



SPACE CYBERSECURITY WEEKLY WATCH

Week 46

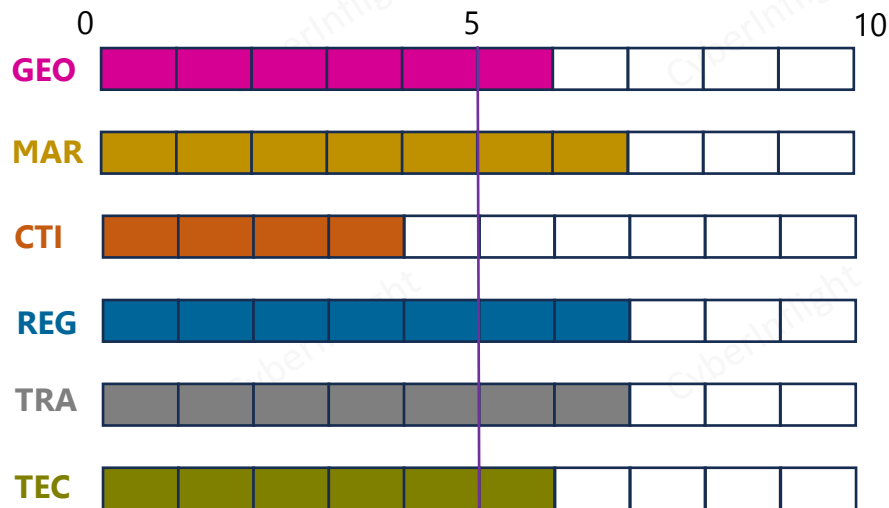
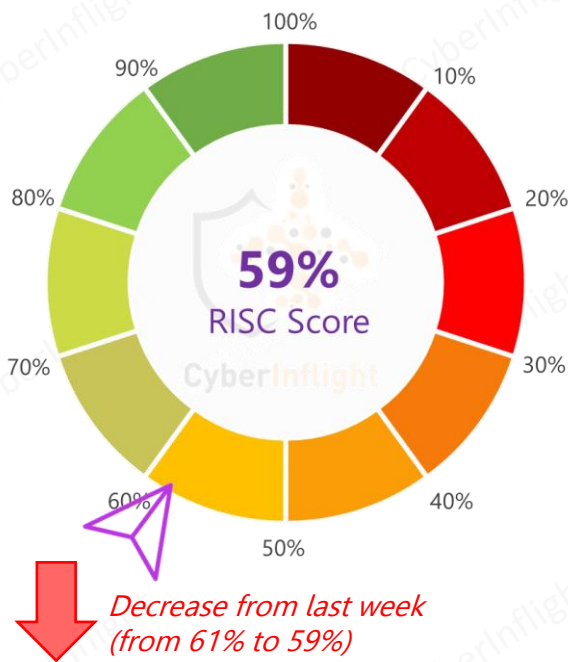
November 7 – 13, 2023

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 : 32
Est. time to read : 1h 20 min

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

Overview & RISC Score



This week's RISC Score is 59%. This week, to mark SPARTA's anniversary, version 1.5 has been announced, providing an overview of the latest changes to the framework. CyberInflight is proud to have participated in SPARTA thanks to our attacks database. This week as well, NASA's Space Security Best Practices Guide was published. On the geopolitical front, Starlink is currently being tested by the Japanese army, with the aim of strengthening Self-Defense Forces (SDF) communications capabilities in a context where China and Russia are stepping up their satellite attack capabilities. Also this week, ONCD announced that the US government is taking a particular interest in the cybersecurity of space systems, and is seeking industry collaboration to inform policy in this area. As for the threat intel. this week, a USSF official said that the recent increase in cyberattacks on space systems highlights the need to improve their security. ESA has set up an information web portal created to promote software reuse and to provide all parties involved in the development of software for European space with access to the results of previous projects. Finally, on the technological front, the next-generation ground-based GPS system should be operational this summer, according to a US Air Force official.



GEOPOLITIC

New US military 'will' to partner with US SPACECOM on space domain awareness

The US Joint Task Force Space Operations Commercial Operations Cell (JTF-SCOC) effort will extend the time for USMC and USNavy take on satellites, especially those owned by adversaries and dangerous space debris. #US #US

Link: <https://www.spaceforce.com/2023/11/06/new-us-military-will-to-partner-with-us-spacecom-on-space-domain-awareness/>



House appropriators target Space Force programs

The House Appropriations Committee last week approved a \$10.4 billion spending bill for the Department of Defense for fiscal year 2024, about \$200 million above the Biden administration request. The bill, however, recommends nearly \$1 billion in cuts from the U.S. Space Force's \$10 billion request. #US #Budget

Link: <https://www.spaceforce.com/2023/11/06/house-appropriators-target-space-force-programs/>



The 12th EU-US Space Dialogue convened in Brussels

Meeting between the EU and the US in Brussels on the 26 - 27 June for further cooperation in a space dialogue. The EU and the US delegations gathered to discuss wide-ranging space topics including important cooperation on GNSS, Earth Observation and its applications, Space Situational Awareness, the safety of spaceflight as well as long term sustainability of space activities. A dedicated part of the dialogue addressed space security. #EU #US

Link: <https://www.spaceforce.com/2023/11/06/12th-eu-us-space-dialogue-convened-brussels/>



Starlink being tested by Japan's armed forces - report

The US Defense Force (DF) has been using Starlink with the aim to boost its communication through and across the globe and needs to further their abilities to attack satellites. #Japan #Starlink

Link: <https://www.spaceforce.com/2023/11/06/starlink-being-tested-by-japan-armed-force-report/>



MARKET & COMPETITION



ONCD Assistant Director Says White House is Incentivizing Long-Term Space Cybersecurity Investments

The White House's Office of the National Cyber Director (ONCD) is taking a particular look at cybersecurity for space systems, and seeking industry collaboration to inform policy in this area. #US #Investment

Link: <https://www.satellitetoday.com/cybersecurity/2023/11/06/oncd-assistant-director-says-white-house-is-incentivizing-long-term-space-cybersecurity-investments/>



Excellent Distributed Network Management For Secure Satellite Constellations (ARTES 4.0 45 IPI, SA 179)

The objective of this activity is the design and demonstration of network protocols that can use multiple available satellite ground networks for increased resilience and security for the retrieval of multiple data with multiple QoS classes. #SA #IPI

Link: <https://www.spaceforce.com/2023/11/06/excellent-distributed-network-management-secure-satellite-constellations-45-i-pi-sa-179/>



Cyber Essentials Funding

Leading assistance for companies operating in the Scottish space sector to achieve cyber essentials. #Scotland #Funding

Link: <https://www.spaceforce.com/2023/11/06/cyber-essentials-funding-assistance-for-achieving-cyber-essentials/>



Waterfront Technical Services, a Serter Company, Wins NASA Marshall Space Flight Center Small Business Subcontractor of the Year

Water Inc., a serter-owned small business specializing in advanced cyber intelligence solutions and technology, announced today that Waterfront Technical Services, a Serter company, has been awarded the NASA Marshall Space Flight Center (MSFC) Small Business Subcontractor of the Year. #NASA #Waterfront

Link: <https://www.spaceforce.com/2023/11/06/waterfront-technical-services-a-serter-company-wins-nasa-marshall-space-flight-center-small-business-subcontractor-of-the-year/>



SES signs \$270 million agreement to acquire SES satellite communications services

The global satellite operator SES will provide services to the U.S. Defense Department under a five-year agreement worth up to \$270 million, the company announced Nov. 6. The blanket purchase agreement makes the SES constellation available to the U.S. armed forces as a managed service. This includes broadband satellite services as well as gateway services, terminals, technical support, mission services, broadcast-based and more. #SES #US

Link: <https://www.spaceforce.com/2023/11/06/ses-signs-270-million-agreement-to-acquire-ses-satellite-communications-services/>





THREAT INTELLIGENCE

Launch data shows an orbit maneuver by Russian satellite

The space tracking firm LaunchInsider from the past year tracked two Russian satellites performing evasive and possibly operations. These satellites — Kosmos 2251 and Kosmos 2252 — conducted maneuvers that offer a glimpse of the potential threats that U.S. and allied spacecraft could face in low Earth orbit. [#Russia #SpaceInsights](#)

Link: [https://www.launchinsider.com/launch-insider-2023-11-07-launch-data-shows-an-orbit-maneuver-by-russian-satellite](#)



Cyber Security of Space Systems 'Crucial,' As US Space Force Official Notes Recent Attacks

A number of recent cyberattacks on space systems highlight the need for their improved security, a U.S. Space Force official said on Nov. 6. [#USSF #Cyberattacks](#)

Link: <https://www.satellitetoday.com/cybersecurity/2023/11/07/cyber-security-of-space-systems-crucial-as-us-space-force-official-notes-recent-attacks/>



Seeking Security and Opportunity in the Satellite Cold War

A federal agency has set in motion steps to further secure the rapidly proliferating frontier of satellites where private, independent satellites might interact with government infrastructure. [#USCF #SpaceInsights](#)

Link: [https://www.spaceinsights.com/seeking-security-and-opportunity-in-the-satellite-cold-war](#)



Global Navigation Satellite System Damage

Following their analysis of recent data from the Network of Analysis and Open Sources that has concluded that GPS jamming and spoofing has shown a marked increase in the severity of its impact, as well as an overall growth of intensity and sophistication of these events, the agency has updated the ICD on Global Navigation Satellite System Damage and Mitigation leading to Navigation, Intelligence, and Communications. [#USCF #SpaceInsights](#)

Link: [https://www.spaceinsights.com/global-navigation-satellite-system-damage](#)



LockBit attack on Boeing

LockBit has published files from Boeing on its page. [#LockBit #Boeing](#)

Link: <https://twitter.com/AlvieriD/status/1722898889919828352>

Is Military Space-based Jamming Normal? Some Worry It Is

My research shows that the Chinese military is using space-based jamming in a controlled practice among space powers. As a result, they claim to have developed an experimental spacecraft to practice jamming between satellites from government-to-earth orbit. [#Jamming #SpaceMilitary](#)

Link: [https://www.spaceinsights.com/is-military-space-based-jamming-normal-some-worry-it-is](#)

REGULATION



SPARTA: Year One in Review (and v1.5 Updates)

SPARTA turned one year old last month and, since the launch in October 2022, nine versions/releases of SPARTA have taken place. [#SPARPA](#)

Link: <https://medium.com/the-aerospace-corporation/sparta-year-one-in-review-and-v1-5-updates-bd389232d7fb>



ESA Launches First Secure SATCOM Market and User Technology Report

The secure SATCOM market and user technology report intends to build upon the growing investments made by the EU with forthcoming EU satellite ICDs which aims to provide secure and cost-efficient communications capabilities to security and safety-critical missions and operations, and the security launchpad (SLP) initiative that will further expand the EU space-based connectivity capabilities of the EU Space Programme. [#ESA #Report](#)

Link: [https://www.esa.int/ESA_Media/Press_Releases/2023/11/01/esa_launches_first_secure_satcom_market_and_user_technology_report](#)



Bulgaria Signs Artemis Accords at NASA Headquarters

NASA Administrator Bill Nelson today signed a signing ceremony. The day with Bulgaria's Minister of Defense, Minister of Innovation and Growth, as her country became the 10th nation to sign the Artemis Accords. [#Bulgaria #ArtemisAccords](#)

Link: [https://www.nasa.gov/bulgaria-signs-artemis-accords-at-nasa-headquarters](#)



NASA's Space Security : Best Practice Guide

The Space Security: Best Practices Guide (BPG) provides guidance on mission security implementation in the form of principles coupled with applicable controls that cover both the space vehicle and the ground segment. The BPG leverages security controls as defined in the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53 and serves as a translation guide between NIST verbiage and NASA flight project parlance. [#NASA #BestPractices](#)

Link: <https://swehb.nasa.gov/display/SWEHBVD/7.22+-+Space+Security%3A+Best+Practices+Guide>





TRAINING & EDUCATION

EU Space Week 2023 – Webinar

The session will explore the current needs and requirements for space applications covering all space components. The session will explore the needs for applications relying on location, navigation, timing, earth observation, and secure communication. #Webinar #EU

Link: <https://www.esa.int/en/press/pr/2023/11/2023euw-webinar-secure-space>



EU Space Week 2023 – Programme

Program of the 2 days of the EU Space Week November 7th to 8th, 2023. #EU #SpaceWeek

Link: <https://www.esa.int/en/press/pr/2023/11/2023euw-programme>



Digital Forensics in Space: Investigating Cybersecurity Threats and Incidents in Satellite Networks
Hosted at the National ISEC on November 13th, 2023 about the ability to address and prevent cyber threats in space.

#NationalISEC #Conference

Link: <https://nationalisec.com/en/program/digital-forensics-space-investigating-cybersecurity-threats-and-incidents-13th>

17th ESA Workshop on Antennas, Data, Control and Software Systems – ADCSS2023

The 17th ESA Workshop on Antennas, Data, Control and Software Systems (ADCSS2023) covers topics related to antennas for space applications in the form of a set of roundtables. The workshop acts as a forum for the presentation of position papers followed by discussion and interaction between ESA and industry and between participants. #Workshop #ESA

Link: <https://www.esa.int/en/press/pr/2023/11/2023adc>



Webinar "A Beginner's Guide to Space Security" by Angelina Trudell

The Saturday 11/13 at 11 AM EST (8 AM PST), we will be doing again the talk "A Beginner's Guide to Space Security" by Angelina Trudell. #Webinar #SpaceOps

Link: <https://www.inetsec.com/en/program/a-beginners-guide-to-space-security-13th>



Talk about how digitization can enhance the resilience of multi-mission satellite operations

Learn how the Digital Transformation of SATCOM unlocks new capabilities for MSpace tomorrow. Host: Marko Unger, Strategic Account Director. States as for digital how digitization can enhance the resilience of multi-mission satellite operations. #Space #Workshop

Link: <https://beta.com/en/program/digital-transformation-of-satcom-13th>

Oct 17 Part 1 - 2023 Space ISAC Value of Space Summit, co-hosted by the Aerospace Corporation

Part 1 of the first part of the 2023 Space ISAC Value of Space Summit, co-hosted by the Aerospace Corporation.

#Space #ISAC

Link: <https://www.aerospacemag.com/en/program/2023-space-isac-value-of-space-summit-part-1>



Ultra-Secure Communications with Quantum Technologies

The comprehensive training course, offering 5 courses, is designed to equip professionals with the knowledge and skills necessary to harness the power of quantum technologies for ultra-secure communications. #Course #Quantum

Link: <https://www.cyberinflight.com/en/program/ultra-secure-communications-quantum-technologies>



European Space Software Repository

The European Space Software Repository (ESSR) is an ESA informational web portal created to promote reuse of Software - including Open Source Software (OSS) - and to provide all parties involved in the European Space software development (in particular SMEs) with access to results of previous investments. #ESA #OpenSourceSoftware

Link: <https://essr.esa.int/>



TECHNOLOGY



Next-gen GPS ground system expected to come online this summer: Calvelli

The Air Force's space acquisition czar, Frank Calvelli, said today he expects the long-troubled Next-Generation Operational Control System (OCX) for the Space Force's new Global Positioning System satellites to finally be up and running by June or July — more than a decade after its initially planned debut. **#USSF #GPS**

Link: <https://breakingdefense.com/2023/11/next-gen-gps-ground-system-expected-to-come-online-this-summer-calvelli/>



Space Operators Should Harden Cryptography Defenses, NSA Cyber Official Says

Space operators must start planning for and implementing quantum-resistant cryptography now to ensure that space control security systems are resistant to emerging threats, a senior cyber official for the National Security Agency (NSA) said.

Link: <https://www.defenseone.com/technology/2023/11/11/2023-space-operators-should-harden-cryptography-defenses-nsa-cyber-official-says/>



Introducing ESA/PTQ26: ShuttleTech's Trailblazing Space Security Mission

Starting off with exciting news — the PTQ26 project for the ShuttleTech has successfully demonstrated a quantum leap in space asset security, right where it matters most — in orbit on board the ESA/PTQ26 satellite.

Link: <https://www.shuttletech.com/news/2023/11/11/2023-space-operators-should-harden-cryptography-defenses-nsa-cyber-official-says/>



Space Force taps 4 firms to vie for missile warning C2 prototype

USAF announced awards to four defense firms, General Dynamics and Northrop Grumman, to develop a prototype for the Future Operationally Resilient Ground Control/Command and Control (FORC2) C2 prototype effort. The prototype effort is designed to lay the foundation for what eventually will be a government-owned, cyber-secure satellite C2 system that will provide mission management, ground control, telemetry, tracking and command functions for key Space Force missile warning constellations.

Link: <https://breakingdefense.com/2023/11/11/2023-space-operators-should-harden-cryptography-defenses-nsa-cyber-official-says/>



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