

SPACE CYBERSECURITY WEEKLY WATCH

Week 24

June 6 - 12, 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.



Overview

Timeframe: Weekly

of articles identified: 40

Est. time to read: 1.5 hour

This week has been marked by numerous market news, such as the announcement of the RISE program to improve cybersecurity in the space field and the SDA award contract to SAIC to develop software applications factory. There was also the announcement of the QUID project to design and implement the future Italian network of the European Quantum Communication Infrastructure. Quantum and GPS were big topic of discussion this week, as attested by the many articles. On the regulatory front, in the US a draft about Space National Guard and the creation of an hybrid Space Component is being examined. The NCCoE, as part of NIST, has published a draft of a cybersecurity framework profile for Hybrid Satellite Networks.

GEOPOLITIC

Along with new office, Space Force plots new funding pot for commercial buys by 2025

The Space Force's primary acquisition command is seeking to establish a new, consolidated budget basket for commercial tech and services to underpin its multi-pronged effort to more rapidly and effectively take advantage of industry innovation, according to a senior officials responsible for the effort. **#USSF #Budget**

Link: https://breakingdefense.com/2023/06/along-with-new-office-space-force-plots-new-funding-pot-for-commercial-buys-by-2025/

Space Force opens new office to foster ties with private sector

With a ceremonial ribbon cutting, the Space Systems Command on June 6 marked the opening of its new office and conference center dedicated to doing business with the commercial space industry. The command named the facility COSMIC, short for Commercial Space Marketplace for Innovation and Collaboration. #USSF #COSMIC

Link: https://spacenews.com/space-force-opens-new-office-to-foster-ties-with-private-sector/

U.S. Space Force in talks with allies about how to jointly protect space assets

U.S. Space Force deputy chief of space operations Lt. Gen. DeAnna Burt during a recent trip to Germany and the United Kingdom heard a consistent message from allies: They don't expect the United States to bear all the costs of protecting satellites from cyber attacks and other threats. **#USSF**

Link: https://spacenews.com/u-s-space-force-in-talks-with-allies-about-how-to-jointly-protect-space-assets/







MARKET & COMPETITION

NASA Selects 200 Plus Small Businesses

NASA will award funding to more than 200 small business teams to develop new technologies designed to protect the health of astronauts, lower risk of collision damage to spacecraft, and more.#NASA

Link: https://spaceanddefense.io/nasa-selects-200-plus-small-businesses/



GDIT President Amy Gilliland spoke to Breaking Defense about how the tech company is redirecting its investments to meet the technological demands of the day, including incorporating lessons from Ukraine.#DoD #Cyberopeations

Link: https://breakingdefense.com/2023/06/gdit-drastically-upping-investments-in-dod-emerging-tech-areas-like-aizero-trust/

Viasat forms satcoms titan to take on a market in transformation

Viasat's \$6.2 billion Inmarsat acquisition has created a satellite communications behemoth with revenues that would rival other geostationary operators even after their potential consolidation deals.#Viasat

Link: https://spacenews.com/viasat-forms-satcoms-titan-to-take-on-a-market-in-transformation/

Cybersecurity earns space grant alongside industry partners

In collaboration with the prime recipient of Catalyst Campus for Technology and Innovation, UCCS recently won an two year grant to develop and improve cybersecurity in the space field as part of the Resilient Space Infrastructures, Systems, and Economy (RISE) team. #UCCS #RISE

Link: https://communique.uccs.edu/?p=148300

RESILIENT SPACE INFRASTRUCTURES, SYSTEMS, AND ECONOMY (RISE)

The Resilient Space Infrastructures, Systems, and Economy (RISE) development award is focused on igniting technological innovation and workforce development to foster technology commercialization and technology transfer in space systems, space infrastructure, and cybersecurity for the space economy. #RISE #Cybersecurity

Link: https://riseeconomicengine.com/

Galvanick Raises \$10M for Industrial Cybersecurity

Galvanick, an industrial cybersecurity startup, raised a \$10M seed round to expand its team and continue developing its debut product. #Galvanick #Cybersecurity

Link: https://payloadspace.com/galvanick-raises-10m-for-industrial-cybersecurity/

Telespazio Partners In QUID, The Quantum Communication Network Project For Italy

The QUID (Quantum Italy Deployment) project, funded by the European Commission under the Digital Europeprogramme, will design and implement the future Italian network of the European Quantum Communication Infrastructure (EuroQCI). #Quantum #Telespazio #DigitalEurope

Link: https://www.publicnow.com/view/B87F98A88CB80563461C3A96D83752E266639872

Leonardo is a key player in the QUID project that kicks off a quantum communication network in Italy

The company, through the Leonardo Quantum Technology Lab and its joint ventures, Telespazio and ThalesAlenia Space, is making an important technological contribution to the QUID project in the implementation of the Metropolitan Quantum Networks and their interconnection with the Italian Quantum Backbone.#Quantum #Leonardo #DigitalEurope

Link: https://www.leonardo.com/en/news-and-stories-detail/-/detail/leonardo-key-player-in-the-quid-project

Space investment rebounding, but more selectively

Investment in the space sector has fallen in recent quarters due to factors such as the rise in interest rates and the poor performance of some companies in the sector. A recent report by Space Capital calculated that \$2.2 billion was invested in space companies in the first quarter of 2023, the lowest quarterly total by its metrics since 2015.#Investment

Link: https://spacenews.com/space-investment-rebounding-but-more-selectively/

SAIC to develop 'software factory' for Space Development Agency

The Space Development Agency awarded a \$64 million contract to Science Applications International Corp. (SAIC) to develop a software applications factory for the agency's low Earth orbit constellation. #SAIC #SDA

Link: https://spacenews.com/saic-to-develop-software-factory-for-space-development-agency/

QuSecure Awarded U.S. Army Contract for Post-Quantum Cybersecurity Solutions

QuSecure™, Inc., announced that the United States Army has awarded the company a Small Business Innovation Research (SBIR) Phase II Federal Government contract to develop quantum-resilient software solutions. #Quantum #USArmy

Link: https://www.businesswire.com/news/beverlyhillschamber/20230608005339/en









































































THREAT INTELLIGENCE

What can interfere the navigational system

List of threats and things that can arm and interfere with the navigational system. #GPS

Link: https://marsom.jawal365.com/what-can-interfere-the-navigatioanl-system/

Spike in Russian GPS interference hit Estonia in early June

Global Positioning System interference in recent days has affected Estonia and the Baltic region, with commercial pilots often having to resort to alternate navigation systems, news agency Bloomberg reports. #Jamming #GPS #Russia

Link: https://news.err.ee/1609001321/spike-in-russian-gps-interference-hit-estonia-in-early-june



Article written with the former Joint Chiefs of Staff Sandy Winnefeld and former Air Force Materiel Command head Ellen Pawlikowski about the security of space assets. #Cybersecurity #US

Link: https://breakingdefense.com/2023/06/the-gray-rhino-in-space-us-must-update-military-requirements-for-satellite-

cyber-defense/

SecAF Reading List: Understanding Our Pacing Challenge

A reading list to provide suggested works intended to enhance our knowledge of China's history, culture, society, strategy, and military modernization program – and their implications for the Air Force and Space Force. #AirForce

Link: https://www.af.mil/News/Article-Display/Article/3404337/secaf-reading-list-understanding-our-pacing-challenge/

National Cybersecurity Strategy calls for significant change in critical infrastructure

Through the strategy, the White House is calling for new regulation that is not only for critical infrastructure but regulatory frameworks that are sector-specific. #CriticalInfrastructure

Link: https://federalnewsnetwork.com/commentary/2023/06/national-cybersecurity-strategy-calls-for-significant-changein-critical-infrastructure/

No Surprise – AIS Spoofing on the Rise

Numerous reports of AIS spoofing. The most prominent was by the New York Times about a Russian oil tanker trying to evade surveillance and maintain its insurance coverage. #Spoofing

Link: https://rntfnd.org/2023/06/12/no-surprise-ais-spoofing-on-the-rise/

The Advantages of Military Satellite Internet for Cybersecurity and Data Protection.

With the increasing threat of cyber attacks and data breaches, military satellite internet has become an essential tool for cybersecurity and data protection. #Cybersecurity

Link: https://anyuakmedia.com/the-advantages-of-military-satellite-internet-for-cybersecurity-and-data-protection/

Low Earth orbit: disruptive military technologies

Chris Moore, vice president Defence & Security at OneWeb, explains how the rise of low Earth orbit (LEO) satellites can disrupt how militaries fight. #Satellite

Link: https://www.airforce-technology.com/comment/low earth orbit disruptive military technologies/

REGULATION

NCCoE published cybersecurity framework profile for hybrid satellite networks, seeks public input

The National Cybersecurity Center of Excellence (NCCoE), a part of the National Institute of Standards and Technology, published Tuesday a draft of its cybersecurity framework profile for hybrid satellite networks. #NIST #Cybersecurity

Link: https://industrialcyber.co/nist/nccoe-published-cybersecurity-framework-profile-for-hybrid-satellite-networksseeks-public-input/

Draft House NDAA would create Space National Guard

The House Armed Services military personnel subcommittee draft of the fiscal 2024 defense policy bill, would establish a Space National Guard, as well as approve the Biden administration's plan to create a "hybrid Space Component" comprising both full- and part-time Guardians in lieu of a separate Space Force Reserve. #US #Congress

Link: https://breakingdefense.com/2023/06/draft-ndaa-would-create-space-national-quard/

State Department framework seeks to coordinate its space policy activities

The State Department published May 30 the Strategic Framework for Space Policy, a first-of-its-kind document that outlines the efforts by the department to use diplomacy to advance space policy goals and also use space to advance broader diplomatic aims. #SpacePolicy

Link: https://spacenews.com/state-department-framework-seeks-to-coordinate-its-space-policy-activities/



































TECHNOLOGY

U.S. Government Accountability Office (GAO): GPS Modernization

GAO is making two recommendations to DOD: (1) assess the number of satellites necessary to meet operational needs, and (2) either develop a sound business case for the M-code capable Increment 2 handheld, or do not initiate the effort. **#GPS #DoD**

Link: https://news.satnews.com/2023/06/05/u-s-government-accountability-office-gao-gps-modernization/

First in space: SpaceX and NASA launch satellite that hackers will attempt to infiltrate during DEF CON

For the first time ever, researchers will be able to test the security of a satellite on-orbit at this year's Hack-A-Sat contest at DEF CON. #Moonlighter

Link: https://cyberscoop.com/moonlighter-hack-a-sat-defcon/

INTEGRASYS Develops MOBISAT and Successfully Completes ESA's ARTES Programme Project

MOBISAT represents the first Ground Segment software to enable the first fully automated commissioning of SATCOM Onthe-Move/SATCOM Onthe-Pause (SOTM/SOTP) mechanically steerable antennas. **#ARTES**

Link: https://www.satcom.digital/news/integrasys-develops-mobisat-and-successfully-completes-esas-artes-programme-project

A simulation perspective on supporting GPS modernization

Interview of Roger Hart about the reasons and how to modernize GPS and GNSS. **#GPS #GNSS** Link: https://www.gpsworld.com/a-simulation-perspective-on-supporting-gps-modernization/

The quantum communication network in Italy is closer – Technologies

The project is at the starting line Quid (Quantum Italy Deployment) for the realization of future quantum communication network in Italy: will be part of a wider European network and will allow you to protect sensitive data from cyber threats Of critical infrastructure, guaranteeing a level of security not achievable with conventional technologies. **#QUID #Quantum Link:** https://news.italy24.press/local/607914.html

Quantum encryption seeks its first — and final — frontier

Satellites are built to last. That might make them the first major venue for post-quantum encryption. **#Quantum Link**: https://techmonitor.ai/hardware/quantum/quantum-encryption-seeks-its-first-and-final-frontier

Expand National Quantum Initiative to keep up with China, say officials, experts, legislators

The US and China are neck and neck in quantum technology, witnesses warned the House Science Committee today. **#Quantum #US**

Link: https://breakingdefense.com/2023/06/expand-national-quantum-initiative-to-keep-up-with-china-say-officials-experts-legislators/

GPS 3 satellite delivered by Lockheed Martin

The U.S. Space Force has received the 10th and final GPS 3 satellite manufactured by Lockheed Martin under a contract dating back to 2008. **#Satellite #GPS**

Link: https://www.linksystems-uk.com/gps-3-satellite-delivered-by-lockheed-martin/

C-17 Tests Magnetic Navigation System That Works When GPS Doesn't

An Air Force C-17 transport jet recently tested a new technology that could help aviators stay on course even if the satellite-based Global Positioning System (GPS) that much of modern-day aviation relies on is compromised. **#GPS**Link: https://www.airandspaceforces.com/air-force-magnetic-navigation-gps/

First Signal Simulator for First Dedicated LEO PNT Satellite Constellation Will Be Demonstrated at 2023 Joint Navigation Conference

Spirent will demonstrate the first fully-certified Xona satellite constellation simulator, SimXona, at the 2023 Joint Navigation Conference (JNC), June 12-15, 2023, in San Diego, CA. **#PNT**

Link: https://www.businesswire.com/news/home/20230608005711/en/First-Signal-Simulator-for-First-Dedicated-LEO-PNT-Satellite-Constellation-Will-Be-Demonstrated-at-2023-Joint-Navigation-Conference

Hexagon | NovAtel receivers successfully track Xona PULSAR LEO signal generated by Spirent simulator

This test shows that NovAtel GNSS receivers can track a Spirent simulated L-band signal identical to the PULSAR signal broadcast by Xona's low Earth orbit (LEO) satellites. The Xona LEO signals will complement GNSS, improving resiliency, security and precision for positioning, navigation and timing. **#PNT #GNSS**

Link: https://novatel.com/about-us/news-releases/hexagon-novatel-receivers-successfully-track-xona-pulsar-leo-signal-generated-by-spirent-simulator























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Space Force sees further delays to 'troubled' GPS ground segment

The U.S. Space Force now expects Raytheon to deliver the next phase of its GPS ground system overhaul at the end of this year — nine months later than the program's previous schedule estimate. **#GPS**



Link: https://www.defensenews.com/battlefield-tech/space/2023/06/09/space-force-sees-further-delays-to-troubled-aps-ground-segment/

TRAINING & EDUCATION

MEDIA INVITATION - THALES AT PARIS AIR SHOW 2023: TRUSTED TECHNOLOGIES FOR SAFER SKIES

Thales is pleased to welcome you to Paris Air Show 2023, where we are presenting the latest technologies for safer skies. Celebrating 130 years of innovation, the Group will display the best of its advances in Defense, Space and Avionics. **#Thales**



Link: https://www.thalesgroup.com/fr/monde/groupe/press-release/media-invitation-thales-paris-air-show-2023-trusted-technologies-safer

ISA OT Cybersecurity Summit concludes as focus shifts to cybersecurity training

The two-day event focused on cybersecurity training, featured a welcome from Aberdeen Lord Provost Dr David Cameron, and addresses from keynote speakers, including Cheri Caddy, deputy director at the US Office of the National Cyber Director and Megan Samford, vice president and chief product security officer for energy management at Schneider Electric. #Scotland #ISA



Link: https://industrialcyber.co/training-development/isa-ot-cybersecurity-summit-concludes-as-focus-shifts-to-cybersecurity-training/

Outer Space Security Conference 2023

The Outer Space Security Conference is a flagship annual UNIDIR event that provides a unique forum for the diplomatic community to jointly consider challenges related to security in outer space and to exchange ideas regarding solutions. It's an hybrid event on the September 13th and 14th 2023. **#OuterSpace #UNIDIR**



Link: https://www.unidir.org/events/outer-space-security-conference-2023

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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