



SPACE CYBERSECURITY WEEKLY WATCH

Week 25

June 13 – 19, 2023

Timeframe : Weekly
of articles identified : 39
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
- MARKET & COMPETITION
- THREAT INTELLIGENCE
- TECHNOLOGY
- REGULATION
- TRAINING & EDUCATION
- ★ IMPORTANT NEWS

Overview

This week saw the release of four important documents on the regulation of space cybersecurity. Germany released its first National Security Strategy, as did Japan with its Space Security Policy. In the US, the Satellite Cybersecurity Act is currently being debated in Congress, and the Strategic Framework for Space Diplomacy has been adopted. Quantum was one of the main topics this week, from the technological, threat intelligence as well as market analysis points of view, as illustrated by the IrelandQCI consortium, which was set up in response to the EU Digital Europe Program. Also in the Market & Competition section, this week saw a meeting for SMEs and start-ups to submit a request for interest in the IRIS² tender. Finally, on the technological front, in addition to quantum, GPS and GNSS were in the spotlight, with the announcement of new products.

GEOPOLITIC

China's efforts to catch up in global electronic spying race

Recent reports that China is expanding its electronic eavesdropping capabilities in Cuba - which Beijing has denied - China's growing military surveillance network has a long way to go to match the scope and reach of the U.S. and its allies, defense intelligence analysts say. [#Space](#)

[Link](#) [Source](#)

Russia Doubles Trained Dolphins Defending Base Against Ukrainian Attacks

The threat of Ukraine's elite special forces boats must seem large in the minds of the Russian Navy. As well as extensive anti-submarine and missile launches, Russia has increased the trained dolphins guarding Sevastopol in Crimea. [#Russia](#) [#Ukraine](#)

[Link](#) [Source](#)

U.S. opens "window of opportunity" to improve space governance

Working at the Secure World Foundation's Summit for Space Sustainability here with U.S. Rep. Gabe Liles, U.S. undersecretary general for policy, said the organization was making efforts to address space sustainability ahead of a September 2024 UN conference called Summit of the Future that will address broad challenges for world's future. [#US](#) [#SpaceSustainability](#)

[Link](#) [Source](#)

Spaceflight has reached the International Space Station

Spaceflight has reached the ISSpace Station. This new satellite from @SpaceX will be the world's first & only leading satellite in space and will allow cybersecurity professionals and some of the world's best hackers to do space based cyber experiments. [#Spaceflight](#)

[Link](#) [Source](#)





Antonio Tajani after meeting with Elon Musk: Italy is the best country to invest

The meeting with Elon Musk 'was not in a great innovative environment. We talked about space cybersecurity, freedom of information that in many countries does not exist, and industry policy' @Italy

[Link: https://www.italynews.com/en/2023/06/13/antonio-tajani-elon-musk-italy-is-the-best-country-to-invest/](#)



Russia and Algeria sign an accord for cooperation satellite (Trad.: Russia and Algeria sign space cooperation agreement)

As part of the visit of the President of the Peoples Democratic Republic of Algeria, Abdelmadjid Tebboune, to Russia on June 15, 2023, an agreement was signed between the Government of the Russian Federation and the Government of the Republic of Algeria on cooperation in the application and use of outer space for peaceful purposes. @Russia @Algeria

[Link: https://www.russia-embassy.ru/en/press/2023/06/15/2023061501](#)

MARKET & COMPETITION



European start-ups, SMEs and Midcaps invited to submit a request for interest in IRIS² tender

European start-ups, mid-Caps and SMEs are encouraged to join the Call for Tender on the future European satellite constellation IRIS² for the creation of a more innovative and competitive European space sector where new business models will emerge. As such there will be a hybrid IRIS² Info Day held on 15 June in Brussels. #Iris²

Link: <https://spacewatchafrica.com/european-start-ups-smes-and-midcaps-invited-to-submit-a-request-for-interest-in-iris%2fb2-tender/>



Thales Program To Acquire Tenable In A Recommended Transaction, Expanding Its Global Cybersecurity Leadership

The combination of Thales and Tenable will create an exceptional provider of much needed cybersecurity services in Australia and New Zealand at a time when the market is expecting double digit growth through to 2026.

@Thales @Tenable

[Link: https://www.thalesgroup.com/en/press-releases/2023/06/13/thales-to-acquire-tenable](#)

How International Evidence collected by GPO for Malware satellite monitoring center

Earlier this week, business leading in security, today announced that GPO, leading provider of satellite control centers, has selected Evidence byGPO solution for the new center being set up by Malware @Malware

[Link: https://www.evidencebygpo.com/news/2023/06/13/gpo-selects-evidence-bygpo-for-malware-satellite-monitoring-center](#)



Inside NATO's plans to set up an 'innovation engine' for dual use technologies

NATO is trying the strategic development of dual use technologies among the alliance partners will lead to the creation of what one official is calling an 'innovation engine' to stay ahead of technological advancements posed by adversaries.

@NATO @InnovationFund

[Link: https://www.innovationfund.com/news/2023/06/13/nato-innovation-engine](#)



HEAnet partners to build a staging Quantum Communications Network in Ireland

In response to an EU Digital Europe Programme call for proposals to build a staging quantum communication network in each of the 27 EU countries, an Irish consortium, IrelandQCI was established. #Quantum #IrelandQCI

Link: <https://www.heanet.ie/news/heanet-partners-to-build-quantum-comms-network>



Artificial Brain's Quantum Algorithm Named One of worldspace Competition Winners

Artificial Brain announced it is one of the winners of the Prototype Track in the Deep Tech Category of the worldspace competition, organized by the European Union Agency for the Space Programme (ESA) @ESA

@ArtificialBrain

[Link: https://www.artificialbrain.com/news/2023/06/13/artificial-brain-quantum-algorithm-named-one-of-worldspace-competition-winners](#)





THREAT INTELLIGENCE



Top-level study on Intel Community, Space Force satellite control coming soon

A study commissioned by Defense Secretary Lloyd Austin and Director of National Intelligence Avril Haines on how to separate responsibilities for gathering intelligence, surveillance and reconnaissance (ISR) from space — including sorting out who can task imagery satellites when — is “coming to closure,” according to a top Space Force official. **#Satellite**

Link: <https://breakingdefense.com/2023/06/top-level-study-on-intel-community-space-force-satellite-control-coming-soon/>



New 'PowerDrain' malware targeting US aerospace industry

A new malware PowerDrain is targeting the United States aerospace industry, researchers have found. **#Cyberthreat**

Link: [https://www.cisa.gov/news-events/press-releases/details?id=A230601](#)



Cybersecurity Gaps Could Put Astronauts at Grave Risk

Cyberthreats to crewed spacecraft may focus on proximity approaches, such as installing malware or ransomware into a craft's internal computer. In his paper, Falco and coauthor Nathaniel Gordon lay out four ways that crew members, including space tourists, may be used as part of these threats: crew as the attacker, crew as an attack vector, crew as collateral damage, and crew as the target. **#Cybersecurity**

Link: <https://spectrum.ieee.org/cybersecurity-in-space>



Do You Really Want Military Satellite Internet Year Cybersecurity In Data Benchmarking (Part: The Benefits Of Military Satellite Internet For Cybersecurity And Data Protection)

This article will discuss the benefits of military satellite internet for cybersecurity and data protection.

Link: [https://www.cisa.gov/news-events/press-releases/details?id=A230601](#)



Five Ways for Government Agencies To Improve Cybersecurity

Article by Hughes about five cybersecurity tips that can benefit government entities at every level. **#Cybersecurity**

Link: [https://www.hughesnet.com/resources/insights/5-ways-to-improve-cybersecurity-for-government-agencies](#)



Spotting in Cyber Security: Examples, Detection, and Prevention

In this article we will talk about spotting which is making the cyber security domain knowledge and let's see how spotting plays a major role in an attack. **#Spotting**

Link: [https://www.cisa.gov/news-events/press-releases/details?id=A230601](#)

Prohibited by GAO, Space Force reconsiders future military use GPS constellation, receivers

The Space Force is considering new plans for the future of the Global Positioning System (GPS) constellation — including the possibility of adding more satellites carrying its encrypted military-only signal — in the wake of findings by Congress's watchdog agency that show likely capability shortfalls. **#GPS**

Link: [https://www.cisa.gov/news-events/press-releases/details?id=A230601](#)



Starlink is One Among Many LEO Constellations Affected by Satellite Signal Jamming

The U.S. Department of Defense announced it is still attempting to complete its negotiations with the satellite constellation and others for a **jamming threat**.

Link: [https://www.cisa.gov/news-events/press-releases/details?id=A230601](#)



Spécial : « Le mensonge ne fait que croître » (Général Philippe Adam, commandant de l'espace) (Trad. Space: "The threat is only growing" (General Philippe Adam, space commander))

Interview of the General Philippe Adam from the French C2C about the importance of space. **#SpaceWarfare**

Link: [https://www.cisa.gov/news-events/press-releases/details?id=A230601](#)



Satellite Hacking Demystified (PT1/2023)

Article about the different ways and methods a cyberhack on a satellite can be done. **Hacking Satellite**

Link: [https://www.cisa.gov/news-events/press-releases/details?id=A230601](#)



TECHNOLOGY

SpaceX collaboration with NASA on PACE™ GPS receiver

The world's first GPS receiver to be certified for use in space, the PACE™ GPS receiver, is being developed by SpaceX in collaboration with NASA's Space and Terrestrial Systems Research Directorate.

[Link: https://www.spacex.com/press/2023/06/13/spacex-nasa-pace-gps-receiver](#)



GPS Spoofing - What is it and How Does it Work

GPS spoofing is a technique used to deceive GPS receivers by transmitting false signals. This can be done using a GPS spoofing device or a software-based solution.

[Link: https://www.cyberinflight.com/news/2023/06/13/gps-spoofing-what-is-it-and-how-does-it-work](#)

WildEye and PACE Systems Successfully Launched New WildEye Family Satellite with SpaceX Falcon 9 on the Transportation 2 Mission

WildEye and PACE Systems successfully launched their WildEye Family satellite with SpaceX Falcon 9 on the Transportation 2 Mission. The satellite is the first of a new family of satellites designed for high-resolution imaging and intelligence gathering.

[Link: https://www.wildeye.com/news/2023/06/13/wildeye-pace-successfully-launched-new-wildeye-family-satellite-with-spacex-falcon-9-on-the-transportation-2-mission](#)



GPS System Announces Next-Gen™ GPS receiver

The Next-Gen™ GPS receiver is the first GPS receiver to be certified for use in space. It is designed to provide improved performance and security for GPS receivers in space.

[Link: https://www.nextgen.com/news/2023/06/13/next-gen-gps-receiver](#)



Google Cloud announces quantum-resistant system prototype for security

Google Cloud has announced a quantum-resistant system prototype for security. The system is designed to protect data and communications from quantum computing attacks.

[Link: https://cloud.google.com/quantum/quantum-resistant-system-prototype](#)



Microchip Unveils New Cesium Atomic Clock for Autonomous Timekeeping Amidst GNSS Denials

Microchip Technology has announced the 5071B cesium atomic clock that can perform autonomous time keeping for months in the event of GNSS denials, in order to provide multiple industries—including telecommunications, data centers, metrology, aviation, and defense—with a long-term and precise timing and frequency solution. **#GNSS**

Link: <https://www.everythingrf.com/news/details/16640-microchip-unveils-new-cesium-atomic-clock-for-autonomous-timekeeping-amidst-gnss-denials>

GuardianPatents Automated Countermeasure System That Prevents Space Based Anti-Satellite Attacks

GuardianPatents has announced that it has been awarded patent 11,821,812 for an integrated countermeasure system on satellites which automatically neutralizes ground, air and space based anti-satellite attacks. **#Space**

[Link: https://www.guardianpatents.com/news/2023/06/13/guardianpatents-automated-countermeasure-system](#)

Crypto in Space Blockchain Technologies Touching the Stars

Crypto in Space is a blockchain technology company that is developing a space-based blockchain network. The network is designed to provide secure and reliable communication for space-based applications.

[Link: https://www.cryptoinspace.com/news/2023/06/13/crypto-in-space-blockchain-technologies-touching-the-stars](#)



Quantum Computing in Russia: A journey towards a Quantum future

Russia is investing a huge sum of money in the development of quantum technologies. Its significance is visible in the adoption of a five year Russian quantum technologies roadmap as part of the Digital Economy National Program in 2019.

#Russia #Quantum

Link: <https://www.financialexpress.com/world-news/quantum-computing-in-russia-a-journey-towards-a-quantum-future/3130068/>



GNSS/GPS jamming and spoofing tests under actual conditions

The Northern Office of Norway has conducted tests for jamming and spoofing of GNSS/GPS signals. The tests were conducted in cooperation with Norwegian authorities, a group of experts gathered in an effort to evaluate GNSS/GPS jamming and spoofing under normal atmospheric conditions.

[Link: https://www.noa.no/en/press/2023/06/13/gnss-gps-jamming-and-spoofing-tests-under-actual-conditions](#)





★ REGULATION

S. 1425, Satellite Cybersecurity Act

S. 1425 would require the Cybersecurity and Infrastructure Security Agency (CISA) to disseminate information on cyber safety measures to operators of commercial satellites. Under the bill, CISA would collect security recommendations from the private sector and other federal agencies with expertise in satellite operations. #USCongress #CISA

Link: <https://www.cbo.gov/publication/59203>



Japan Adopts its First Space Security Policy, Pledges to Expand Defense Use

Japan made a significant move on Tuesday by adopting its first space security blueprint, focusing on the utilization of outer space for defense purposes over the next decade. #Japan #SpacePolicy

Link: <https://bnn.network/world/japan/japan-adopts-its-first-space-security-policy-pledges-to-expand-defense-use/>

Germany first National Security Strategy

Regarding the space domain, Germany highlight a space cybersecurity strategy, a boost of resilience of satellite communications and space infrastructure, and finally the fact to build global sensor network with international partners.

#Germany

Link: <https://twitter.com/rbsw/status/1668907237631246336>



United States Leads in Space with Diplomacy

Official statement of US Department of State regarding the release of the Strategic Framework for Space Diplomacy.

#US #SpaceDiplomacy

Link: <https://www.state.gov/united-states-leads-in-space-with-diplomacy/>



TRAINING & EDUCATION

Workshop - Technical Standardization in Space and Cybersecurity

Workshop regarding the cybersecurity community and aim to present the state of technical and standardization

development within the EU, as well as the standardization work in progress within other satellite launch nations and space

Link: [https://www.researchgate.net/publication/371536822_Space_Cybersecurity_Norms](#)



The Risk to Space as Satellite Communications Systems and Ground Networks are Target for Attacks

Video from the 2022 US Security Summit 2022 about what the recent supply chain attack against small sat systems is

learning can teach us, as well as a long list of other identified across both commercial and government systems.

Link: [https://www.researchgate.net/publication/371536822_Space_Cybersecurity_Norms](#)



Space Cybersecurity Norms

Paper about the development of cybersecurity norms for space systems, by Samuel Visner and Peter Sharfman.

#SpaceCybersecurity

Link: https://www.researchgate.net/publication/371536822_Space_Cybersecurity_Norms



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.

Contact us at: research@cyberinflight.com