



Cyber Center of Excellence Unclassified Threat Read Book 16-30 September 2024

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Table of Contents

Cyber

- Chinese Spies Built Massive Botnet of IoT Devices to Target US, Taiwan Military 18 SEP
- 2. FBI disrupts Chinese cyber operation targeting critical infrastructure in the US 18 SEP
- Hezbollah's Exploding Pagers Could Be As Monumental A Cyber-Espionage Operation As Stuxnet - 17 SEP
- North Korean Hackers Lure Critical Infrastructure Employees With Fake Jobs 18 SEP
- Apple Patches Major Security Flaws With iOS 18 Refresh 16 SEP

Electronic Warfare

- Navy researchers ask industry for uncrewed electronic warfare (EW) to disrupt enemy RF communications- 18 SEP
- NAVFEST: As Real as it Gets 17 SEP
- NAVFEST: 20 Years of Cost -Effective GPS NAVWAR Testing 16 SEP

Information Advantage

- Al-generated election disinformation can subtly influence voters, deepen political divide

 18 SEP
- Russia goes all-out with covert disinformation aimed at Harris, Microsoft report says 17
 SEP
- 3. The Al Theat Deepfake or Deep Fake? Unraveling the True Security Risk 17 SEP
- 4. Russian election interference efforts focus on the Harris-Walz campaign 17 SEP
- 5. <u>Trust but verif-AI: Army will let genAI draft acquisition documents, with guardrails</u> 16 SEP

Signal

- Post-Quantum Cryptography: The Future of Secure Communications and the Role of Standard - 18 SEP
- RCS Encryption Between Android and iPhones is Hopefully Next 18 SEP
- 3. A lab in the US unveils new tools to withstand encryption-breaking quantum 12 SEP
- Link 16 Coverage From Space, Laser Communications Relays Make Major Advances -17 SEP

Items of Interest

- Lot full? In an increasingly crowded orbit, MITRE studies how many LEO sats are too many - 18 SEP
- 2. <u>China's "70% Grip" On Rare Earth Material Threatens Disruption Of Military Supplies, Undercuts Projects From U.S. To Japan</u> 18 SEP
- North Korea launches ballistic missiles for second time in a week 17 SEP
- US moves soldiers to Alaska island amid Russian military activity increase in the area -17 SEP

Israel-Hamas Conflict

- 1. <u>Institute for The Study of War Iran Update</u>
- 2. How Israel Turned Hezbollah's Pagers Into Exploding Trojan Horses 19 SEP





- 3. Exploding Pagers and the Risk of a Spreading War 19 SEP
- 4. The Day Thousands of Pagers Exploded in Lebanon 18 SEP
- More Electronics Explode In Lebanon As Israel Declares 'New Phase' Of War 18 SEP
- 6. <u>Taiwan Or Hungary: Where Did Israeli Spy Agency Sabotage The Pagers That Are Exploding In Lebanon?</u> 18 SEP
- 7. <u>Lebanon Blasts: Why Israeli Mossad Could Have Easily Sabotaged The Pagers Both In Taiwan & Hungary</u> 18 SEP
- 8. Exploding Hezbollah pagers: How did it happen? 18 SEP
- Israel has a long history of pulling off complex attacks like the exploding pagers. 17
- 10. <u>Lebanon: What we know about the Hezbollah pager attack</u> 18 SEP)

Russia-Ukraine Conflict

- 1. Institute for The Study of War
- 2. <u>Akin To A 'Nuclear Blast' Ukraine's Sensational Strike On Russia Stuns Kremlin;</u> Kalashnikov Unveils Ultimate Tank-Killer UAV 20 SEP
- 3. Ukraine drone attack in Russia sparks fire 18 SEP
- 4. <u>Ukraine May Have A New Strategy In Russia's Kursk Oblast—Move Fast And Surround Thousands Of Russian Troops</u> 16 SEP
- 5. 38,000 Russian Troops Committed To Kursk Counteroffensive: Report 16 SEP





Cyber

 Chinese Spies Built Massive Botnet of IoT Devices to Target US, Taiwan Military (Security Week, 18 SEP, Ryan Naraine)

Researchers at Lumen Technologies have eyes on a massive, multi-tiered botnet of hijacked IoT devices being commandeered by a Chinese state-sponsored espionage hacking operation.

2. FBI disrupts Chinese cyber operation targeting critical infrastructure in the US (AP News, 18 SEP, Eric Tucker)

The FBI has disrupted a group of Chinese hackers who were working at the direction of the Chinese government to infiltrate critical infrastructure in the U.S. and other countries and to spy on and steal data from universities, government agencies and others, Director Chris Wray said Wednesday.

3. North Korean Hackers Lure Critical Infrastructure Employees With Fake Jobs (Security Week, 18 SEP, Eduard Kovacs)

A North Korean group tracked as UNC2970 has been spotted trying to deliver new malware to people in the aerospace and energy industries.

4. <u>Hezbollah's Exploding Pagers Could Be As Monumental A Cyber-Espionage Operation As Stuxnet</u> (TWZ, 17 SEP, Thomas Newdick & Tyler Rogoway)

We live surrounded by networked devices equipped with packs full of potential energy, possibly offering adversaries an unprecedented vector for kinetic attacks.

5. <u>Apple Patches Major Security Flaws With iOS 18 Refresh</u> (Security Week, 16 SEP, Ryan Naraine)

Apple warns that attackers can use Siri to access sensitive user data, control nearby devices, or view recent photos without authentication.





Electronic Warfare

1. Navy researchers ask industry for uncrewed electronic warfare (EW) to disrupt enemy RF communications (Military & Eerospace Electronics, 18 SEP, John Keller)

The goal is to create chaos and confusion in the RF spectrum by targeting adversary situational awareness, command and control, and decision-making.

2. NAVFEST: As Real as it Gets (Inside GNSS, 17 SEP, Renee Knight)

During NAVFEST, participants can put their equipment through real-world spoofing/jamming scenarios, and use the data collected to improve current and future solutions. We recently spoke to a few attendees as well as the company behind the ground truth infrastructure about the event and why it's so important.

3. NAVFEST: 20 Years of Cost-Effective GPS NAVWAR Testing (Inside GNSS, 16 SEP)

Held on White Sands Missile Range in south-central New Mexico, the 746th Test Squadron creates GPS EW scenarios during the cost-sharing event, allowing participants to test navigation systems as well as train personnel at a reduced cost.





Information Advantage

 Al-generated election disinformation can subtly influence voters, deepen political divide (UPI, 18 SEP, Joe Fisher)

Experts warn that false images, video and audio created by artificial intelligence to spread disinformation about the 2024 elections can subtly influence voters and worsen the nation's political divide.

2. Russia goes all-out with covert disinformation aimed at Harris, Microsoft report says (AP News, 17 SEP, Ali Swenson)

The video was seen millions of times across social media but some viewers were suspicious: It featured a young Black woman who claimed Vice President Kamala Harris left her paralyzed in a hit-and-run accident in San Francisco 13 years ago.

3. <u>The Al Threat: Deepfake or Deep Fake? Unraveling the True Security Risks</u> (Security Week, 17 SEP, Kevin Townsend)

When it comes to adversarial use of AI, the real question is whether the AI threat is a deep fake, or whether the deepfake is the AI threat.

4. Russian election interference efforts focus on the Harris-Walz campaign (Microsoft, 17 SEP, Clint Watts)

Russia and Iran have both undertaken cyber influence operations headed into the 2024 presidential election. In our last report, published on August 8, we detailed how Iranian cyber-enabled influence operations sought to undermine the Republican campaign through targeted hack-and-leak operations, covert social media personas, and imposter US news sites. In the past two months, Microsoft has observed a notable shift in Russian influence operations tactics reflecting the changing U.S. political environment. Specifically, we have observed Russia pivot towards targeting the Harris-Walz campaign, with actors disseminating fabricated videos designed to sow discord and spread disinformation about the new Democratic nominee Vice President Harris.

5. <u>Trust but verif-Al: Army will let genAl draft acquisition documents, with guardrails (Breaking Defense, 16 SEP, Sydney J. Freedberg JR)</u>

A user can't just say "write me a Request For Proposals" and get the AI to blurt out a draft, explained Ask Sage founder Nic Chaillan. Instead, the software will guide them through the process step by step – and use multiple AI models to check each others' work.





Signal

1. <u>Post-Quantum Cryptography: The Future of Secure Communications and the Role of Standard</u> (Security Boulevard, 18 SEP, Ganesh Gopalan)

Digital security has long relied on cryptographic systems that use complex mathematical problems (also known as algorithms) to keep sensitive data and transactions safe from unauthorized access. These algorithms were designed to be nearly impossible for classical computers to solve, ensuring robust protection and encryption for online activities like email communication, secure banking, and more. However, recent advancements in quantum computing are challenging this security foundation. Unlike classical computers, which process data in binary form (0s and 1s), quantum computers use qubits that can exist in multiple states simultaneously, a property known as superposition. This capability allows quantum computers to solve complex algorithms much faster, potentially breaking the cryptographic systems that have protected data and internet transactions for decades.

2. RCS Encryption Between Android and iPhones is Hopefully Next (Droidlife, 18 SEP, Kellen)

The big news of the week for Android users who want to send messages to their friends with iPhones involves the big update to iOS 18 that was just released by Apple. With this update, iPhone owners can send RCS messages over to Android users, meaning big updates to the messaging experience between the two.

3. A lab in the US unveils new tools to withstand encryption-breaking quantum (Big Think, 12 SEP, Spencer Feingold and Filipe Beato)

Earlier this month, a government lab in the United States released three highly anticipated encryption algorithms that were built to withstand cyberattacks from quantum computers.

4. <u>Link 16 Coverage From Space, Laser Communications Relays Make</u>
<u>Major Advances</u> (TWZ, 17 SEP, Thomas Newdick)

The Space Development Agency is seeing major promise during testing of new low-cost Link 16 datalink, laser communications, and missile tracking satellites.





Items of Interest

1. <u>Lot full? In an increasingly crowded orbit, MITRE studies how many LEO sats are too many</u> (Breaking Defense, 18 SEP, Theresa Hitchens)

The proposed framework is based on adapting the risk-based approach the international air traffic control system uses to manage airspace to prevent planes from colliding, said Kevin Toner, vice president of MITRE's Center for Government Effectiveness and Modernization.

2. China's "70% Grip" On Rare Earth Material Threatens Disruption Of Military Supplies, Undercuts Projects From U.S. To Japan (The EurAsian Times, 18 SEP, Ashish Dangwal)

The US and its allies are grappling with significant challenges in their efforts to reduce dependency on China's rare earths monopoly. Despite substantial investments and ambitious projects, China's strong grip on this critical market remains a formidable obstacle.

3. North Korea launches ballistic missiles for second time in a week (UPI, 17 SEP, Thomas Maresca)

North Korea fired several ballistic missiles on Wednesday, South Korea's military said, the isolated regime's second launch in less than a week as tensions mount on the Korean Peninsula.

4. <u>US moves soldiers to Alaska island amid Russian military activity increase in the area</u> (AP News, 17 SEP, Mark Thiessen)

The U.S. military has moved about 130 soldiers along with mobile rocket launchers to a desolate island in the Aleutian chain of western Alaska amid a recent increase in Russian military planes and vessels approaching American territory.





Israel-Hamas Conflict

1. Institute for The Study of War Iran Update:

The Iran Update provides insights into Iranian and Iranian-sponsored activities abroad that undermine regional stability and threaten US forces and interests. It also covers events and trends that affect the stability and decision-making of the Iranian regime.

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Iran Update, September 30, 2024
Iran Update, September 29, 2024
Iran Update, September 28, 2024
Iran Update, September 27, 2024
Iran Update, September 26, 2024
Iran Update, September 25, 2024
Iran Update, September 24, 2024
Iran Update, September 23, 2024
Iran Update, September 22, 2024
Iran Update, September 22, 2024
Iran Update, September 21, 2024
Iran Update, September 20, 2024
Iran Update, September 19, 2024
Iran Update, September 18, 2024
Iran Update, September 17, 2024
Iran Update, September 17, 2024
Iran Update, September 16, 2024
Iran Update, September 16, 2024
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2. <u>How Israel Turned Hezbollah's Pagers Into Exploding Trojan Horses</u> (TWZ, 19 SEP, Thomas Newdick)

It's becoming clear that Israel executed a highly complex, years-long espionage operation unlike any we have seen before to weaponize Hezbollah's communications against them.

3. Exploding Pagers and the Risk of a Spreading War (The Journal, 19 SEP, Kate Linebaugh & Michael Amon)

On Tuesday afternoon, thousands of pagers issued to Hezbollah operatives in Lebanon exploded at the same time, killing 12 people and injuring more than 2,800. The next day, walkie-talkies detonated in a similar way. Michael Amon reports on one of Israel's most ambitious covert operations and what the attacks could mean for a broader war.

4. <u>The Day Thousands of Pagers Exploded in Lebon</u> (The Daily, 18 SEP, Sabrina Tavernise & Patrick Kingsley)

Hundreds of electronic devices carried by Hezbollah members exploded simultaneously across Lebanon on Tuesday and Wednesday in an audacious plot by Israel.

5. More Electronics Explode In Lebanon As Israel Declares 'New Phase' Of War (TWZ, 18 SEP, Thoas Newdick)

The detonation of thousands of devices along with other developments may be a precursor to a full-on Israeli military operation against Hezbollah in Lebanon.

6. <u>Taiwan Or Hungary: Where Did Israeli Spy Agency Sabotage The Pagers That Are Exploding In Lebanon?</u> (The EurAsian Times, 18 SEP, Prakash Nanda)





More and more experts now seem to be ruling out the possibility of the pager explosions that killed at least 12 people and wounded nearly 3000 Hezbollah militants and sympathizers on September 17 as an act of cyber-attacks. They are more inclined to support the theory that the blasts were an Israeli operation by hiding explosive material within a new batch of about 5000 Taiwanese-made pagers that were "smuggled" into Lebanon by the Iran-backed extremist outfit.

7. <u>Lebanon Blasts: Why Israeli Mossad Could Have Easily Sabotaged</u> <u>The Pagers Both In Taiwan & Hungary</u> (The EurAsian Times, 18 SEP, Prakash Nanda)

More and more experts now seem to be ruling out the possibility of the pager explosions that killed at least 12 people and wounded nearly 3000 Hezbollah militants and sympathizers on September 17 as an act of cyber-attacks. They are more inclined to support the theory that the blasts were an Israeli operation by hiding explosive material within a new batch of about 5000 Taiwanese-made pagers that were "smuggled" into Lebanon by the Iran-backed extremist outfit.

8. <u>Exploding Hezbollah pagers: How did it happen?</u> (DW, 18 SEP, Matthew Ward Agius)

Lithium-ion batteries can catch fire or explode, but in the attack on pagers in Lebanon, the devices are more likely to have been hacked.

9. <u>Israel has a long history of pulling off complex attacks like the exploding pagers.</u> (AP News, 17 SEP)

Hezbollah and the Lebanese government were quick to blame Israel for the nearly simultaneous detonation of hundreds of pagers used by the militant group's members in an attack Tuesday that killed at least nine people and wounded nearly 3,000 others, according to officials.

10. <u>Lebanon: What we know about the Hezbollah pager attack</u> (DW, 18 SEP)

At least nine people were killed and thousands injured when pagers belonging to Hezbollah members exploded across Lebanon. The militant group has vowed to "continue" the fight for Gaza and "punish" Israel.

11.





Russia-Ukraine Conflict

1. Institute for The Study of War

Russian Offensive Campaign Assessment, September 29, 2024
Russian Offensive Campaign Assessment, September 28, 2024
Russian Offensive Campaign Assessment, September 27, 2024
Russian Offensive Campaign Assessment, September 27, 2024
Russian Offensive Campaign Assessment, September 26, 2024
Russian Offensive Campaign Assessment, September 25, 2024
Russian Offensive Campaign Assessment, September 24, 2024
Russian Offensive Campaign Assessment, September 23, 2024
Russian Offensive Campaign Assessment, September 22, 2024
Russian Offensive Campaign Assessment, September 21, 2024
Russian Offensive Campaign Assessment, September 20, 2024
Russian Offensive Campaign Assessment, September 19, 2024
Russian Offensive Campaign Assessment, September 18, 2024
Russian Offensive Campaign Assessment, September 17, 2024
Russian Offensive Campaign Assessment, September 17, 2024
Russian Offensive Campaign Assessment, September 17, 2024
Russian Offensive Campaign Assessment, September 16, 2024

2. <u>Akin To A 'Nuclear Blast' — Ukraine's Sensational Strike On Russia Stuns Kremlin; Kalashnikov Unveils Ultimate Tank-Killer UAV</u> (The EurAsian Times, 20 SEP, Vijainder K Thakur)

On September 18, in a sensational strike that astounded the world, around 100 Ukrainian long-range drones flew 500 km through Russian airspace and struck a large ammunition dump in Toropets, a town in the Tver region of western Russia.

3. <u>Ukraine drone attack in Russia sparks fire</u> (BBC, 18 SEP, Jaroslav Lukiv & James Waterhouse)

Thirteen people have been injured in Russia's Tver region after a large Ukrainian drone attack sparked a fire there, according to the country's health ministry.

4. <u>Ukraine May Have A New Strategy In Russia's Kursk Oblast—Move Fast And Surround Thousands Of Russian Troops</u> (Forbes, 16 SEP, David Axe)

A possible encirclement of Russian forces is developing in Kursk.

5. <u>38,000 Russian Troops Committed To Kursk Counteroffensive:</u>
Report (TWZ, 16 SEP, Thomas Newdick)

Worryingly for Ukraine, there are few signs that the incursion is seeing Russian troops redeployed from the eastern front lines.