DRONE SEC

NOTIFY ISSUE #73 (PUBLIC)

WEEKLY THREAT INTELLIGENCE

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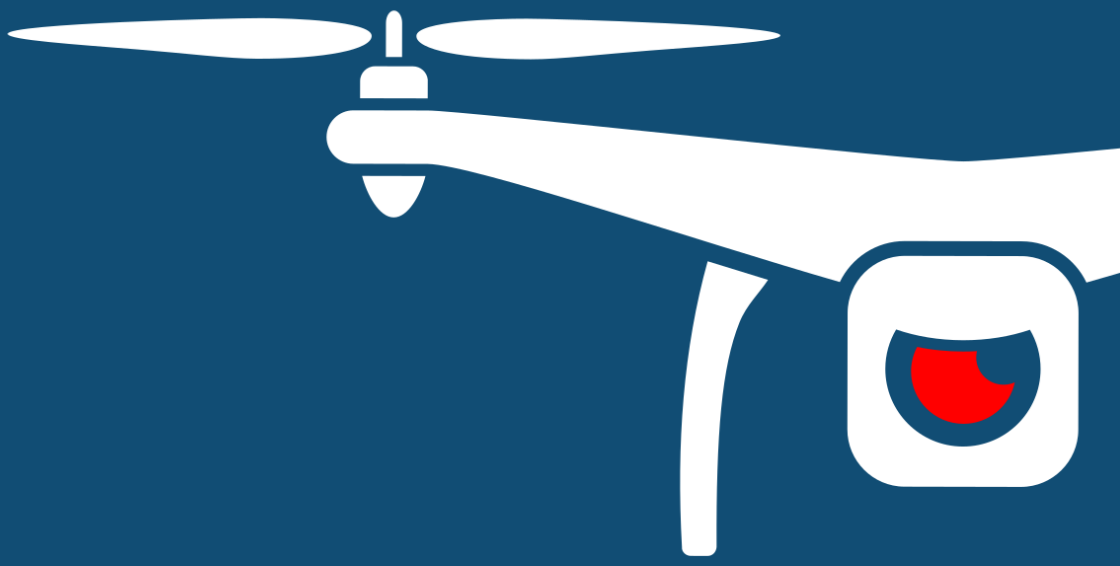

UAS HACKING, HARDENING AND DEFENCE

UAS PENETRATION TESTING
COUNTER-UAS CONSULTING
FORENSICS & INCIDENT RESPONSE
AERIAL THREAT SIMULATIONS
DRONE SECURITY MANAGEMENT PROGRAMS

DOCUMENT **CONTROL**

PREPARATION

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Threat Intelligence Team

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EXECUTIVE SUMMARY

Thank you to everyone that attended the third DroneSec Global Drone Security Network! It was two terrific days of speakers from a variety of backgrounds related to drone security. We are grateful to the speakers (especially those returning) and viewers who joined in and made the event a great one. If you did attend the event, we would love to hear your feedback on the specific talks and speakers:

Quick Survey Form

All the talks have now been individually separated from the livestream and are available to watch:

Watch Now

As we enter a new month, another roll-up looks at the statistics observed by our intel team.

In Israel, police deploy drones to drop tear-gas canisters on Palestinian protesters. Just over the border, an Israeli drone was captured by adversary forces for analysis.

At the CanSecWest conference, researchers demonstrated an exploit of a Tesla vehicle via remote delivery of the payload by a drone with an offensive Wi-Fi dongle capability. Drones have been loaded with wireless enumeration devices before, but this may be one of the first cases of an exploit delivered remotely, to a remote system (vehicle) demonstrating the power of a transferrable platform.

In Japan, a number of firms have halted the use of Chinese-made drones over cyber-security, data security and privacy concerns. It's a move already undertaken by a number of Western countries, with an uptick in risk assessments (such as Blue sUAS) taking place to assess the security associated with friendly drone operations.

One of those firms, Skydio, has also just released the X2 drone with a number of interesting features such as strobe/IR lighting and encryption for the firmware, hard drive, data-link and controller password protection. This signals a large investment in cyber-security for drones used by both critical infrastructure and defense users where digital security extends to OT systems.

Want to find out more about the system that we source this information from, or get in touch? Feel free to drop us an email at info@dronesec.com to see how we can help.

- *Mike Monnik (Founder & CTO)*

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1. THREAT INTELLIGENCE

Why am I receiving this report later than usual?

DroneSec has made Notify PRIVATE available to all subscribers for a subscription fee of $99 AUD per year. PRIVATE, along with being released earlier, contains the following benefits and can be purchased below:

A 'light' threat intel subscription for customers who want the latest UAV threat intel weekly newsletter without having to be a Notify Platform user. It also includes the following:

- Receive PRIVATE issues up to two days earlier than PUBLIC issues
- Access to featured reports and analysis by our UAV Threat Intel Analysts
- Access to Monthly Roll-Up's with data-driven statistics and trends
- Access to the DroneSec State of Drone Security Report
- Exclusive discounts on Training courses and Software

Where is the regular Monthly roll-up?

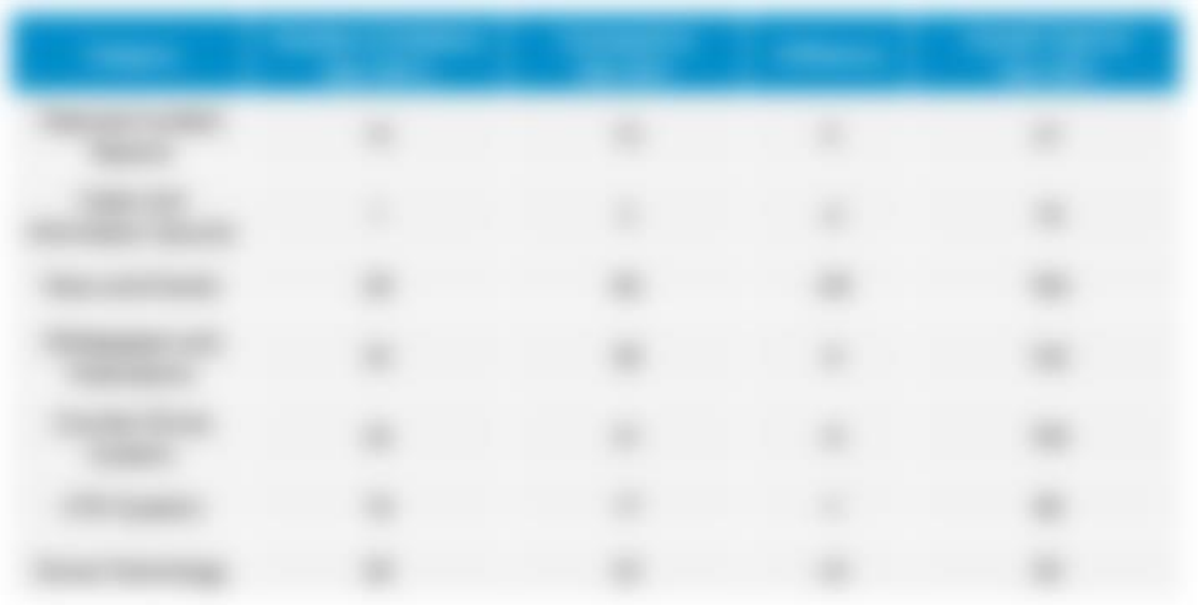
The monthly roll-up is now part of our PRIVATE release. At the start of each month, all analytics and statistics are provided in a reflection of collected data from the platform.

1.1. MONTHLY ROLL-UP

As we enter a new month, Notify features an aggregated summary of drone incidents, types and affected sectors in 2021 and collated numerical data on drone incidents. Extended analytics with full database-searchable functionality is only offered to our paid members via the DroneSec Notify Platform.

Below you will find some handy statistics to measure correlation, location and systems involved over data we have collected for April 2021. Anything we have missed? Anything you would like to see? Drop us a note at info@dronesec.com to get in touch with the team.

Figure 1 - Can't see this? Sign up for Notify PRIVATE here to get monthly roll ups, featured reports and more



[redacted]

[redacted]

[redacted]

1.2. FEATURED ADVISORIES

The prioritisation table and its dependencies are explained in Appendix A, and relate to how we filter, analyse and visualise the intelligence we collect.

Figure 2 - Can't see this? Sign up for Notify PRIVATE here to get monthly roll ups, featured reports and more

[redacted]

[redacted]

[redacted]

[redacted]

1.3. NON-CONFLICT NEWS AND EVENTS (P2)

Drone crashes into bald eagle nest in East Bay park

https://www.mercurynews.com/2021/04/27/bald-eagles-may-have-abandoned-nest-after-drone-crash-in-east-bay-park/

Police in Kakanui, New Zealand, issue warning on drone use over private properties

https://www.odt.co.nz/star-news/star-districts/star-south-canterbury/warning-over-drone-use-kakanui

1.4. CONFLICT NEWS AND EVENTS (P3)

Israeli police deploy drones to drop tear gas on Palestinian protesters

https://english.alaraby.co.uk/english/news/2021/4/28/israel-deploys-tear-gas-drones-against-palestinian-protests

Hezbollah drone downed upon breaching Israeli airspace

https://www.timesofisrael.com/idf-hezbollah-drone-downed-after-breaching-israeli-airspace/

Palestinian resistance seizes downed Israeli army drone in northern Gaza

https://www.aa.com.tr/en/middle-east/israeli-army-drone-falls-in-northern-gaza/2223934

Saudi-led coalition shoots down Houthi drones targeting southern Saudi cities

https://www.saudigazette.com.sa/article/606270/SAUDI-ARABIA/Coalition-shoots-down-Houthi-drone-targeting-southern-Saudi-cities

1.5. CYBER AND DATA SECURITY (P3)

Tesla Model X hacked by drone via Wi-Fi (CanSecWest 2021)

https://www.forbes.com/sites/thomasbrewster/2021/04/29/watch-a-tesla-have-its-doors-hacked-open-by-a-drone/?sh=13f71d651a2b

Japanese firms to halt use of Chinese-made drones over security concerns

https://www.uasvision.com/2021/05/04/japanese-firms-drop-chinese-drones-over-security-concerns/

Skydio releases the X2 drone with a variety of encrypted architecture functions

https://www.skydio.com/blog/skydio-x2-now-available

1.6. WHITEPAPERS, PUBLICATIONS & REGULATIONS (P3)

Australias CASA to pilot streamlined drone flight approval process

https://www.unmannedairspace.info/news-first/australias-casa-to-pilot-streamlined-drone-flight-approval-process-at-three-airports/

USA FAA extends safety reporting programme to include unmanned systems

https://www.unmannedairspace.info/latest-news-and-information/faa-extends-safety-reporting-programme-to-include-events-relating-to-unmanned-systems/

USA Customs and Border Protection taking more interest in anti-drone systems (Commentary)

https://theintercept.com/2021/05/03/cbp-border-drones-military/

How Israel and the US are taking Iran's drone threat seriously (Commentary)

https://www.jpost.com/middle-east/israel-and-the-us-are-taking-irans-drone-threat-seriously-666546

Drone Swarms: The Good, the Bad, and the Beautiful (Commentary)

https://dronelife.com/2021/05/02/drone-swarms-the-good-the-bad-and-the-beautiful/

Building a drone safety management system (Commentary)

https://dronelife.com/2021/05/03/building-a-drone-safety-management-system-the-four-pillars/

US Navy destroys target vessel with drone swarm (Commentary)

https://www-forbes-com.cdn.ampproject.org/c/s/www.forbes.com/sites/davidhambling/2021/04/30/us-navy-destroys-target-with-drone-swarm---and-sends-a-message-to-china/amp/

Why the FCC keeps shooting down requests from CUAS companies (Commentary)

https://spectrum.ieee.org/tech-talk/aerospace/military/fcc-shoot-down-drones

1.7. COUNTER-DRONE SYSTEMS (P4)

US military testing microware counter drone system called THOR

https://www.popsci.com/story/technology/air-force-anti-drone-technology-thor/

1.8. SOCIALS (P5)

How NASA is driving innovation in drone technology (Podcast)

https://www.freightwaves.com/news/dronewaves-exception-management-a-game-changer-for-drone-operations-nasa-official-says

Saint Petersburg hosts International Drone Festival (Video)

https://www.kenoshanews.com/news/world/saint-petersburg-hosts-mesmerizing-international-drone-festival/video_e0110b4d-39d3-5dee-8555-afe9a4a27df0.html

1.9. INFORMATIONAL (P5)

Police arrests two after reports of high-powered laser aimed at airplanes, seizes drone and drugs

https://atlantic.ctvnews.ca/n-b-rcmp-arrest-two-people-seize-drone-and-drugs-following-reports-of-high-powered-laser-aimed-at-airplanes-1.5410231

Burlington, Massachusetts police using drones for emergency situations

https://whdh.com/news/mass-police-using-drones-for-emergency-situations/

Kuala Lumpur police use drones to monitor safe-distancing compliance during bazaars

https://www.thestar.com.my/news/nation/2021/05/01/cops-use-drones-to-monitor-sops-at-klang-valley-bazaars

Police track down Nottinghamshire burglary suspect with the help of drones

https://www.worksopguardian.co.uk/news/crime/police-dog-and-drone-team-up-to-track-down-nottinghamshire-burglary-suspect-3222596

Drones drop explosives to help with snow clearance in Austria

https://translate.google.com/translate?sl=de&tl=en&u=https://www.sn.at/salzburg/chronik/schneeraeumung-auf-grossglocknerstrasse-high-tech-drohnen-werfen-sprengsaetze-ab-103116208

North Korea finishes testing of its unmanned attack and reconnaissance drones

https://www.thedefensepost.com/2021/04/28/n-korea-reconnaissance-attack-drone-tests/

1.10. UTM SYSTEMS (P5)

EHang partners with Zaragoza, Spain to build UAM hub

https://www.urbanairmobilitynews.com/air-taxis/ehang-partners-with-zaragoza-in-spain-to-construct-aerial-transportation-hub-and-further-develop-uam-pilot-city-initiative/

Experts speak on development of UAM ecosystems (Webinar)

https://www.unmannedairspace.info/latest-news-and-information/drone-uam-ecosystem-governance-must-be-developed-around-services-welcomed-by-communities-third-civataglobal-webinar/

Aeroscript to start drone integration trials in St Petersburg airspace

https://www.unmannedairspace.info/uncategorized/utm-company-aeroscript-to-start-drone-integration-trials-in-st-petersburg-airspace/

1.11. DRONE TECHNOLOGY (P5)

Anti-Armor suicide drone to be fielded by US Special Ops Command

https://www.autoevolution.com/news/anti-armor-suicide-drone-to-be-fielded-by-us-special-ops-command-160455.html

Parrot announces partnership with Rapid Imaging to bring geospatial AR solutions to drone users

https://www.directionsmag.com/pressrelease/10710

For Appendix items please click this link.