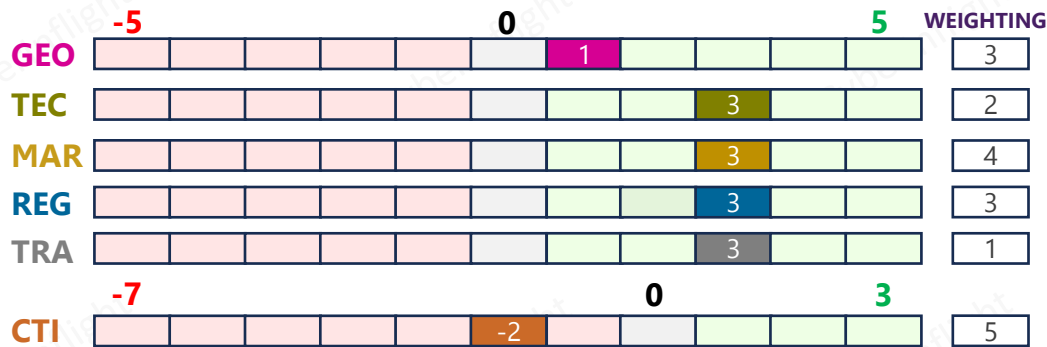## Week 41

### October 8 - 14, 2024

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

**Timeframe**: Weekly

**# of articles identified**: 25

**Est. time to read**: 30 minutes

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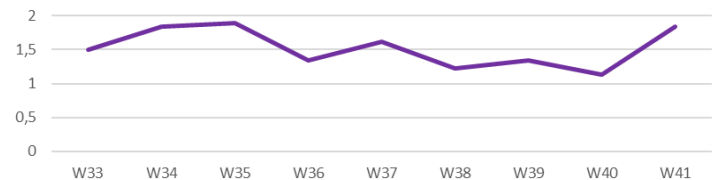- **THREAT INTELLIGENCE**
- ⭐ **IMPORTANT NEWS**

## RISC Score Assesment



1.84
RISC Score
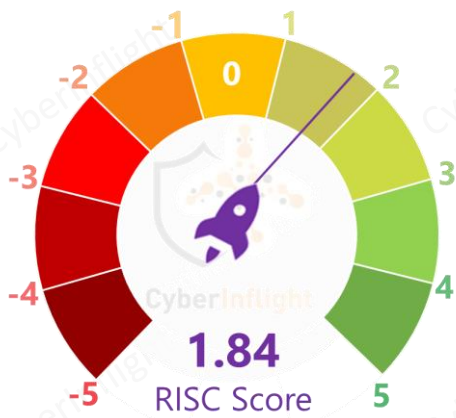
## Overview & Resilience Index for Space Cybersecurity (RISC)

| | -5 | 0 | 5 | WEIGHTING |
|---|---|---|---|---|
| **GEO** | | 1 | | 3 |
| **TEC** | | | 3 | 2 |
| **MAR** | | | 3 | 4 |
| **REG** | | | 3 | 3 |
| **TRA** | | | 3 | 1 |

| | -7 | 0 | 3 | |
|---|---|---|---|---|
| **CTI** | | -2 | | 5 |

## RISC Score Evolution



This week's RISC score is 1.84, an increase from the previous weeks. This amelioration is primarily attributed to dynamic technological progress and good threat and business climates.

On the technological side, Safran Electronics & Defense made various announcements at the ION GNSS+ Conference in Baltimore, including the launch of the GSG-8 Gen2 and the availability of Xona Space Systems' PULSAR XL on Skydel simulation software. Moreover, on the technological side, the Joint Air Power Competence Centre (JAPCC) published its 2024 journal's third and last part, discussing use cases and timelines in quantum for ISR and PNT. On the market front, Xage Security Government announced a $1.5 million Sequential Phase II Small Business Innovation Research (SBIR) contract with the US Navy to prove Xage's Zero Trust Access and Protection and Federated Identity Management capabilities in support of multiple strategic initiatives. This initiative supports compliance with the US Department of Defense Chief Information Officer (DoD CIO) Zero Trust Target Strategy to enhance data protection, systems, and services with a Zero Trust model/architecture by 2027. On the regulatory side, the European Union adopted the Cyber Resilience Act that addresses gaps, clarifies connections, and enhances coherence in the cybersecurity legislative framework. On the threat intel side, an article analyses the results of a war game outlining how China could cut undersea cables, attack GPS, and isolate Taiwan in a conflict to take control of the island. Like most advanced nations, Taiwan has not widely adopted alternatives to GPS and other satnav. Denying GPS could bring the country to its knees. Lastly, on a blog, Dr Basel Halak, Associate Professor of Secure Electronics and Director of the Cyber Security Academy at the University of Southampton, raises awareness and writes about the challenges of keeping the sector safe from current and emerging threats.

CyberInflight

# GEOPOLITICS

[illegible]

# TECHNOLOGY

[illegible]

## Safran launches GSG-8 Gen2 at ION GNSS+, displays XONA PULSAR simulation capabilities

Safran Electronics & Defense made various announcements at ION GNSS+ in Baltimore, including the launch of the GSG-8 Gen2. This simulator is the latest evolution of the company's GSG simulator series, building on the success of the GSG-8, according to the company. The upgraded simulator offers improvements in capabilities, operability and performance, providing a high-end solution for multi-antenna/vehicle and jamming/spoofing scenarios. Safran also announced the availability of Xona Space Systems' PULSAR XL on Skydel simulation software. **#Safran #IONGNSS**

**Link**: https://insidegnss.com/safran-launches-gsg-8-gen2-at-ion-gnss-displays-xona-pulsar-simulationcapabilities/

## Quantum technologies for Air and Space (Part 3 of 3)

In this final installment of the series, Dr. Michal Krelina and Lieutenant Colonel Denis Dubravcik explore the practical military applications of quantum technologies in Intelligence, Surveillance, and Reconnaissance (ISR) and Positioning, Navigation, and Timing (PNT). They discuss cutting-edge quantum imaging systems, sensors such as gravimeters and magnetometers, and how these tools can revolutionize battlefield awareness and navigation in GPS-denied environments. With NATO recently adopting a Quantum Technology Strategy, the authors outline timelines for implementation and the significant operational advantages these advancements promise for the Alliance. **#Quantum #EW**

**Link**: https://www.japcc.org/articles/quantum-technologies-for-air-and-space-part-3-of-3/

# MARKET & COMPETITION

**Viasat 3 satellite starts government service for the US Marine corps**

The first Viasat 3 satellite has begun working its first government customer, the US Marine Corps. Viasat announced. The Marine Wing Communications Squadron 38 (MWCS-38) and the 3rd Marine Littoral Regiment are the first two military operational units using the satellite. The MWCS-38 provides expeditionary communications support to the Aviation Combat Element (ACE) inside the Marine Air Ground Task Force (MAGTF). This squadron is using sterling multi-mission terminals (MMT) to access VS3-F1 service. The 3rd Marine Littoral Regiment, based out of the Marine Corps Base Kaneohe Bay, Hawaii, is also using VS3-F1 services to support mission and reconnaissance operation communications. **#Viasat #USMarines**

**Link:** https://www.satellitetoday.com/government-military/2024/10/11/viasat-3-satellite-starts-government-service-for-the-us-marine-corps/

**Nation Space UK awarded program to develop advanced onboard telecommunication processors**

Nation Space, a global leader in space resilient computing systems, proudly announces its selection for a groundbreaking program to develop next-generation digital onboard processors for large-scale communication constellations. This initiative is underpinned by funding from the UK Space Agency, designed to foster cutting-edge collaboration among UK space technology companies and propel innovation in onboard digital payloads. **#NationSpace #communications #connectivity**

**Link:** https://spacewatch.africa.com/nation-space-uk-awarded-program-to-develop-advanced-onboard-communication-processors/

⭐ ## Xage Security secures $1.5m contract by US Navy to advance Zero Trust initiatives

Xage Security Government, vendor of Zero Trust access and protection solutions, announced on Wednesday a $1.5 million Sequential Phase II Small Business Innovation Research (SBIR) contract with the United States Navy to prove out Xage's Zero Trust Access and Protection and Federated Identity Management capabilities in support of multiple strategic initiatives. This initiative supports compliance with the US Department of Defense Chief Information Officer (DOD CIO) Zero Trust Target Strategy to enhance the protection of data, systems, and services with a Zero Trust model/architecture by 2027. **#XageSecurity #ZeroTrust**

**Link**: https://industrialcyber.co/news/xage-security-secures-1-5-million-contract-by-us-navy-to-advance-zero-trust-initiatives/

**Comstock to acquire Quantum Generative Materials LLC**

Comstock Inc. has executed an agreement, Comstock, Deep Interstellar Research ("DIR"), and Quantum Generative Materials LLC ("GenMat"), under which Comstock effectively acquired substantially all of the equity of GenMat, including GenMat's artificial intelligence (AI) materials discovery platform, materials synthesis, and related assets, business, and all of the related technical action. **#Comstock #GenMat**

**Link:** https://www.sdnews.com/article/10/08/comstock-to-acquire-quantum-generative-materials-llc/

**Seraphim picks 11 startups for 14th Space Accelerator Program**

Seraphim Space, one of the leading investors in space tech startups, announced the latest round of companies taking part in Mission 14, its latest dedicated accelerator for space startups. Seraphim, which is known as Generation Space in the United States, announced the line-up, 11 companies taking part include Acupuncta Athena Earth Constellation Technologies & Operations, Fiqtek AI, Torpid Manufacturernix Planetary Systems, ROVAL, Vektab Orbit-Eco and Tspin Hotworks. Mission 14 participants focus on key areas like data analytics, Earth observation (EO), and advanced manufacturing. **#Seraphim #companies #accelerator**

**Link:** https://www.satellitetoday.com/finance/2024/10/07/seraphim-picks-11-startups-for-14h-space-accelerator-program/

**Muon Space secures $56m series B funding to develop and deliver three satellites for SWC's Vandler capability**

Muon Space, an end-to-end Space Systems Provider that designs, builds, and operates mission-tailored low-earth orbit (LEO) satellite constellations, announced the successful completion of a $56.7 million series B funding round led by Activate Capital, Acme Capital and existing investors including Ventures, Radical Ventures and Congruent Ventures at joined the round. **#MuonSpace #funding**

**Link:** https://spacewatch.africa.com/muon-space-secures-56m-series-b-funding-to-develop-and-deliver-three-satellites-for-swc-vandler-capability/

**Globalstar's band 53 Spectrum to be used for mission-critical applications through carrier aggregation with CBRS in US**

Globalstar, Inc. the next-generation mobile satellite and communications services provider, announced that Band 53 spectrum will be used to enable high value and mission-critical applications through carrier aggregation with Citizens Broadband Radio Service (CBRS) in the United States. In a significant move, Globalstar is collaborating with Qualcomm, Ericsson, Mavenir, and Hawk Networks, which builds on the defense platforms to deliver an enhanced, seamless and reliable connectivity experience to its customers. **#Globalstar #USSpectrum**

**Link:** https://spacewatch.africa.com/globalstars-band-53-spectrum-to-be-used-for-mission-critical-applications-through-carrier-aggregation-with-cbrs-in-us/

# REGULATION

⭐ **EU adopts Cyber Resilience Act, bolsters security requirements of connected devices and infrastructure**

The European Union adopted a new law on cybersecurity for digital products to ensure their safety before market entry. The Cyber Resilience Act addresses gaps, clarifies connections, and enhances coherence in the cybersecurity legislative framework. As the first regulation globally to set security requirements for product market entry, it mandates that from 2027, products with digital components must meet these standards to be available in the EU. **#CyberResilienceAct #EU**

**Link**: https://industrialcyber.co/regulation-standards-and-compliance/eu-adopts-cyber-resilience-act-bolsters-security-requirements-of-connected-devices-and-infrastructure/

**Australia's Cyber Security Bill 2024 focusing on strengthening cyber resilience, protecting critical infra**

The Australian government rolled out Wednesday a Cyber Security Legislative Package to enhance the security and resilience of Australia's cyber environment and critical infrastructure. Subject to the passage of the Cyber Security Bill 2024 legislation this week, Australia will have its first standalone Cyber Security Act to ensure strong laws and protections through a clear legislative framework. **#CyberSecurityBill #Australia**

**Link**: https://industrialcyber.co/regulation-standards-and-compliance/australia-cyber-security-bill-2024-focuses-on-strengthening-cyber-resilience-protecting-critical-infrastructure

**CISA advisory committee approved four draft reports on critical infrastructure resilience**

An advisory committee to the Cybersecurity and Infrastructure Security Agency today approved a series of reports to be delivered to the agency aimed at boosting national cyber resilience, increasing public awareness of CISA efforts, and better securing the world's digital ecosystem. Members of CISA's Cybersecurity Advisory Committee approved the reports and multiple recommendations in response to looming threats by Chinese hackers on critical infrastructure. **#CISA #CriticalInfra**

**Link**: https://cyberscoop.com/cisa-cybersecurity-advisory-committee-october-report/

# THREAT INTELLIGENCE

**NSA issues updated guidance on Russian SVR cyber ops**

The National Security Agency (NSA) joins the US, the United States Cyber Command's Cyber National Mission Force (CNMF), and the United Kingdom National Cyber Security Centre (NCSC) to warn network defenders about ongoing Russian Federation Foreign Intelligence Service (SVR) cyber threats and to recommend rapid countermeasures for securely patching and mitigating systems. **#NSA #CyberThreats**

**Link**: https://www.nsa.gov/Press-Room/Press-Releases-Statements/Press-Release-View/Article/3934570/nsa-issues-updated-guidance-on-russian-svr-cyber-ops

⭐ **War Game: China will attack Taiwan's comms tech, GPS**

Like most advanced nations, Taiwan has not widely adopted alternatives to GPS and other satnav. Denying GPS could help bring the nation to its knees. China's terrestrial complement to satnav, eLoran, is very difficult to disrupt and reaches far beyond Taiwan. Even if the US were to disable BeiDou, as envisioned in the war game, China would still have PNT at home and in the theater of conflict. **#PNT #China**

**Link**: https://rntfnd.org/2024/10/07/war-game-china-will-attack-taiwans-comms-tech-gps-spacenews/

**Galileo: la GPS européen face au plus grand défi de son histoire (/Trad. Galileo: Europe's GPS system faces the biggest challenge in its history)**

A new generation of Galileo satellites is on its way, as the European constellation completes its routing with the help of SpaceX. Before long, Ariane 6 will take the relay in a race for sovereignty and security. A way of moving away from GPS, with its weaknesses and growing threats. **#Europe #Galileo**

**Link**: https://www.01net.com/actualites/galileo-le-gps-europeen-face-au-plus-grand-defi-de-son-histoire.html

# TRAINING & EDUCATION

**Navigating the cybersecurity threats and challenges in MilSatCom**

As the cyber landscape evolves alongside increasing threats to satellite communications, the importance of cybersecurity in the MilSatCom space is becoming more critical than ever. However, there is often uncertainty around how the complexities of securing sensitive communications and ensuring resilience against sophisticated attacks should be navigated. UK Media Group spoke with Jennifer Brubaker, CEO at Plan Z and former Chief Information Officer for Space Systems Command, ahead of the Global MilSatCom 2024 where she will chair the cybersecurity focus day. Brubaker discussed the key threats and vulnerabilities in SatCom cybersecurity and what needs to be done to secure against them.

**#MilSatCom #Conference**

Link: https://www.marketforce.net.com/milsatcom/navigating-the-cybersecurity-threats-and-challenges-in-milsatcom/

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⭐ **How do we ensure the security of space applications ?**

In this blog, Dr Basel Halak, Associate Professor of Secure Electronics and Director of the Cyber Security Academy at the University of Southampton writes about the challenge of keeping the sector safe from current and emerging threats.

**#Awareness #SpaceApplications**

Link: https://www.port.ac.uk/news-events-and-blogs/how-do-we-ensure-the-security-of-space-applications

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**T-Minus Space Daily: Secret space plane maneuvers**

Discover this podcast of which we discuss several topics. Among them, the US Space Force's X-37B Orbital Test Vehicle is executing a series of novel maneuvers called aerobraking to change its orbit around Earth and safely dispose of its service module components. It also discussed NASA's Low-Cost Optical Terminal ground station that transmitted its first laser communications uplink to the TBIRD (Terabyte Infrared Delivery). Lastly, Quasar and the Internal Money Corporation (IMC) have announced an agreement for a space robotics demonstration on a future space mission to the lunar surface.

**#TMinus #Podcast**

Link: https://boxmedia.segment.com/day/XX/XXXX/XXXXX-X2XXXX-XXXXX/

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**The Space Systems Software Security Testing Competition**

Cybfuel Technologies, in collaboration with SpaceIT, is excited to welcome you to the Space Systems Software Security Testing Competition. The event will take place during the annual Software Defined Space Conference (26-27 Nov), organised by the Estonian Space Office (ESO) and the Ministry of Economic Affairs and Communications of Estonia. The competition will be technically carried out using Cybfuel's Cyber Range technology, enabling simulated environments and giving the participants the opportunity to practice their skills in a properly high-competitive environment.

**#Competition #Conference**

Link: https://info.cybmen.co/sc/space/softcmpt/en/register

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**New Space Spain 2024 consolidates the strategy to position Spain at the forefront of the space industry**

The third edition of New Space Spain has come to an end today after two intense days, featuring over 40 speakers, 270 professionals, and 104 companies. The conference broke participation records from previous editions and turned Vigo into the epicenter of Spain's space industry through a packed program of conferences and panel discussions. Under the motto "The path to global leadership", attendees at both Woovisector Vigo had the opportunity to hear the most respected representatives of the sector in Spain and Latin America discuss their key projects and the challenges faced by companies, public institutions, startups, research centers, and universities developing space-related projects.

**#NewSpaceSpain #Conference**

Link: https://spacewatch.hd5.io/es/new-space-spain-2024-consolidates-the-strategy-to-position-spain-at-the-forefront-of-the-space-industry/

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*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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