

2025 ACM Wireless Risks Analysis Presentation

Joseph Jesson
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<https://www.britishpoles.uk/how-the-polish-mathematicians-deciphered-and-handed-over-the-enigma-code-to-french-and-british-allies/>

2025 ACM Wireless Risks Analysis Presentation

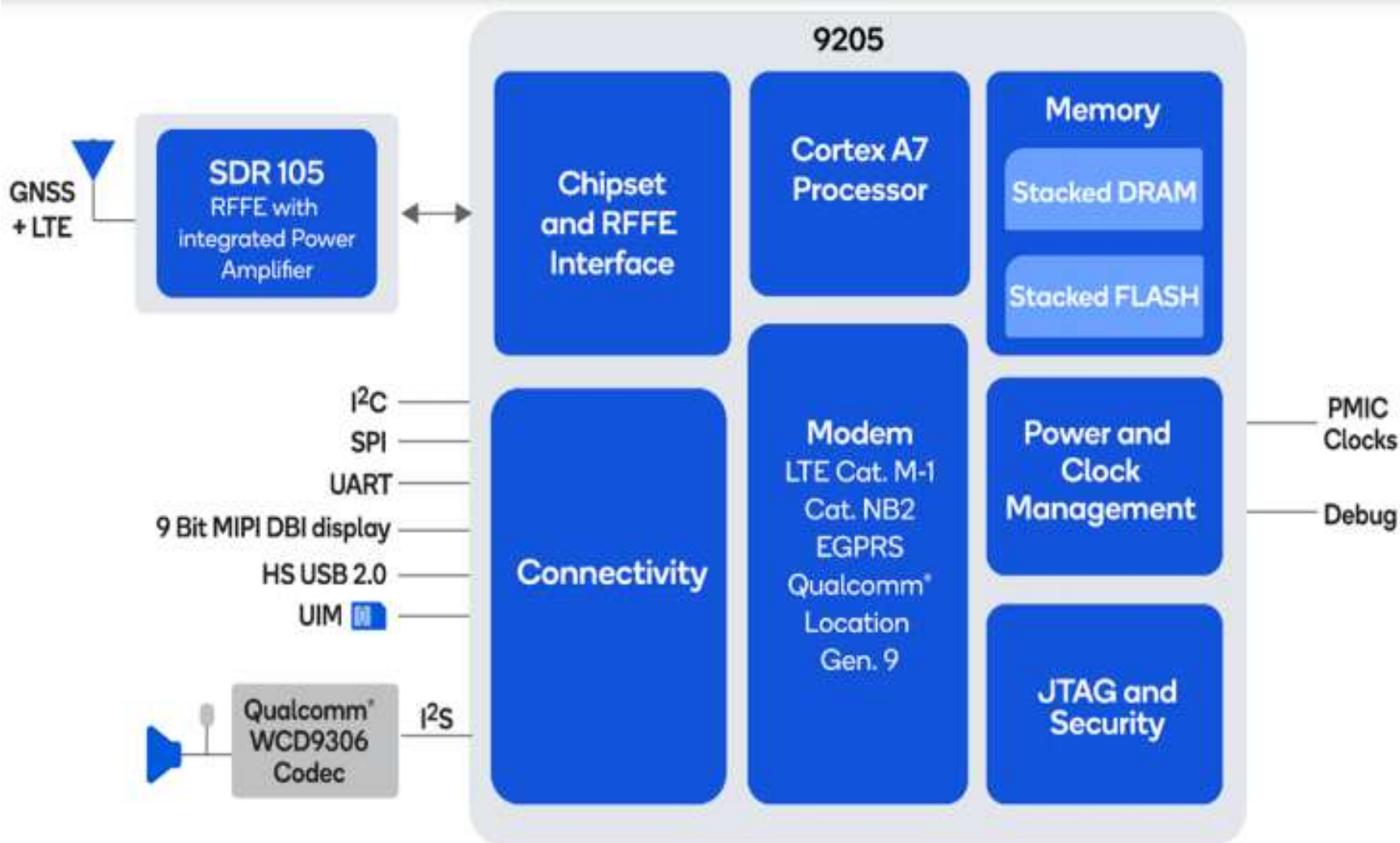
- Communications SOC Supply Risks Analysis
- IoT Security and Spectrum Window
- Aircraft Digital Communication Risks
- Drone Detection and Identification

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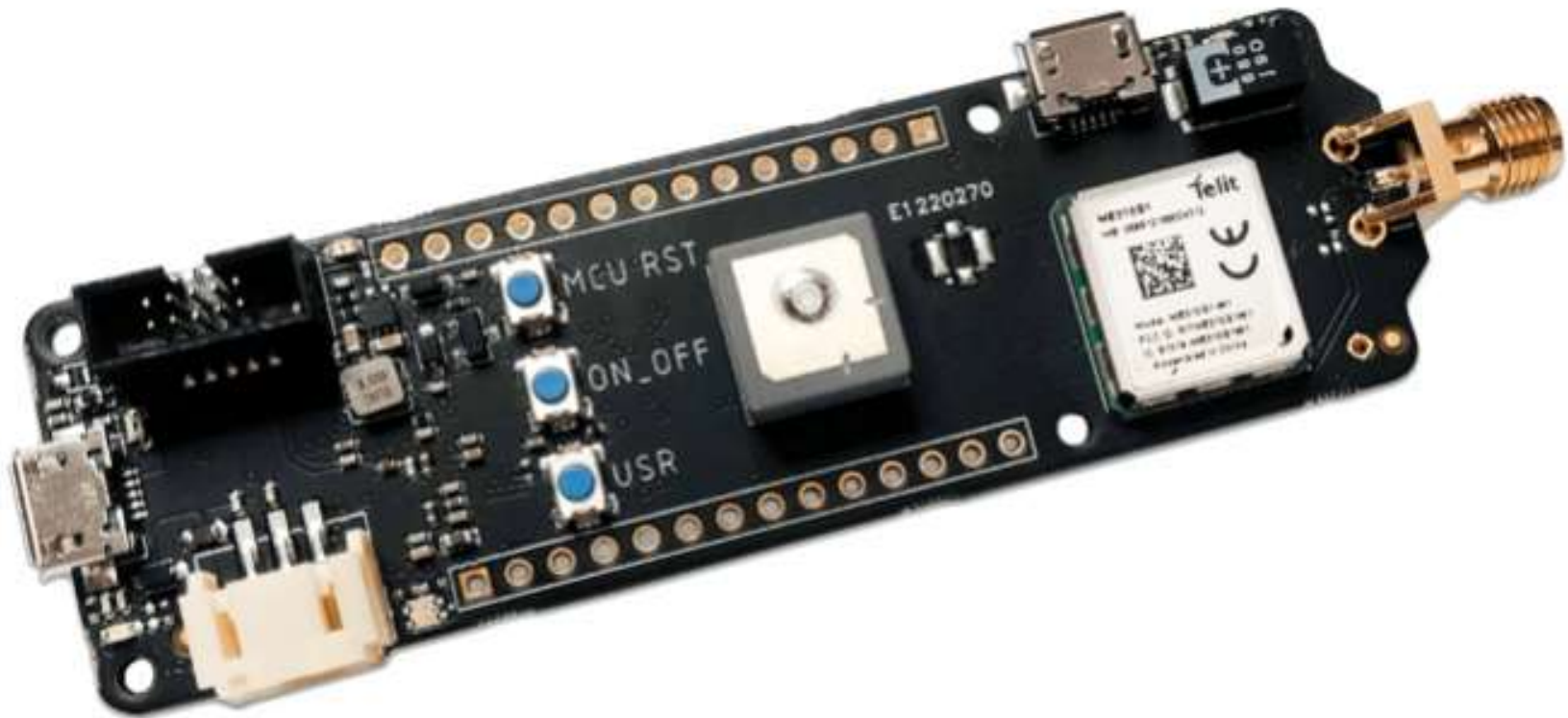
QUECTEL RISK MITIGATION

- 1. Qualcomm MDM9205 license**, identical chip set in **Quectel BG95**, Telit 910, and now Thales (Cinterion) EXS62
- 2. COI = Made in Germany** (Siemens – Leeyss – in Liptzieg), OR
- 3. COI = Made in USA** , OR COI = Taiwan, China, Vietnam
- 4. Production Lead Times of 8 Weeks**
- 5. Interested in also quoting package Contract Mfg**
- 6. Quectel's BG95 AT commands vs. Thales (Cinterion) EXS62**

QUALCOMM 9205 LTE Modem CS Architecture



TELIT ME910G1-WW Development Board

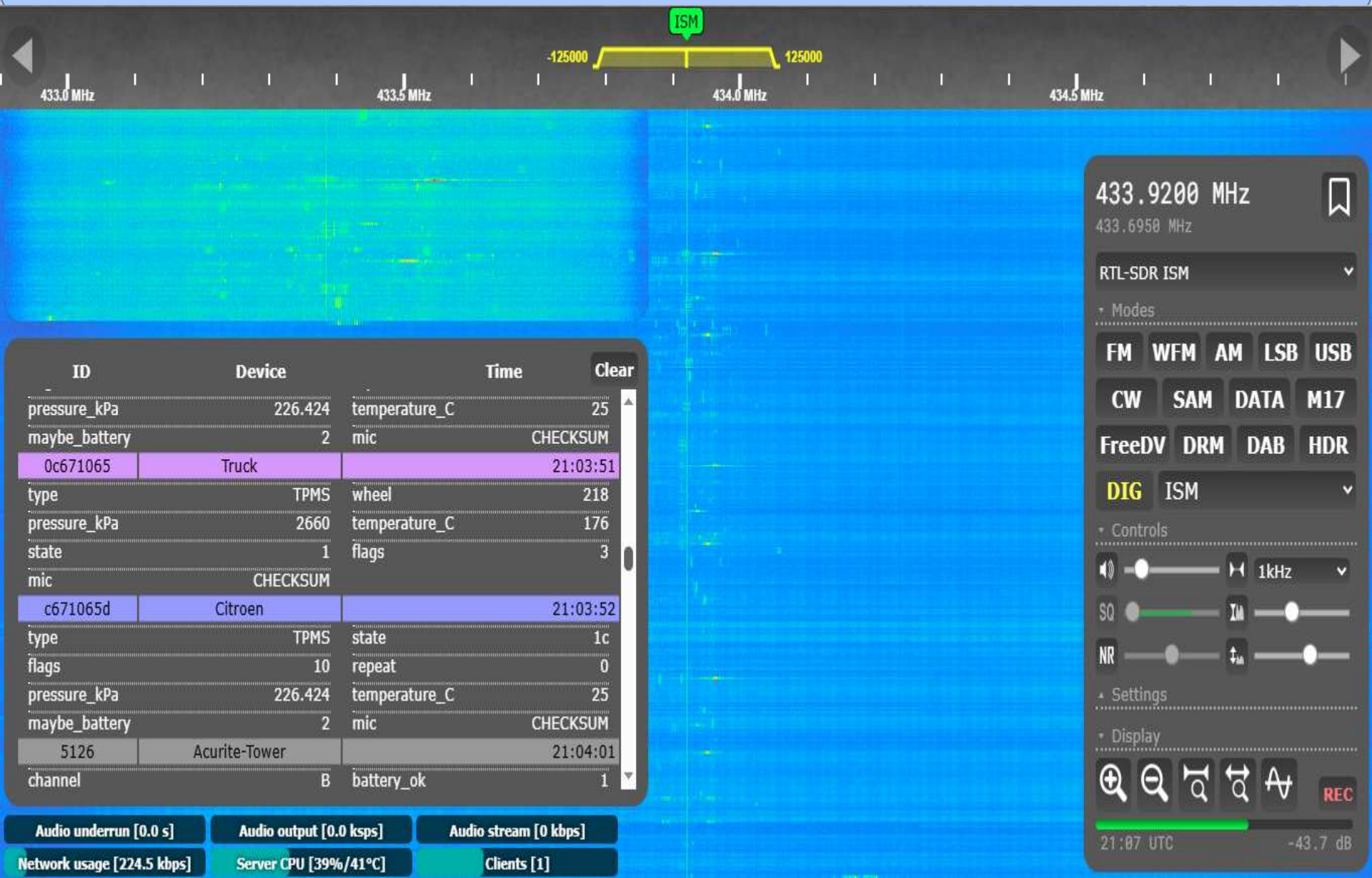


Mounts ME310G1-WW module with **LTE Cat M1/NB1** , **GNSS receiver**.
MKR form factor that features a low-power **ARM® Cortex®-M0 32-bit SAMD21 microprocessor**.
Bosch Sensortec BMA400 triaxial acceleration sensor, 12-bit resolution and typical μA current.
Full compatibility with the standard's software development environment.

Internet of Things 433MHz ISM Spectrum Weather Tower and Security Station



Internet of Things 433MHz ISM Spectrum Citroen Automobile Start



ID	Device	Time	Clear
pressure_kPa	226.424	temperature_C	25
maybe_battery	2	mic	CHECKSUM
0c671065	Truck	21:03:51	
type	TPMS	wheel	218
pressure_kPa	2660	temperature_C	176
state	1	flags	3
mic	CHECKSUM		
c671065d	Citroen	21:03:52	
type	TPMS	state	1c
flags	10	repeat	0
pressure_kPa	226.424	temperature_C	25
maybe_battery	2	mic	CHECKSUM
5126	Acurite-Tower	21:04:01	
channel	B	battery_ok	1

Audio underrun [0.0 s] Audio output [0.0 kbps] Audio stream [0 kbps]
 Network usage [224.5 kbps] Server CPU [39%/41°C] Clients [1]

433.9200 MHz

433.6950 MHz

RTL-SDR ISM

+ Modes

FM WFM AM LSB USB

CW SAM DATA M17

FreeDV DRM DAB HDR

DIG ISM

+ Controls

1kHz

SQ

NR

+ Settings

+ Display

21:07 UTC -43.7 dB

December 11, 2024, New Jersey

12/11/2024

NJ Congressman Jeff Van Drew announced December 11th, 2024 that drones over NJ are from an Iranian "mothership" stationed off the U.S. East Coast, reportedly launching drones now flying over New Jersey.

Finally, on January 29th, the President announced, "The drones that were flying over New Jersey in large numbers were authorized to be flown by the FAA for research and various other reasons ... this was not the enemy,"

Pentagon's Response

"Maj. Gen. Pat Ryder, the Pentagon press secretary, said the military was providing "active and passive detection capabilities" and "counter-drone capabilities" to Picatinny Arsenal and Naval Weapons Station Earle." The Pentagon sent counter-drone weapons from the corporation, dzyne.com

Pentagon's Response

HANDHELD | WEARABLES

DRONEBUSTER® DTIM KIT

Detect, Track, Identify, Mitigate

Now available: Dronebuster® 4-EU – a region-specific, wearable counter-UAS solution engineered for European frequency compliance and mission-critical drone defense.

Dronebuster® DTIM Kit:

Detects drones up to 7 km away

Effective jamming and optional PNT (Position, Navigation, Timing) attack mode

Lightweight, wearable, and **ATAK-compatible** for seamless situational awareness

Handheld, mobile, and fixed-site configurations available for layered defense



Automatic Dependent Surveillance - Broadcast (ADS-B) is an advanced surveillance technology that combines an aircraft's positioning source, aircraft avionics, and a ground infrastructure

Identify Drones or Commercial Aircraft with OpenWebRx+ Spectrum Monitor

<https://fms.komkon.org/OWRX/>

Flight	Aircraft	Squawk	Dist	Alt (ft)	Speed (kt)	Signal
GLG7396	N776AV	3765	83 km	1856↓ 8600	NNE 282	-28.8 dB
DAL305	N389DN	6606	83 km	1280↓ 13050	NNE 356	-31.1 dB
NKS591	N991NK	3365	53 km	896↓ 4075	NE 285	-31.5 dB
NKS358	N680NK	2705	43 km	960↑ 19150	WSW 350	-26.8 dB
ABX152	N371CM	1771	45 km	32425	W 426	-31 dB
DAL2552	N3761R	3134	32 km	64↑ 5000	NNE 265	-25.8 dB
SWA3928	N8801Q	7431	45 km	8850	NE 305	-32.4 dB
DAL8920	N650DL	1540	49 km	3072↑ 15125	WSW 345	-30 dB
N98MN	N98MN	3653	91 km	25400	NE 327	-32.2 dB
	N905AN			27200	NNE 472	-32.4 dB
JBU2724	N4080J	7356	89 km	576↓ 20825	E 514	-28.1 dB
	N636JB			31000		-33 dB
AAL1858	N655AW	2540	63 km	37575	NE 471	-31.6 dB
UAL1444	N47332	7466	9 km	1920↓ 9175	NE 306	-16.8 dB
EJA179	N1790S	3737	28 km	1856↓ 10350	NE 314	-28.6 dB

Audio underrun [0.0 s] Audio output [0.0 kbps] Audio stream [0 kbps]
 Network usage [257.1 kbps] Server CPU [39%/38°C] Clients [1]

1.0900000 GHz
 1.0903500 GHz

RTL-SDR 1090MHz ADSB

Modes

FM WFM AM LSB USB
 CW SAM DATA M17
 FreeDV DRM DAB HDR
DIG ADSB

Controls

25kHz
 SQ
 NR

Settings

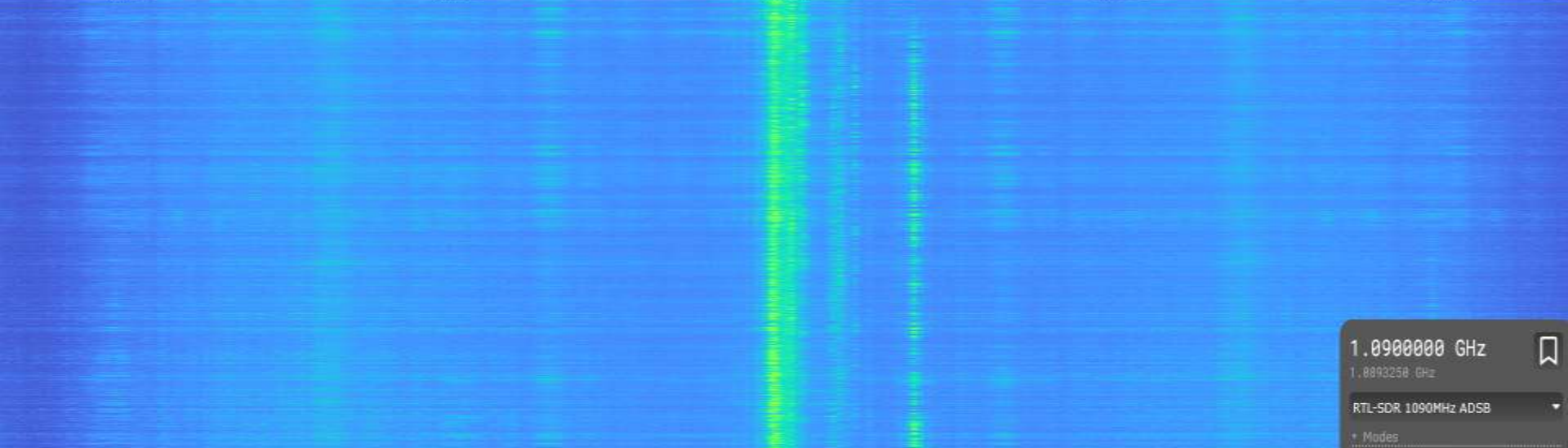
Display

REC
 04:19 UTC -40.0 dB

Automatic Dependent Surveillance - Broadcast (ADS-B) is an advanced surveillance technology that combines an aircraft's positioning source, aircraft avionics, and a ground infrastructure

OpenWebRX

Help Status Chat Receiver Map Files Settings



Flight	Aircraft	Squawk	Dist	Alt (ft)	Speed (kt)	Signal
SNA1332	N8851Q	2246	67 km	15364	5450	NE 277 -34.2 dB
DAL849	N521DT	3528	156 km	9604	26475	NE 478 -33.2 dB
N712CA	N712CA		11 km	644	100	W 1 -32.7 dB
NKS427	N636NK	2705	62 km	7684	5600	MNE 283 -31.4 dB
MXV842	N1400Z	0745	98 km	18564	20750	NE 423 -33.2 dB
JJA5431	N720PS	2314	61 km	9604	28750	SW 407 -33.2 dB
N79178	N79178	0223	3 km	644	3700	W 107 -31 dB
EDV5018	N181PQ	3354	38 km	8321	24175	W 379 -31.5 dB
N43138	N43138	1200	40 km	1921	1950	E 83 -32.5 dB
RPA3578	N642RW	1665	150 km	10241	23850	MNW 342 -32.6 dB
UCA4857	N14125	7304	93 km	10244	20875	SW 370 -33 dB
EDV5086	N1856J	7102	89 km	641	28000	WSW 430 -33.8 dB
RPA3610	N742YX	2365	71 km	7681	29050	WSW 332 -31.4 dB
N71705	N71705	1200	42 km	6404	2100	MNE 133 -31.6 dB

1.0900000 GHz
1.8893250 GHz

RTL-SDR 1090MHz ADSB

Modes

FM WFM AM LSB USB
CW SAM DATA M17
FreeDV DRM DAB HDR
DIG ADSB

Controls

25kHz

Settings

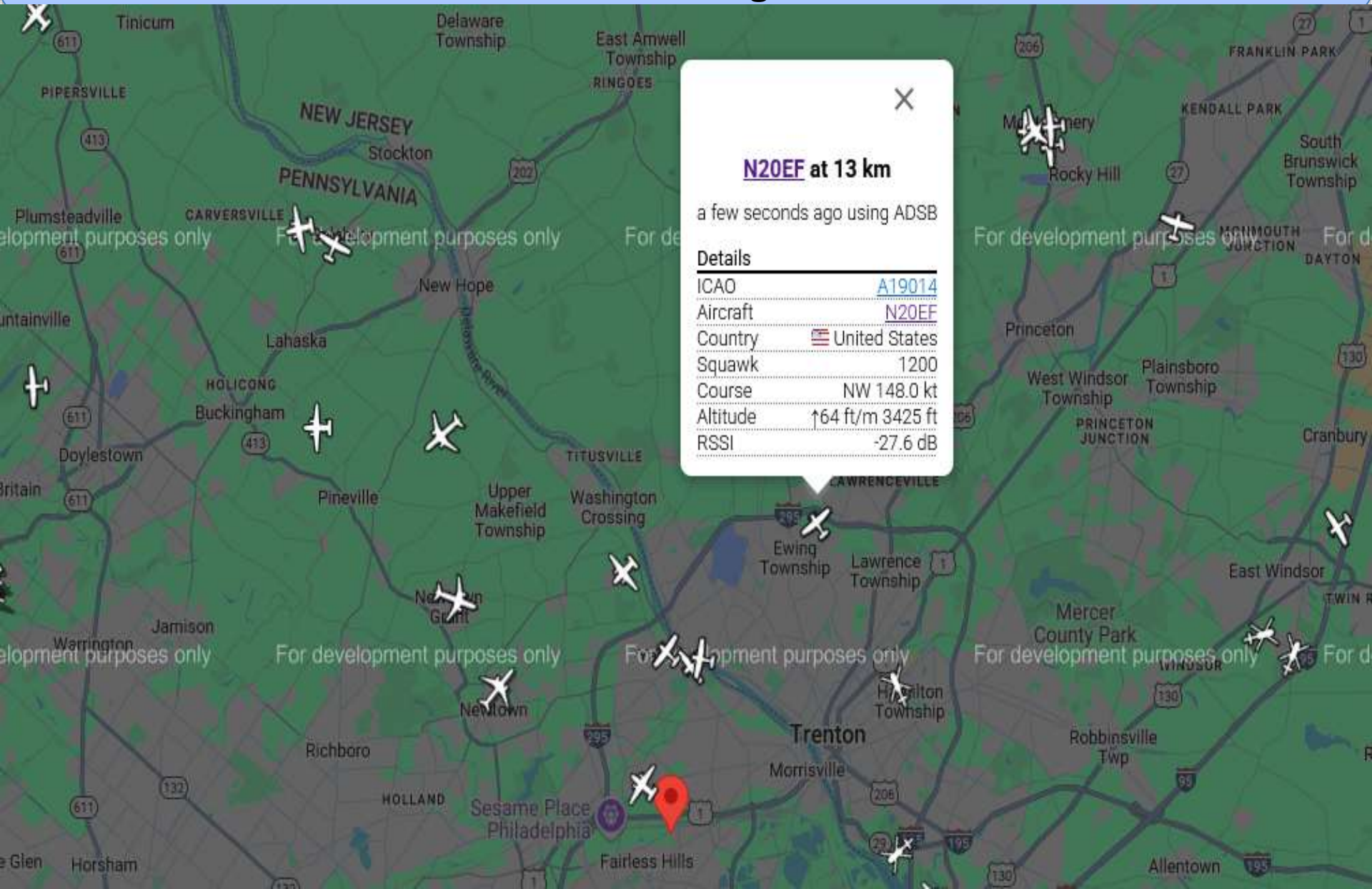
Display

REC

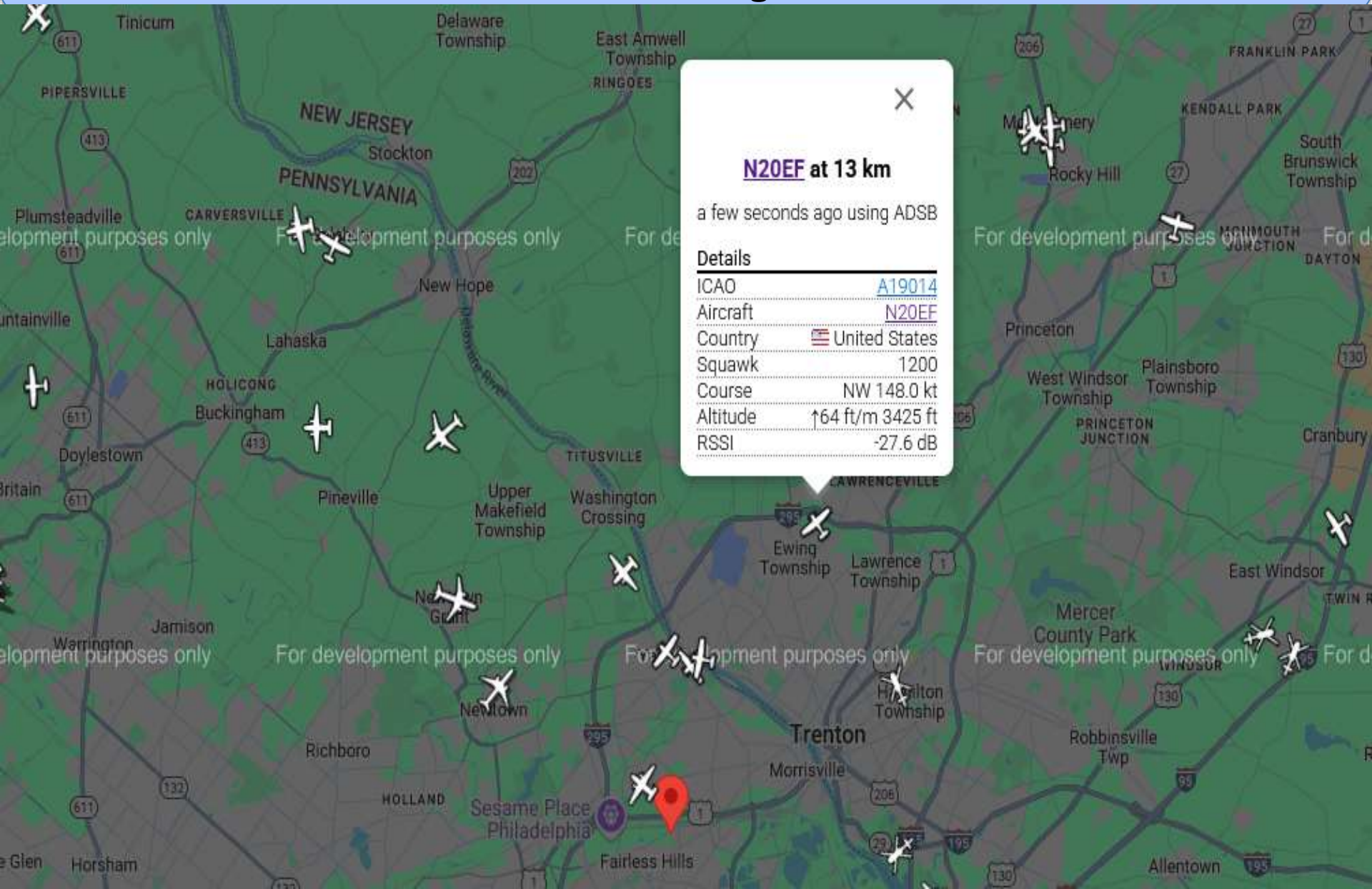
14:56 UTC -38.3 dB

Audio underrun [0.0 s] Audio output [0.0 ksps] Audio stream [0 kbps]
Network usage [649.2 kbps] Server CPU [47%/44°C] Clients [1]

Automatic Dependent Surveillance - Broadcast (ADS-B) is an advanced surveillance technology that combines an aircraft's positioning source, aircraft avionics, and a ground infrastructure



Automatic Dependent Surveillance - Broadcast (ADS-B) is an advanced surveillance technology that combines an aircraft's positioning source, aircraft avionics, and a ground infrastructure



Automatic Dependent Surveillance - Broadcast (ADS-B) is an advanced surveillance technology that combines an aircraft's positioning source, aircraft avionics, and a ground infrastructure



N20EF

EN ROUTE

[N20EF flight schedule](#)

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updated a few seconds ago



TTN



TRENTON, NJ

THURSDAY 01-MAY-2025

10:05AM EDT

Set Up Unlimited Flight Alerts & More

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Position-Only Flight

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1h



Automatic Dependent Surveillance - Broadcast (ADS-B) is an advanced surveillance technology that combines an aircraft's positioning source, aircraft avionics, and a ground infrastructure



Automatic Dependent Surveillance - Broadcast (ADS-B) is an advanced surveillance technology that combines an aircraft's positioning source, aircraft avionics, and a ground infrastructure

FlightAware

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2 Votes (5.00 Average) and 1,301 Views



Automatic Dependent Surveillance - Broadcast (ADS-B) is an advanced surveillance technology that combines an aircraft's positioning source, aircraft avionics, and a ground infrastructure

Registration/Tail #

N20EF

[View Aircraft Registration](#)

[Live N20EF flight tracker](#)
[View N20EF flight history](#)
[View N20EF photos](#)



Want more information about this aircraft? You might be interested in our FBO ToolBox service. [Click here.](#)

N20EF Aircraft Registration

Aircraft Summary

Summary	2021 CIRRUS DESIGN CORP SR20 Fixed wing single engine (4 seats / 1 engine)
Owner	EFENJ LLC PRINCETON , NJ, US
Airworthiness Class	Standard/Normal
Serial Number	2700
Engine	LYCOMING IO-390-C3B6 (Reciprocating) Horsepower: 215
Weight	Less than 12,500lbs
Speed	Not defined
Mode S Code	050310024 / A19014

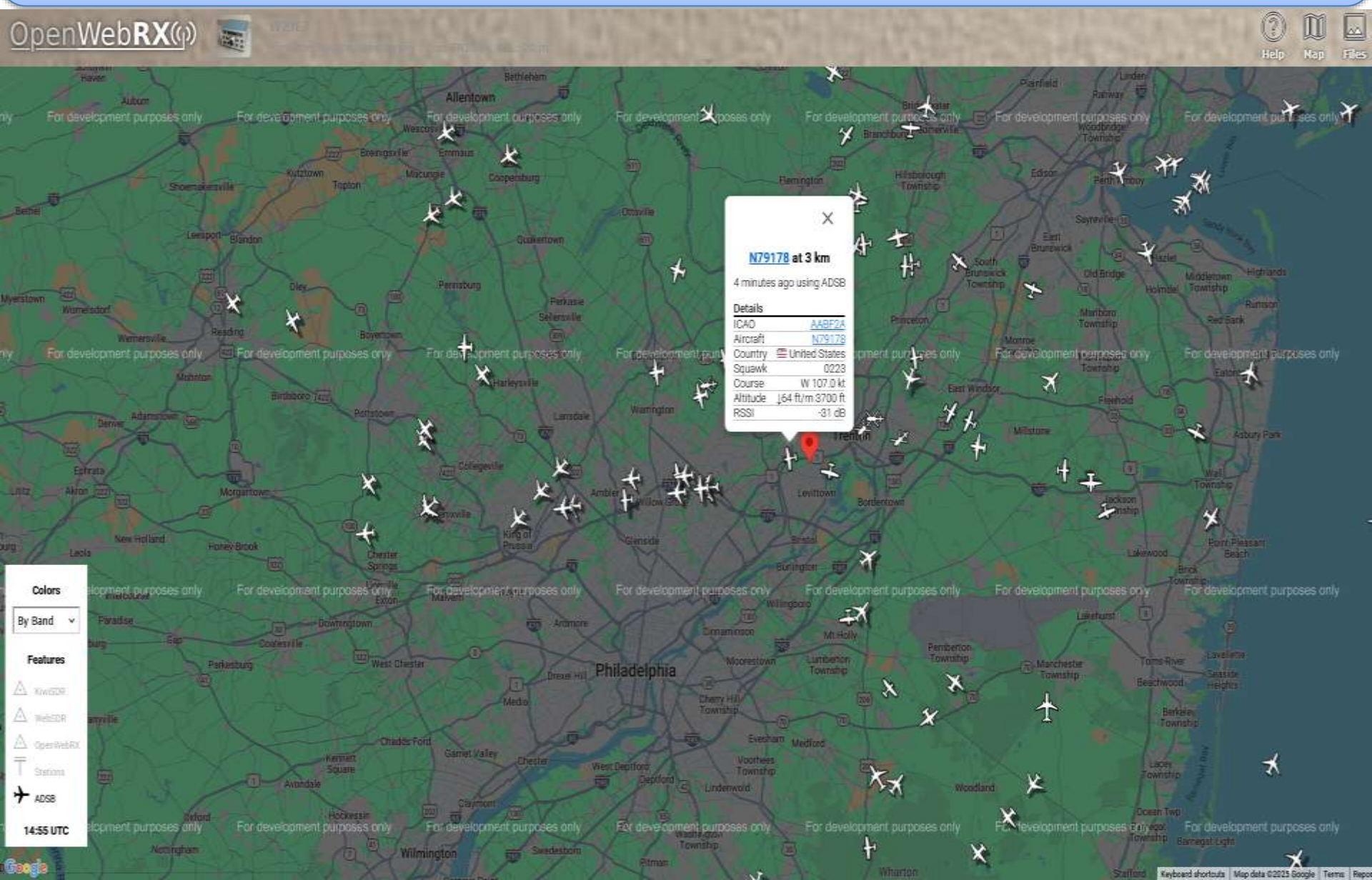
Registration Details

Status	Assigned
Certificate Issue Date	2021-07-01
Airworthiness Date	2021-04-05
Last Action Date	2023-04-19
Expiration	2028-07-31
Registry Source	FAA

Registration History

Date	Owner	Location	Serial Number
01-Jul-2021	EFENJ LLC	PRINCETON NJ	2700
12-Feb-2021	CIRRUS DESIGN CORP	DULUTH MN	2700
14-Jul-2006	SALE REPORTED	EAST TROY WI	T26-157
02-Jun-2006	AIR CARGO CARRIERS INC	MILWAUKEE WI	T26-157

Automatic Dependent Surveillance - Broadcast (ADS-B) is an advanced surveillance technology that combines an aircraft's positioning source, aircraft avionics, and a ground infrastructure




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← → ↻ 🔍 flightaware.com/live/flight/N389DN



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Products Industries **ADS-B** Flight Tracking



N389DN
DAL305 / DL305
EN ROUTE
Arriving in 11 minutes
Operating as [Delta Air Lines 305](#)

FLL
FORT LAUDERDALE, FL
left **GATE D6**
[Fort Lauderdale Intl. - FLL](#)
FRIDAY 28-MAR-2025
09:59PM EDT (6 hours 29 minutes late)

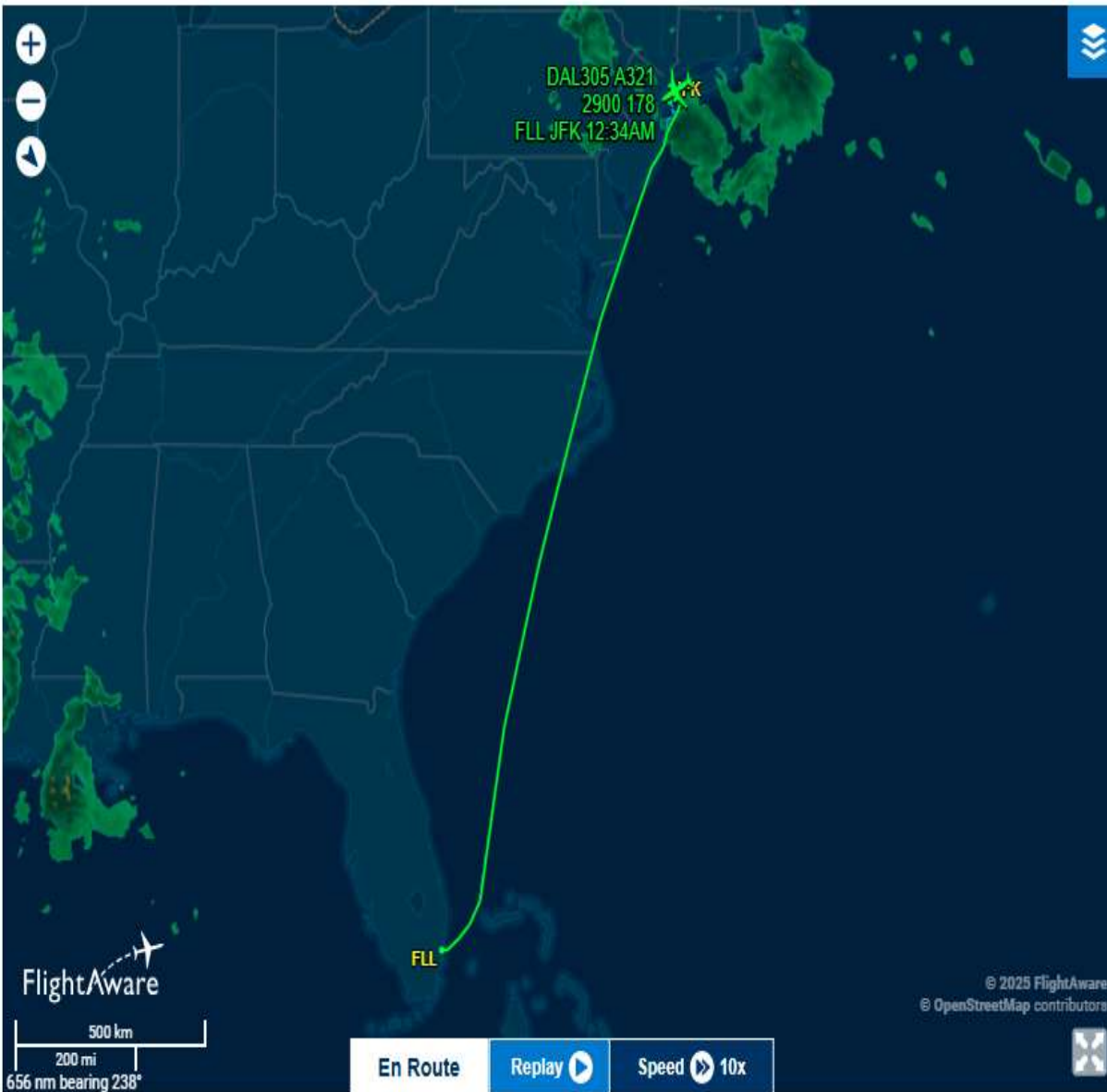
JFK
NEW YORK, NY
arriving at **GATE B26**
[John F. Kennedy Intl. - JFK](#)
SATURDAY 29-MAR-2025
(6 hours 11 minutes late) **12:44AM EDT**

2h 34m elapsed
1,087 mi flown

2h 45m total travel time

11m remaining
17 mi to go

Automatic Dependent Surveillance - Broadcast (ADS-B) is an advanced surveillance technology that combines an aircraft's positioning source, aircraft avionics, and a ground infrastructure



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Flight Details

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[All flights between FLL and JFK](#)

Departure Times

Gate Departure

09:59PM EDT

Scheduled 03:30PM EDT

Takeoff

10:15PM EDT

Scheduled 03:40PM EDT

Taxi Time: 16 minutes

Average Delay: Less than 10 minutes

Arrival Times

Landing

12:34AM EDT (+1)

Scheduled 06:01PM EDT

Gate Arrival

12:44AM EDT (+1)

Scheduled 06:33PM EDT

Taxi Time: 10 minutes

Average Delay: Less than 10 minutes

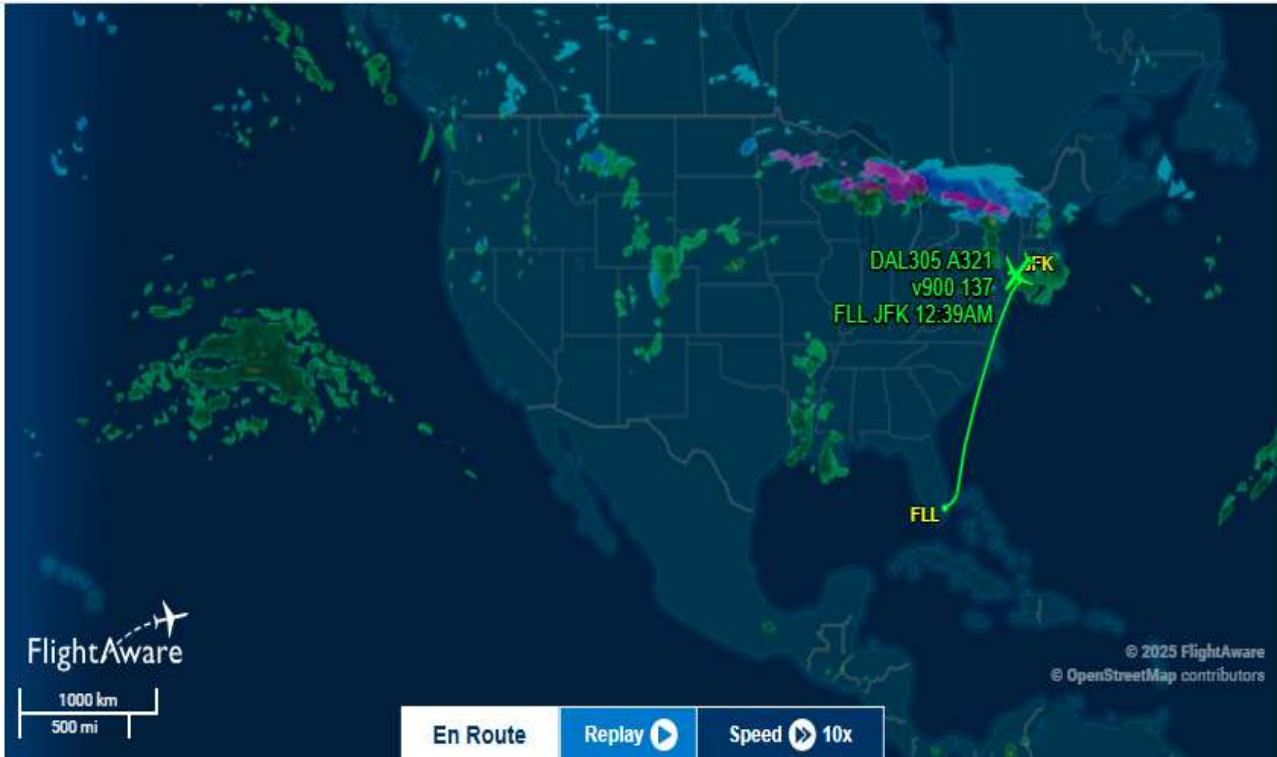
Aircraft Details

updated a few seconds ago

Aircraft Information

Automatic Dependent Surveillance - Broadcast (ADS-B) is an advanced surveillance technology that combines an aircraft's positioning source, aircraft avionics, and a ground infrastructure

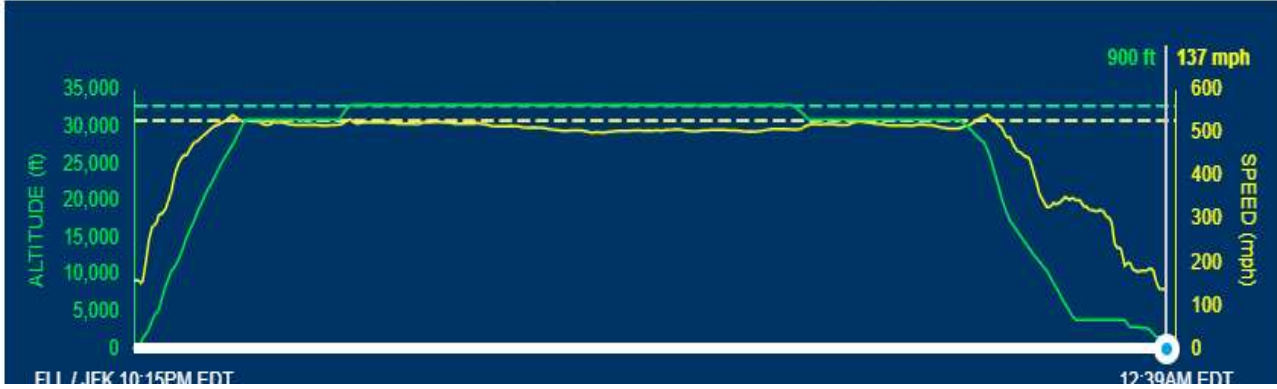
flightaware.com/live/flight/N389DN



Gate Departure 09:59PM EDT Scheduled 03:30PM EDT	Takeoff 10:15PM EDT Scheduled 03:40PM EDT
Taxi Time: 16 minutes Average Delay: Less than 10 minutes	
Arrival Times	
Landing 12:39AM EDT (+1) Scheduled 06:01PM EDT	Gate Arrival 12:44AM EDT (+1) Scheduled 06:33PM EDT
Taxi Time: 5 minutes Average Delay: Less than 10 minutes	

Aircraft Details updated a few seconds ago

Aircraft Information	
Tail Number	N389DN · Registration
Owner	BANK OF UTAH TRUSTEE
Aircraft Type	Airbus A321 (twin-jet) (A321) Photos
Airline Information	
Airline	Delta Air Lines "Delta" all flights
Flight Data ⚙️	



SIGNALS INTELLIGENCE – RF SIGNATURE



- Amateur Radio
- Trunked Radio
- Numbers Stations
- Commercial
- Utility
- Time

- tools
- What links here
 - Related changes
 - Special pages
 - Printable version
 - Permanent link
 - Page information
 - Browse properties

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FREQUENCY BANDS

VLF	LF	MF	HF	VHF	UHF
17	26	35	218	127	169

CATEGORIES

All Identified Signals			Unidentified Signals		
Military	Radar	Common/Active	Rare/Inactive	Amateur Radio	Commercial
Aviation	Marine	Analogue	Digital	Trunked Radio	Utility
Satellite	Navigation	Interfering Emissions	Requested	Numbers Stations	Time



TEKTRONICS SOLUTION

Detecting Drones Using a Real-Time Spectrum Analyzer

Nearly all drones:

- Are controlled locally within a visual range of about 1000 ft.
- Are controlled remotely within 2-3 miles using First Person View (FPV)
- Operate in the 2.4 GHz unlicensed band for control (approx. 80 MHz bandwidth)
- Use 5.8 GHz unlicensed band for first person view (FPV) video feeds (20 MHz or less)
- Employ return to home (RTH) when control signals are lost or weak
- Utilize drone control signals that normally hop across multiple frequencies and can be up to 80 MHz wide
- The FCC has designated that drones can only be operated in the unlicensed bands, including the 2.4 GHz, 5.8 GHz, 900 MHz and 433 MHz bands

TEKTRONICS SOLUTION

Detecting Drones Using a Real-Time Spectrum Analyzer

Basic Drone Detection

Basic drone detection can be performed with a Tektronix RSA306B or RSA500 Series Spectrum Analyzer and Tektronix DataVu-PC software. As drone operators generally use a first-person video (FPV) link to track of the drone's location, the first step in looking for a drone's presence is to scan the 5.8 GHz band to look for burst signals that are present as the drone and controller communicate to each other.

As mentioned above, hobbyist and commercial drones transmit video in the 5.8 GHz unlicensed band. Transmitting video or control signals from the drone to the pilot results in recognizable bursts of RF energy that occur as the transmitter and receiver acknowledge receipt of data.



The Tektronix RSA306B and RSA500.

TEKTRONICS SOLUTION

Detecting Drones Using a Real-Time Spectrum Analyzer

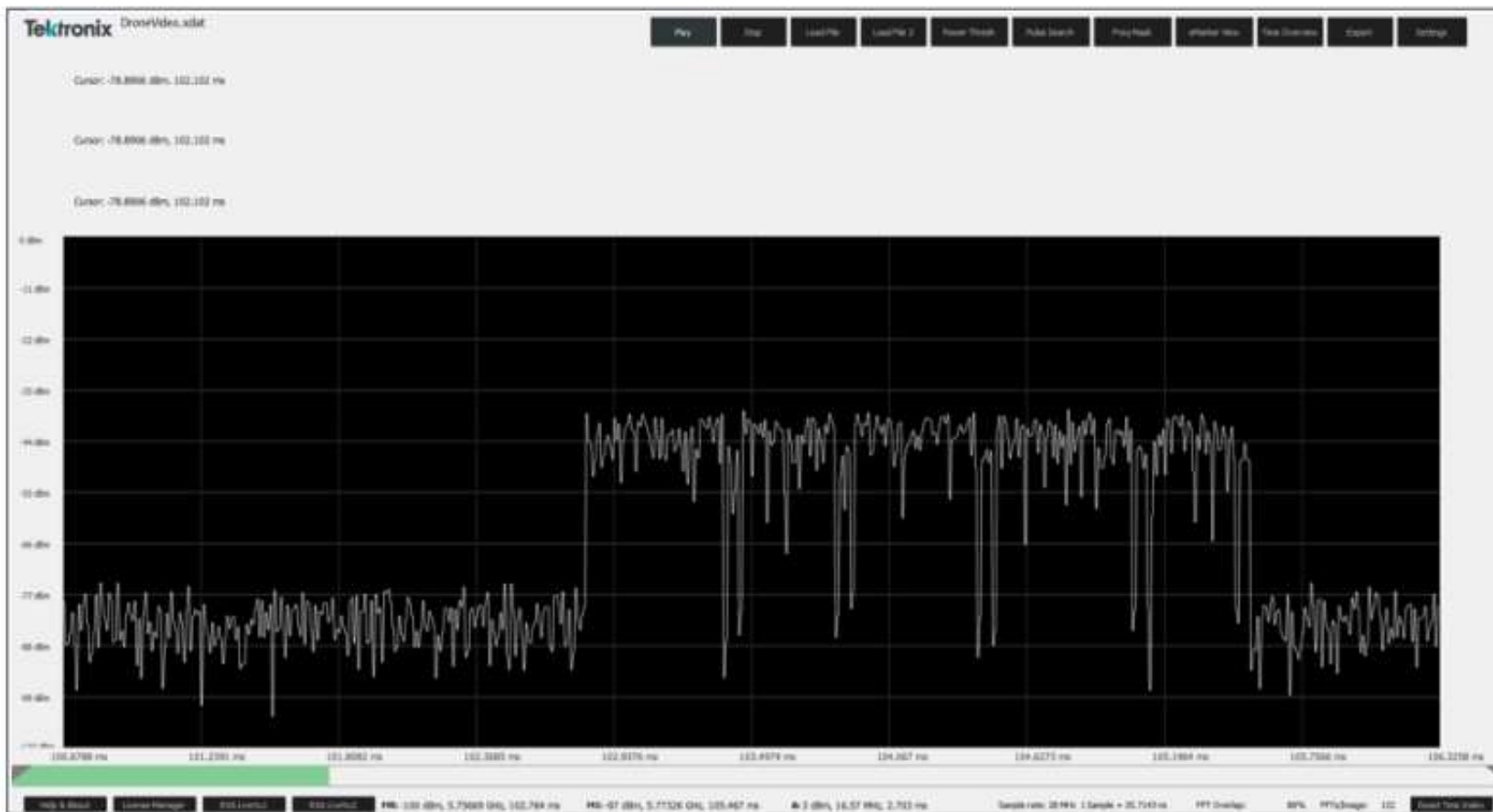


FIGURE 1 .
Video burst
from 5.8 GHz
frequency band.

TEKTRONICS SOLUTION

Detecting Drones Using a Real-Time Spectrum Analyzer

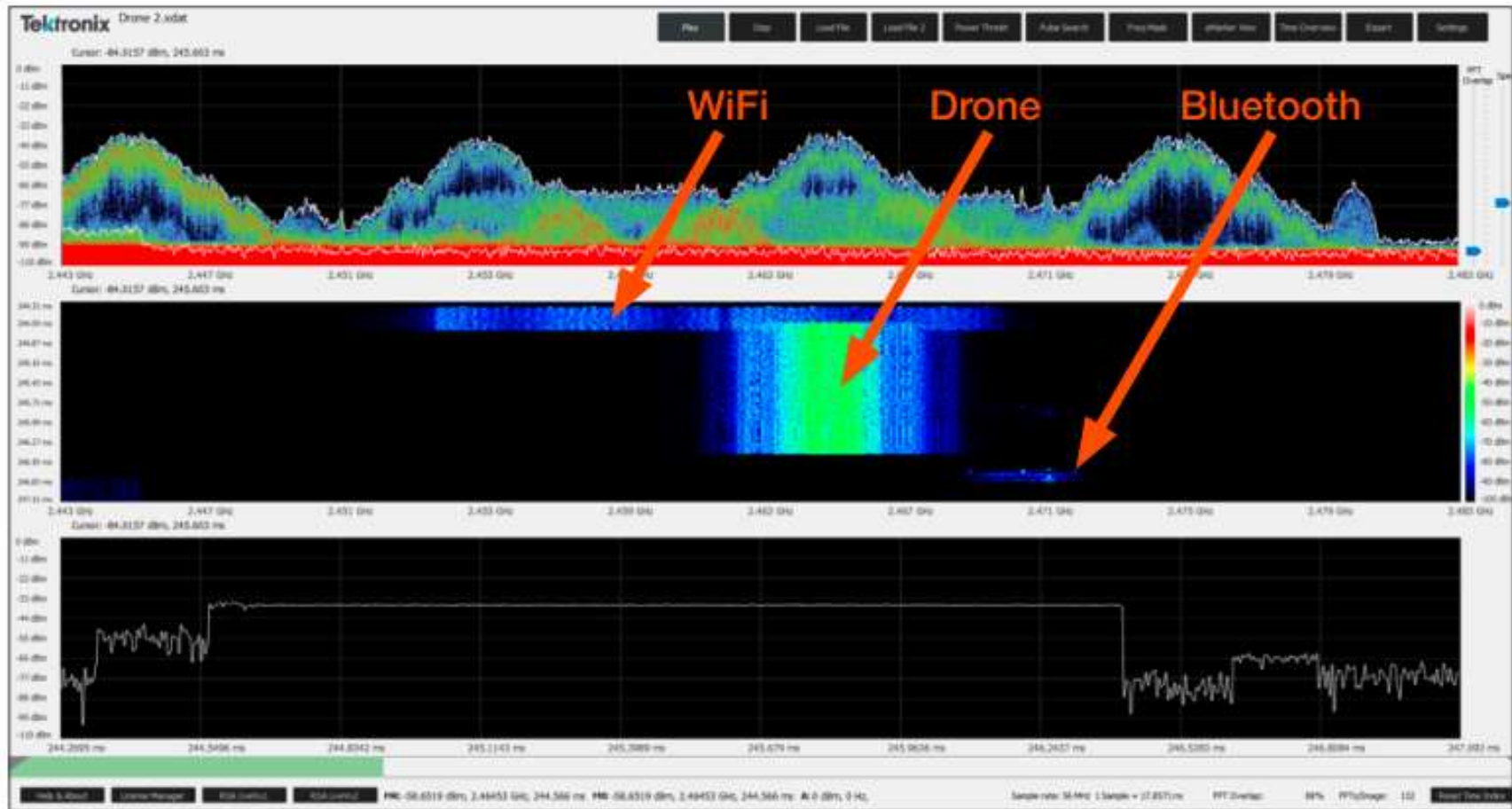


FIGURE 2.
Control bursts
from 2.4 GHz
frequency band.

<https://download.tek.com/document/Detecting%20Drones%20Using%20a%20RTSA%20App-Note%2037W615760.pdf>

TEKTRONICS SOLUTION

Detecting Drones Using a Real-Time Spectrum Analyzer

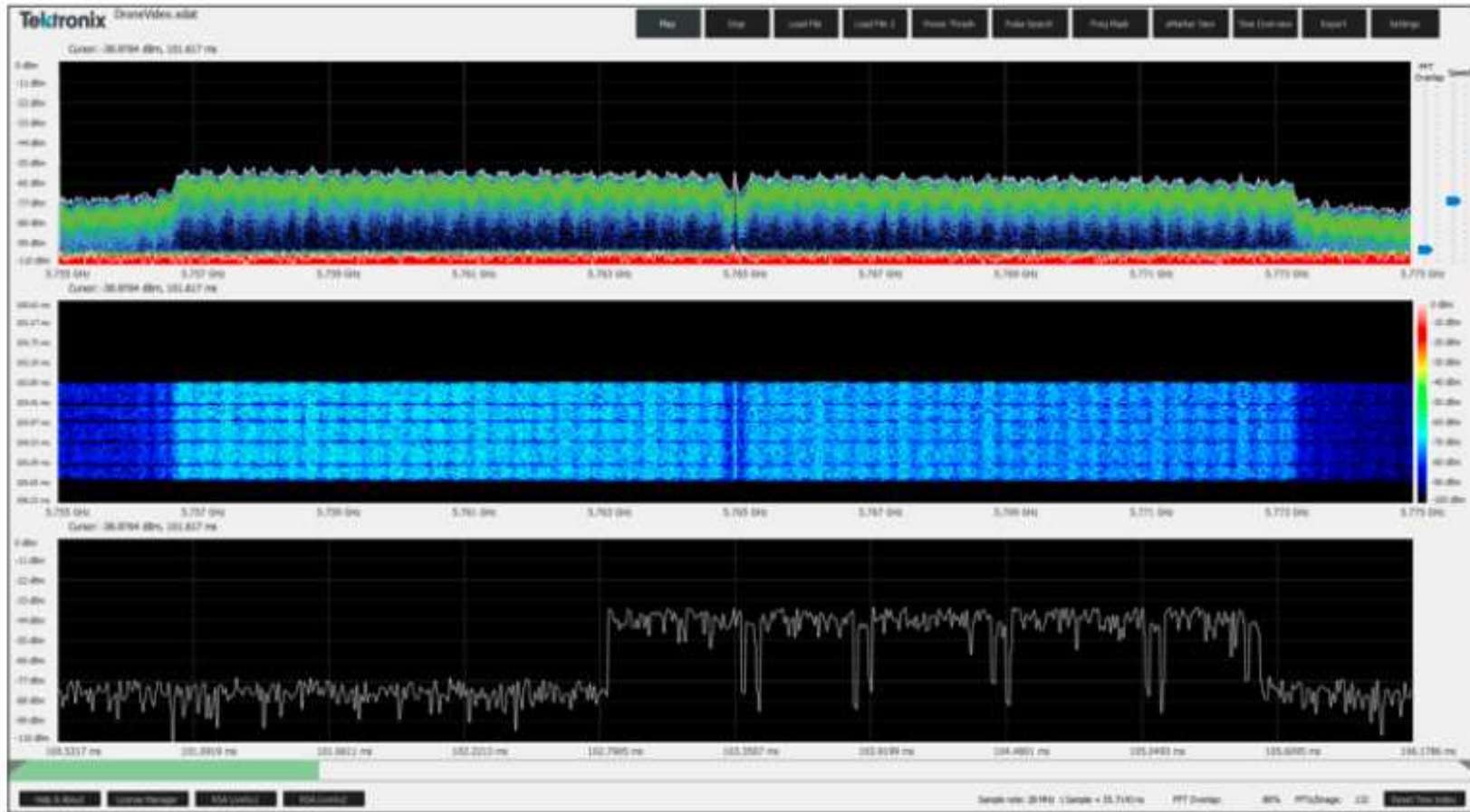


FIGURE 3. Video burst from 5.8 GHz frequency band using I/Q processing.

TEKTRONICS SOLUTION

Detecting Drones Using a Real-Time Spectrum Analyzer

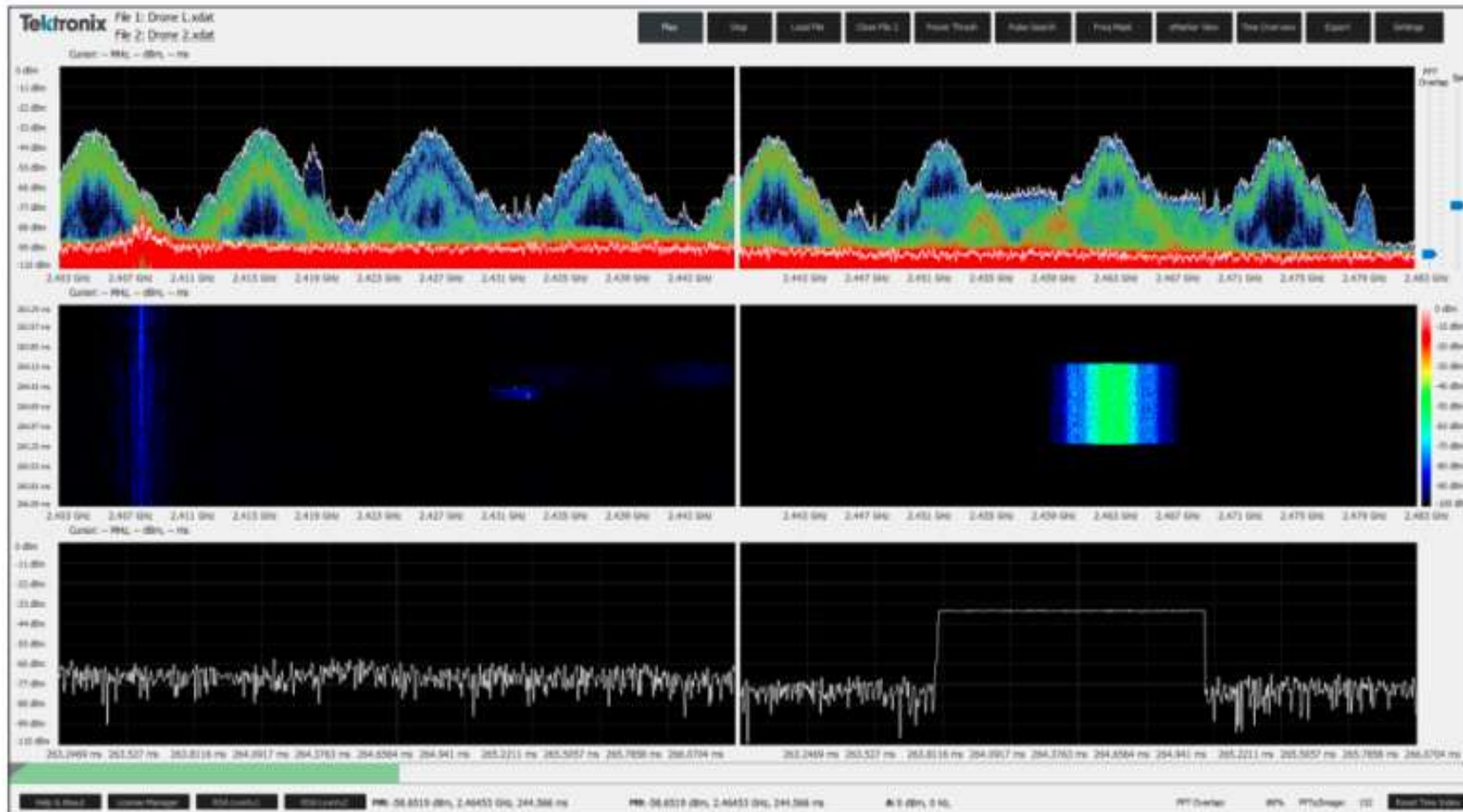
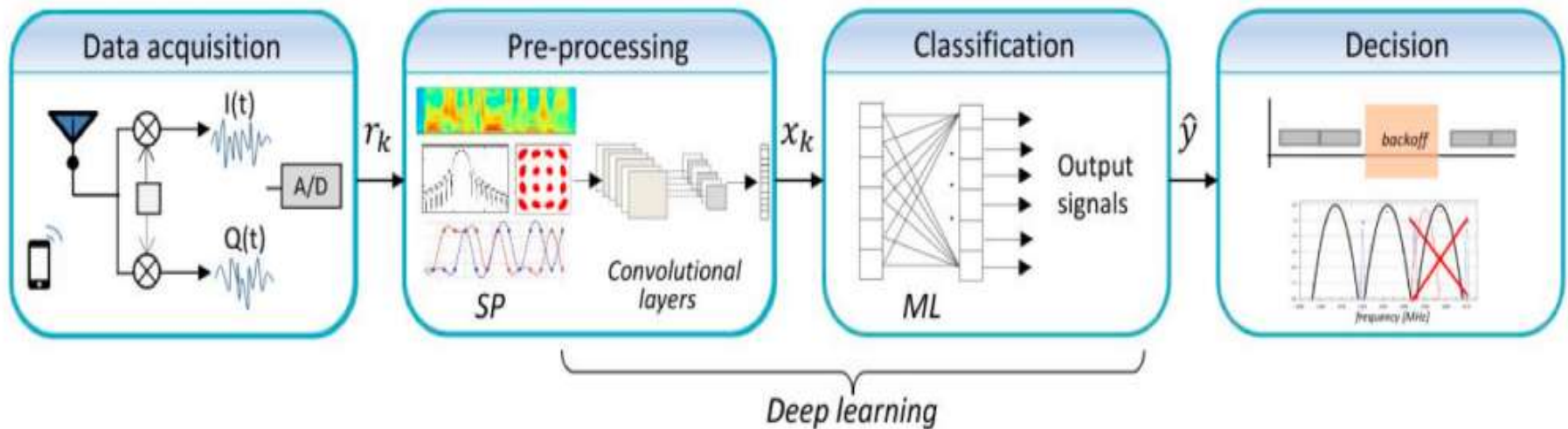


FIGURE 4. Dual RSA mode showing the hopping frequencies and sequences of the drone controller.

TEKTRONICS SOLUTION

Detecting Drones Using a Real-Time Spectrum Analyzer

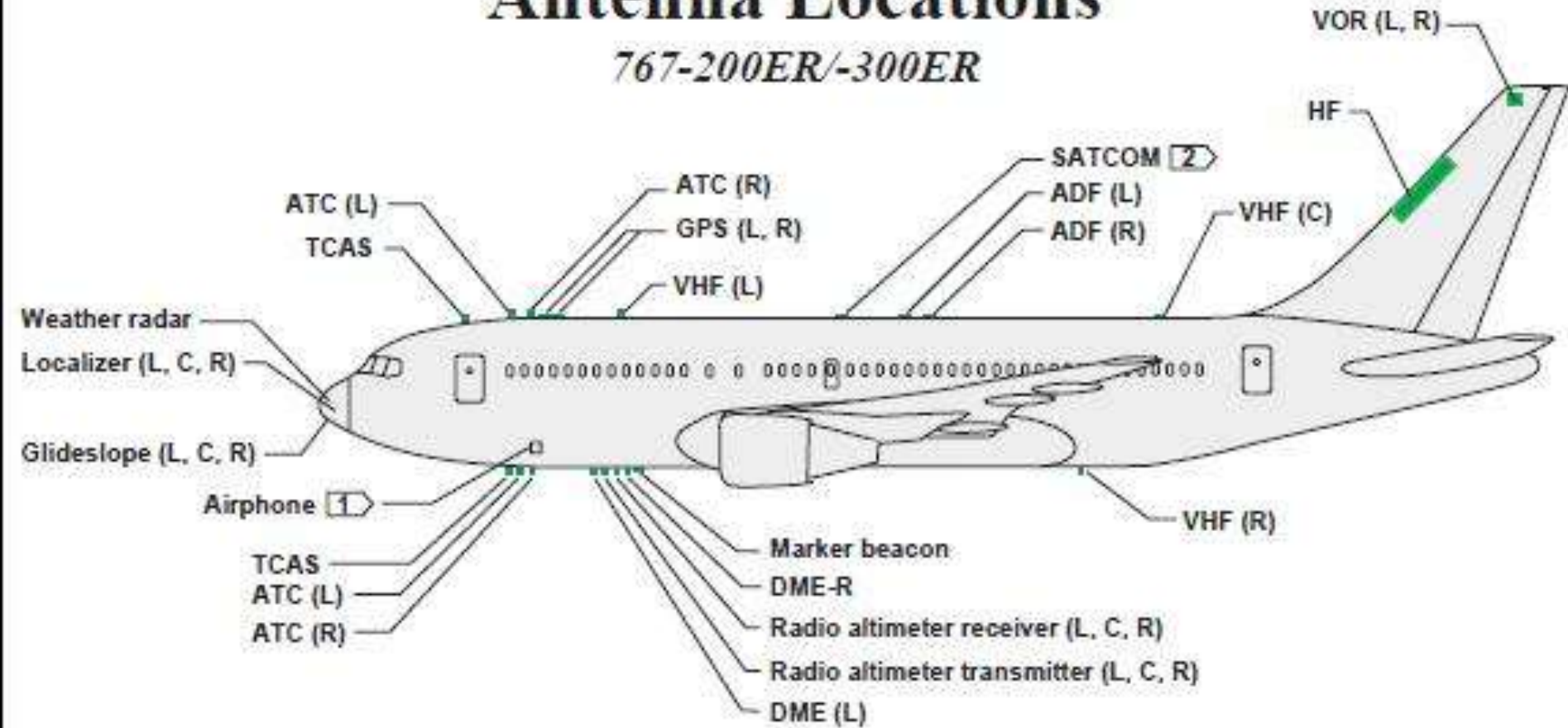


Processing pipeline for end-to-end learning from spectrum data.²

RTL-SDR AIRCRAFT MONITORING

Antenna Locations

767-200ER/-300ER



AIRCRAFT ACARS

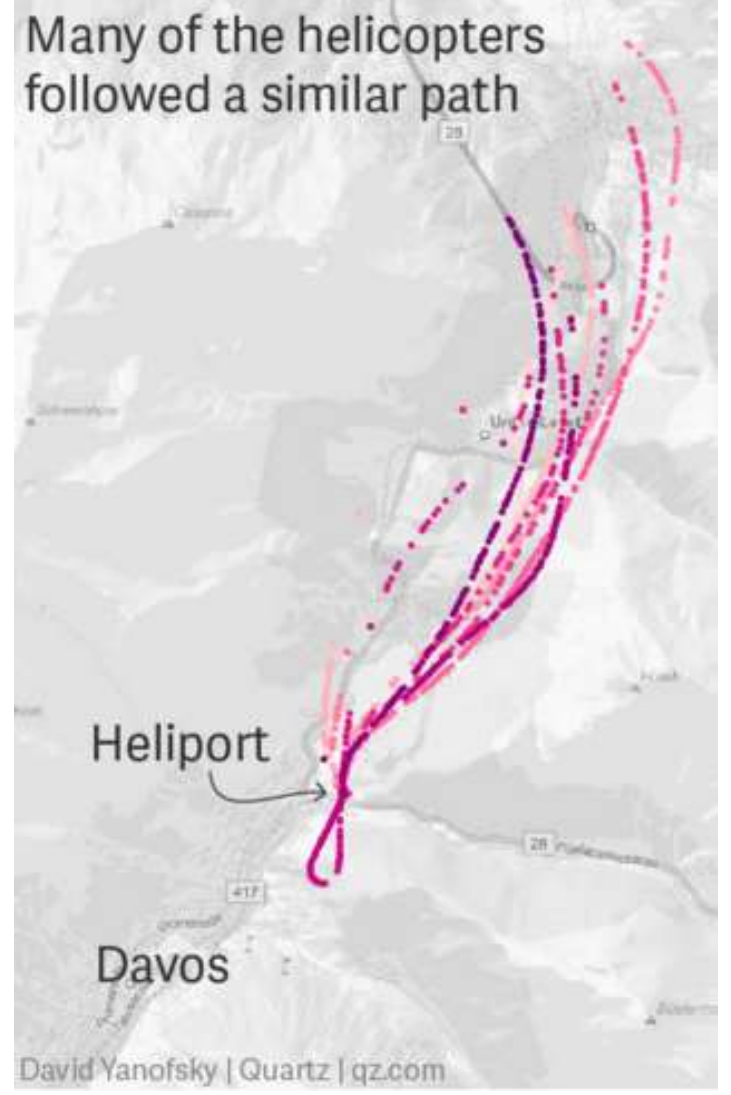
AIRCRAFT ACARS IS VHF, HF, AND SATELLITE

The screenshot displays the ACARS software interface, which is used for monitoring and decoding ACARS (Aircraft Communications Addressing and Reporting System) messages. The interface is divided into several sections:

- Left Panel (Spectrum Analyzer):** Shows a real-time spectrum plot of the received signal. The frequency is set to 131,739,153 Hz, and the center frequency is 131,349,488 Hz. The plot shows a signal around 131,700 MHz. Below the plot, a list of timestamps is visible: 12/10/2012 15:36:05, 12/10/2012 15:36:03, 12/10/2012 15:36:02, and 12/10/2012 15:36:00.
- Right Panel (Message List):** Displays a list of decoded ACARS messages. Each message entry includes the ACARS mode, aircraft registration, message label, block ID, message number, and flight ID. The messages are as follows:
 - ACARS mode: E Aircraft reg: G-TAWA ||
Message label: 5V Block id: 1 Msg no: 589A
Flight id: BY031A || ||
[12/10/2012 15:32]
 - ACARS mode: E Aircraft reg: N1NC ||
Message label: 17 Block id: 3 Msg no: M55A
Flight id: GS0000 || ||
Message content:
POADIGS0000/12121434CYTLKPRVNS1 55.7W 4 3.9 J222/10/429/ 48/AUTOR
PY15
North: 51.00 West: 4.00
[12/10/2012 15:32]
 - ACARS mode: E Aircraft reg: PZ-TCP ||
Message label: 00 Block id: 4 Msg no: 507A
Flight id: PY0993 || ||
[12/10/2012 15:32]
 - ACARS mode: X Aircraft reg: G-EUXX ||
Message label: 10 Block id: || Msg no: M72A
Flight id: BA007H || ||
Message content:
ARRB1 EGLL1515 NBAW0914005765003232000300 00
PCB checkbox doesn't match for the following message:
 - ACARS mode: G Aircraft reg: LX-UCV ||
Message label: HT Block id: || Msg no: D25A
Flight id: CV0861 || ||
[12/10/2012 15:34]
- Bottom Panel (Log):** Shows a log of events, including aircraft additions to the database:
 - 12 Oct 2012 - 15:31:57 Document containing no data
 - 12 Oct 2012 - 15:31:58 Document containing no data
 - 12 Oct 2012 - 15:32:43 Aircraft "PZ-TCP" was added to your database
 - 12 Oct 2012 - 15:33:07 Aircraft "G-EUXX" was added to your database
 - 12 Oct 2012 - 15:34:53 Aircraft "LX-UCV" was added to your database

ADS-B AIRCRAFT AND HELICOPTER

TRACKING THE WORLD ECONOMIC HEADQUARTERS' TRANSPORTATION HELICOPTERS @ 1090 MHz (Automatic Dependent Surveillance Location Tracking System)



UPLOADED AND SHARED ADS-B

← → ↻ <https://www.flightradar24.com/40.64,-73.78/8>

Apps Suggested Sites Web Slice Gallery Imported From IE RCA SECURITY EB5AC Search ★ Bookmark Manager New folder Imported Imported (1)



Apps Add coverage Data / History Social Press About

✈️ AIRCRAFT ? 233 / 12,728 >

📍 AIRPORT DELAYS ? ▾

AIRPORT	ARR	DEP
Barcelona (BCN)	3.8	3.8
Brussels (BRU)	3.8	3.6
Sapporo (CTS)	2.7	2.3
Malaga (AGP)	1.3	2.9
Tenerife (TFS)	0.4	3.3

[Full list](#)

🐦 TWEETS ▾

#BA59, London-Cape Town, is returning to London with a mechanical issue. <https://t...>
14 hours ago

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<https://www.flightradar24.com/40.64,-73.78/8>

EMERGENCY COMMUNICATIONS – HURRICANE MARIA STRUCK DOMINICA @ 175 mph, CAT 5



11/06/2017

AT&T is using an LTE cell payload UAV to offer connectivity to Puerto Ricans who lost wireless service after Hurricane Maria and live in a 40-mile (max) area under the UAV CELL ON WINGS.

This photo was taken over a month after hurricane Maria devastated Puerto Rico where 48 percent of cell sites remain inoperative.

SIGNALS INTELLIGENCE – RF SIGNATURE

sigidwiki.com/wiki/Category:Marine

	Automatic Identification System (AIS)	Automatic Identification System (AIS) is used by ships to broadcast position and vessel information.	161.975 MHz — 162.025 MHz	NFM	GMSK	25 kHz	Worldwide		
	Automatic Transmitter Identification System (ATIS)	ATIS systems are identification tags used by inland commercial waterway traffic on rivers in Europe. The FSK burst is appended at the end of every voice transmission by the vessel operator.	30 MHz — 800 MHz	NFM	FSK	12 kHz	Europe		
	CODAR	CODAR (Coastal Ocean Dynamics Applications Radar) is used for near-surface	4.438 MHz —	USB	ILFM	50 kHz	Worldwide		

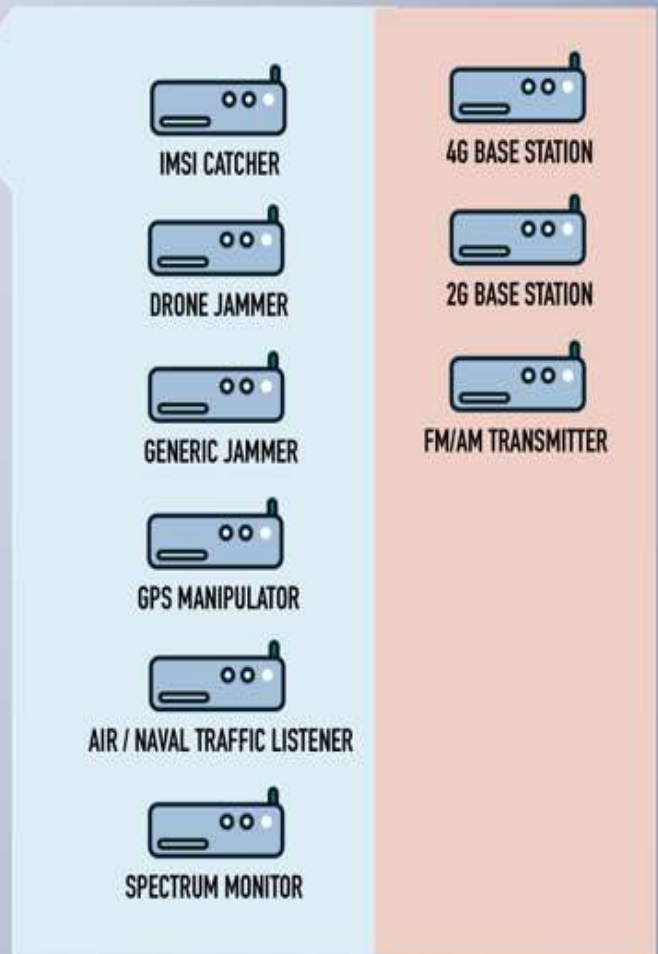
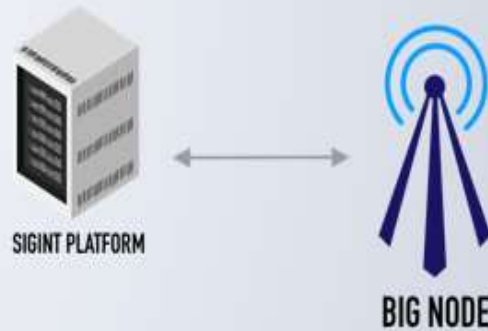
Coverage compari....pdf Coverage Analysis....pdf On the Coverage o....pdf Measurementofele....pdf RF bugs-GS days 2....pdf Show all

Marine RF and modulation signal patterns

<https://www.sigidwiki.com/wiki/Category:Marine>

CELLULAR DATA SECURITY - SigintOS

NODES



BIG NODE

MINI NODE; It is easily portable. It performs operations according to many different hardware and radio receivers in its content. These operations can be added or removed as modules.

In addition, FM and AM broadcasts can be made and 4G and 2G networks can be created completely privately.



SIGINT PLATFORM

<https://medium.com/@tomac/sigintos-a-wireless-pentest-distro-review-a7ea93ee8f8b>

CELLULAR DATA SECURITY – SigintOS SDR,

T-IMSI

1.850.100.000 Record to Database Start Listen Stop

Raw Data

```
0000 40 0e 0c 25 fd 9c 10 00 00 87 bd ea 0d 8d 15
4e c8 10 a0 e3 e8 7c 1e 00 00 00 00 00 d8 e3 ff e7
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00

0000 40 0e 0d 1c 9e 53 10 00 00 87 bd ea 0d 8d 15
4e c8 10 a0 e3 e8 7c 1e 00 00 00 00 00 d8 e3 ff e7
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00

0000 40 8d 8c 25 c1 a7 d0 e0 c2 ed 10 f6 00 00 00
4e c8 10 a0 e3 e8 7c 1e 00 00 00 00 00 d8 e3 ff e7
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00
```

Decoded T-IMSI List

```
2243757368351
1603607385644
1603467605325
2003718803116
2163700001583
1844147913376
1843977023290
2003611698893
1843800424806
1844010925683
1843235850533
2163522845346
2163464009389
1843958116475
1603901933949
1843395856487
2003685923239
1843363659365
2243724847634
1843979652373
2243261061569
2243519669553
2163260815997
```

Export as CSV Save Plain Text

IMSI stands for International Mobile Subscriber Identity and is the identifier for the SIM card to which your mobile phone number is Linked.

TIMSI is the LTE 4G/5G Temporary International Mobile Subscriber Identity.

<https://i-hls.com/archives/80949>

CELLULAR DATA SECURITY, Historic StingRAY



Fake Cell Site, the L3Harris StingRAY

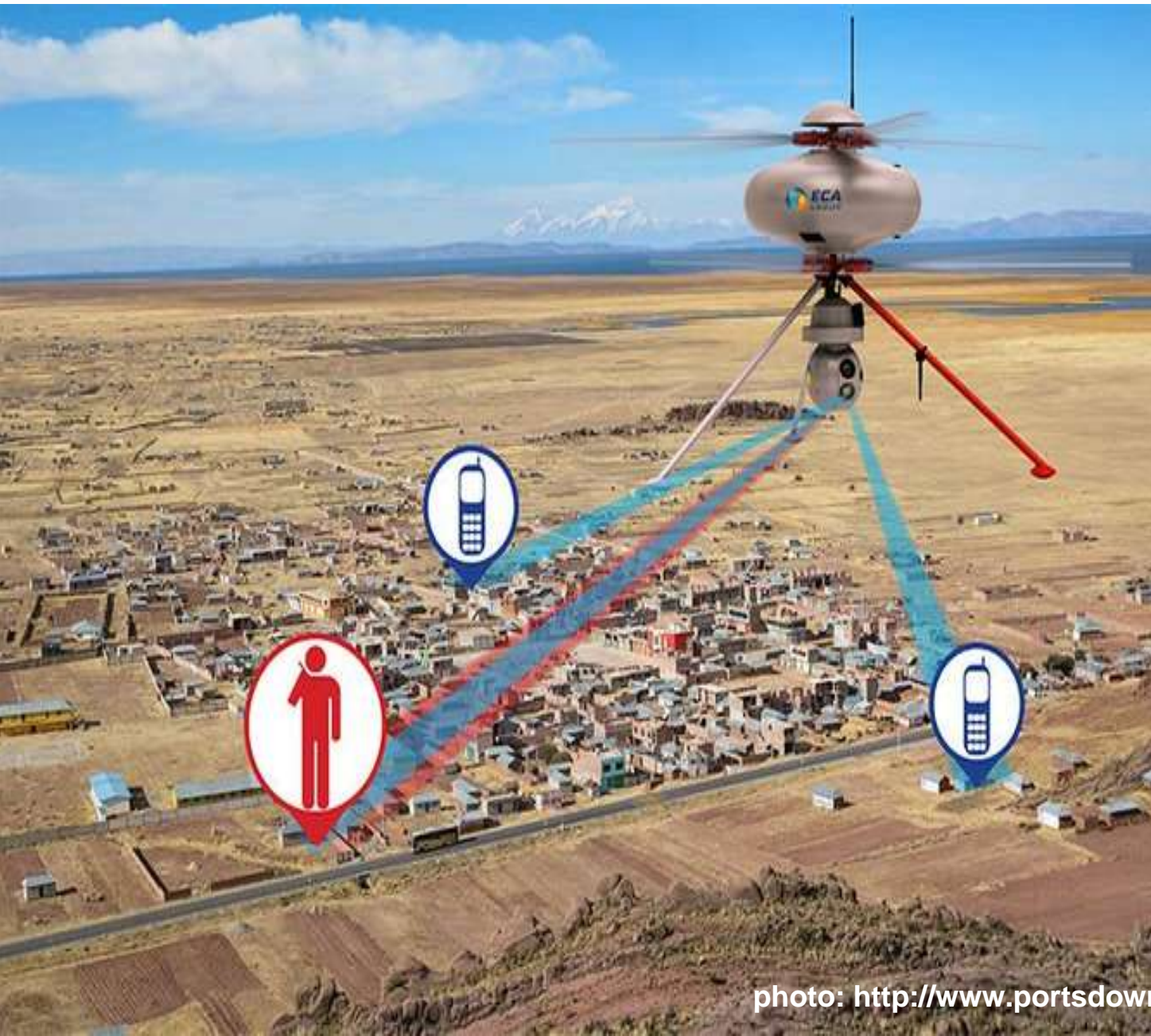
<https://www.washingtonpost.com/world/national-security/dhs-says-it-has-detected-possible-cellphone-surveillance-in-dc--and-doesnt-know-whos-doing-it/>

CELLULAR DATA SECURITY



The Israeli companies unveiled their joint intelligence-gathering UAV at the Eurosatory exhibition in Paris. In the context of this cooperative effort, the Orbiter-3 UAV by Aeronautics carries the SigInt systems by Verint. Amir Rapaport reports from Paris <https://israeldefense.co.il/en/node/34581>

CELLULAR DATA SECURITY



The At MILIPOL 2017, [ECA Group](#), unveiled the IMSI-Catcher signal intelligence module for its UAV IT180 mini-drone. A tool in the fight against terrorism.

https://www.armyrecognition.com/milipol_paris_2017_news_online_show_daily/milipol_2017_eca_group_uav_it180_gets_new_sigint_payload.html

photo: <http://www.portsdown>

CHINESE PLA BALLOON HAP SECURITY

ITS ROUTE OVER NUCLEAR MISSILE SITES



A US defense official said the balloon is **the size of several buses** - but doesn't post an immediate threat to Americans.

<https://www.dailymail.co.uk/news/article-11712125/Explosion-sky-Billings-Montana-Chinese-balloon-spotted-U-S-airspace.html>

GLOBAL EXPERIMENTAL BALLOON (HAP) SECURITY



Weights only 1.8g and measurer just 33.0 x 12.7mm!

<https://qrp-labs.com/u4b.html>

DEDICATED TO THE HEROS AND HEROINES OF INTELLIGENCE OPERATIONS



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[7] Samy Kamkar, "DEFCON Drive it liked you Hacked it", Defcon 23, 2015 <http://samy.pl/defcon2015/>

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<https://davidsarnoff.tcnj.edu/visi>

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