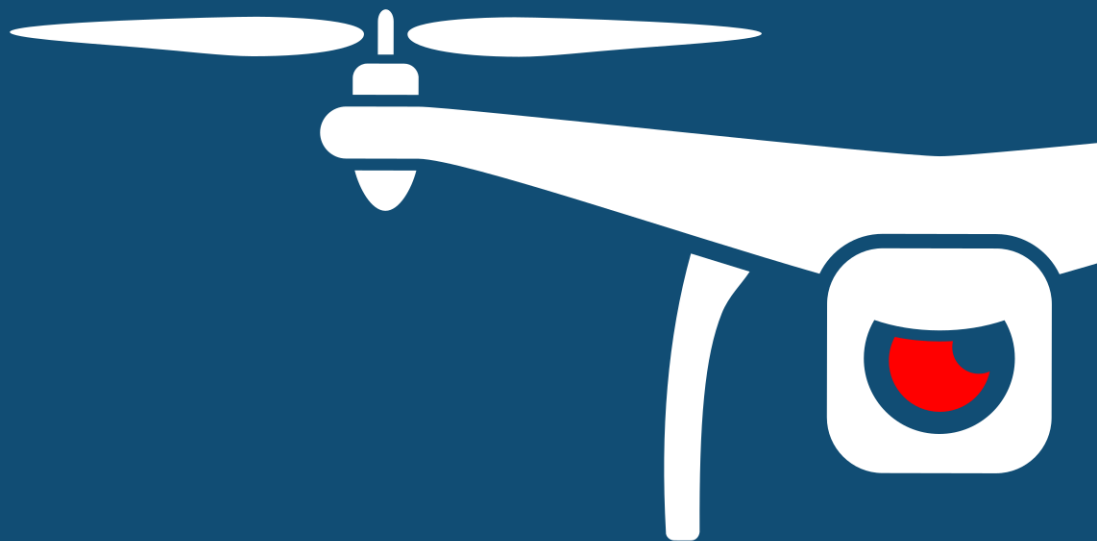




NOTIFY ISSUE #103 (PUBLIC)

WEEKLY THREAT INTELLIGENCE

02 Dec 2021 | v1.0 RELEASE



UAS HACKING, HARDENING AND DEFENCE

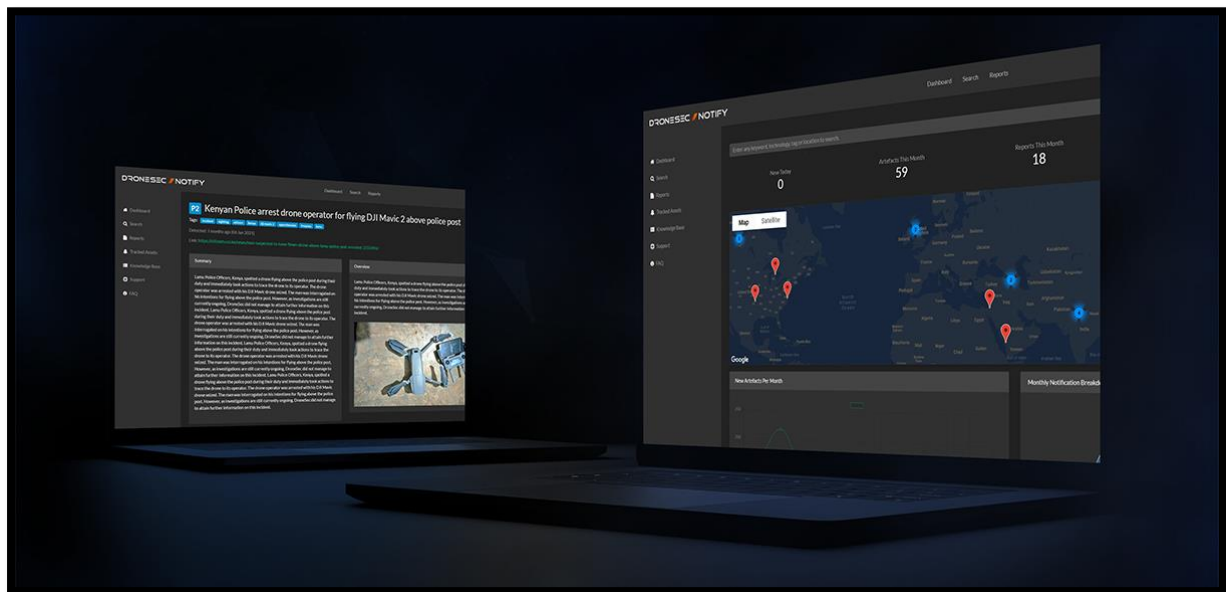
DOCUMENT CONTROL

PREPARATION

DroneSec (dronesec.com)

Threat Intelligence Team

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This document is a summary of real-time incidents released within the [Notify UAS Threat Intelligence Platform](#). If you have been forwarded this document, subscribe for future updates: [here](#).

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1. THREAT INTELLIGENCE

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 November 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.

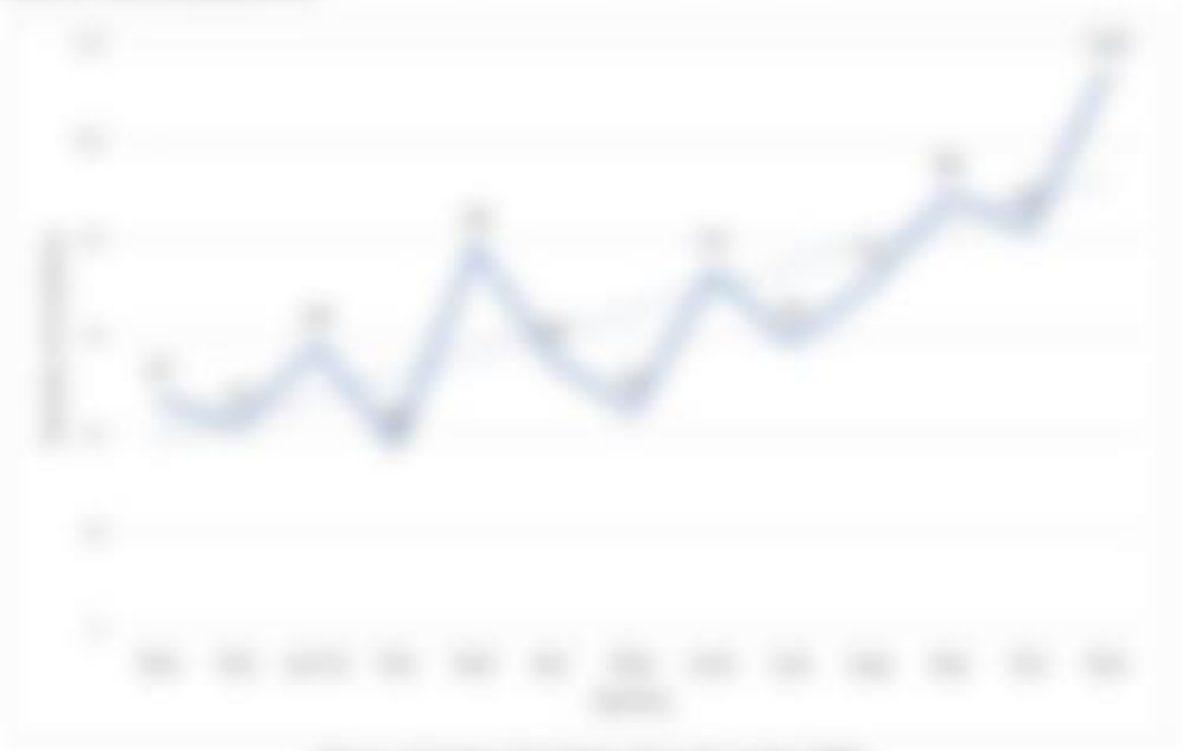


Figure 1: Can't see this? Contact us to sign up for Notify PRIVATE

	2019	2020	2021	2022
Revenue	100	100	100	100
Operating Expenses	20	20	20	20
Operating Income	80	80	80	80
Interest Expense	10	10	10	10
Income Before Taxes	70	70	70	70
Taxes	10	10	10	10
Net Income	60	60	60	60

Figure 2: Can't see this? Contact us to sign up for Notify PRIVATE

DRONESEC is a leading provider of drone threat intelligence and security solutions. Our mission is to help organizations protect themselves from drone threats by providing them with the most accurate and up-to-date information available. We offer a variety of services, including drone threat assessments, drone threat monitoring, and drone threat mitigation. Our services are designed to help organizations identify and respond to drone threats in a timely and effective manner. We are committed to providing our clients with the highest quality of service and the most comprehensive range of drone threat intelligence and security solutions.



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Figure 3: Can't see this? Contact us to sign up for Notify PRIVATE

[Redacted content]

Category	Severity	Source	Target	Method	Impact	Notes
Malware	High	Internal	Internal	Internal	Internal	Internal
Malware	High	Internal	Internal	Internal	Internal	Internal
Malware	High	Internal	Internal	Internal	Internal	Internal
Malware	High	Internal	Internal	Internal	Internal	Internal

Figure 4: Can't see this? Contact us to sign up for Notify PRIVATE



Figure 5: Can't see this? Contact us to sign up for Notify PRIVATE

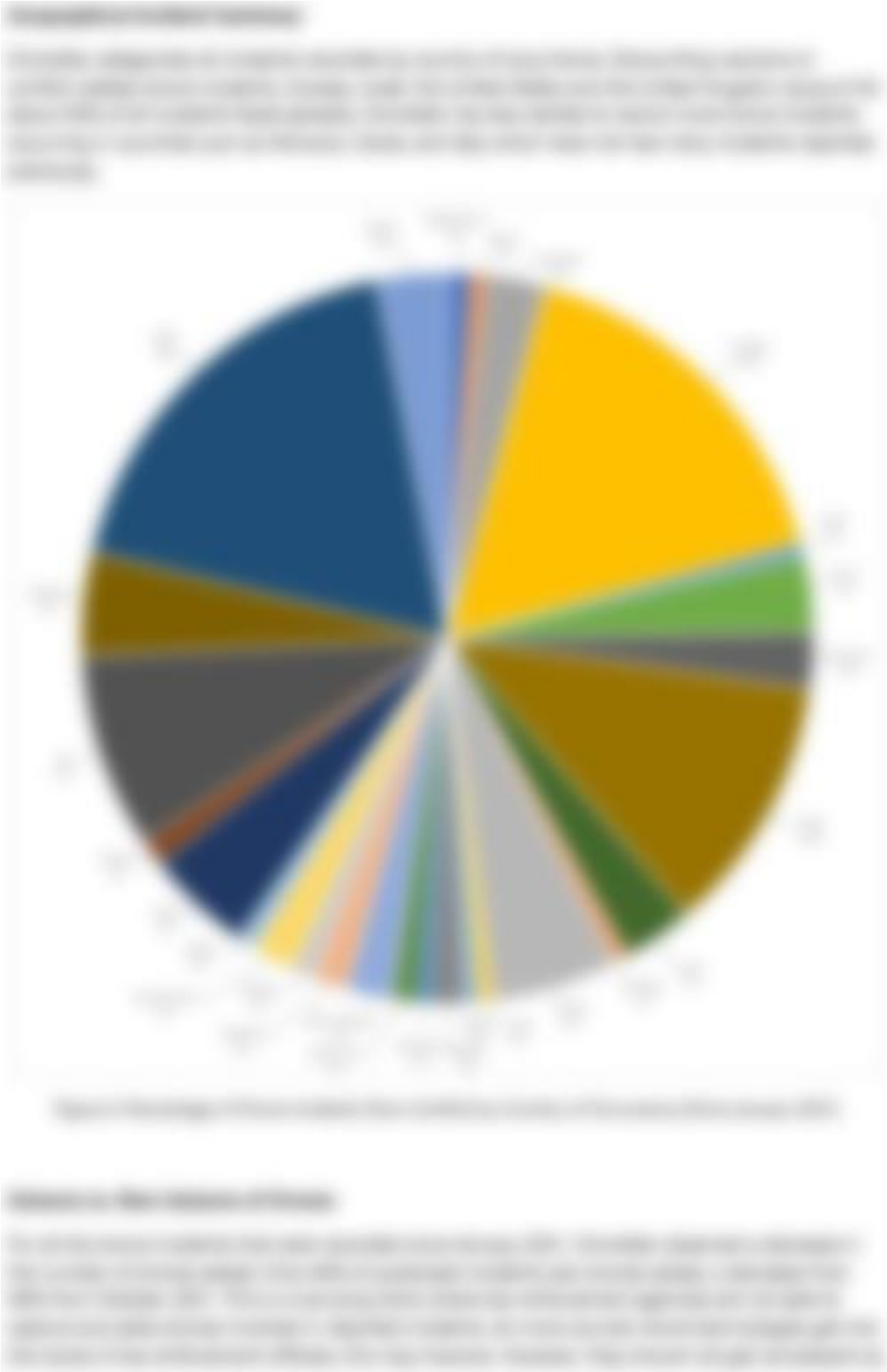


Figure 6: Can't see this? Contact us to sign up for Notify PRIVATE





Figure 8: Can't see this? Contact us to sign up for Notify PRIVATE

1.2. FEATURED ADVISORIES

The prioritisation table and how we filter, analyse and visualise the intelligence we collect is located at the end of the document.

Intrusion and Trespass	Priority
Three arrested for using drone to deliver contraband into Russian Prison, disguised as police drone	P2

Summary

Three men were arrested for attempting to deliver a drone into a prison in Russia.

Overview

A drone in black body kit with the stickers “Police” pasted to it were seized by prison officers in Russia. Three men were apprehended for attempting to deliver mobile phones, sim cards and phone chargers into the restricted area. The contraband was stored in white plastic bag and bubble wrapped before being tied onto the drone via black duct tape. It was not stated how the prison officers manage to seize the drone and apprehend the operators.



Figure 9: Drone and contraband seized



Figure 10: Contraband strapped beneath the drones with Police sticker on it

Analysis

This incident is interesting as the drone operators deliberately tried to disguise their drone as a Police drone by having the "Police" sticker pasted all over the drone. Although it was a futile attempt, this is one of the first few deceit incidents recorded. Deception techniques range from painting the drone blue (to match the sky), grey (to blend in with clouds) and removing LEDs/lights during night flights. However, labelling as "police" may deceive public bystanders into believing the drone is on an official mission, or prevent non-targeted prison inmates from approaching the drone.

Threat Actor Group

Prison Drone Delivery Groups: <https://help.dronesec.com/en/articles/4637701-prison-drone-delivery-groups>

Reference

<https://t.me/mash iptash/2086>



Figure 11: Can't see this? Contact us to sign up for Notify PRIVATE



Figure 12: Can't see this? Contact us to sign up for Notify PRIVATE

1.3. NON-CONFLICT NEWS AND EVENTS (P3)

Ukrainian Police DJI Matrice 300 drone shot down unintentionally by Ukrainian Army

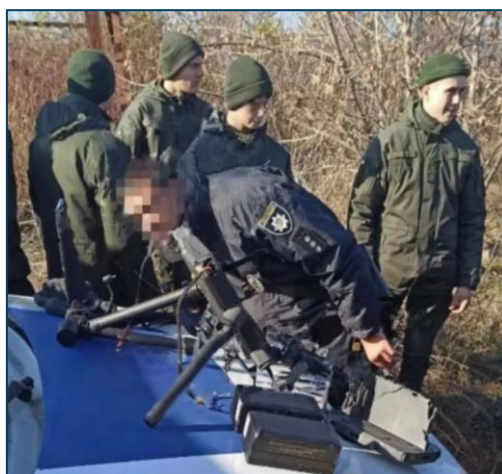


Figure 13 DJI Matrice 300 that was shot down by Ukrainian Army

<https://ria.ru/20211125/bespilotnik-1760758969.html>

https://t.me/urd_news/16011

Japan reports losing contact of ScanEagle drone off the coast of Kagoshima Prefecture<https://www3.nhk.or.jp/nhkworld/ru/news/334598/>**Riga Airport suspends flight for half an hour due to drone sighting, Latvia**<https://www.aex.ru/m/news/2021/11/26/238388/>**India reports at least 67 Chinese-made drone intrusions from Pakistan into India for 2021**https://www.business-standard.com/article/current-affairs/small-chinese-drones-carrying-drugs-frequently-intrude-into-india-bsf-dg-121113001571_1.html**Pilot reports drone sighting at Calgary Airport, Canada**<https://avrodex.com/view/2021C4751>**Brazilian Police releases video of drones used to drop contraband into Proto Alegre prisons**<https://www.youtube.com/watch?v=73iBQdnBObM>**Flock of bird crashes DJI Mavic 2 during filming at Kuril islands, Russia**<https://astv.ru/news/society/2021-11-28-ochen-krasivaya-ptichka-na-kurilah-effektno-utopila-dron-novosibirskogo-rezhissera>**Illegal drone flight records video and flies over protestors in Melbourne, Australia**https://www.youtube.com/watch?v=g_3aQW-Peas**Illegal drone flight records video and flies over protest in Sydney, Australia**<https://t.me/UncensoredPatriot/38057>

1.4. CONFLICT NEWS AND EVENTS (P3)

Arab Coalition reports Houthi surveillance drone activities at Sanaa Airport, Yemen<https://english.aawsat.com/home/article/3328276/arab-coalition-detects-hostile-houthi-activity-sanaa-airport>**Drone strike from Saudi-Yemen conflict damages school, 10 students injured, Al-Fakher, Yemen**<https://www.alyemenione.com/201449/%D8%AC%D8%B1%D9%8A%D9%85%D8%A9-22/>**Arab coalition destroys Houthi drone launched from Sanaa airport, Yemen**<https://www.arabnews.com/node/1978631/saudi-arabia>**Ukrainian drone drops anti-tank grenade on DPR militia, Donbas**https://www.reddit.com/r/CombatFootage/comments/r1okby/ukrainian_drone_quadcopter_dropping_anti_tank/**Ukraine releases video of warheads dropped from drones onto DPR forces in Donbass**<https://lenta.ru/news/2021/11/25/bpla/>**Two explosives dropped from Tigray drone strikes, damaging a school and homes, Ethiopia**https://t.me/Tsegaye_R_Ararsaa/1694

Rased suicide drone with 10kg of explosives shot down over Kerbala by Iraqi forces

Figure 14: Rased drone shot down by Iraqi forces

<https://fa.shafaqna.com/news/1268234/>

Ukrainian R-18 drone with explosives taken down via jammers by DPR forces in Donetsk

Figure 15: Ukrainian R-18 drones with explosives (in blue)



Figure 16: Explosives when detached from the R-18 drone

<https://www.donbass-insider.com/fr/2021/11/26/la-milice-populaire-de-la-rpd-capture-un-drone-de-armee-ukrainienne-charge-explosifs/>

Houthi DJI Mavic drone with warhead shot down by Yemeni forces in Marib

Figure 17: DJI Mavic drone with explosive warhead shot down by Yemeni forces

<https://t.me/vorposte/10752>

Yemeni Army downs Houthi suicide drone flying towards Al-Jawf Governate

https://twitter.com/AlArabiya_Brk/status/1463874596961144836

Drone strikes near hospital and drones sighted over Albukmal and Deir ez-Zur, Syria

<https://t.me/adpfarsi/46659>

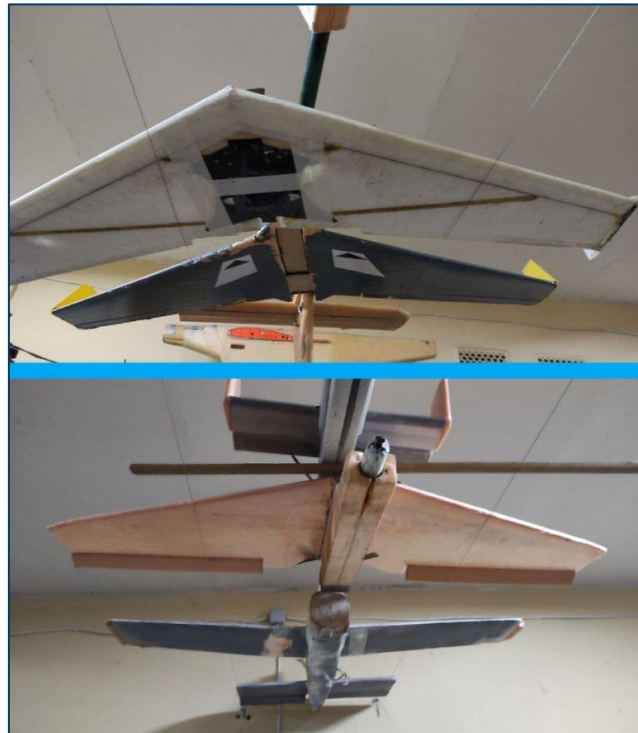
DPR militants open drone workshop to build suicide drones and improvised explosives

Figure 18: Various drones found in militant workshop



Figure 19: Improvised warheads found in militant workshop

https://twitter.com/Mukhtarr_MD/status/1463832731746459649

At least 20 killed and wounded by Houthi drones and artillery strikes, Hays, Yemen



Figure 20: Seized Houthi suicide drone used to strike Hays

<https://t.me/Alqodsona/3516>

Arab coalition takes down Houthi Rased drone over Marib, Yemen

Figure 21: Rased drone seized by Arab coalition

https://t.me/siyasat_online/75794

Russian Orlan 10 drone crash lands in northern Syria, drone seized by Free Syrian Army

Figure 22: Russian made Orlan-10 drone crashed in northern Syria

<https://t.me/novinaerospace/40123>

1.5. SOCIALS (P3)

Forum discusses drone intrusion of privacy and ways to counter rogue drone monitoring

https://www.reddit.com/r/drones/comments/r3b6kg/neighbor_using_drone_to_spy_what_can_be_done_to/

DJI Matrice films alleged weapons and drones deal between Mexican military and cartel group

<https://www.cofutures.net/post/drone-video-of-the-purported-transfer-of-mexican-army-sedena-weapons-and-explosive-drones-to-cu>

<https://twitter.com/narcoblogger/status/1465726314518831115>

1.6. WHITEPAPERS, PUBLICATIONS & REGULATIONS (P4)

Man arrested for manufacturing bombs and drones for Mexican cartel members (UPDATE)

<https://www.cofutures.net/post/bad-boy-and-other-drone-weaponeer-gang-members-arrested-in-mexico-city>

https://www.academia.edu/62516807/Bad_Boy_and_other_Drone_Weaponeer_Gang_Members_Arrested_in_Mexico_City_CSRL_and_CJNG_Provision_Links

France CAA publishes SORA risk assessment guide for safe drone operations

<https://www.unmannedairspace.info/latest-news-and-information/french-regulator-publishes-sora-guide-sets-out-expectations-for-safe-drone-operations/>

Mexico's drug war fought with drones, human shields, gunships (commentary)

<https://www.pbs.org/newshour/world/mexicos-drug-war-fought-with-drones-human-shields-gunships>

The drone threat and how to prepare for it (commentary)

<https://telegra.ph/Ugroza-ot-dronov-i-kak-k-nej-podgotovitsya-11-27>

Russia's jamming could isolate Ukrainian troops so artillery can destroy them (commentary)

<https://www.forbes.com/sites/davidaxe/2021/11/23/russias-jamming-force-could-isolate-ukrainian-troops-so-artillery-can-destroy-them/amp/>

Nammo fits its anti-tank rocket launcher to a small drone, plans swarms of them (commentary)

<https://www.forbes.com/sites/davidhambling/2021/11/29/nammo-fit-their-anti-tank-rocket-launcher-to-a-drone/>

China equips its drones with mortar shells, grenade launchers and machine guns (commentary)

<https://eurasianimes.com/china-equips-its-drones-with-mortar-shells-grenade-launchers-even-machine-guns-as-india-deploys-soldiers-to-lac/>

A cascading catastrophe: the drone threat to critical infrastructure (commentary)

<https://thebulletin.org/2021/11/a-cascading-catastrophe-the-drone-threat-to-critical-infrastructure/>

1.7. COUNTER-DRONE SYSTEMS (P4)

Sao Paulo to use counter drone weapons to prevent prison deliveries via drones

<https://g1.globo.com/jornal-nacional/noticia/2021/11/15/sao-paulo-passar-a-utilizar-arma-antidrone-para-impedir-entregas-aereas-em-presidios.ghtml>

Russia's upgraded Pantsyr anti-aircraft system can fight strike drones at a range of 30km

<https://tass.com/defense/1368227>

Russian tank fitted with protective roof to possibly protect against drone strike



Figure 23: Tank with protective armour, possible to defend against drone attacks

<https://twitter.com/AlexKokcharov/status/1463221816307208196>

1.8. UTM SYSTEMS (P5)

Pontoise Cormeilles Airport inaugurated to test EVTOL drone taxis, France

https://actu.fr/ile-de-france/cormeilles-en-vexin_95177/les-taxis-volants-du-futur-vont-decoller-a-l-aerodrome-de-pontoise_46796909.html

HHLA Sky and Iris Automation to collaborate on controlling 100 drones from centralised centre

<https://www.unmannedairspace.info/latest-news-and-information/hhla-and-iris-automation-link-to-provide-safe-control-of-100-drones-through-a-single-centre/>

1.9. INFORMATIONAL (P5)

FAA launches 12 days of drone safety campaign

<https://www.unmannedairspace.info/uncategorized/faa-launches-2021-holiday-twelve-days-of-drones-safety-campaign/>

Drones too close to aircraft spark concerns in Tampa Bay, Florida USA (commentary)

<https://www-wfla-com.cdn.ampproject.org/c/s/www.wfla.com/8-on-your-side/drones-sparking-increasing-concerns-in-tampa-bay-skies/>

1.10. CYBER AND DATA SECURITY (P5)

Sevastopol scientist to design artificial immune system to protect drones from cyberattacks

<https://t.me/binarcat/804>

1.11. DRONE TECHNOLOGY (P5)

EHang completes autonomous air taxi trial in Bali, Indonesia

<https://www.intelligent-aerospace.com/unmanned/article/14214741/ehang-216-autonomous-aerial-vehicle-completes-debut-flight-demo-in-bali-indonesia>

Chinese firm develops swarming drones to besiege and expel surface vessels

<https://www.maritime-executive.com/article/chinese-firm-develops-swarming-drones-to-besiege-and-expel-vessels>

For Appendix items please click [this link](#).