



# SPACE CYBERSECURITY WEEKLY WATCH

Week 34

August 15 – 22, 2023

**Timeframe :** Weekly  
**# of articles identified :** 30  
**Est. time to read :** 55 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.**

- CYBERINFLIGHT'S NEWS**
- GEOPOLITIC**
- MARKET & COMPETITION**
- TECHNOLOGY**
- TRAINING & EDUCATION**
- THREAT INTELLIGENCE**
- IMPORTANT NEWS**

## Overview

This week, the 75<sup>th</sup> Intelligence, Surveillance and Reconnaissance Squadron of the USSF was created. Also, the EU accepted the Biden administration's proposal to the United Nations working group to limit ASAT testing. In addition, the US administration has informed the public and American space companies that Russian and Chinese intelligence agencies are trying to steal information and technology, and that cyberattacks to disable satellites in a conflict are to be expected. CyberInflight had the opportunity this week to visit the Space ISAC headquarters in Colorado Springs, as well as attending DEFCON and Black Hat in Las Vegas. On the market front, this week saw the launch of a partnership between Airbus and the University of Delf to advance talent and technology. CyberOps won a \$2.5m contract with the Australian Dept. of Defence. As for threat intelligence, a new report shows that Russia has managed to find and use new vulnerabilities in Starlink satellites. At the DEFCON and Black Hat conferences, Viasat and the NSA took the opportunity to report on the details of the attack that took place in February 2022. Also, a cyberattack on the Gemini Observatory in early August 2023 has caused the observatory to close for the time being. Finally, the Space ISAC AI/ML Community has published a white paper on the intersection between AI technologies, cybersecurity and space infrastructure.

## ★ **CYBERINFLIGHT'S NEWS** ★



### **Florent Rizzo, founder and CEO of CyberInflight, visits the ISAC space in Colorado Springs.**

During his visit to Space ISAC, Florent was lucky to be present on the day of Senator John Hickenlooper's visit to the Space ISAC headquarters to talk about cybersecurity issues for SMEs and the difficulty of training cyber experts. For more information on this visit, link to the follow-up post of the day. **#SpaceISAC**

**Link:** [https://www.linkedin.com/posts/florent-rizzo-13b54383\\_space-isac-colorado-springs-activity-7097984230038589441-8Abo?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/florent-rizzo-13b54383_space-isac-colorado-springs-activity-7097984230038589441-8Abo?utm_source=share&utm_medium=member_desktop)

### **CyberInflight at DEFCON and Aerospace Village**

Takeways by Florent Rizzo from the DEFCON and Aerospace Village events and conferences **#DEFCON**

**Link:** [https://www.linkedin.com/posts/florent-rizzo-13b54383\\_space-cybersecurity-cyberinflight-activity-7096951714523541504-drrP?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/florent-rizzo-13b54383_space-cybersecurity-cyberinflight-activity-7096951714523541504-drrP?utm_source=share&utm_medium=member_desktop)

**Link:** [https://www.linkedin.com/posts/florent-rizzo-13b54383\\_defcon-aerospace-village-hack-a-sat-activity-7096189507166695424-XyNk?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/florent-rizzo-13b54383_defcon-aerospace-village-hack-a-sat-activity-7096189507166695424-XyNk?utm_source=share&utm_medium=member_desktop)

### **CyberInflight at the BlackHat 2023**

Takeways by Florent Rizzo from the BlackHat 2023 in Las Vegas **#BlackHat**

**Link:** [https://www.linkedin.com/posts/florent-rizzo-13b54383\\_blackhat-defcon-cyberinflight-activity-7095222345698533376-5lhr?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/florent-rizzo-13b54383_blackhat-defcon-cyberinflight-activity-7095222345698533376-5lhr?utm_source=share&utm_medium=member_desktop)



## GEOPOLITIC

### Space on agenda for Biden's bilateral summit with S. Korea, Japan

History and commercial opportunities in space will be among the top agenda items during the first bilateral summit among US President Joe Biden, Japanese Prime Minister Fumio Kishida and South Korean President Yoon Suk Yeol on Aug. 18 at Camp David, according to government sources. #US #Japan #SouthKorea

**Link:** <https://breakingdefense.com/2023/08/18/biden-bilateral-summit-space-agenda/>



### Space Force's first targeting squadron brought to life

The 7th Intelligence, Surveillance and Reconnaissance Squadron was activated as a unit under Space Delta 7 - Intelligence, Surveillance and Reconnaissance on Monday Aug. 14, 2023, at Peterson Space Force Base, Colorado. #SpaceForce #USAF

**Link:** <https://www.defense.com/space-force-first-targeting-squadron-brought-to-life/>



### Newly created Army cyber/space office to focus on streamlining efforts, building out talent

The Army officer in charge of the recently just created cyber and space office was opportunities to streamline previously complicated, overlapping lines of effort, he told Breaking Defense in an exclusive interview. #Army

**Link:** <https://breakingdefense.com/2023/08/18/army-newly-created-cyber-space-office-to-focus-on-streamlining-efforts-building-out-talent/>



### EU embraces Biden administration's limited ASAT test ban as UN meeting looms

In the run up to the final meeting of the UN working group on military space norms of behavior, the 27 nations of the European Union have committed to a Biden administration proposal not to conduct tests of destructive, direct-ascent anti-satellite (ASAT) missiles. #UN #ASAT

**Link:** <https://breakingdefense.com/2023/08/eu-embraces-biden-administrations-limited-asat-test-ban-as-un-meeting-looms/>



### Intelligence Agencies Warn Foreign Spies Are Targeting U.S. Space Companies

U.S. officials say Chinese and Russian spy agencies are trying to steal technology from private American space companies and preparing cyberattacks that could disable satellites in a conflict. #US #China #Russia

**Link:** <https://www.nytimes.com/2023/08/18/us/politics/cyberattacks-russia-china-space-companies.html>



## MARKET & COMPETITION



### Airbus and Delft University of Technology enter five-year partnership agreement to advance talent and technology

Through joint research activities, in particular PhD projects, the partnership provides Airbus access to both new and traditional topnotch engineering capabilities, in areas such as sustainable aviation, space, helicopters, artificial intelligence and cybersecurity. #Airbus #DelftUniversity

**Link:** <https://spacewatchafrica.com/airbus-and-delft-university-of-technology-enter-five-year-partnership-agreement-to-advance-talent-and-technology/>



### Raytheon to provide navigation and guidance to enable combat vehicles to operate in GPS-denied conditions

Officials of the Army Contracting Command in Newark, N.J., announced a \$10 million contract to Raytheon and work for the company's CR&A 2023 contract negotiation unit, which includes Global Positioning System (GPS) denial and GPS denial capabilities, and a commitment to help military and civilian users to operate in difficult and sometimes GPS-denied conditions. #Raytheon #Army

**Link:** <https://www.defense.com/raytheon-to-provide-navigation-and-guidance-to-enable-combat-vehicles-to-operate-in-gps-denied-conditions/>



### CyberOps Takes the Lead in Space Cybersecurity

South Australian-based cybersecurity specialist, CyberOps, has secured a \$2.5 million contract with the Department of Defense. The project's focus is to strengthen the nation's critical space infrastructure against evolving cyber threats. As part of the initiative, Australia's first dedicated space cyber testing and training facility will be developed. Its primary goal will provide space operators and cyber practitioners with a simulation environment to enhance their skills and test space hardware and services. #Australia #CyberOps

**Link:** <https://www.thesign.media/blog/cyberops>





# TECHNOLOGY

## Specialized Type Manufacturing and Properties for Quantum Photonics

Specialized type manufacturing, manufacturing and properties for quantum photonics. The deal was announced Aug. 16. Specialized type manufacturing and properties for quantum photonics. The deal was announced Aug. 16. Specialized type manufacturing and properties for quantum photonics. The deal was announced Aug. 16.

**Link:** <https://www.satnews.com/2023/08/16/specialized-type-manufacturing-and-properties-for-quantum-photonics/>

## Face signals for real results: GNSS simulators keep up with a profusion of new signals

As the number of constellations, satellites and signals grow — especially in the past few years, with the completion of the BeiDou and Galileo constellations — GNSS manufacturers were challenged to keep up. Trends of precision and accuracy also increased. There is a new quantum leap in developing new products for navigation and timing (PNT) constellations in use Earth orbit. Now, it is common for simulators to require several hundred channels. #GNSS

**Link:** <https://www.satnews.com/2023/08/16/face-signals-for-real-results-gnss-simulators-keep-up-with-a-profusion-of-new-signals/>

## USAF Funds Quantum Navigation System to Overcome GPS Limitations

USAF funds quantum navigation system to overcome GPS limitations. The deal was announced Aug. 16. USAF funds quantum navigation system to overcome GPS limitations. The deal was announced Aug. 16.

**Link:** <https://www.satnews.com/2023/08/16/usaf-funds-quantum-navigation-system/>



# TRAINING & EDUCATION

## Italian team wins Space Force's first on-orbit Hack & Sat contest

The annual Hack & Sat contest, sponsored by the Space Force and Air Force Research Laboratory to help improve the cybersecurity of Defense Department satellites, officially got real this year — with Italy's world-class team beating out the international teams of cyber researchers vying to take control of a live, in-orbit satellite. #Hack & Sat

**Link:** <https://www.satnews.com/2023/08/16/italian-team-wins-space-force-first-on-orbit-hack-a-sat-contest/>



## Space ISAC AI/ML community publishes MLSecOPs whitepaper

The Space ISAC AI/ML Community is focused on the intersection between AI technologies, cybersecurity and space infrastructure, striving to provide guidance for improving space infrastructure security through trustworthy AI technologies.

#SpaceISAC

**Link:** <https://news.satnews.com/2023/08/15/space-isac-ai-ml-community-publishes-mlsecops-whitepaper/>



## Episode 121: Cyber Defense for Space

Episode of the Space Policy Show about topics impacting the protection of the space domain in order to maintain freedom of action for all space actors. #Podcast #TheSpaceAge

**Link:** <https://www.satnews.com/2023/08/16/episode-121-cyber-defense-for-space/>

## 12th International SES Workshop

The 12th International SES Workshop will take place at the University of Luxembourg and invite you to the 12th International Workshop devoted to satellite communications, a cross-sectoral of governmental, international business, and private connections in today's complex world. The workshop is organized in three panels: A brings together high-level specialists in satellite communication regulation and technology. #SES #Luxembourg

**Link:** <https://www.satnews.com/2023/08/16/12th-international-ses-workshop-12th-2023/>

## Cyberspace Visual Expression Technology System Oriented to Space-Based Information System

This paper sets out the research progress of space-based information network at home and abroad, discusses the development status of cyberspace visualization expression theory and technology, and proposes the content and technical path of cyberspace visualization expression for space-based information system. #Cybersecurity #ResearchPaper

**Link:** <https://www.satnews.com/2023/08/16/cyberspace-visual-expression-technology-system-oriented-to-space-based-information-system/>

## How a hacking crew overtook a satellite from inside a Las Vegas convention center and won \$25,000

In a room about overflown with operators inside Caesars Forum, the main arena for this year's DEF CON hacking conference, five teams of hackers from around the world waited anxiously to see who would be named the winner of the first ever capture the flag in space. #Hack & Sat #DEFCON

**Link:** <https://www.satnews.com/2023/08/16/how-a-hacking-crew-overtook-a-satellite-from-inside-a-las-vegas-convention-center-and-won-25000/>



## ECIPA agreement to support the security accreditation of the EU Space Programme

Working on the 12th of August dedicated to security accreditation activities of the EU European Galileo, Copernicus, and EGNOS. #ECIPA

**Link:** <https://www.satnews.com/2023/08/16/ecipa-agreement-to-support-the-security-accreditation-of-the-eu-space-programme/>





# THREAT INTELLIGENCE



## Recent intel report reveals new Starlink vulnerabilities, increasing concerns about the future of global satellite internet



Russia's intelligence services are using custom malware to target Android devices to tap into Starlink satellite data, a recent Security Service of Ukraine (SBU) report warns. **#Russia #Starlink**

**Link:** <https://thedebrief.org/recent-intel-report-reveals-new-starlink-vulnerabilities-increasing-concerns-about-the-future-of-global-satellite-internet/>

## Ensuring Geospatial Data Integrity by Addressing Malware Threats

Ensuring geospatial data from satellites, drones and other forms of remote sensing is a critical part of the intelligence of many national and commercial operations, including defense, intelligence, and other purposes. **#Cybersecurity**

**Link:** <https://www.army.mil/News/Article/Article/20230815/Ensuring-geospatial-data-integrity-addressing-malware-threats>

## The US Army is rushing to repair its electronic warriors after watching Russia and Ukraine jam each other's drones



After years of neglecting electronic warfare, the US Army is rushing to initiate its jamming capabilities. This has put fresh impetus behind the US Army's electronic warfare upgrade. **#EW**

**Link:** <https://www.army.mil/News/Article/Article/20230815/US-Army-is-rushing-to-repair-its-electronic-warriors-after-watching-russia-and-ukraine-jam-each-other-s-drones>



## Incident response lessons learned from the Russian attack on Viasat

At the Black Hat and DEF CON conferences, Viasat and the NSA offered detailed accounts about what went down when Russian hackers shut off tens of thousands of satellite broadband modems in the Ukraine war's first significant cyberattack. **#Viasat #NSA**

**Link:** <https://www.csoonline.com/article/649714/incident-response-lessons-learned-from-the-russian-attack-on-viasat.html>

## Cheapest tool to destroy satellites? A computer

Efforts to counter to space is an ongoing endeavor, mostly focused by wealthy nations. Countries lacking resources, however, might employ cheaper tools as ways to sabotage. That's why cyber attacks can become a crucial weapon in the arsenal of resource-deprived actors. **#Cybersecurity #Satellites**

**Link:** <https://www.army.mil/News/Article/Article/20230815/Cheapest-tool-to-kill-satellites-a-computer>

## Cyberattack takes out satellite interchanges for Russian military



A satellite communication framework serving the Russian military was abruptly disconnected by a cyberattack late Wednesday and remained generally down on Thursday in an occurrence suggestive of an assault on a computer framework ally. **#Cyberattack #Russia**

**Link:** <https://www.army.mil/News/Article/Article/20230815/Cyber-attack-takes-out-satellite-interchanges-for-russian-military>

## Five Russian hackers claimed they attacked Iran's strategic electronic intelligence system, stole secret documents



On August 15, five Russian hackers on the group called themselves claimed they had attacked strategic electronic intelligence system of the Ministry of Defense of the Islamic Republic of Iran (IRI), affecting the system to the department as all forms of defense. **#Cyberattack #Russia**

**Link:** <https://www.army.mil/News/Article/Article/20230815/Five-russian-hackers-claimed-they-attacked-iran-s-strategic-electronic-intelligence-system-stole-secret-documents>

## Can we mitigate the impacts of the quantum threat?

Quantum computing has created a new paradigm in computing due to its ability to outperform conventional computers and solve problems that have not been computable. However, a quantum threat exists. **#Quantum**

**Link:** <https://www.army.mil/News/Article/Article/20230815/Can-we-mitigate-the-impacts-of-the-quantum-threat>



## Gemini Observatory will be forced to stop the system due to cyber attack, there is a possibility that there will be a big delay in astronomy research

The Gemini Observatory, which has telescopes in Hawaii and Chile, has been shut down due to cyber attacks since August 1, 2023. The US National Institute of Optical and Infrared Astronomy (NOIRLab) has not disclosed the details of the attack, and experts have pointed out that "the attacker may not be aware that he has attacked the observatory." **#Cyberattack**

**Link:** [https://gigazine.net/gsc\\_news/en/20230821-cyberattack-telescope/](https://gigazine.net/gsc_news/en/20230821-cyberattack-telescope/)

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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