



SPACE CYBERSECURITY WEEKLY WATCH

Week 20&21

May 9-22, 2023

Timeframe : Weekly
of articles identified : 37
Est. time to read : 1,5 hour

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

Overview

The last two weeks have been marked by statements from the US who firstly asked allies to join the GPS OPS. center, and next prepare itself for the Red Skies and Black Skies military exercises. In Europe, a focus has been made on some new projects, such as Horizon Europe, but also EAGLE-1, or Qudice. On the market front, Accenture, Raytheon and Stellar Venture have invested in SpiderOak. The US Congress is also in the process of expanding CISA's role. Some cyberattacks have been discovered on L3Harris, Russia and Israel.

GEOPOLITIC



Space Force wants key allies to join 24/7 GPS ops center

The Defense Department is inviting seven of the closest US allies — the members of the Five Eyes intelligence coalition, plus France, Germany and Japan — to participate in operations of GPS satellites by assigning their own military personnel to serve alongside the Space Force's 2nd Space Operations Squadron, according to the squadron's commander.

#DoD #GPS

Link: <https://breakingdefense.com/2023/05/space-force-wants-key-allies-to-join-24-7-gps-ops-center/>

Space Force to hold first 'orbital warfare' exercise this summer

The US Space Force is planning its first exercise dedicated to "orbital warfare," called Red Skies, this summer, according to the head of the service's Space Training and Readiness Command (STARCOM).

#MilitaryExercise #RedSkies

Link: <https://breakingdefense.com/2023/05/space-force-to-hold-first-orbital-warfare-exercise-this-summer/>



Space Force Gearing Up for Future EW, Orbital Warfare, and Cyber Warfare Exercises

The U.S. Space Force's Space Training and Readiness Command (STARCOM) held the second Black Skies electronic warfare exercise recently and is preparing to hold another this fall, as the command also gears up for a Red Skies orbital warfare exercise this summer and a Blue Skies cyber warfare exercise next year.

#MilitaryExercise #USSF

Link: <https://www.satellitetoday.com/government-military/2023/05/10/space-force-gearing-up-for-future-ew-orbital-warfare-and-cyber-warfare-exercises/>

Aerospazio, Goretto: "Digitale e dati pilastri del futuro" (Trad.: Aerospace, Goretto: "Digital and data pillars of the future")

During the Aerospace Power Conference, the Italian Air Force Chief of Staff turned the spotlight on the need to push cooperation. And Defense Chief of Staff Joseph Cavo Dragone highlighted the need to anticipate technological development.

#Italy

Link: <https://www.spaceeconomy360.it/difesa-cybersecurity/aerospazio-goretto-digitale-e-dati-pilastri-del-futuro/>



Critical space technologies, la Ue mette sul piatto 20 milioni l'anno (Trad.: Critical space technologies, EU puts up 20 million a year)

The European Commission will increase investment in Horizon Europe in response to the changing geopolitical environment. The aim is to strengthen research activities and cooperation in support of continental autonomy increasingly seen as the priority.

#EuropeanCommission #HorizonEurope

Link: <https://www.spaceeconomy360.it/tecnologie-spaziali/critical-space-technologies-la-ue-mette-sul-piatto-20-milioni-lanno/>



Spazio, Crosetto: "La tecnologia è il presupposto della sicurezza" (Trad.: Space, Crosetto: "Technology is the prerequisite for security.")

Technology is a prerequisite for democracy, freedom and peace, which is why it is essential to invest in aeronautics and space, two realities that are now inextricably linked. This was stated by Defense Minister Guido Crosetto in his speech at the AeroSpace Power Conference held May 12-14 at the Rome La Nuvola Convention Center. **#Italy #MinistryOfDefense**

Link: <https://www.spaceeconomy360.it/difesa-cybersecurity/spazio-crosetto-la-tecnologia-e-il-presupposto-della-sicurezza/>

Justice and Commerce Department 'strike force' target theft of quantum, autonomous technologies

Numerous cases were announced this week, among them is Nikolaos Bogonikolos, a Greek national allegedly recruited by Russia in 2017 to acquire sensitive materials, who obtained technology vitally important to national security such as quantum cryptography. He shipped the technology to Russia where it was shared with nuclear and quantum research facilities as well as Russian intelligence agencies. **#US #Russia #Quantum**

Link: <https://cyberscoop.com/justice-commerce-strike-force-quantum-russia-china/>

Scoppia il caso Corea del Nord: gli Usa lanciano l'allarme sul satellite "spia" (Trad.: North Korea case erupts: U.S. raises alarm over 'spy' satellite)

The official "Korean Central News Agency" reported that North Korea's leader Kim Jong-un inspected the country's first spy satellite and gave the go-ahead for the "future action plan" to put it into Earth orbit. **#NorthKorea #SpySatellite**

Link: <https://www.spaceeconomy360.it/difesa-cybersecurity/scoppia-il-caso-corea-del-nord-gli-usa-lanciano-lallarme-sul-satellite-spia/>

TECHNOLOGY



Quantum computing per la rete spaziale europea, Qudice entra nel vivo (Trad.: Quantum computing for the European space network, Qudice goes live)

Qudice, the European project launched in January 2023 and aiming to develop components and subsystems for QKD in Space to ensure ultra-secure online communications in Europe, is entering into action.

#Qudice #QKD #Europe

Link: <https://www.spaceeconomy360.it/comunicazioni-satellitari/quantum-computing-per-la-rete-spaziale-europea-qudice-entra-nel-vivo/>

SES and TESAT to Develop Payload for Europe's First Quantum Cryptography LEO Satellite System EAGLE-1

EAGLE-1 consortium lead SES announces a new key partner, TESAT, responsible for developing and integrating the Quantum Key Distribution (QKD) payload for the EAGLE-1 satellite. **#QKD #ESA**

Link: <https://www.satcom.digital/news/ses-and-tesat-to-develop-payload-for-europes-first-quantum-cryptography-leo-satellite-system-eagle-1>

Boeing's new military satellite integrates anti-jam payload for enhanced battlefield comms

Boeing recently unveiled the company's Protected Wideband Satellite design that features Boeing's Protected Tactical. The PTS-P design features automated anti-jam capabilities, including jammer geolocation, real-time adaptive nulling, frequency hopping and other techniques, harnessing the power of the U.S. military's Protected Tactical Waveform to ensure the warfighter can stay connected in a contested environment. **#Boeing #AntiJamming**

Link: <http://milsatmagazine.com/story.php?number=1893668831>

Adtran expands Oscilloquartz PNT platform for enhanced protection of critical timing networks

Adtran today launched a major upgrade of its Oscilloquartz aPNT+™ technology suite, bringing new levels of resilience to critical network infrastructure that relies on position, navigation and timing services. **#GNSS #PNT #Adran**

Link: <https://www.businesswire.com/news/home/20230512005309/en/Adtran-expands-Oscilloquartz-PNT-platform-for-enhanced-protection-of-critical-timing-networks>



MARKET & COMPETITION

Colorado Springs defense contractor joins forces with California cybersecurity firm

Boecore, a space and missile defense company formed and headquartered in Colorado Springs, plugged another company into its network with the acquisition of California-based cybersecurity firm La Jolla Logic earlier this month.

#Boecore #LaJollaLogic

Link: https://gazette.com/business/colorado-springs-defense-contractor-joins-forces-with-california-cybersecurity-firm/article_2f2c4fa2-f35c-11ed-9bbf-a3eccd9d9e56.html

UK Leads Europe in Race for Space Investment, New Report Finds

According to the report, the UK has been the leading destination for space investment in Europe— and second internationally behind the US— since 2015, receiving 17% of global investment. **#UK #Investment**

Link: <https://www.satcom.digital/news/uk-leads-europe-in-race-for-space-investment-new-report-finds>

Rivada Space Networks partners with OKAPI:Orbits on Space Situational Awareness

Rivada Space Networks and OKAPI:Orbits have extended their partnership, which will secure the responsible use of space-based technologies. The agreement brings together Rivada Space Networks' interconnected high-speed, Low Earth Orbit satellite network and OKAPI: Orbits' Space Traffic Management Software-as-a-Service solution. **#RivadaSpaceNetworks #OKAPI:Orbits**

Link: <https://spacewatch.global/2023/05/rivada-space-networks-partners-with-okapiorbits-on-space-situational-awareness/>

Northrop Grumman equipping more USAF platforms with IR countermeasure systems

Northrop Grumman Corporation continues its work for the U.S. Air Force for additional Large Aircraft Infrared Countermeasure (LAIRCM) systems. The LAIRCM system defends domestic and international aircrews by detecting, tracking and jamming incoming infrared threats. The system automatically counters advanced infrared missile systems by directing a high-intensity laser beam into the missile seeker. **#U.S.AirForce #NorthropGrumman**

Link: <http://milsatmagazine.com/story.php?number=1076755956>

SSC Wins New ESA Deal for Nodes Optical Communications Project

Swedish Space Corporation (SSC) has won a new 2.26 million euros (\$2.46 million) contract from the European Space Agency (ESA). This contract is for the second phase of the optical communication project NODES. The contract is under ESA's ARTES ScyLight program. ScyLight is an ESA strategic program line dedicated to optical communications, photonics and quantum communication and sits within ESA's ARTES 4.0. **#SwedishSpaceCorporation #ESA #Quantum**

Link: <https://www.satellitetoday.com/technology/2023/05/16/ssc-wins-new-esa-deal-for-nodes-optical-communications-project/>

One New Zealand Selects Palo Alto Networks to Protect its Starlink for Business

One New Zealand has announced it will offer its Enterprise customers Starlink for Business, with orders open from today.

#OneNewZealand #Starlink

Link: <https://www.thefastmode.com/technology-solutions/32029-one-new-zealand-selects-palo-alto-networks-to-protect-its-starlink-for-business>

WISeKeys Cybersecurity Success and Plans for Satellite Expansion

On May 15, 2023, Wisekey International Holding AG (WKEY) saw a significant increase in its stock price. The company's shares also have been soaring high, thanks to a recent tweet about a discussion between its CEO and Elon Musk.

#WISeKeys

Link: <https://beststocks.com/wisekeys-cybersecurity-success-and-plans-for/>

SatCom, Accenture investe in SpiderOak per rafforzare la sicurezza (Trad.: SatCom, Accenture invest in SpiderOak to strengthen security)

Although the amounts remain (so far) top secret, Accenture has made a strategic investment, through Accenture Ventures, in SpiderOak, a leading U.S. company in zero-trust cybersecurity and resilience solutions for next-generation space systems. **#Accenture #SpiderOak**

Link: <https://www.spaceeconomy360.it/difesa-cybersecurity/satcom-accenture-investe-in-spideroak-per-rafforzare-la-sicurezza/>



Space cybersecurity firm SpiderOak gets new investors

Accenture Ventures, Raytheon Technologies' RTX Ventures, and Stellar Ventures announced strategic investments in SpiderOak. **#SpiderOak #Accenture #Raytheon #StellarVentures**

Link: <https://spacenews.com/space-cybersecurity-firm-spideroak-gets-new-investors/>



THREAT INTELLIGENCE

Special ops turn to data, space tech to gain 'decisive advantage'

U.S. Special Operations Command is increasingly using cyber, space and data-based technology to support its missions, gauge equipment readiness and maintain its end strength, according to the organization's leader. **#USArmy**

Link: <https://www.defensenews.com/smr/sofic/2023/05/09/special-ops-turn-to-data-space-tech-to-gain-decisive-advantage/>

Satellites need cybersecurity measures too

Interview of Bill Harrod, Public Sector CTO for Ivanti about cyberattacks against space-based assets.

#Satellites #Cybersecurity

Link: <https://federalnewsnetwork.com/space-hour/2023/05/satellites-need-cybersecurity-measures-too/>

Five Takeaways From the Russian Cyber-Attack on Viasat's Satellites

AcidRain, as the cyber-attack is commonly known, had a limited impact on Ukraine's military operations as Viasat's satellites were only used as a backup system. However, there are many lessons we can learn from it, the deputy chairman of Ukraine's State Service of Special Communications (SSSCIP) General Oleksandr Potii, said during CYSAT.

#Ukraine #ViasatAttack #CYSAT

Link: <https://www.infosecurity-magazine.com/news/takeaways-russian-cyberattack/>

How Satellites Can Help Identify and Prevent Cyber Attacks

Cyber attacks are a growing threat to businesses and organizations, with an estimated cost of up to \$2 trillion globally by 2019. To help identify and prevent these attacks, satellite technology is increasingly being used. **#Cyberattacks #Satellites**

Link: <https://ts2.space/en/the-use-of-satellites-in-defending-against-cyber-attacks/>

What if all telecommunication satellites stopped?

Article from Airbus about satellites and what things would look like in a world without them. **#Satellites**

Link: <https://www.airbus.com/en/newsroom/stories/2023-05-what-if-all-telecommunication-satellites-stopped>



Was L3Harris hacked? A cybersecurity firm says defense data may have been stolen

Cybersecurity company BetterCyber is reporting that the Abyss ransomware group is claiming to have hacked Melbourne-based aerospace and defense company L3Harris Technologies Inc. and stolen data related to the company's work on an Army communications system. **#L3Harris #Cyberattack**

Link: <https://news.yahoo.com/l3harris-hacked-cyber-security-firm-165508941.html>

LeoLabs alert about a close conjunction between a Chinese satellite and a defunct Soviet-era satellite

Around 7:00 ET today (May 16), we observed a close conjunction at ~545 km between a satellite recently launched out of China and a defunct Soviet-era satellite from 1984. The miss distance was ~30.6 meters with a PC of 1.9e-2 at the time of closest approach. **#China #Russia**

Link: <https://www.linkedin.com/feed/update/urn:li:activity:7064348760935440384/>

Algeria confirms acquisition of another Chinese electronic warfare system

The Algerian Ministry of National Defence (MND) released a photograph on 9 May confirming it has acquired the CHL-906 electronic warfare system made by China's ELINC. **#Algeria #China #EW**

Link: <https://www.janes.com/defence-news/c4isr-command-tech/latest/algeria-confirms-acquisition-of-another-chinese-electronic-warfare-system>

A Tale of Two Worlds: The Convergence of Satellite and Terrestrial Telecom

Constellations spoke with Robert Bell, Guido Neumann, and Stuart Daughtridge, about the challenges and opportunities for growth as satellite and teleport operators deepen integration with terrestrial telecommunications providers.

#Kratos #Satellite

Link: <https://www.kratosdefense.com/constellations/articles/a-tale-of-two-worlds-the-convergence-of-satellite-and-terrestrial-telecom>



Space Force ground control operators press for 'absolutely critical' network upgrades

As the number of US government satellites continues to grow, the Space Force's already outdated Satellite Control Network (SCN) for keeping them flying is in real danger of being overwhelmed, according to officers at the 22nd Space Operations Squadron responsible for that mission. **#USSF #GroundNetwork**

Link: <https://breakingdefense.com/2023/05/space-force-ground-control-operators-press-for-absolutely-critical-network-upgrades/>



Ghostec attack on Israel industrial systems

Ghostsec group claims to have hacked Israel's industrial systems, Aegis 2 Water pumps and GNSS Satellite receivers.

#Ghostec #Cyberattack

Link: <https://twitter.com/FalconFeedsio/status/1644163866866388992>

Ukraine war latest: Wagner Group 'broken' by Bakhmut fight - as Russia warns NATO over F-16 jets

In a separate incident on Monday, Russian satellite television menus were hacked to show viewers in Moscow messages about events in Ukraine, including "You have blood on your hands", according to screenshots obtained by Reuters.

#Russia #Cyberattack

Link: <https://news.sky.com/story/ukraine-russia-war-latest-zelensky-uk-wagner-yevgeny-prigozhin-12541713?postid=3866749>



Satellite Signal Jamming Reaches New Lows

In March, the U.S. Department of Defense concluded that Russia was still trying to jam Starlink, according to the Pentagon documents leaked. Ukrainian troops have likewise blamed problems with Starlink on Russian jamming. If Russia is jamming a LEO constellation, it would be a new layer in the silent war in space-ground communications. **#Jamming #Satellite**

Link: <https://spectrum.ieee.org/satellite-jamming>

REGULATION



Congress looks to expand CISA's role, adding responsibilities for satellites and open source software

Lawmakers on Wednesday passed a series of bills to give the Cybersecurity and Infrastructure Security Agency new responsibilities when it comes safeguarding open source software, protecting U.S. critical infrastructure and expanding the cybersecurity workforce. **#USCongress #CISA**

Link: <https://cyberscoop.com/lawmakers-markup-cisa-bills/>

TREKS (Targeting, Reconnaissance, & Exploitation Kill-Chain for Space Vehicles), a new Cybersecurity Framework that highlights the unique kill chain for the space vehicle

Now, after more than five years spent researching and working on space system cybersecurity, Dr. Jacob Oakley released the Targeting, Reconnaissance, & Exploitation Kill-Chain for Space Vehicles (TREKS) Cybersecurity Framework.

#TREKS #Frameworks

Link: <https://www.spacesecurity.info/en/treks-targeting-reconnaissance-exploitation-kill-chain-for-space-vehicles-a-new-cybersecurity-framework-that-highlights-the-unique-kill-chain-for-the-space-vehicle/>

TRAINING & EDUCATION

Workshop on technical standardization in space and cybersecurity

The Luxembourgish Standards Body is organizing a Workshop on "Technical Standardization in Space and Cybersecurity", on Tuesday, June 27th 2023, from 9:00am to 2:00pm, at the Maison de la Biomédecine II, in Belval.

#Luxembourg #Workshop

Link: <https://www.farvest.com/workshop-on-technical-standardization-in-space-and-cybersecurity/>

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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