



governmentattic.org

"Rummaging in the government's attic"

Description of document:	Defense Threat Reduction Agency (DTRA) PHALANX Reports to Analyze Unmanned Aircraft System Activity, 2024
Requested date:	16-December-2024
Release date:	27-June-2025
Posted date:	07-July-2025
Source of document:	FOIA Request U.S. Department of Agriculture Office of the General Counsel (OGC) Room 107W, Whitten Building 1400 Independence Ave, SW Washington, D.C. 20250-1400 Email: usdafoia@usda.gov FOIA.gov

The governmentattic.org web site ("the site") is a First Amendment free speech web site and is noncommercial and free to the public. The site and materials made available on the site, such as this file, are for reference only. The governmentattic.org web site and its principals have made every effort to make this information as complete and as accurate as possible, however, there may be mistakes and omissions, both typographical and in content. The governmentattic.org web site and its principals shall have neither liability nor responsibility to any person or entity with respect to any loss or damage caused, or alleged to have been caused, directly or indirectly, by the information provided on the governmentattic.org web site or in this file. The public records published on the site were obtained from government agencies using proper legal channels. Each document is identified as to the source. Any concerns about the contents of the site should be directed to the agency originating the document in question. GovernmentAttic.org is not responsible for the contents of documents published on the website.



DEFENSE THREAT REDUCTION AGENCY
8725 JOHN J. KINGMAN ROAD, STOP 6201
FORT BELVOIR, VA 22060-6201

June 27, 2025

Re: FOIA Case No.: 25-024

This is our final response to your Freedom of Information Act (FOIA) request perfected December 16, 2024, and assigned FOIA case number 25-024 by the Defense Threat Reduction Agency (DTRA). You requested copies of records (reports, memos, emails, etc.) since December 1, 2024, regarding drone sightings on the East Coast of the United States (New Jersey, Maryland, Virginia, Massachusetts, New York, etc.).

Enclosed is a copy of documents totaling 348 pages. These documents are being released to you in part. Portions of the records are exempt from release under FOIA Exemption 6. Exemption 6 prevents the release of information which, if released, would constitute a clearly unwarranted invasion of personal privacy. No fees are due as the assessable cost total \$25.00 or less.

Determinations on behalf of DTRA were made by the Initial Denial Authority (IDA), Mr. James Skelton, Chief of Staff, Information Management & Technology Directorate. If you consider this decision to be an adverse determination, you may file a written appeal that is postmarked no later than 90 calendar days after the date of this letter to the Deputy Director, Defense Threat Reduction Agency, Information Management and Technology Directorate, ATTN: FOIA/PA Office, 8725 John J. Kingman Road, MSC 6201, Fort Belvoir, Virginia 22060. The appeal should reference the FOIA/Privacy Act case number, contain a concise statement of the grounds upon which the appeal is brought, and a description of the relief sought. A copy of this letter should also accompany your appeal. Both the envelope and your letter should clearly identify that a Freedom of Information Act and/or a Privacy Act Appeal is being made.

Should you have additional questions or concerns regarding this case, you may seek dispute resolution services from the DTRA FOIA Public Liaison or the Office of Government Information Services (OGIS). The DTRA FOIA Public Liaison, Mr. Burton Post, may be contacted by phone at (571) 616-5162 or by email at dtrafoiaprivacy@mail.mil. The contact information for OGIS can be found at www.archives.gov/ogis.

Sincerely,

Eugene McGirt

Eugene McGirt
FOIA/Privacy Act Specialist
Freedom of Information/Privacy Act Office



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than October 02, 2025.

DTRA PHALANX Activity Report

Kings Bay, GA (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview (2 Slides)
- S/N: 3N33HC7002Z065
- S/N: 687XMA800209PK
- Points of Contact
- Sources
- Terminology



Executive Summary

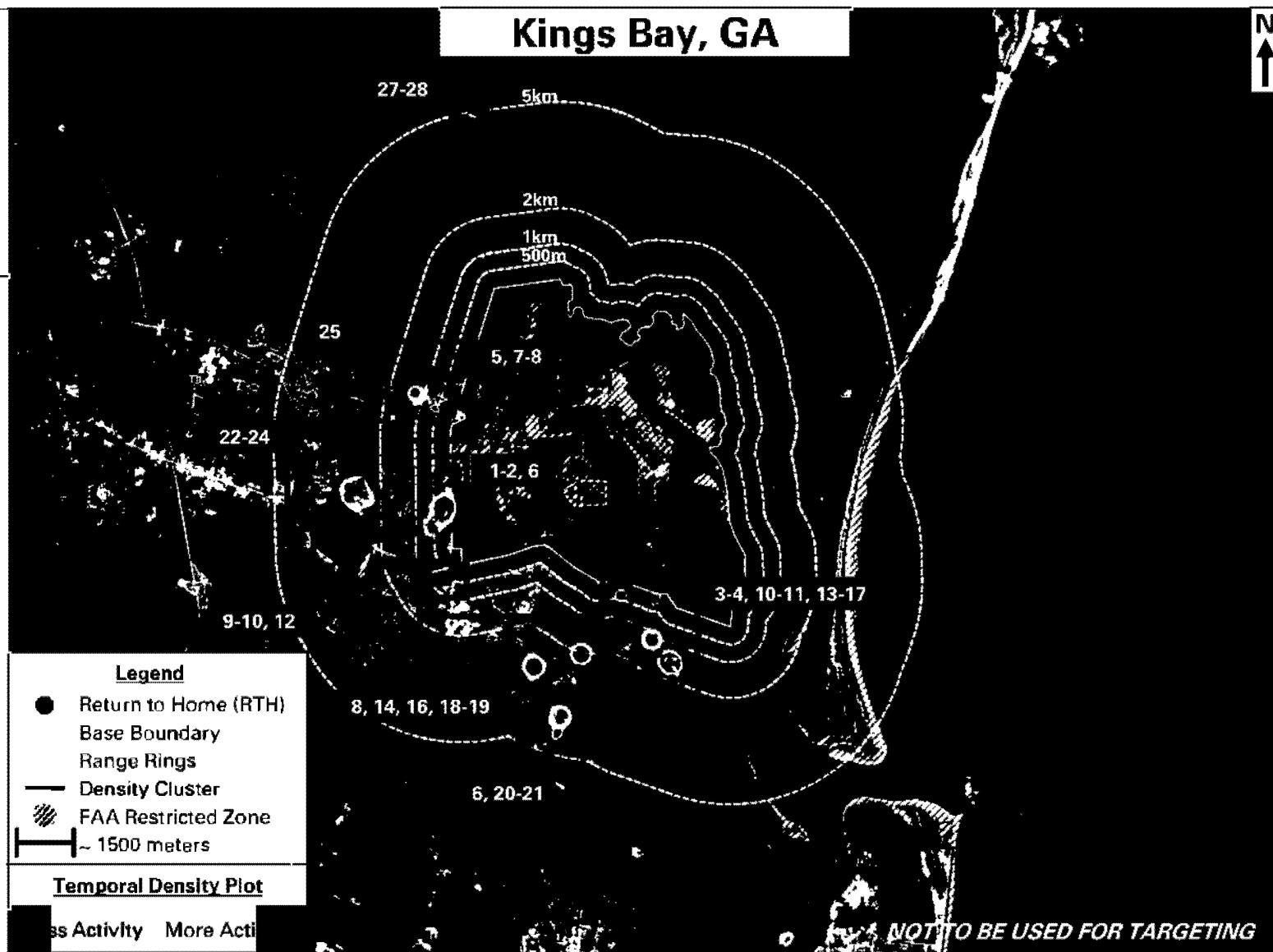
December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

There was significant sUAS activity during the month of December 2024. S/Ns: 1-2 are platforms that operated IVO the base boundary. S/N: 6 is reported to be a possible altitude violation at ~730ft AGL (highest altitude reported at the time). S/Ns: 7-8, 19, 26-27 have been reported as "DJI Unknown" platforms; with S/N: 12 only providing a partial serial number. There was a significant increase in all activity compared to the previous 4-week reporting period (01 NOV 24 – 30 NOV 24, 24x S/Ns, 46x events, 01:56:05 duration). S/Ns increased 13%, events increased 53%, and duration increased 162%.

5km Overview

- 28x S/Ns, 73x events, 05:14:33 duration
 - Exceeded altitude allowance: 2x S/Ns (9x events) (S/Ns: 2, 6)
 - Night detections: 3x S/Ns (5x events) (S/Ns: 2, 6, 9)
- 11x S/Ns previously detected (S/Ns: 5-7, 9-10, 13, 15, 16, 18-19, 21, 26)
 - (S/N: 6) shown to be previously detected on the SE corner of St. Mary's Airport (17 JUN 24).
 - (S/N: 7) unknown platform previously detected IVO of Oceanview Elementary School in Norfolk, VA (23 NOV 24).
- 8x different platforms, 6x DJI Unknown Platforms, and 1x Unknown Platform detected (14x rotary-wing, 1x unknown)
 - Top by total events: DJI Unknown Platform (23x, 29%)
 - Top by total duration: DJI Phantom 4 Pro V2 (01:35:34, 28%)
 - Top by S/N count: DJI Unknown Platform and DJI Mini 2 (6x each, 21% each)



~~CUI~~



CUI

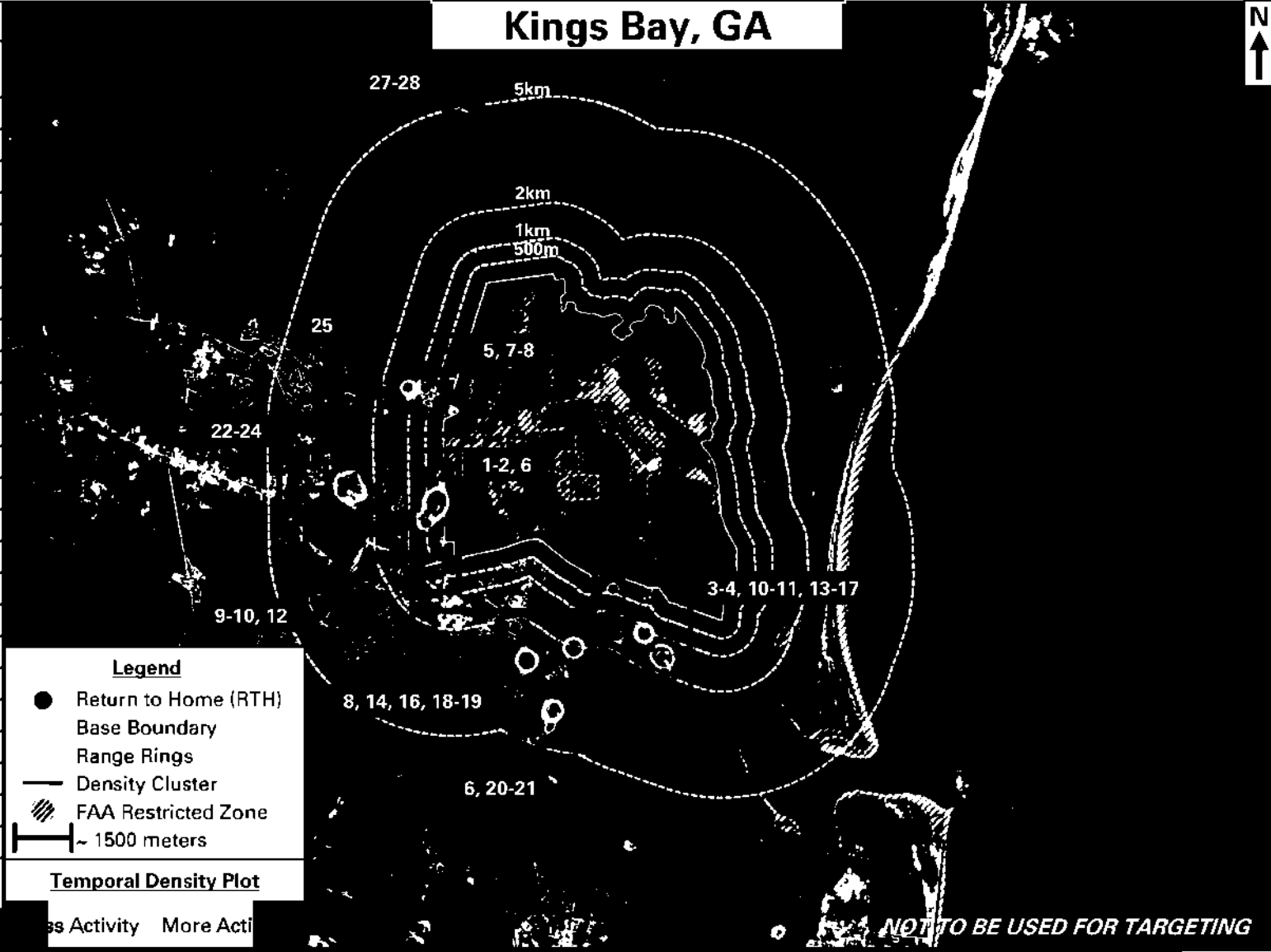
Current System Overview (1 of 2)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform/Component	Serial Number / Identifier	Events	Max AGL (ft)	Total Duration
1	DJI Mavic Air 2	3N33HC7002Z065	1	132	00:04:47
2	DJI Mini 3	687XMA800209PK	6	577	00:41:59
3	DJI Mini 2	3NZCH9A00310GP	2	190	00:01:28
4	DJI Mini 2	5FSCK460117R54	1	177	00:03:13
5	DJI Phantom 3	03Z0552360	1	194	00:04:18
6	DJI Mini 3 Pro	F4XFA226RML70T	3	730	00:06:01
7	DJI Unknown Platform	F8PJC247W0005V	7	323	00:14:30
8	DJI Unknown Platform	F8PJC24810005X	6	362	00:16:54
9	DJI Air 2S	3YT7M2T003B026	1	387	00:00:40
10	DJI Air 2S	3YT8M5H003E093	4	313	00:20:11
11	DJI FPV	37QBL8UBD10045	2	215	00:02:15
12	Unknown Platform	70	3	382	00:32:01
13	DJI Unknown Platform	F8PJC249L0007Y	2	334	00:14:00
14	DJI Mavic Air 2	3N3BH6H00200EJ	1	113	00:01:05
15	DJI Mini 3	F5YHX2476002AR	1	395	00:10:46
16	DJI Mavic 2 Pro	163CJ7FR0A889L	1	127	00:01:01
17	DJI Mini 3 Pro	F4XFA232DML8Q8	1	169	00:01:07
18	DJI Mini 2	3NZCJ760242BE7	1	242	00:01:40
19	DJI Mini 2	3NZCJ59004EEVN	1	98	00:03:44
20	DJI Unknown Platform	F8PJC24B9001BR	5	344	00:07:26
21	DJI Mavic Air 2	3N3BH7L00202TM	2	385	00:11:01
22	DJI Mavic 2 Pro	163DF9U0018D85	1	393	00:10:13
23	DJI Phantom 4 Pro V2	11VKH2M00203NP	13	395	01:35:34
24	DJI Mini 2	3NZCJ9E0145NFL	1	213	00:00:05

– S/N with night detection(s) | Red font – S/N previously detected | – exceed
FAA. altitude allowance.





CUI

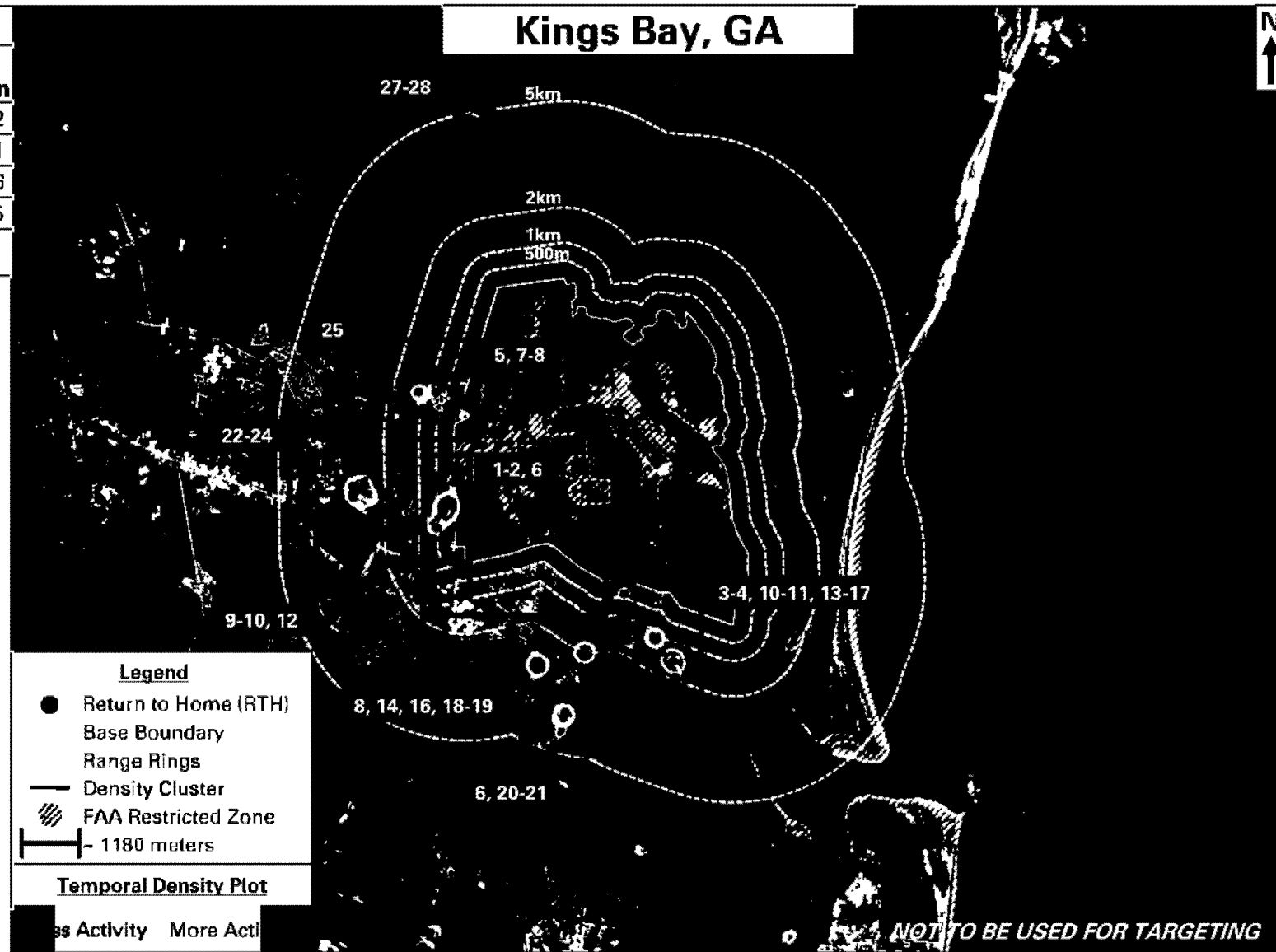
Current System Overview (2 of 2)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform/Component	Serial Number / Identifier	Events	Max AGL (ft)	Total Duration
25	DJI Mini 3	F5YHX24B8002FR	2	247	00:00:02
26	DJI Mini 2	3NZCJ8R0143ECW	1	236	00:00:01
27	DJI Unknown Platform	F8PJC24AJ0009M	2	348	00:06:26
28	DJI Unknown Platform	8JECMAC011027V	1	244	00:02:05

Red font – S/N previously detected



CUI



—CUI—

S/N: 3N33HC7002Z065

December 01, 2024 – December 31, 2024

Entire Slide is CUI—

- 1** S/N: 3N33HC7002Z065, DJI Mavic Air 2
- 1x total event (00:04:47) within 500m.

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-10 16:50:46	2024-12-10 16:55:33	00:04:47	132

- Platform was operating ~75m W from the base boundary, mostly within the wood line area and ~260m from Stimson Gate ECP facility. This platform was within altitude restriction guidelines and is a commercial-off-the-shelf product with standard camera resolution and digital zoom capabilities. No organic night mode or night vision capabilities.
- There are no previous detections of this S/N in the Phalanx repository.

DJI Mavic Air 2



Source: UAS Card Master

- Weight: ~670g/1.3lbs
- Dimensions: 183x253x77mm
- Max Speed: ~42.5 mph/ 68kpm
- Flight Time: ~34 Mins
- Transmission Distance:
 - FCC Compliant: 6.2 mi/10km
 - CE Compliant: 3.7 mi/6km
- C2 Signal: OcuSync 2.0
- Dual Frequency: 2.4-5.8GHz
- Image Transmission: 4K
- Camera: 48MP/ 4x Digital Zoom
- Cost: \$799





CUI

S/N: 687XMA800209PK

December 01, 2024 – December 31, 2024

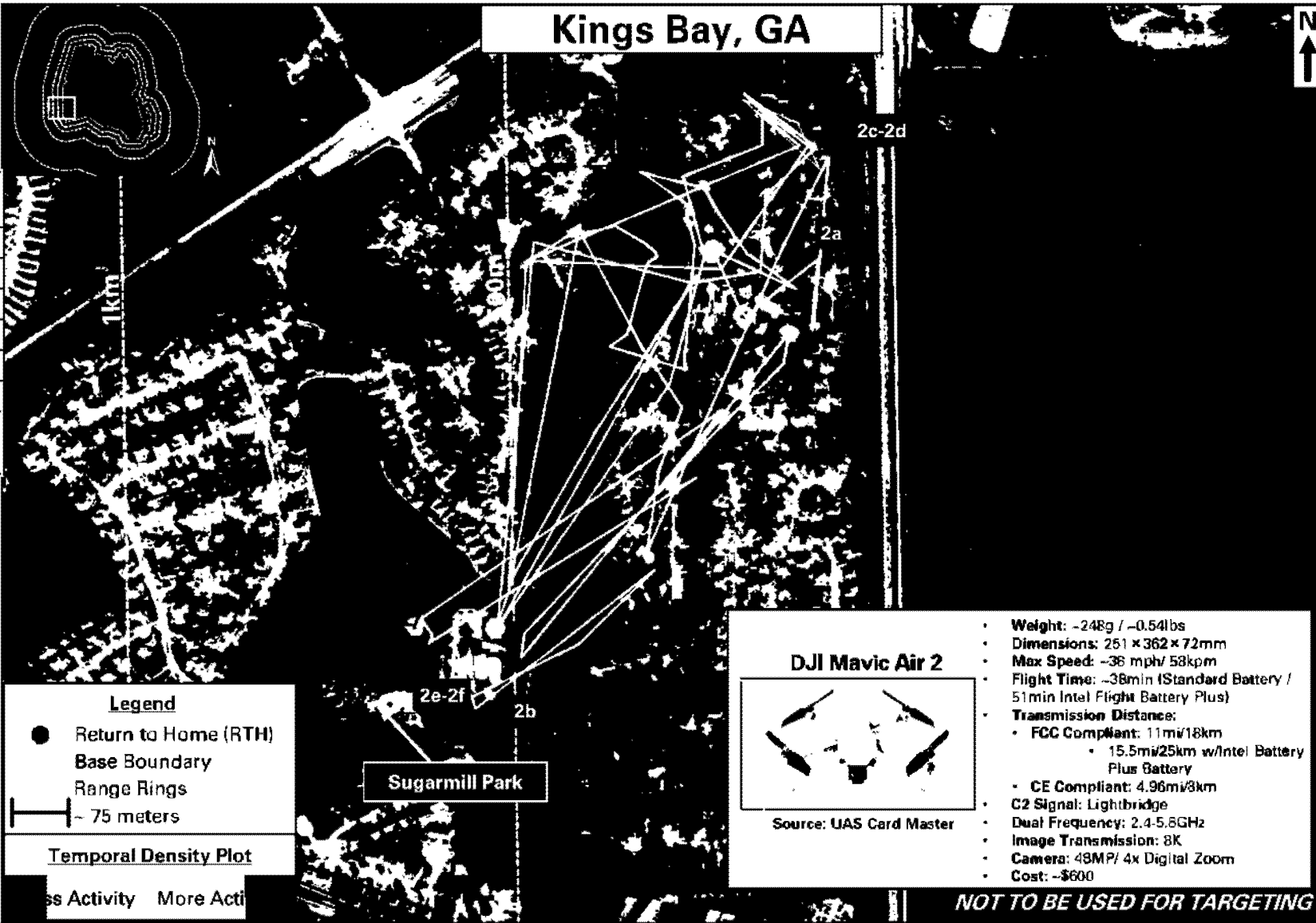
Entire Slide is ~~CUI~~

- 2 S/N: 687XMA800209PK, DJI Mini 3
- 6x total events (00:41:59) within 1km
 - 3x events (2a-2b, 2e) operates IVO Sugarmill Park (00:11:26)
 - 3x events (2c-2d, 2f) operates ~75m from base boundary IVO a residential area (00:30:33)

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
2a	2024-12-27 17:34:27	2024-12-27 17:53:27	00:19:00	231
2b	2024-12-25 23:34:23	2024-12-25 23:35:53	00:01:30	269
2c	2024-12-21 05:55:51	2024-12-21 06:06:18	00:10:27	559
2d	2024-12-15 23:57:15	2024-12-15 23:58:21	00:01:06	119
2e	2024-12-12 17:11:26	2024-12-12 17:15:01	00:03:35	449
2f	2024-12-12 16:57:36	2024-12-12 17:03:57	00:06:21	577

- S/N with night detection(s) | Negative values for Max AGL (ft) are due to calculations based on base elevation not accounting for surrounding terrain. | exceed FAA altitude allowance

- S/N: 2 is shown to have a flight pattern between a residential area and Sugarmill Park; flight patterns in clockwise formation form NE to SW. This S/N broke altitude restrictions on 3x occurrences as well as operating at low light hours. The DJI Mavic Air 2 is commercial-off-the-shelf with standard imagery and zoom capabilities. No organic night mode or night vision capabilities.
- Activity occurred ~75m from base boundary and ~300m from Stimson Gate ECP.
- There are no previous detections of this S/N in the Phalanx repository





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimpx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than October 02, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Kings Bay, GA. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides: 2-6)**
2. National Security UAS Flight Restrictions. https://dds-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides: 2-6)**
3. Map of Kings Bay, GA; PHALANX CONUS Repository; Technical Logs **(Slides: 2-6)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slides: 5-6)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than November 11, 2026.

DTRA PHALANX Activity Report

Air National Guard Base Barnes, MA (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

—CUI—

—CUI—

Agenda

- Executive Summary
- Points of Contact
- Sources
- Terminology



~~CUI~~

Executive Summary

December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

This is the first monthly report for this installation, comparative metrics will be available in subsequent reports. **Detections IVO ANGB Barnes were sparse, with the only activity detected ~5km from the installation boundary IVO a residential neighborhood. Both platforms were relatively low-cost models, however both come equipped as standard with high resolution camera equipment. Both detections exceeded FAA Altitude restrictions; S/N: 1 operated at an altitude in excess of 1200ft AGL. S/N: 1 operated at night and is equipped with night mode software, a program that increases contrast in low light conditions.**

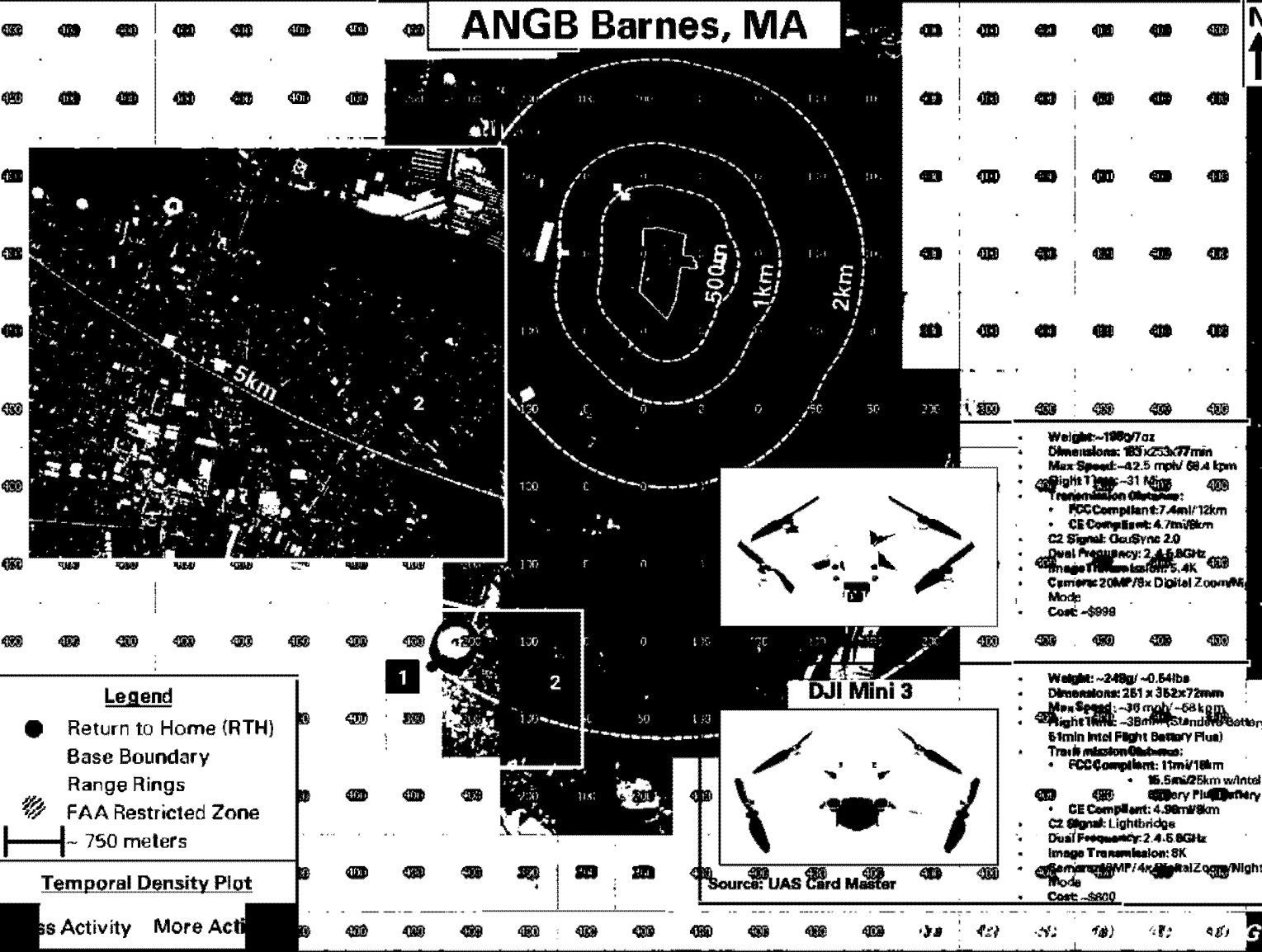
5km Overview

- 2x S/Ns, 2x events, 00:02:00 duration
 - Exceeded altitude allowance: 2x S/Ns (2x events) (S/Ns: 1-2)
 - Night detections: 1x S/N (1x event) (S/N: 1)
- 1x S/N previously detected (S/N: 2)
 - S/N: 2 Was previously detected IVO the same residential area as current detection (11 NOV 24)
- 2x different platforms detected (2x rotary-wing)
 - Top by total events: DJI Air 2S, DJI Mini 3 (1x, 50% ea.)
 - Top by total duration: DJI Air 2S (00:01:59, 99%)
 - Top by S/N count: DJI Air 2S, DJI Mini 3 (1x, 50% ea.)

Active within 5km

#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Air 2S	3YTBJ8U003023B	1	1243	00:01:59
2	DJI Mini 3	F5YHA23B803107Y7	1	177	00:00:01

– S/N with night detection | Red font – S/N previously detected | – exceed FAA altitude allowance





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimpx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than November 11, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Air National Guard Base Barnes. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 2)**
2. National Security UAS Flight Restrictions. https://udis-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slide 2)**
3. Air National Guard Base Barnes; PHALANX CONUS Repository; Technical Logs **(Slide 2)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 2)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
6. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slides 2)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than May 11, 2026.

DTRA PHALANX Activity Report

Bangor ANGB, MA (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- Points of Contact
- Sources
- Terminology



CUI

Executive Summary

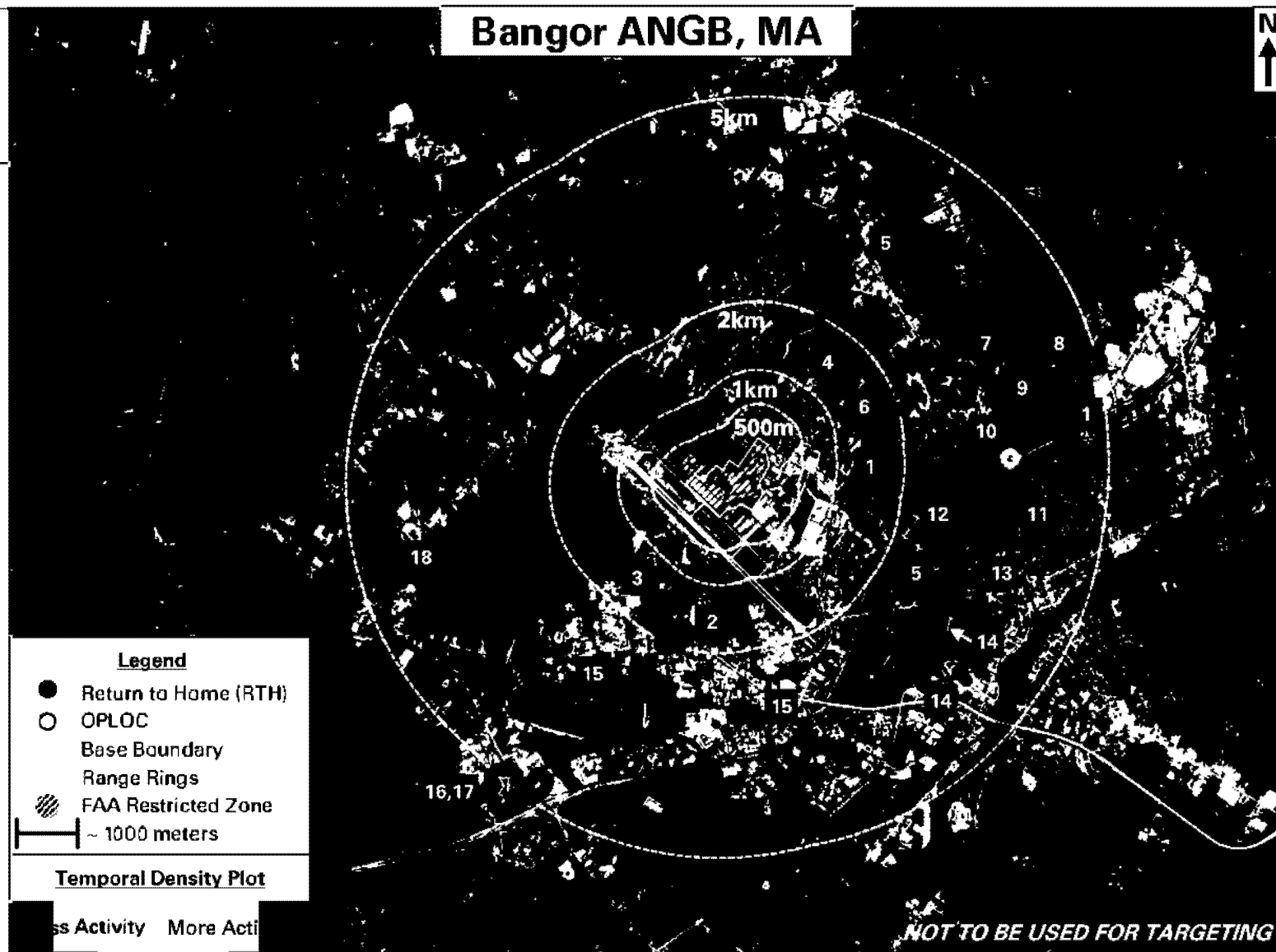
December 01, 2024 – December 31, 2024

Entire Slide is CUI

This is the initial report for Bangor Air National Guard Base. Platform activity was concentrated around residential/commercial areas east and south of the installation. Out of the 18x S/Ns identified, no activity was observed within 1km of the base boundary. 32x out of 39x total events (82%) exceeded FAA altitude restrictions IVO Bangor ANGB.

5km Overview

- 18x S/Ns, 39x events, 02:15:01 duration
- Exceeded altitude allowance: 14x S/Ns (32x events) (S/Ns: 1-5, 7-9, 11-15, 17)
- Night detections: 2x S/Ns (5x events) (S/Ns: 1, 6)
 - S/Ns 1, 6 are not equipped with night vision, thermal or an infrared capable camera for use during nighttime flights, however, do have Night Mode. Night Mode is a software-based program meant to enhance existing ambient light under extreme low-light conditions.
- 8x S/Ns previously detected (S/Ns: 5, 10-15, 17)
- S/Ns: 5, 10-15, 17 were previously detected outside 2km of base perimeter conducting likely recreational and commercial activity.
- 11x different platforms and 1x U/I DJI UAS detected (12x rotary-wing)
 - Top by total events: DJI Phantom 4 Pro RTK (12x, 31%)
 - Top by total duration: DJI Phantom 4 Pro RTK (00:34:23, 25%)
 - Top by S/N count: DJI Mini 3 Pro (3x, 17%)





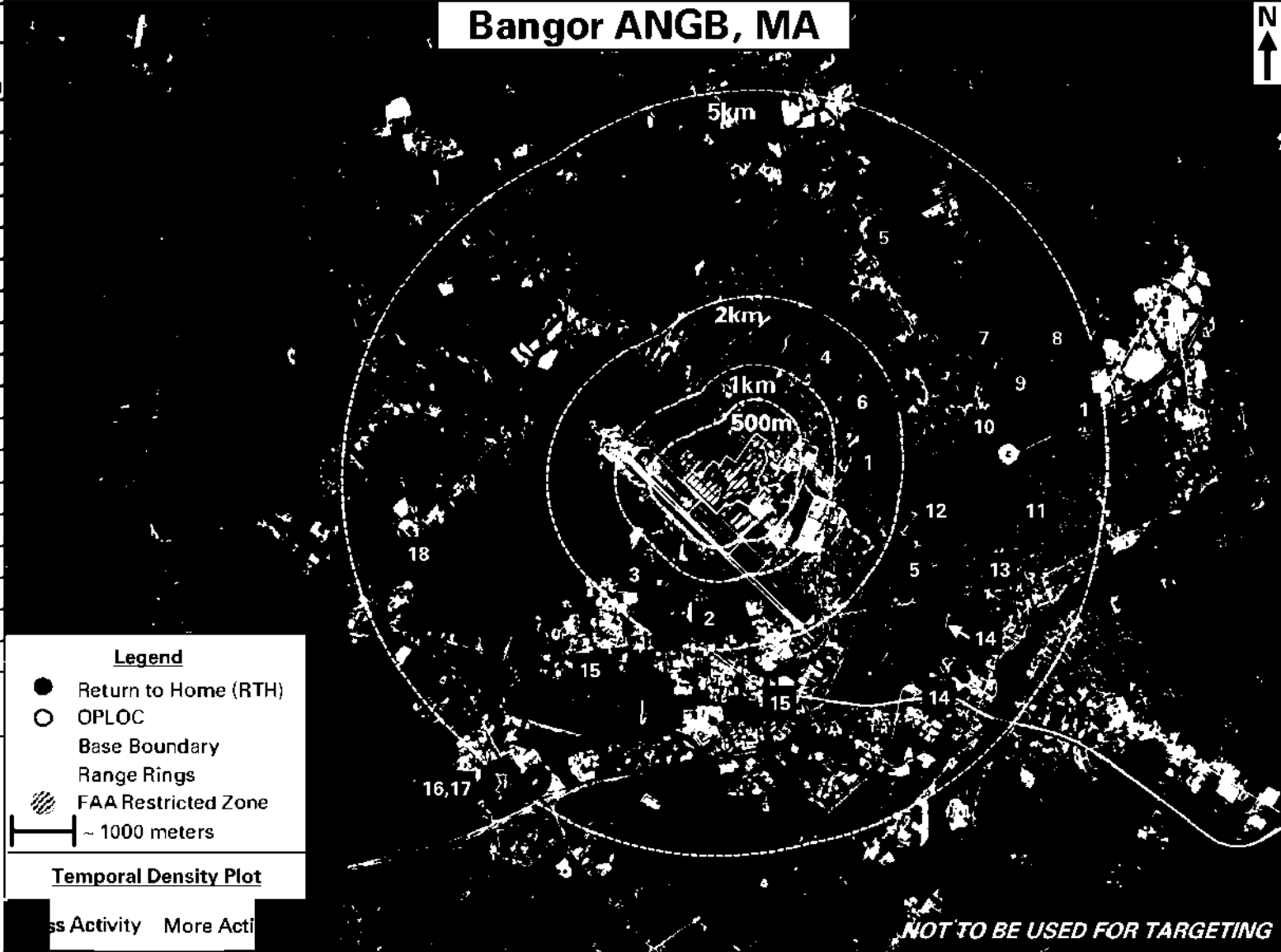
Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mavic Air 2	3N3BJ83012010J	4	118	00:12:15
2	DJI FPV	F37QBJ6PBD100G60	1	220	00:01:10
3	U/I DJI UAS	F163DFAD00137T90	1	191	00:00:01
4	DJI Mini 2 SE	F6CDA243BML20LDH	2	406	00:04:38
5	DJI Mavic Air 2	3N3BH4Q00203B6	3	269	00:10:59
6	DJI Mini 3	F5YHA241R03193S2	2	-49	00:03:51
7	DJI Mavic 2 Pro	1637L59001L2RT	1	507	00:32:25
8	DJI Air 3	F6N8C238J0033KZG	1	288	00:01:44
9	DJI Mini 2 SE	6C5CM2S001EJ6P	1	318	00:02:14
10	DJI Mini 3 Pro	F4XFA233XML82LV3	1	112	00:10:52
11	DJI Mini 3 Pro	F4XF7234TM06D14G	1	248	00:01:49
12	DJI Air 2S	3YT7L4M003D0EX	2	196	00:00:02
13	DJI Mini 3 Pro	F6L5C229H007KV9V	2	258	00:01:07
14	U/I DJI UAS	F8PJC24AH0009GP3	1	75	00:01:05
15	DJI Phantom 4 Pro RTK	F0UYKHB002013R0	12	342	00:34:23
16	DJI Mini 2	3NZSHCQ004004Y	2	154	00:00:58
17	DJI Mavic 3 Enterprise	F5FHD239800D66FW	1	277	00:12:45
18	DJI Mini 3	F5YHA2428031V7H6	1	141	00:02:43

- S/N with night detections | Red font - S/N previously detected | - exceeded FAA altitude allowance | Negative values for Max AGL (ft) are due to calculations based on base elevation not accounting for surrounding terrain.





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimpx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than May 11, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Bangor ANGB, MA. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. (Slides 2-3)
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 (Slides 2-3)
3. Bangor ANGB, MA; PHALANX CONUS Repository; Technical Logs (Slides 2-3)
4. FAA definition of night. https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf (Slides 2-3)
5. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> (Slides 2-3)

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than August 14, 2026.

DTRA PHALANX Activity Report

Dobbins AFB, GA (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- Points of Contact
- Sources
- Terminology



CUI

Executive Summary

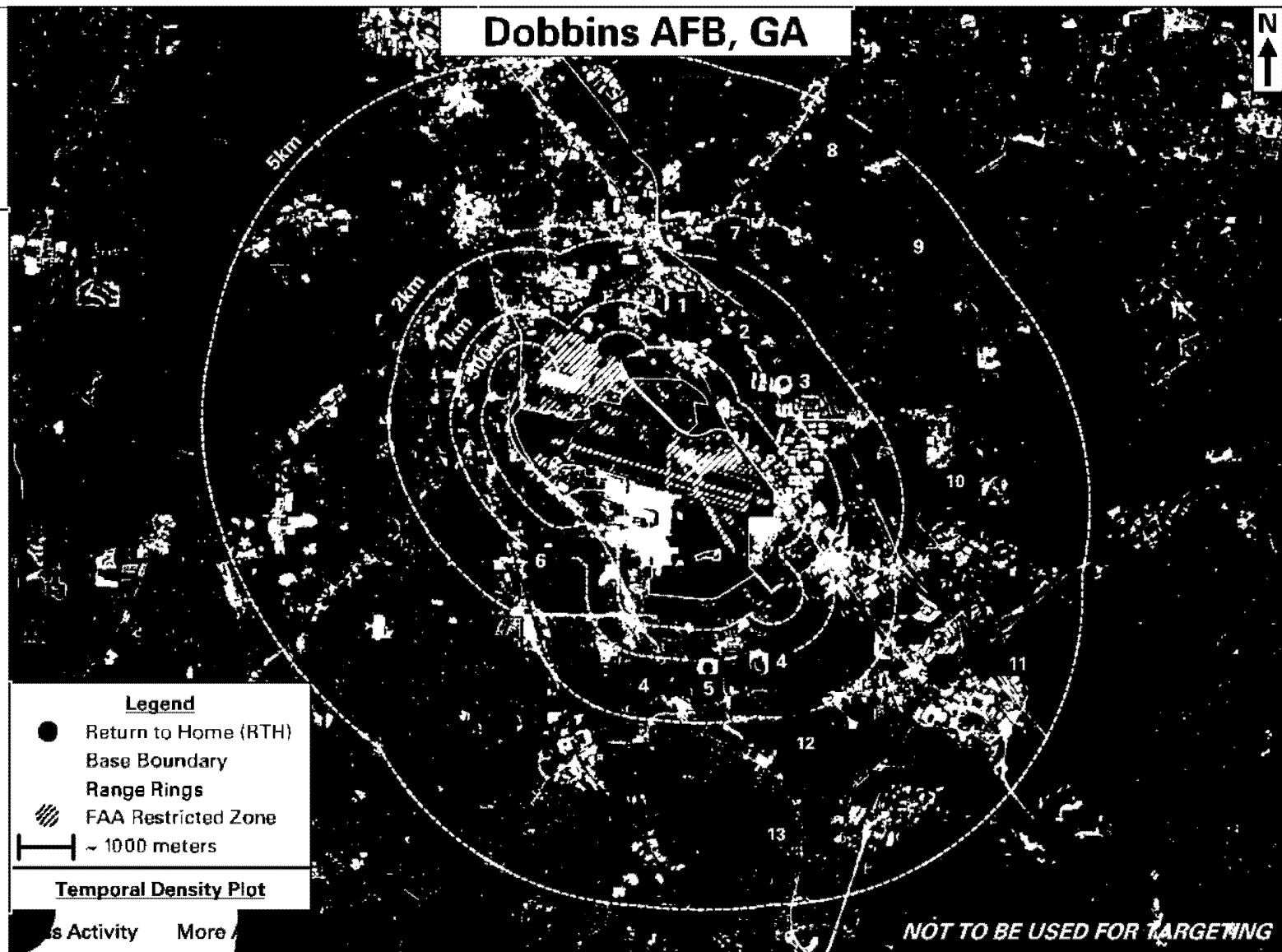
December 01, 2024 – December 31, 2024

Entire Slide is CUI

No S/Ns were detected within ~500m of the base boundary during the reporting period. S/Ns 1-2 came within ~1km; however, activities for both appeared to be recreational due to their operating area. S/Ns: 2-6, 8-10, 12-13 possibly exceeded FAA altitude ceiling allowances set for Dobbins AFB, GA. Compared to the previous reporting period, (01 – 30 NOV 24), the number of S/Ns decreased 30%, from 18x to 13x, events decreased 22%, from 21x to 17x, but duration increased 17%, from 00:55:27 to 01:07:24.

5km Overview

- 13x S/Ns, 17x events, 01:07:24 duration
 - Exceeded altitude allowance: 10x S/Ns (14x events) (S/Ns: 2-6, 8-10, 12-13)
 - Night detections: 1x S/N, (1x events) (S/N: 1)
- 6x S/Ns previously detected (S/Ns: 4, 6-7, 9-10, 13)
 - S/N: 4 was most recently detected on 14 AUG 24, ~13km NE of the base boundary IVO a residential area.
 - S/N: 6 was most recently detected on 31 OCT 24, ~3km NE of the base boundary IVO a residential area.
 - S/N: 7 was most recently detected on 24 OCT 24, ~2.4km NE of the base boundary IVO a residential area.
 - S/N: 9 was most recently detected on 01 OCT 24, ~9.6km E of the base boundary IVO a residential area.
 - S/N: 10 was most recently detected on 25 NOV 24, ~2.6km E of the base boundary IVO a commercial area.
 - S/N: 13 was most recently detected on 20 NOV 24, ~3.6km S of the base boundary IVO a residential area.
- 8x different platforms and 3x U/I DJI UAS detected (11x rotary-wing)
 - Top by total events: DJI Mavic 3 and U/I DJI UAS (4x, 24%) each
 - Top by total duration: DJI Mini 2 SE (00:20:47, 31%)
 - Top by S/N count: U/I DJI UAS (3x, 23%)



CUI



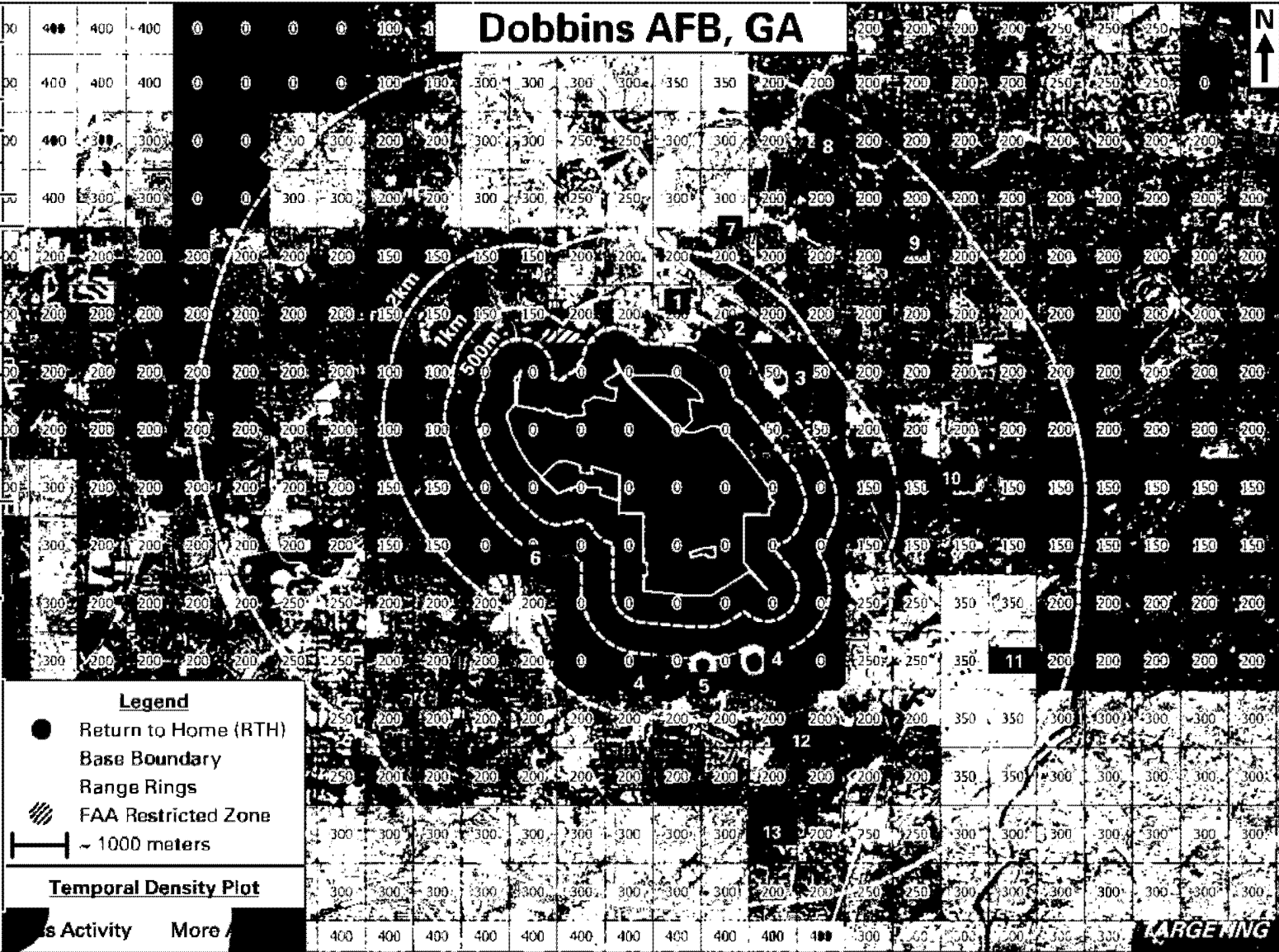
Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 3	F5YHA231A031EU30	1	63	00:05:45
2	U/I DJI UAS	F8PJC24AM0019VNU	1	-10	00:03:51
3	DJI Mini SE	4AEAK1600200RR	1	210	00:08:24
4	DJI Mavic 3	F45T7242200EB1YS	3	373	00:03:10
5	U/I DJI UAS	F8PJC249200072SR	2	163	00:03:19
6	DJI Mavic 2 Enterprise Dual	298CJ3GR0A12X5	1	154	00:07:59
7	U/I DJI UAS	8JECM7V0014SL5	1	167	00:05:28
8	DJI Mini 2 SE	F6CDA248LML2C9GT	2	322	00:12:18
9	DJI Air 3	F6N8C237J0032216	1	261	00:00:24
10	DJI Mini 2 SE	6C5AL58001010G	1	331	00:08:29
11	DJI Mini 2	5FSCK1601124K8	1	157	00:06:39
12	DJI Mavic 3	F45TB21CK1BE06D2	1	875	00:01:09
13	DJI Mavic Mini	1SDLH1D20402LR	1	229	00:00:29
- S/N with night detection Red font - S/Ns previously detected - exceed FAA altitude allowance Negative values for Max AGL (ft) are due to calculations based on base elevation not accounting for surrounding terrain.					

- Requests to operate within controlled airspace must be requested via the Low Altitude Authorization and Notification Capability (LAANC)
- Activity occurred in areas with ceilings ranging from 0 – 400ft AGL
- 77% of all S/Ns and 82% of total events exceeded altitude ceilings
 - 10x S/Ns, 14x events (S/Ns: 2-6, 8-10, 12-13)
- *Events with negative altitudes detected in FAA 0ft AGL ceiling areas are included since no activity is allowed without authorization





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimbx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than August 14, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Dobbins ARB. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. (Slides 2-3)
2. National Security UAS Flight Restrictions. https://dds-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 (Slides 2-3)
3. Dobbins ARB; PHALANX CONUS Repository; Technical Logs (Slides 2-3)
4. FAA definition of night. https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
5. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> (Slides 2-3)

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:** The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs/25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than March 19, 2026

DTRA PHALANX Activity Report

Joint Base Langley-Eustis, VA (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

Agenda

- Executive Summary
- Current System Overview (3 slides)
- Altitude Allowance (2 slides)
- Activity Cluster (2 slides)
- Points of Contact
- Sources
- Terminology



Executive Summary

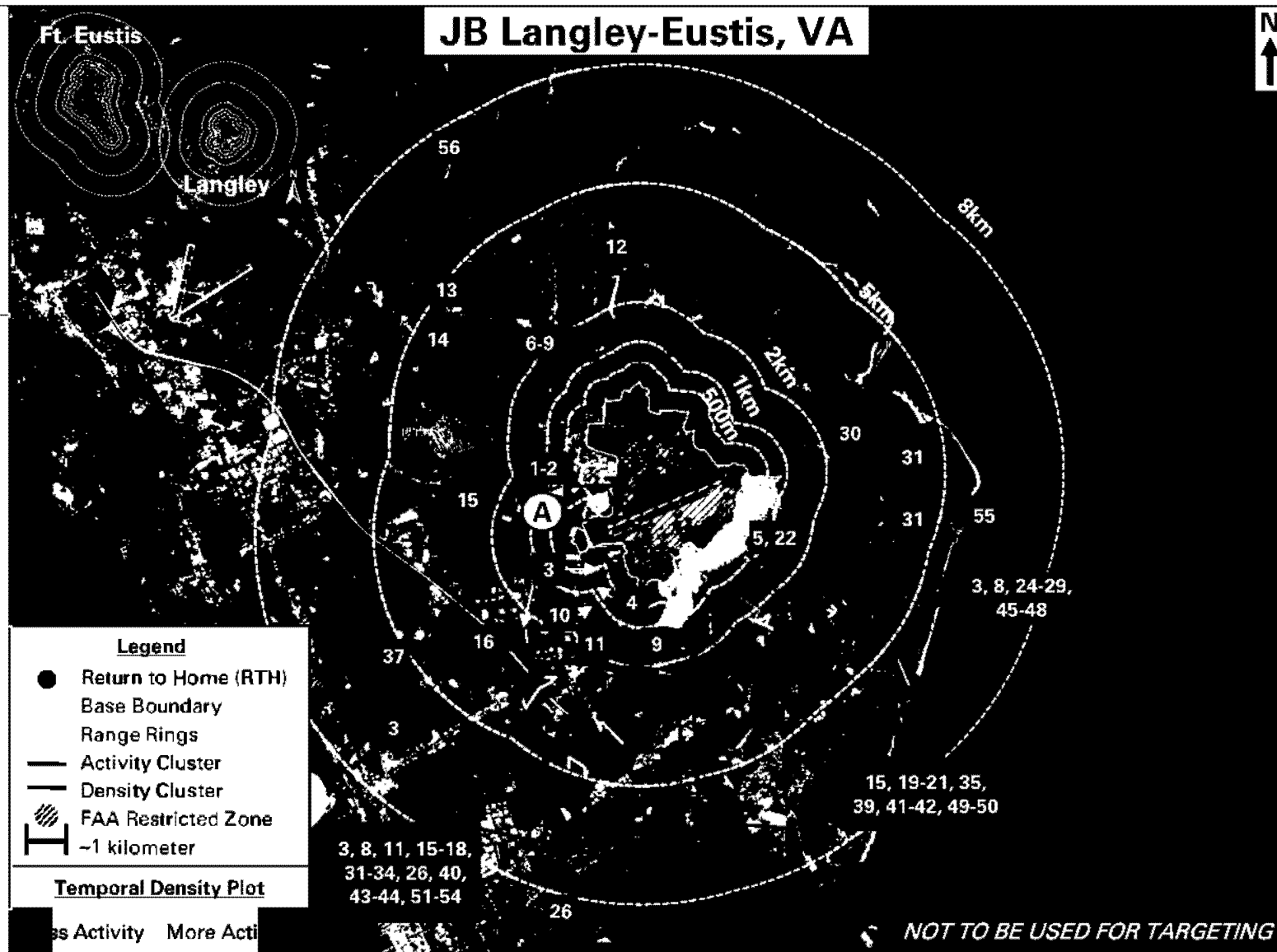
December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

During this reporting period, no activity was detected within 8km of Fort Eustis; all activity occurred within 8km of Langley AFB with no detects occurring within Langley's base boundary. S/Ns: 1-2 detected within 500m of Langley. S/N: 1 was detected ~250m W of the base boundary IVO a private airport and wooded area, (S/N: 2) was also in proximity of (S/N: 1). S/Ns: 3-4 detected within 30m of each other operating over a residential neighborhood SW of the base boundary and appears recreational in nature. sUAS detections within 8km of the base boundary decreased compared to the previous 4-week reporting period (01 NOV 24 – 31 NOV 24, 69x S/Ns, 138x events, 06:58:00 duration). S/Ns decreased 23%, events decreased 21%, and duration decreased 19%.

8km Overview

- 56x S/Ns, 113x events, 05:50:40 duration
 - Exceeded altitude allowance: 37x S/Ns (63x events) (S/Ns: 1-5, 8-13, 15-26, 29-30, 32-37, 40, 43-45, 49-50)
 - Night detections: 7x S/Ns (9x events) (S/Ns: 11, 14, 16, 18, 32, 46, 53)
- 30x S/Ns previously detected (S/Ns: 1, 3-4, 6, 8-9, 11, 17, 19, 21-22, 25-27, 30-32, 34-37, 39-40, 43-46, 48, 51, 53)
 - S/N: 1 most recent previous detect occurred (21 NOV 24) IVO an industrial area ~800m NW of the base boundary IVO an open field and residential home.
 - S/N: 3 most recent previous detect occurred (21 NOV 24) ~3.1 km SE of the base boundary IVO a residential area.
 - S/N: 4 most recent previous detect occurred (12 DEC 24) ~38km SE of the base boundary IVO a residential neighborhood which is ~ 1.8km N of NAS Oceana.
- 6x S/Ns cross-detections (S/Ns: 4, 8-9, 27, 31, 53)
 - S/Ns: 8-9, 31 were cross-detected IVO NWS Yorktown during the current reporting period.
 - S/N: 53 cross-detected IVO NSY Norfolk during the current reporting period.
 - S/Ns: 4, 27 cross-detected IVO NSY Norfolk during the reporting period.
- 19x different platforms and 1x U/I DJI UAS detected (20x rotary-wing)
 - Top by total events: DJI Mini 3 (26x, 23%)
 - Top by total duration: DJI Mini 3 (01:46:25, 30%)
 - Top by S/N count: DJI Mini 3 (11x, 20%)



~~CUI~~



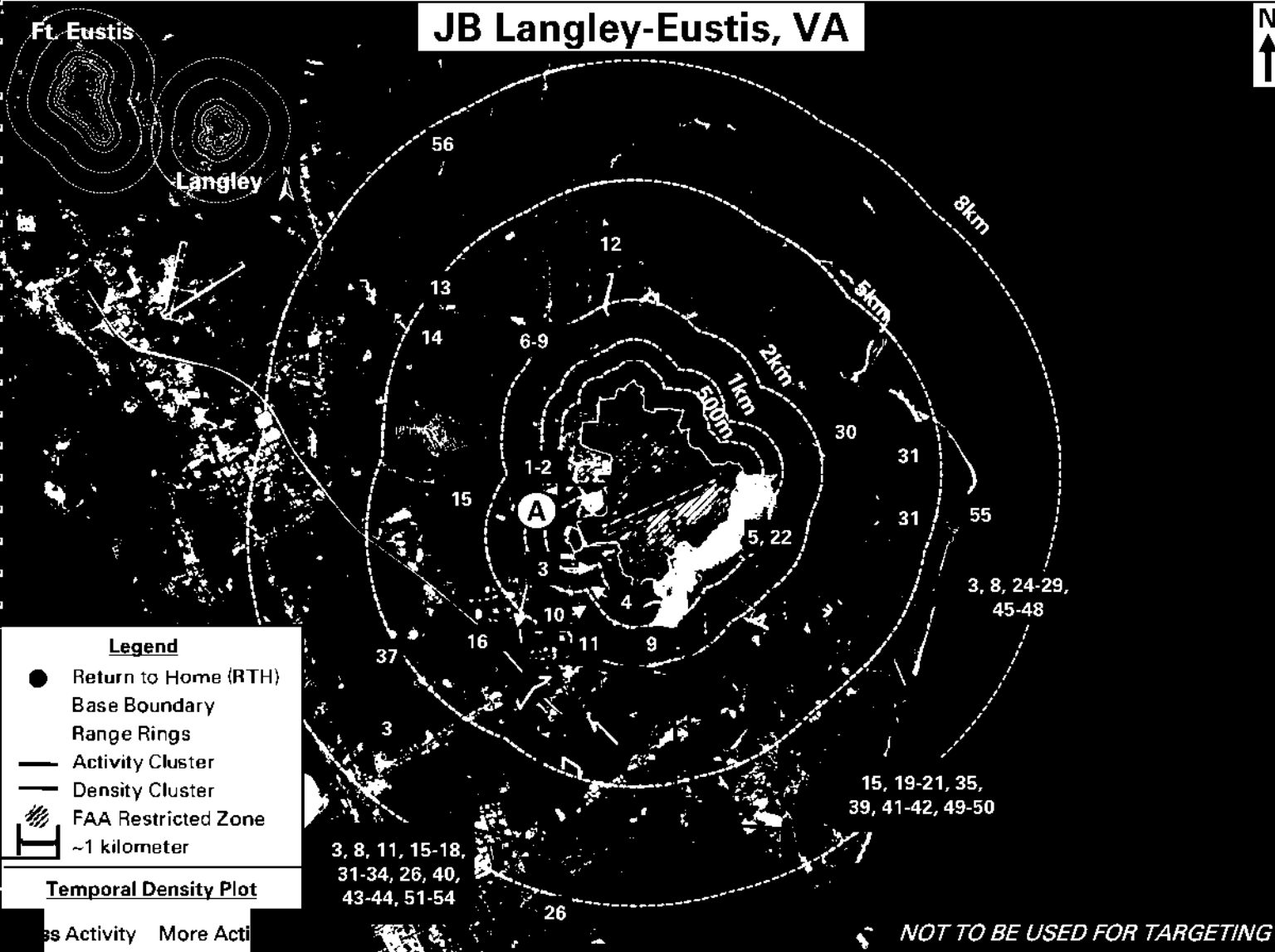
Current System Overview (1 of 3)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 8km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	Skydio UAS	1668BR40EA00H54Z	1	280	00:22:56
2	U/I DJI UAS	F4GCCJ8SR0A0N0V0	9	225	00:27:47
3	DJI Mavic 3 Classic	F67QE235H00A003G	5	416	00:05:14
4	DJI Mini 3	687CKAH001119B	1	180	00:03:20
5	DJI FPV	37QBJ6PBD102A9	1	299	00:02:47
6	DJI Mini 3	F5YHA243S031TPJH	1	-10	00:10:06
7	DJI Mini 3	687AM3E002074F	1	13	00:01:55
8	DJI Mavic Air 2	3N3BHBE01203C8	3	223	00:00:39
9	DJI Mavic Mini	1SDCH7G0169RS7	2	161	00:05:52
10	DJI Mavic 3 Classic	F67QE241900A00BG	1	438	00:00:01
11	DJI Mini 2	5FSAK5500600MU	2	371	00:27:22
12	DJI Mini 3	F5YH724BCM01S6XJ	6	553	00:28:06
13	U/I DJI UAS	F8PJC24BB001BTNM	2	557	00:19:13
14	DJI Mini SE	4AEAK15002004R	1	220	00:00:01
15	DJI Mini 3	F5YHX247W002C0GD	3	223	00:00:15
16	DJI Mini 2 SE	6C5AM4800101VK	1	92	00:04:09
17	DJI Mini 2	3NZCHBQ003BPJD	1	413	00:06:02
18	DJI Mini 2	3NZCJAR0341KNZ	1	269	00:00:01
19	DJI Mavic 3 Classic	F67PB229U00201HB	1	284	00:00:01
20	DJI Air 2S	3YT4KBA00SS1UY	2	1536	00:05:58
21	DJI Mavic 3	F45TB21CG1BE06EB	1	404	00:04:54
22	DJI Mini 3	F5YHA22CH031929V	8	200	00:33:48
23	DJI Mini 4 Pro	F6Z9A23AQML31U7L	1	212	00:00:01
24	DJI Mini 3	F5YHC22B30021E7E	1	263	00:03:32
25	DJI Mavic 3	F4QWD226P002472Q	1	39	00:00:01

- S/N with night detection(s) | Red font - S/N previously detected | - exceed
FAA altitude allowance | Negative values for Max AGL (ft) are due to calculations based on base
elevation not accounting for surrounding terrain.



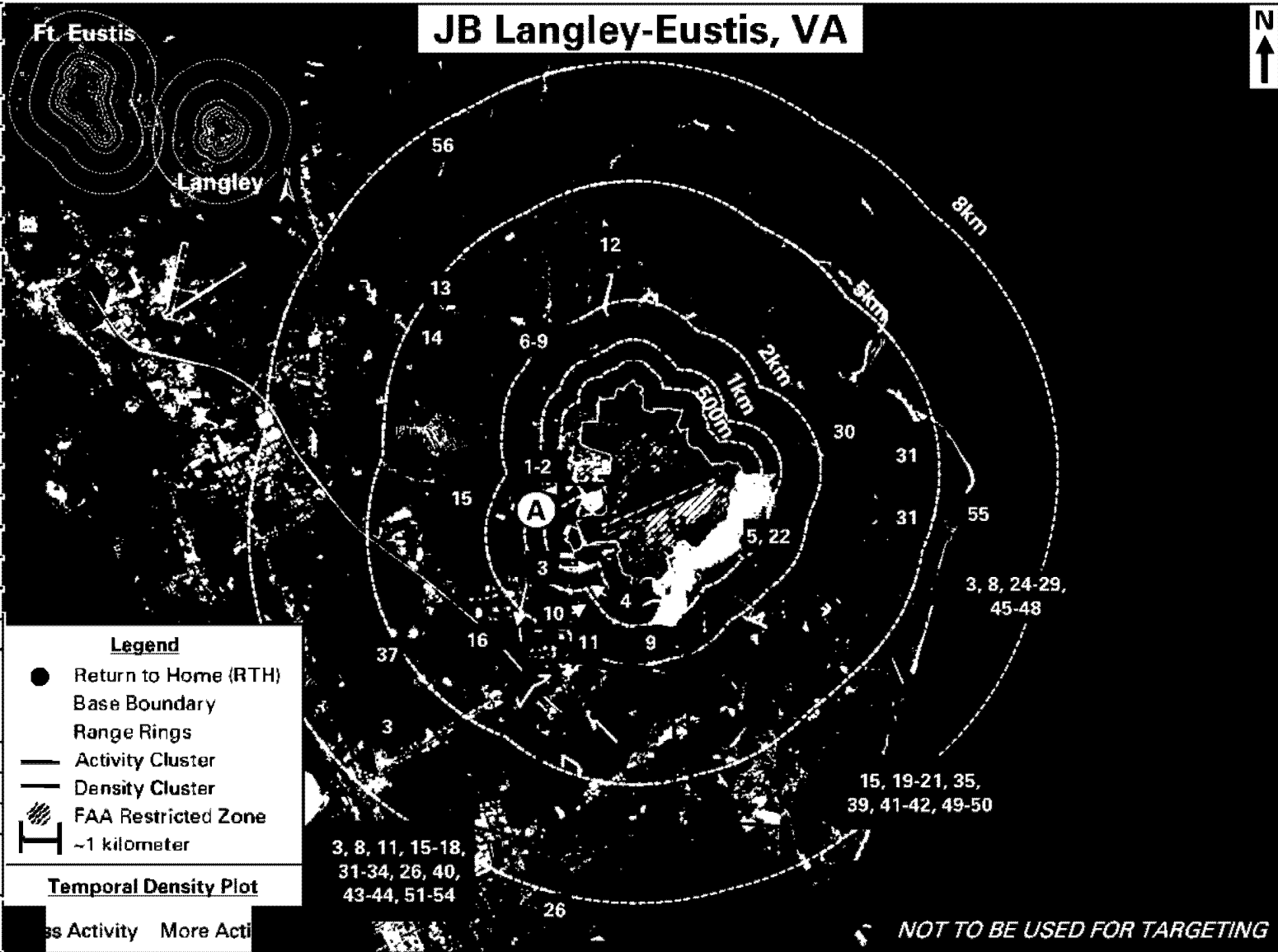


Current System Overview (2 of 3)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 8km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
26	DJI Mini 2	3NZCH9V0033QU7	4	279	00:09:01
27	DJI Mini 2 SE	6C5AL7600101GN	1	358	00:05:38
28	DJI Mini 3 Pro	F4XF72496M0SQ2BD	1	376	00:00:29
29	DJI Mavic Pro	08RDE4L0010281	1	624	00:02:32
30	U/I DJI UAS	F8PJ824AC001R00P	1	128	00:00:29
31	DJI Mavic 3	F45TB21AT2AE00QK	4	160	00:03:28
32	DJI Mavic 3	F45TB219P00D024E	3	520	00:12:57
33	DJI Mini 3 Pro	F4XF8249LM06Q1K7	2	389	00:00:02
34	DJI Mini 3 Pro	F4XFD224P006T375	2	389	00:00:02
35	DJI Mini 3	687AKC1001040R	1	236	00:06:15
36	DJI Mavic 2 Zoom	0M63K7E001U00T	1	354	00:03:49
37	DJI Mavic 3	F45TB21CB2AE004B	1	723	00:00:43
38	DJI Mavic 3 Classic	F67QE238900A00E6	1	163	00:00:01
39	DJI Mini 4 Pro	F6Z9A23C5ML33PR2	7	380	00:19:10
40	DJI Mini 3	F5YHA241S031X6R0	2	217	00:19:06
41	DJI Air 3	F6N8A23BGML34M5Z	2	288	00:03:02
42	DJI Mavic 2 Pro	163DFAV0013194	1	381	00:07:30
43	DJI Mini 2 SE	F6CDC235J00372WU	2	423	00:16:13
44	DJI Mini SE	4AECJAH0021M4C	2	427	00:01:27
45	DJI Mini 3 Pro	F4XFA233VML85E23	1	294	00:00:01
46	DJI Mini 2	3NZCJA70147M17	1	256	00:04:21
47	DJI Mini 3	687AKCG0010R76	1	177	00:00:01
48	DJI Air 2S	3YT7L9F003Q04K	3	390	00:01:39
49	DJI Mini 3 Pro	F4XFC2288007EQDW	1	265	00:00:01
50	U/I DJI UAS	F8PJA245XML1P7L5	1	217	00:07:02
51	DJI Mini 3 Pro	F4XFA231UML8Q50V	1	389	00:01:05
52	DJI Phantom 4 Pro V2	11VKF4D00200XJ	2	318	00:07:19





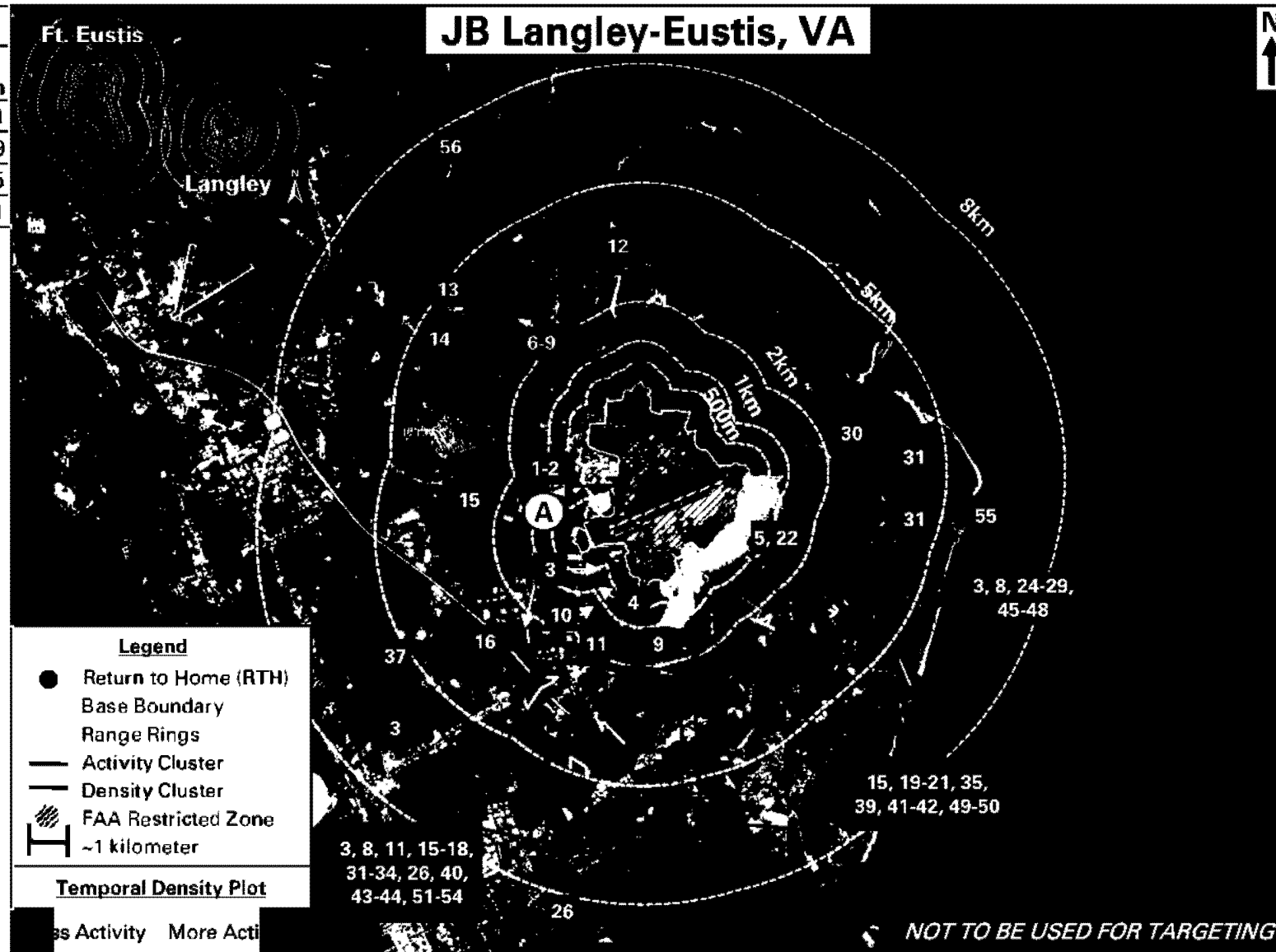
Current System Overview (3 of 3)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 8km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
53	DJI Air 2S	3YT4J8J00SPWW4	1	318	00:00:01
54	DJI Matrice 200 V2	1DADG7K00100H7	3	354	00:02:59
55	DJI Mavic 3 Classic	F67PE23BU00300CQ	1	193	00:00:15
56	DJI Mini 3	F5YHA23CG0311MWK	1	203	00:00:01

- The DJI Mini 2, DJI Mavic 3 and DJI Air 2S are equipped with Night Mode. Night Mode is not Night Vision; it is a software-based program meant to enhance existing ambient light under extreme low-light conditions.





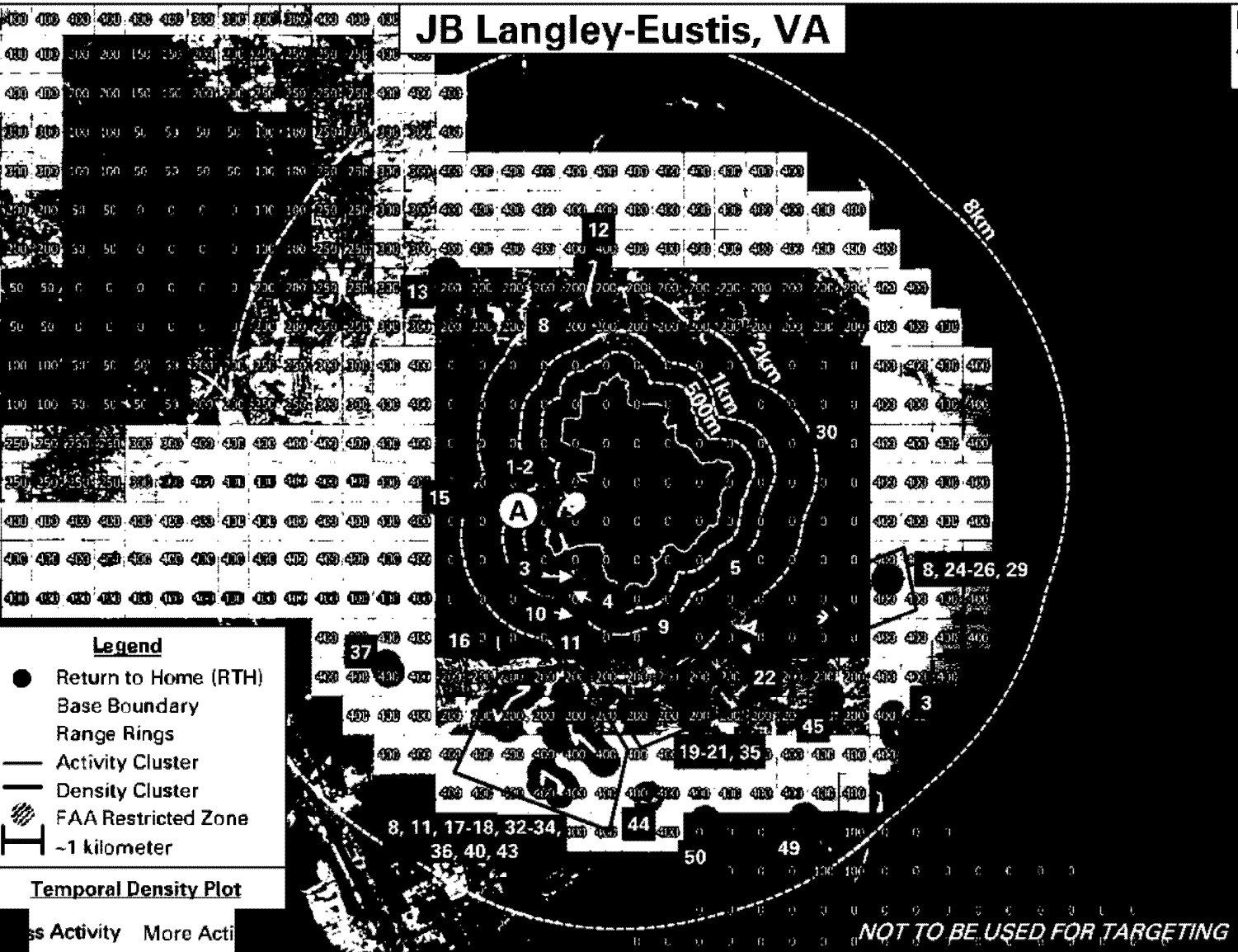
Altitude Allowance (1 of 2)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 8km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	Skydio UAS	1668BR40EA00H54Z	1	280	00:22:56
2	U/I DJI UAS	F4GCCJ8SR0A0N0V0	9	225	00:27:47
3	DJI Mavic 3 Classic	F67QE235H00A003G	3	416	00:04:24
4	DJI Mini 3	687CKAH001119B	1	180	00:03:20
5	DJI FPV	37QBJ6PBD102A9	1	299	00:02:47
8	DJI Mavic Air 2	3N3BHBE01203C8	3	223	00:00:39
9	DJI Mavic Mini	1SDCH7G0169RS7	1	161	00:02:48
10	DJI Mavic 3 Classic	F67QE241900A00BG	1	438	00:00:01
11	DJI Mini 2	5FSAK5500600MU	2	371	00:27:22
12	DJI Mini 3	F5YH724BCM01S6XJ	2	553	00:16:41
13	U/I DJI UAS	F8PJC24BB001BTNM	1	557	00:13:51
15	DJI Mini 3	F5YHX247W002C0GD	1	164	00:00:01
16	DJI Mini 2 SE	6C5AM4800101VK	1	92	00:04:09
17	DJI Mini 2	3NZCHBQ003BPJD	1	413	00:06:02
18	DJI Mini 2	3NZCJAR0341KNZ	1	269	00:00:01
19	DJI Mavic 3 Classic	F67PB229U00201HB	1	284	00:00:01
20	DJI Air 2S	3YT4KBA00SS1UY	2	1536	00:05:58
21	DJI Mavic 3	F45TB21CG1BE06EB	1	404	00:04:54
22	DJI Mini 3	F5YHA22CH031929V	8	200	00:33:48
23	DJI Mini 4 Pro	F6Z9A23AQML31U7L	1	212	00:00:01
24	DJI Mini 3	F5YHC22B30021E7E	1	263	00:03:32
25	DJI Mavic 3	F4QWD226P002472Q	1	39	00:00:01
26	DJI Mini 2	3NZCH9V0033QU7	3	279	00:06:36
29	DJI Mavic Pro	08RDE4L0010281	1	624	00:02:32
30	U/I DJI UAS	F8PJ824AC001R00P	1	128	00:00:29

– S/N with night detection(s) | Red font – S/N previously detected | – exceed
FAA altitude allowance





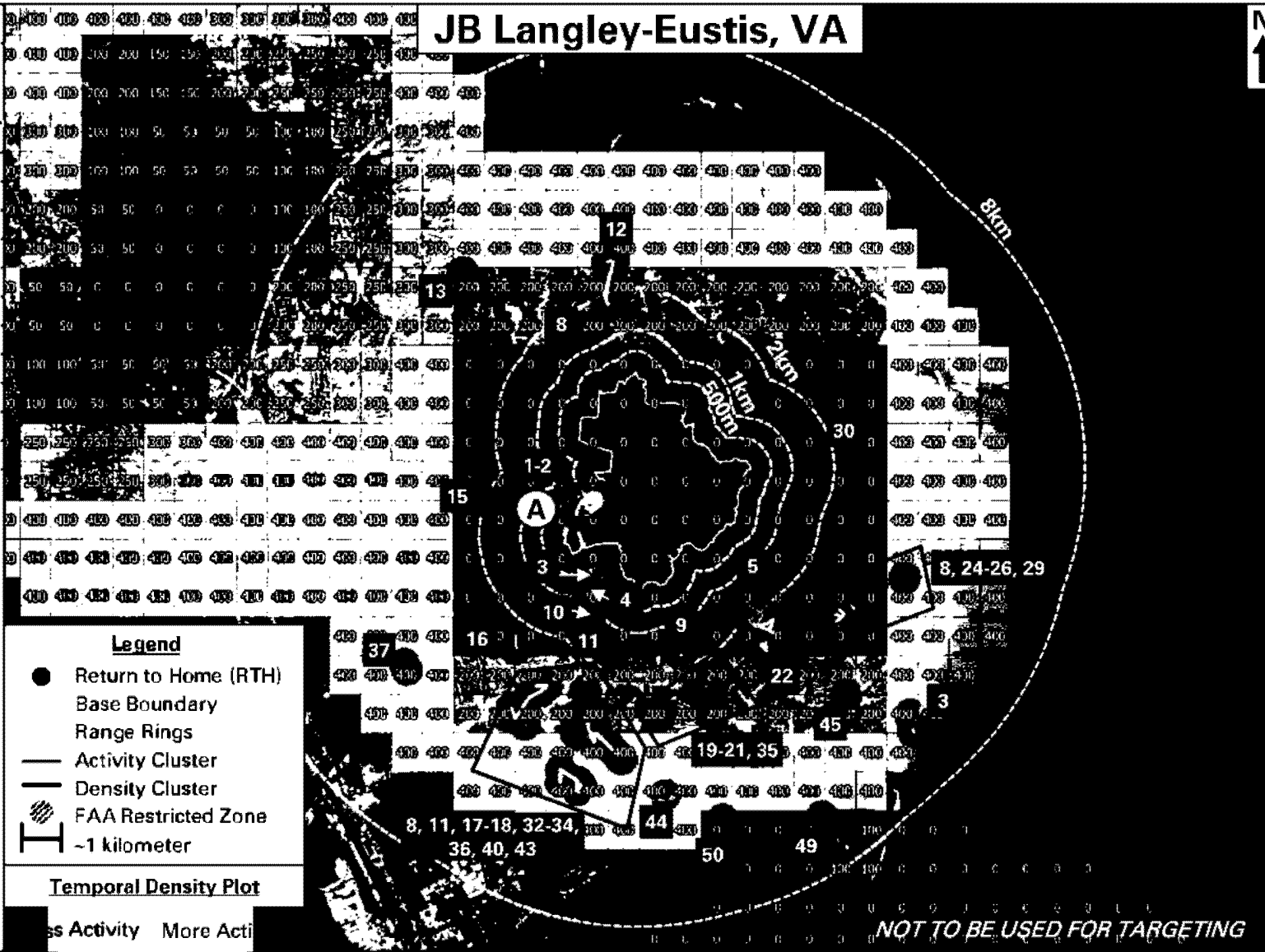
Altitude Allowance (2 of 2)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 8km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
32	DJI Mavic 3	F45TB219P00D024E	3	520	00:12:57
33	DJI Mini 3 Pro	F4XF8249LM06Q1K7	1	323	00:00:01
34	DJI Mini 3 Pro	F4XFD224P006T375	1	366	00:00:01
35	DJI Mini 3	687AKC1001040R	1	236	00:06:15
36	DJI Mavic 2 Zoom	0M63K7E001U00T	1	354	00:03:49
37	DJI Mavic 3	F45TB21CB2AE004B	1	723	00:00:43
40	DJI Mini 3	F5YHA241S031X6R0	1	217	00:09:12
43	DJI Mini 2 SE	F6CDC235J00372WU	1	423	00:06:17
44	DJI Mini SE	4AECJAH0021M4C	1	427	00:01:17
45	DJI Mini 3 Pro	F4XFA233VML85E23	1	294	00:00:01
49	DJI Mini 3 Pro	F4XFC2288007EQDW	1	265	00:00:01
50	U/I DJI UAS	F8PJA245XML1P7L5	1	217	00:07:02

- Requests to operate within controlled airspace must be requested via the Low Altitude Authorization and Notification Capability (LAANC)
- Only Part 107 (licensed) operators may request to operate above the designated altitude ceilings up to 400ft AGL (see graphic)
- Activity occurred in areas with ceilings ranging from 0 – 400ft AGL
- 66% of all S/Ns and 56% of total events exceeded altitude ceilings
 - Exceeded FAA 0ft AGL: 19x S/Ns, 37x events (S/Ns: 1-5, 8-11, 15-16, 22-26, 30, 49-50)
 - Exceeded FAA 200ft AGL: 16x S/Ns, 19x events (S/Ns: 8, 11-13, 17-21, 32-36, 40, 45)
 - Exceeded FAA 400ft AGL: 7x S/Ns, 7x events (S/Ns: 3, 12, 29, 32, 37, 43-44)





—CUI—

Activity Cluster A (1 of 2)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

- 1** S/N: 1668BR40EA00H54Z, Skydio UAS
- 1x total event (00:22:56) within 500m
 - 1x event (1a) within depicted (00:22:56)

#	Event Start DTG (Z)	Event End DTG (Z)	Max AGL (ft)	Total Duration
1a	2024-12-02 19:40:33	2024-12-02 20:03:29	280	00:22:56
- exceed FAA altitude allowance				

- **S/N: 1** operated ~250m W of the base boundary which the Skydio UAS appears to have launched from a U/I private airport TARMAC. This platform flew over a wooded area W of the TARMAC and returned to its point of origin.
- No return to home (RTH) data was available for this event.
- **S/N: 1** operator locations were detected along the TARMAC which activity appears to have exceeded FAA 0ft AGL altitude allowance.
- **S/N: 1** most recent previous detect occurred (21 NOV 24) IVO a industrial area ~800m NW from the base boundary IVO an open field and residential home.





Activity Cluster A (2 of 2)

December 01, 2024 – December 31, 2024

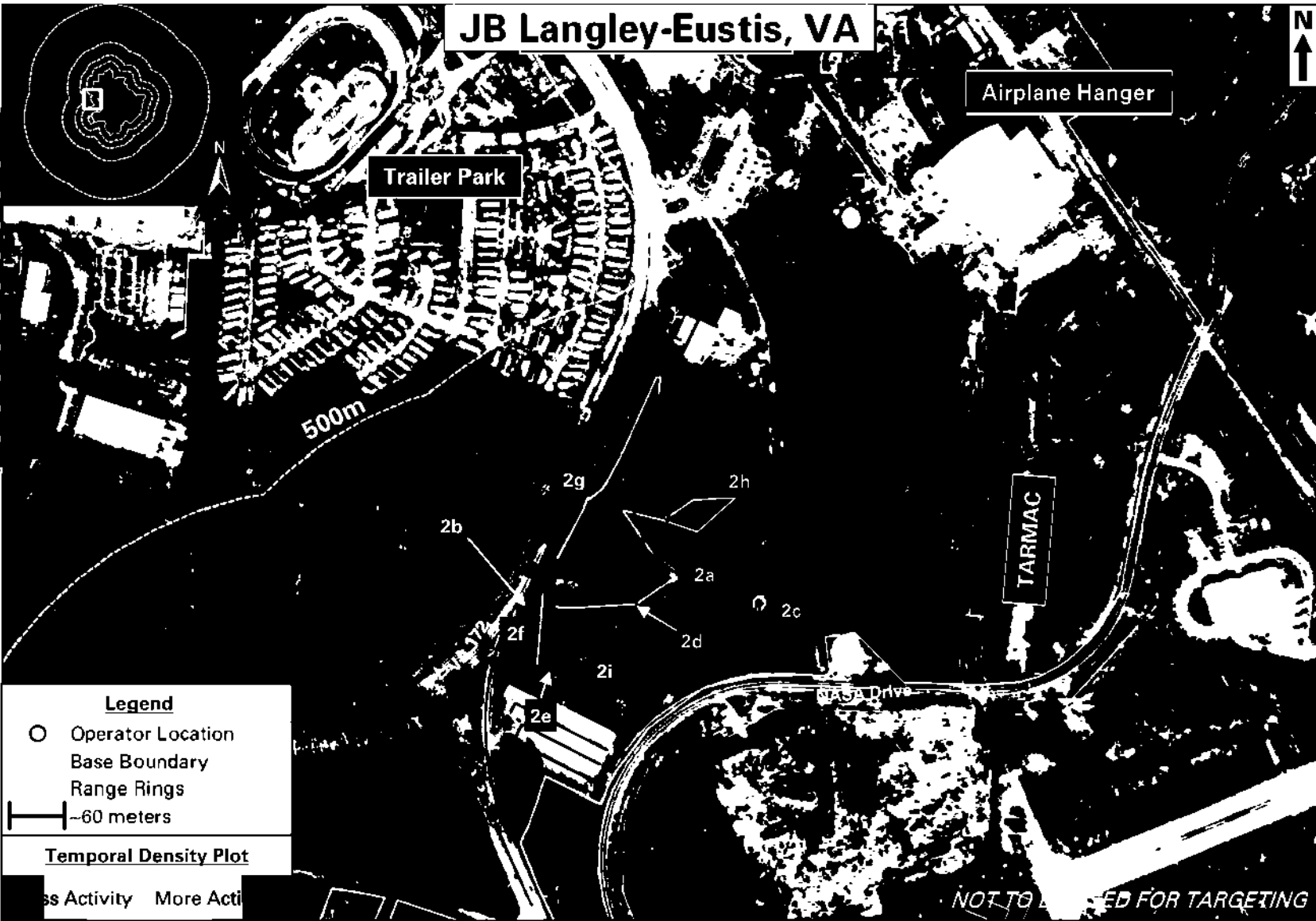
Entire Slide is CUI

- S/N: F4GCCJ8SR0A0N0V0, U/I DJI UAS
- 9x total events (00:27:47) within 500m
- 9x events (2a-2i) within depicted (00:27:47)

#	Event Start DTG (Z)	Event End DTG (Z)	Max AGL (ft)	Total Duration
2a	2024-12-02 19:16:39	2024-12-02 19:22:17	223	00:05:38
2b	2024-12-02 19:12:59	2024-12-02 19:12:59	190	00:00:01
2c	2024-12-02 19:05:43	2024-12-02 19:09:25	168	00:03:42
2d	2024-12-02 19:02:06	2024-12-02 19:02:27	187	00:00:21
2e	2024-12-02 18:54:21	2024-12-02 18:54:34	192	00:00:13
2f	2024-12-02 18:41:25	2024-12-02 18:43:01	179	00:01:36
2g	2024-12-02 18:32:35	2024-12-02 18:36:56	154	00:04:21
2h	2024-12-02 18:18:56	2024-12-02 18:28:13	154	00:09:17
2i	2024-12-02 18:13:13	2024-12-02 18:15:51	225	00:02:38

– exceed FAA altitude allowance

- S/N: 2 operated ~250m W of the base boundary which the U/I DJI UAS was detected over a wooded area SW of a local U/I private airport.
- No return to home (RTH) data was available for this event.
- S/N: 2 operator locations were detected along VA 172 IVO a wooded area. Activity appears to have exceeded FAA 0ft AGL altitude allowance and recreational in nature.
- This is a first-time detection for this S/N.



UNCLASSIFIED

Points of Contact



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of JB Langley-Eustis, VA. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. (Slides 2-9)
2. National Security UAS Flight Restrictions. https://dds-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 (Slides 2-9)
3. JB Langley-Eustis; PHALANX CONUS Repository; Technical Logs (Slides 2-9)
4. FAA definition of night. https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
5. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> (Slides 2-9)

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than May 13, 2025.

DTRA PHALANX Activity Report

Joint Base Charleston, SC (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

—CUI—

—CUI—

Agenda

- Executive Summary
- Current System Overview
- S/N: 3N3BK14012001U
- Points of Contact
- Sources
- Terminology



Executive Summary

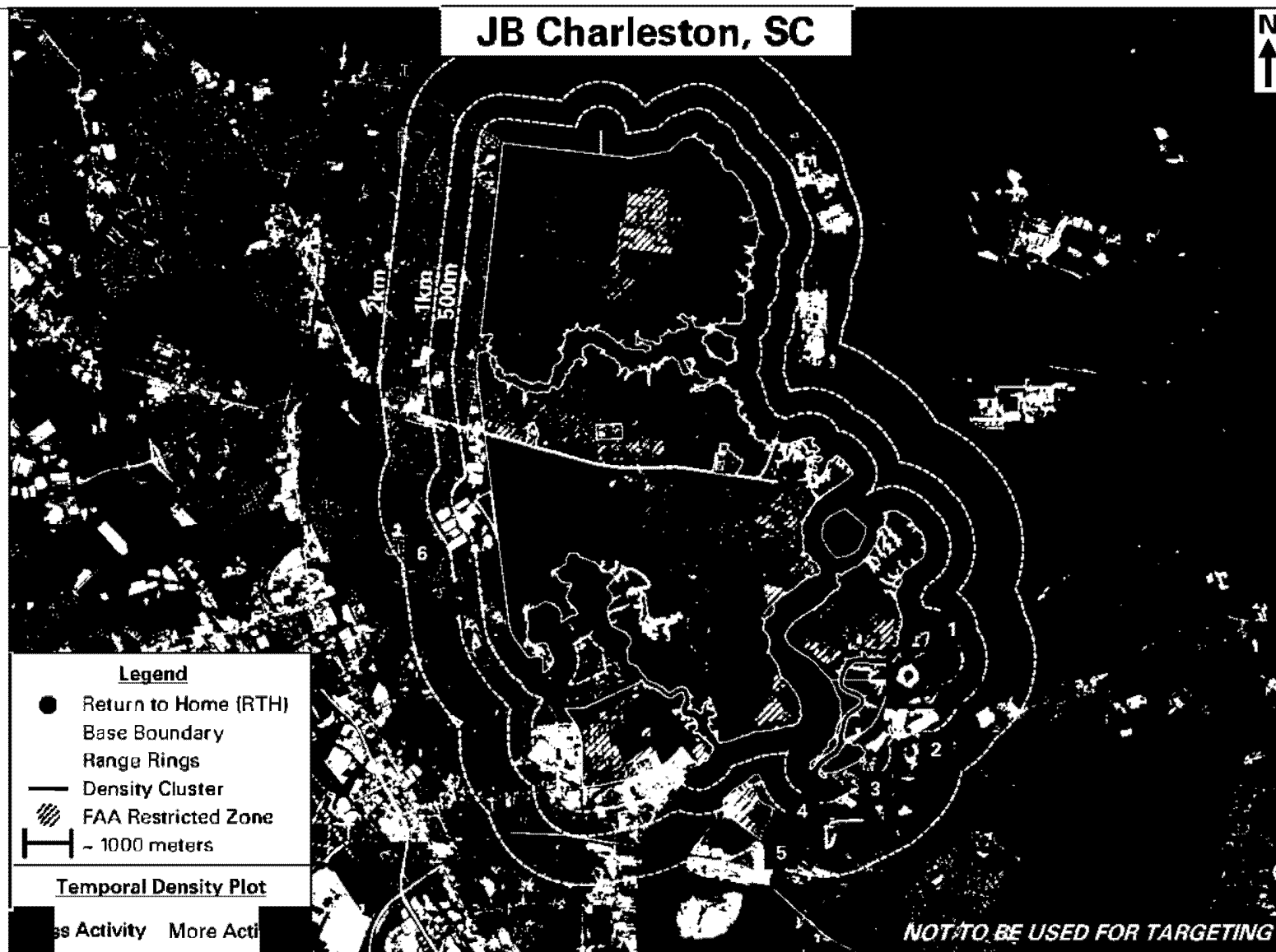
December 01, 2024 – December 31, 2024

Entire Slide is CUI

During the reporting period, S/N: 1 was the only S/N detected within 500m of the base boundary, operating over a residential area and marsh land. S/N: 1 has been detected IVO the same area on multiple occasions, most recently on 11 MAY 24. Activity for all S/Ns occurred IVO residential, commercial, or forested areas, and appeared recreational. S/Ns: 1, 6 likely exceeded FAA ceiling. Compared to the previous reporting period (01 – 30 NOV 24, 24x S/Ns, 38x events, 01:56:25), the number of S/Ns decreased 76%, events decreased 54%, and duration decreased 65%.

2km Overview

- 6x S/Ns, 18x events, 00:41:58 duration
 - Exceeded altitude allowance: 2x S/Ns, 2x events (S/Ns: 1, 6)
 - Night detections: 0x S/Ns, 0x events
- 4x S/Ns previously detected (S/Ns: 1-2, 4-5)
 - S/N: 1 was most recently detected ~630m E of the base IVO a residential area (11 MAY 24).
 - S/N: 2 was most recently detected ~5.5km E of the base IVO a forested area (27 NOV 24).
 - S/N: 4 was most recently detected ~800m SE of the base IVO a residential area (28 SEP 24).
 - S/N: 5 was most recently detected ~1.5km SE of the base IVO a residential area (29 NOV 24).
- 6x different platforms detected (6x rotary-wing)
 - Top by total events: DJI Mini 3 (6x, 33%)
 - Top by total duration: DJI Mavic Air 2 (00:21:16, 51%)
 - Top by S/N count: All platforms (1x, 17%) each



CUI



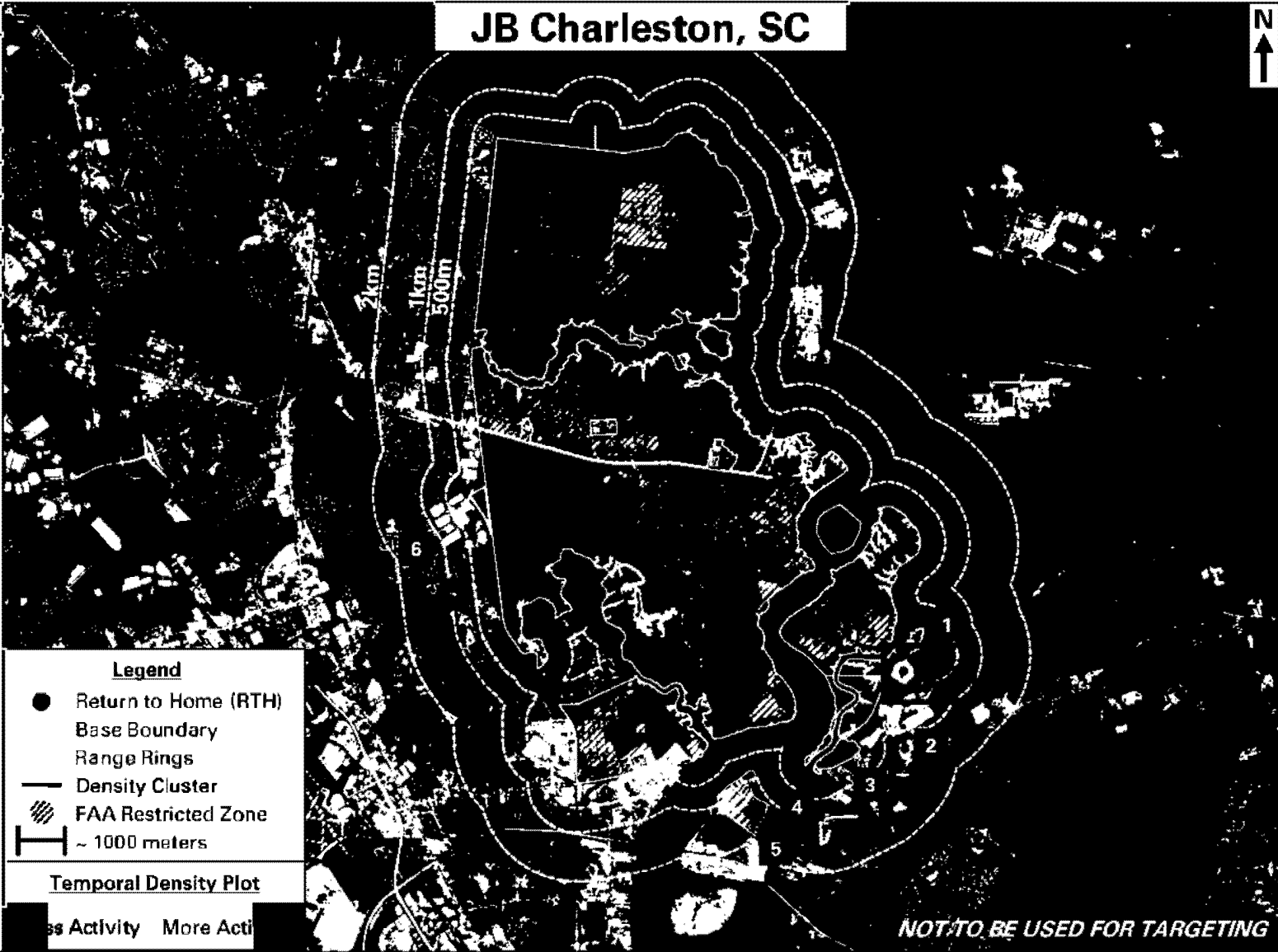
—CUI—

Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 2km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mavic Air 2	3N3BK14012001U	4	374	00:21:16
2	DJI Mavic 2 Pro	163DG5F001V3VU	2	168	00:04:15
3	DJI Mini 3	F5YHA244Q031FPLY	6	130	00:04:14
4	DJI Mini 2	3NZCJAP03413L8	3	348	00:07:17
5	DJI Air 3	F6N8C245D003ALXT	2	247	00:04:22
6	DJI Mini 2 SE	L31ML220QF	1	325	00:00:34
Red font – S/Ns previously detected – exceed FAA altitude allowance					



—CUI—



—CUI—

S/N: 3N3BK14012001U

December 01, 2024 – December 31, 2024

Entire Slide is CUI

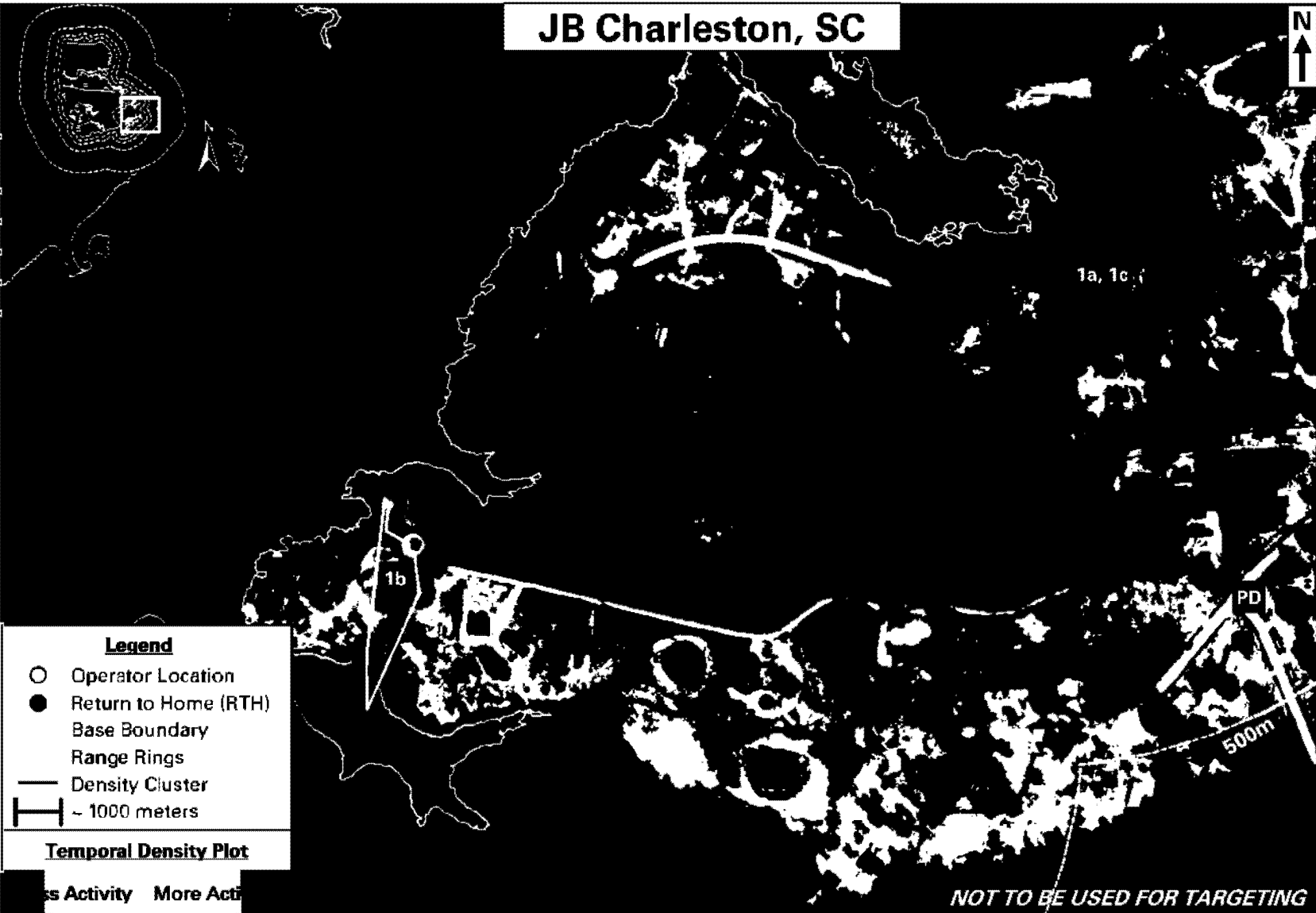
- 1** S/N: 3N3BK14012001U, DJI Mavic Air 2
- 4x total events within 1km (00:21:16)
 - 1x event outside depicted area (00:05:46)
 - 3x events (1a-1c) within depicted area (00:15:30)

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-03 15:44:32	2024-12-03 15:48:19	00:03:47	276
1b	2024-12-03 15:20:15	2024-12-03 15:26:57	00:06:42	180
1c	2024-12-03 15:06:50	2024-12-03 15:11:51	00:05:01	322

— exceed FAA altitude allowance

- Event (1b) briefly crossed over into the base boundary; however, due to the location, pattern of the flight, and previous activity IVO this same residential area, the activity was possibly recreational.
- The DJI Mavic Air 2 is equipped with a 48MP camera with 4x digital zoom and night mode capabilities.

PD S/N: 1 was previously detected ~415m SE of the base boundary on 13 MAY 23, IVO the same area detected during this reporting period.



DJI Mavic Air 2



Source: UAS Card Master

- Weight: ~570g/1.3lbs
- Dimensions: 183x253x77mm
- Max Speed: ~42.5 mph/ 68 kpm
- Flight Time: ~34 Mins
- Transmission Distance:
 - FCC Compliant: 6.2 mi/10km
 - CE Compliant: 3.7 mi/6km
- C2 Signal: OcuSync 2.0
- Dual Frequency: 2.4-5.8GHz
- Image Transmission: 4K
- Camera: 48MP/4x Digital Zoom/Night Mode
- Cost: ~\$799

—CUI—



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimbx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than May 13, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Joint Base Charleston, SC. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-4)**
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-4)**
3. Joint Base Charleston; PHALANX CONUS Repository; Technical Logs **(Slides 2-4)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 4)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:** The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than August 03, 2026.

DTRA PHALANX Activity Report

MCAS Cherry Point, NC (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- Points of Contact
- Sources
- Terminology



—CUI—

Executive Summary

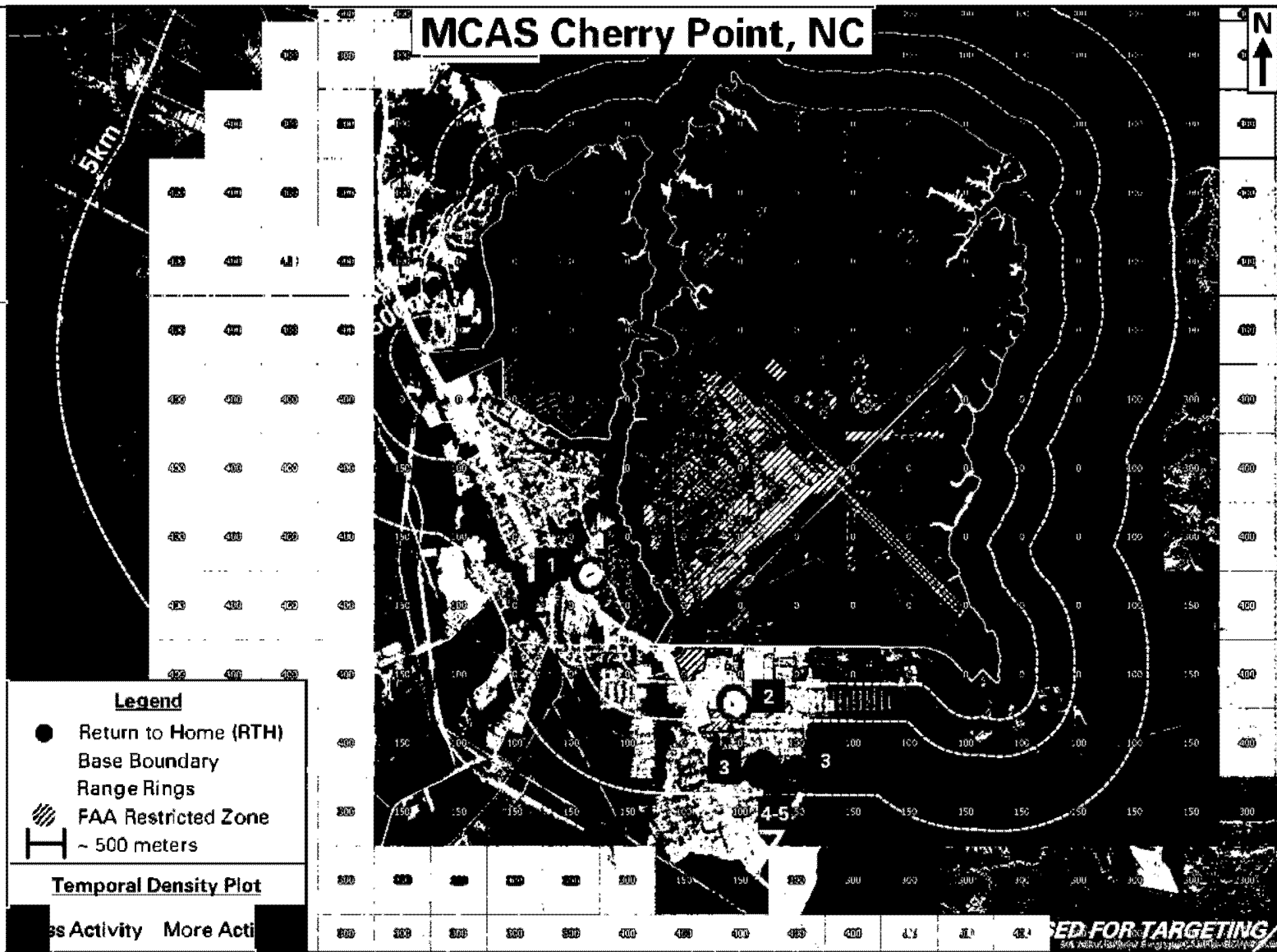
December 01, 2024 – December 31, 2024

Entire Slide is CUI

During the reporting period, 7x events from 5x different S/Ns were detected. No events were detected within 500m MCAS Cherry Point's installation boundary. No altitude data was collected for S/Ns: 1-2, 5. S/N: 3 (DJI Mini 2 SE) was detected flying at night but has no night vision capabilities. S/N: 3 was the only sUAS that has been previously detected IVO of MCAS Cherry Point. S/Ns: 1-3 were detected in areas under an FAA 0ft AGL ceiling. sUAS detections within 5km of the base decreased compared to the previous 4-week reporting period (01 NOV 24 – 30 NOV 24, 4x S/Ns, 11x events, 00:33:49 duration). S/Ns increased 21%, events decreased 38%, and duration decreased 79%.

5km Overview

- 5x S/Ns, 7x events, 00:07:12 duration
 - Exceeded altitude allowance: 2x S/Ns (6x events) (S/Ns: 1-4)
 - Night detections: 1x S/Ns (1x event) (S/N: 3)
- 1x S/Ns previously detected (S/N: 3)
 - S/N: 3 was previously detected IVO MCAS Cherry Point on 03 AUG 24 and 29 OCT 24
- 4x different platforms detected (4x rotary-wing)
 - Top by total events: DJI Air 3, DJI Mini 2 SE, DJI Mini 3 (2x, 29%)
 - Top by total duration: DJI Mini 2 SE (00:04:01, 56%)
 - Top by S/N count: DJI Air 3 (2x, 40%)



CUI



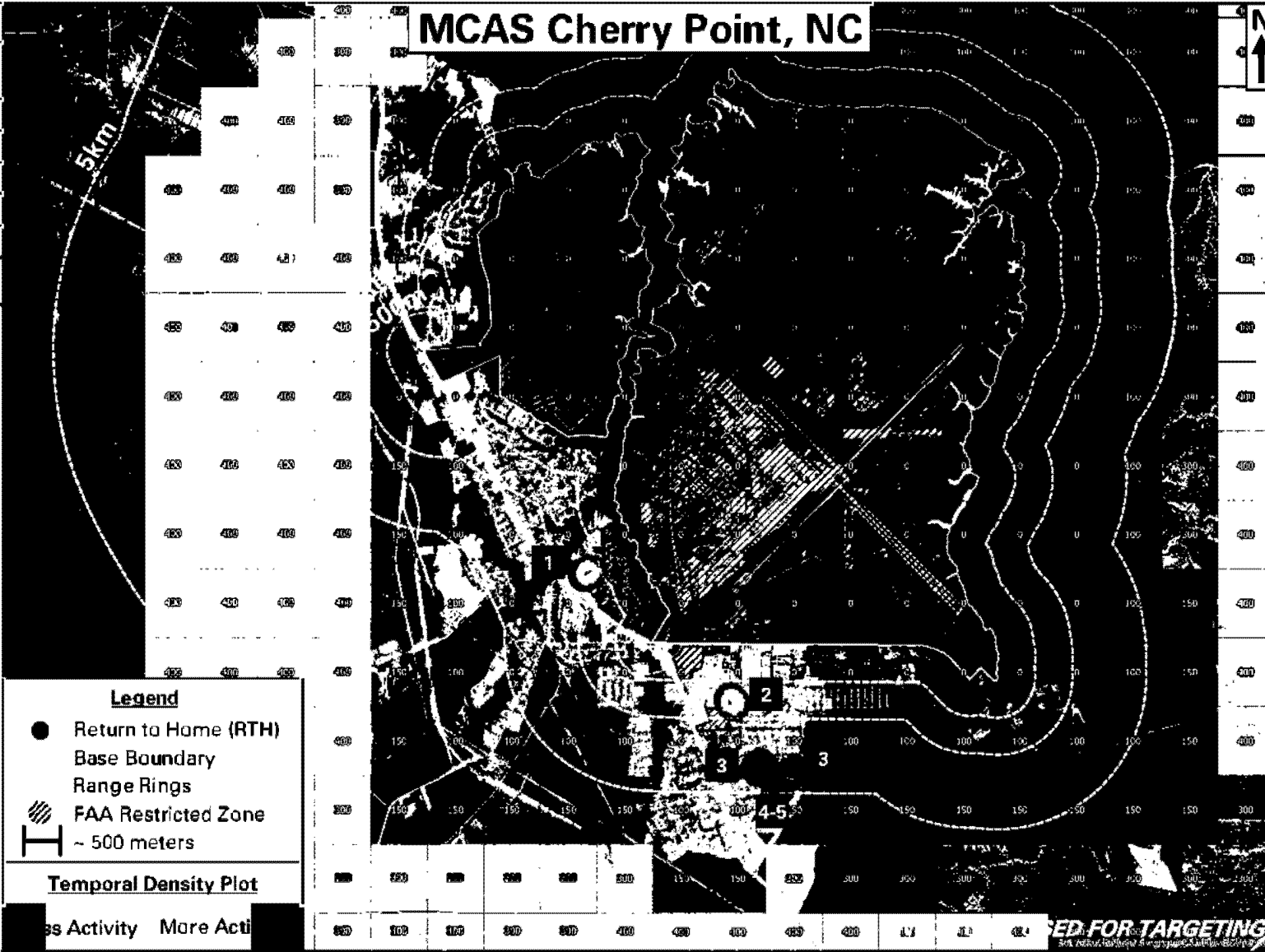
Current System Overview

December 01, 2024 – December 31, 2024

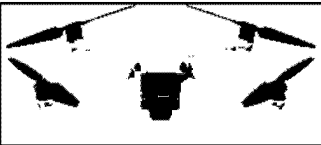
Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Air 3	F6N8A241BML3UKHL	1	UNK	00:01:34
2	DJI Air 3	F6N8A23C1ML3S43S	1	UNK	00:01:34
3	DJI Mini 2 SE	F6CD3242N002H135	2	427	00:04:01
4	DJI Mini 3	F5YHA2445031997N	2	49	00:00:02
5	DJI Avata 2	F6W8B249L00200AV	1	UNK	00:00:01
- S/N with night detection(s) Red font - S/N previously detected - exceed FAA altitude allowance					

- S/Ns: 1-2, 5 No altitude data collected.
- S/Ns: 1-3 were detected in areas under a 0ft AGL ceiling.
- S/N: 3 was detected flying at night on 17 DEC 24 at 08:29:52z.
- The total duration of the flight was 00:04:00 at 427ft AGL.
- S/N: 3 is a DJI Mini 2 SE with 3x total zoom and no night vision capabilities.
- Requests to operate within controlled airspace must be requested via the Low Altitude Authorization and Notification Capability (LAANC)



DJI Air 3



Source: UAS Card Master

- Weight: ~720g/1.58lbs
- Dimensions: 258.8 x 326 x 105.8mm
- Max Speed: ~46.9mph/ ~74 kpm
- Flight Time: ~46 Mins
- Max Flight Distance: 20mi/32km
- Transmission Distance:
 - FCC Compliant: 12 mi/20km
 - CE Compliant: 6.2 mi/10km
 - SRCC Compliant: 6.2 mi/10km
- C2 Signal: cuSync 4.0
- Dual Frequency: 2.4-5.8GHz
- Image Transmission: 4K
- Camera: 48MP/ 3x Lossless Optical zoom and 9x Digital Zoom
- Cost: ~\$1,099



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimbx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than August 03, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of MCAS Cherry Point, NC. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-3)**
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-3)**
3. MCAS Cherry Point, NC; PHALANX CONUS Repository; Technical Logs **(Slides 2-3)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 3)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
6. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slides 2-3)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



~~CUI~~

Information Cutoff Date: 14 JAN 25

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than November 25, 2026.

DTRA PHALANX Activity Report

McEntire JNGB, SC (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- S/N: F6CDC247B003M6MG
- Points of Contact
- Sources
- Terminology

Component: Defense Threat Reduction Agency
Controlled by: DTRA OI (Phalanx)
CUI Categories: LCOMM
Distribution/ Dissemination Control: N/A
POC (b)(6)



—CUI—

Executive Summary

December 01, 2024 – December 31, 2024

Entire Slide is CUI

During this reporting period, S/N: 1 was detected within 500m of the base boundary, operating in an FAA 0ft AGL zone where all activity is strictly prohibited. All sUAS activity during this reporting period occurred over rural areas and was most likely recreational in nature. In total, 67% of the S/Ns and 75% of the events exceeded FAA flight ceilings. sUAS detections within 5km of the base boundary significantly decreased compared to the previous 4-week reporting period (01 NOV 24 – 30 NOV 24, 5x S/Ns, 17x events, 01:28:31 duration). S/Ns decreased 42%, events decreased 77%, and duration decreased 87%.

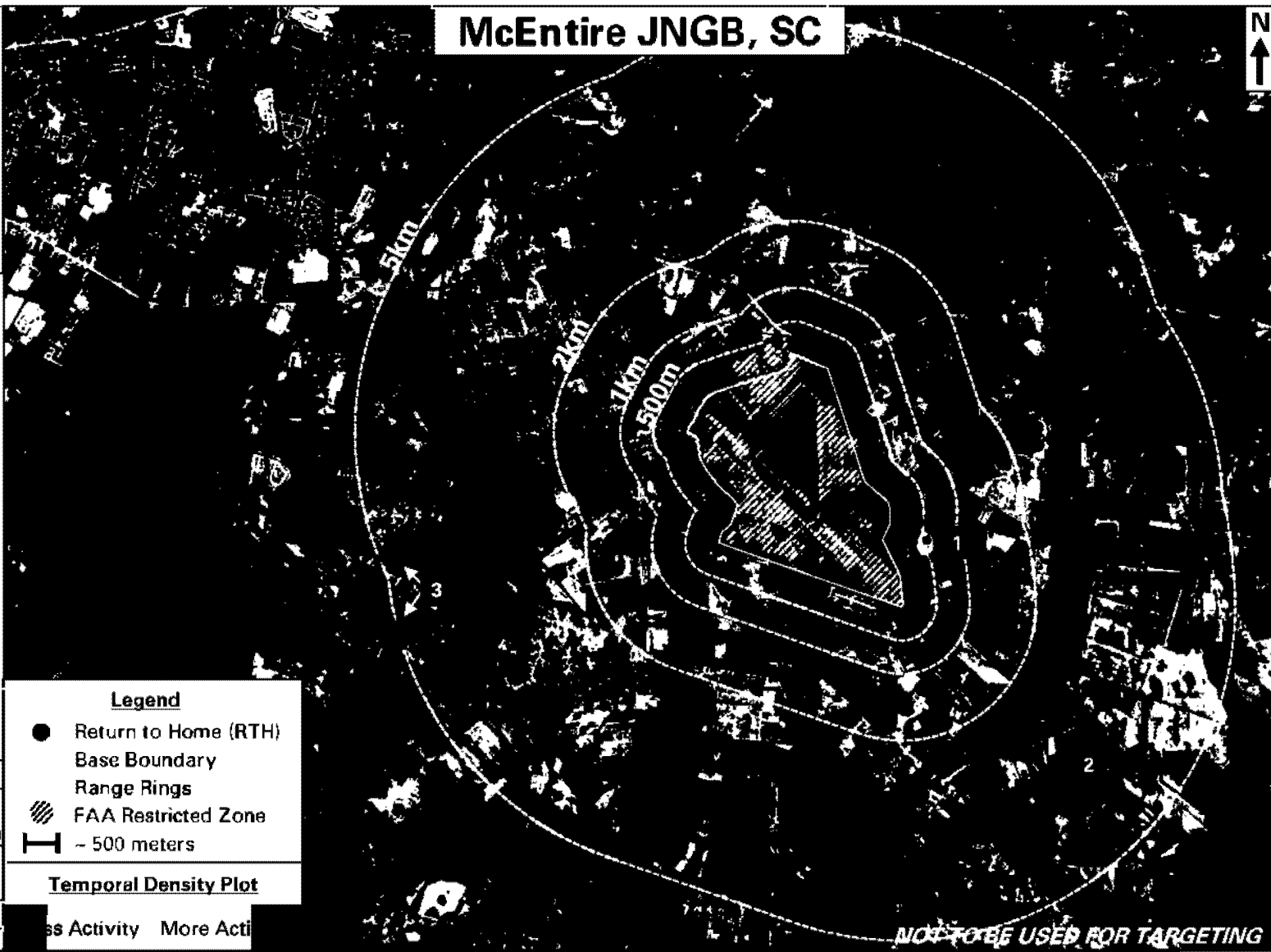
5km Overview

- 3x S/Ns, 4x events, 00:11:47 duration
 - Exceeded altitude allowance: 2x S/Ns (3x events) (S/Ns: 1, 3)
 - Night detections: None
- 1x S/N previously detected (S/N: 2)
 - (S/N: 2) Previous activity ~4.2km SE of McEntire JNGB over a rural residential area (25NOV24).
- 2x different platforms detected (2x rotary-wing)
 - Top by total events: DJI Mini 3 (3x, 75%)
 - Top by total duration: DJI Mini 2 SE (00:06:02, 51%)
 - Top by S/N count: DJI Mini 3 (2x, 67%)

Active within 5km

#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 2 SE	F6CDC247B003M6MG	1	239	00:06:02
2	DJI Mini 3	F5YHA232H03128K7	1	30	00:04:39
3	DJI Mini 3	687ALB3002033F	2	299	00:01:06

Red font – S/N previously detected | – exceed FAA altitude allowance



—CUI—



~~CUI~~

S/N: F6CDC247B003M6MG

December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

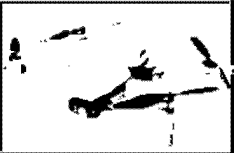
- 1 S/N: F6CDC247B003M6MG, DJI Mini 2 SE
- 1x total event (00:06:02) within 5km

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-31 22:34:43	2024-12-31 22:40:45	00:06:02	239

– exceed FAA altitude allowance

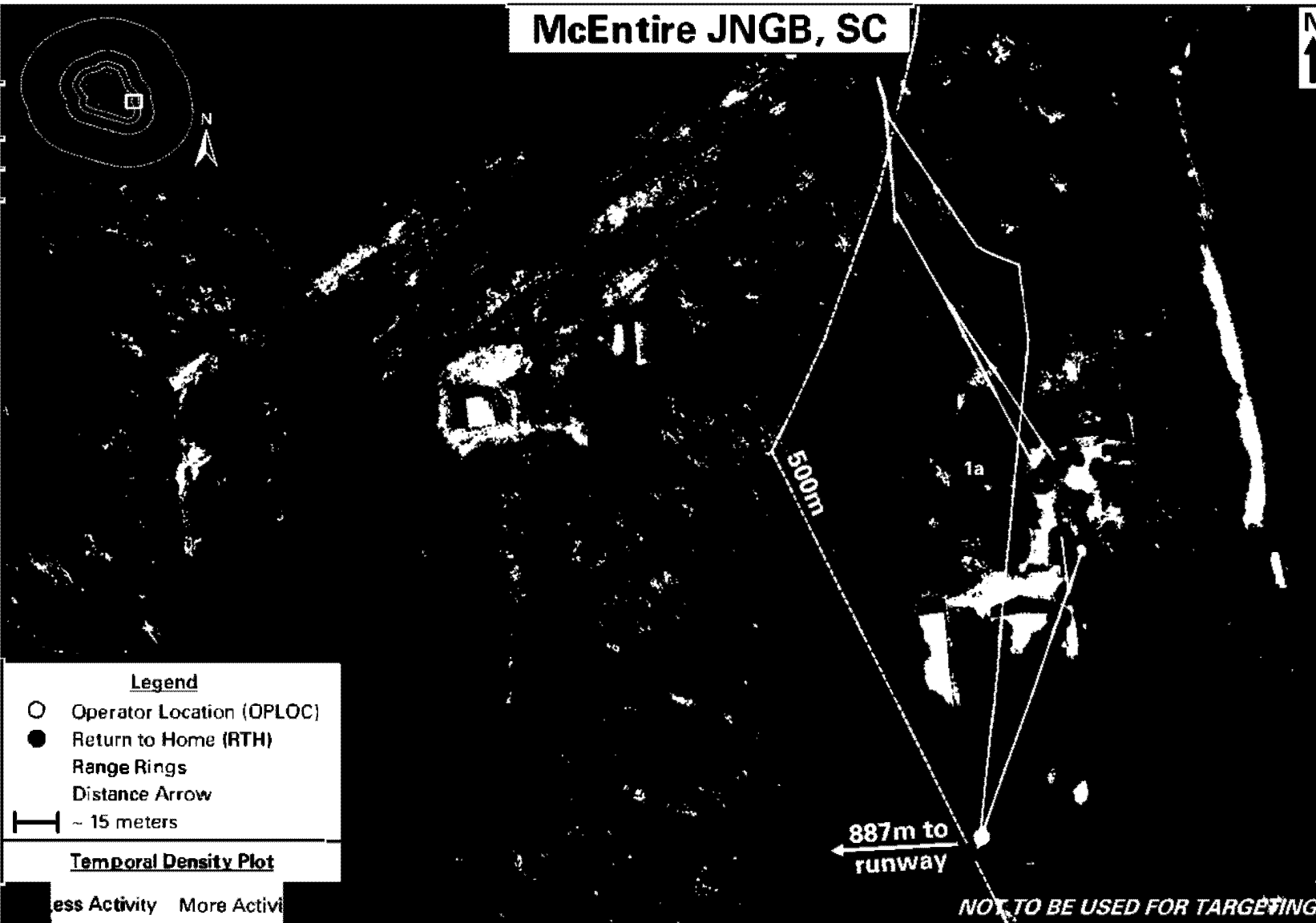
- Activity occurred ~487m E of the base boundary and ~887m E of the on-base runway, over a rural residential area IVO Old Congaree Run road.
- The Operator Location (OPLOC) and Return to Home (RTH) location were within a ~15m radius of each other near the residence. This activity was most likely recreational in nature.
- This sUAS activity occurred in an FAA 0ft AGL zone, in which all flight operations are strictly prohibited.
- This is the first detection for this S/N within the Phalanx repository.

DJI Mini 2 SE



Source: UAS Card Master

- Weight: ~246g/9oz
- Dimensions: 138x81x58mm
- Max Speed: ~29mph/ 46.8 kpm
- Flight Time: ~31 Mins
- Transmission Distance:
 - FCC Compliant: 6.2 mi/10km
 - CE Compliant: 3.7 mi/6km
- C2 Signal: OcuSync 2.0
- Dual Frequency: 2.4-5.8GHz
- Image Transmission: 2.7K (4x Digital Zoom)
- Camera: 12MP
- Cost: \$339





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than November 25, 2026.

UNCLASSIFIED



Entire Slide is UNCLASSIFIED

1. Map of McEntire JNGB. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. (Slides 2-3)
2. National Security UAS Flight Restrictions. https://udels-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 (Slide 2-3)
3. McEntire JNGB; PHALANX CONUS Repository; Technical Logs (Slide 2-3)
4. PHALANX UAS Card Master; Image, and Technical Data (Slide 3)
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
6. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> (Slides 2-3)



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:** The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than June 05, 2026.

DTRA PHALANX Activity Report

Naval Air Station (NAS) Key West, FL (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- Points of Contact
- Sources
- Terminology



CUI

Executive Summary

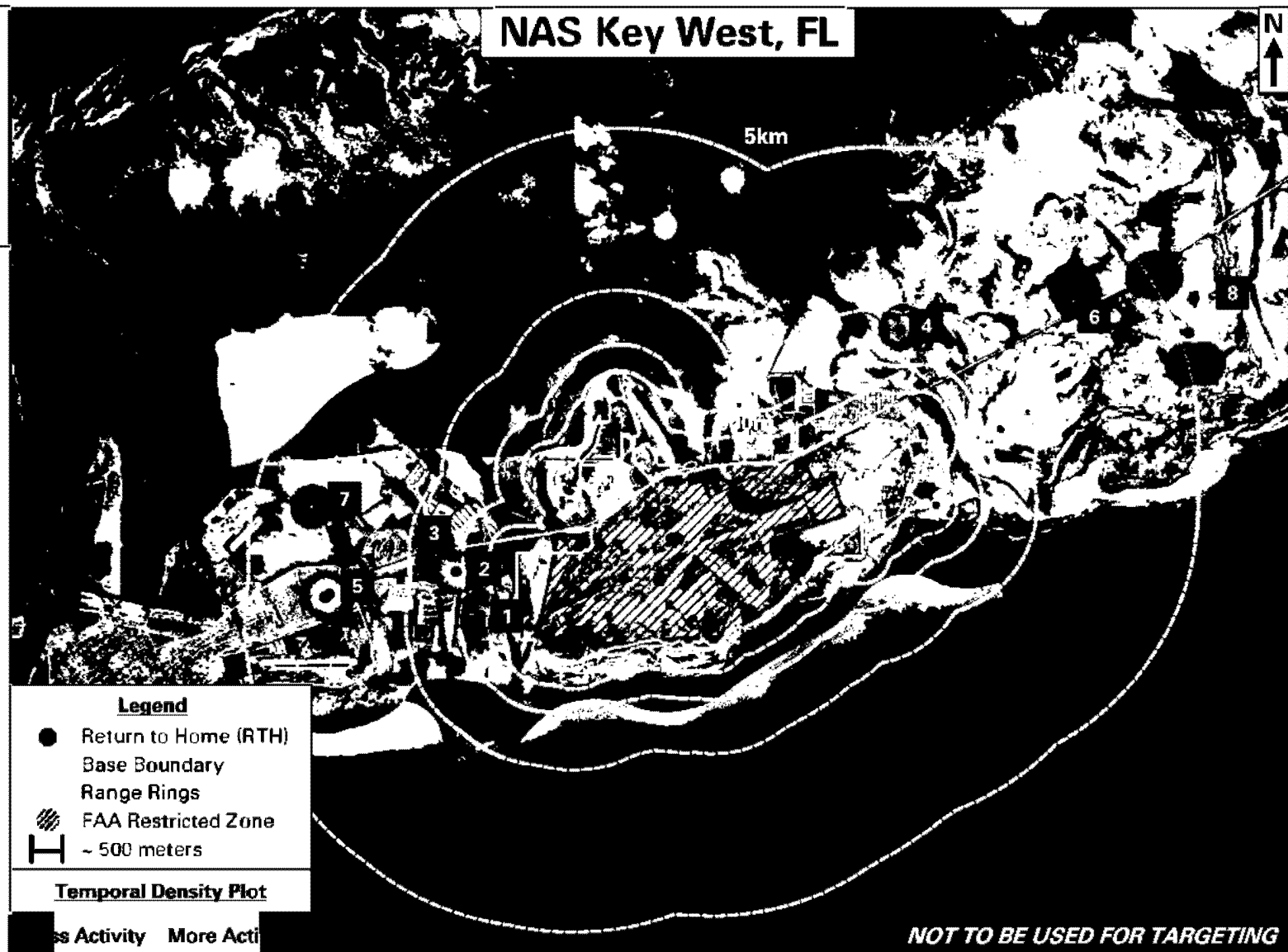
December 01, 2024 – December 31, 2024

Entire Slide is CUI

There was no activity within 500m of the base boundary during the reporting period. **S/N: 1** was the closest activity to the base, ~700m W IVO Oceanside Marina of Stock Island. **S/Ns: 1-8** possibly exceeded FAA sUAS AGL altitude ceilings set for NAS Key West. There were no nighttime detections during this reporting period. Small UAS S/N detections increased 158% (3x to 8x), events increased 222% (3x to 10x), and duration increased 1103% (00:01:51 to 00:23:01) within 5km of the base compared to the previous 4-week reporting period (01 – 30 NOV 24).

5km Overview

- 8x S/Ns, 10x events, 00:23:01 duration
- Exceeded altitude allowance: 8x S/Ns (9x events) (**S/Ns: 1-8**)
- No night detections
 - **S/Ns: 1, 4-5** identified as DJI Air 3, DJI Mavic 3 Classic, and DJI Mavic 3 are night mode capable, software enhancement for ambient light, not night vision
- 3x S/Ns previously detected (**S/Ns: 4-5, 7**)
- **S/N: 4** detected ~837m NW of the base IVO forested/ swamp area, Seppala Way (05 JUN 24)
- **S/N: 5** detected ~113m S of the base IVO residential area, Boca Chica Rd and Spica Ln (01 OCT 24)
- **S/N: 7** detected ~3.6km S of NAS Mayport IVO a swamp, Dutton Island Rd West (20 NOV 24)
- 6x different platforms detected (6x rotary-wing)
- Top by total events: DJI Air 3, DJI Mavic 3, DJI Mini 2, and DJI Mini 3 Pro (2x, 20%) each
- Top by total duration: DJI Mini 3 Pro (00:11:02, 48%)
- Top by S/N count: DJI Mini 2 and DJI Mini 3 Pro (2x, 25%) ea.



CUI



Current System Overview

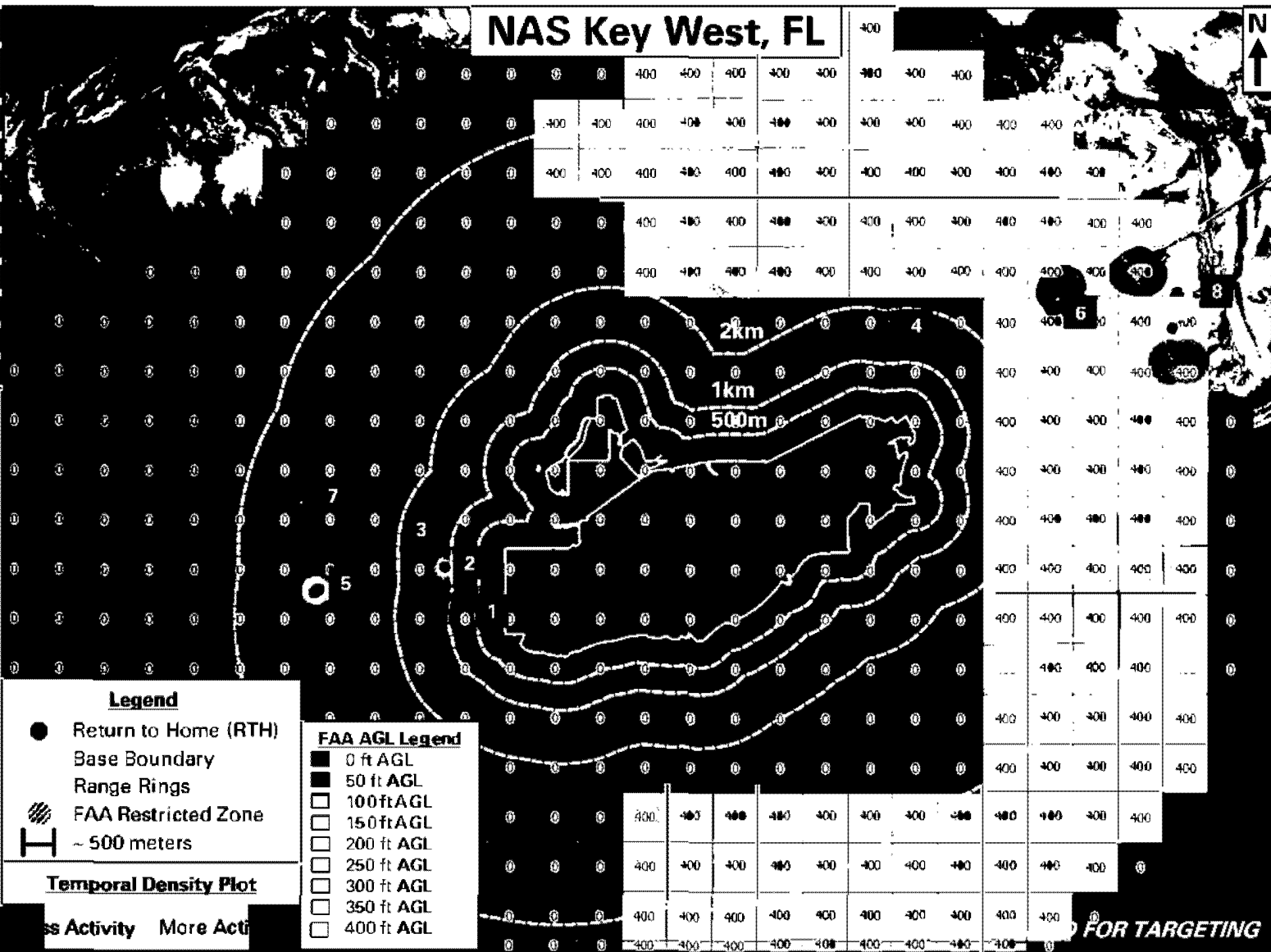
December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 3 Pro	F4XFA2346ML8309S	1	162	00:00:39
2	U/I DJI UAS	F8PJA245EML1J1WC	1	221	00:02:12
3	DJI Mini 2	3NZCJ64004GT96	1	389	00:00:01
4	DJI Mini 3 Pro	F4XF72365M06F04U	1	106	00:10:23
5	DJI Mavic 3	F45T722C600EZ0LS	2	435	00:06:57
6	DJI Mavic 3 Classic	F67QE237M00A00HK	1	448	00:00:48
7	DJI Mini 2	3NZSHCH0040351	1	257	00:00:12
8	DJI Air 3	F6N8C237U0032N8H	2	405	00:01:49

Red font – S/N previously detected | – exceed FAA altitude allowance

- Requests to operate within controlled airspace must be requested via the Low Altitude Authorization and Notification Capability (LAANC)
- Only Part 107 (licensed) operators may request to operate above the designated altitude ceilings up to 400ft AGL (see graphic)
- Activity occurred in areas with ceilings ranging from 0 – 400ft AGL
- 100% of all S/Ns, 98% of total duration and 90% of total events exceeded altitude ceilings
 - 8x S/Ns, 9x events (S/Ns: 1-8)
 - Exceeded FAA 0ft AGL: 6x S/Ns, 7x events (S/Ns: 1-5, 7)
 - Exceeded FAA 400ft AGL: 2x S/Ns, 2x events (S/Ns: 6, 8)





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than June 05, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Air Station Key West. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS.WMTS Service. Map. **(Slides 2-3)**
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-3)**
3. Naval Air Station Key West; PHALANX CONUS Repository; Technical Logs **(Slides 2-3)**
4. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
5. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slides 2-3)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than August 21, 2026.

DTRA PHALANX Activity Report

Naval Air Station Oceana, VA (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- Points of Contact
- Sources
- Terminology



Executive Summary

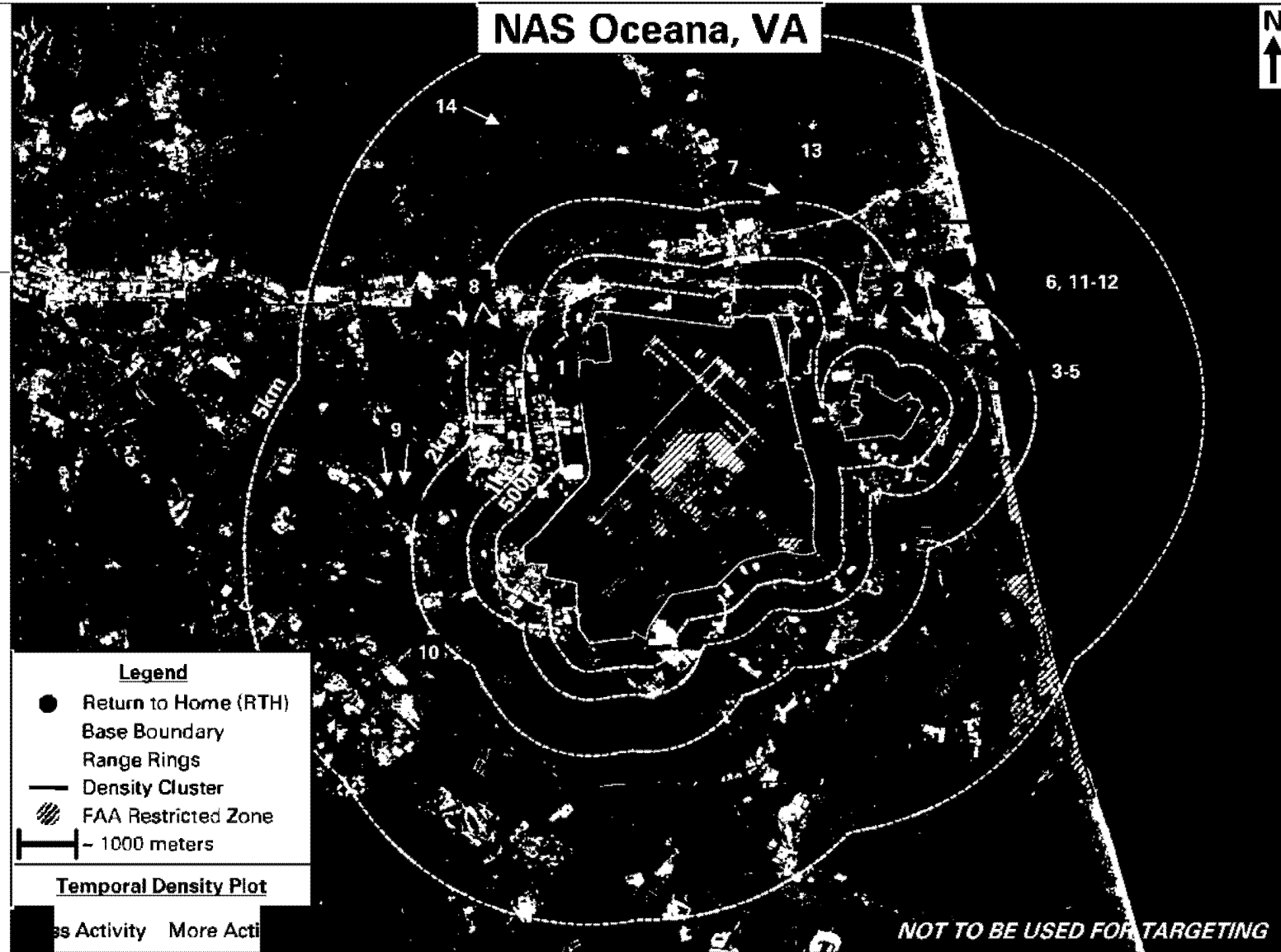
December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

No detected events within the base boundary during the reporting period. (S/N: 1) was detected ~210m W of base boundary IVO a residential neighborhood. No night-flights detected this reporting period. Remaining detects beyond ~1km or from base boundary over residential homes and between Rudee Inlet and 15th Street Pier along the Virginia Beach Coastline. Given the altitude restrictions IVO NAS Oceana, all platforms potentially exceeded AGL limits; (S/Ns: 1-14), to include above the 400ft ceiling. sUAS detections within 5km of the base boundary generally decreased compared to the previous 4-week reporting period (01 - 31 OCT 24, 21x S/Ns, 27x events, 00:35:16 duration). S/Ns decreased 33%, events increased 11%, and duration decreased 45%.

5km Overview

- 14x S/Ns, 30x events, 00:19:25 duration
 - Exceeded altitude allowance: 14x S/Ns (30x events) (S/Ns: 1-14)
 - All S/Ns and Events exceeded altitude restrictions IVO NAS Oceana
 - 5x S/Ns (10x events) detected within the 0ft AGL (S/Ns: 1, 2, 7, 8, 13)
 - 3x S/Ns (4x events) exceed the maximum AGL of 400ft (S/Ns: 6, 9, 12)
- 5x S/Ns previously detected (S/Ns: 2-4, 7, 10)
 - (S/N: 2) most recent previous detect occurred (27 NOV 24) IVO the current area of reported activity.
 - (S/N: 3) most recent previous detect occurred (21 AUG 24) ~2.25km N of March ARB, CA. IVO a hotel parking lot.
 - (S/N: 7) most recent previous detect occurred (22 NOV 24) ~225m E of NAS Norfolk IVO a residential area.
- 1x cross-site detection during reporting period: (S/N: 7)
 - (S/N: 7) was detected IVO of NS Norfolk on 22 NOV 24; this is ~2.25km N of base boundary within this reporting period (01-31 DEC 24).
- 8x different platforms detected (8x rotary-wing)
 - Top by total events: DJI Mini 3 Pro (17x, 57%)
 - Top by total duration: DJI Mini 3 Pro (00:14:31, 75%)
 - Top by S/N count: DJI Mini 3 Pro (5x, 36%)





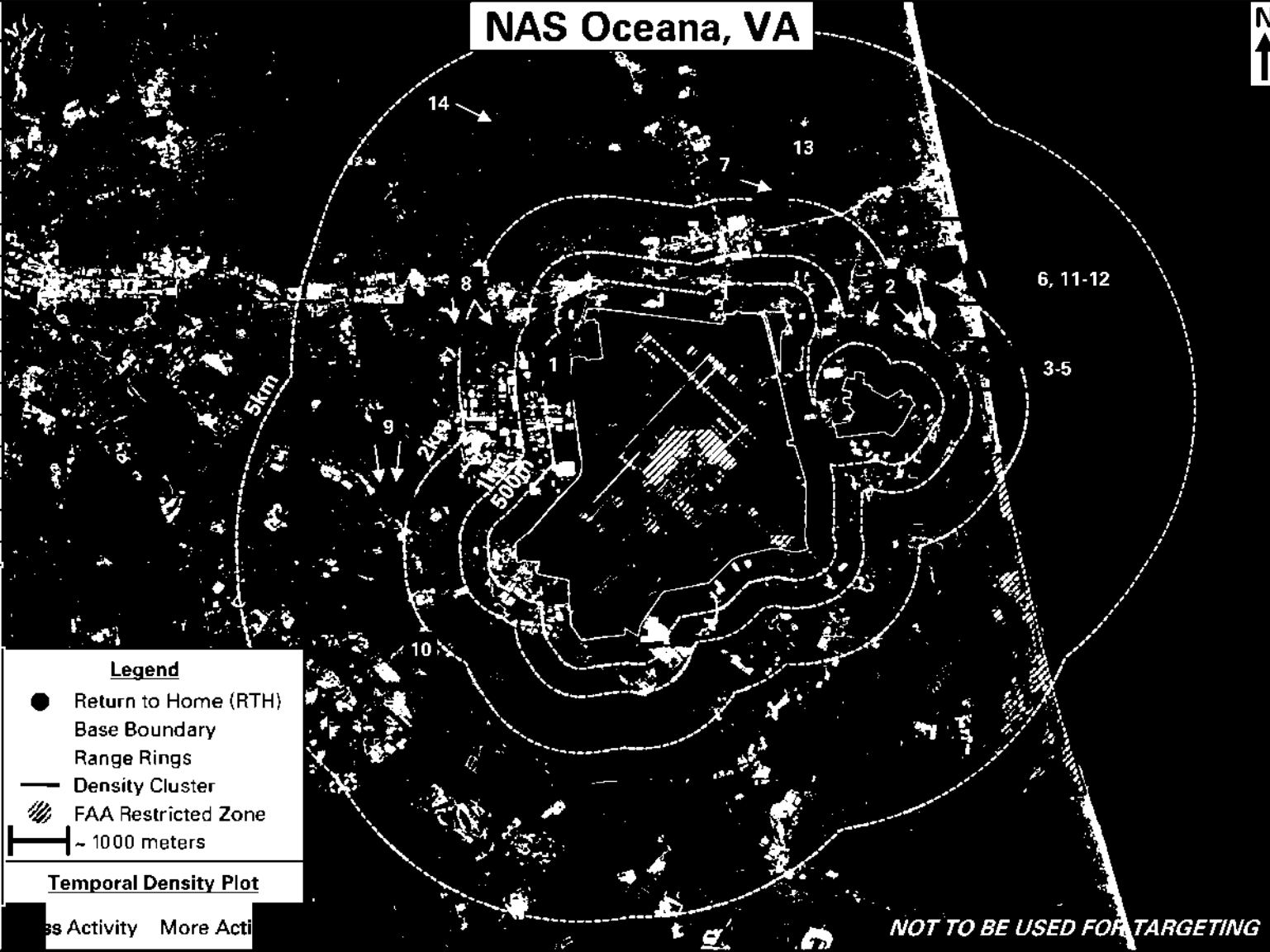
—CUI—

Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 2	3NZSHCQ00401FZ	1	399	00:00:01
2	DJI Mini 3 Pro	F4XFC23880080EY7	13	396	00:12:44
3	DJI Mini 3	F5YHA243S0311V56	1	239	00:00:16
4	DJI Air 2S	3YTBJ7J00300D4	2	351	01:00:16
5	DJI Mini 3	F5YHA239V03133U0	1	262	02:00:16
6	DJI Mini 3 Pro	F4XF8249E006Q36R	1	419	03:00:16
7	DJI Mavic 2 Pro	163CHAJR0A50FG	1	288	04:00:16
8	DJI Mini 3	F5YHA244Q031PM71	2	396	05:00:16
9	DJI Mini 2 SE	F6CDC2478003LZHF	3	438	06:00:16
10	DJI Mavic Air	0K13HAB00DX006	1	311	07:00:16
11	DJI Mini 3 Pro	F4XF7232P006BA56	1	396	08:00:16
12	DJI Mini 3 Pro	F4XFA231UML8P65L	1	580	09:00:16
13	DJI Mini 3 Pro	F4XF8247J006N05Q	1	298	10:00:16
14	DJI Phantom 3	03Z0288517	1	393	11:00:16
Red font – S/N previously detected – exceeded FAA altitude allowance					



—CUI—



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimbx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than August 21, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Air Station Oceana. ArcGIS.
https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS.%20WMTS%20Service.%20Map (Slides 2-3)
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 (Slides 2-3)
3. Naval Air Station Oceana; PHALANX CONUS Repository; Technical Logs (Slides 2-3)
4. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than April 05, 2025.

DTRA PHALANX Activity Report

NSA Panama City, FL (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview (2 Slides)
- Night System Overview
- S/N: 6C5CL5R00163WD
- S/N: 0M6CH8QR0A1QWC
- Points of Contact
- Sources
- Terminology



December 01, 2024 – December 31, 2024

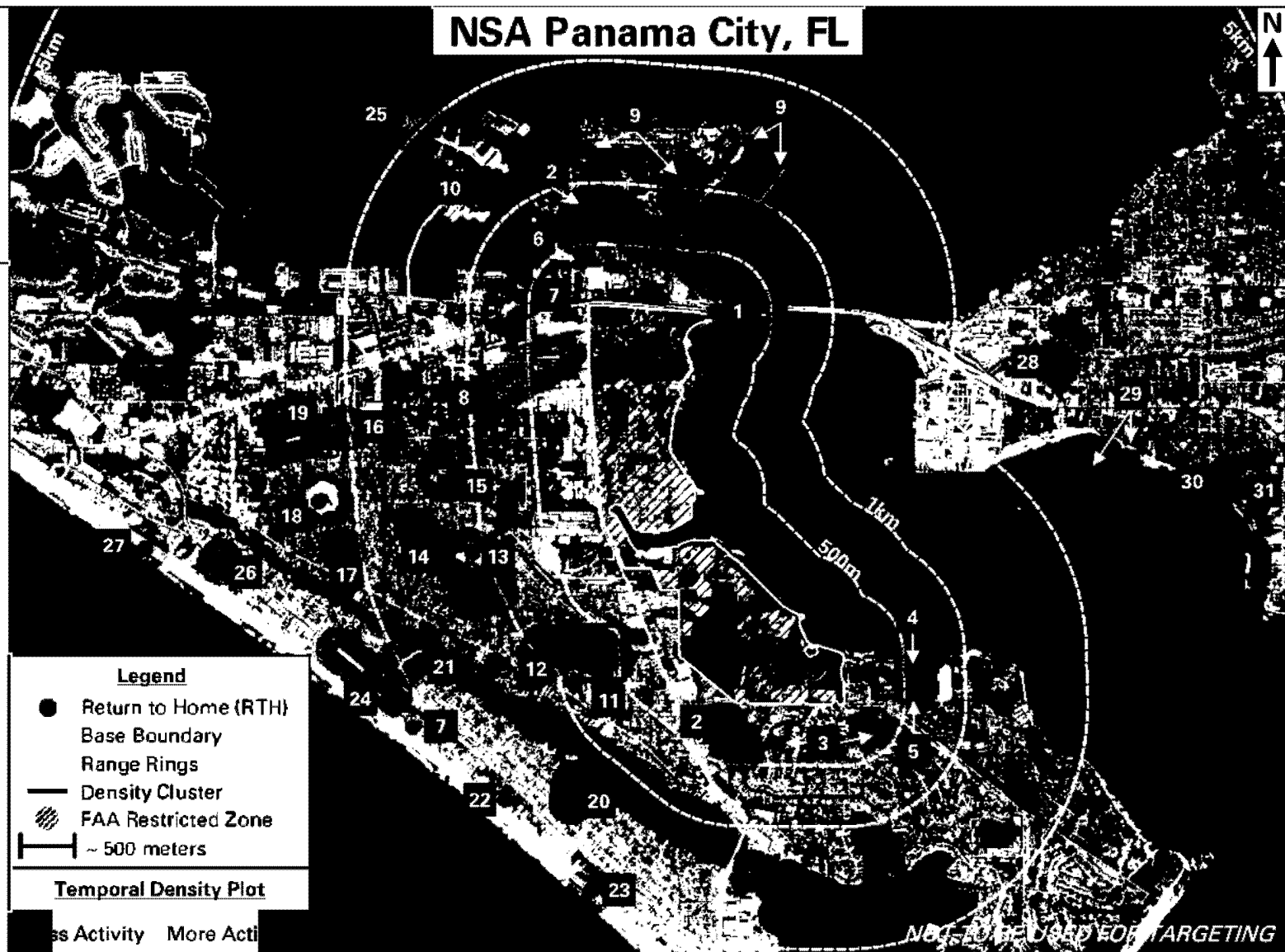
Executive Summary

Entire Slide is CUI

During the reporting period, (S/Ns: 1-3) were active within 500m of the base boundary. S/N: 1 had 1x event occur along the Hathaway Bridge for a total duration of 00:01:41. Additionally, no critical infrastructure was in Line of Sight (LoS) of sUAS at the reported altitude. S/Ns: 2-3 mostly operated IVO residential areas located S/SE of base boundary (see slide 6-7). S/Ns: 7, 9, 16, 22-23 exceeded FAA sUAS 400ft AGL ceiling restrictions set for NSA Panama City. S/Ns: 1-2, 17, 29-31 operated at night, possibly violating FAA nighttime restrictions for NSA Panama City. sUAS S/Ns increased by 25%, events decreased by 23%, and duration decreased by 52% within 5km of the base compared to a previous 4-week reporting period (01 – 30 NOV 24, 24x S/Ns, 58x events, 02:59:01 duration).

5km Overview

- 31x S/Ns, 46x events, 01:29:11 duration
 - Exceeded altitude allowance: 5x S/Ns (5x events) (S/Ns: 7, 9, 16, 22-23)
 - Night detections: 6x S/Ns (9x events) (S/Ns: 1-2, 17, 29-31)
- 16x S/Ns previously detected (S/Ns: 2, 4-5, 7-9, 12-14, 17-20, 26, 29, 31)
 - S/N: 4 was previously detected; ~2.3km SW of base boundary IVO a commercial area near Creek Street (27 SEP 24). Additionally, previously detected; ~9.2km SE of NAS Pensacola base boundary IVO a residential area off Fort Pickens Rd (07 AUG 24)
 - S/N: 5 was previously detected; ~588m SE of base boundary IVO a residential area off Grandiflora Blvd (23 SEP 24)
 - S/N: 7 was previously detected; ~865m NW of base boundary IVO a residential area off Shadow Lake Drive (30 NOV 24)
 - S/N: 14 was previously detected; ~1.5km W of base boundary IVO a residential area off Grand Bay Blvd (17 NOV 24). Additionally, previously detected; ~10.4km N of base boundary IVO a commercial area (19 OCT 24).
 - S/Ns: 20, 29 were previously detected by sensor but had no geolocational data available (05 APR 23 and 29 JUL 24)
 - S/N: 26 was previously detected; ~4.6km SE of Hurlburt Field base boundary IVO a commercial area off Miracle Strip Pkwy Southwest/US-98 (23 SEP 23)
- S/N: 7 was cross detected at MacDill AFB, FL outside of 5km along the Big Bend Channel for 2x events on 25 DEC 24.
- 9x different platforms detected (9x rotary-wing)
 - Top by total events: DJI Mini 2 (14x, 30%)
 - Top by total duration: DJI Mini 2 (00:25:21, 28%)
 - Top by S/N count: DJI Mini 2 (11x, 35%)



CUI



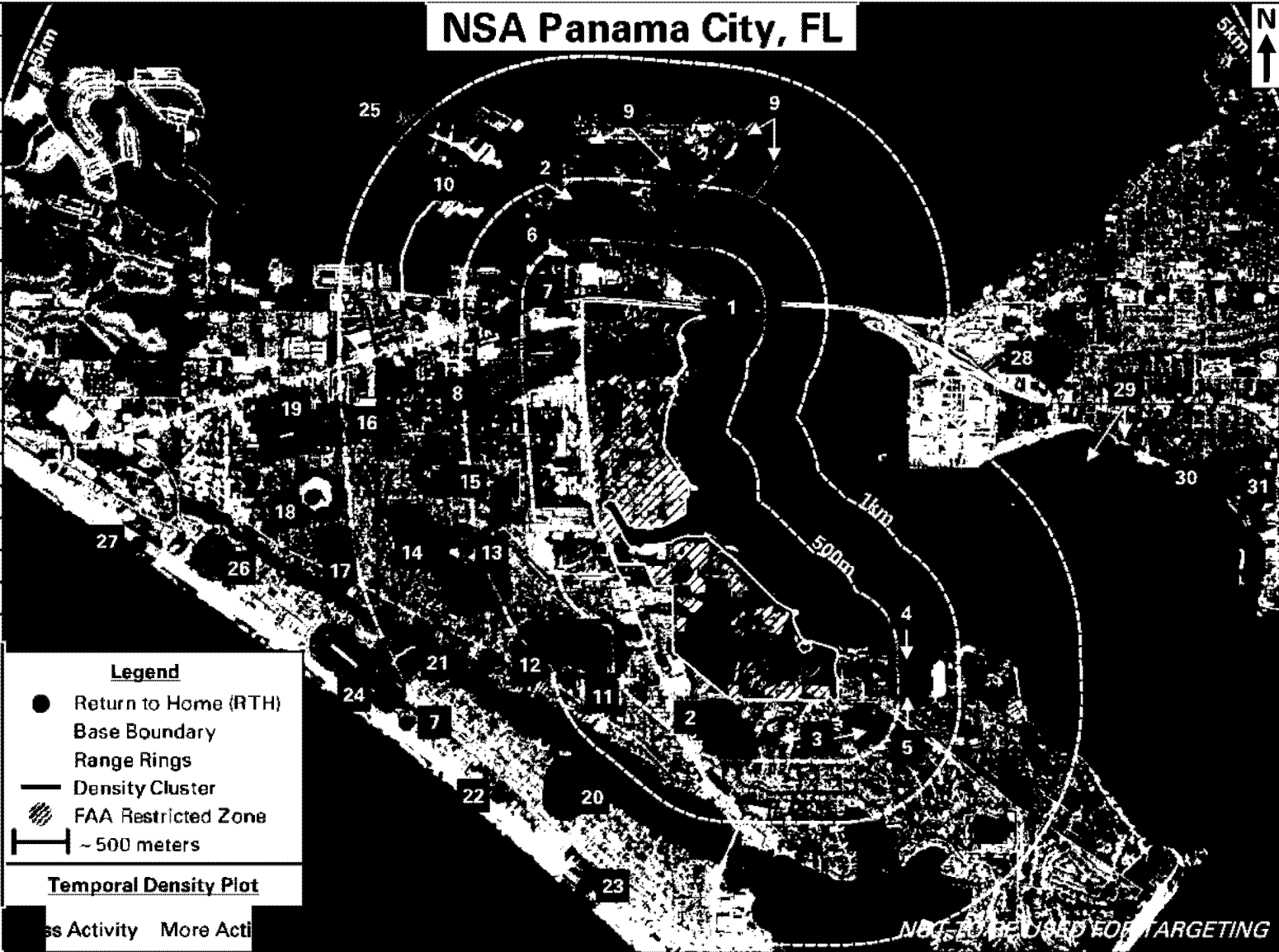
Current System Overview (1 of 2)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	U/I DJI UAS	8JECMA40018B0M	1	82	00:01:41
2	DJI Mini 2 SE	6C5CL5R00163WD	4	364	00:11:52
3	DJI Mavic 2 Zoom	0M6CH8QR0A1QWC	1	269	00:07:01
4	DJI Mavic 2 Zoom	0M6CHC5R0A2WY1	1	108	00:00:01
5	DJI Mini 2	3NZSHA5003026K	1	384	00:02:03
6	DJI FPV	37Q7LAD00BX052	1	26	00:00:01
7	DJI Mavic Air 2	3N3BH9B01202J4	2	751	00:06:08
8	DJI Mini 2	3NZSHBE00402T5	1	328	00:06:03
9	DJI FPV	37QBHCHBD1002C	2	404	00:05:22
10	DJI Mavic Pro	08RDGBNP0101AY	1	246	00:00:30
11	DJI Mavic Pro	08RDE2M001047K	3	121	00:01:35
12	DJI Mavic Air	0K1CF6B3AF252G	2	112	00:06:04
13	DJI FPV	37QBHBA00B039J	2	108	00:04:16
14	DJI Air 2S	3YTEKA6003000U	1	85	00:00:02
15	DJI Mini 2	3NZCJ980144JEK	2	164	00:10:21
16	DJI Mini 2	3NZCHCS00445WP	1	436	00:01:55
17	DJI Mavic Air	0K1CF7K3AG3LCE	1	292	00:03:02
18	DJI Mini 2 SE	6C5CM44001FAV9	1	318	00:05:35
19	DJI Air 2S	3YT7M12003A4YJ	1	282	00:01:49
20	DJI Mini 2	5FSAK9P0060AY1	1	115	00:00:01
21	DJI Mini 2	3NZSHBM00400VC	1	344	00:00:49
22	DJI Mini 2	3NZCJCBO443QJL	1	436	00:01:06
23	DJI Mini 2	3NZCJ6L02419ML	1	509	00:02:58
24	DJI Mavic Air 2	3N3BJ7501200XQ	1	220	00:00:01
25	DJI Mini 2 SE	6C5AL3800104Z9	1	308	00:02:49

– S/N with night detection(s) | Red font – S/N previously detected | – exceed FAA altitude allowance





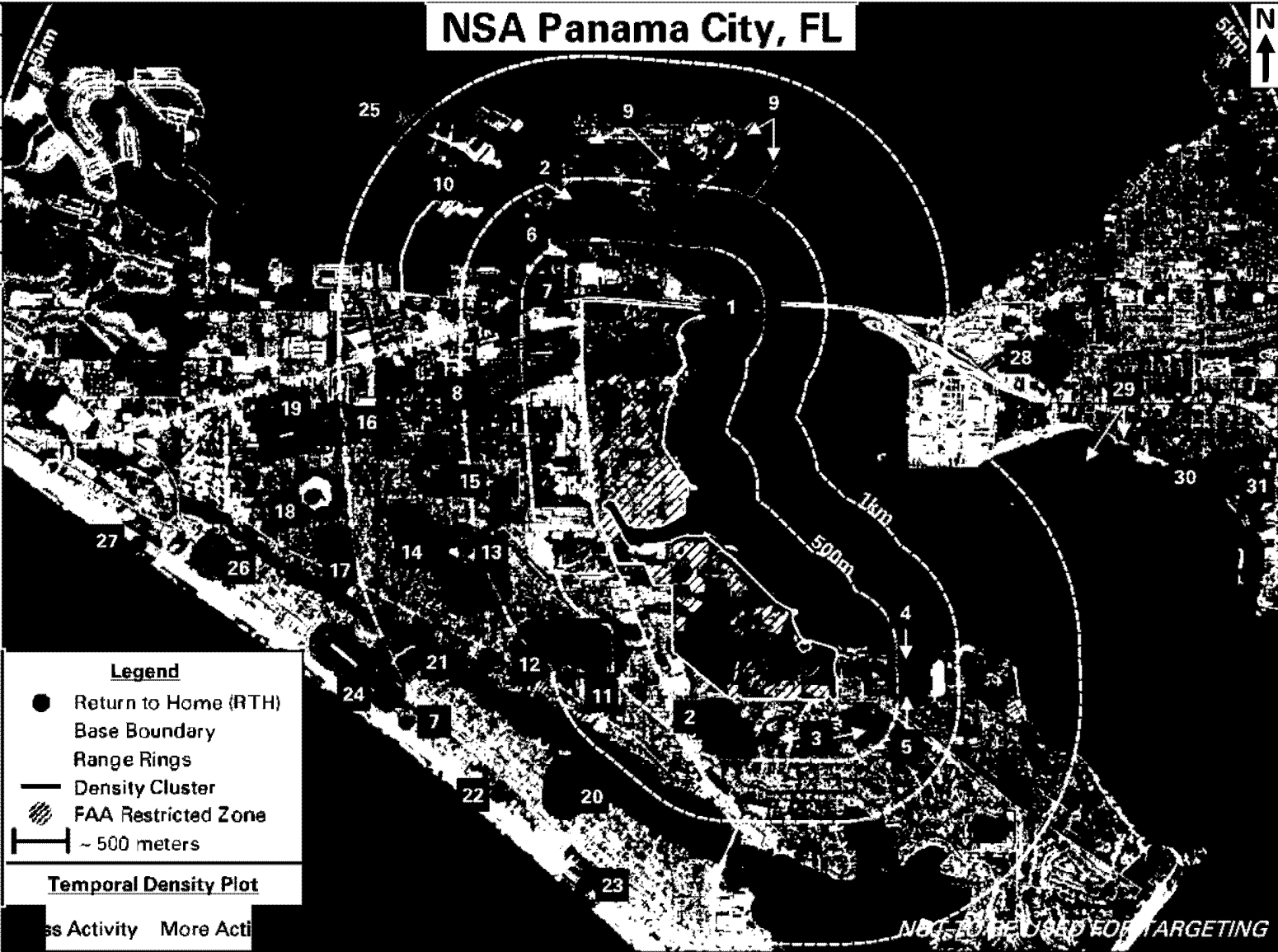
Current System Overview (2 of 2)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
26	DJI Air 2S	3YTBJCC00302JX	1	367	00:00:01
27	DJI Mini 2	5FSCK3A01168D7	2	358	00:00:02
28	DJI Mini 2	3NZCK58014BMFJ	1	52	00:00:01
29	DJI Mini 2	5FSCK140111NZW	2	331	00:00:02
30	DJI Mini 2 SE	6C5ALA300102JB	3	30	00:02:51
31	DJI FPV	37QBK1NBD100LK	2	180	00:03:09

- Requests to operate within controlled airspace must be requested via the Low Altitude Authorization and Notification Capability (LAANC)
- Only Part 107 (licensed) operators may request to operate above the designated altitude ceilings up to 400ft AGL (see graphic)
- Activity occurred in areas with ceilings ranging from 0 – 400ft AGL
- 16% of all S/Ns and 11% of total events exceeded altitude ceilings
 - 5x S/Ns, 5x events (S/Ns: 7, 9, 16, 22-23)





cur

Night System Overview

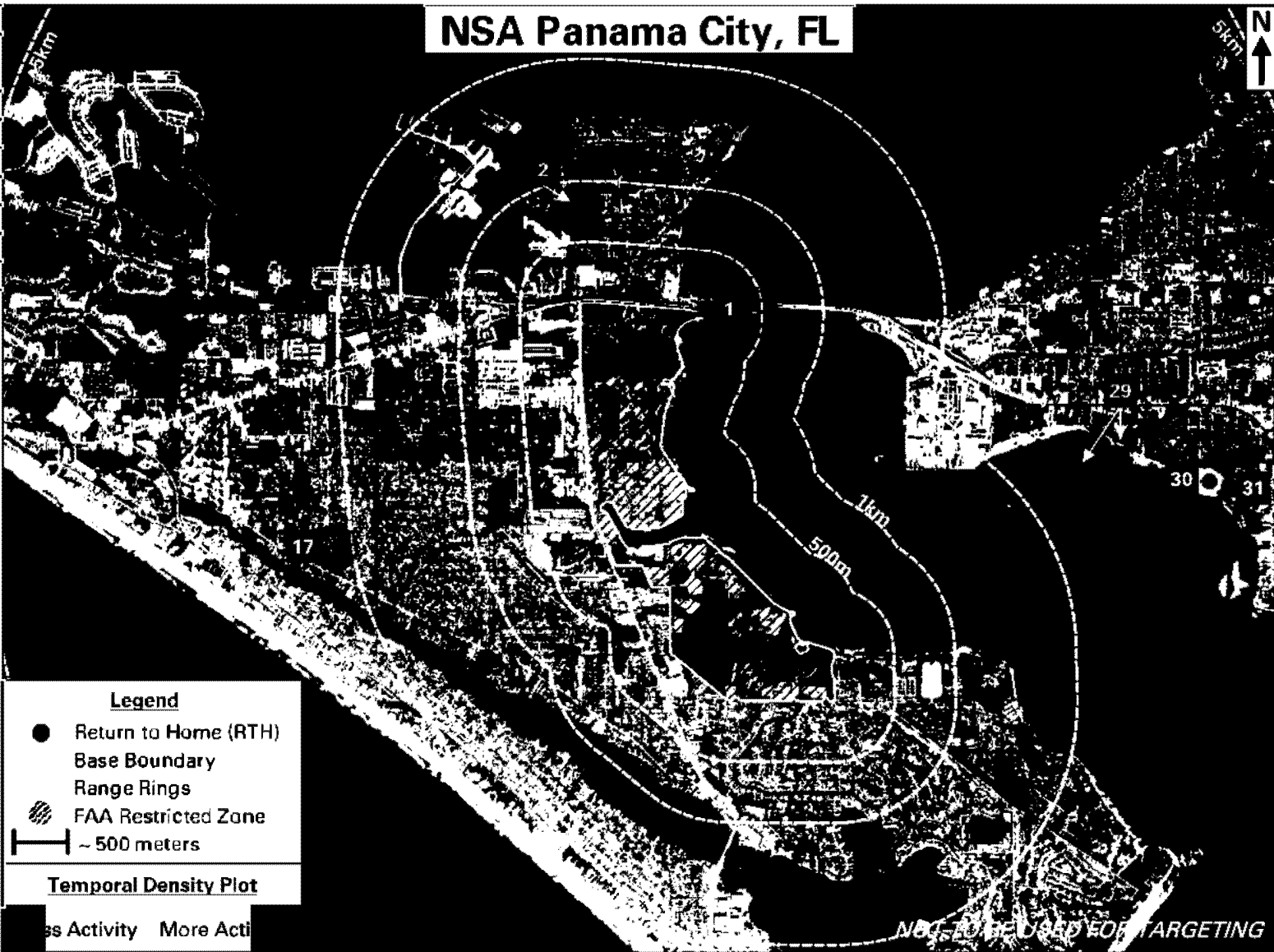
December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	U/I DJI UAS	8JECMA40018B0M	1	82	00:01:41
2	DJI Mini 2 SE	6C5CL5R00163WD	1	177	00:00:22
17	DJI Mavic Air	0K1CF7K3AG3LCE	1	292	00:03:02
29	DJI Mini 2	5FSCK140111NZW	2	331	00:00:02
30	DJI Mini 2 SE	6C5ALA300102JB	3	30	00:02:51
31	DJI FPV	37QBK1NBD100LK	1	98	00:03:01
Red font – S/N previously detected – S/N with night detection(s)					

5km Night Activity Overview

- 6x S/Ns, 9x events, 00:10:59 duration
 - Potential AGL violations: 0x S/Ns (0x events)
 - 4x S/Ns previously detected (S/Ns: 2, 17, 29, 31)
- 5x different platforms detected (5x rotary-wing)
 - S/Ns: 1-2, 30-31 do not come standard with night vision, thermal, or infrared cameras. sUAS activity mostly took place IVO residential and recreational areas.
 - S/Ns: 17, 29 were identified as a DJI Mavic Air and DJI Mini 2 have night mode capability and a 12MP Camera. The DJI Mavic Air does not have Digital or Optical Zoom. The DJI Mini 2 has 2x Digital Zoom capability. Both sUAS operated greater than ~2km from base boundary IVO residential and recreational areas and possibly associated with recreational use.
- Top by total events: DJI Mini 2 SE (4x, 44%)
- Top by total duration: DJI Mini 2 SE (00:03:13, 29%)
- Top by S/N count: DJI Mini 2 SE (2x, 33%)





S/N: 6C5CL5R00163WD

December 01, 2024 – December 31, 2024

Entire Slide is CUI

2 S/N: 6C5CL5R00163WD, DJI Mini 2 SE

- 4x total events (00:11:52) within 1km
- 1x event (2d) within depicted area (00:04:55)
- 3x events (2a-2c) outside depicted area (00:06:57)

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
2d	2024-12-02 16:30:48	2024-12-02 16:35:43	00:04:55	223

- S/N: 2 operated mostly IVO residential areas. Event 2d operated ~185m S of base boundary IVO a residential area off Broward Street. Track path was away from base boundary towards Wahoo Circle for a total duration of 00:04:55. Based on drone type, location, and duration it is likely associated with recreational use.
- S/N: 2 was previously detected; ~2km SW of base boundary IVO a residential area off Gulf Drive (08 MAY 24)

DJI Mini 2 SE



Source: UAS Card Master

Weight: ~246g/9oz

Dimensions: 138x81x58mm

Max Speed: ~29mph/ 46.8kpm

Flight Time: ~31 Mins

Transmission Distance:

- FCC Compliant: 6.2 mi/10km
- CE Compliant: 3.7 mi/6kpm

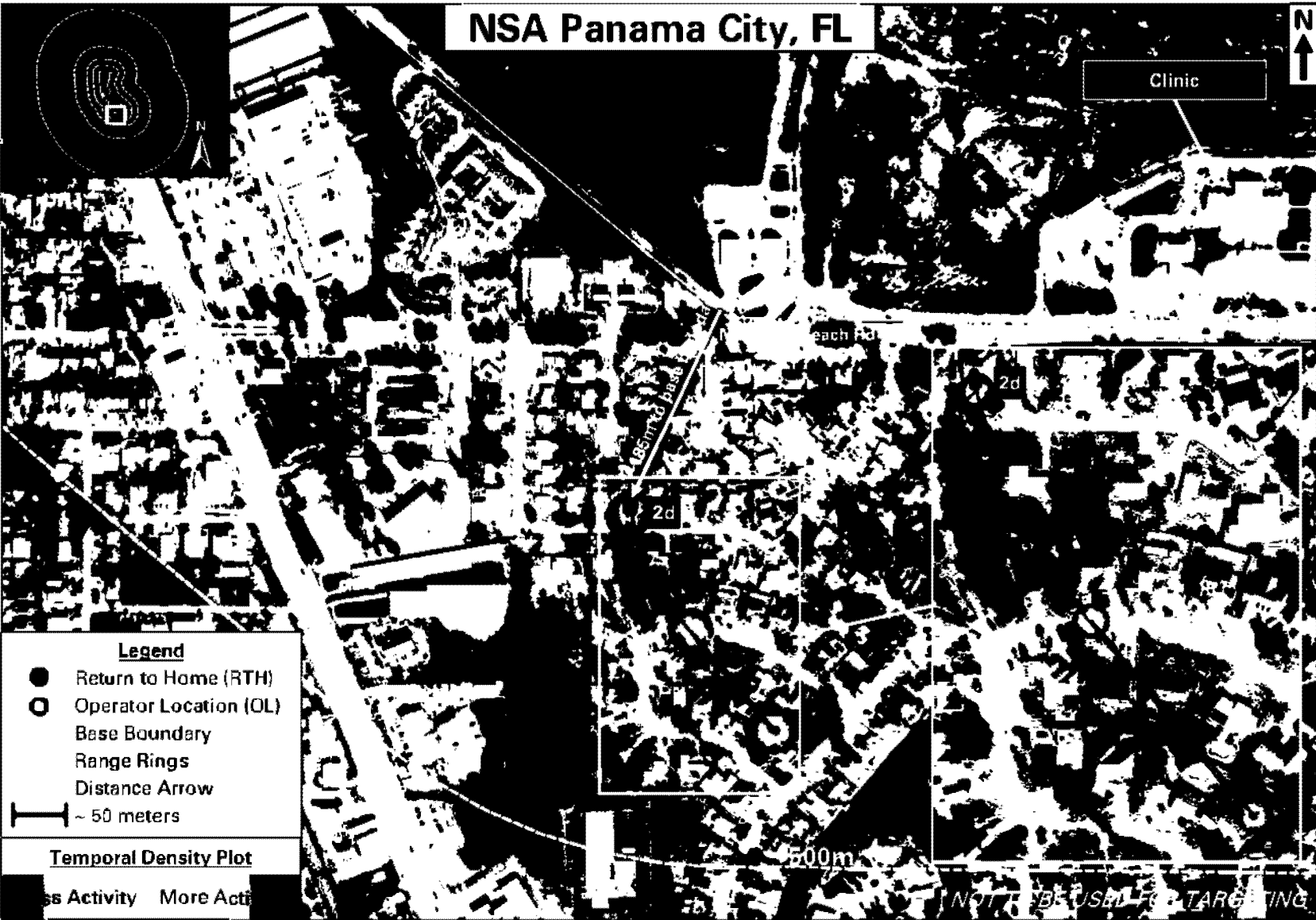
C2 Signal: OcuSync 2.0

Dual Frequency: 2.4-5.8GHz

Image Transmission: 2.7K 14x Digital Zoom

Camera: 12MP

Cost: \$339





~~CUI~~

S/N: 0M6CH8QR0A1QWC

December 01, 2024 – December 31, 2024

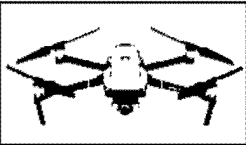
Entire Slide is ~~CUI~~

- 3** S/N: 0M6CH8QR0A1QWC, DJI Mavic 2 Zoom
- 1x total event (00:07:01) within 500m
 - 1x event (3a) within depicted area (00:07:01)

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
3a	2024-12-25 21:21:27	2024-12-25 21:28:28	00:07:01	269

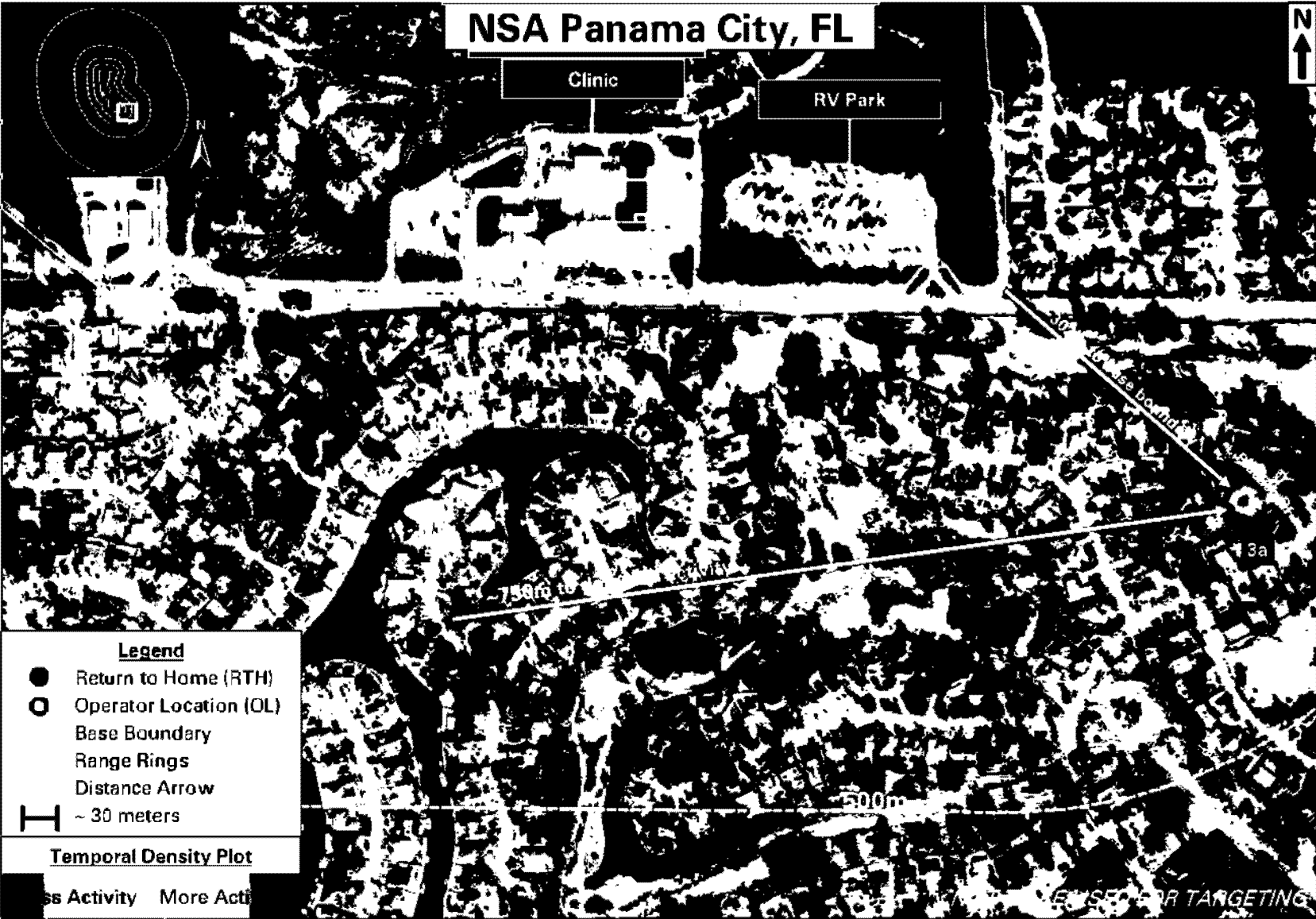
- **S/N: 3** operated mostly IVO a residential area with the Return to Home (RTH) and Operator Location (OL) located on Wahoo Lane. Event **3a** operated ~302m SE of base boundary IVO a residential area located off Bluefish Drive for a duration of 00:07:01. Based on drone type, location, and duration it is likely associated with recreational use.
- The DJI Mavic 2 Zoom has a flight time of ~31 minutes with a max speed of ~ 45mph and is a first time detect.

DJI Mavic 2 Zoom



Source: UAS Card Master

- Weight: ~905g/2lbs
- Dimensions: 322x242x84mm
- Max Speed: ~45 mph/ 72kpm
- Flight Time: ~31 Mins
- Transmission Distance:
 - FCC Compliant: 5 mi/8km
 - CE Compliant: 3.1 mi/5km
- C2 Signal: OcuSync 2.0
- Dual Frequency: 2.4-5.8GHz
- Image Transmission: 4K
- Camera: 12MP/ 4x Digital Zoom/2x Optical Zoom (Total: 8x Zoom)
- Cost: ~\$1,349





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimpx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than April 05, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Support Activity (NSA) Panama City. ArcGIS.
https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-7)**
2. National Security UAS Flight Restrictions. https://udls-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-7)**
3. NSA Panama City; PHALANX CONUS Repository; Technical Logs **(Slides 2-7)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 6-7)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf **(Slides 2-7)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than November 08, 2026.

DTRA PHALANX Activity Report

NAS Patuxent River, MD (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~~~CUI~~

Agenda

- Executive Summary
- Points of Contact
- Sources
- Terminology



Executive Summary

December 01, 2024 – December 31, 2024

Entire Slide is CUI

During this reporting period, no sUAS activity was detected within 500m of the base boundary. (S/N: 1) was detected ~2km south of the base boundary over a wooded area IVO a residential area between Briarcliffe Ct. and Wickshire Ct. for a total duration of 00:00:27. This activity was likely recreational in nature. (S/N: 1) operated in restricted airspace, possibly exceeding FAA sUAS AGL altitude restrictions set for NAS Patuxent River. There were no night detections. sUAS detections within 5km of the base boundary decreased compared to the previous 4-week reporting period (01 NOV 24 – 30 NOV 24, 2x S/Ns, 2x events, 00:05:20 duration). S/Ns decreased 52%, events decreased 52%, and duration decreased 92%.

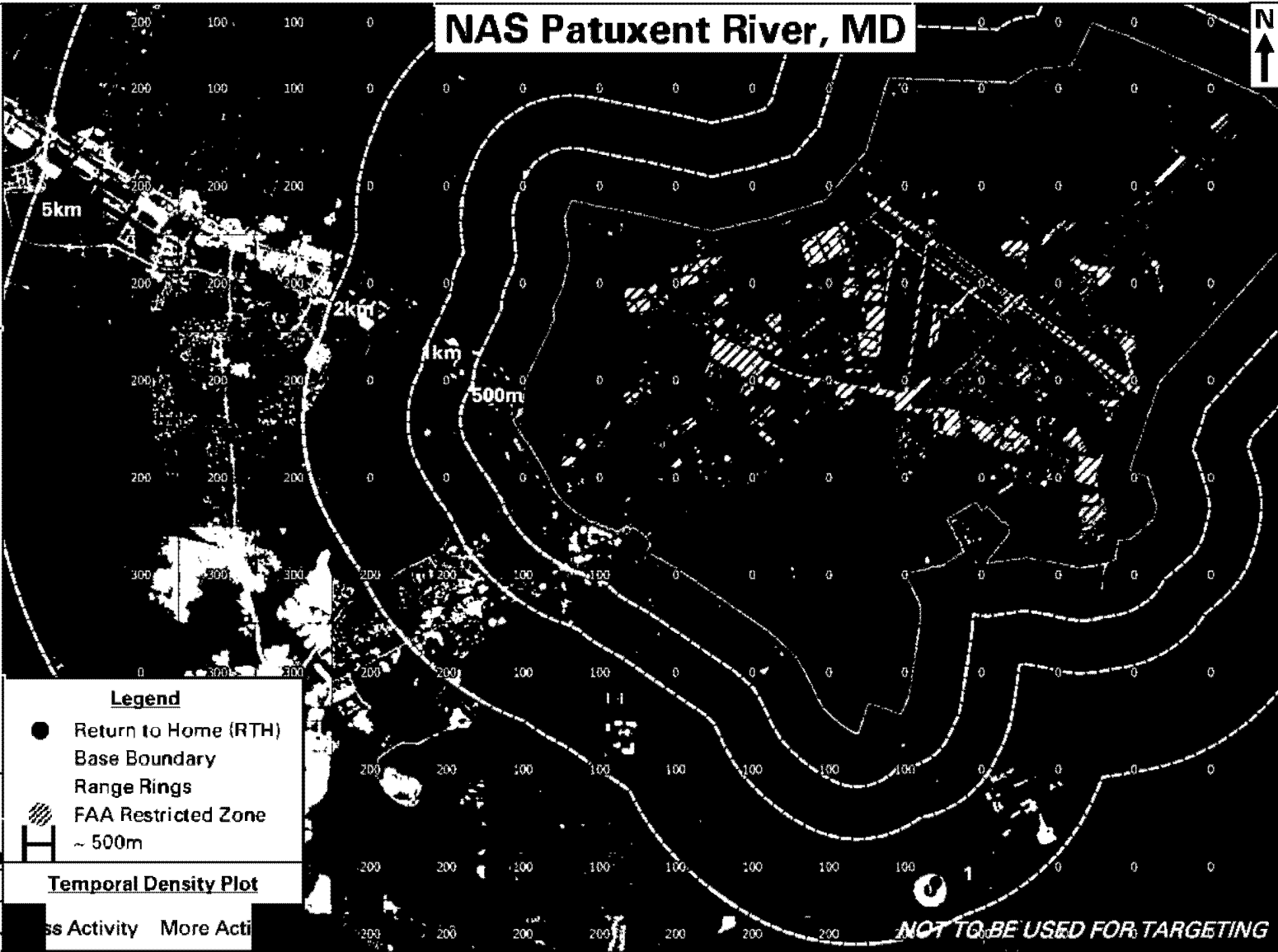
5km Overview

- 1x S/N, 1x event, 00:00:27 duration
 - Exceeded altitude allowance: 1x S/N (1x event) (S/N: 1)
 - Night detections: 0x S/Ns (0x events)
- 1x S/N previously detected (S/N: 1)
 - (S/N: 1) was previously detected on (08 NOV 24) ~5km northwest of the base boundary IVO a residential area east of Soundings Rd.
- 1x platform detected (1x rotary-wing)
 - Top by total events: DJI Mavic 3 (1x, 100%)
 - Top by total duration: DJI Mavic 3 (00:00:27, 100%)
 - Top by S/N count: DJI Mavic 3 (1x, 100%)

Active within 5km

#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mavic 3	F45TB219F00D0134	1	350	00:00:27

Red font – S/N previously detected | – exceed FAA altitude allowance





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than November 08, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Air Station (NAS) Patuxent River. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 2)**
2. National Security UAS Flight Restrictions. https://dds-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slide 2)**
3. NAS Patuxent River; PHALANX CONUS Repository; Technical Logs **(Slide 2)**
4. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slide 2)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



~~CUI~~

Information Cutoff Date: 21 FEB 25

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than October 14, 2026.

DTRA PHALANX Activity Report

Naval Air Station (NAS) Whidbey Island, WA (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Points of Contact
- Sources
- Terminology

Component: Defense Threat Reduction Agency
Controlled by: DTRA OI (Phalanx)
CUI Categories: LCOMM
Distribution / Dissemination Control: OVA
POC: (S)



CUI

Executive Summary

December 01, 2024 – December 31, 2024

Entire Slide is CUI

During the reporting period detected activity within 5km of the base boundary was minimal. On 04 DEC 24, S/N: 1 was detected ~1051m N of the base over a residential area along Monkey Hill Road. The drone loitered in a single location for each event. Both events were detected in an area under a 0ft AGL ceiling. Part 107 (licensed) operators may submit requests to the FAA to operate above the designated altitude ceiling up to 400ft AGL. A search of Phalanx repositories for the previous 4-week reporting period (01 NOV 24 – 31 NOV 24) revealed no detections.

5km Overview

- 1x S/N, 2x events, 00:25:23 duration
- Exceeded altitude allowance: 1x S/N (2x events) (S/N: 1)
- Night detections: 0x S/N (0x events)
- 1x S/N previously detected (S/N: 1)
- S/N: 1 detected in the same area as current activity (14 OCT 24)
- 1x platform detected (1x rotary-wing)

DJI Mini 3



Source: UAS Card Master

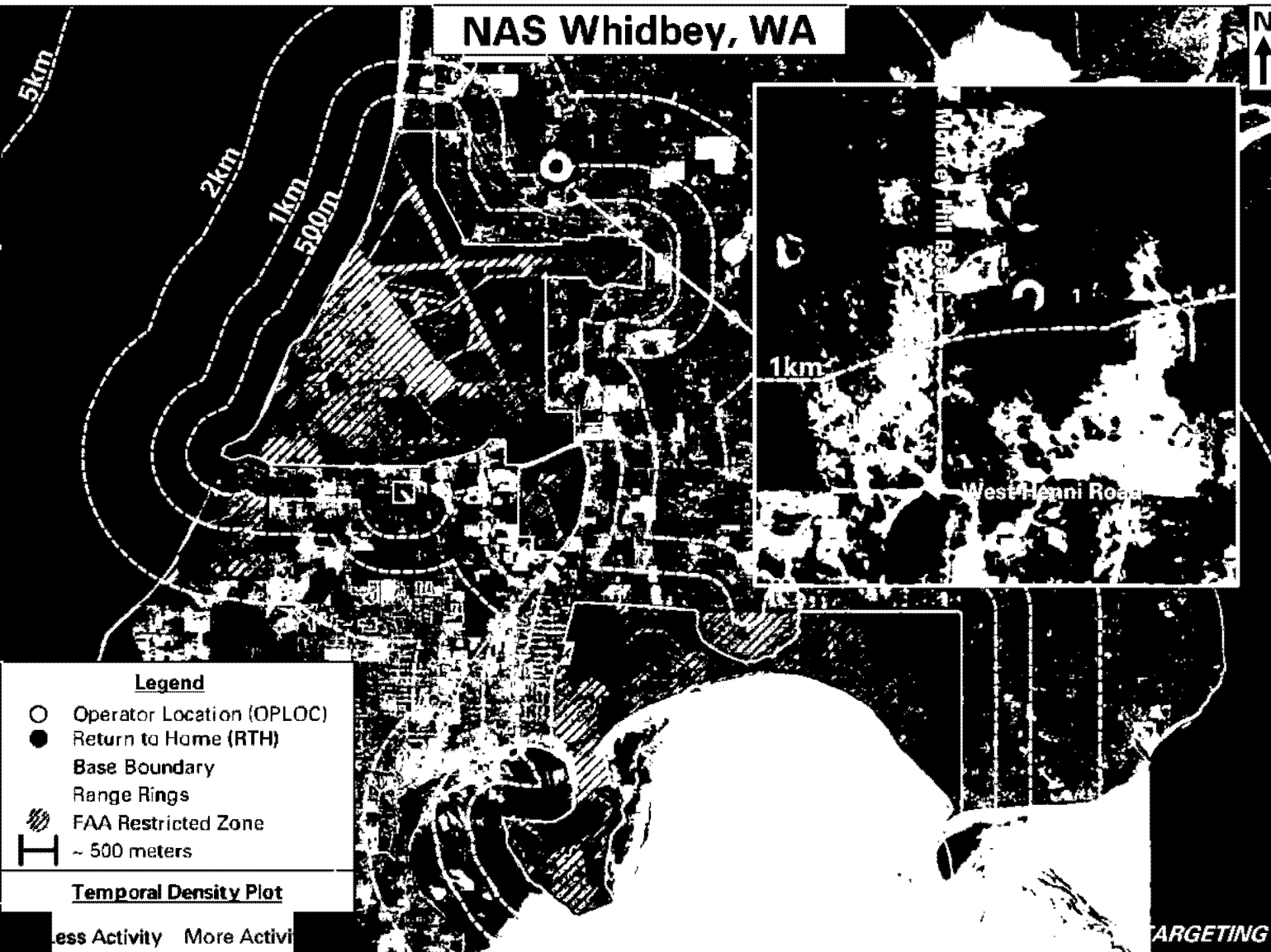
- Weight: ~248g/054lbs
- Dimensions: 251 x 362 x 72mm
- Max Speed: ~36 mph/ 58 kpm
- Flight Time: ~38min (Standard Battery / 51min Intel Flight Battery Plus)
- Transmission Distance:
 - FCC Compliant: 11mi/18km
 - 15.5mi/25km w/Intel Battery Plus Battery
- CE Compliant: 4.96mi/8km
- C2 Signal: Lightbridge
- Dual Frequency: 2.4-5.8GHz
- Image Transmission: 4K
- Camera: 48MP/ 4x Digital Zoom/Night Mode
- Cost: ~\$600

Active within 5km

#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 3	F5YHA23C603156MK	2	385	00:25:23

Red font – S/N previously detected |

– exceed FAA altitude allowance





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimbx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than October 14, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Air Station Whidbey Island, WA. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 2)**
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slide 2)**
3. Naval Air Station Whidbey Island, WA; PHALANX CONUS Repository; Technical Logs **(Slide 2)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 2)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
6. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slide 2)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:** The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than September 04, 2025.

DTRA PHALANX Activity Report

National Capital Region Assessment

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Overall Activity Summary
- Top 4 Site Charts
- Activity by Base / Top 5 Platforms
- Activity by Weekday / Activity by Time NCR Area of Interest (3 slides)
- JB Andrews (3 slides)
- Fort Belvoir (3 slides)
- South Potomac - Indian Head (3 slides)
- NSF Thurmont (3 slides)
- Intelligence Community Campus - Bethesda (ICCB) (3 slides)
- Pentagon (3 slides)
- Washington Navy Yard (3 slides)
- Armed Forces Retirement Home (3 slides)
- NSF Dahlgren (3 slides)
- Naval Observatory (3 slides)
- NSF Suitland (3 slides)
- Points of Contact
- Sources
- Terminology

Component: Defense Threat Reduction Agency
Controlled by: DTRA OI (Phalanx)
CUI Categories: LCOMM
Distribution/ Dissemination Control: N/A
POC: (b)(6)



CUI

Overall Activity Summary

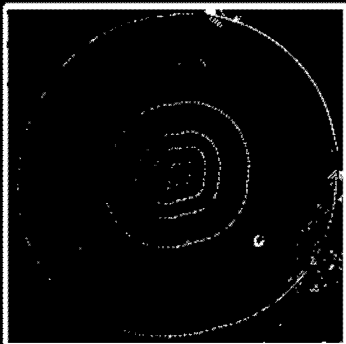
December 01, 2024 – December 31, 2024

Entire Slide is CUI

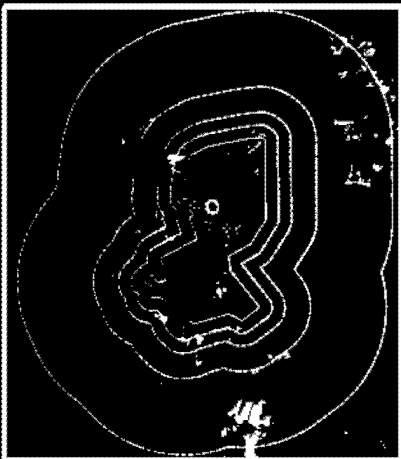
Activity Summary

- 52x S/Ns, 148x events, 23:37:05 duration
- 5x S/Ns detected operating within a base boundary (13x events)
 - 52x S/Ns (148x events) within NCR Area of Interest
- Exceeded altitude allowance or Special Flight Rules Area (SFRA): 51x S/Ns (147x events)
- Night detections: 4x S/Ns (7x events)
- Previous month comparison (NOV 2024): 87x S/Ns (42% decrease), 151x events (5% decrease), 07:46:21 duration (194% increase)
- 27x S/Ns previously detected
- S/N: F45TB21CE2AE0689 (DJI Mavic 3) operated over an airstrip on base at DAHLGREN (5 and 6 DEC 24) for a total duration of 01:20:42.
- S/N: F8PJA245EML11GJL (U/I DJI UAS) was detected ~1.72km W from base boundary IVO residential area (7-10 DEC 24).
- S/N: F45TB21C82AE085X (DJI Mavic 3) operated over an airstrip on base at DAHLGREN (5 and 6 DEC 24) for a total duration of 00:42:28.
- S/N: F45TB21CB2AE03QA (DJI Mavic 3) operated over an airstrip on base at DAHLGREN (6 DEC 24) for a total duration of 00:33:20.
- Highest Activity by Base
 - Events: Fort Belvoir (66x events)
 - Duration: Fort Belvoir (15:33:21)
- Highest Activity by Weekday
 - Events: Thursday (22x events)
 - Duration: Thursday (07:21:24)
- Highest Activity by Time (Zulu)
 - Events: 2000Z (30x events)
 - Duration: 2000 (05:07:12)
- 20x S/Ns detected Intra-COCOM, 0x S/Ns detected Inter-COCOM

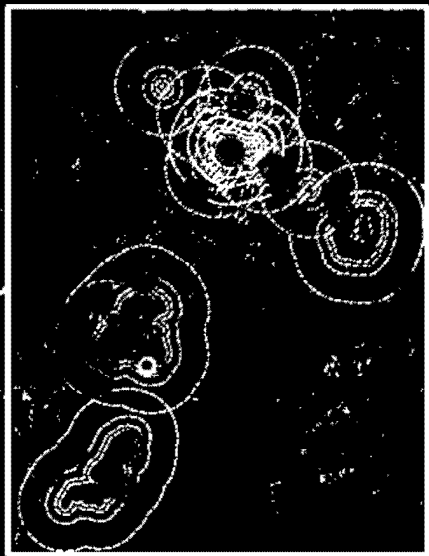
NOT TO BE USED FOR TARGETING



NSF Thurmont, MD



NSF Dahlgren, VA



National Capital Region



Legend

- Return to Home (RTH)
- Base Boundary
- Range Rings
- FAA Restricted Zone

Temporal Density Plot

Less Activity More Activity

Intra-CCMD: S/Ns detected at different sites within the CCMD
Inter-CCMD: S/Ns detected in multiple CCMDs

*Count includes duplicates due to overlapping base areas of interest | All detected events covered by the National Capital Region
15-Mile Special Flight Rules Area (SFRA) are counted toward the altitude allowance violations.

CUI

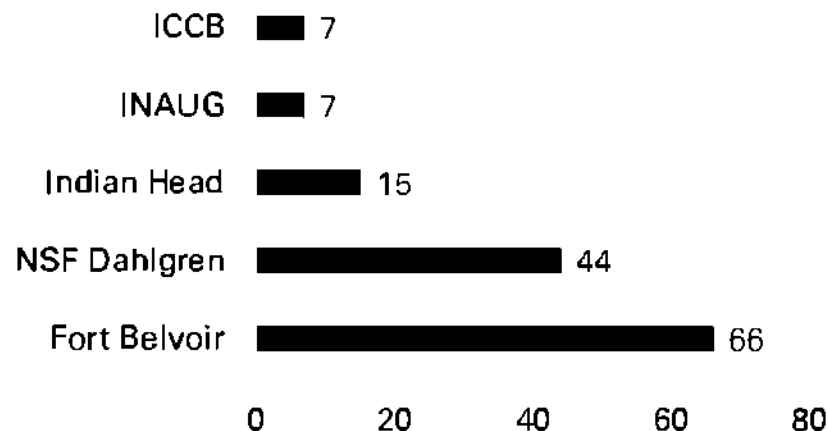


Top 4 Site Charts

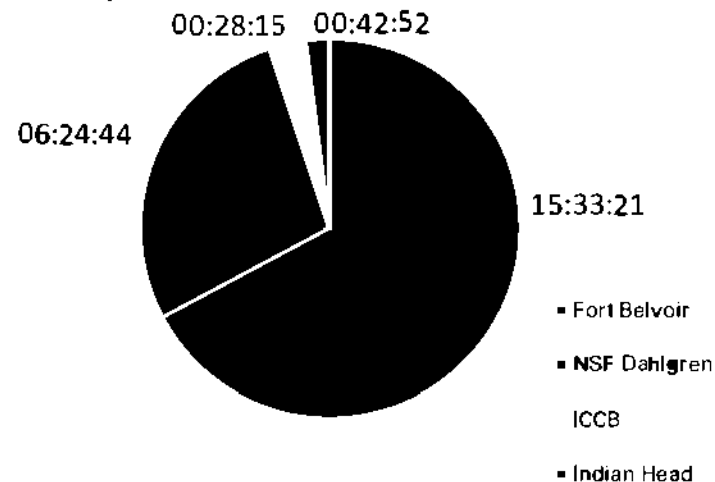
December 01, 2024 – December 31, 2024

Entire Slide is CUI

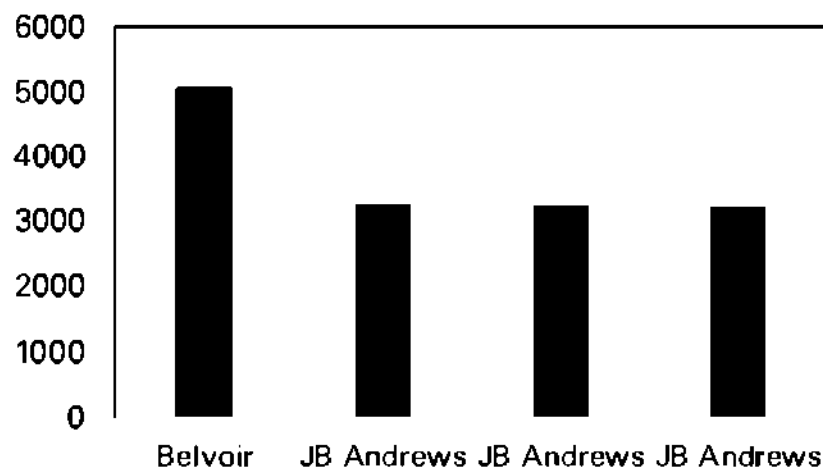
Top 4 Sites - Total Events



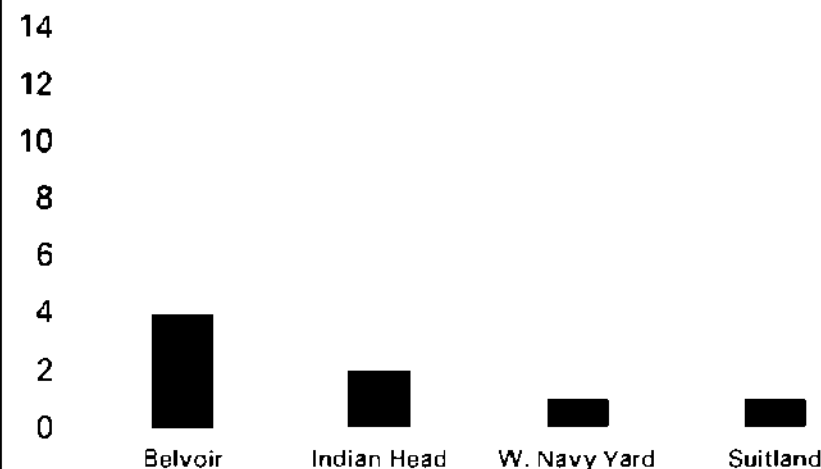
Top 4 Sites - Total Duration



Top 4 Sites – Altitude Violations



Top 4 Sites – Night Events





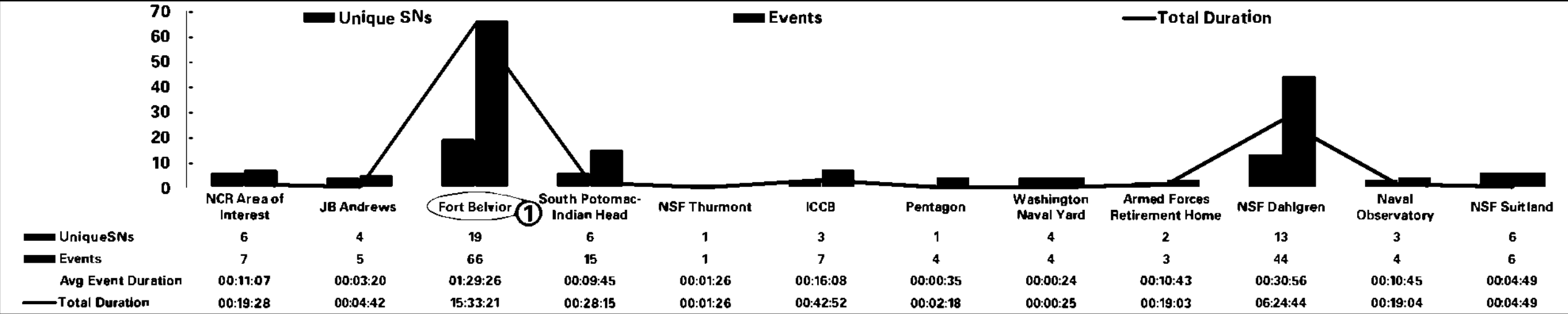
—CUI—

Activity by Base / Top 5 Platforms (Total Duration)

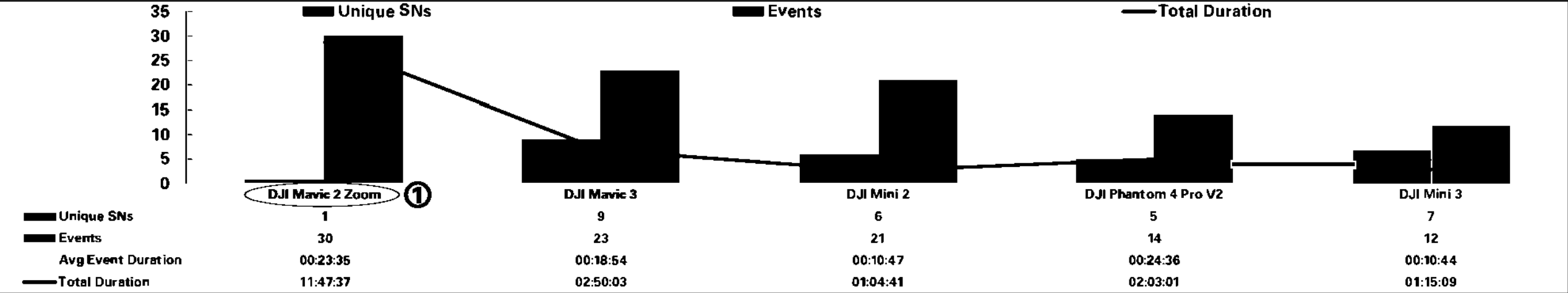
December 01, 2024 – December 31, 2024

Entire Slide is CUI

Activity by Base



Top 5 Platforms (Total Duration)



○ Highest Total Event/Duration (by Base)

○ Highest Total Event/Duration (by Platform)

—CUI—



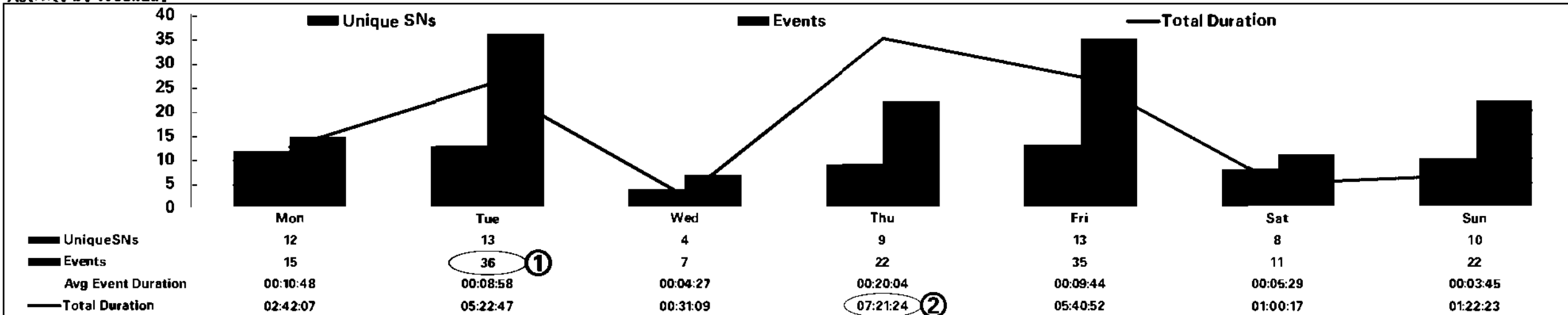
-CUI-

Activity by Weekday / Activity by Time (Zulu)

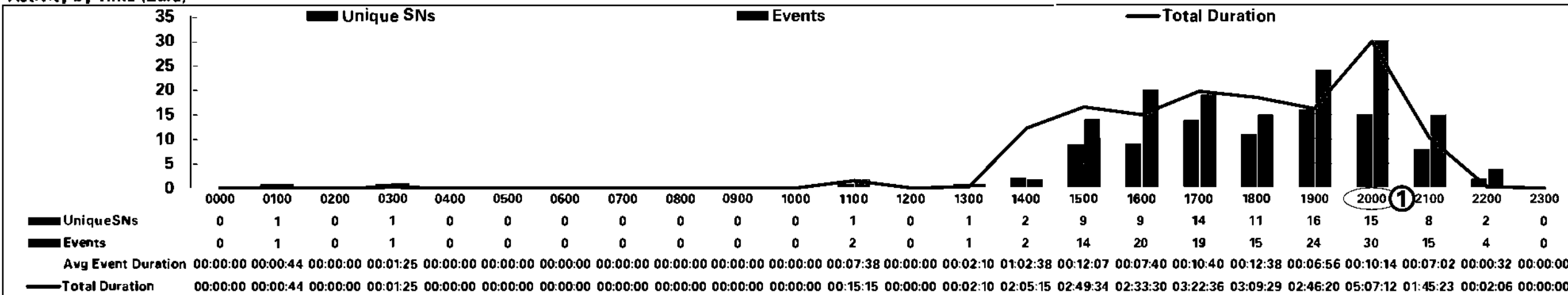
December 01, 2024 – December 31, 2024

Entire Slide is CUI

Activity by Weekday



Activity by Time (Zulu)



○ Highest Total Event/Duration (Weekday)

○ Highest Total Event/Duration (Hour)

-CUI-



CUI

NCR Area of Interest Activity Summary

December 01, 2024 – December 31, 2024

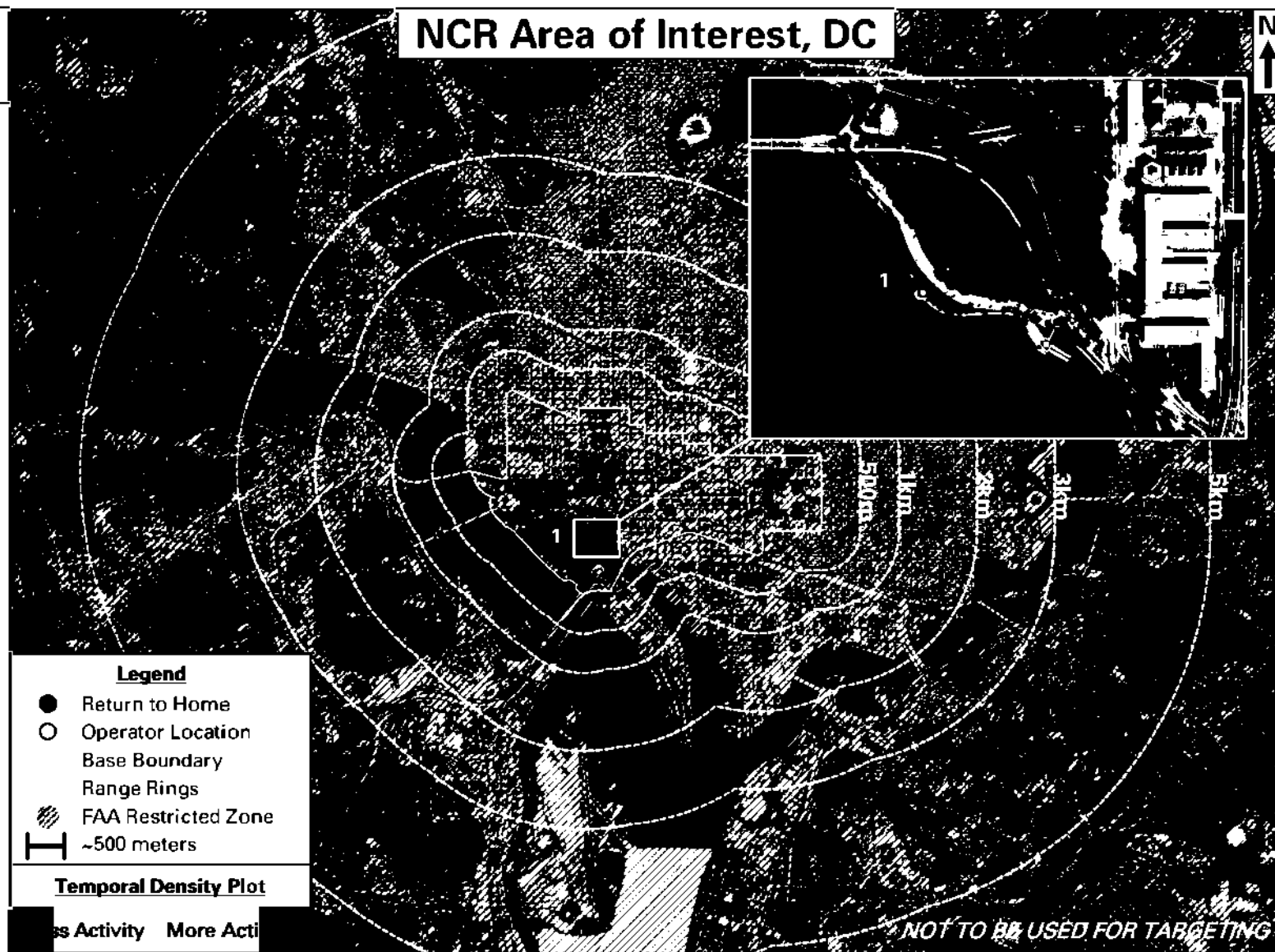
Entire Slide is CUI

S/N: 1 operated within 0.47km south of the Washington Monument and 0.2km south of Independence Avenue (27 DEC 24). Activity occurred in a recreational area.

Activity Highlights

- 6x S/Ns, 7x events, 00:19:28 duration
 - Exceeded altitude allowance: 6x S/Ns (7x events)
 - Night detection: 1x S/N (1x event)
 - No nighttime detections within ~2km from base boundary
- 3x S/Ns previously detected
- S/N: 3NZCK6E014CPAQ (DJI Mini 2)
- S/N: F4XFA22AFML78D81 (DJI Mini 3 Pro)
- S/N: F6N8C236W00314EH (DJI Air 3)
- Highest Activity by Weekday
 - Events: Friday (5x events)
 - Duration: Friday (00:19:05)
- Highest Activity by Time (Zulu)
 - Events: 1500Z (2x events)
 - Duration: 1500Z (00:16:39)
- Highest Duration by Platform: DJI Phantom 4 Pro V2 (00:16:39)
- 0x Detects within 500m, 1x Detect within the Base Boundary

- 1 S/N: 3NZCJ740140ULR (DJI Mini 2) operated within the area perimeter, on the NE coast of the Washington Channel Tidal Basin (27 DEC 24).



CUI



— CUI —

NCR Area of Interest Data Analysis

December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 24 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	24		7		-72%
Total Duration	01:21:59		00:19:28		-77%
Total SNs	14		6		-59%
Most Active Platform					
By Unique SNs	DJI Mini 3, DJI Mini 3 Pro		DJI Mini 2		
	3		2		-36%
By Events	DJI Mini 3, DJI Mini 3 Pro		DJI Mini 2, DJI Phantom 4 Pro V2		
	5		2		-61%
By Duration	DJI Mavic 3 Classic		DJI Phantom 4 Pro V2		
	00:50:54		00:16:39		-68%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

— CUI —

Metric	Jan-Jun 2022		Jul-Dec 2022		Jan-Jul 2023		Percentage Change	Percentage Change
Length of Reporting Period	Start Date	01 Jan 22	Start Date	01Jul22	Start Date	01Jan 23	Jan-Jun 2022 / Jul-Dec 2022 Comparison	Jul-Dec 2022 / Jan-July 2023 Comparison
	End date	30 Jun22	End date	31 Dec 22	End Date	31Jul23		
	Weeks in total	26	Weeks in total	26	Weeks in Total	30		
Total Events	144		137		253		-6%	
Total Duration	13:06:00		11:44:43		20:57:42		-12%	
Total CLs	57		61		91			
Most Active Platform/Component								
By Unique CLs	DJ Mini 2		DJ Mini2		DJ Mini2			
	22		5		26		-75%	
By Events	DJ Mini 2		DJ Mini2		DJ Mini 3 Pro			
	59		90		59			-43%
By Duration	DJ Mini 2		DJ Mini2		DJ Mavic 3 Enterprise			
	05:24:54		05:24:54		05:24:54		-2%	-13%

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 24 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	24		7		-72%
Total Duration	01:21:59		00:19:28		-77%
Total SNs	14		6		-59%
Most Active Platform					
By Unique SNs	DJI Mini 3, DJI Mini 3 Pro		DJI Mini2		
	3		2		-36%
By Events	DJI Mini 3, DJI Mini 3 Pro		DJI Mini 2, DJI Phantom 4 Pro V2		
	5		2		-61%
By Duration	DJI Mavic 3 Classic		DJI Phantom 4 Pro V2		
	00:50:54		00:16:39		-68%

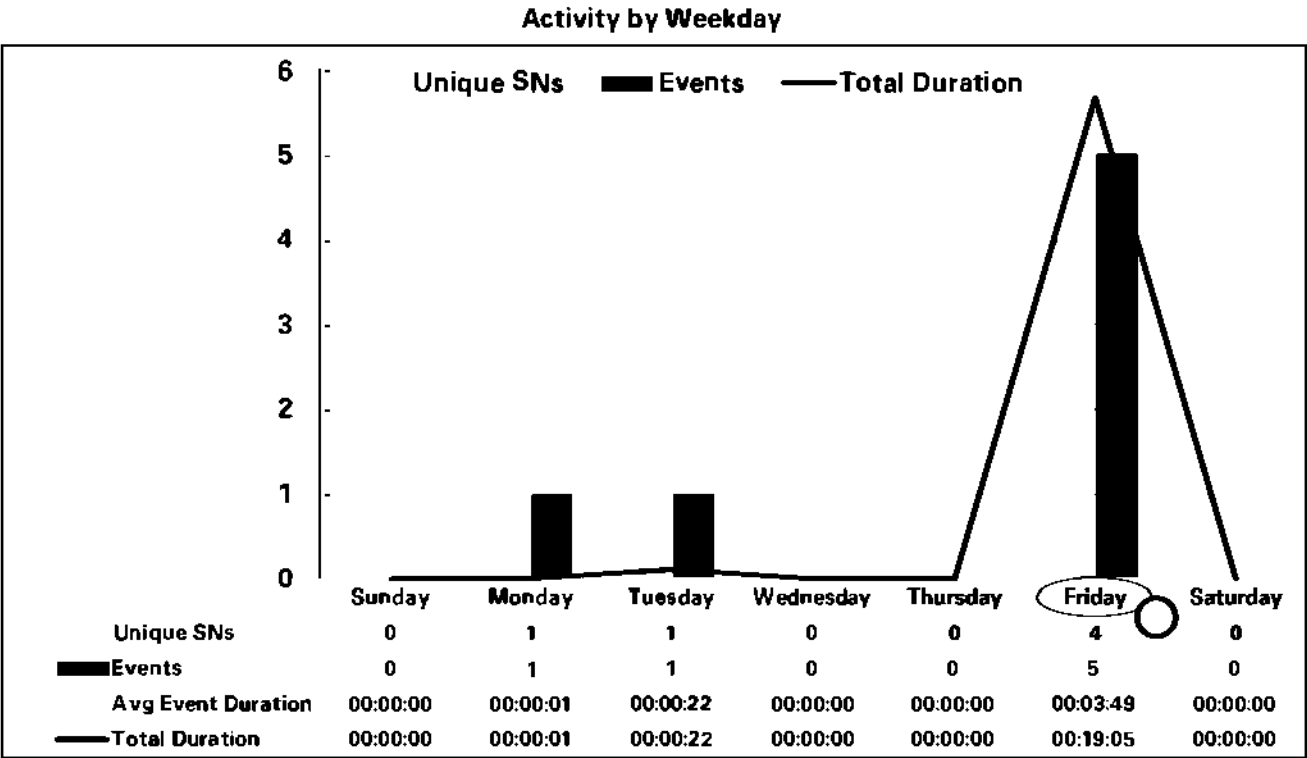


~~CUI~~

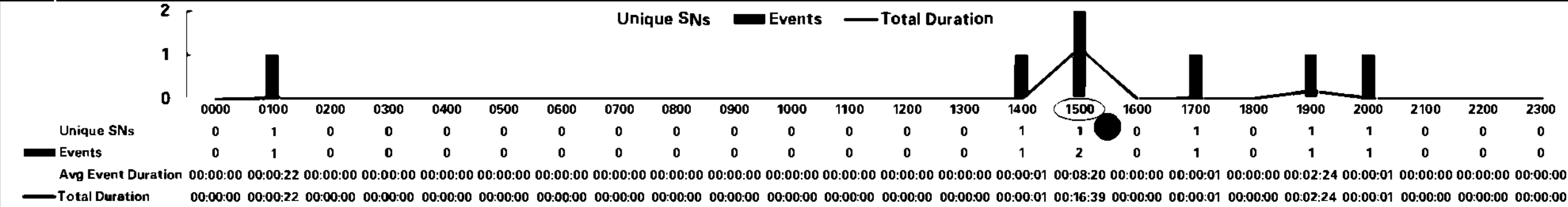
NCR Area of Interest Activity Charts

December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~



Activity by Hour



○ Highest Total Event/Duration (Weekday) ● Highest Total Event/Duration (Hour)



JB Andrews Activity Summary

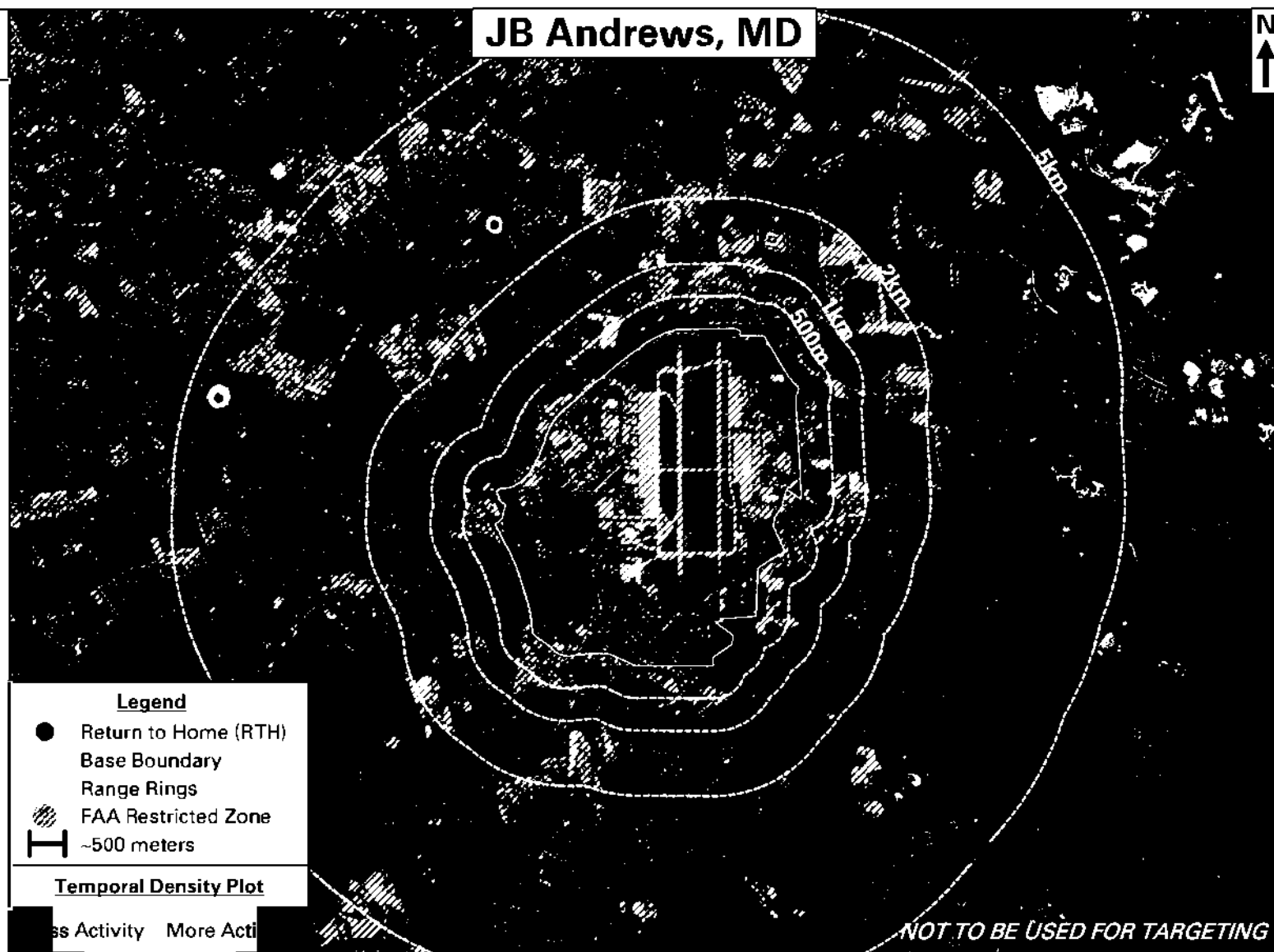
December 01, 2024 – December 31, 2024

Entire Slide is CUI

During this reporting period no activity took place within base perimeter or within 500m of the base perimeter.

Activity Highlights

- 4x S/Ns, 5x events, 00:04:42 duration
 - Exceeded altitude allowance: 4x S/Ns (5x events)
 - Night detections: 0x S/Ns (0x events)
- 2x S/Ns previously detected
- S/N: 5FSCJC40111EJ8 (DJI Mini 2)
- S/N: F4XFA235GML89MHR (DJI Mini 3 Pro)
- Highest Activity by Weekday
 - Events: Monday (2x events)
 - Duration: Monday (00:03:20)
- Highest Activity by Time (Zulu)
 - Events: 1300Z, 1700Z, 1800Z, 1900Z, & 2200Z (1x event) ea.
 - Duration: 1700Z (00:01:58)
- Highest Duration by Platform: DJI Mini 2 (00:02:27)
- 0x Detects within 500m, 0x Detects within the Base Boundary





CUI

JB Andrews Data Analysis

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	4		5		-41%
Total Duration	00:07:45		00:04:42		
Total SNs	3		4		
Most Active Platform					
By Unique SNs	U/I DJI UAS, DJI Mini 3, DJI Mini 3 Pro		DJI Mini 2		
	1		2		
By Events	DJI Mini 3 Pro		DJI Mini 2, DJI Mini 3 Pro		
	2		2		
By Duration	DJI Mini 3		DJI Mini 2		
	00:05:16		00:02:27		-55%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

CUI

Metric	Jan-Jun 2022		Jul-Dec 2022		Jan-Jul 2023		Percentage Change	Percentage Change
Length of Reporting Period	Start Date	01Jan22	Start Date	01Jul22	Start Date	01Jan 23	Jan-Jun 2022 / Jul-Dec 2022 Comparison	Jul-Dec 2022 / Jan-July 2023 Comparison
	End date	30Jun22	End date	31 Dec 22	End Date	31Jul 23		
	Weeks in total	26	Weeks in total	26	Weeks in Total	30		
Total Events	144		137		253		-6%	
Total Duration	13:06:00		11:44:43		20:57:42		-12%	
Total CLs	57		61		91			
Most Active Platform/Component								
By Unique CLs	DJ Mini 2		DJ Mini 2		DJ Mini 2			
	22		5		26		-78%	
By Events	DJ Mini2		DJ Mini 2		DJ Mini 3 Pro			
	59		90		59			-43%
By Duration	DJ Mini2		DJ Mini 2		DJ Mavic 3 Enterprise			
	05:24:54		05:24:54		05:24:54		-2%	-13%

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	4		5		-41%
Total Duration	00:07:45		00:04:42		
Total SNs	3		4		
Most Active Platform					
By Unique SNs	U/I DJI UAS, DJI Mini 3, DJI Mini 3 Pro		DJI Mini 2		
	1		2		
By Events	DJI Mini 3 Pro		DJI Mini 2, DJI Mini 3 Pro		
	2		2		
By Duration	DJI Mini 3		DJI Mini 2		
	00:05:16		00:02:27		-55%

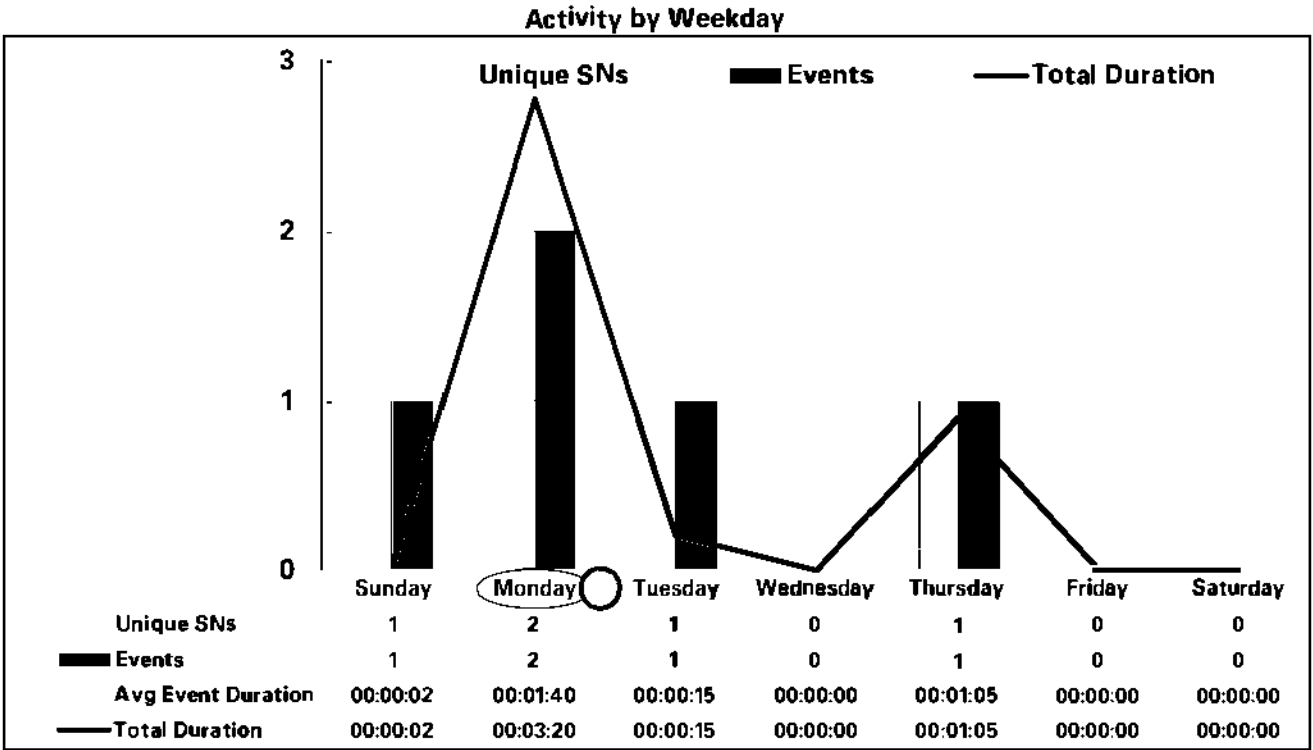


CUI

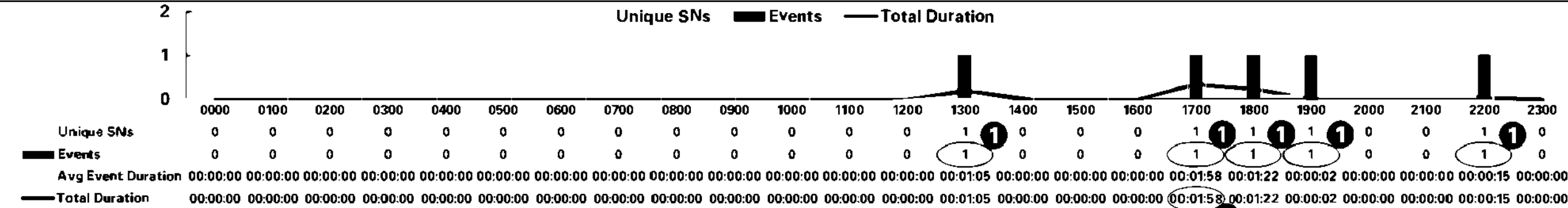
JB Andrews Activity Charts

December 01, 2024 – December 31, 2024

Entire Slide is CUI



Activity by Hour



○ Highest Total Event/Duration (Weekday)

● Highest Total Event/Duration (Hour)

CUI



CUI

Fort Belvoir Activity Summary

December 01, 2024 – December 31, 2024

Entire Slide is CUI

4x sUAS consisting of a DJI Mavic Pro, DJI Phantom 4 Pro V2, DJI Mavic 2 Pro, and a DJI Air 2S were associated to 37x events within the SE boundary of the base. There is a potential these events within the boundary are part of base activities.

Activity Highlights

- 19x S/Ns, 66x events, 15:33:21 duration
 - Exceeded altitude allowance: 19x S/Ns (66x events)
 - Night detections: 2x S/Ns (4x events)

8x S/Ns previously detected

- 1 S/N: 08RDF6VP0101PX (DJI Mavic Pro)
- 3 S/N: 163CJ47R0A7PH0 (DJI Mavic 2 Pro)
 - S/N: 37QBHBLBD101LY (DJI FPV)
 - S/N: 3N37KAJ002R0E3 (DJI Mavic Air 2)
 - S/N: 3NZCH930030LC0 (DJI Mini 2)
 - S/N: 3NZCJ990144MPD (DJI Mini 2)
 - S/N: 687CL13001AYM8 (DJI Mini 3)
 - S/N: F4XFA22AFML78D81 (DJI Mini 3 Pro)

Highest Activity by Weekday

- Events: Tuesday (27x events)
- Duration: Tuesday (04:56:02)

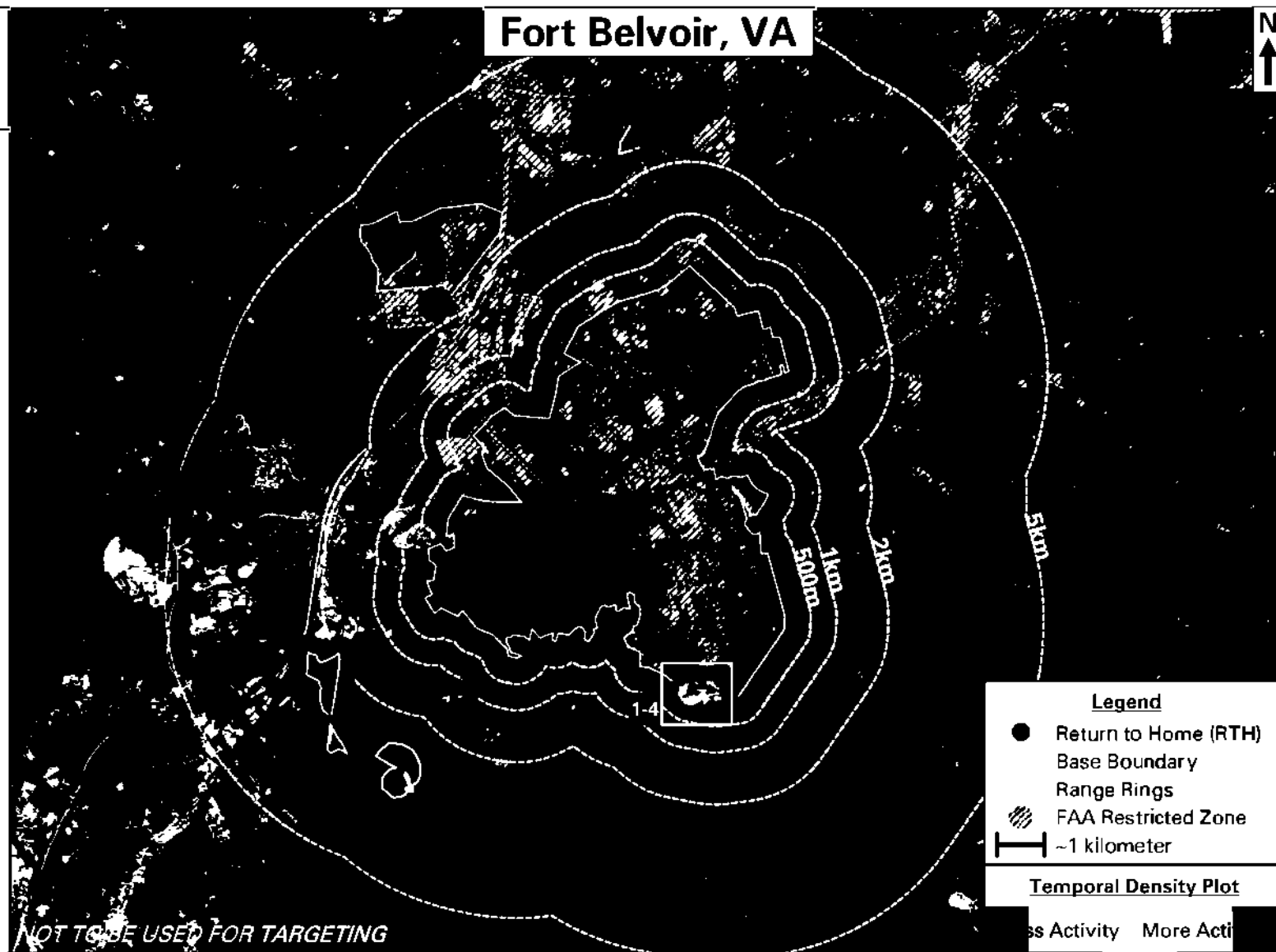
Highest Activity by Time (Zulu)

- Events: 1600Z (13x events)
- Duration: 2000Z (03:26:42)

Highest Duration by Platform: DJI Phantom 4 Pro V2 (11:47:37)

0x Detects within 500m, 37x Detects within the Base Boundary

- 1-4 S/Ns: 08RDF6VP0101PX (DJI Mavic Pro), 11VKK4T00201G9 (DJI Phantom 4 Pro V2), 163CJ47R0A7PH0 (DJI Mavic 2 Pro), 3YTEL770040093 (DJI Air 2S) operated within the base boundary IVO Burbeck Rd and over Accotink Creek.



CUI



~~CUI~~

Fort Belvoir Data Analysis

December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	50		66		
Total Duration	03:14:36		15:33:21		
Total SNs	13		19		
Most Active Platform					
By Unique SNs	DJI Air 2S, DJI Mavic Air 2, DJI Mavic Pro, DJI Mini 2		DJI Mini 3		
By Events	DJI Mini 2		DJI Phantom 4 Pro V2		
By Duration	DJI Mini 2		DJI Phantom 4 Pro V2		
	01:28:34		11:47:37		

• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

~~CUI~~

Metric	Jan-Jun 2022		Jul-Dec 2022		Jan-Jul 2023		Percentage Change	Percentage Change
Length of Reporting Period	Start Date	01 Jan 22	Start Date	01Jul22	Start Date	01Jan 23	Jan-Jun 2022 / Jul-Dec 2022 Comparison	Jul-Dec 2022 / Jan-July 2023 Comparison
	End date	30 Jun22	End date	31 Dec 22	End Date	31Jul23		
	Weeks in total	26	Weeks in total	26	Weeks in Total	30		
Total Events	144		137		253		-6%	
Total Duration	13:06:00		11:44:43		20:57:42		-12%	
Total CLs	57		61		91			
Most Active Platform/Component								
By Unique CLs	DJ Mini 2		DJ Mini2		DJ Mini2			
	22		5		26		-75%	
By Events	DJ Mini 2		DJ Mini2		DJ Mini 3 Pro			
	59		90		59			-43%
By Duration	DJ Mini 2		DJ Mini2		DJ Mavic 3 Enterprise			
	05:24:54		05:24:54		05:24:54		-2%	-13%

Metric		November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison	
	End date	30 Nov 24	End date	31 Dec 24		
	Weeks in total	4	Weeks in total	4		
Total Events	50		66			
Total Duration	03:14:36		15:33:21			
Total SNs	13		19			
Most Active Platform						
By Unique SNs	DJI Air 2S, DJI Mavic Air 2, DJI Mavic Pro, DJI Mini 2		DJI Mini3			
	2		4			
By Events	DJI Mini 2		DJI Phantom 4 Pro V2			
	25		30			
By Duration	DJI Mini 2		DJI Phantom 4 Pro V2			
	01:28:34		11:47:37			

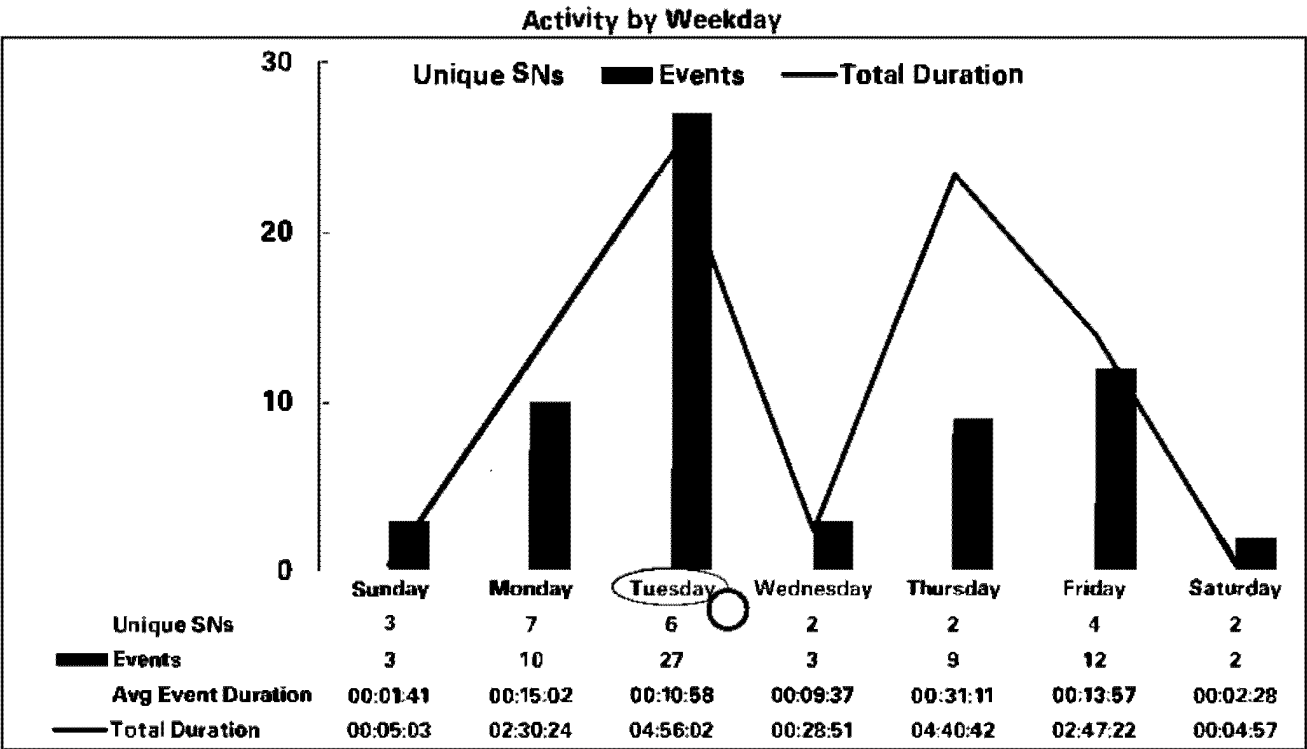


CUI

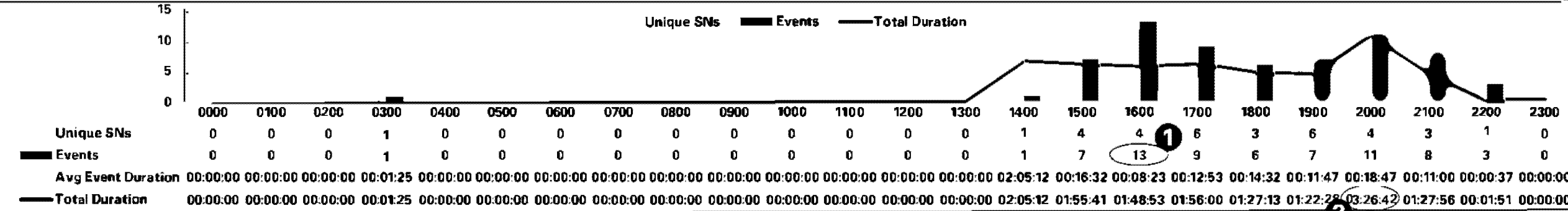
Fort Belvoir Activity Charts

December 01, 2024 – December 31, 2024

Entire Slide is CUI



Activity by Hour



○ Highest Total Event/Duration (Weekday)

● Highest Total Event/Duration (Hour)

CUI



South Potomac – Indian Head Activity Summary

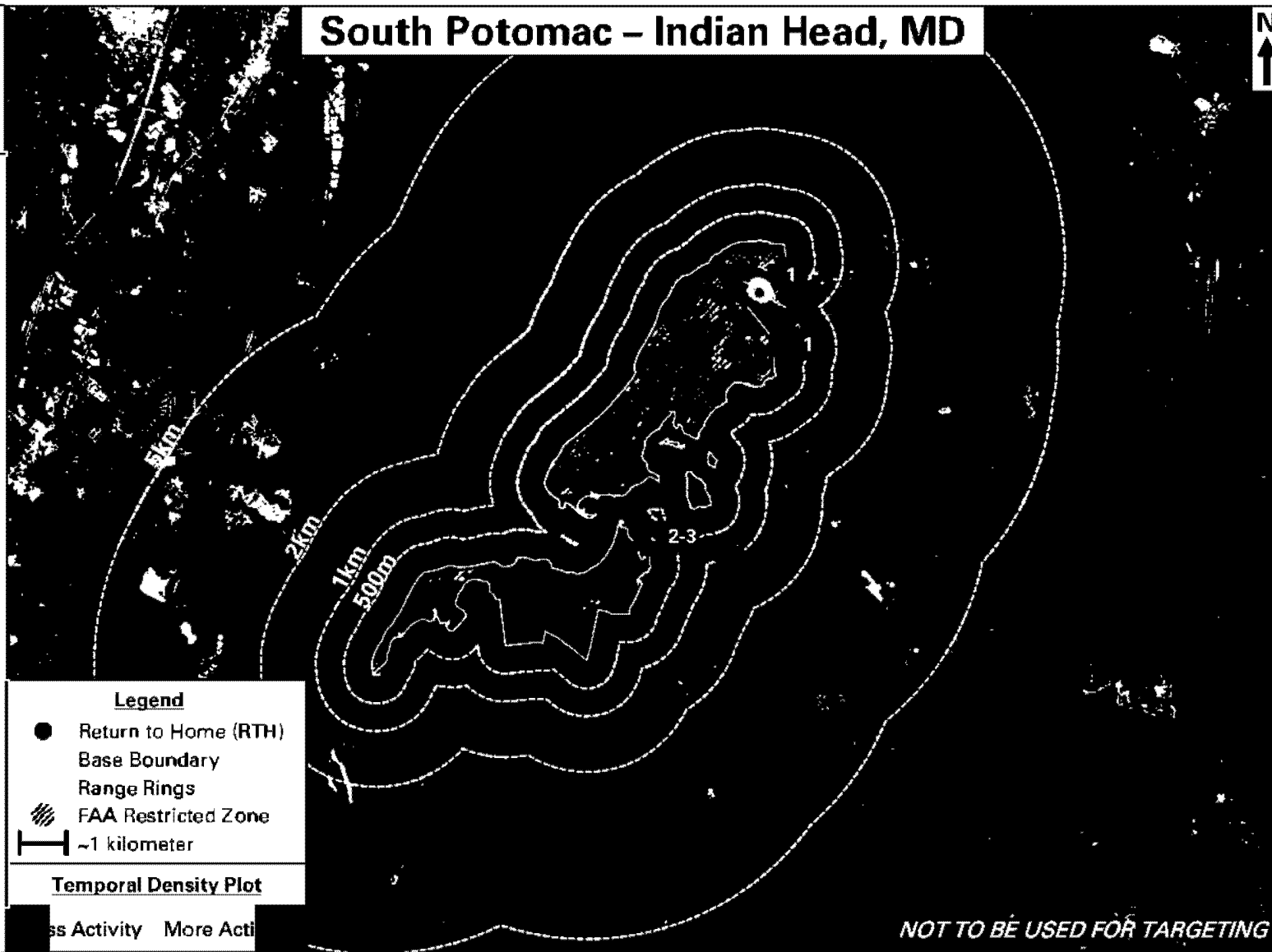
December 01, 2024 – December 31, 2024

Entire Slide is CUI

There were 0 detects within the base boundary. Within 500m there were 3x S/Ns detected. S/N: 1 operated over a fire department for a total duration of 00:15:15 and again IVO a dock near a residential area. S/Ns: 2-3 were detected IVO a parking lot for a marina within 500m of the base boundary near recreational, residential areas.

Activity Highlights

- 6x S/Ns, 15x events, 00:28:15 duration
 - Exceeded altitude allowance: 6x S/Ns (15x events)
 - Night detections: 1x S/N (2x events)
 - 1 S/N: F45T3239600EW0EC (DJI Mavic 3)
- 4x S/Ns previously detected
 - 1 S/N: F45T3239600EW0EC (DJI Mavic 3)
 - 2 S/N: 8JECMA40018457 (U/I DJI UAS)
 - S/N: 3YTBJCC00301L0 (DJI Air 2S)
 - S/N: 0M6CHARR0A2DVK (DJI Mavic 2 Zoom)
- Highest Activity by Weekday
 - Events: Sunday (11x events)
 - Duration: Saturday (00:15:09)
- Highest Activity by Time (Zulu)
 - Events: 1900Z & 2000Z (5x events)
 - Duration: 1100Z (00:15:15)
- Highest Duration by Platform: DJI Mavic 3 (00:15:15)
- 12x Detects within 500m, 0x Detects within the Base Boundary.
 - 1-3 S/Ns: F45T3239600EW0EC (DJI Mavic 3), S/N: 8JECMA40018457 (U/I DJI UAS) and F5YH72413M0SA23U (DJI Mini 3) active near commercial and residential areas.





CUI

South Potomac - Indian Head Data Analysis

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Metric	Novem ber 2024		Decem ber 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	21		15		-31%
Total Duration	01:19:11		00:28:15		-66%
Total SNs	15		6		-61%
Most Active Platform					
By Unique SNs	DJI Mini 3		All 6x Platforms		
	3		1		-68%
By Events	DJI Mavic Air 2		DJI Mini 3		
	4		8		
By Duration	DJI Mavic 2 Enterprise Advanced		DJI Mavic 3		
	00:32:55		00:15:15		-55%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

Metric	Jan-Jun 2022		Jul-Dec 2022		Jan-Jul 2023		Percentage Change	Percentage Change
Length of Reporting Period	Start Date	01 Jan 22	Start Date	01Jul22	Start Date	01Jan 23	Jan-Jun 2022 / Jul-Dec 2022 Comparison	Jul-Dec 2022 / Jan-July 2023 Comparison
	End date	30 Jun22	End date	31 Dec 22	End Date	31Jul23		
	Weeks in total	26	Weeks in total	26	Weeks in Total	30		
Total Events	144		137		253		-6%	
Total Duration	13:06:00		11:44:43		20:57:42		-12%	
Total CLs	57		61		91			
Most Active Platform/Component								
By Unique CLs	DJ Mini 2		DJ Mini2		DJ Mini2			
	22		5		26		-75%	
By Events	DJ Mini 2		DJ Mini2		DJ Mini 3 Pro			
	59		90		59			-43%
By Duration	DJ Mini 2		DJ Mini2		DJ Mavic 3 Enterprise			
	05:24:54		05:24:54		05:24:54		-2%	-13%

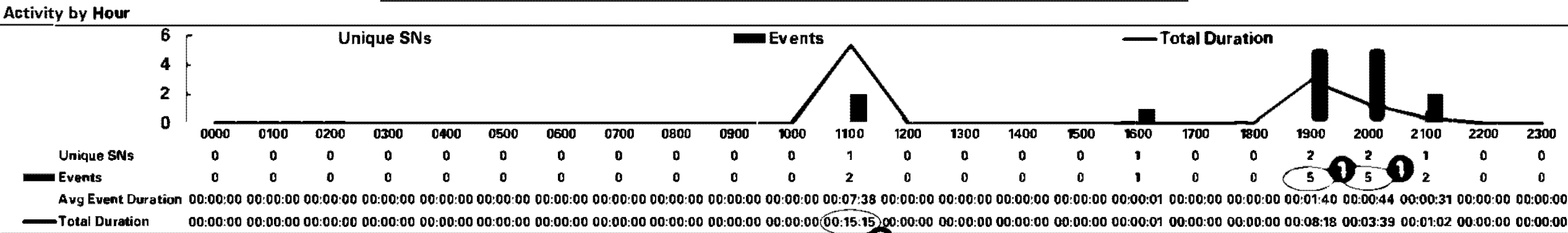
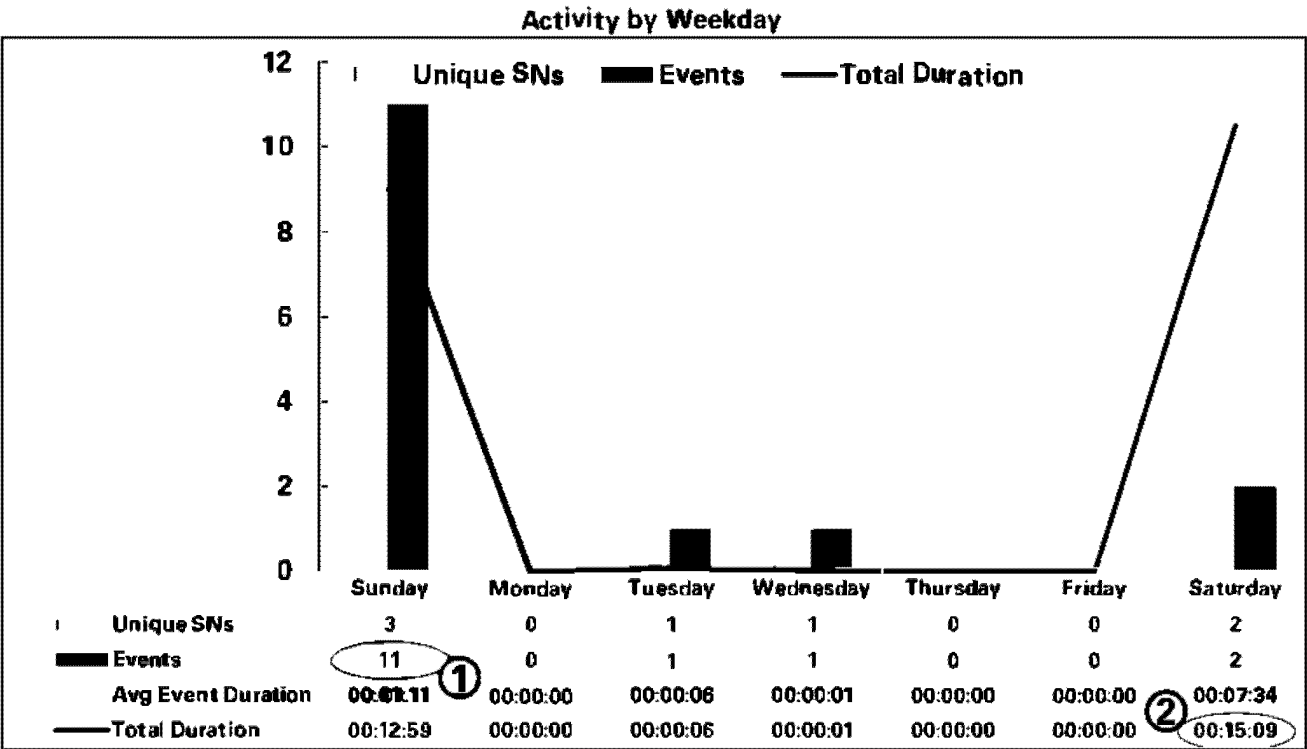
Metric		November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison	
	End date	30 Nov 24	End date	31 Dec 24		
	Weeks in total	4	Weeks in total	4		
Total Events	21		15		-31%	
Total Duration	01:19:11		00:28:15		-66%	
Total SNs	15		6		-61%	
Most Active Platform						
By Unique SNs	DJI Mini 3		All 6x Platforms			
	3		1		-68%	
By Events	DJI Mavic Air 2		DJI Mini3			
	4		8			
By Duration	DJI Mavic 2 Enterprise Advanced		DJI Mavic 3			
	00:32:55		00:15:15		-55%	



South Potomac - Indian Head Activity Charts

December 01, 2024 – December 31, 2024

Entire Slide is CUI



○ Highest Total Event/Duration (Weekday) ● Highest Total Event/Duration (Hour)



NSF Thurmont – Camp David Activity Summary

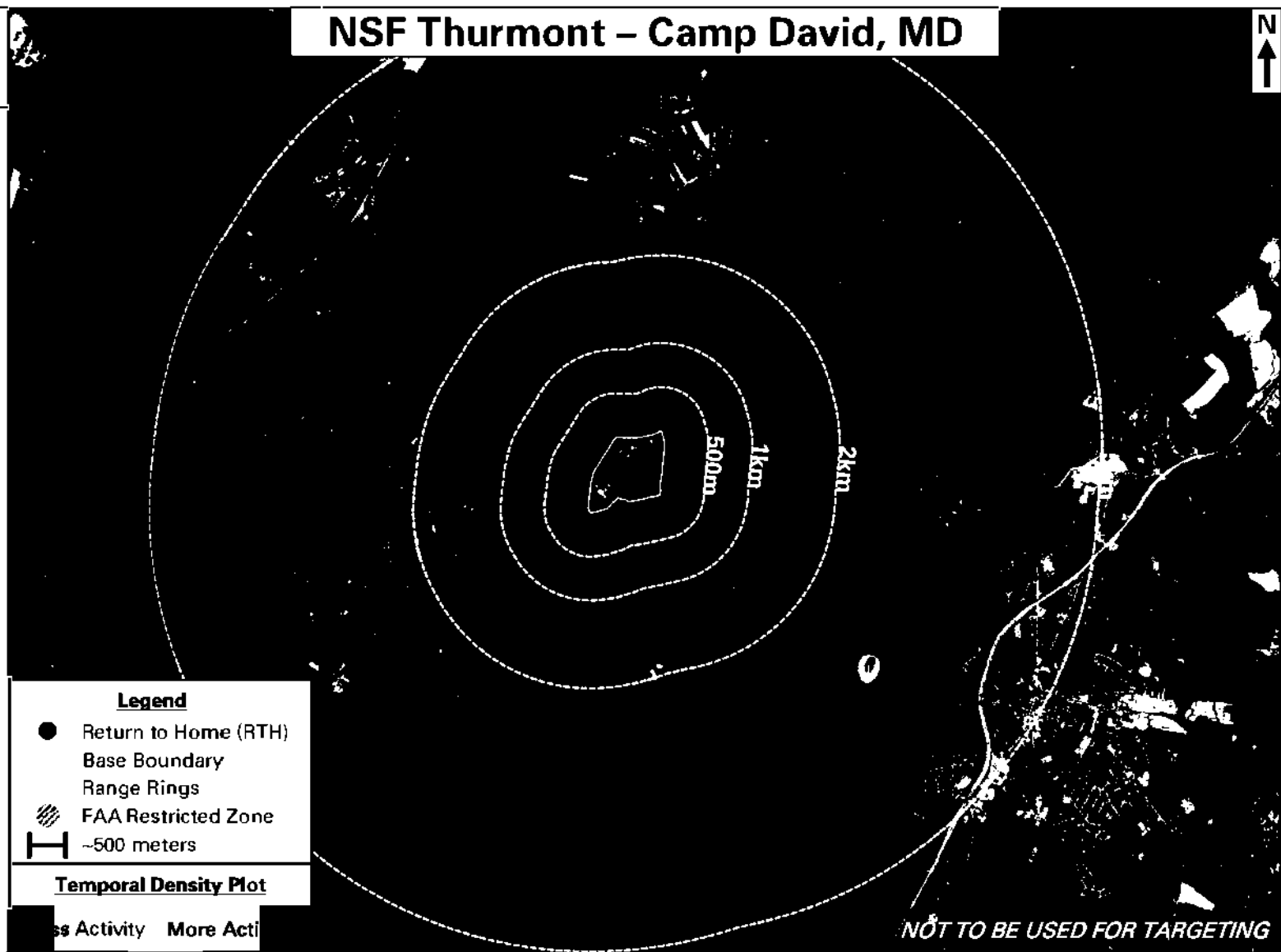
December 01, 2024 – December 31, 2024

Entire Slide is CUI

During this reporting period, no events were detected within the base boundary or within 500m of the boundary. All activity occurred outside of 2km, over forested area.

Activity Highlights

- 1x S/N, 1x event, 00:01:26 duration
 - Exceeded altitude allowance: 1x S/N (1x event)
 - Night detections: 0x S/Ns (0x events)
- 0x S/Ns previously detected
- Highest Activity by Weekday
 - Events: Sunday (1x event)
 - Duration: Sunday (00:01:26)
- Highest Activity by Hour (Zulu)
 - Events: 1500Z (1x event)
 - Duration: 1500Z (00:01:26)
- Highest Duration by Platform: DJI Mavic Air (00:01:26)
- 0x Detects within 500m, 0x Detects within the Base Boundary.



CUI



—CUI—

NSF Thurmont Data Analysis

December 01, 2024 – December 31, 2024

Entire Slide is CUI—

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	1		1		-3%
Total Duration	00:03:07		00:01:26		-56%
Total SNs	1		1		-3%
Most Active Platform					
By Unique SNs	DJI FPV		DJI Mavic Air		
	1		1		-3%
By Events	DJI FPV		DJI Mavic Air		
	1		1		-3%
By Duration	DJI FPV		DJI Mavic Air		
	00:03:07		00:01:26		-56%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

—CUI—

Metric	Jan-Jun 2022		Jul-Dec 2022		Jan-Jul 2023		Percentage Change	Percentage Change
Length of Reporting Period	Start Date	01 Jan 22	Start Date	01Jul22	Start Date	01Jan 23	Jan-Jun 2022 / Jul-Dec 2022 Comparison	Jul-Dec 2022 / Jan-July 2023 Comparison
	End date	30 Jun22	End date	31 Dec 22	End Date	31Jul23		
	Weeks in total	26	Weeks in total	26	Weeks in Total	30		
Total Events	144		137		253		-6%	
Total Duration	13:06:00		11:44:43		20:57:42		-12%	
Total CLs	57		61		91			
Most Active Platform/Component								
By Unique CLs	DJ Mini 2		DJ Mini2		DJ Mini2			
	22		5		26		-75%	
By Events	DJ Mini 2		DJ Mini2		DJ Mini 3 Pro			
	59		90		59			-43%
By Duration	DJ Mini 2		DJ Mini2		DJ Mavic 3 Enterprise			
	05:24:54		05:24:54		05:24:54		-2%	-13%

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	1		1		-3%
Total Duration	00:03:07		00:01:26		-56%
Total SNs	1		1		-3%
Most Active Platform					
By Unique SNs	DJI FPV		DJI Mavic Air		
	1		1		-3%
By Events	DJI FPV		DJI Mavic Air		
	1		1		-3%
By Duration	DJI FPV		DJI Mavic Air		
	00:03:07		00:01:26		-56%



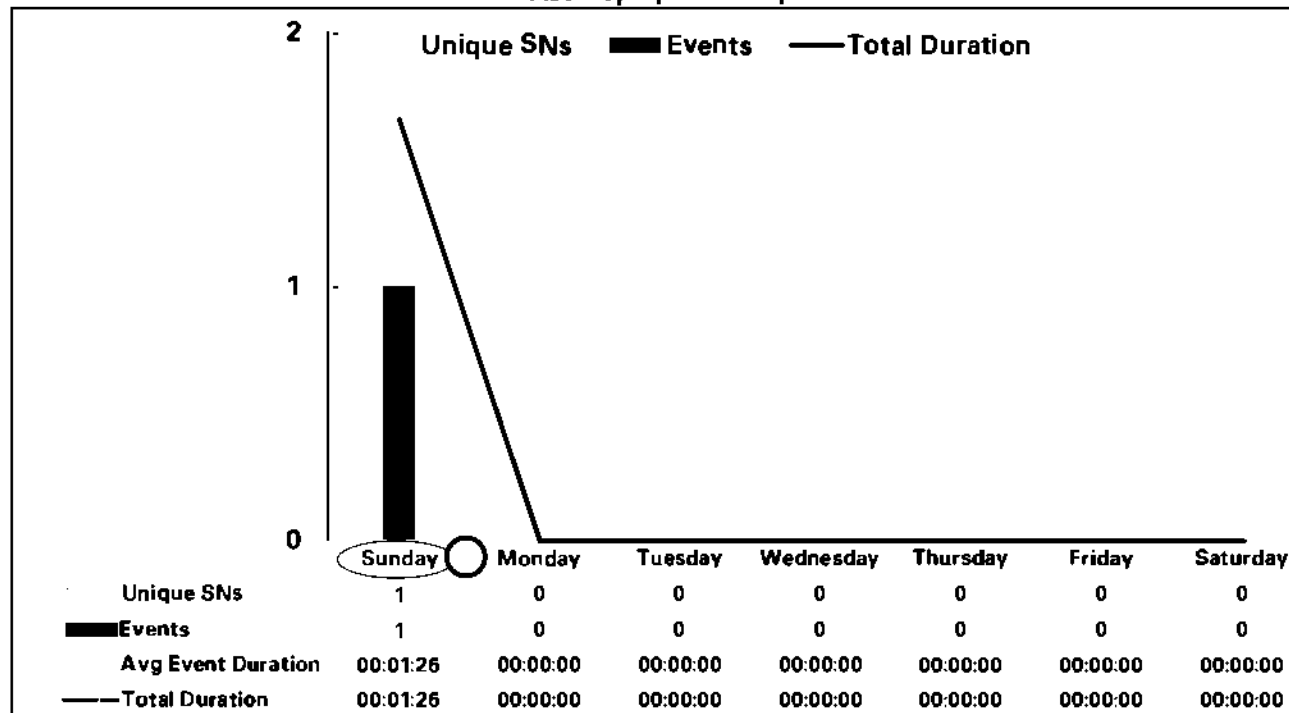
CUI

NSF Thurmont Activity Charts

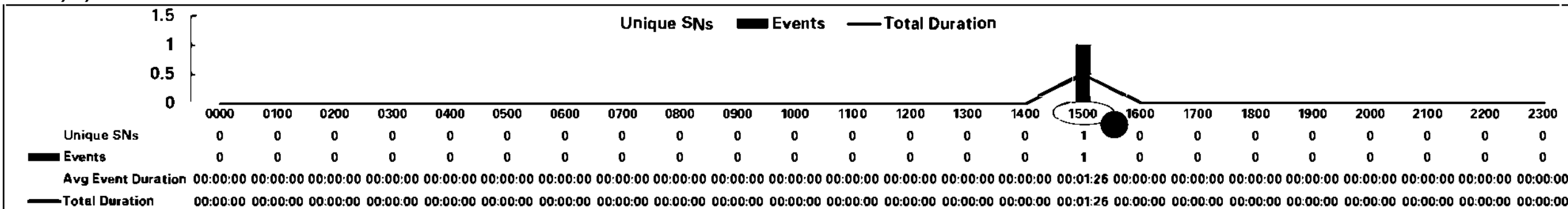
December 01, 2024 – December 31, 2024

Entire Slide is CUI

Activity by Weekday



Activity by Hour



○ Highest Total Event/Duration (Weekday)

● Highest Total Event/Duration (Hour)

CUI



Intelligence Community Campus – Bethesda Activity Summary

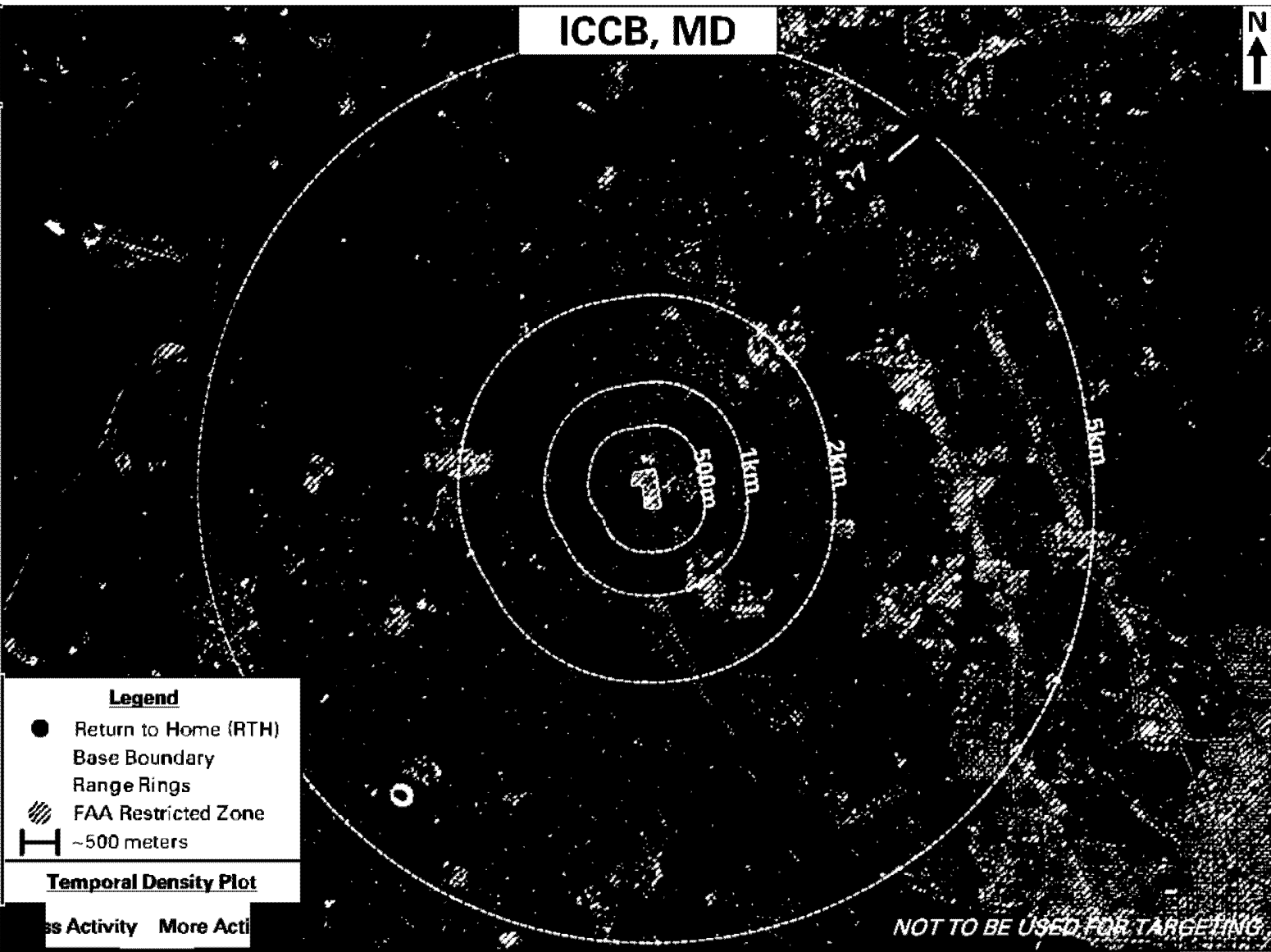
December 01, 2024 – December 31, 2024

Entire Slide is CUI

No events were detected within 500m of the base boundary during this reporting period. All activity occurred outside of 2km, over commercial, recreational, and residential areas.

Activity Highlights

- 3x S/Ns, 7x events, 00:42:52 duration
 - Exceeded altitude allowance: 3x S/Ns (7x events)
 - Night detections: 0x S/Ns (0x events)
- 1x S/N previously detected
- S/N: 0UYKH9900201BU (DJI Phantom 4 RTK)
- Highest Activity by Weekday
 - Events: Sunday (4x events)
 - Duration: Sunday (00:22:12)
- Highest Activity by Time (Zulu)
 - Events: 1800Z, 1900Z, 2000Z (2x events)
 - Duration: 1800Z (00:18:44)
- Highest Duration by Platform: DJI Phantom 4 RTK (00:22:12)
- 0x Detects within 500m, 0x Detects within the Base Boundary





December 01, 2024 – December 31, 2024

~~CUI~~

ICCB Data Analysis

Entire Slide is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	4		7		-30%
Total Duration	00:59:27		00:42:52		
Total SNs	3		3		
Most Active Platform					
By Unique SNs	DJI Mavic 2 Pro, DJI Matrice 200 V2, DJI Mavic 3 Pro		DJI FPV, DJI Mini 3 Pro, DJI Phantom 4 RTK		
	1		1		-3%
By Events	DJI Mavic 2 Pro		DJI Phantom 4 RTK		
	2		4		
By Duration	DJI Mavic 2 Pro		DJI Phantom 4 RTK		
	00:35:17		00:22:12		-39%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

Metric	Jan-Jun 2022		Jul-Dec 2022		Jan-Jul 2023		Percentage Change	Percentage Change
Length of Reporting Period	Start Date	01 Jan 22	Start Date	01 Jul 22	Start Date	01 Jan 23	Jan-Jun 2022 / Jul-Dec 2022 Comparison	Jul-Dec 2022 / Jan-July 2023 Comparison
	End date	30 Jun 22	End date	31 Dec 22	End Date	31 Jul 23		
	Weeks in total	26	Weeks in total	26	Weeks in Total	30		
Total Events	144		137		253		-6%	
Total Duration	13:06:00		11:44:43		20:57:42		-12%	
Total CLs	57		61		91			
Most Active Platform/Component								
By Unique CLs	DJ Mini 2		DJ Mini2		DJ Mini2			
	22		5		26		-75%	
By Events	DJ Mini 2		DJ Mini2		DJ Mini 3 Pro			
	59		90		59			-43%
By Duration	DJ Mini 2		DJ Mini2		DJ Mavic 3 Enterprise			
	05:24:54		05:24:54		05:24:54		-2%	-15%

Metric		November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison	
	End date	30 Nov 24	End date	31 Dec 24		
	Weeks in total	4	Weeks in total	4		
Total Events	4		7		-3 0%	
Total Duration	00:59:27		00:42:52			
Total SNs	3		3			
Most Active Platform						
By Unique SNs	DJI Mavic 2 Pro, DJI Matrice 200 V2, DJI Mavic 3 Pro		DJI FPV, DJI Mini 3 Pro, DJI Phantom 4 RTK		-3%	
	1		1			
By Events	DJI Mavic 2 Pro		DJI Phantom 4 RTK			
	2		4			
By Duration	DJI Mavic 2 Pro		DJI Phantom 4 RTK		-39%	
	00:35:17		00:22:12			

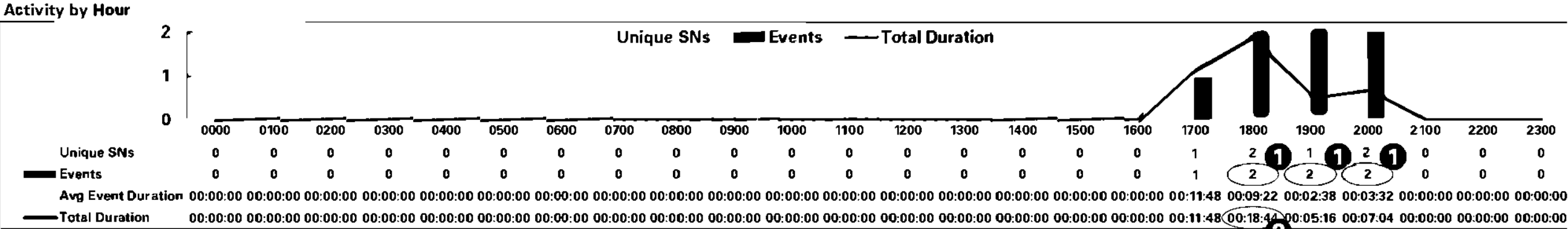
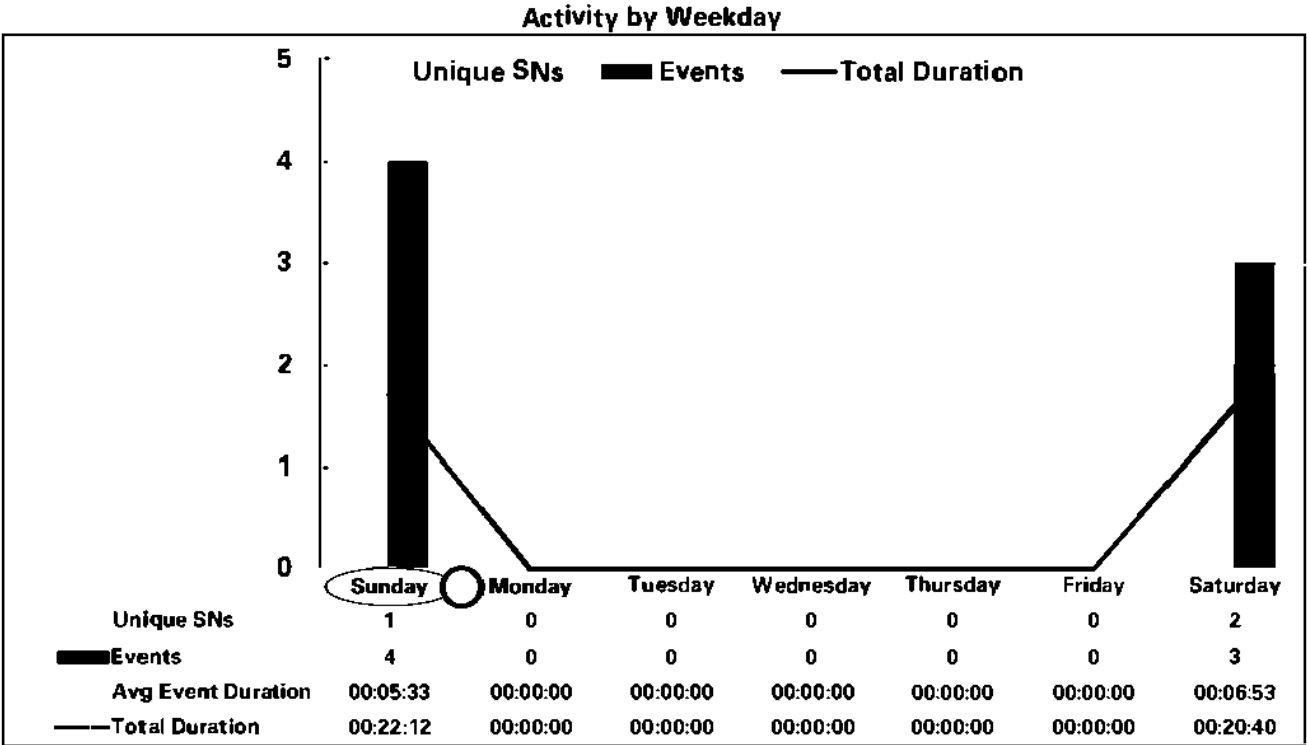


—CUI—

ICCB Activity Charts

December 01, 2024 – December 31, 2024

Entire Slide is CUI



○ Highest Total Event/Duration (Weekday) ● Highest Total Event/Duration (Hour)

—CUI—



CUI

Pentagon Activity Summary

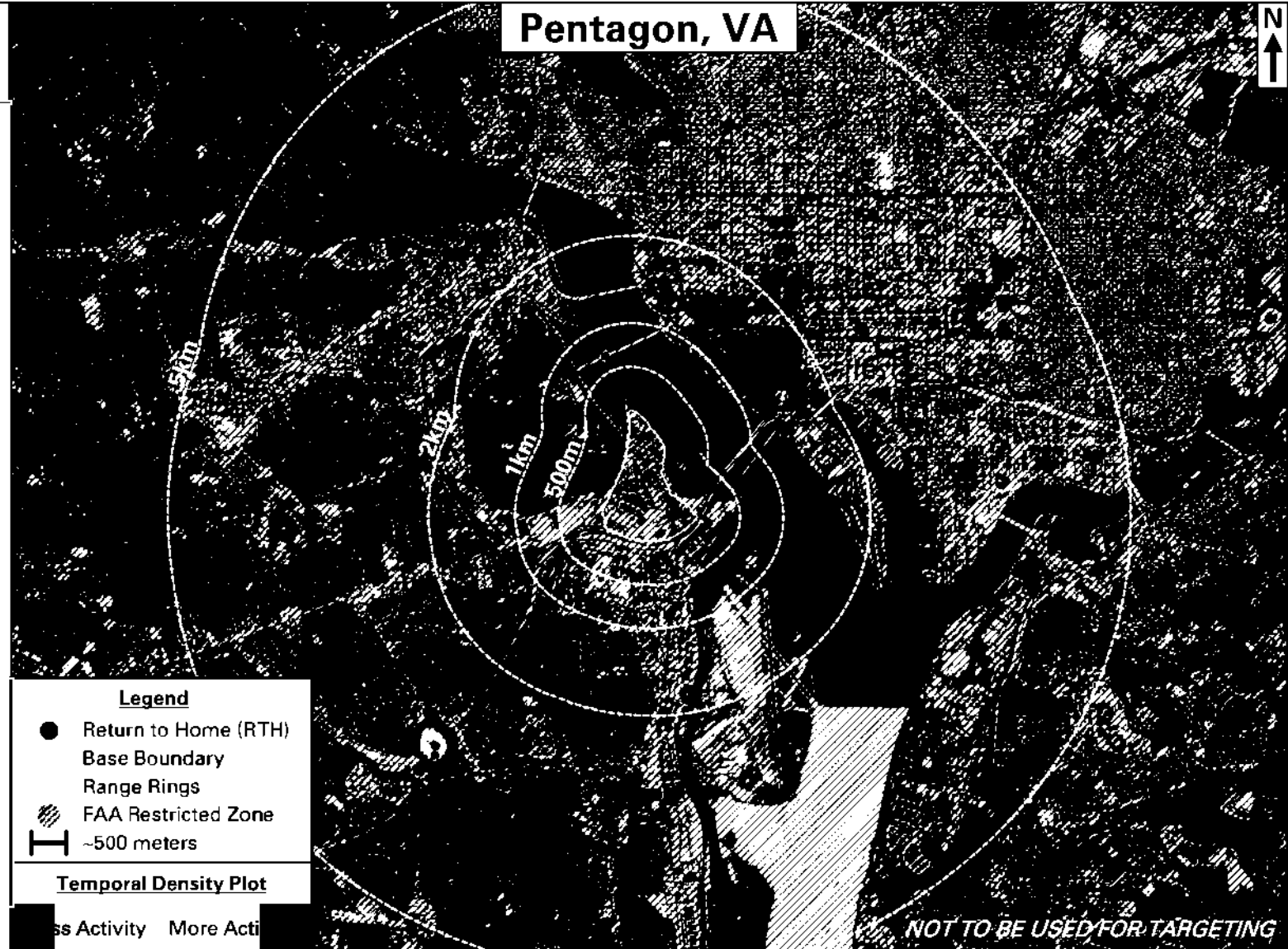
December 01, 2024 – December 31, 2024

Entire Slide is CUI

No events were detected within 500m of the base boundary during this reporting period. All activity occurred outside of 1km, over commercial, recreational, and residential areas.

Activity Highlights

- 2x S/Ns, 4x events, 00:02:18 duration
 - Exceeded altitude allowance: 2x S/Ns (4x events)
 - Night detections: 0x S/Ns (0x events)
- 0x S/Ns previously detected
- Highest Activity by Weekday
 - Events: Wednesday (3x events)
 - Duration: Wednesday (00:02:17)
- Highest Activity by Time (Zulu)
 - Events: 1500Z (2x events)
 - Duration: 1600Z (00:02:13)
- Highest Duration by Platform: DJI Mavic 3 Classic (00:02:17)
- 0x Detects within 500m, 0x Detects within the Base Boundary



CUI



Pentagon Data Analysis

December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	15		4		-74%
Total Duration	01:04:33		00:02:18		-97%
Total SNs	8		2		-76%
Most Active Platform					
By Unique SNs	DJI Mini 3, DJI Mini 3 Pro		DJI Mavic 3 Classic, DJI Mini 2		
	3		1		-68%
By Events	DJI Mini 3, DJI Mini 3 Pro		DJI Mavic 3 Classic		
	5		3		-42%
By Duration	DJI Mavic 3 Classic		DJI Mavic 3 Classic		
	00:50:54		00:02:17		-96%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

Metric	Jan-Jun 2022		Jul-Dec 2022		Jan-Jul 2023		Percentage Change	Percentage Change
Length of Reporting Period	Start Date	01 Jan 22	Start Date	01 Jul 22	Start Date	01 Jan 23	Jan-Jun 2022 / Jul-Dec 2022 Comparison	Jul-Dec 2022 / Jan-July 2023 Comparison
	End date	30 Jun 22	End date	31 Dec 22	End Date	31 Jul 23		
	Weeks in total	26	Weeks in total	26	Weeks in Total	30		
Total Events	144		137		253		-6%	
Total Duration	13:06:00		11:44:43		20:57:42		-12%	
Total CLs	57		61		91			
Most Active Platform/Component								
By Unique CLs	DJ Mini 2		DJ Mini2		DJ Mini2			
	22		5		26		-75%	
By Events	DJ Mini 2		DJ Mini2		DJ Mini 3 Pro			
	59		90		59			-43%
By Duration	DJ Mini 2		DJ Mini2		DJ Mavic 3 Enterprise			
	05:24:54		05:24:54		05:24:54		-2%	-13%

Metric		November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison	
	End date	30 Nov 24	End date	31 Dec 24		
	Weeks in total	4	Weeks in total	4		
Total Events	15		4		-74%	
Total Duration	01:04:33		00:02:18		-97%	
Total SNs	8		2		-76%	
Most Active Platform						
By Unique SNs	DJI Mini 3, DJI Mini 3 Pro		DJI Mavic 3 Classic, DJI Mini 2			
	3		1		-68%	
By Events	DJI Mini 3, DJI Mini 3 Pro		DJI Mavic 3 Classic			
	5		3		-42%	
By Duration	DJI Mavic 3 Classic		DJI Mavic 3 Classic			
	00:50:54		00:02:17		-96%	

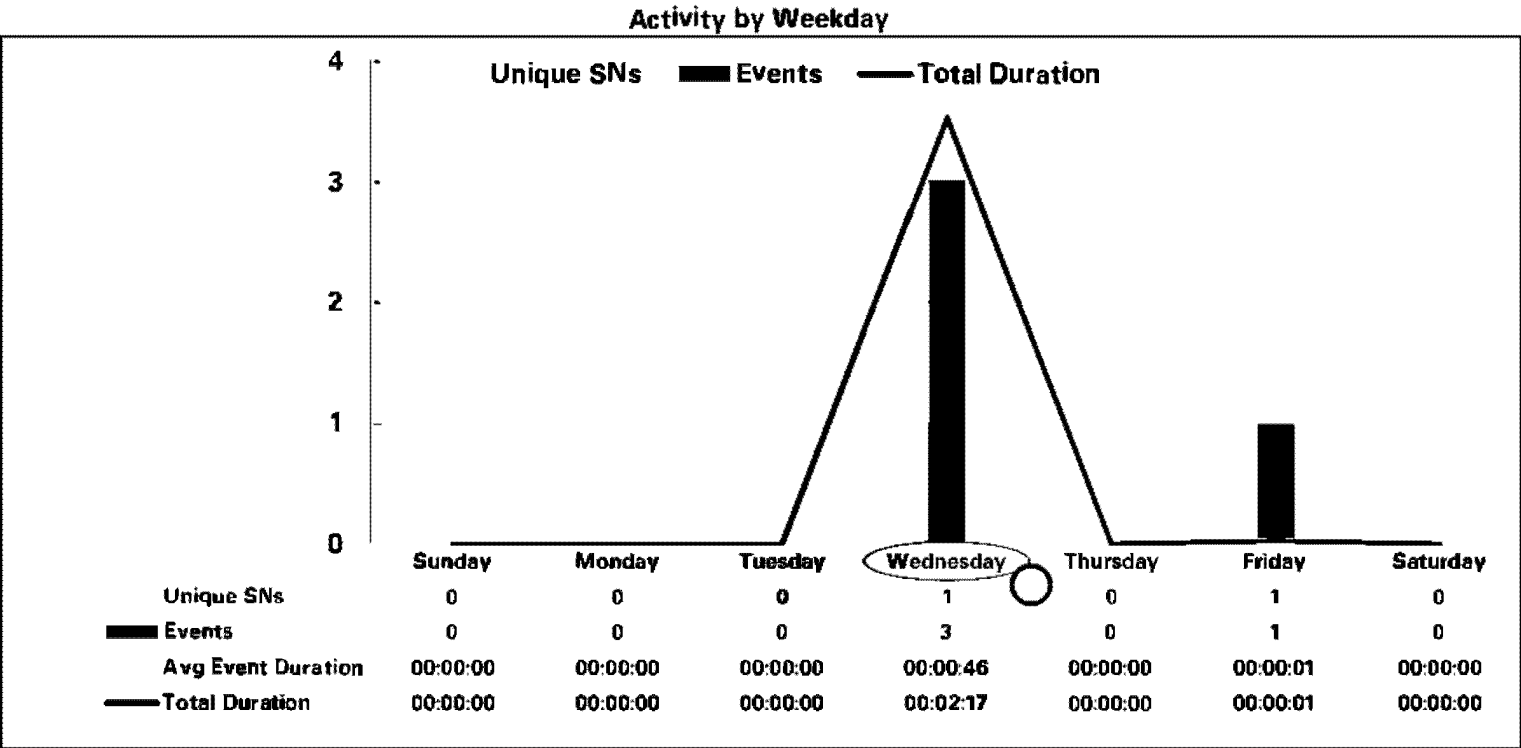


CUI

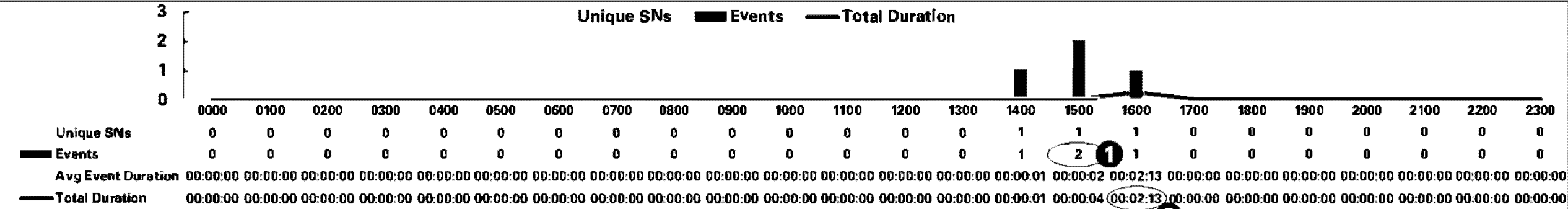
Pentagon Activity Charts

December 01, 2024 – December 31, 2024

Entire Slide is CUI



Activity by Hour



○ Highest Total Event/Duration (Weekday)

● Highest Total Event/Duration (Hour)

CUI



CUI

Washington Navy Yard Activity Summary

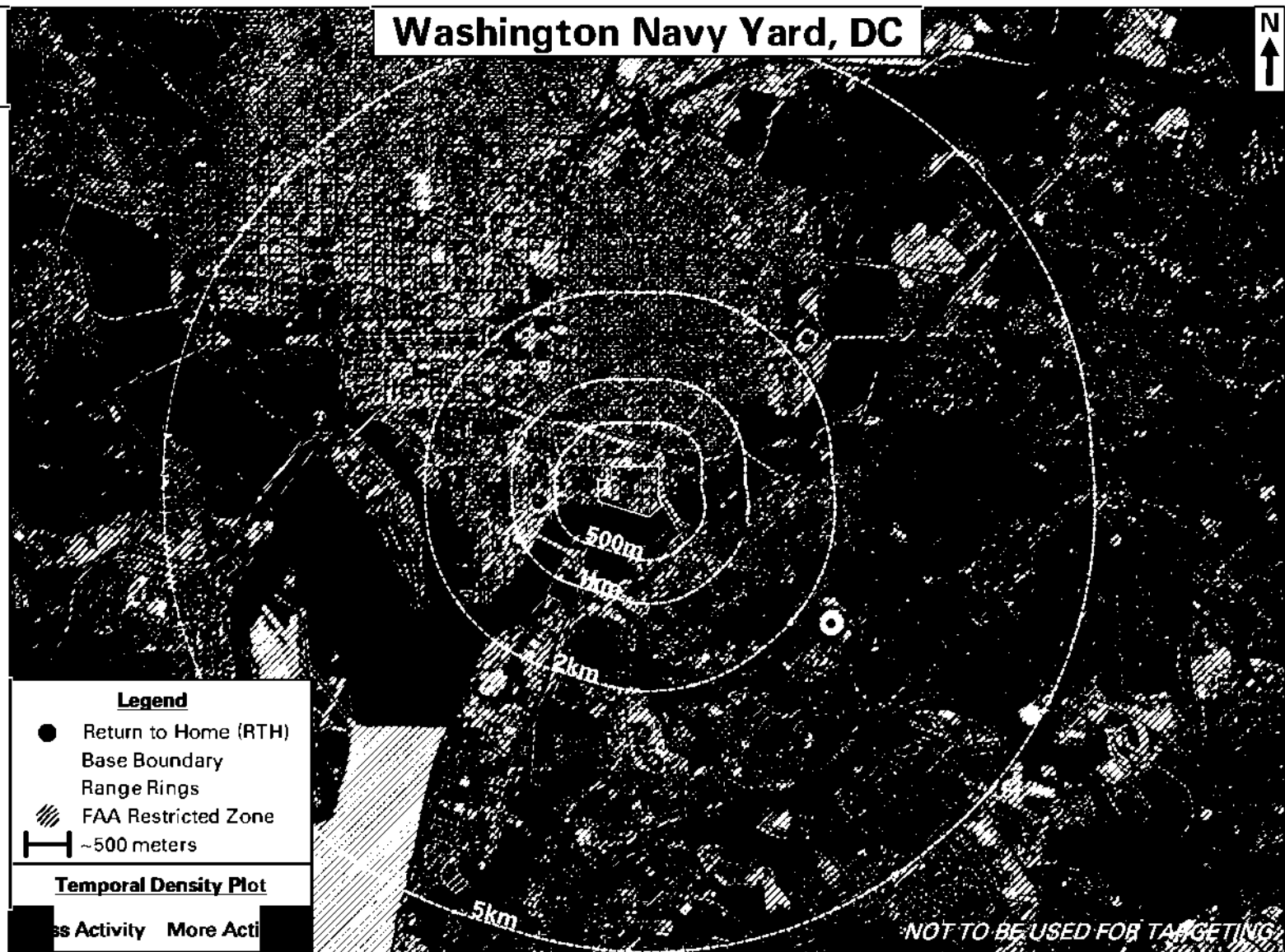
December 01, 2024 – December 31, 2024

Entire Slide is CUI

No events were detected within 500m of the base boundary during this reporting period. All activity occurred outside of 500m, over commercial, recreational, and residential areas.

Activity Highlights

- 4x S/Ns, 4x events, 00:00:25 duration
 - Exceeded altitude allowance: 4x S/Ns (4x events)
 - Night detection: 1x S/N (1x event)
- 2x S/Ns previously detected
- S/N: 3NZCK6E014CPAQ (DJI Mini 2)
- S/N: F6N8C236W00314EH (DJI Air 3)
- Highest Activity by Weekday
 - Events: Friday (2x events)
 - Duration: Tuesday (00:00:22)
- Highest Activity by Time (Zulu)
 - Events: 0100Z, 1400Z, 1700Z, 2000Z (1x event) ea.
 - Duration: 0100Z (00:00:22)
- Highest Duration by Platform: DJI Air 3 (00:00:22)
- 0x Detects within 500m, 0x Detects within the Base Boundary.



CUI



CUI

Washington Navy Yard Data Analysis

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	19		4		-80%
Total Duration	01:10:48		00:00:25		-99%
Total SNs	11		4		-65%
Most Active Platform					
By Unique SNs	DJI Mini 3		DJI Mini 2		
	3		2		-36%
By Events	DJI Mini 3		DJI Mini 2		
	5		2		-61%
By Duration	DJI Mavic 3 Classic		DJI Air 3		
	00:50:54		00:00:22		-99%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

CUI

Metric	Jan-Jun 2022		Jul-Dec 2022		Jan-Jul 2023		Percentage Change	Percentage Change
Length of Reporting Period	Start Date	01 Jan 22	Start Date	01Jul22	Start Date	01Jan 23	Jan-Jun 2022 / Jul-Dec 2022 Comparison	Jul-Dec 2022 / Jan-July 2023 Comparison
	End date	30 Jun22	End date	31 Dec 22	End Date	31Jul23		
	Weeks in total	26	Weeks in total	26	Weeks in Total	30		
Total Events	144		137		253		-6%	
Total Duration	13:06:00		11:44:43		20:57:42		-12%	
Total CLs	57		61		91			
Most Active Platform/Component								
By Unique CLs	DJ Mini 2		DJ Mini2		DJ Mini2			
	22		5		26		-75%	
By Events	DJ Mini 2		DJ Mini2		DJ Mini 3 Pro			
	59		90		59			-43%
By Duration	DJ Mini 2		DJ Mini2		DJ Mavic 3 Enterprise			
	05:24:54		05:24:54		05:24:54		-2%	-13%

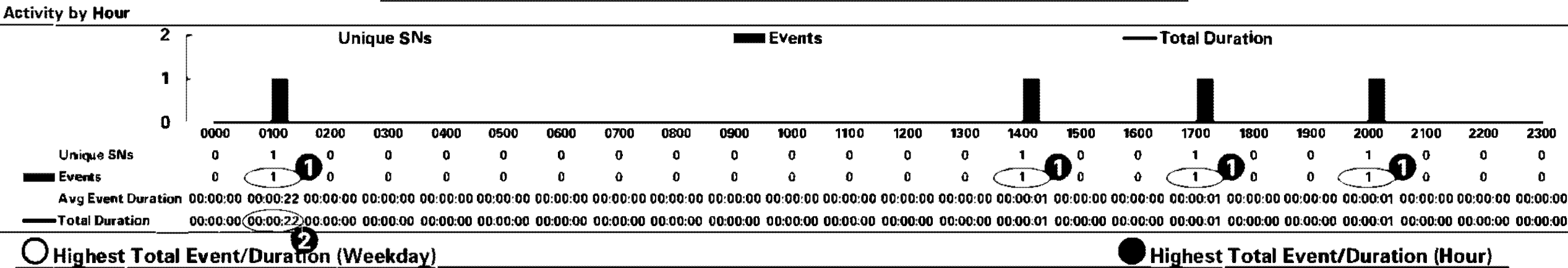
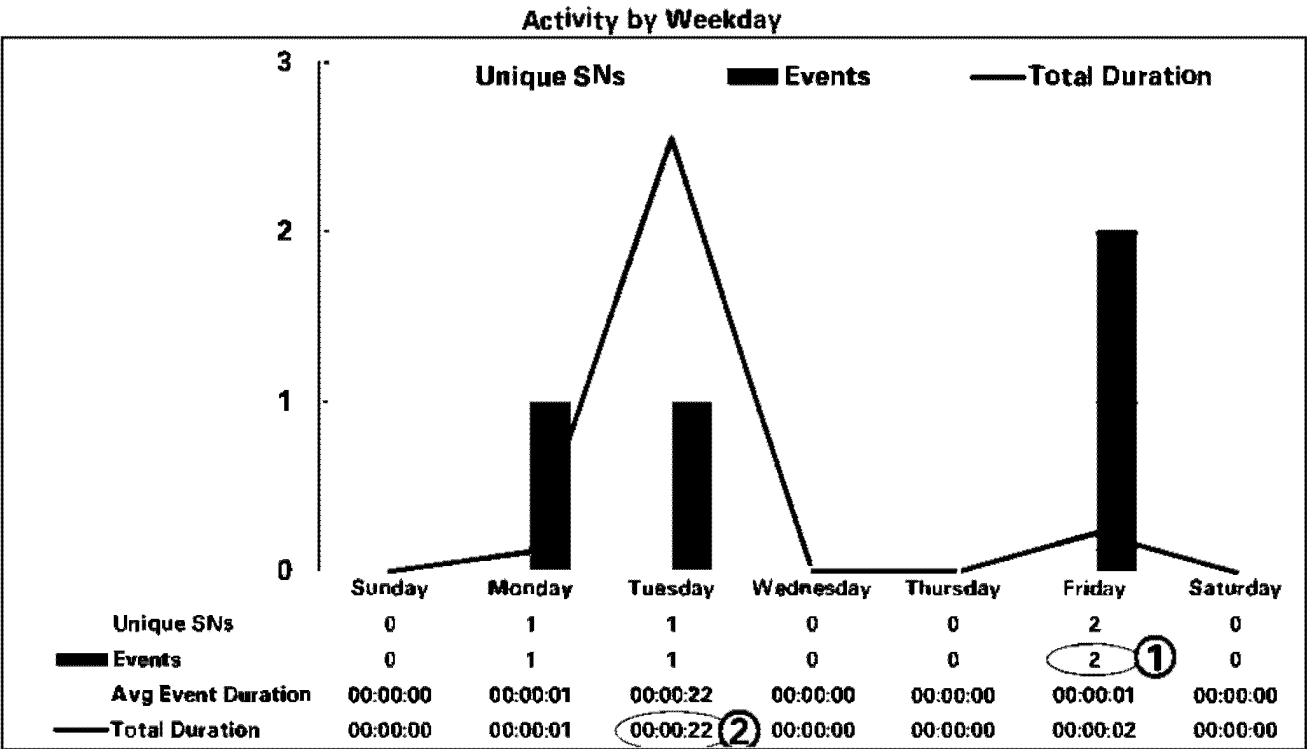
Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	19		4		-80%
Total Duration	01:10:48		00:00:25		-99%
Total SNs	11		4		-65%
Most Active Platform					
By Unique SNs	DJI Mini 3		DJI Mini2		
	3		2		-36%
By Events	DJI Mini 3		DJI Mini 2		
	5		2		-61%
By Duration	DJI Mavic 3 Classic		DJI Air 3		
	00:50:54		00:00:22		-99%



Washington Navy Yard Activity Charts

December 01, 2024 – December 31, 2024

Entire Slide is CUI



○ Highest Total Event/Duration (Weekday) ● Highest Total Event/Duration (Hour)



—CUI—

Armed Forces Retirement Home Activity Summary

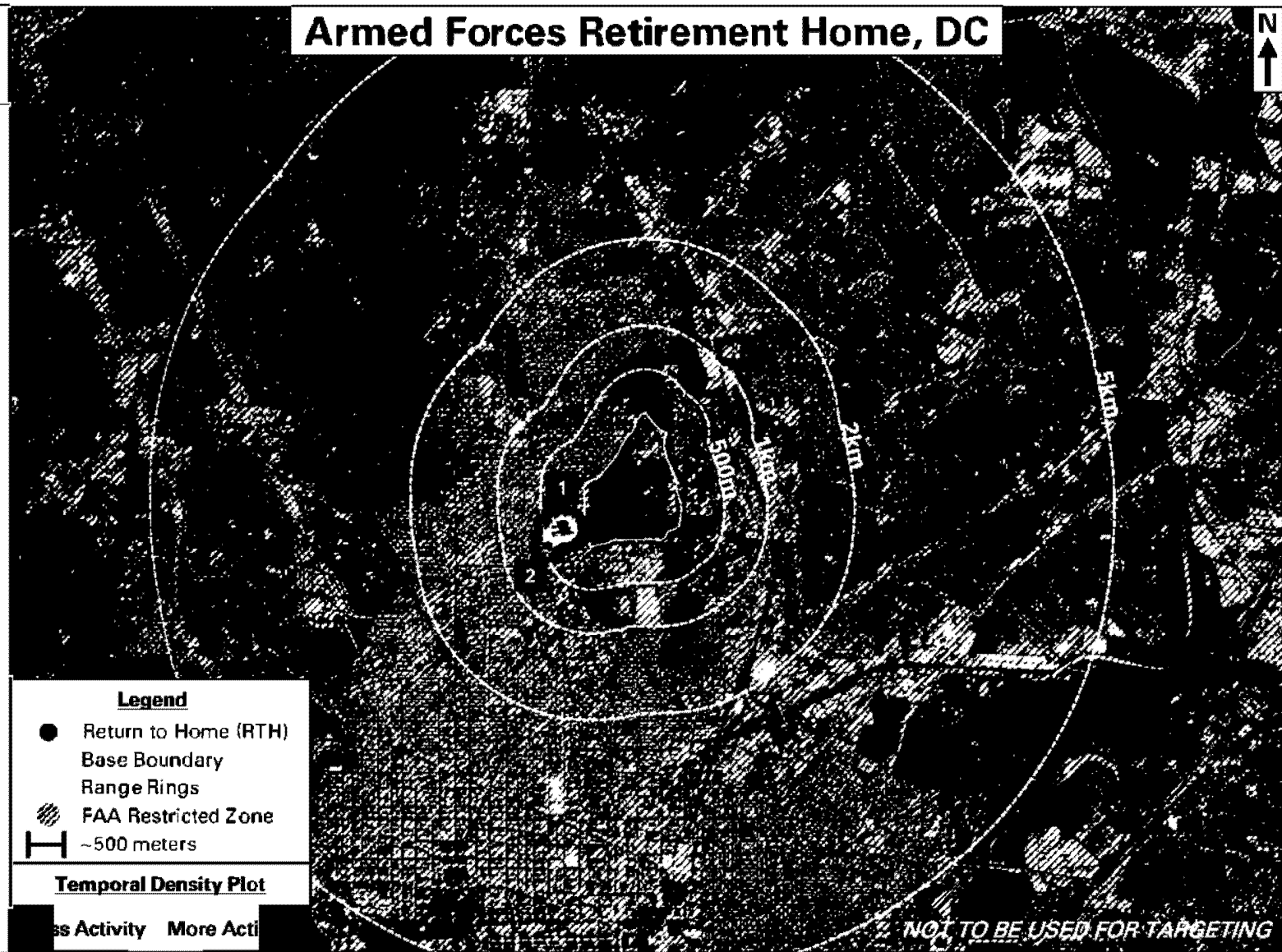
December 01, 2024 – December 31, 2024

Entire Slide is CUI

No events were detected within the base boundary. 3x events were detected within 500m of the base boundary. All activity occurred over commercial or residential areas.

Activity Highlights

- 2x S/Ns, 3x events, 00:19:03 duration
 - Exceeded altitude allowance: 2x S/Ns (3x events)
 - Night detections: 0x S/Ns (0x events)
-
- 1x S/N previously detected
- 2** S/N: F4XFA22AFML78D81 (DJI Mini 3 Pro)
-
- Highest Activity by Weekday
 - Events: Friday (3x events)
 - Duration: Friday (00:19:03)
-
- Highest Activity by Time (Zulu)
 - Events: 1500Z (2x events)
 - Duration: 1500Z (00:16:39)
-
- Highest Duration by Platform: DJI Phantom 4 Pro V2 (00:16:39)
-
- 3x Detects within 500m, 0x Detects within the Base Boundary
- 1-2** S/Ns: 11VKJ46002004T (DJI Phantom 4 Pro V2) and S/N: F4XFA22AFML78D81 (DJI Mini 3 Pro) active near commercial and residential areas.



—CUI—



Armed Forces Retirement Home Data Analysis

December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	7		3		-59%
Total Duration	00:09:04		00:19:03		
Total SNs	5		2		-61%
Most Active Platform					
By Unique SNs	DJI Mini 3		DJI Mini 3 Pro, DJI Phantom 4 Pro V2		
	2		1		-52%
By Events	DJI Mini 3		DJI Phantom 4 Pro V2		
	3		2		-36%
By Duration	DJI Mavic Air 2		DJI Phantom 4 Pro V2		
	00:05:24		00:16:39		

• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

Metric	Jan-Jun 2022		Jul-Dec 2022		Jan-Jul 2023		Percentage Change	Percentage Change
Length of Reporting Period	Start Date	01 Jan 22	Start Date	01Jul22	Start Date	01Jan 23	Jan-Jun 2022 / Jul-Dec 2022 Comparison	Jul-Dec 2022 / Jan-July 2023 Comparison
	End date	30 Jun22	End date	31 Dec 22	End Date	31Jul23		
	Weeks in total	26	Weeks in total	26	Weeks in Total	30		
Total Events	144		137		253		-6%	
Total Duration	13:06:00		11:44:43		20:57:42		-12%	
Total CLs	57		61		91			
Most Active Platform/Component								
By Unique CLs	DJ Mini 2		DJ Mini2		DJ Mini2			
	22		5		26		-75%	
By Events	DJ Mini 2		DJ Mini2		DJ Mini 3 Pro			
	59		90		59			-43%
By Duration	DJ Mini 2		DJ Mini2		DJ Mavic 3 Enterprise			
	05:24:54		05:24:54		05:24:54		-2%	-13%

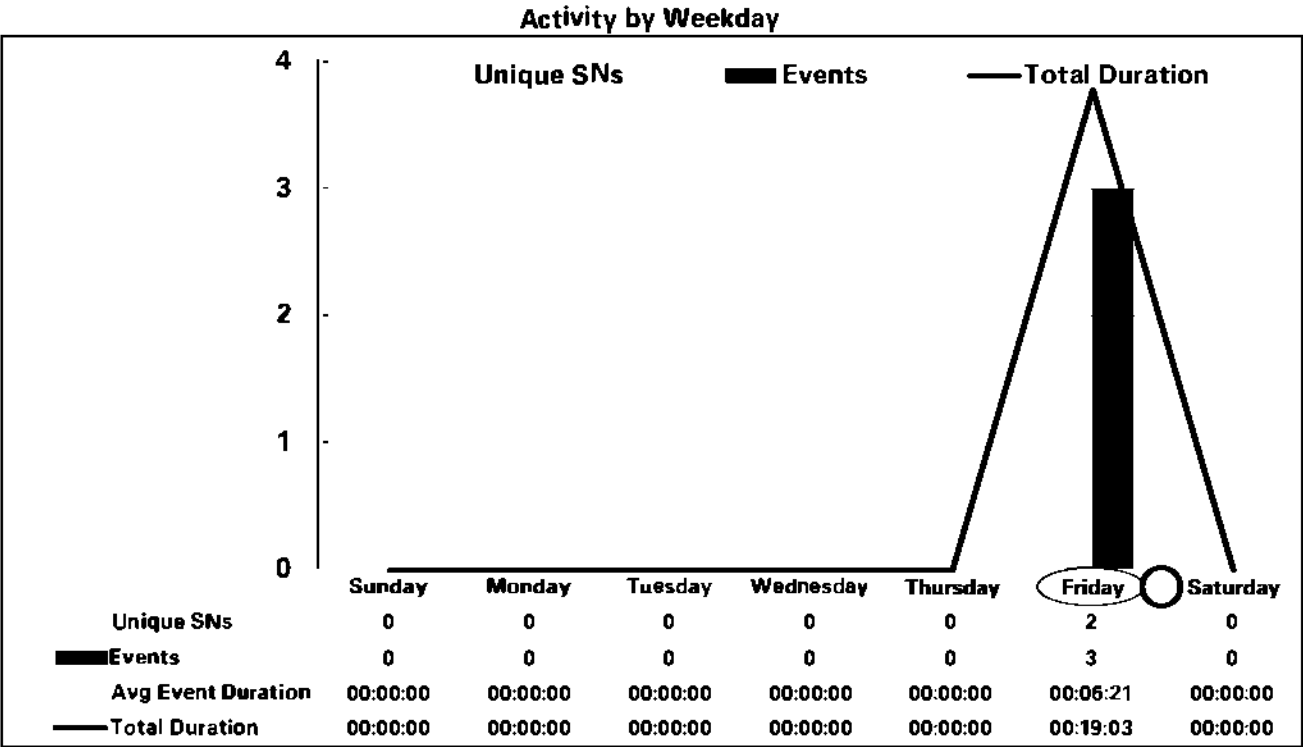
Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	7		3		-59%
Total Duration	00:09:04		00:19:03		
Total SNs	5		2		-61%
Most Active Platform					
By Unique SNs	DJI Mini 3		DJI Mini 3 Pro, DJI Phantom 4 Pro V2		
	2		1		-52%
By Events	DJI Mini 3		DJI Phantom 4 Pro V2		
	3		2		-36%
By Duration	DJI Mavic Air 2		DJI Phantom 4 Pro V2		
	00:05:24		00:16:39		



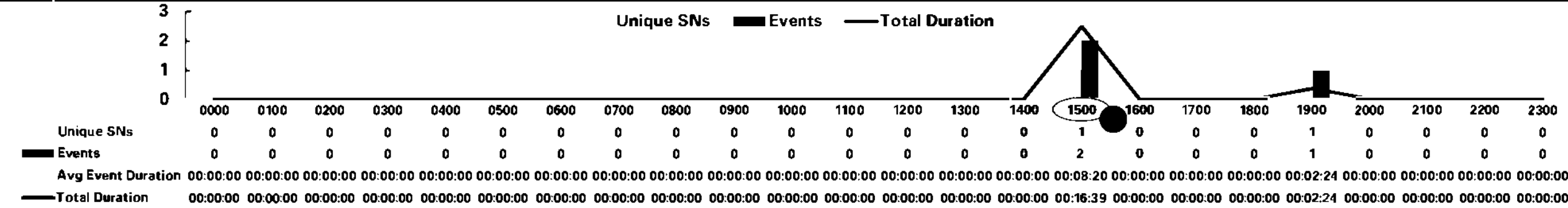
Armed Forces Retirement Home Activity Charts

December 01, 2024 – December 31, 2024

Entire Slide is CUI



Activity by Hour



○ Highest Total Event/Duration (Weekday)

● Highest Total Event/Duration (Hour)



CUI

NSF Dahlgren Activity Summary

December 01, 2024 – December 31, 2024

Entire Slide is CUI

10 S/Ns (consisting of 3x DJI Phantom 4 Pro and 7x DJI Mavic 3) are associated to 34x events IVO Runway 16/34. The total detected duration of these S/Ns are 05:04:51.

Activity Highlights

- 13x S/Ns, 44x events, 06:24:44 duration
- Exceeded altitude allowance: 13x S/Ns (43x events)
- Night detections: 0x S/N (0x events)

• 10x S/Ns previously detected

3 S/N: 11VKJ5E00201DA (DJI Phantom 4 Pro V2)

4-6 S/Ns: F45TB21C82AE085X, F45TB21CB2AE03QA, F45TB21CE2AE0689 (3x DJI Mavic 3) were previously detected same location and possibly associated with base operations (05-06 DEC 24).

7-10 S/Ns: F45TB21AQ1BE02V3, F45TB21CB2AE028W, F45TB21CE2AE059N, and F45TB22751AE00EL (4x DJI Mavic 3)

- S/N: 687CL16001BC9T (DJI Mini 3)
- S/N: F8PJA245EML11GJL (U/I DJI UAS)

• Highest Activity by Weekday

- Events: Friday (18x events)
- Duration: Thursday (02:38:32)

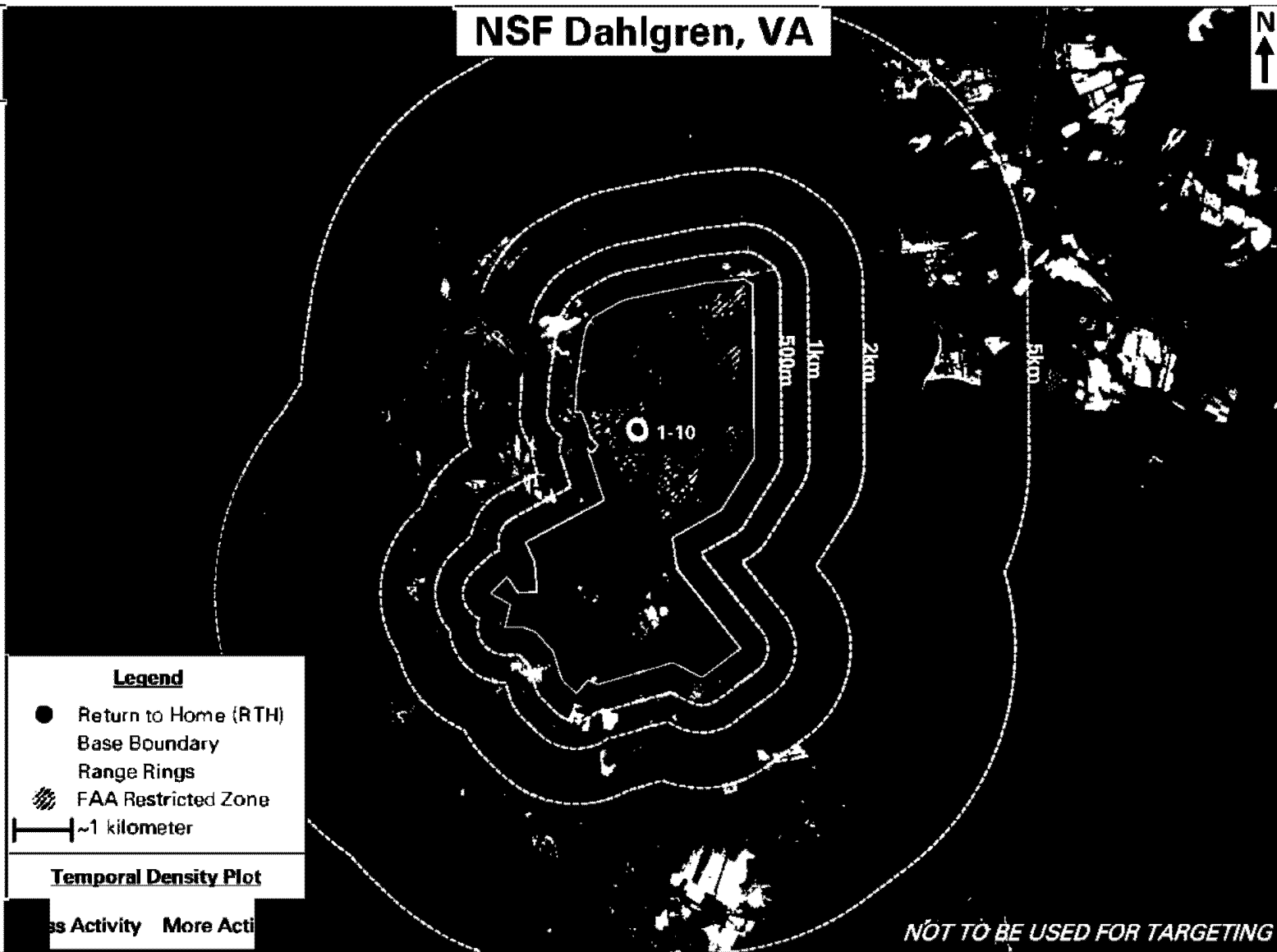
• Highest Activity by Time (Zulu)

- Events: 2000Z (11x events)
- Duration: 2000Z (01:29:45)

• Highest Duration by Platform: DJI Mavic 3 (03:18:49)

• 0x Detects within 500m, 34x Detects within the Base Boundary

1-10 S/Ns: 11VKJ4700200MM, 11VKJ5700201MP, 11VKJ5E00201DA (3x DJI Phantom 4 Pro V2), F45TB21AQ1BE02V3, F45TB21C82AE085X, F45TB21CB2AE028W, F45TB21CB2AE03QA, F45TB21CE2AE059N, F45TB21CE2AE0689, and F45TB22751AE00EL (7x DJI Mavic 3); all detected operating on or IVO Runway 16/34 for a total combined duration of 05:04:51.



CUI



-CUI-

NSF Dahlgren Data Analysis

December 01, 2024 – December 31, 2024

Entire Slide is CUI-

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	48		44		-11%
Total Duration	00:38:12		06:24:44		
Total SNs	39		13		-68%
Most Active Platform					
By Unique SNs	DJI Mavic 3		DJI Mavic 3		
	33		7		-79%
By Events	DJI Mavic 3		DJI Mavic 3		
	40		26		-37%
By Duration	DJI Mavic 3		DJI Mavic 3		
	00:30:46		03:18:49		

• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

Metric	Jan-Jun 2022		Jul-Dec 2022		Jan-Jul 2023		Percentage Change	Percentage Change
Length of Reporting Period	Start Date	01 Jan 22	Start Date	01 Jul 22	Start Date	01 Jan 23	Jan-Jun 2022 / Jul-Dec 2022 Comparison	Jul-Dec 2022 / Jan-July 2023 Comparison
	End date	30 Jun 22	End date	31 Dec 22	End Date	31 Jul 23		
	Weeks in total	26	Weeks in total	26	Weeks in Total	30		
Total Events	144		137		253		-6%	
Total Duration	13:06:00		11:44:43		20:57:42		-12%	
Total CLs	57		61		91			
Most Active Platform/Component								
By Unique CLs	DJ Mini 2		DJ Mini2		DJ Mini2			
	22		5		26		-75%	
By Events	DJ Mini 2		DJ Mini2		DJ Mini 3 Pro			
	59		90		59			-43%
By Duration	DJ Mini 2		DJ Mini2		DJ Mavic 3 Enterprise			
	05:24:54		05:24:54		05:24:54		-2%	-13%

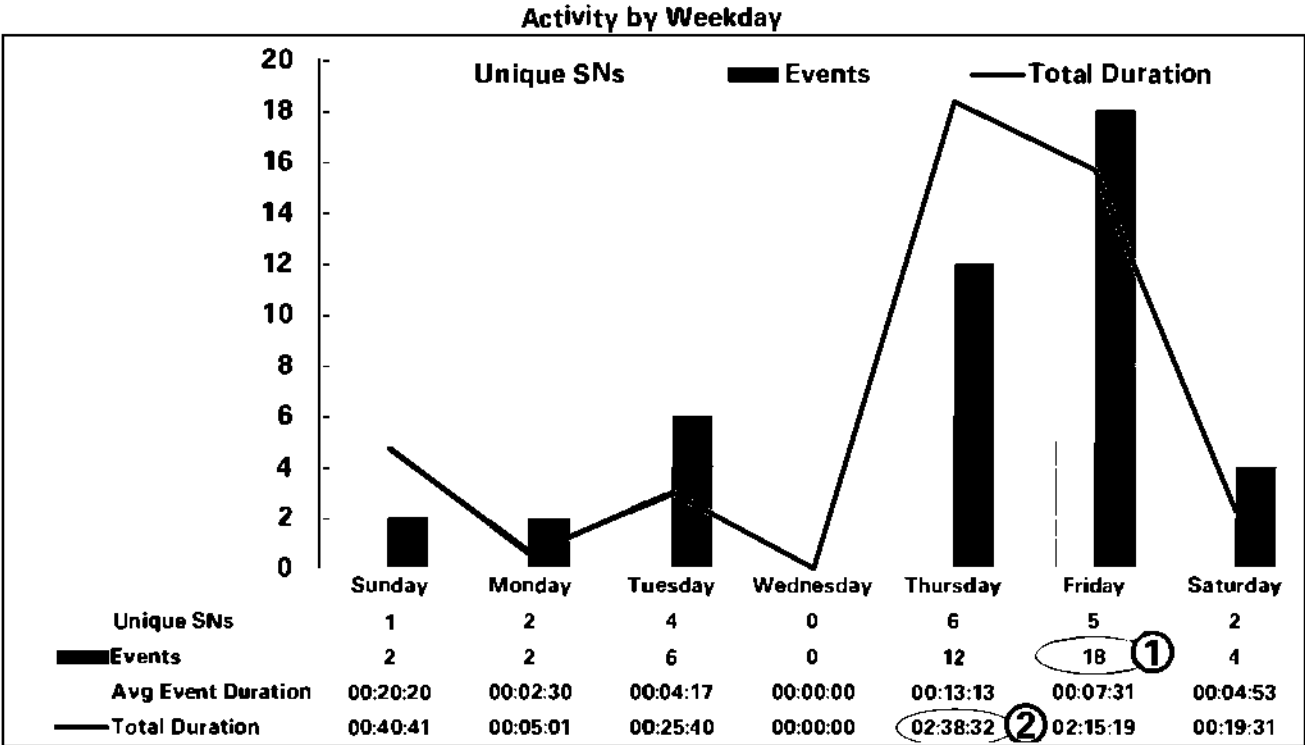
Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	48		44		-11%
Total Duration	00:38:12		06:24:44		
Total SNs	39		13		-68%
Most Active Platform					
By Unique SNs	DJI Mavic 3		DJI Mavic 3		
	33		7		-79%
By Events	DJI Mavic 3		DJI Mavic 3		
	40		26		-37%
By Duration	DJI Mavic 3		DJI Mavic 3		
	00:30:46		03:18:49		



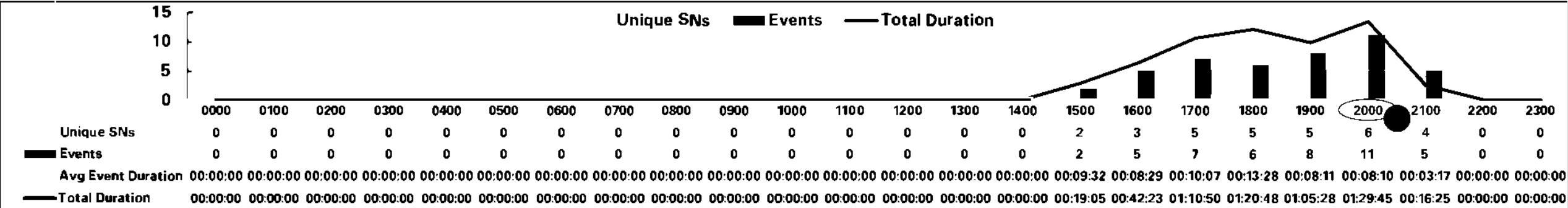
NSF Dahlgren Activity Charts

December 01, 2024 – December 31, 2024

Entire Slide is CUI



Activity by Hour



○ Highest Total Event/Duration (Weekday)

● Highest Total Event/Duration (Hour)



—CUI—

Naval Observatory Activity Summary

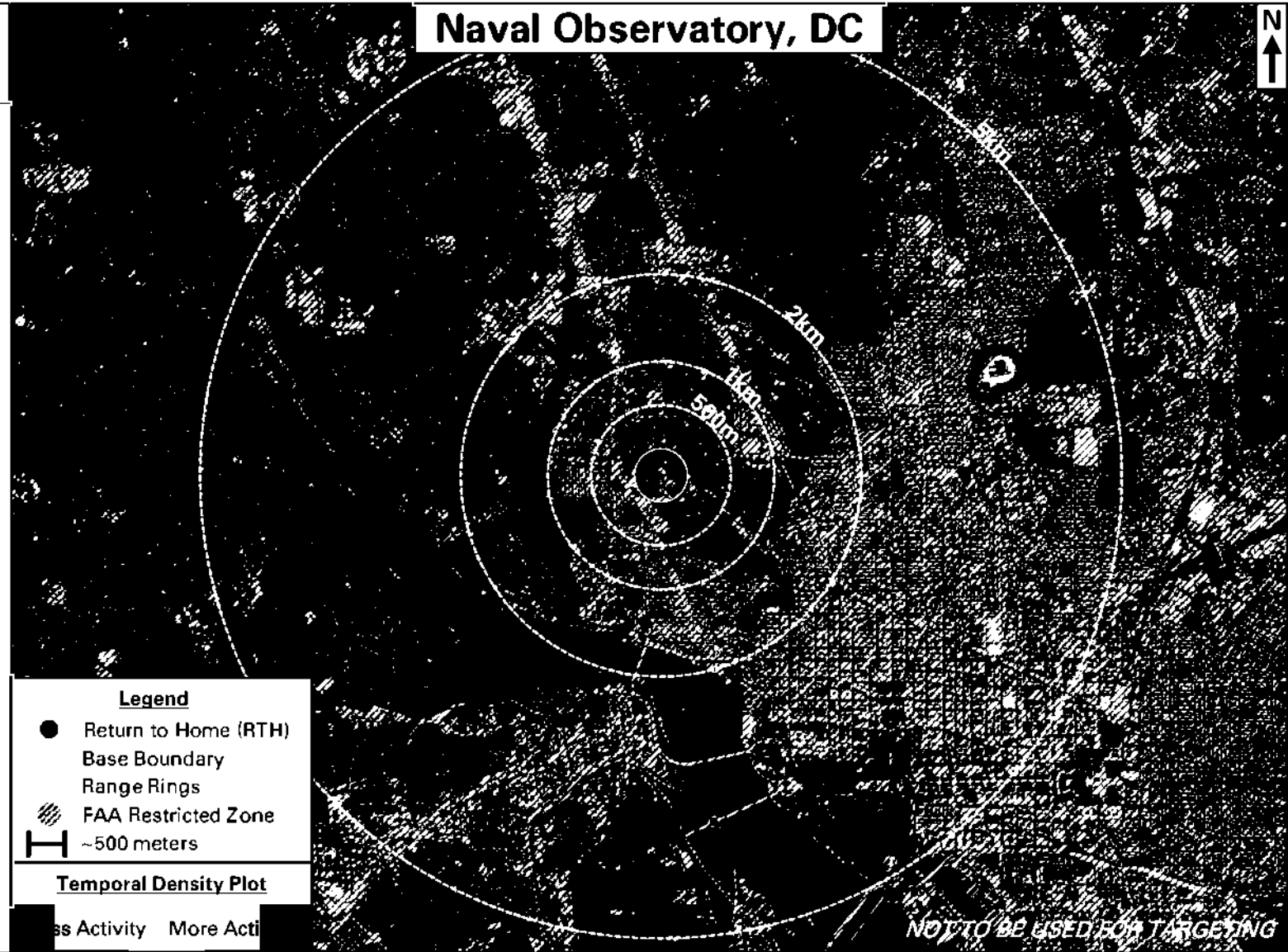
December 01, 2024 – December 31, 2024

Entire Slide is CUI

No events were detected within the base boundary or within 500m. All activity occurred outside of 2km in residential, recreational, or monument areas.

Activity Highlights

- 3x S/Ns, 4x events, 00:19:04 duration
 - Exceeded altitude allowance: 3x S/Ns (4x events)
 - Night detections: 0x S/Ns (0x events)
- 1x S/N previously detected
- **S/N: F4XFA22AFML78D81** (DJI Mini 3 Pro)
- Highest Activity by Weekday
 - Events: Friday (4x events)
 - Duration: Friday (00:19:04)
- Highest Activity by Time (Zulu)
 - Events: 1500Z (2x events)
 - Duration: 1500Z (00:16:39)
- Highest Duration by Platform: DJI Phantom 4 Pro V2 (00:16:39)
- **0x Detects within 500m, 0x Detects within the Base Boundary**



—CUI—



—CUI—

Naval Observatory Data Analysis

December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	8		4		-52%
Total Duration	00:47:17		00:19:04		-61%
Total SNs	6		3		-52%
Most Active Platform					
By Unique SNs	DJI Mavic 2 Pro, DJI Mini 3		DJI Mini 2, DJI Mini 3 Pro, DJI Phantom 4 Pro V2		
	2		1		-52%
By Events	DJI Mavic 2 Pro, DJI Mini 3		DJI Phantom 4 Pro V2		
	3		2		-36%
By Duration	DJI Mavic 2 Pro		DJI Phantom 4 Pro V2		
	00:36:29		00:16:39		-56%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation's C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

—CUI—

Metric	Jan-Jun 2022		Jul-Dec 2022		Jan-Jul 2023		Percentage Change	Percentage Change
Length of Reporting Period	Start Date	01 Jan 22	Start Date	01Jul22	Start Date	01Jan 23	Jan-Jun 2022 / Jul-Dec 2022 Comparison	Jul-Dec 2022 / Jan-July 2023 Comparison
	End date	30 Jun22	End date	31 Dec 22	End Date	31Jul23		
	Weeks in total	26	Weeks in total	26	Weeks in Total	30		
Total Events	144		137		253		-6%	
Total Duration	13:06:00		11:44:43		20:57:42		-12%	
Total CLs	57		61		91			
Most Active Platform/Component								
By Unique CLs	DJ Mini 2		DJ Mini2		DJ Mini2			
	22		5		26		-75%	
By Events	DJ Mini 2		DJ Mini2		DJ Mini 3 Pro			
	59		90		59			-43%
By Duration	DJ Mini 2		DJ Mini2		DJ Mavic 3 Enterprise			
	05:24:54		05:24:54		05:24:54		-2%	-13%

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 2024 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	8		4		-52%
Total Duration	00:47:17		00:19:04		-61%
Total SNs	6		3		-52%
Most Active Platform					
By Unique SNs	DJI Mavic 2 Pro, DJI Mini 3		DJI Mini 2, DJI Mini 3 Pro, DJI Phantom 4 Pro V2		
	2		1		-52%
By Events	DJI Mavic 2 Pro, DJI Mini 3		DJI Phantom 4 Pro V2		
	3		2		-36%
By Duration	DJI Mavic 2 Pro		DJI Phantom 4 Pro V2		
	00:36:29		00:16:39		-56%

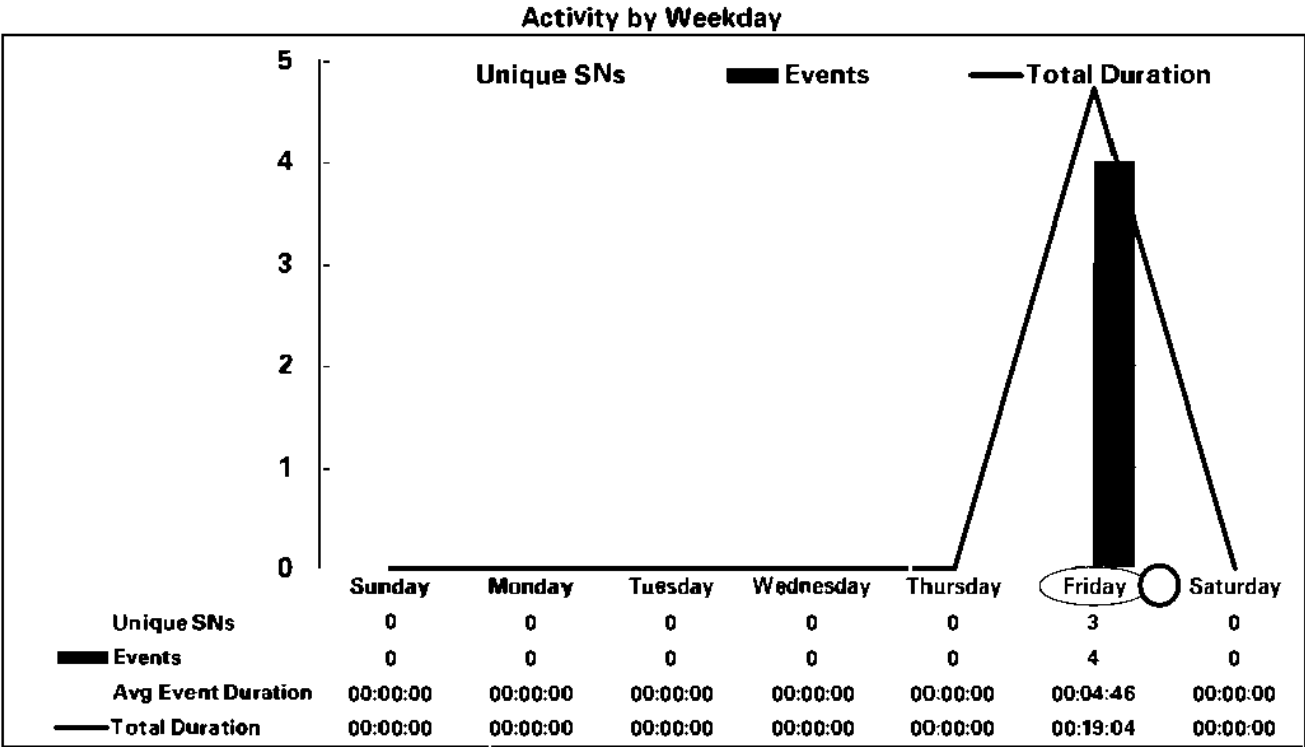


CUI

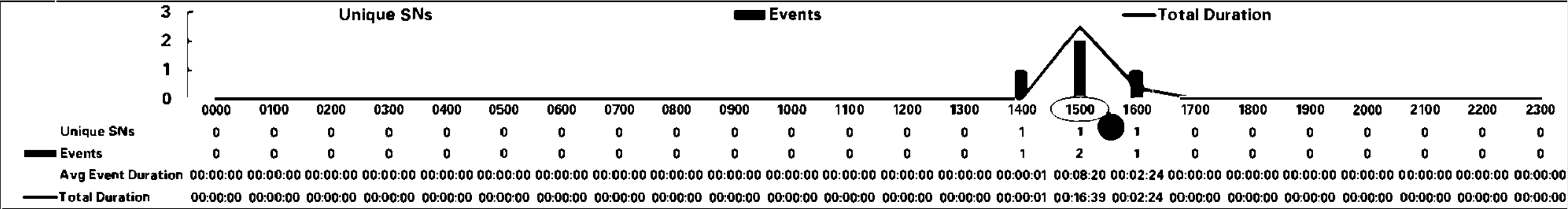
Naval Observatory Activity Charts

December 01, 2024 – December 31, 2024

Entire Slide Is CUI



Activity by Hour



○ Highest Total Event/Duration (Weekday)

● Highest Total Event/Duration (Hour)

CUI



CUI

NSF Suitland Activity Summary

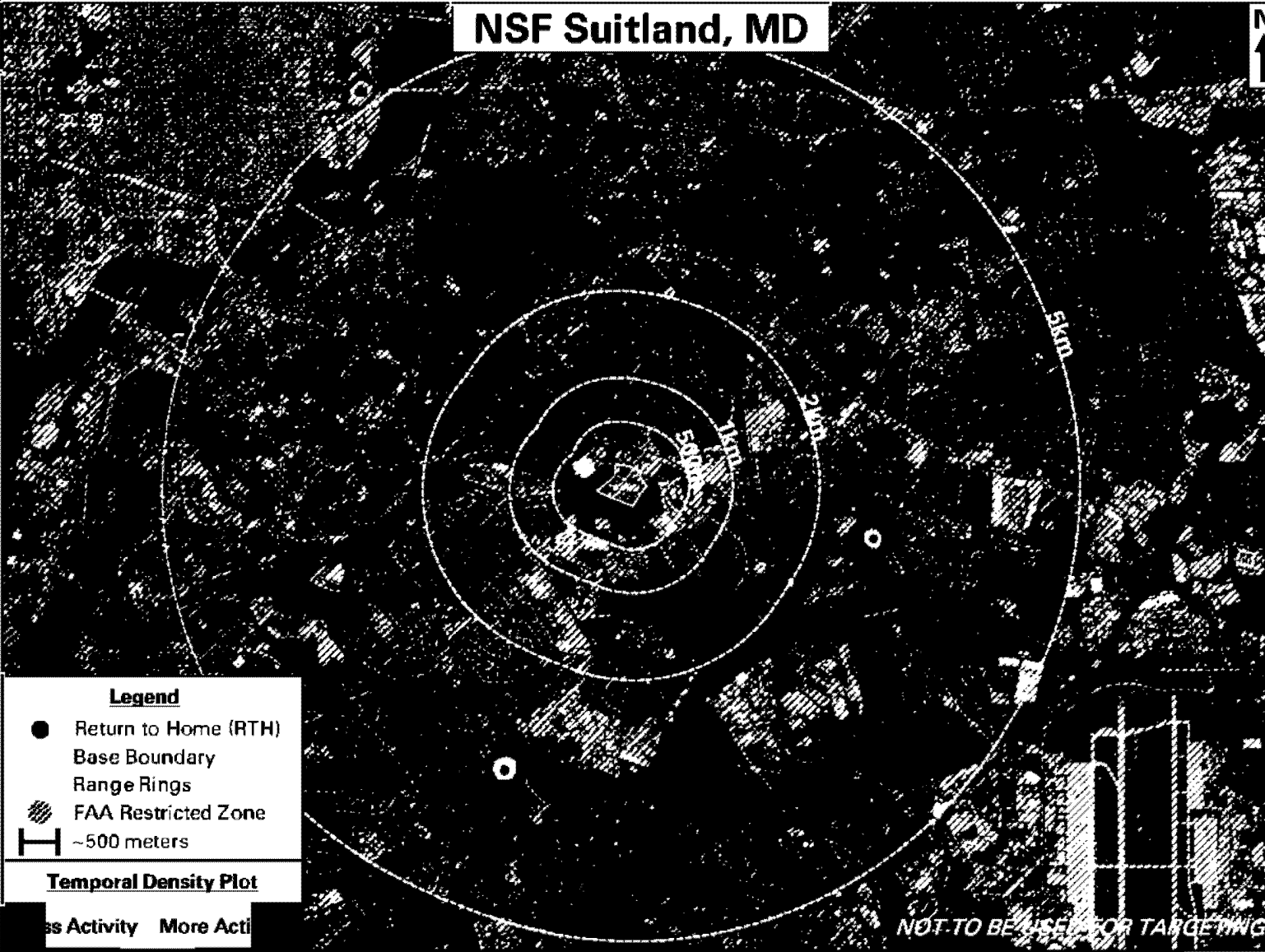
December 01, 2024 – December 31, 2024

Entire Slide is CUI

No events were detected within 500m of the base boundary. All activity occurred outside of 2km in residential, recreational, or commercial areas.

Activity Highlights

- 6x S/Ns, 6x events, 00:04:49 duration
 - Exceeded altitude allowance: 6x S/Ns (6x events)
 - Night detections: 1x S/N (1x event)
- 3x S/Ns previously detected
- **S/N: 3NZCK6E014CPAQ** (DJI Mini 2)
- **S/N: 5FSCJC40111EJ8** (DJI Mini 2)
- **S/N: F6N8C236W00314EH** (DJI Air 3)
- Highest Activity by Weekday
 - Events: Monday (3x events)
 - Duration: Monday (00:03:21)
- Highest Activity by Time (Zulu)
 - Events: 1700Z (2x events)
 - Duration: 1700Z (00:01:59)
- Highest Duration by Platform: DJI Mini 2 (00:02:28)
- **0x Detects within 500m, 0x Detects within the Base Boundary**





~~CUI~~

NSF Suitland Data Analysis

December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 24 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	9		6		-36%
Total Duration	00:19:53		00:04:49		-77%
Total SNs	7		6		-17%
Most Active Platform					
By Unique SNs	DJI Air 2S, U/I DJI UAS		DJI Mini 2		
	2		3		
By Events	DJI Air 2S		DJI Mini 2		
	4		3		-28%
By Duration	DJI Air 2S		DJI Mini 2		
	00:10:42		00:02:28		-78%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

~~CUI~~

Metric	Jan-Jun 2022		Jul-Dec 2022		Jan-Jul 2023		Percentage Change	Percentage Change
Length of Reporting Period	Start Date	01 Jan 22	Start Date	01Jul22	Start Date	01Jan 23	Jan-Jun 2022 / Jul-Dec 2022 Comparison	Jul-Dec 2022 / Jan-July 2023 Comparison
	End date	30 Jun22	End date	31 Dec 22	End Date	31Jul23		
	Weeks in total	26	Weeks in total	26	Weeks in Total	30		
Total Events	144		137		253		-6%	
Total Duration	13:06:00		11:44:43		20:57:42		-12%	
Total CLs	57		61		91			
Most Active Platform/Component								
By Unique CLs	DJ Mini 2		DJ Mini2		DJ Mini2			
	22		5		26		-75%	
By Events	DJ Mini 2		DJ Mini2		DJ Mini 3 Pro			
	59		90		59			-43%
By Duration	DJ Mini 2		DJ Mini2		DJ Mavic 3 Enterprise			
	05:24:54		05:24:54		05:24:54		-2%	-13%

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	01 Dec 24	NOV-DEC 24 Comparison
	End date	30 Nov 24	End date	31 Dec 24	
	Weeks in total	4	Weeks in total	4	
Total Events	9		6		-36%
Total Duration	00:19:53		00:04:49		-77%
Total SNs	7		6		-17%
Most Active Platform					
By Unique SNs	DJI Air 2S, U/I DJI UAS		DJI Mini 2		
	2		3		
By Events	DJI Air 2S		DJI Mini2		
	4		3		-28%
By Duration	DJI Air 2S		DJI Mini 2		
	00:10:42		00:02:28		-78%

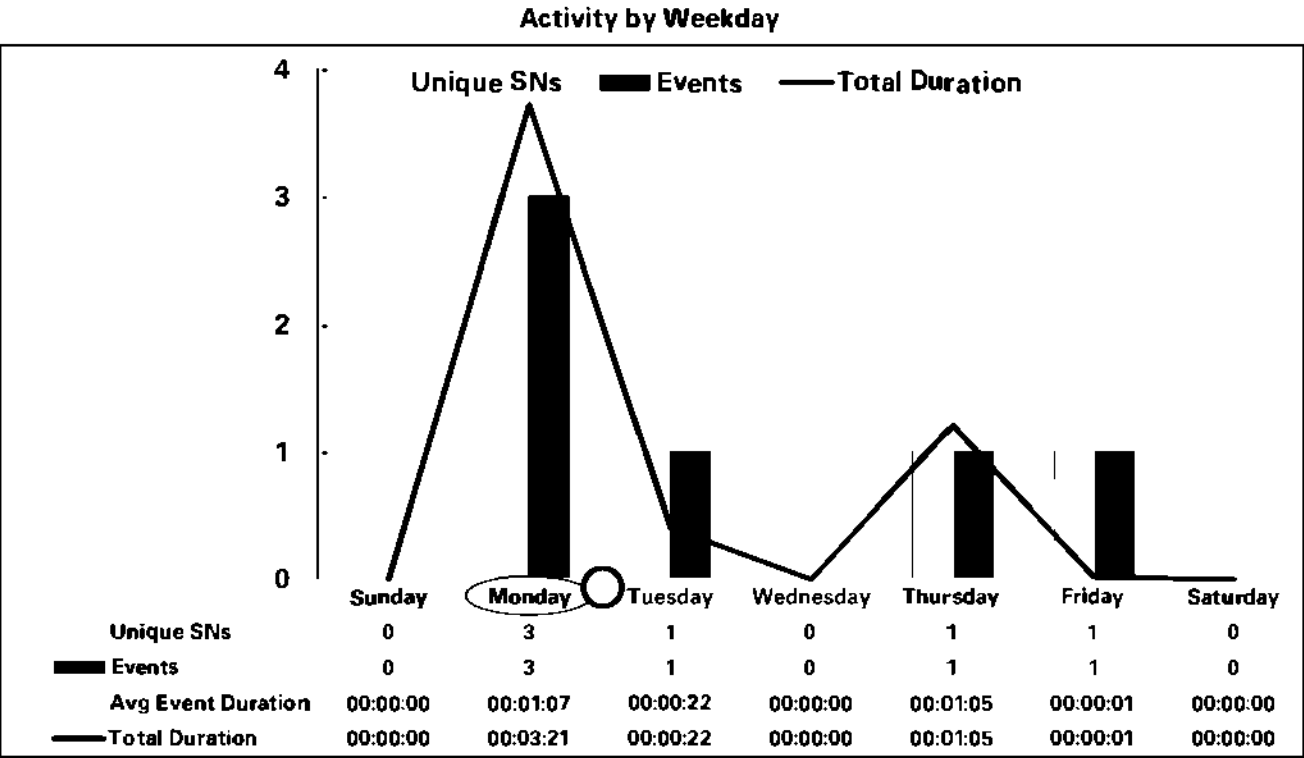


—CUI—

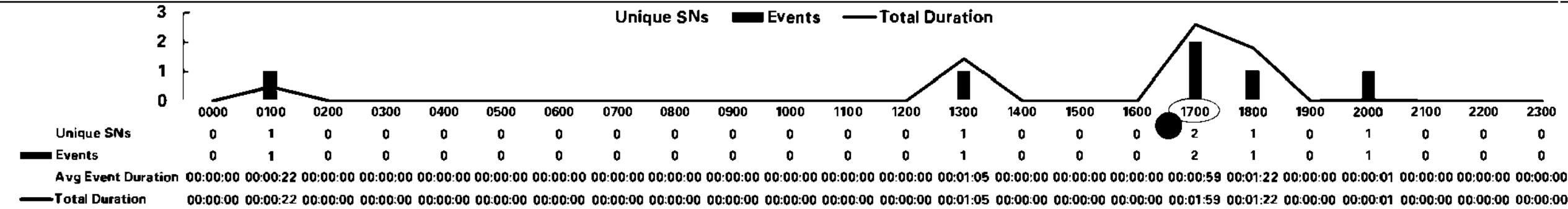
NSF Suitland Activity Charts

December 01, 2024 – December 31, 2024

Entire Slide is CUI



Activity by Hour



○ Highest Total Event/Duration (Weekday)

● Highest Total Event/Duration (Hour)

—CUI—



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimbx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than September 04, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of NCR Region Assessment. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 2)**
2. Map of NCR Area of Interest. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 6)**
3. Map of JB Andrews. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 9)**
4. Map of Fort Belvoir. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 12)**
5. Map of South Potomac – Indian Head. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 15)**
6. Map of NSF Thurmont. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 18)**
7. Map of ICCB. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 21)**
8. Map of Pentagon. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 24)**
9. Map of Washington Navy Yard. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 27)**
10. Map of Armed Forces Retirement Home. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 30)**
11. Map of NSF Dahlgren. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 33)**
12. Map of Naval Observatory. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 36)**
13. Map of NSF Suitland. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 39)**
14. National Security UAS Flight Restrictions. https://data.faa.gov/datasets/0270b9a8a5a34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39)**
15. NCR Area of Interest; PHALANX CONUS Repository; Technical Logs **(Slides 2-8)**
16. JB Andrews; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 9-11)**
17. Fort Belvoir; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 12-14)**
18. South Potomac – Indian Head; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 15-17)**
19. NSF Thurmont; PHALANX CONUS Repository; Technical Logs **(Slide 2-5, 18-20)**
20. ICCB; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 21-23)**
21. Pentagon; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 24-26)**
22. Washington Navy Yard; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 27-29)**
23. Armed Forces Retirement Home; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 30-32)**
24. NSF Dahlgren; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 33-35)**
25. Naval Observatory; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 36-38)**
26. NSF Suitland; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 39-41)**
27. FAA definition of night. https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



~~CUI~~

Information Cutoff Date: 13 JAN 25

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than October 22, 2026.

DTRA PHALANX Activity Report

Niagara Falls Air Reserve Station, NY (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- S/N: F5FHE23B300200JT
- Points of Contact
- Sources
- Terminology

Component: Defense Threat Reduction Agency
Controlled by: DTRA OI (Phalanx)
CUI Categories: LCOMM
Distribution / Dissemination Control: N/A
POC: (b)(6)



CUI

Executive Summary

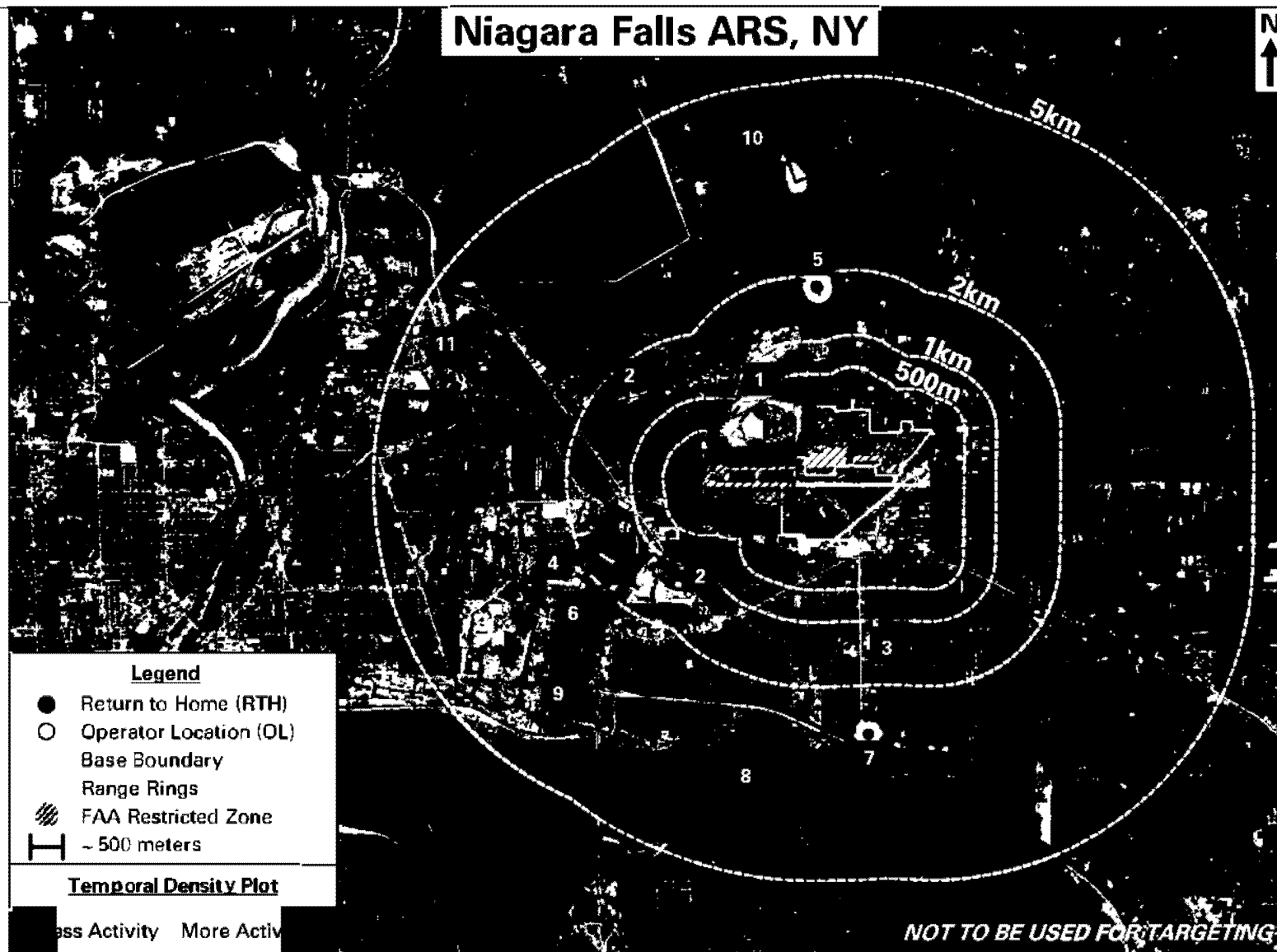
December 01, 2024 – December 31, 2024

Entire Slide is CUI

During this reporting period, no activity occurred within the base boundary. (S/N: 1) was detected within 500m NE of the base boundary with all 11x events occurring over open fields and was likely commercial in nature. (S/Ns: 2-11) activity occurred IVO residential, agricultural, and commercial areas. (S/Ns: 1-7, 9-10) possibly exceeded FAA sUAS AGL altitude restrictions set for Niagara Falls. There were no night detects. sUAS detections within 5km of the base boundary decreased compared to the previous 4-week reporting period (01 NOV 24 – 30 NOV 24, 11x S/Ns, 76x events, 04:32:58 duration). S/Ns decreased 3%, events decreased 69%, and duration decreased 46%.

5km Overview

- 11x S/Ns, 24x events, 02:32:15 duration
- Exceeded altitude allowance: 9x S/Ns (18x events) (S/Ns: 1-7, 9-10)
- Night detections: 0x S/Ns (0x events)
- 4x S/Ns previously detected (S/Ns: 1-2, 7, 10)
 - (S/N 1) was most recently detected IVO current location (27 NOV 24).
 - (S/N 2) was most recently detected ~2.8km SW of the Niagara Falls ARS base boundary IVO a commercial area off NY 265 (25 NOV 24).
 - (S/N 7) was most recently detected ~12.7km SW of MacDill AFB IVO a residential area near 2nd St North and 15th Ave North (22 OCT 24).
 - (S/N 10) was mostly recently detected IVO current location (12 NOV 24).
- 6x different platforms and 1x U/I DJI UAS detected (7x rotary-wing)
 - Top by total events: DJI Mavic 3 Enterprise (13x, 54%)
 - Top by total duration: DJI Mavic 3 Enterprise (02:07:13, 84%)
 - Top by S/N count: DJI Mavic 3 Enterprise and DJI Mini 4 Pro (3x, 27%) ea.



CUI



Current System Overview

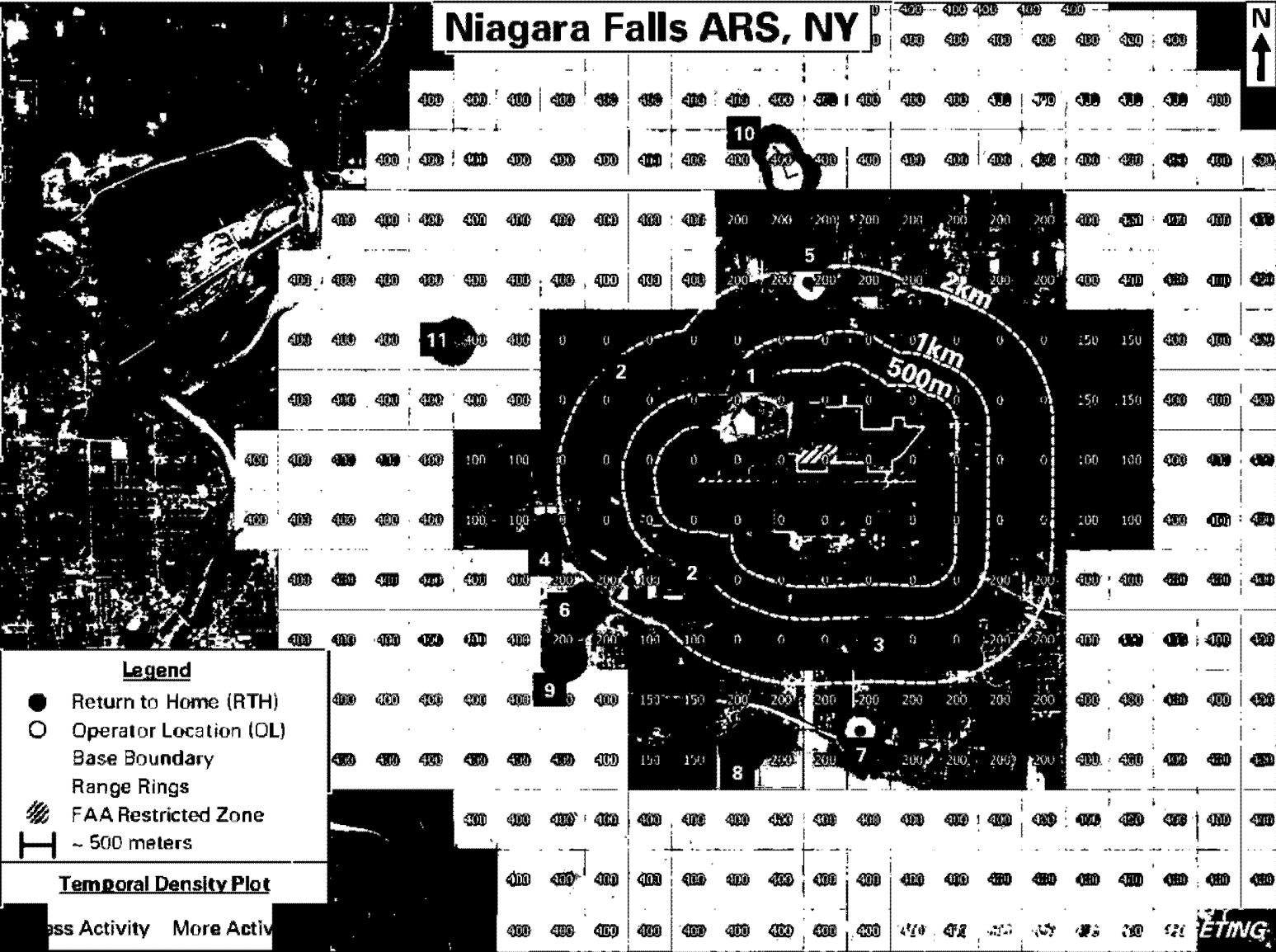
December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mavic 3 Enterprise	F5FHE23B300200JT	8	239	01:57:02
2	DJI Mini 4 Pro	F6Z9A2414ML3U35S	3	415	00:06:07
3	DJI Mini 4 Pro	F6Z9A241PML34C0L	1	86	00:00:01
4	DJI Mavic 3 Enterprise	F5FJB22A700A0GTA	1	264	00:03:04
5	DJI Mini 3	F5YH8244F001D03R	1	220	00:05:04
6	DJI Mavic 3 Classic	F67PE22BP0030076	2	1207	00:00:46
7	DJI Mavic 3 Enterprise	F5FHD239800DV357	4	223	00:07:07
8	DJI Mini 3 Pro	F4XF722A5006X118	1	108	00:02:11
9	DJI Mini 4 Pro	F6Z9C23950036DMJ	1	257	00:00:01
10	U/I DJI UAS	F8PJA244KML1RK31	1	422	00:06:30
11	DJI Mavic 2 Enterprise Zoom	276CH5KR0A08K5	1	285	00:04:22

Red font – S/N previously detected | – exceed FAA altitude allowance

- Requests to operate within controlled airspace must be requested via the Low Altitude Authorization and Notification Capability (LAANC).
- Only Part 107 (licensed) operators may request to operate above the designated altitude ceilings up to 400ft AGL (see graphic).
- Activity occurred in areas with ceilings ranging from 0 – 400ft AGL.
- 82% of all S/Ns and 75% of total events exceeded altitude ceilings
 - 9x S/Ns, 18x events (S/Ns: 1-7, 9-10)





~~CUI~~
S/N: F5FHE23B300200JT

December 01, 2024 – December 31, 2024

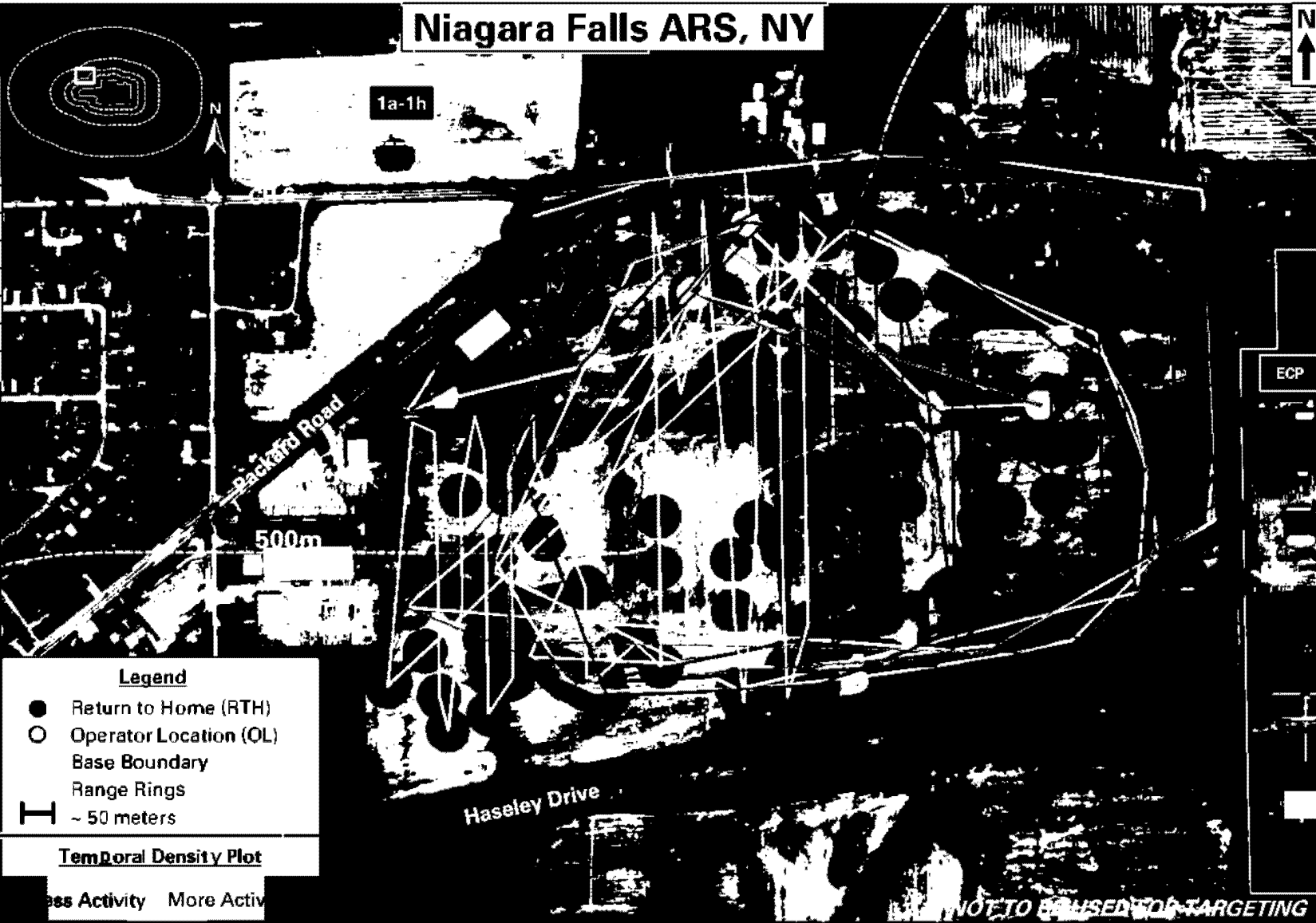
Entire Slide is ~~CUI~~

- 1** S/N: F5FHE23B300200JT, DJI Mavic 3 Enterprise
- 8x total events (01:57:02) within 500m

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-16 21:23:35	2024-12-16 21:38:08	00:14:33	201
1b	2024-12-12 21:12:27	2024-12-12 21:27:03	00:14:36	197
1c	2024-12-12 20:42:25	2024-12-12 21:01:42	00:19:17	200
1d	2024-12-12 20:12:19	2024-12-12 20:34:42	00:22:23	211
1e	2024-12-10 18:16:37	2024-12-10 18:29:22	00:12:45	239
1f	2024-12-05 15:00:49	2024-12-05 15:16:21	00:15:32	206
1g	2024-12-05 14:36:37	2024-12-05 14:39:25	00:02:48	208
1h	2024-12-03 18:03:58	2024-12-03 18:19:06	00:15:08	237

– exceed FAA altitude allowance

- Events (1a-1h) were active W of the base boundary with all events occurring over open fields bordered by CR 6 to the N, Packard Rd. to the W, and Haseley Dr. to the S. The closest event (1c) was detected within ~27m of the base boundary and ~90m of an Entry Control Point (ECP). All events occurred in areas with 0ft AGL ceilings.
- The DJI Mavic 3 Enterprise is a small commercial drone designed to support survey and mapping missions. Drone type, flight patterns, location, and duration is indicative of (S/N: 1) conducting surveying activities.
- (S/N: 1) was previously detected (27 NOV 24) in the same location as this current reporting period. Additionally, (S/N:1) has historically been detected in this same location (OCT and NOV 2024).



~~CUI~~



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimbx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than October 22, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Niagara Falls Air Reserve Station (ARS). ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-4)**
2. National Security UAS Flight Restrictions. https://udms-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-4)**
3. Niagara Falls ARS; PHALANX CONUS Repository; Technical Logs **(Slides 2-4)**
4. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slide 3)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than November 22, 2025.

DTRA PHALANX Activity Report

Norfolk Naval Shipyard, VA (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary (2 slides)
- Current System Overview
- Altitude Allowance
- Night Activity Overview
- S/N: 3NZCJCB0443LNW
- Points of Contact
- Sources
- Terminology



CUI

Executive Summary (1 of 2)

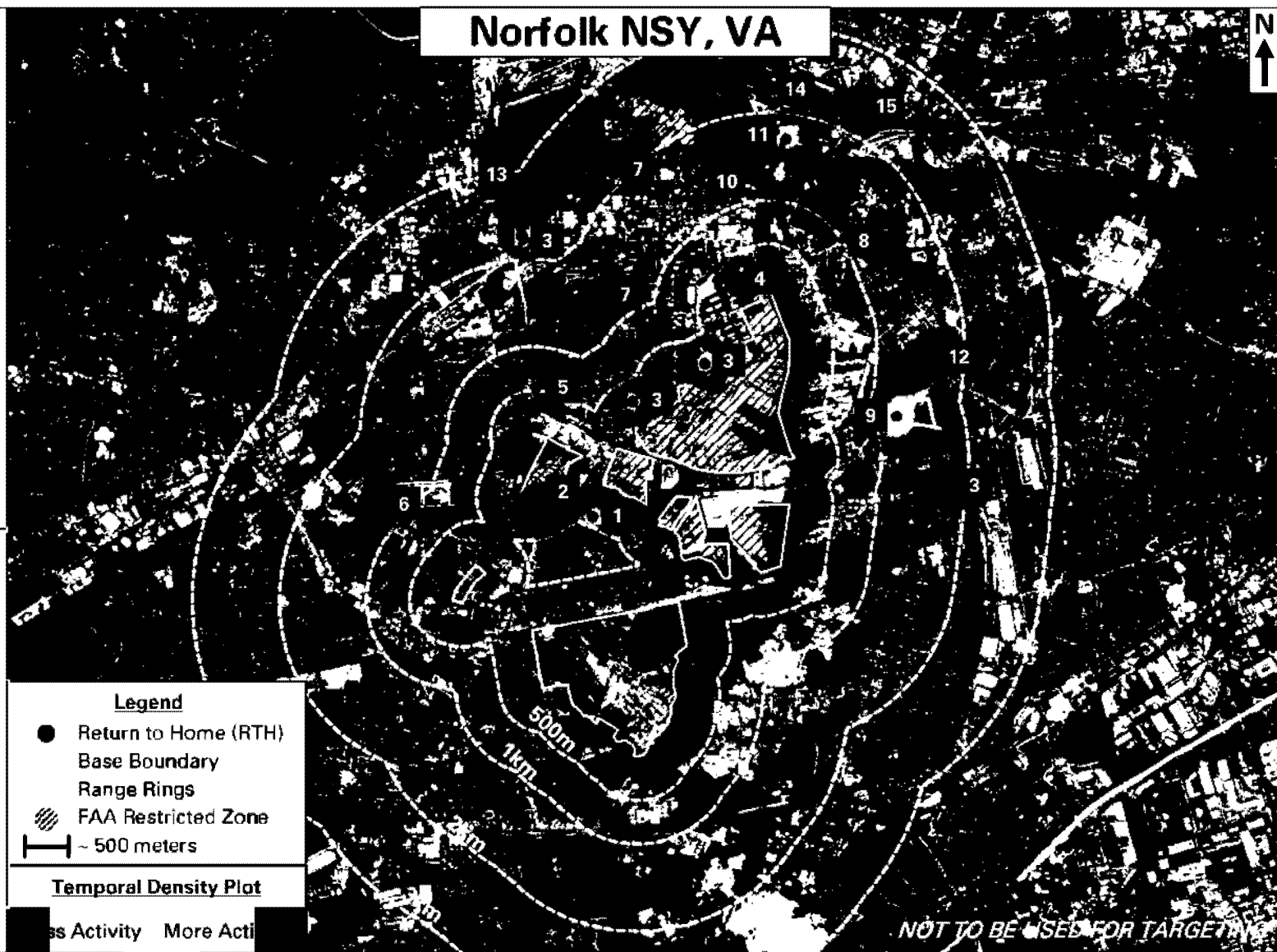
December 01, 2024 – December 31, 2024

Entire Slide is CUI

During the reporting period, **S/Ns: 1-4** were active within 500m of a base boundary and their activity appears recreational and commercial in nature as no events occurred within the base boundary. **S/N: 1** activity occurred ~394m S of NSY Norfolk, Scoot Center Naval Annex, IVO Cradock Middle School. **S/N: 2** activity occurred ~199m S of New Gosport base housing, RTH originated IVO residential area and flew away from NSY Norfolk towards George Washington Park (see slide 7). **S/N: 3** activity occurred in multiple locations, only two events occurred within 500m, with the first closest event to the base boundary ~163m NW of NSA Norfolk IVO a residential area NW of Effingham Plaza. The second closest event occurred ~251m NW of the NSY Norfolk IVO Saint Pauls Cemetery. **S/N: 4** activity occurred ~321 N of the base IVO WAVY-TV/ WVBT Station. **S/Ns: 2, 7, 10-11, 14-15** possibly exceeded FAA sUAS AGL altitude ceiling restrictions set for NSY Norfolk. **S/Ns: 4-5, 9-10, 12** were nighttime detections. sUAS S/Ns increased 25%, events increased 10%, and duration increased 3% within 3km of the base perimeter compared to the previous reporting period (01 OCT 24 – 30 NOV 24, 24x S/Ns, 42x events, 03:11:27 duration).

3km Overview

- 15x S/Ns, 23x events, 01:38:29 duration
- Exceeded altitude allowance: 6x S/Ns (7x events) (**S/Ns: 2, 7, 10-11, 14-15**)
- Night detections: 5x S/Ns (8x events) (**S/Ns: 4-5, 9-10, 12**)
- 12x S/Ns previously detected (**S/Ns: 1-7, 10-14**)
- S/N: 1** detected ~854m W of base, IVO residential area located on Jefferson St and Richmond Ave (15 NOV 24) and IVO JB Langley-Eustis (11 SEP 24)
- S/N: 2** detected IVO Afton Square ~870m S of NSA Norfolk-Naval Shipyard Scott Center, Naval Annex (26 SEP 24)
- Continued next slide



CUI



— CUI —

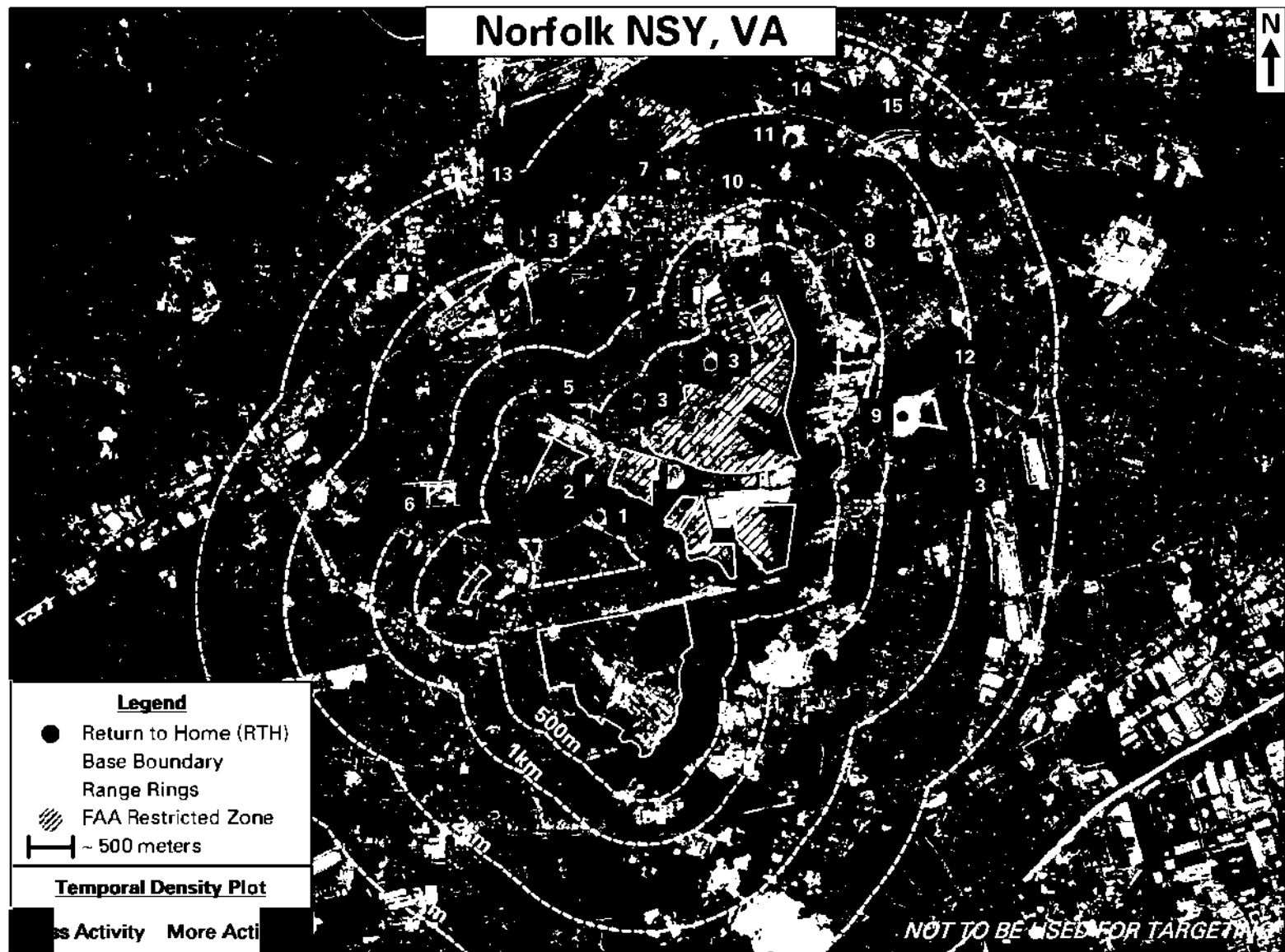
Executive Summary (2 of 2)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

3km Overview

- 12x S/Ns previously detected (S/Ns: 1-7, 10-14) continued
- S/N: 3 detected IVO Rollingwood residential area ~3.5km w of NSY Norfolk (22 SEP 24)
- S/N: 4 detected IVO Civic Center parking lot, located S of Fresnel Lens, Hog Island Light ~625m N of NSY Norfolk (19 NOV 24)
- S/N: 5 detected IVO WAVY-TV/ WVBT Station ~315m N of NSY Norfolk (23 AUG 24)
- S/N: 6 detected IVO Holiday Park ~ 3.5km SE of JB Langley-Eustis (15 NOV 24) and IVO Little Creek, Ft. Story (26 SEP 24)
- S/N: 7 detected IVO residential areas IVO JB Langley-Eustis (18 NOV 24)
- S/N: 10 detected IVO NOAA- National Geodetic Survey ~2.8km N of NSY Norfolk (18 NOV 24) and IVO Newport News Marine terminals ~18km N of NSY Norfolk (17 NOV 24)
- S/N: 11 detected IVO Portsmouth Art & Cultural Center ~856m N of NSY Norfolk (28 NOV 24)
- S/N: 12 detected IVO residential area at Mc Neal Ave and Chestnut Ave ~4.5km E of NSY Norfolk (22 NOV 23)
- S/N: 13 detected IVO commercial area at High St. and Washington St ~1.1km N of NSY Norfolk (10 JUL 24)
- S/N: 14 detected IVO Selden Market, Norfolk commercial area ~2.1km NE of NSY Norfolk (24 JAN 24)
- 1x S/N was detected cross site during the reporting period (S/N: 7)
- S/N: 7 detected IVO residential area along Harris river ~4.5km SE of JB Langley-Eustis (30 DEC 24) and IVO Hampton residential area ~4.1km S of JB Langley-Eustis (16 DEC 24)
- 9x different platforms detected (9x rotary-wing)
 - Top by total events: DJI Mini 2 SE (6, 26%)
 - Top by total duration: U/I DJI UAS (00:51:37, 52%)
 - Top by S/N count: DJI Mini 2S and U/I DJI UAS (3x, 20%) ea.



— CUI —



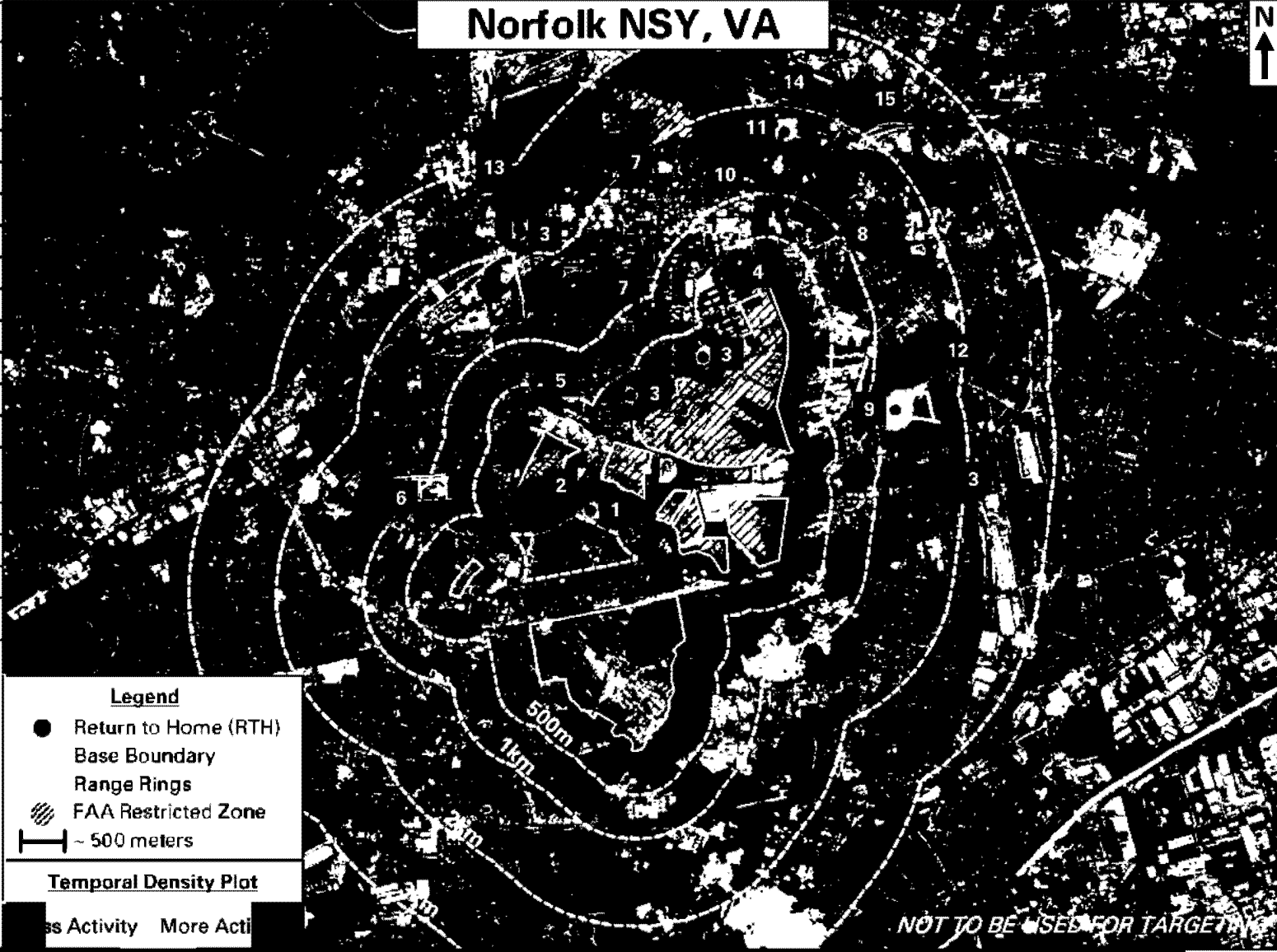
CUI

Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 3km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	U/I DJI UAS	8JEAM3V00107FR	1	299	00:04:12
2	DJI Mini 2	3NZCJCB0443LNW	1	486	00:05:07
3	DJI Mini 2 SE	F6CDA241WML225XY	4	312	00:12:10
4	DJI Mavic 2 Zoom	0M6DG140013ZP4	1	174	00:02:31
5	DJI Mavic 2 Zoom	0M6CJ1LR0A347H	1	253	00:04:02
6	DJI Mini 3 Pro	F4XF823BQ009S057	1	135	00:05:53
7	DJI Mini 2 SE	6C5AL7600101GN	2	476	00:03:15
8	DJI Air 2S	3YTSJ3B00303RR	1	148	00:00:26
9	U/I DJI UAS	F8PJC24BK0020M69	3	322	00:24:30
10	DJI Air 2S	3YTDJ1V003S5WU	2	519	00:04:12
11	U/I DJI UAS	F8PJA243MML184T8	1	141	00:22:55
12	DJI Mavic 2 Enterprise Zoom	2763KC2001ZY0V	2	214	00:03:17
13	DJI Mavic 2 Pro	163DF8U001C618	1	328	00:02:45
14	DJI Mavic Mini	1SDCH7B01698ZW	1	476	00:02:46
15	DJI Air 2S	3YT7LAT003R1T1	1	276	00:00:28
- S/N with night detections Red font - S/N previously detected - exceed FAA altitude allowance					



CUI



—CUI—

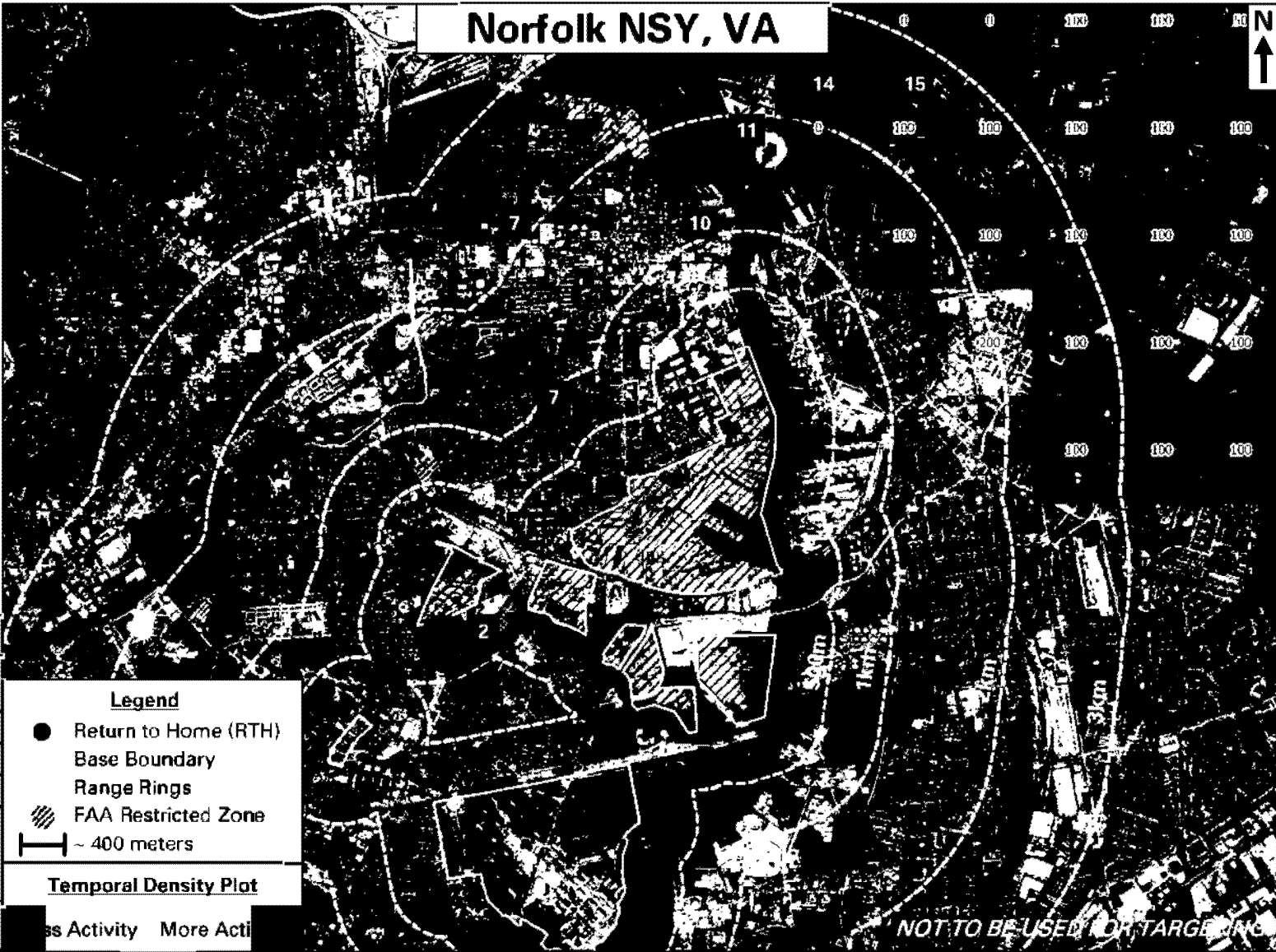
Altitude Allowance

December 01, 2024 – December 31, 2024

Entire Slide is CUI

- Requests to operate within controlled airspace must be requested via the Low Altitude Authorization and Notification Capability (LAANC)
- Only Part 107 (licensed) operators may request to operate above the designated altitude ceilings up to 400ft AGL (see graphic)
- Activity occurred in areas with ceilings ranging from 0 – 100ft AGL and above 400ft AGL
- 40% of all S/Ns and 30% of total events exceeded altitude ceilings
 - 6x S/Ns, 7x events, 00:35:17 duration (S/Ns: 2, 7, 10-11, 14-15)
 - Exceeded FAA 0ft AGL: 2x S/Ns, 2x events (S/Ns: 11, 14)
 - Exceeded FAA 100ft AGL: 1x S/N, 1x event (S/N: 15)
 - Exceeded FAA 400ft AGL: 3x S/Ns, 4x events (S/Ns: 2, 7, 10)

Active within 3km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
2	DJI Mini 2	3NZCJCB0443LNW	1	486	00:05:07
7	DJI Mini 2 SE	6C5AL7600101GN	2	476	00:03:15
10	DJI Air 2S	3YTDJ1V003S5WU	1	519	00:00:46
11	U/I DJI UAS	F8PJA243MML184T8	1	141	00:22:55
14	DJI Mavic Mini	1SDCH7B01698ZW	1	476	00:02:46
15	DJI Air 2S	3YT7LAT003R1T1	1	276	00:00:28
- S/N with night detection Red font - S/N previously detected altitude allowance					
- exceed FAA					



—CUI—



Night Activity Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

S/N: 4 was the only night detection within 500m of the base boundary, and all suspected night activity occurred IVO residential and commercial areas. sUAS night detections S/Ns increased 400%, events increased 167%, and duration increased 122% within 3km of the base perimeter compared to the previous 4-week reporting period (01 OCT 24 – 30 NOV 24, 2x S/Ns, 6x events, 00:34:00 duration).

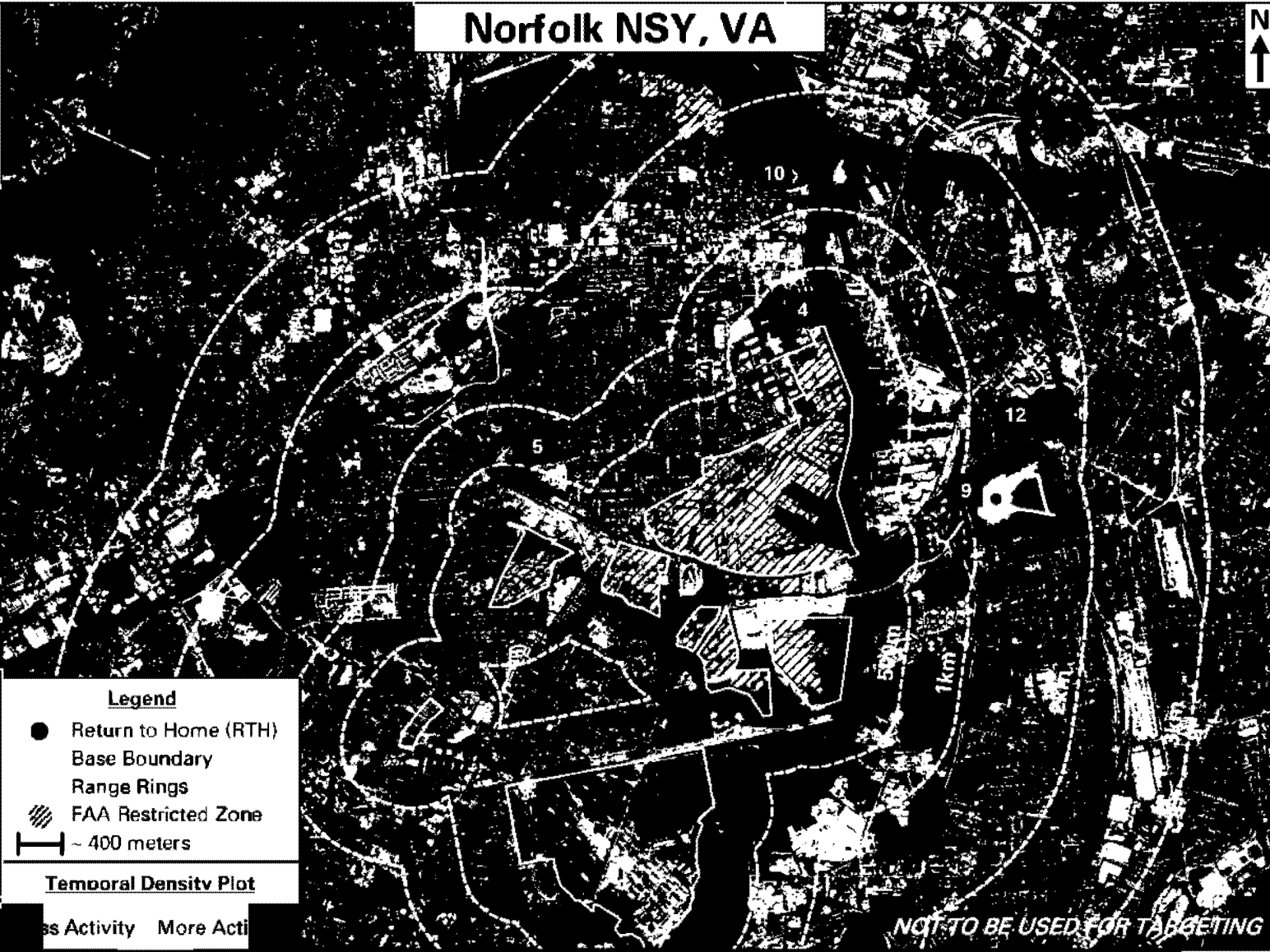
3km Night Activity Overview

- 5x S/Ns, 8x events, 00:37:46 duration
 - Potential AGL violations: 0x S/N (0x events)
 - 4x S/Ns previously detected (S/Ns: 4-5, 10, 12)
- 4x different platforms detected (4x rotary-wing)
 - None come standard with night vision, thermal, or infrared cameras.
 - Top by total events: U/I DJI UAS (3x, 38%)
 - Top by total duration: U/I DJI UAS (00:24:30, 65%)
 - Top by S/N count: DJI Mavic 2 Zoom (2x, 40%)

Active within 3km

#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
4	DJI Mavic 2 Zoom	0M6DG140013ZP4	1	174	00:02:31
5	DJI Mavic 2 Zoom	0M6CJ1LR0A347H	1	253	00:04:02
9	U/I DJI UAS	F8PJC24BK0020M69	3	322	00:24:30
10	DJI Air 2S	3YTDJ1V003S5WU	1	279	00:03:26
12	DJI Mavic 2 Enterprise Zoom	2763KC2001ZY0V	2	214	00:03:17

- S/N with night detections | Red font - S/N previously detected





~~CUI~~
S/N: 3NZCJCB0443LNW

December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

2 S/N: 3NZCJCB0443LNW, DJI Mini 2

- 1x total event (00:05:07) within 500m range of focus
- 1x event (2a) inside depicted area (00:05:07)

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
2a	2024-12-19 15:18:08	2024-12-19 15:23:15	00:05:07	486
- exceed FAA altitude allowance				

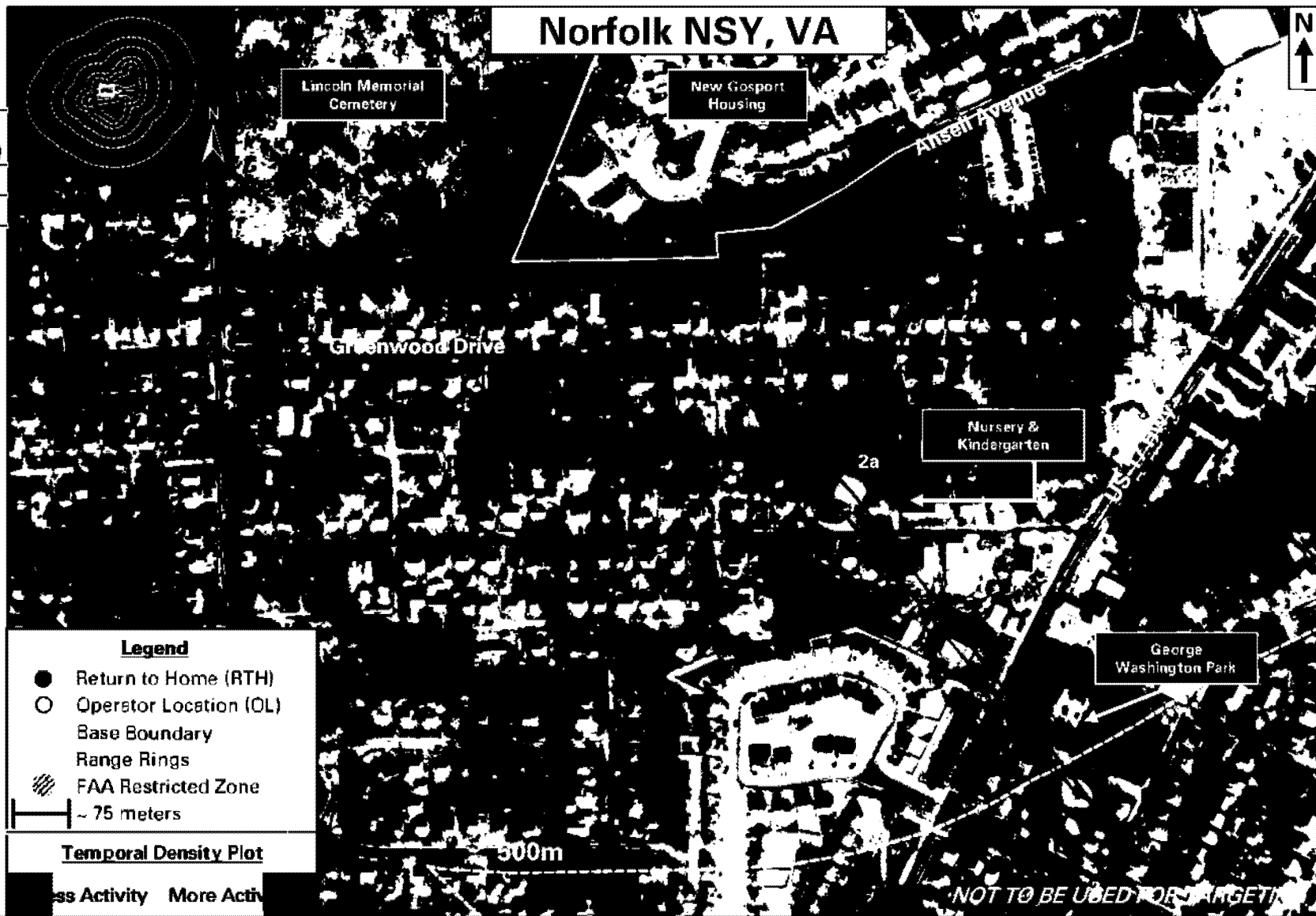
- The operator location and RTH associated with event (2a) originated ~ 199m S of the NSY Norfolk Gosport Housing at a UID residential home IVO a nursery and kindergarten. sUAS flew south away from the base towards George Washington Park and returned to it original location. The overall duration for this event was 00:05:07 and seems likely recreational in nature as it flew away from the base perimeter. Of significance, this event possible exceeded the FAA ceiling restrictions set for NSY Norfolk. Highlighted due to combination of proximity to base boundary and altitude.
- DJI Mini 2 is a budget model and has no nighttime capabilities as standard. This platform is a generally associated with hobbyist sUAS activity
- S/N: 2 detected IVO Afton Square ~870m S of NSA Norfolk-Naval Shipyard Scott Center, Naval Annex (26 SEP 24)

DJI Mini 2



Source: UAS Card Master

- Weight: ~249g/9oz
- Dimensions: 138x81x58mm
- Max Speed: ~35.8mph/ 57.6kpm
- Flight Time: ~31 Mins
- Transmission Distance:
 - FCC Compliant: 6.2 mi/10km
 - CE Compliant: 3.7 mi/6km
- C2 Signal: OcuSync 2.0
- Dual Frequency: 2.4-5.8GHz
- Image Transmission: 4K
- Camera: 12MP/ 2x Digital Zoom
- Cost: \$449



~~CUI~~



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than November 22, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Norfolk Naval Shipyard, VA. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-7)**
2. National Security UAS Flight Restrictions. https://udis-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-7)**
3. Norfolk Naval Shipyard, VA; PHALANX CONUS Repository; Technical Logs **(Slides 2-7)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 7)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
6. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slides 2-7)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than April 17, 2026.

DTRA PHALANX Activity Report

NSA Hampton Roads, VA (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary (2 slides)
- Current System Overview (2 slides)
- Track History
- Points of Contact
- Sources
- Terminology



Executive Summary (1 of 2)

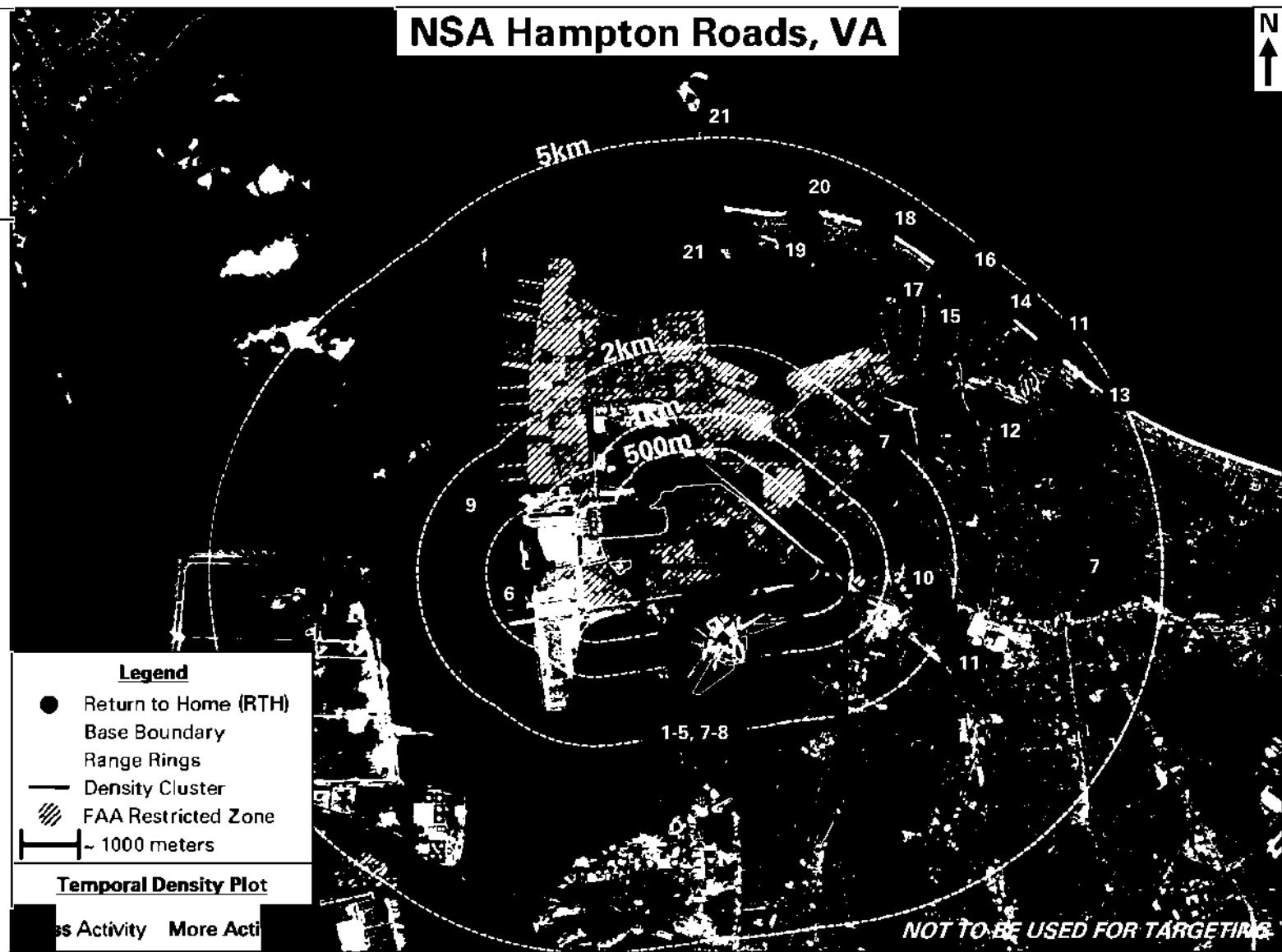
December 01, 2024 – December 31, 2024

Entire Slide is CUI

Activity within 5km of NSA Hampton Roads decreased compared to the previous reporting period. Event count decreased by 28% (108 x to 81x), total duration decreased by 29% (06:41:34 to 04:56:49) and serial count decreased by 31% (31x to 22x). **S/Ns: 1 and 4** operated in the same locations as the previous period. **S/N: 1** was detected IVO a base ECP and parallel to base boundary in previous report and current reporting period. **S/Ns: 6 and 9** operated over a commercial port east of the base.

5km Overview

- 21x S/Ns, 80x events, 04:56:49 duration
 - Exceeded altitude allowance: 21x S/Ns (80x events) (**S/Ns: 1-21**)
 - Night detections: 2x S/Ns (16x events) (**S/Ns: 3-4**)
- 10x S/Ns previously detected (**S/Ns: 1, 4-6, 8, 10-11, 13, 19, 21**)
 - (**S/Ns: 10 and 13**) previously detected ~4km north of the base along the beach on 17 APR 24 and 18 NOV 24 respectively.
 - (**S/Ns: 1, 4, 6, 8, 19, 21**) previously detected in the same locations as current detects. Earliest detect was **S/N: 6** on 06 NOV 24.
- 8x different platforms detected (8x rotary-wing)
 - Top by total events: DJI Mini 2 SE (46x, 57%)
 - Top by total duration: DJI Mini 2 SE (04:06:27, 83%)
 - Top by S/N count: DJI Mini 2 SE and DJI Mini 3 (5x, 23%) each



CUI



CUI

Executive Summary (2 of 2)

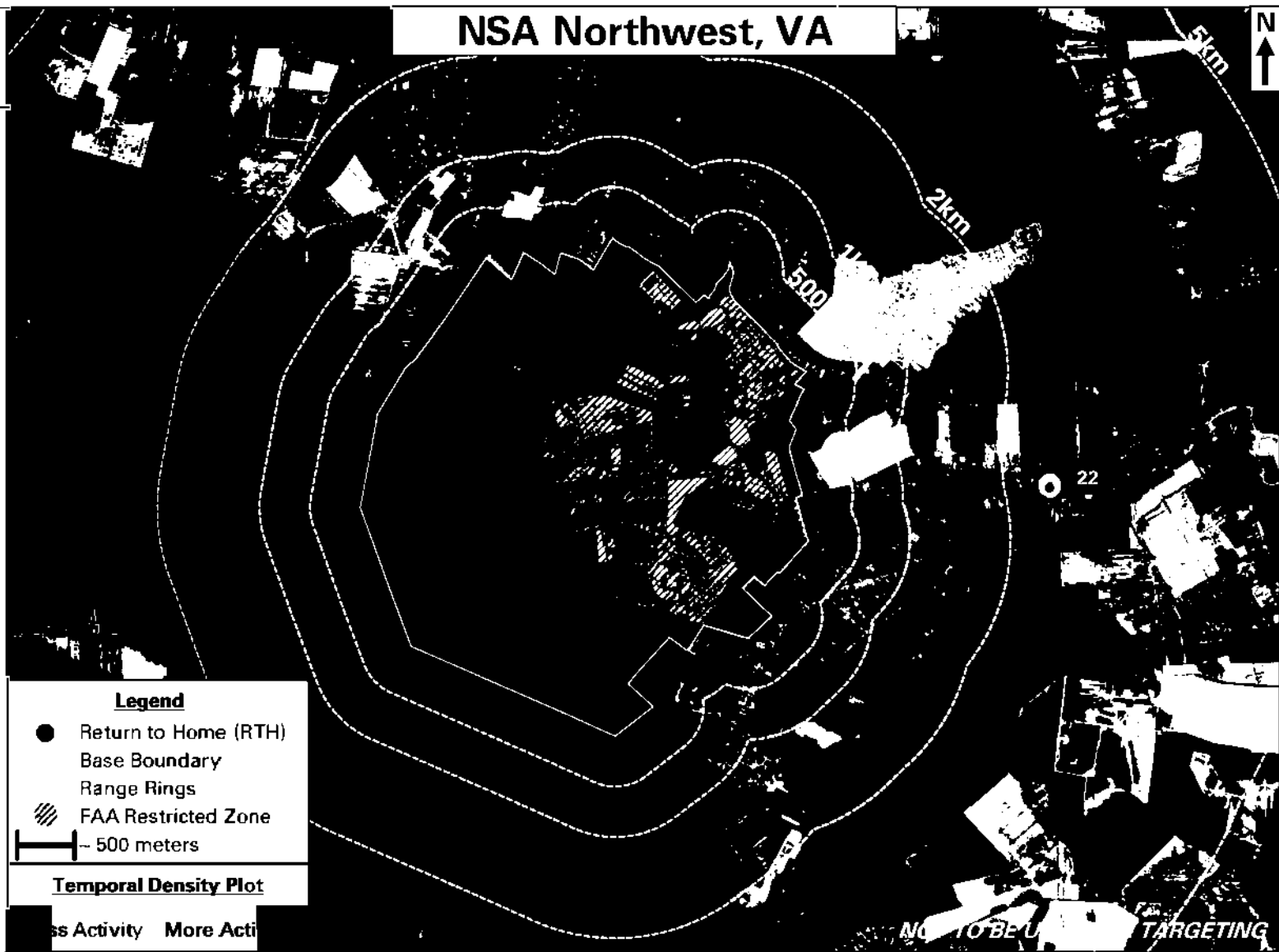
December 01, 2024 – December 31, 2024

Entire Slide is CUI

Activity within 5km of NSA Northwest remained sparse in line with previous reporting periods. S/N: 22 briefly operated over a residence ~2.2km east of the base.

5km Overview

- 1x S/N, 1x event, 00:00:01 duration
 - Exceeded altitude allowance: 1x S/N (1x event) (S/N: 22)
 - Night detections: 0x S/Ns (0x events)
- 1x S/N previously detected (S/N: 22)
 - S/N: 22 detected along the Virginia Beach Boardwalk (11 JUN 24)
- 1x platform detected (1x rotary-wing)
 - Top by total events: DJI Mini 2 SE (1x, 1%)
 - Top by total duration: DJI Mini 2 SE (00:00:01, 1%)
 - Top by S/N count: DJI Mini 2 SE (1x, 5%)



CUI



CUI

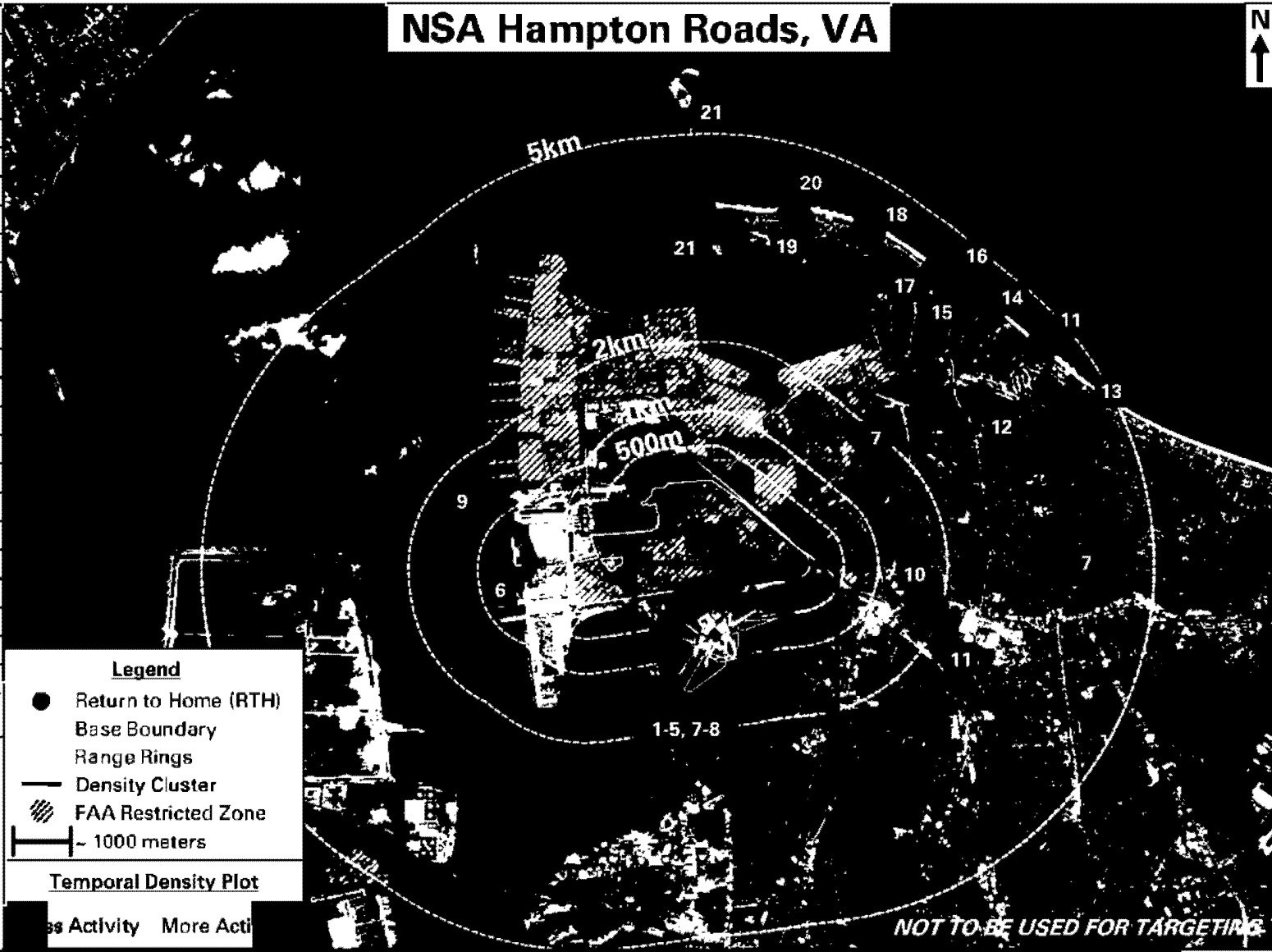
Current System Overview (1 of 2)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 2 SE	6C5AKCL00101G3	2	143	00:21:38
2	DJI Mini 2 SE	KCPML2L444	2	363	00:10:10
3	U/I DJI UAS	F8PJC248F0006D	10	178	00:10:25
4	DJI Mini 2 SE	F6CDA2384ML263	39	446	03:32:43
5	DJI Mavic 2 Pro	163CHAJR0A50FG	1	286	00:03:15
6	DJI Inspire 2	095XGCD00200HE	2	278	00:05:17
7	DJI Mavic 2 Pro	1637L83001V0J9	3	482	00:05:03
8	DJI Mini 3	687AL3Q00103FF	1	193	00:00:14
9	U/I DJI UAS	F8PJC248900065	1	57	00:00:01
10	DJI Mini 2 SE	6C5ALA3001057M	1	234	00:01:51
11	DJI Mini 2	3NZCJAR0341FEL	2	194	00:03:01
12	DJI Mini 3	F5YHA241S03140	1	225	00:00:01
13	DJI Mavic Air 2	3N3BH7F00203QW	1	197	00:04:27
14	DJI Mini 3	F5YHC22B30021E	3	363	00:00:56
15	DJI Mini 3	F5YHX23610021Y	2	127	00:08:05
16	DJI Mini 2	5FSCK1701125WX	1	129	00:00:01
17	DJI Mavic Air 2	3N3BJBJ01203AN	2	220	00:00:28
18	DJI Mini 3	F5YH724AGM01R3	1	117	00:05:26
19	U/I DJI UAS	F8PJ4247C001N0	1	559	00:00:09
20	DJI Mini 2 SE	F6CD7242K00SH0	2	99	00:00:05
21	DJI Air 2S	3YTBJ94003005W	2	249	00:03:32

- S/N with night detections | Red font - S/N previously detected | - exceed
FAA altitude allowance



CUI



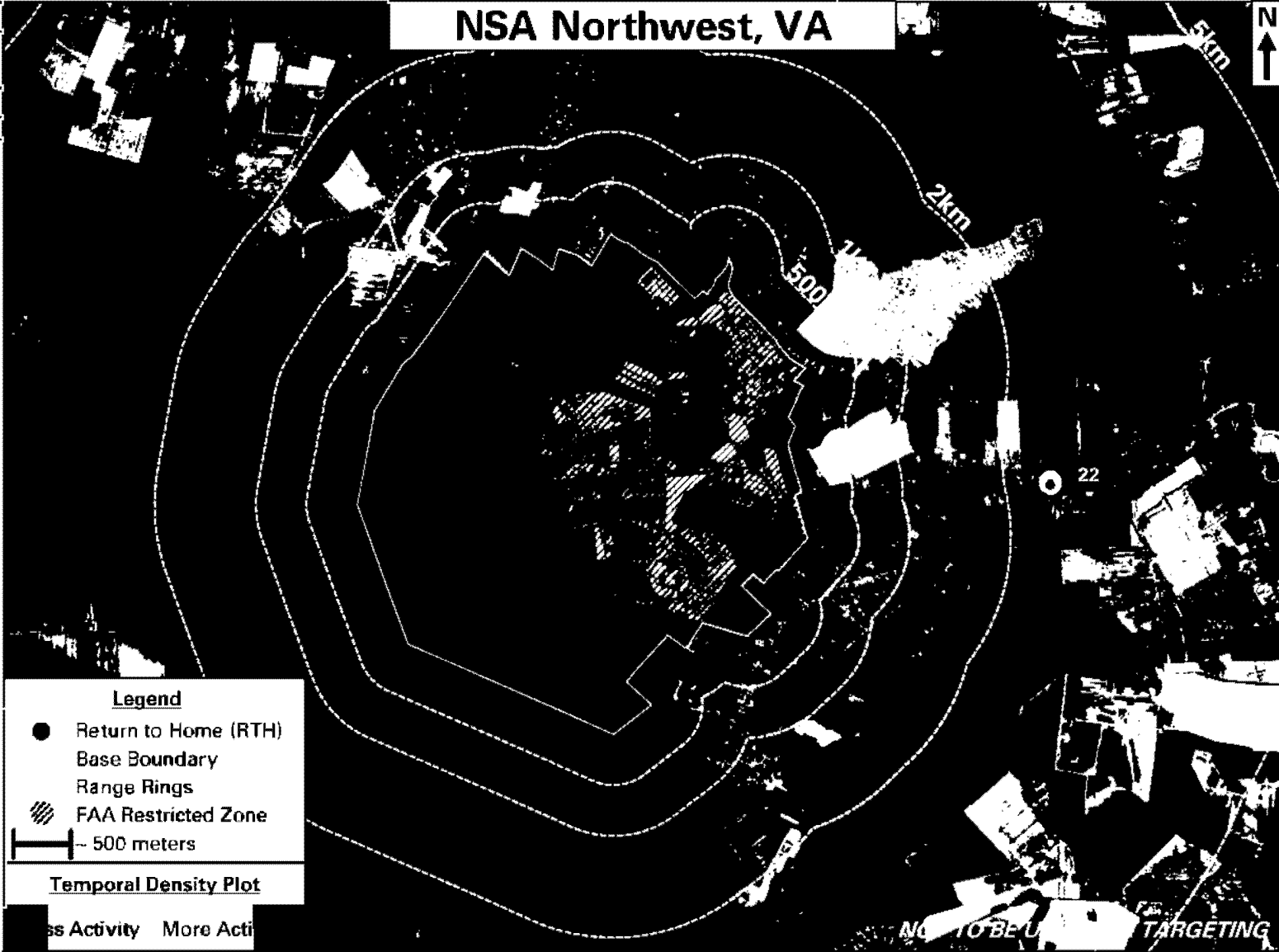
—CUI—

Current System Overview (2 of 2)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Event	Max AGL (ft)	Total Duration
22	DJI Mini 2 SE	6C5AL3X0010E0P	1	408	00:00:01
Red font – S/N previously detected – exceed FAA altitude allowance					



—CUI—



December 01, 2024 – December 31, 2024

Track History

Entire Slide is CUI

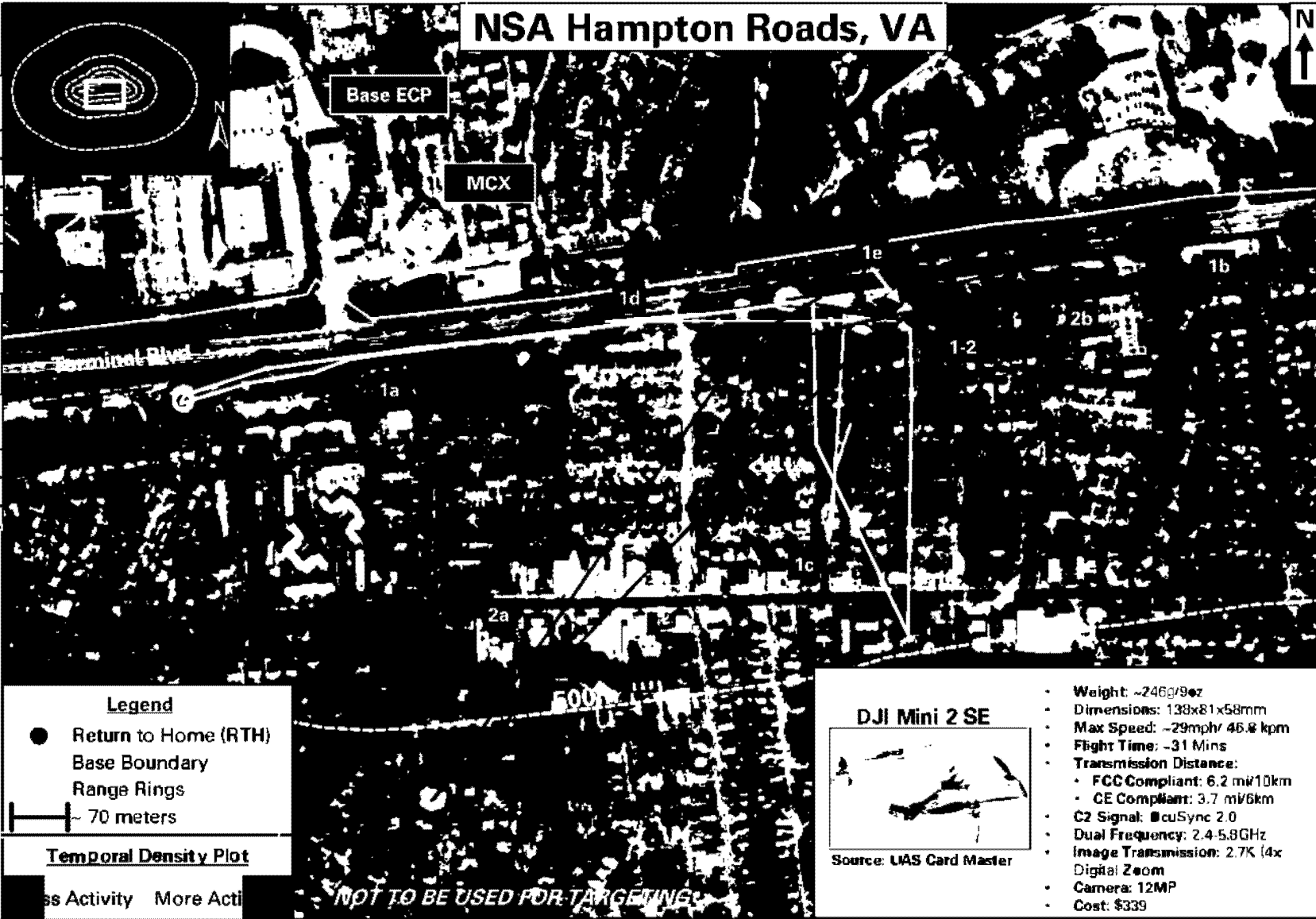
- 1 S/N: 6C5AKCL00101G3, DJI Mini 2 SE
- 5x total events (00:27:58) within 100m

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-09 19:54:14	2024-12-09 20:04:30	00:10:16	143
1b	2024-12-05 15:03:06	2024-12-05 15:14:28	00:11:22	116
1c	2024-11-30 18:47:03	2024-11-30 18:49:15	00:02:12	161
1d	2024-11-29 20:45:18	2024-11-29 20:49:25	00:04:07	80
1e	2024-11-28 19:39:34	2024-11-28 19:39:34	00:00:01	47
– exceed FAA altitude allowance				

- 2 S/N: KCPML2L444, DJI Mini 2 SE
- 2x total events (00:10:10) within 100m

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
2a	2024-12-24 22:08:08	2024-12-24 22:12:48	00:04:40	363
2b	2024-12-21 20:42:58	2024-12-21 20:48:28	00:05:30	167
– exceed FAA altitude allowance				

- S/N:1 was previously detected in the same vicinity as current reporting (1c-e).
- Event 1a was detected flying pass the base ECP and it is feasible that the operator was able to observe ECP operations.
- The RTH for both S/N's originated at the same residence off Lex St. in what appears to be the back yard. At the closest point of approach, the S/N's come within ~34m of the base boundary.





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than April 17, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Support Activity Hampton Roads. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-6)**
2. National Security UAS Flight Restrictions. https://uds-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-6)**
3. Naval Support Activity; PHALANX CONUS Repository; Technical Logs **(Slides 2-6)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 6)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
6. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slides 2-6)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than February 13, 2026.

DTRA PHALANX Activity Report

Naval Station Mayport, FL (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- Altitude Allowance
- S/N: L38ML22J7Z
- Points of Contact
- Sources
- Terminology



—CUI—

Executive Summary

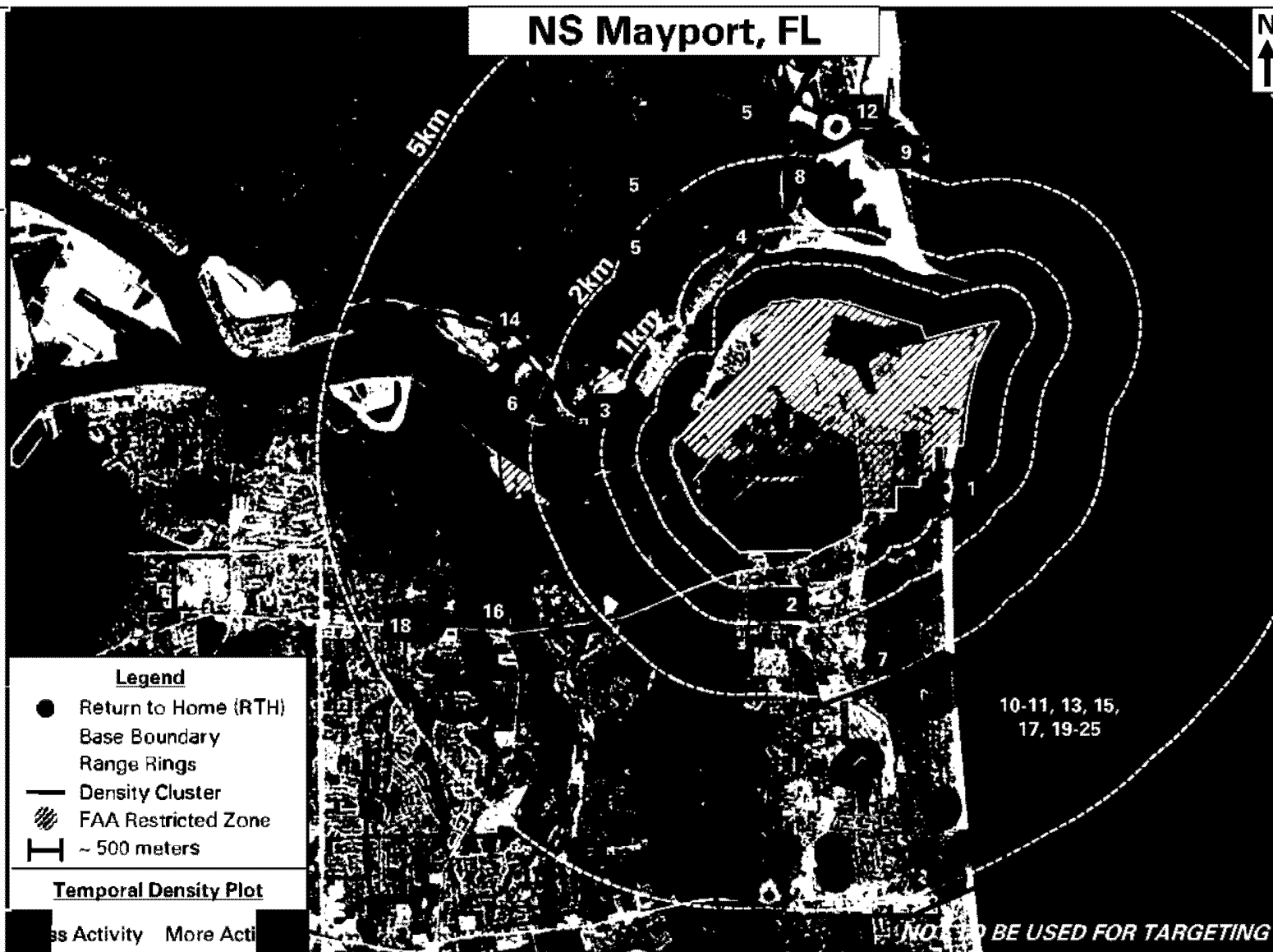
December 01, 2024 – December 31, 2024

Entire Slide is CUI

During the reporting period, (S/N: 1) had 2x events detected within 500m of the base boundary in areas with 0ft AGL ceilings; the closest track ~245m E of the base IVO a recreational area. 21x flights potentially violated FAA ceiling restrictions, of which 2x were night detects. sUAS S/Ns detections decreased 17%, events decreased 11%, and duration decreased 61% within 5km of the base boundary compared to the previous 4-week reporting period (01 – 30 NOV 24, 29x S/Ns, 50x events, 03:51:56 duration).

5km Overview

- 25x S/Ns, 46x events, 01:34:19 duration
- Exceeded altitude allowance: 21x S/Ns (37x events) (S/Ns: 1-8, 10-18, 20-22, 24)
- Night detections: 2x S/Ns (2x events) (S/Ns: 10, 18)
- 10x S/Ns previously detected (S/Ns: 2, 4-6, 11, 13, 17, 19, 24-25)
- (S/Ns: 2, 5, 19, 24) detected IVO the same area as this reporting period
- (S/N: 4) detected ~15km S of JB Charleston, SC (14 JUL 24)
- (S/N: 6) detected IVO the same area this reporting period (26 NOV 24), also detected ~4.4km W of NSB Kings Bay, GA (29 SEP 24)
- (S/N: 11) detected ~30km SW of NS Mayport, FL IVO a residential area (19 NOV 24)
- (S/N: 13) detected ~6.2km S of NS Mayport, FL (25 SEP 24) and ~4.9km N of NAS Jacksonville, FL (24 SEP 24)
- (S/N: 17) detected ~7.4km W of NS Mayport, FL (20 NOV 24) and ~6.7km N of NAS Jacksonville, FL (23 OCT 24)
- (S/N: 25) detected ~23km SW of NS Mayport, FL and within ~7.2km NE from NAS Jacksonville, FL (05 NOV 24)
- (S/N: 1) was also detected ~25km S of MacDill AFB, FL IVO North Sunshine Skyway Fishing Pier during the reporting period on 08 DEC 24
- 13x different platforms and 1x U/I DJI UAS detected (14x rotary-wing)
- Top by total events: DJI Mavic Mini (10x, 22%)
- Top by total duration: DJI Mavic Air 2 (00:26:23, 27%)
- Top by S/N count: DJI Mini 3 Pro (4x, 16%)



—CUI—



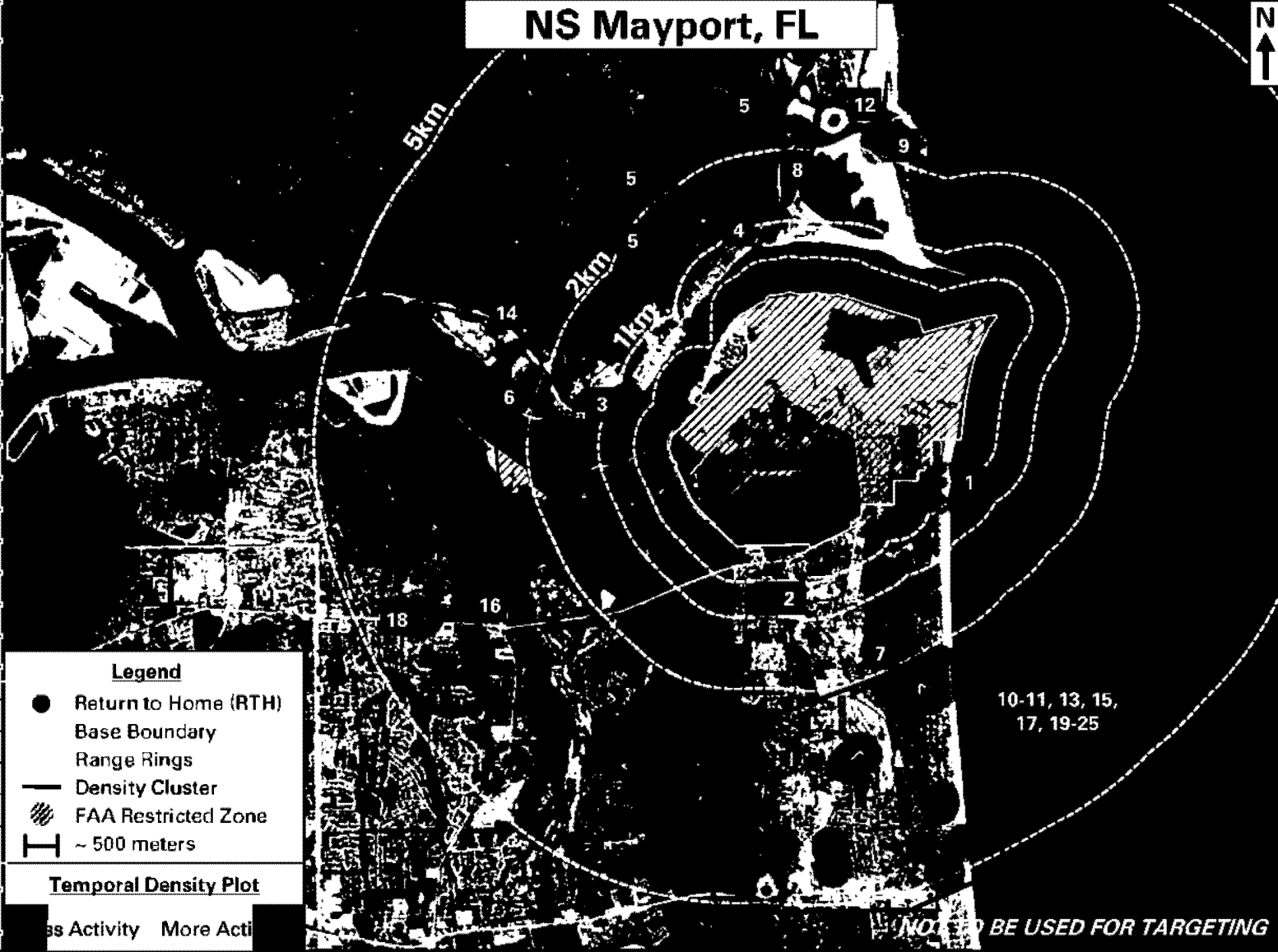
Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 2 SE	L38ML22J7Z	2	239	00:06:23
2	DJI Mini 2	3NZSHCH00403J8	1	232	00:02:58
3	DJI Mini 2	3NZCJCB0443LJD	1	357	00:14:04
4	DJI Mavic 3	F45TB219200C00K4	1	114	00:00:44
5	DJI Mini 3 Pro	F4XF72391M06Q3TF	5	105	00:01:12
6	DJI Air 2S	3YT7L2H00388CD	3	554	00:01:51
7	DJI Mini 3	F5YHX24A5002DW21	1	101	00:03:59
8	DJI Mavic Air 2	3N33J6T002M130	1	229	00:14:58
9	DJI Mini 3 Pro	F4XF723BEM0SS3ZA	1	26	00:00:13
10	DJI Mavic Air 2	3N3BJBL01201G6	1	449	00:10:25
11	DJI Air 3	F6N8C237200315GP	3	278	00:04:26
12	U/I DJI UAS	F8PJC247W0005VJU	1	190	00:10:35
13	DJI Mavic 3	F45TB21BK2AE03X1	1	219	00:00:01
14	DJI Mini 3 Pro	F4XFA235GML8Y4L0	1	91	00:00:01
15	DJI Mini 3 Pro	F4XFA228JML7M025	1	374	00:00:01
16	DJI Mini 3	F5YHA232R0312JZL	2	160	00:00:03
17	DJI Air 3	F6N8C237M00326LB	1	252	00:00:17
18	DJI Mavic Pro	08RDE5R00104V5	2	252	00:01:50
19	DJI Mini SE	4AECJAK0021N0U	1	239	00:00:17
20	DJI Mini 4 Pro	F6Z9C238H0032Q8D	1	357	00:01:09
21	U/I DJI UAS	F8PJC247W0005V3Q	2	377	00:01:38
22	DJI Mavic Mini	1SDCH8W016CYUD	10	895	00:16:16
23	DJI Mini 2	3NZCJA70147QJW	1	226	00:00:01
24	DJI Mini 2 SE	F6CDA243BML237Q2	1	324	00:00:16
25	DJI Air 3	F6N8A2388003S74J	1	121	00:00:41

- S/N with night detections | Red font - S/N previously detected | - exceed FAA altitude allowance



Temporal Density Plot

Less Activity More Active

NOT TO BE USED FOR TARGETING

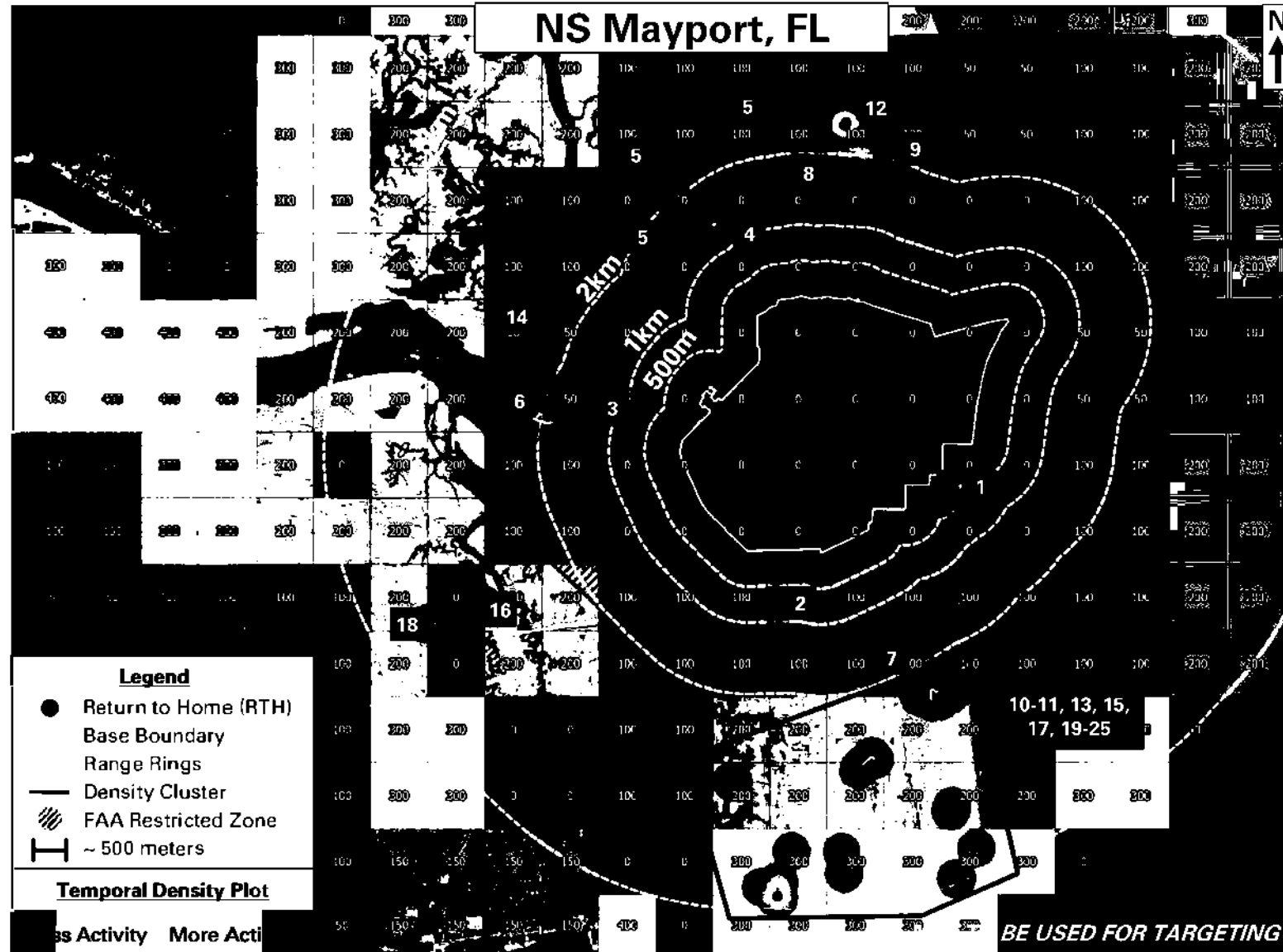


December 01, 2024 – December 31, 2024

Altitude Allowance

Entire Slide is CUI

- Requests to operate within controlled airspace must be requested via the Low Altitude Authorization and Notification Capability (LAANC)
- Only Part 107 (licensed) operators may request to operate above the designated altitude ceilings up to 400ft AGL (see graphic)
- Activity occurred in areas with ceilings ranging from 0 – 300ft AGL
- 84% of all S/Ns and 80% of total events exceeded altitude ceilings
 - 21x S/Ns, 37x events (S/Ns: 1-8, 10-18, 20-22, 24)



CUI



December 01, 2024 – December 31, 2024

~~CUI~~
S/N: L38ML22J7Z

Entire Slide is ~~CUI~~

- 1 S/N: L38ML22J7Z, DJI Mini 2 SE
- 2x total events (00:06:23) within 5km
 - 2x events (1a-1b) within 500m (00:06:23)

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-02 19:01:23	2024-12-02 19:05:10	00:03:47	203
1b	2024-12-02 18:48:39	2024-12-02 18:51:15	00:02:36	239

– exceed FAA altitude allowance

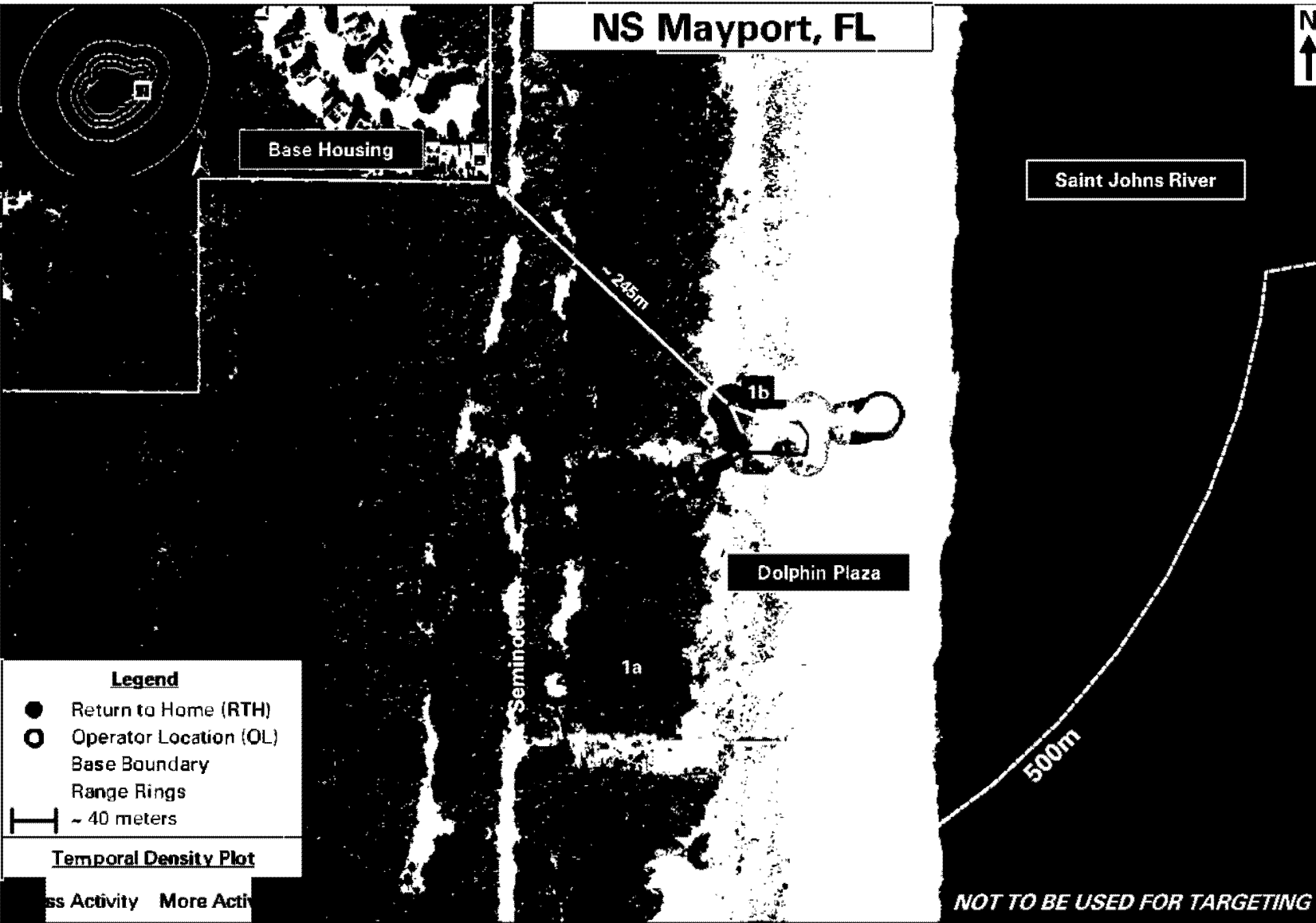
- Events (1a-1b) operated E of the base boundary primarily IVO wooded and beach areas near the Dolphin Plaza recreational area and between Seminole Rd and the Saint Johns River. Due to activity and location, this activity appears recreational in nature.
- DJI Mini 2 SE has no nighttime capabilities and considered a hobbyist sUAS.
- (S/N: 1) was also detected ~25km S of MacDill AFB, FL IVO North Sunshine Skyway Fishing Pier during the reporting period on 08 DEC 24

DJI Mini 2 SE



Source: UAS Card Master

- Weight: ~246g/9oz
- Dimensions: 138x81x59mm
- Max Speed: ~29mph/ 46.8kph
- Flight Time: ~31 Mins
- Transmission Distance:
 - FCC Compliant: 6.2 mi/10km
 - CE Compliant: 3.7 mi/6km
- C2 Signal: OcuSync 2.0
- Dual Frequency: 2.4/5.8GHz
- Image Transmission: 2.7K
- Camera: 12MP/34x Digital Zoom
- Cost: \$339





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than February 13, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Station (NS) Mayport. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-5)**
2. National Security UAS Flight Restrictions. https://dds-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-5)**
3. NS Mayport; PHALANX CONUS Repository; Technical Logs **(Slides 2-5)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 5)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
6. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slides 2-5)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than September 17, 2025.

DTRA PHALANX Activity Report

Naval Station Norfolk, VA (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

CUI

CUI

Agenda

- Executive Summary
- Current System Overview
- Points of Contact
- Sources
- Terminology



CUI

Executive Summary

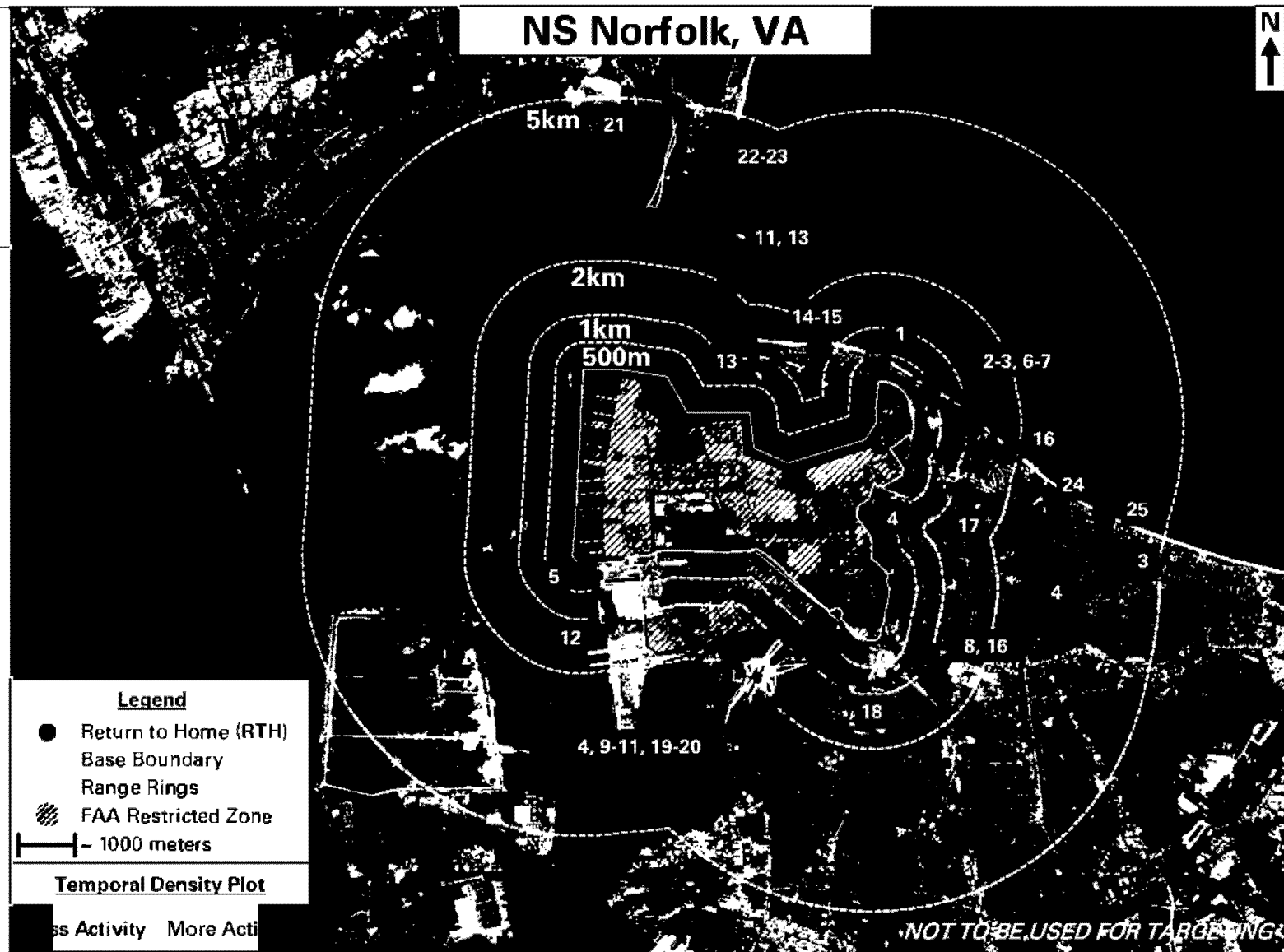
December 01, 2024 – December 31, 2024

Entire Slide is CUI

During the reporting period, 5x S/Ns were observed within 500m of the base. S/Ns: 1-3 were observed at a public beach and S/N: 4 was active over residential areas and was likely recreational in nature. S/N: 5 operated briefly over a known commercial port and was likely either recreational or commercial in nature. sUAS S/N detections decreased 29%, events decreased 26%, and duration decreased 24% within 5km of the base boundary compared to the previous 4-week reporting period (01 – 30 NOV 24, 34x S/Ns, 120x events, 06:44:25 duration).

5km Overview

- 25x S/Ns, 92x events, 05:18:36 duration
 - Exceeded altitude allowance: 23x S/Ns (86x events) (S/Ns: 1-21, 24-25)
 - Night detections: 2x S/Ns (16x events) (S/Ns: 11, 19)
- 12x S/Ns previously detected (S/Ns: 8-9, 12-13, 15-16, 18-21, 24-25)
 - (S/N: 8) was previously observed inside the base boundary on 01 JAN 24 IVO a residential area.
 - (S/Ns: 8, 12, 18, 20) were detected IVO Norfolk NSY, (S/N: 8) was detected as early as 17 APR 24.
 - (S/N: 12) was detected IVO NSF Dahlgren (06 NOV 24).
 - (S/Ns: 13, 24-25) were detected IVO JB Langley-Eustis, (S/N: 25) was detected as early as 17 SEP 23.
 - (S/Ns: 18, 24) were detected IVO Little Creek-Ft Story (30 JUL 24, 16 JUL 24) respectively.
 - (S/N: 20) was detected IVO NWS Yorktown (27 JUN 24).
 - (S/N: 24) was detected IVO NAS Oceana (27 AUG 24).
- (S/N: 20) was also detected in a residential area ~2.6km N of NAS Oceana during this reporting period (05 DEC 24).
- 7x different platforms, 4x U/I DJI UAS detected (11x rotary-wing)
 - Top by total events: DJI Mini 2 SE (46x, 50%)
 - Top by total duration: DJI Mini 2 SE (04:06:27, 77%)
 - Top by S/N count: DJI Mini 3 (7x, 28%)



CUI



—CUI—

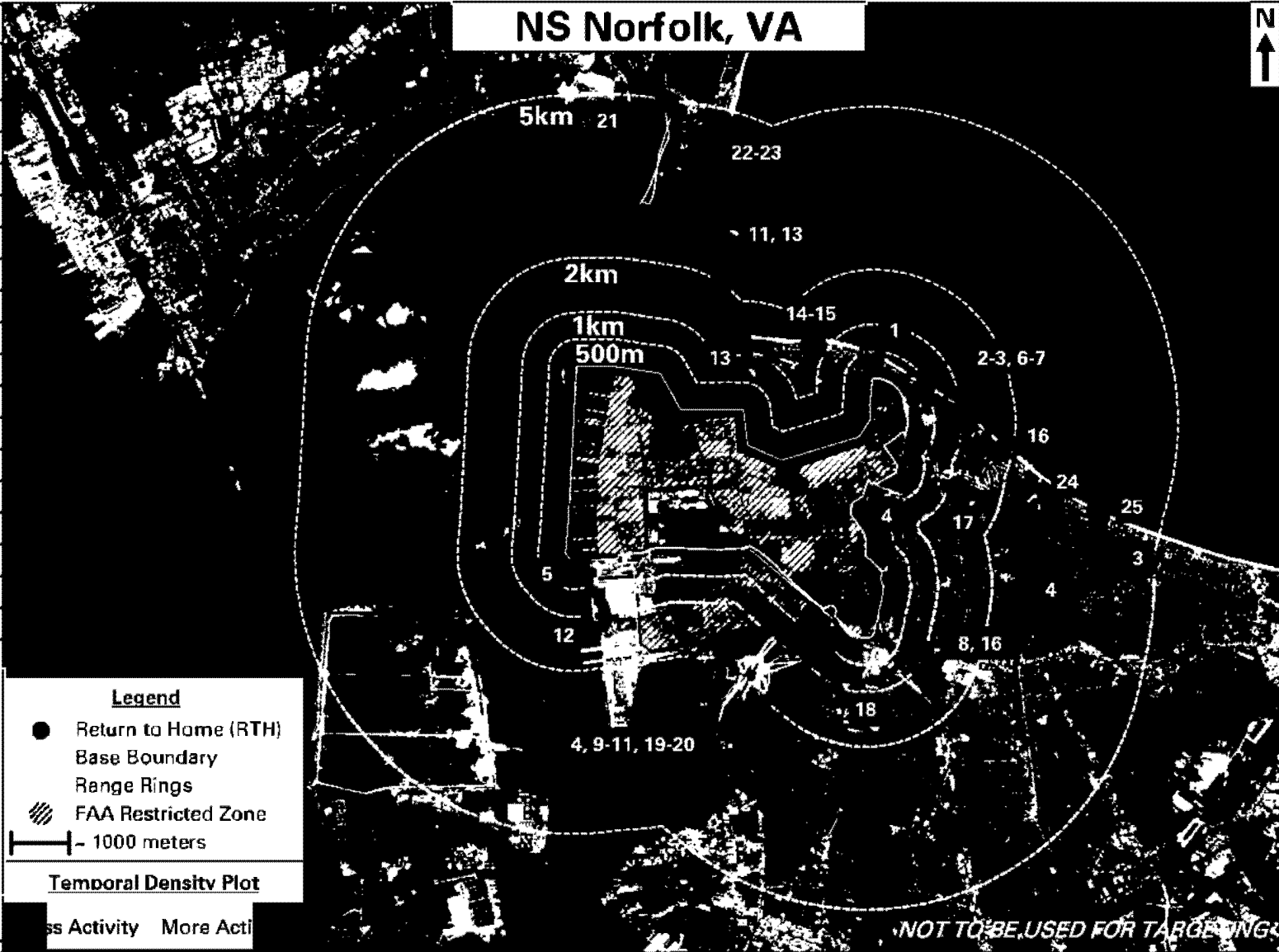
Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide Is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 3	F5YH724AGM01R3	1	117	00:05:26
2	DJI Mavic Air 2	3N3BJBJ01203AN	2	220	00:00:28
3	DJI Mini 3	F5YHC22B30021E	4	363	00:00:57
4	DJI Mavic 2 Pro	1637L83001V0J9	3	482	00:05:03
5	U/I DJI UAS	F8PJC248900065	1	57	00:00:01
6	DJI Mini 3	F5YHX23610021Y	2	127	00:08:05
7	DJI Mini 2	5F5CK1701125WX	1	129	00:00:01
8	DJI Mini 2 SE	6C5ALA3001057M	1	234	00:01:51
9	DJI Mini 2 SE	6C5AKCL00101G3	2	143	00:21:38
10	DJI Mini 2 SE	KCPML2L444	2	363	00:10:10
11	U/I DJI UAS	F8PJC248F0006D	11	178	00:10:28
12	DJI Inspire 2	095XGCD00200HE	2	278	00:05:17
13	DJI Air 2S	3YTBJ94003005W	3	249	00:03:33
14	DJI Mini 2 SE	F6CD7242K00SH0	2	99	00:00:05
15	U/I DJI UAS	F8PJ4247C001N0	1	559	00:00:09
16	DJI Mini 2	3NZCJAR0341FEL	2	194	00:03:01
17	DJI Mini 3	F5YHA241S03140	1	225	00:00:01
18	DJI Mini 3	687AL3Q00103FF	1	193	00:00:14
19	DJI Mini 2 SE	F6CDA2384ML263	39	446	03:32:43
20	DJI Mavic 2 Pro	163CHAJR0A50FG	1	286	00:03:15
21	DJI Mini 3	F5YHA22CH03192	3	255	00:17:54
22	DJI Mini 3	F5YHA23A40310D	3	36	00:02:32
23	U/I DJI UAS	F8PJC248E0006C	2	79	00:01:16
24	DJI Mavic Air 2	3N3BH7F00203QW	1	197	00:04:27
25	DJI Mini 2	3NZCJCP0445BL4	1	190	00:00:01

– S/N with night detections | Red font – S/N previously detected | – exceed
FAA altitude allowance





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than September 17, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Station Norfolk. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-3)**
2. National Security UAS Flight Restrictions. https://dds-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-3)**
3. Naval Station Norfolk; PHALANX CONUS Repository; Technical Logs **(Slides 2-3)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 2-3)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf **(Slide 2-3)**
6. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slides 2-3)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than October 25, 2026.

DTRA PHALANX Activity Report

Naval Weapon Station Earle, NJ (USA)

December 08, 2024 – December 13, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- S/N: 1DADG72001004E
- Points of Contact
- Sources
- Terminology



—CUI—

Executive Summary

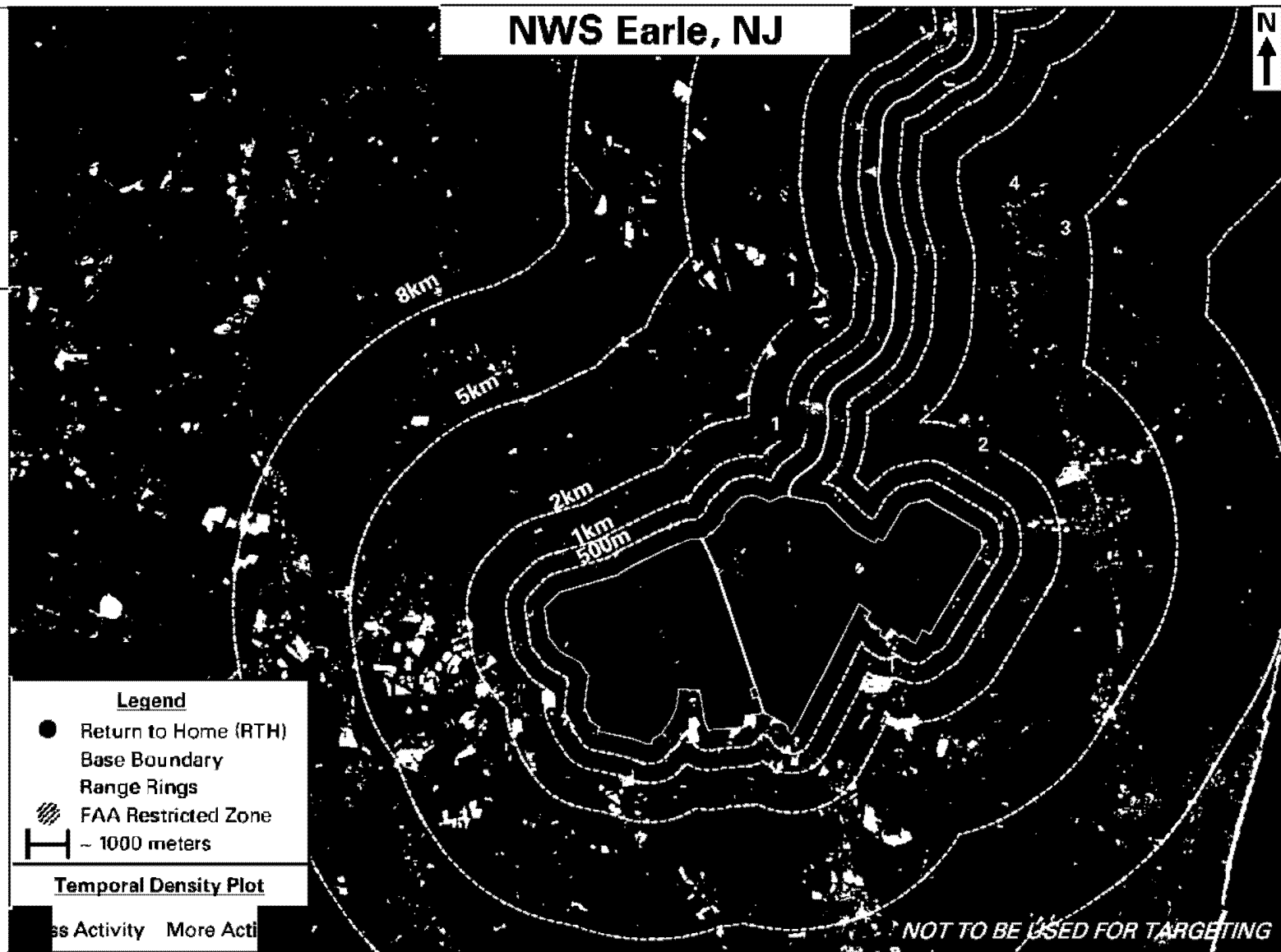
December 08, 2024 – December 13, 2024

Entire Slide is CUI

No events were detected within the base boundary during this period. (S/Ns: 1-4) were all 5km or less N of the base boundary. All S/Ns were detected IVO a community college, recreational park, a museum and 2x residential areas. (S/N: 1) was the most active sUAS with 6x events, 2x of those events were detected at night ~4.95km N of base boundary while 1x event occurred 1.9km N of base boundary IVO the Dorbrook Park. The park is located approximately 900m NW of the Dorbrook Park Model Aircraft Flying Field, directly W and adjacent to the base's railway corridor. (S/N: 1) is a DJI Matrice 200 V2 which can be outfitted with various external nighttime capable cameras (i.e., thermal, night vision, laser range finder).

8km Overview

- 4x S/Ns, 9x events, 00:17:50 duration
 - Exceeded altitude allowance: 1x S/N (1x event) (S/N: 1)
 - Night detections: 1x S/N (2x events) (S/N: 1)
 - (S/N: 1) can be equipped with various cameras offering a range of capabilities not limited to night vision, infrared, spotlights, or a thermal capable camera for use during nighttime flights.
 - (S/Ns: 2-4) are not equipped with nighttime capable cameras, but (S/N: 4) has night mode - a software-based program meant to enhance existing ambient light under extreme low-light conditions.
- 3x S/Ns previously detected (S/Ns: 1-2, 4)
 - (S/N: 1) was previously detected ~9.55km N/NW of Naval Weapons Station Earle IVO a parking lot of a shopping center on (01 DEC 24).
 - (S/N: 2) was previously detected ~1.8km N of Naval Weapons Station Earle IVO a recycling center on (25 OCT 24).
 - (S/N: 4) was previously detected ~5.25km N of Naval Weapons Station Earle IVO two residential areas on (04 DEC 24).
- 4x different platforms detected (4x rotary-wing)
 - Top by total events: DJI Matrice 200 V2 (6x, 67%)
 - Top by total duration: DJI Matrice 200 V2 (00:15:52, 89%)
 - Top by S/N count: All platforms (1x, 25%) each



—CUI—



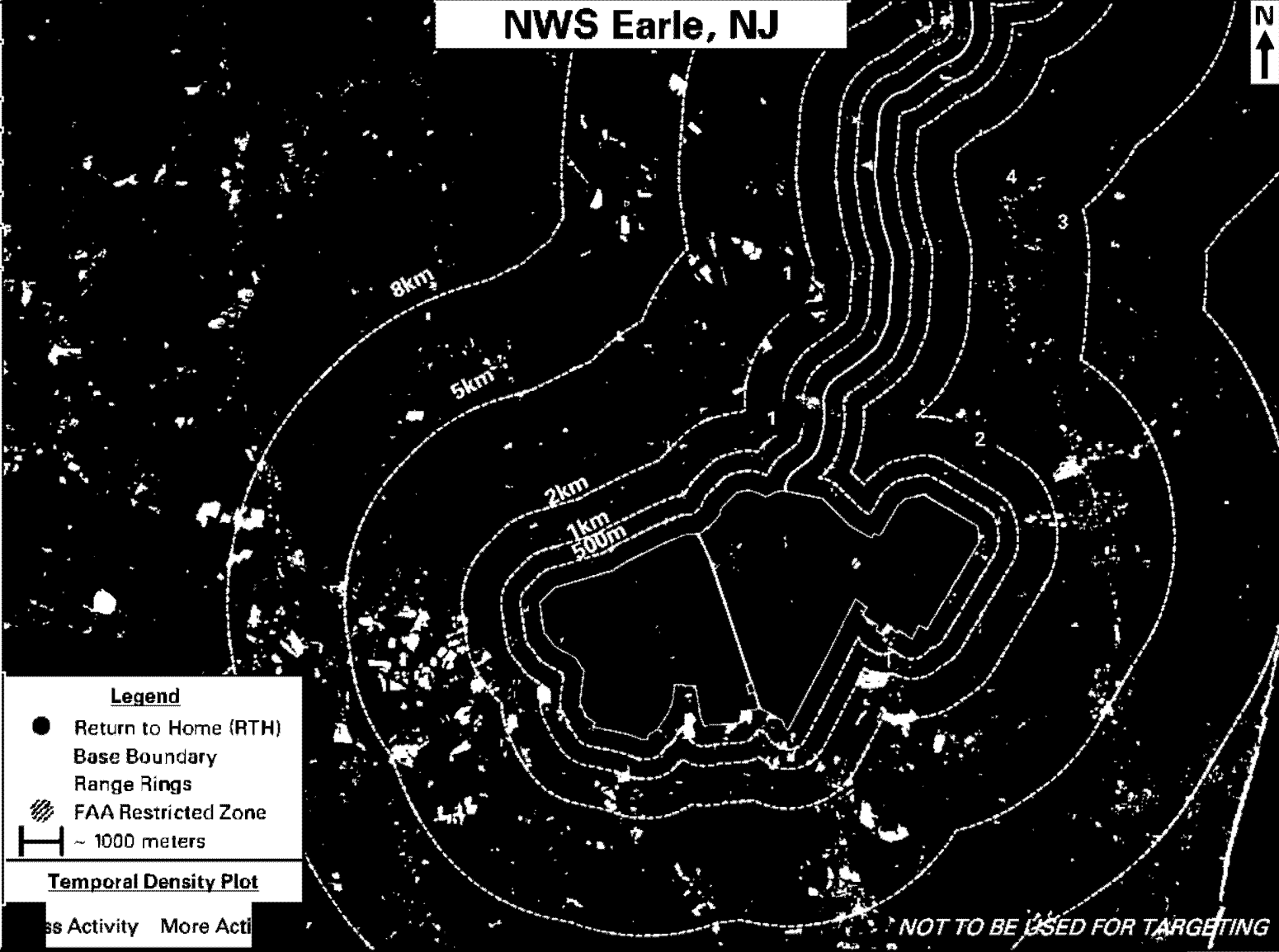
CUI

Current System Overview

December 08, 2024 – December 13, 2024

Entire Slide is CUI

Active within 8km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Matrice 200 V2	1DADG72001004E	6	474	00:15:52
2	DJI Mavic 2 Pro	163CHBJR0A61HH	1	267	00:01:50
3	DJI Mini 2 SE	6C5AL3X0010EN5	1	369	00:00:03
4	DJI Mavic 3	F45TB21AU1AE0129	1	221	00:00:05
- S/N with night detections Red font - S/N previously detected - exceed FAA altitude allowance					



CUI



~~CUI~~

S/N: 1DADG72001004E

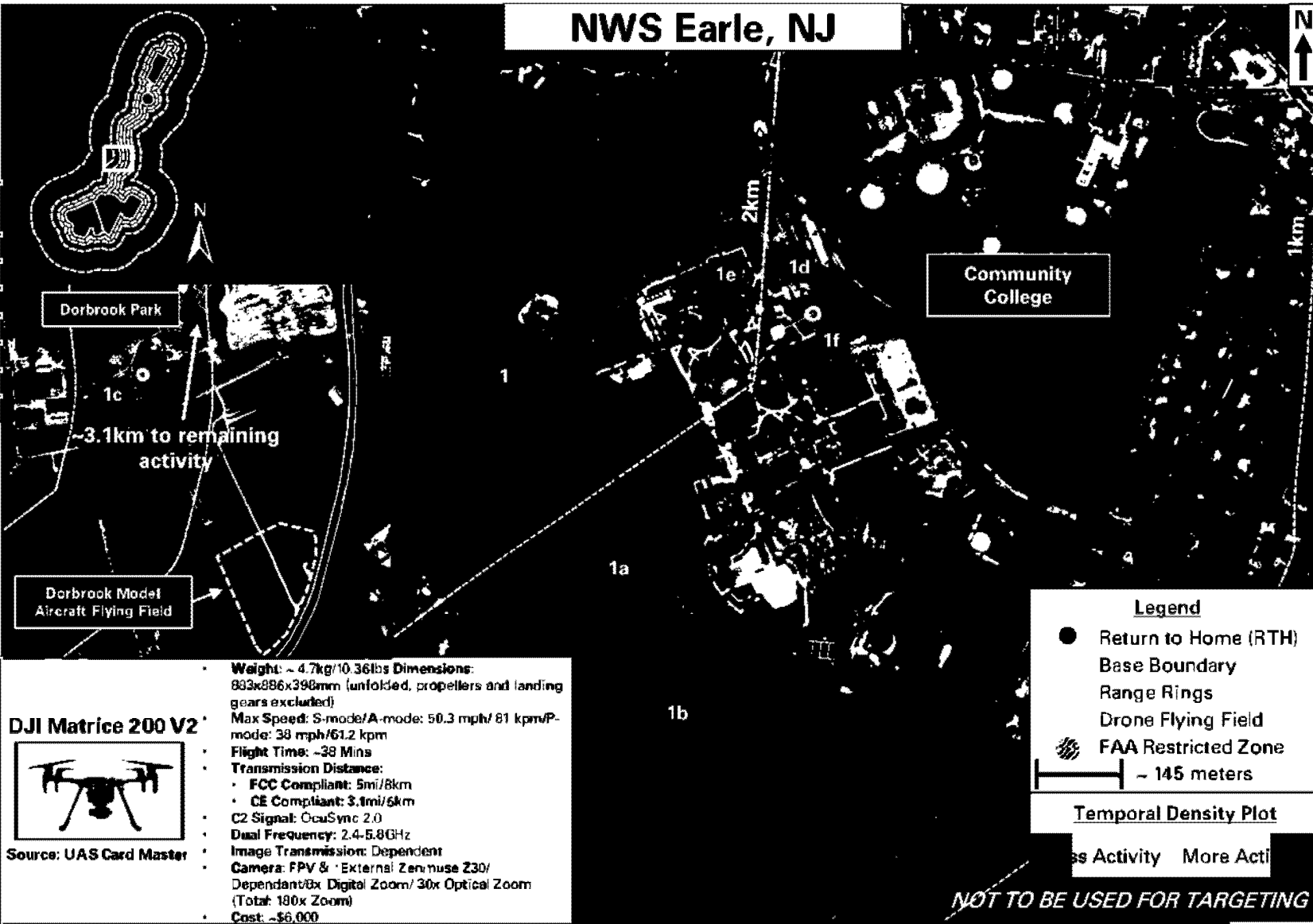
December 08, 2024 – December 13, 2024

Entire Slide is ~~CUI~~

- 1** S/N: 1DADG72001004E, DJI Matrice 200 V2
- 6x total events (00:15:52) within 8km
 - 1x event (1c) ~1.9km N of base, ~3.1km S of other events, ~900m NW of the Dorbrook Model Aircraft Flying Field, and ~975m W of the base's rail corridor. (00:00:01)
 - 5x events (1a, 1b, 1d-1f) ~4.95km N of base and 1.5km W of rail

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-11 00:41:36	2024-12-11 00:53:08	00:11:32	306
1b	2024-12-11 00:26:38	2024-12-11 00:27:06	00:00:28	224
1c	2024-12-09 14:52:00	2024-12-09 14:52:00	00:00:01	474
1d	2024-12-08 17:55:19	2024-12-08 17:55:33	00:00:14	303
1e	2024-12-08 17:51:19	2024-12-08 17:51:30	00:00:11	273
1f	2024-12-08 17:33:24	2024-12-08 17:36:50	00:03:26	306

- S/N with night detections | - exceed FAA altitude allowance
- Events (1a, 1b, 1d-1f) detected IVO a community college of which 2x events occurred at night-time, between 1926 to 1953 local time, ~4.95km N of base boundary. No OPLOCs were detected.
- DJ Matrice 200 V2 comes equipped with Anti Collision, Obstacle Avoidance and DJI Air Sense receiver (ADS). Air Sense uses "Automatic Dependent Surveillance-Broadcast" system which enhances airspace safety automatically providing the operator with real-time information about nearby airplanes and helicopters.
- Additionally, this platform can be operated using either First-Person View (FPV) goggles or any standard laptop, cellphone/tablet. DJI Matrice 200 V2 can be equipped with an optional external camera, commonly the Zenmuse series which offers an array of capabilities to include increased Camera Zoom, Night Vision, Thermal, Lidar, and Laser Range Finder.
- (S/N: 1) was previously detected in the parking lot of a shopping center ~9.55km NNW of NWS Earle (01 DEC 24).





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than October 25, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Weapon Station Earle. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-4)**
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-4)**
3. Naval Weapon Station Earle; PHALANX CONUS Repository; Technical Logs **(Slides 2-4)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 4)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf **(Slides 2-4)**
6. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slides 2-4)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than October 25, 2026.

DTRA PHALANX Activity Report

Naval Weapon Station Earle, NJ (USA)

December 10, 2024 – December 13, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Points of Contact
- Sources
- Terminology



—CUI—

Executive Summary

December 10, 2024 – December 13, 2024

Entire Slide is CUI

4x total S/Ns were identified during the reporting period with no recorded events within 1km of base boundary. (S/N: 1) was observed over Dorbrook Park and the Dorbrook Model Aircraft Flying Field. (S/Ns: 2-4) were observed over residential areas likely conducting recreational activity.

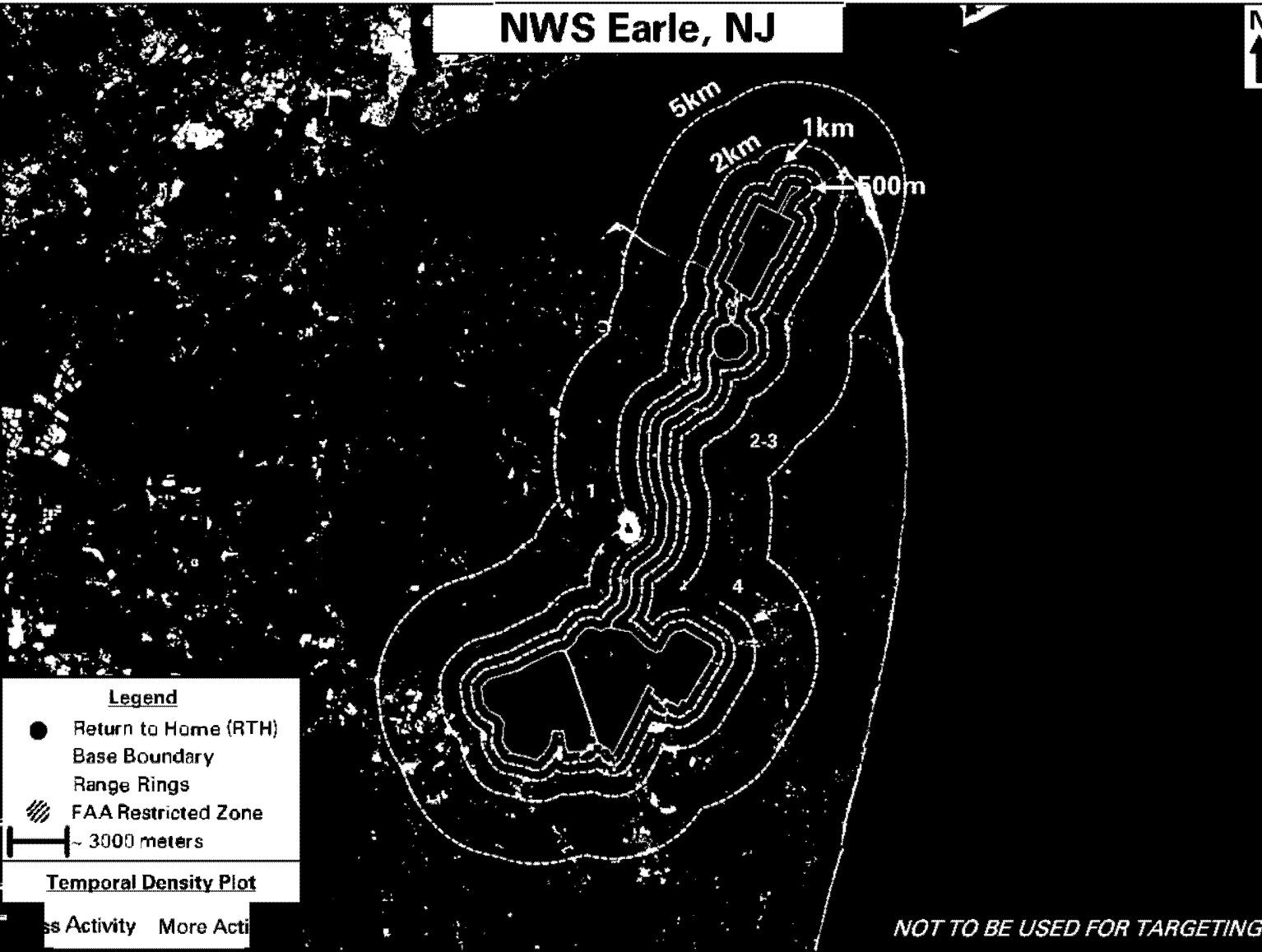
5km Overview

- 4x S/Ns, 5x events, 00:13:58 duration
 - Night detections: 1x S/N (2x events) (S/N: 1)
- 3x S/Ns previously detected (S/Ns: 1-2, 4)
 - (S/N: 1) Platform continued activity over known recreational areas.
 - (S/Ns: 2, 4) were observed conducting similar activity over residential areas.
- 4x different platforms detected (4x rotary-wing)
 - Top by total events: DJI Matrice 200 V2 (2x, 40%)
 - Top by total duration: DJI Matrice 200 V2 (00:12:00, 86%)
 - Top by S/N count: All S/Ns accounted for a different platform (1x, 25% each)

Active within 5km

#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Matrice 200 V2	1DADG72001004E	2	306	00:12:00
2	DJI Mavic 3	F45TB21AU1AE0129	1	221	00:00:05
3	DJI Mini 2 SE	6C5AL3X0010EN5	1	369	00:00:03
4	DJI Mavic 2 Pro	163CHBJR0A61HH	1	267	00:01:50

– S/N with night detection(s) | Red font – S/N previously detected



—CUI—



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimpx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than October 25, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Weapon Station Earle. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 2)**
2. Naval Weapon Station Earle; PHALANX CONUS Repository; Technical Logs **(Slide 2)**
3. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than March 01, 2026.

DTRA PHALANX Activity Report

Naval Weapon Station Earle, NJ (USA)

December 12, 2024 – December 14, 2024



This brief is classified up to

~~CUI~~~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- Activity Cluster
- Points of Contact
- Sources
- Terminology

Component: Defense Threat Reduction Agency
Controlled by: DTRA OI (Phalanx)
CUI Categories: LCOMM
Distribution: (S)
POC: (S)



CUI

Executive Summary

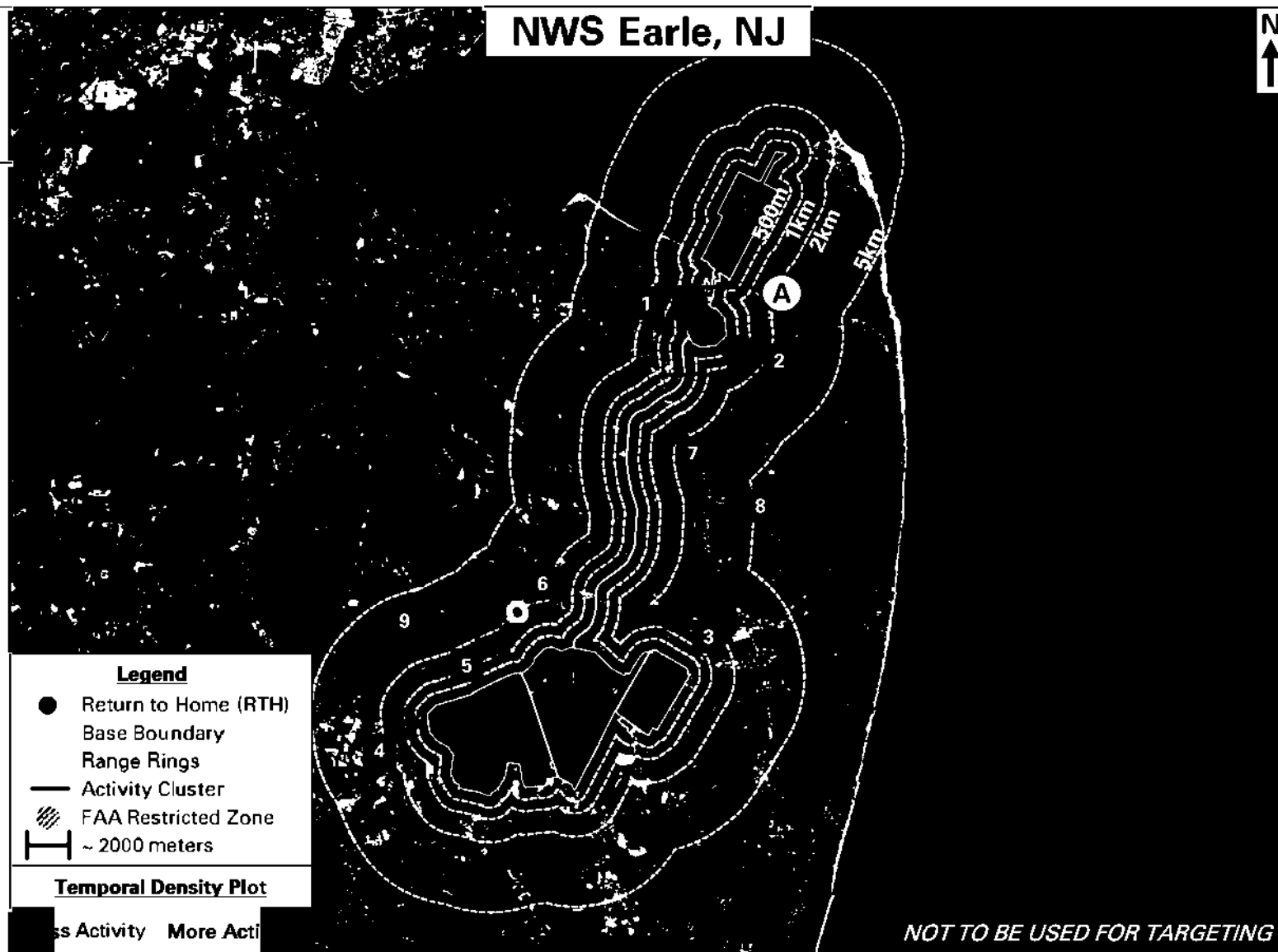
December 12, 2024 – December 14, 2024

Entire Slide is CUI

During this 3-day reporting period, 16x events were detected with 3x of the events not revealing geolocational data. (S/N: 1) operated within 35m, of the base over a residential area but potentially could have observed activity along the rail line connecting to the northern pier. All other detects occurred beyond 500m of the boundary.

5km Overview

- 10x S/Ns, 16x events, 00:57:02 duration
 - Geolocated Detects: 9x S/Ns, 13x events, 00:52:19 (S/Ns: 1-9)
 - Non-Geolocated Detects: 2x S/Ns, 3x events, 00:04:43 (S/Ns: 5, 10)
 - Exceeded altitude allowance: 3x S/Ns (4x events) (S/Ns: 4-6)
 - Night detections: 5x S/Ns (5x events) (S/Ns: 2, 4, 6, 9-10)
- 5x S/Ns previously detected (S/Ns: 2-4, 7, 10)
 - (S/N: 2) Previously detected over Cliffwood Beach ~14km east of the current detect over 03MAR24.
 - (S/N: 3-4) Previously detected within the same location as current detects. (25OCT24 and 25JUL24)
 - (S/N: 7) Previously detected at various locations around the base over residential areas with the closest detect ~1.1km east of the base rail line. Most recent detect on 04DEC24.
 - (S/N: 10) Previously detected at various locations on the western side of the base. The closest detect occurred over an open field within 50m of the rail line, ~3km east of (S/N: 6) current location
- 8x different platforms detected (8x rotary-wing)
 - Top by total events: DJI Mini 3 (4x, 25%)
 - Top by total duration: DJI Mini 3 (00:29:05, 51%)
 - Top by S/N count: DJI Mini 2 SE and DJI Mavic 3 (2x each, 20% each)



CUI



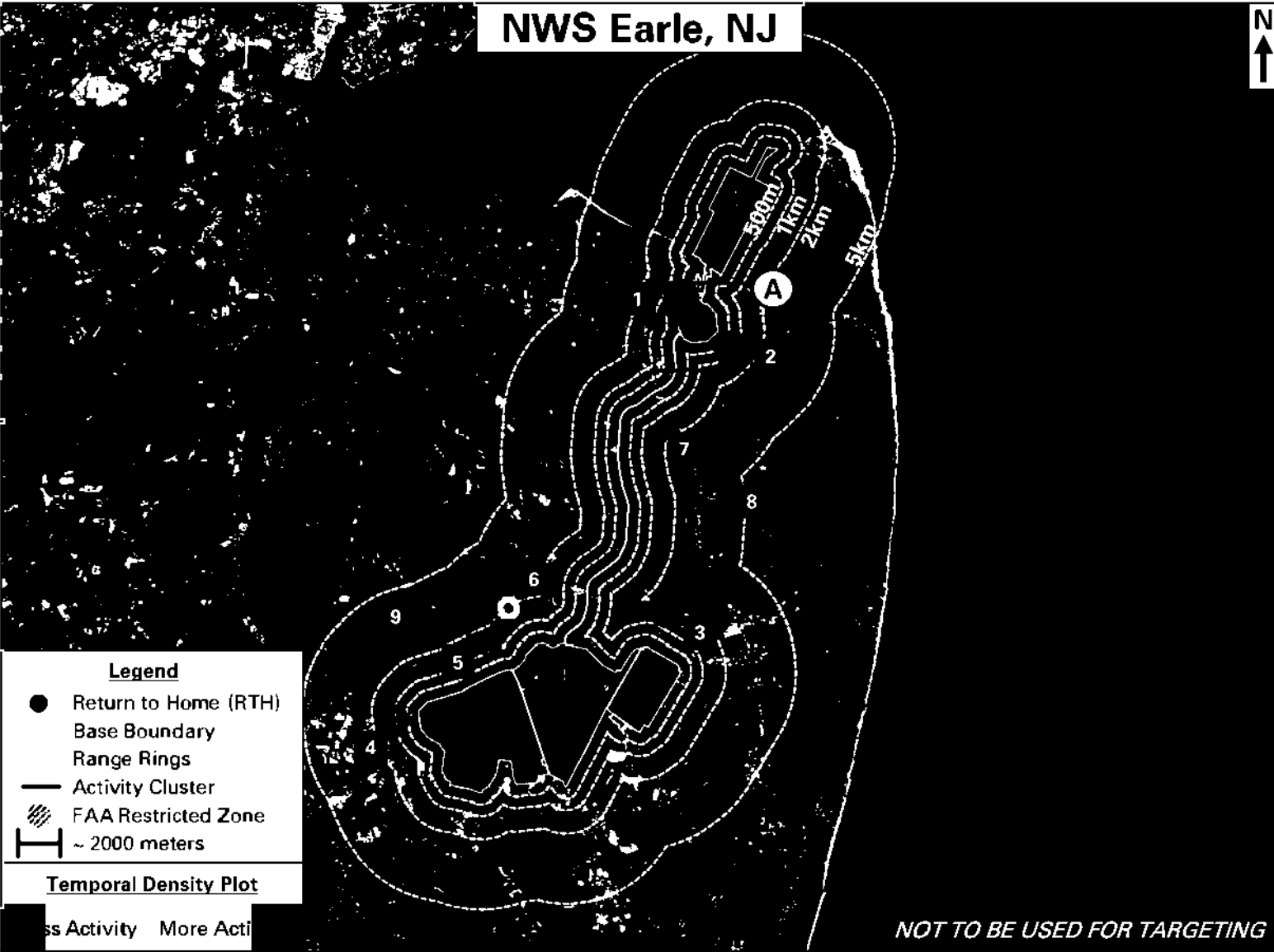
Current System Overview

December 12, 2024 – December 14, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mavic 3	F45T7239S00EQ029	2	296	00:00:02
2	DJI FPV	37QBJ6FBD1049U	1	247	00:01:29
3	DJI Mavic 2 Pro	163CHBJR0A61HH	2	274	00:11:25
4	DJI Mini 2 SE	F6CDA236LML2FPTV	1	444	00:00:49
5	DJI Mini 3	F5YHX24BG002GBHJ	4	464	00:29:05
6	DJI Phantom 3	03Z0449705	1	579	00:08:26
7	DJI Mavic 3	F45TB21AU1AE0129	1	221	00:00:05
8	DJI Mini 2 SE	6C5AL3X0010EN5	1	372	00:00:03
9	DJI Mini SE	4AEAK3E0020186	1	332	00:02:15
10	DJI Matrice 200 V2	1DADG64001007S	2	N/A	00:03:23
- S/N with night detection(s) Red font - S/N previously detected - exceed FAA altitude allowance					

Non-Geolocated Events
(S/N: 5) – 1x event (00:01:20)
(S/N: 10) – 2x events (00:03:23) No geo-located data available





December 12, 2024 – December 14, 2024

Activity Cluster

Entire Slide is CUI

- 2x S/Ns were detected within 500m of the base boundary .
(S/N: 1) detected two events over a residential area within 35m of the base, each event with a one second detect
- (S/N: 2) operated ~960m SE of the base over a house.

- 1 S/N: F45T7239S00EQ029, DJI Mavic 3
- 2x total events (00:00:02) within 500m

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-13 16:48:59	2024-12-13 16:48:59	00:00:01	211
1b	2024-12-13 16:45:01	2024-12-13 16:45:01	00:00:01	296

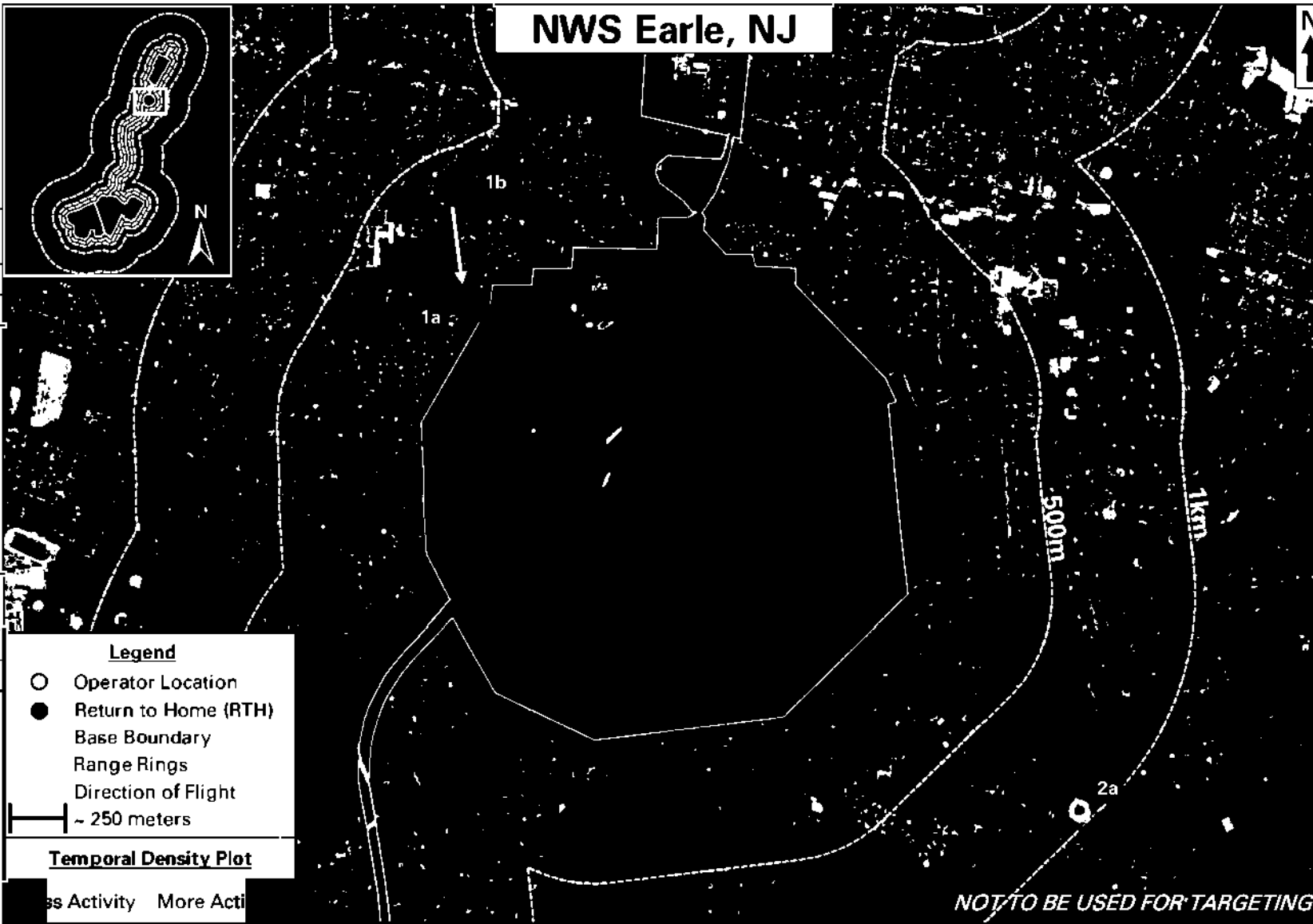
- (S/N: 1) operated NW of the base over a residential area with a likely flight path toward the installation boundary. At the altitude and location, the sUAS could have observed the RV parking lot and activity along the rail line leading to the northern pier.

- 2 S/N: 37QBJ6FBD1049U, DJI FPV
- 1x total event (00:01:29) within 1km

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
2a	2024-12-13 23:08:02	2024-12-13 23:09:31	00:01:29	247

- S/N with night detection

- (S/N: 2) operated over a residential house ~960m SE of the installation. The sUAS remained over within the immediate vicinity of the house.
- (S/N: 2) was previously detected ~14km east of the base near Cliffwood Beach on 01MAR24.





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimpx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than March 01, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Weapon Station Earle. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-4)**
2. National Security UAS Flight Restrictions. https://dds-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-4)**
3. Naval Weapon Station Earle; PHALANX CONUS Repository; Technical Logs **(Slides 2-4)**
4. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than November 11, 2025.

DTRA PHALANX Activity Report

Naval Weapon Station (NWS) Yorktown, VA (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- Altitude Allowance
- S/N: 5FSAK9P0060CR6
- Points of Contact
- Sources
- Terminology

Component: Defense Threat Reduction Agency
Controlled by: DTRA OI (Phalanx)
CUI Categories: LCOMM
Distribution / Dissemination Control: N/A
POC: (S)



Executive Summary

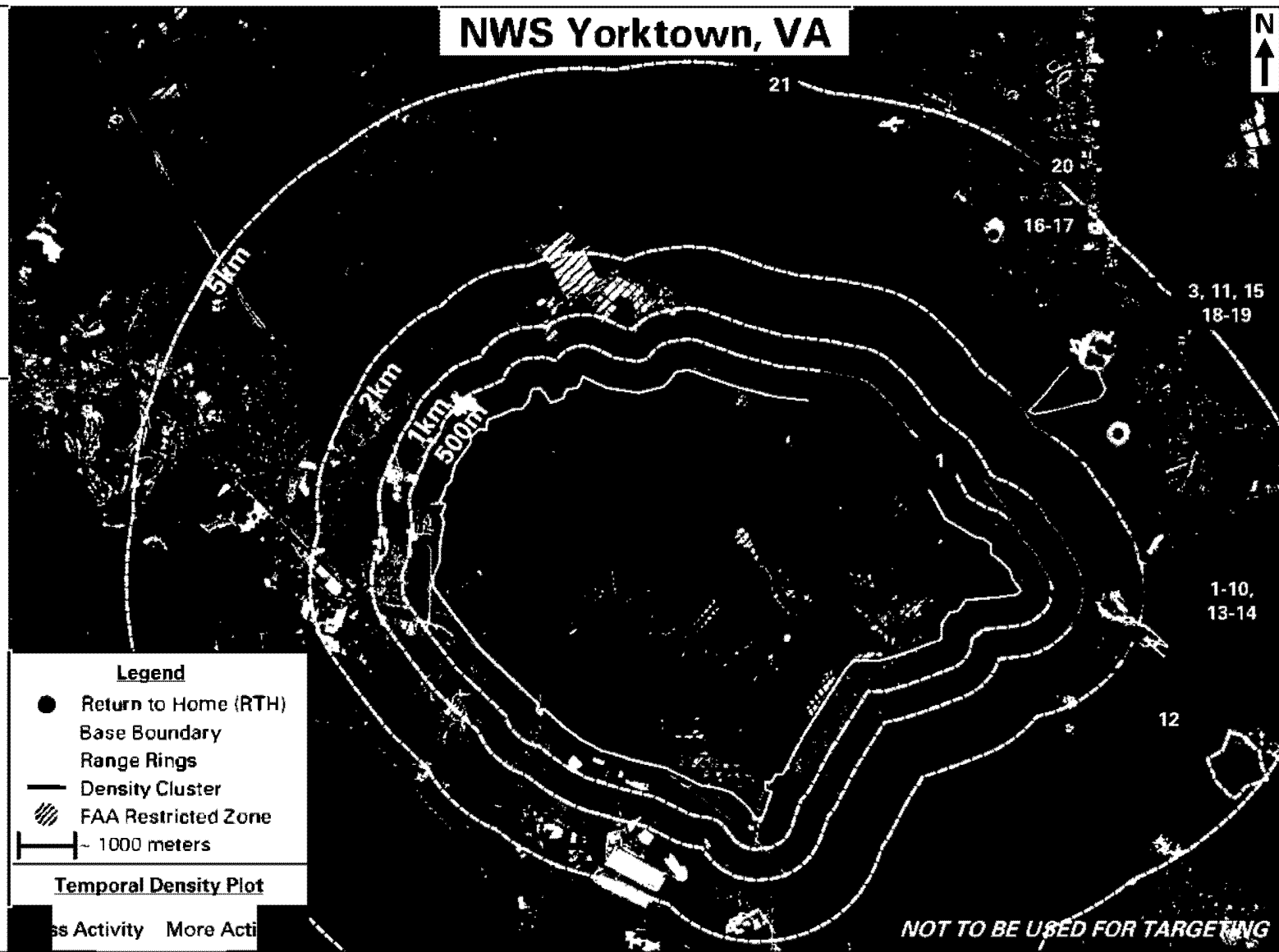
December 01, 2024 – December 31, 2024

Entire Slide is CUI

During the reporting period, (S/N: 1) was the only sUAS detected within 500m of the base boundary. (S/N: 1) had two events, first event was IVO Yorktown Beach, ~1.8km SE of the base. The second event occurred IVO the Colonial Parkway and York River, ~111m E of the base boundary, traversing S to N. All other activity predominately occurred to the E, IVO Little Mumfort Island and SE, IVO Yorktown beach and Coleman bridge between 1km and 5km range. Of significance (S/N: 7) depicted irregularities with the data; one event occurred IVO Colonial Bridge, ~1.6km E of the base, but the RTH and OPLOC associated with this event were located ~29km S of NWS Yorktown, ~7km S at the Woodlands Golf Course IVO Langley AFB. (S/Ns: 3-4, 9, 12, 16-17, 20) possibly exceeded FAA sUAS AGL altitude restrictions set for NWS Yorktown. (S/Ns: 5, 9) were nighttime detections. sUAS S/N detections increased 27%, events increased 33%, and duration increased 104% within 5km of the base compared to the previous 30-day reporting period (01 – 30 NOV 24, 16x S/Ns, 27x events, 01:53:26 duration).

5km Overview

- 21x S/Ns, 37x events, 03:59:36 duration
 - Exceeded altitude allowance: 7x S/Ns (14x events) (S/Ns: 3-4, 9, 12, 16-17, 20)
 - Night detections: 2x S/Ns (2x events) (S/Ns: 5, 9)
- 10x S/Ns previously detected (S/Ns: 2-4, 7, 9, 12, 14-17)
 - (S/N: 2) detected IVO NWS Yorktown (16 NOV 24) no geo-locational data
 - (S/N: 3) detected IVO Harbor Hills ~3.4km NE of NWS Yorktown (28 NOV 24)
 - (S/N: 4) detected ~2.9km S of JB Langley-Eustis (20 MAY 24)
 - (S/N: 7) detected ~3.5km S of JB Langley-Eustis (09 SEP 24)
 - (S/N: 9) detected ~3.6km E of NAS Oceana (27 OCT 24) and IVO Lake Holly ~1.6km N of NWS Yorktown (02 FEB 24)
 - (S/N: 12) detected ~10km N of JB Langley-Eustis (11 NOV 23)
 - (S/N: 14) detected IVO NWS Yorktown (30 NOV 24) no geo-locational data
 - (S/N: 15) detected IVO York Shores ~2.8km E of NWS Yorktown (25 NOV 24)
 - (S/N: 16) detected ~2.9km S of JB Langley-Eustis (11 NOV 24)
 - (S/N: 17) detected IVO Crowne Pointe residential area ~7.2km S of JB Langley-Eustis (27 NOV 24)
- 10x different platforms, 2x U/I DJI UAS detected (12x rotary-wing)
 - Top by total events: DJI Air 2S and DJI Mini 2 (7x, 19%) ea.
 - Top by total duration: DJI Air 2S and DJI Mini 2 (00:36:30 and 00:35:06, 15%) ea.
 - Top by S/N count: DJI Mini 2 (4x, 19%)





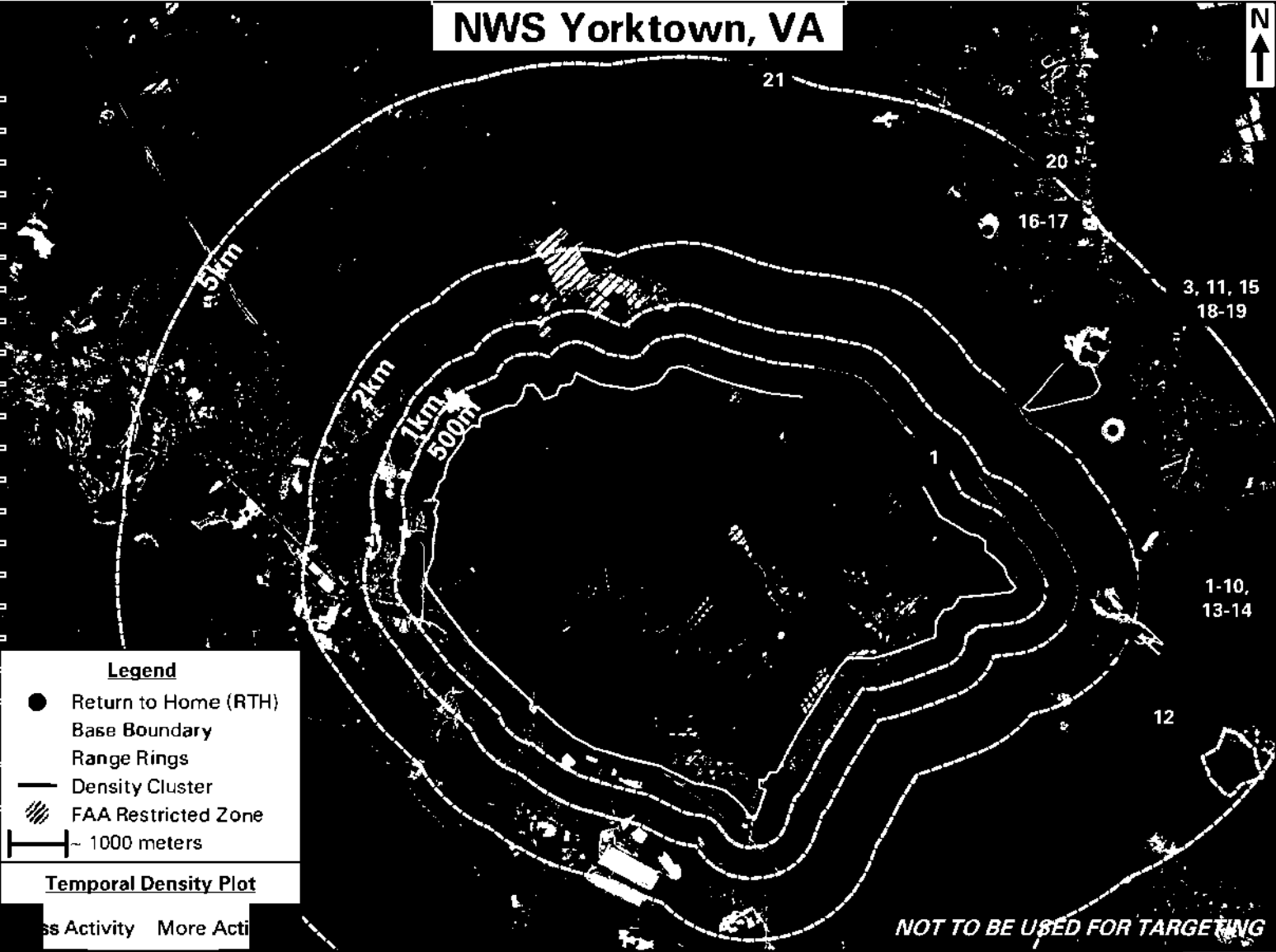
Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 2	5FSAK9P0060CR6	2	331	00:10:36
2	DJI Mini 3	F5YHA23CC031G4P2	1	104	00:08:12
3	DJI Air 2S	3YT7KBM003S0R5	7	570	00:36:30
4	U/I DJI UAS	F8PJA243MML11X20	2	708	00:05:55
5	DJI Mavic 3	F45T8243100EC0PB	2	127	00:21:53
6	DJI Mini 3	F5YHX24BC002FWU3	3	390	00:16:38
7	DJI Mavic 3	F45TB21AT2AE00QK	1	111	00:00:06
8	DJI Mavic Air	0K1DF3C2AD0174	1	350	00:08:55
9	DJI Mini 2 SE	6C5AL6C00101CV	1	1649	00:16:49
10	DJI Mavic Air 2	3N3BH5P00202RO	1	206	00:17:31
11	DJI Mini 3 Pro	F4XFA228JML72X3T	2	383	00:23:54
12	DJI Mini 2 SE	6C5CKB60010BKW	1	724	00:12:02
13	DJI Mini 3 Pro	F4XFC225R00658UC	1	334	00:01:07
14	U/I DJI UAS	F8PJC24AB00091SC	1	186	00:03:38
15	DJI Mini 2	3NZSHBS004023O	3	229	00:16:53
16	DJI Mavic Air 2	3N38HBE01203C8	1	458	00:10:11
17	DJI Mavic Mini	1SDCH7G0169RS7	2	438	00:07:12
18	DJI Mavic Air 2	3N33J7U002U212	2	347	00:05:35
19	DJI Mini 2	3NZCHBP003BBYR	1	265	00:04:50
20	DJI Mini 2	3NZSHA500303A6	1	445	00:02:47
21	DJI Mini 3	F5YH724BCM01S6YC	1	64	00:08:22

- S/N with night detections | Red font - S/N previously detected | - exceed FAA altitude allowance





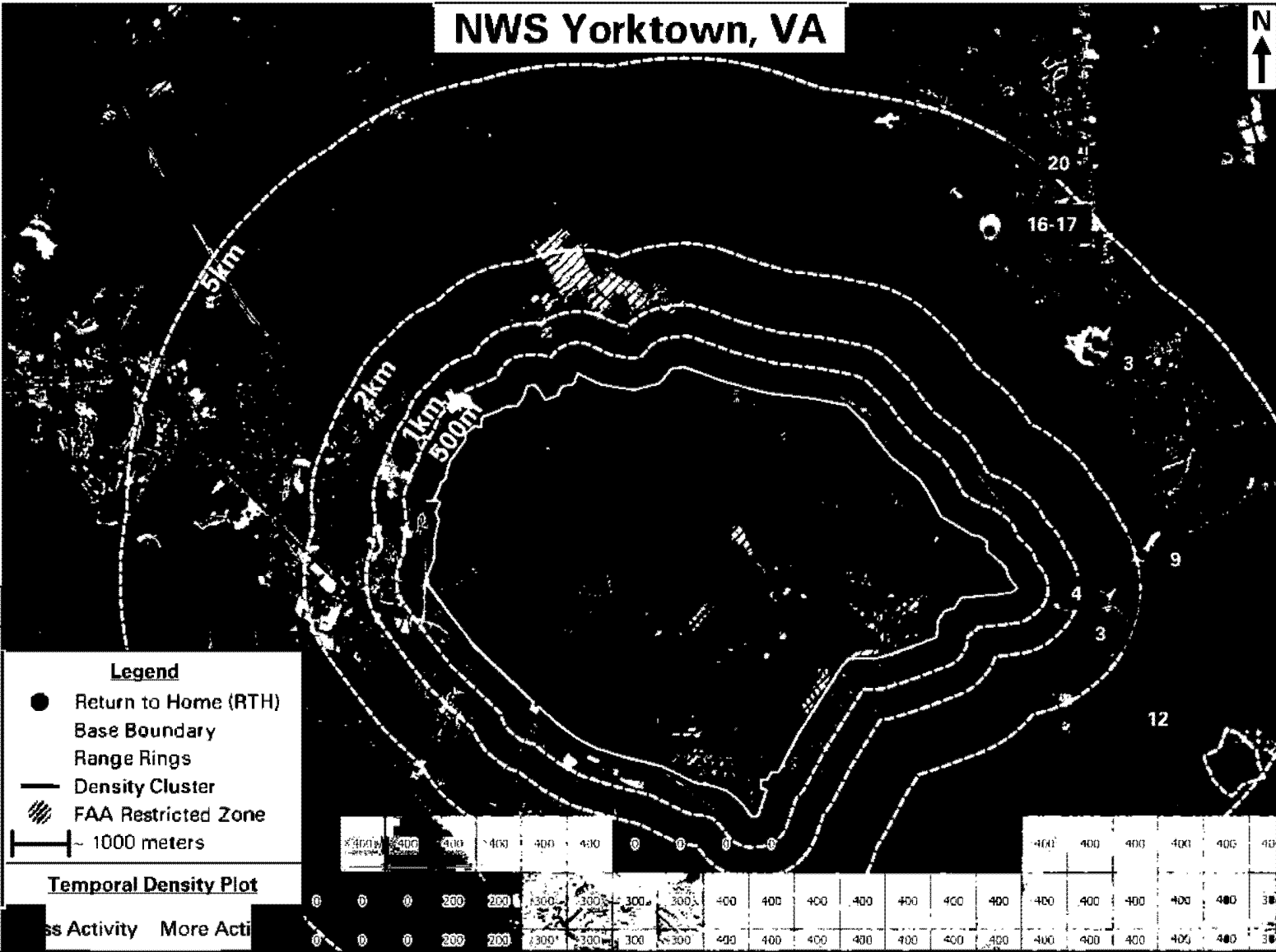
December 01, 2024 – December 31, 2024

Altitude Allowance

Entire Slide is CUI

- Requests to operate within controlled airspace must be requested via the Low Altitude Authorization and Notification Capability (LAANC)
- Only Part 107 (licensed) operators may request to operate above the designated altitude ceilings up to 400ft AGL (see graphic)
- Activity occurred in areas with ceilings up to 400ft AGL
- 33% of all S/Ns and 38% of total events exceeded altitude ceilings
 - 7x S/Ns (14x events) (S/Ns: 3-4, 9, 12, 16-17, 20)
- Exceeded FAA 400ft AGL: 7x S/Ns, 14x events (S/Ns: 3-4, 9, 12, 16-17, 20)
- 5x different platforms and 1x U/I DJI UAS detected (6x rotary-wing)
 - Top by total events: DJI Air 2S (7x, 50%)
 - Top by total duration: DJI Air 2S (00:36:30, 40%)
 - Top by S/N count: DJI Mini 2 SE (2x, 29%)

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
3	DJI Air 2S	3YT7KBM003S0R5	7	570	00:36:30
4	U/I DJI UAS	F8PJA243MML11X20	1	708	00:05:24
9	DJI Mini 2 SE	6C5AL6C00101CV	1	1649	00:16:49
12	DJI Mini 2 SE	6C5CKB60010BKW	1	724	00:12:02
16	DJI Mavic Air 2	3N3BHBE01203C8	1	458	00:10:11
17	DJI Mavic Mini	1SDCH7G0169RS7	2	438	00:07:12
20	DJI Mini 2	3NZSHA500303A6	1	445	00:02:47
- S/N with night detection Red font - S/N previously detected - exceed FAA altitude allowance					





CUI

S/N: 5FSAK9P0060CR6

December 01, 2024 – December 31, 2024

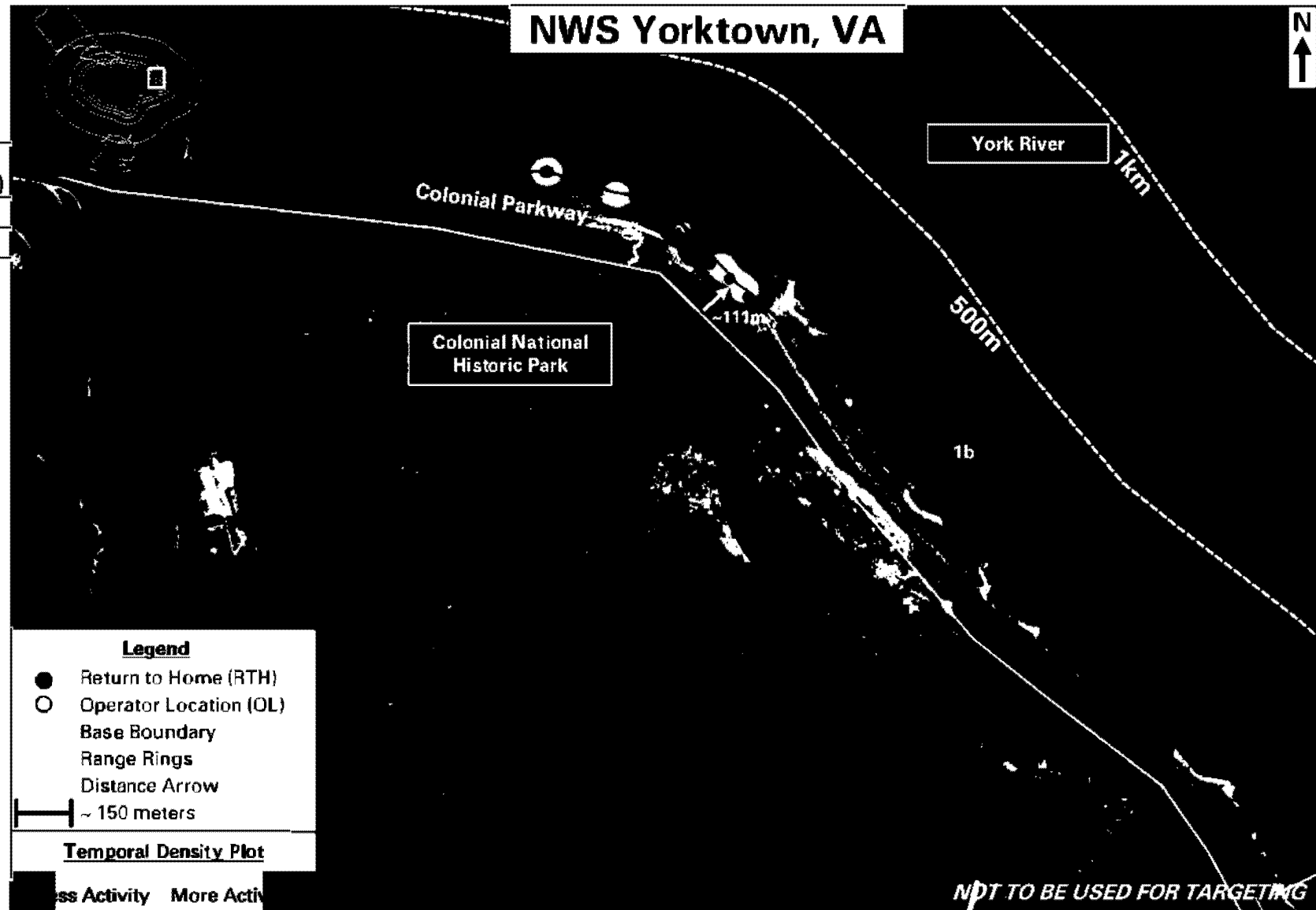
Entire Slide is CUI

1 S/N: 5FSAK9P0060CR6, DJI Mini 2

- 2x total events (00:10:36) within 5km
- 1x event (1a) within 2km (00:01:34) not depicted
- 1x event (1b) within 500m (00:09:02)

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-15 15:34:24	2024-12-15 15:35:58	00:01:34	331
1b	2024-12-15 15:04:23	2024-12-15 15:13:25	00:09:02	271

- Event (1a) occurred ~1.5km SE of the base IVO Yorktown Beach, the track traversed over the York river towards the Coleman Bridge. (not depicted)
- Event (1b) operator locations were detected ~111m NE of the base IVO Colonial National Historic Park and the flight track traversed N to S along the York River and Colonial Parkway getting as close as 73m at the RTH location.
- DJI Mini 2 has no nighttime capabilities and is considered a hobbyist sUAS.



CUI



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than November 11, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Weapon Station Yorktown. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-5)**
2. National Security UAS Flight Restrictions. https://uds-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-5)**
3. Naval Weapon Station Yorktown; PHALANX CONUS Repository; Technical Logs **(Slides 2-5)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 5)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
6. Visualize It, Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slides 2-5)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than September 03, 2025.

DTRA PHALANX Activity Report

Cape Canaveral SFS, FL (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

CUI

CUI

Agenda

- Executive Summary
- Current System Overview
- S/N: 1588E040452AA001
- Points of Contact
- Sources
- Terminology



Executive Summary

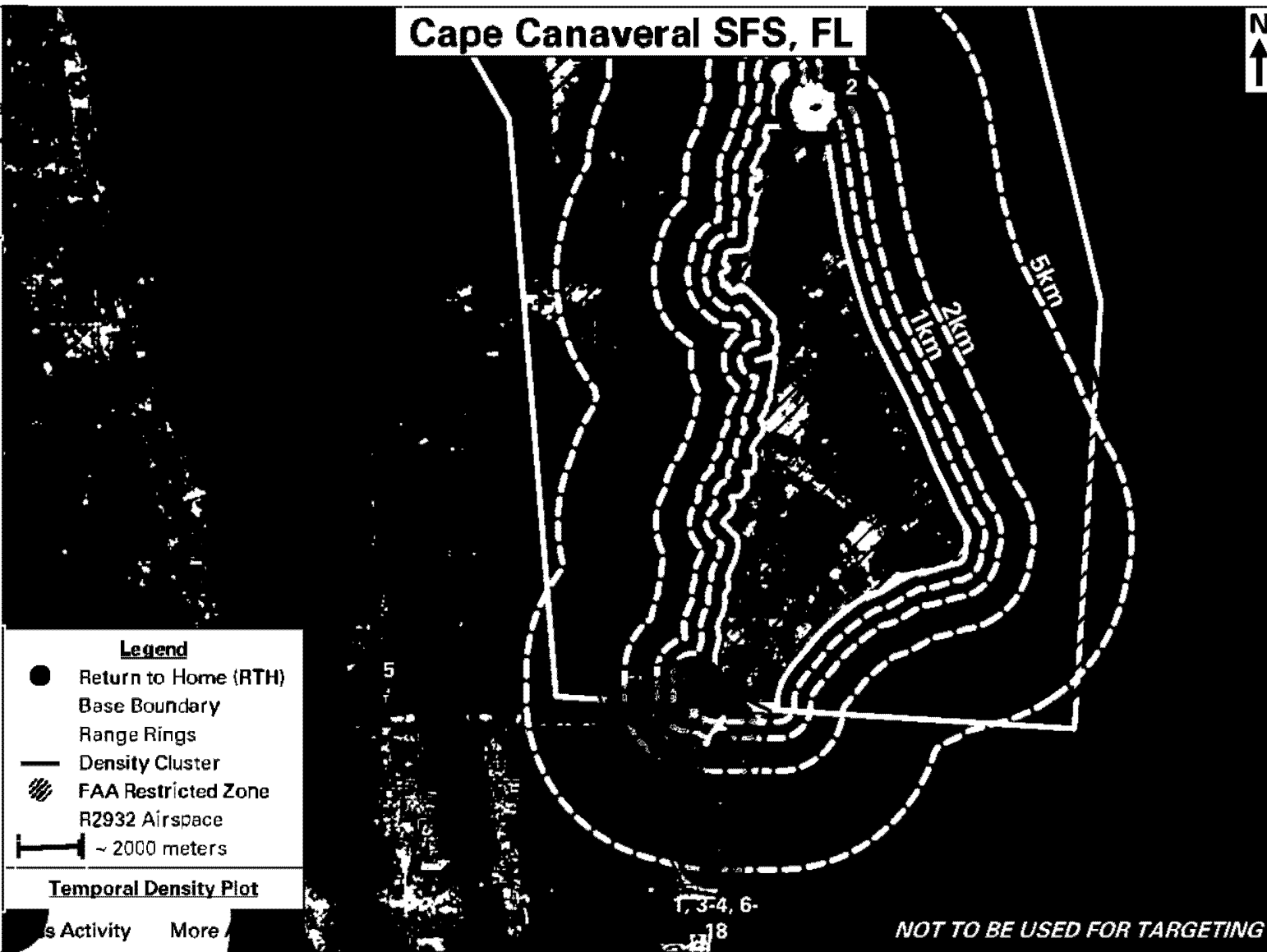
December 01, 2024 – December 31, 2024

Entire Slide is CUI

S/N: 1 was detected within the base boundary over the Middle Turning Basin and operated for (00:00:26) duration. S/N: 2 operated ~464m N of the base IVO the Astronaut Space House and is most likely recreational in nature. There was errant Operator Location data detected placing detections from south of Florida to Canada and is most likely a error. Small UAS S/Ns detections increased 29%, events increased 59%, and duration increased 168% within 5km of the base compared to the previous 4-week reporting period (01-30 NOV 24, 14x S/Ns, 17x events, 00:42:58 duration).

5km Overview

- 18x S/Ns, 27x events, 01:55:01 duration
 - Exceeded altitude allowance: 7x S/Ns (10x events) (S/Ns: 1, 3-8)
 - Night detections: 1x S/N (1x event) (S/N: 6)
 - DJI Mini 2 does not come standard with cameras or software to enhance night flight
- 7x S/Ns previously detected (S/Ns: 2, 5-7, 10, 15, 18)
 - S/Ns: 5, 10 detected IVO MacDill AFB, FL with the closest detection ~13km from the base boundary and all events over residences and businesses (19 OCT 24 and 26 NOV 24 respectively)
 - S/N: 6 detected apartments at Palma Sola Bay ~42km SW of MacDill AFB, FL (19 APR 24)
 - S/N: 18 detected ~2.5km from the NSA Panama City, FL base boundary along the beach (03 SEP 23)
- 1x S/N detected at another base during this period (S/N: 10)
 - S/N: 10 detected 39km south of MacDill AFB, FL IVO residential area (07 DEC 24)
- 11x different platforms detected (11x rotary-wing)
 - Top by total events: DJI Mini 2 (6x, 22%)
 - Top by total duration: Skydio UAS (01:03:53, 56%)
 - Top by S/N count: DJI Mini 2 (4x, 22%)





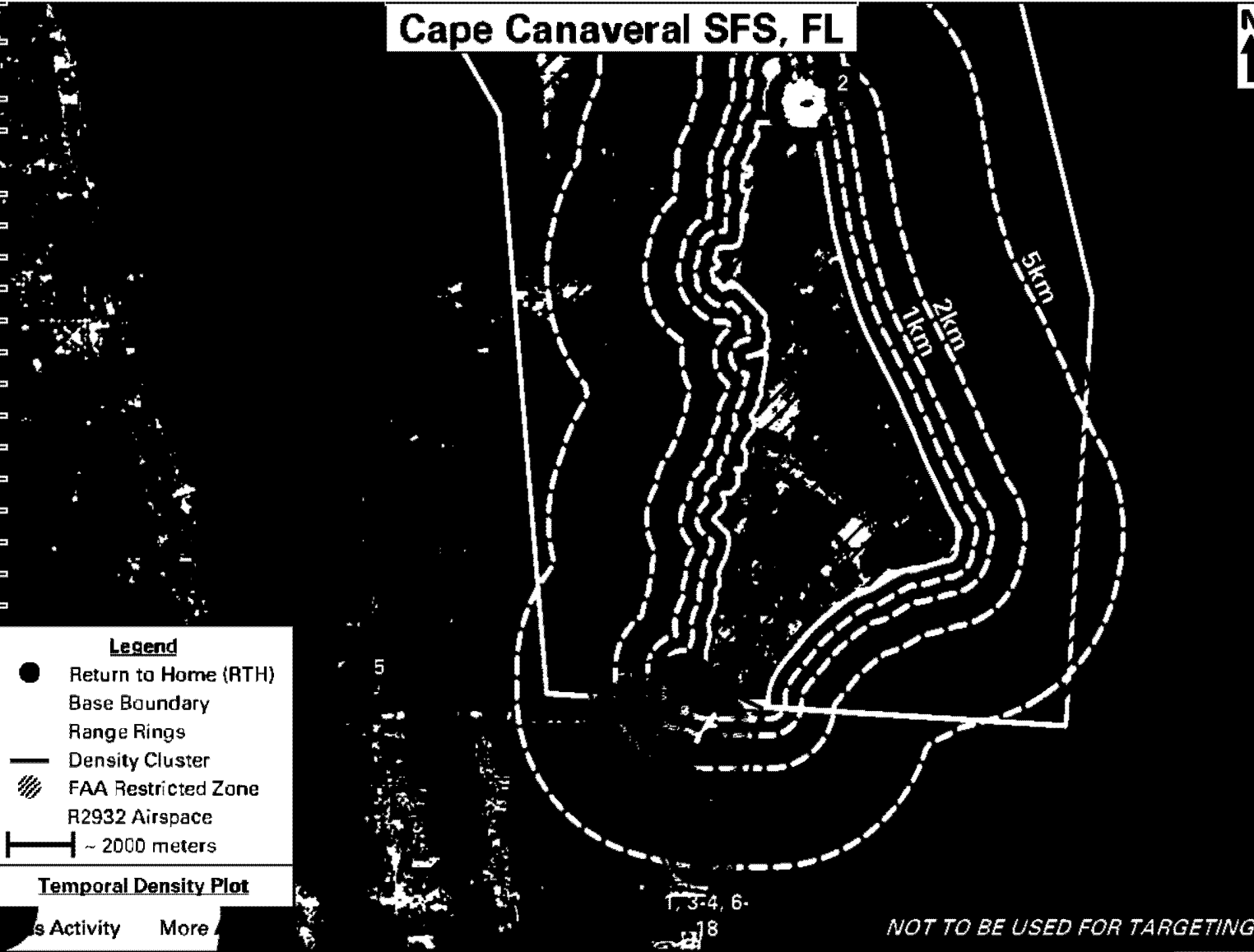
CUI

Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max ft AGL	Total Duration
1	Parrot UAS	1588E040452AA001	1	114	00:00:26
2	Skydio UAS	1668BR40EA0052UT	3	193	01:03:53
3	DJI Mini 2 SE	L2MML2QZ0M	2	200	00:07:15
4	DJI Mini 2	3NZCH9H0031NZ9	1	213	00:06:27
5	DJI Mini 4 Pro	F6Z9A23BHML34M73	2	137	00:01:10
6	DJI Mini 2	3NZSHCO00407RG	1	297	00:02:01
7	DJI Mini 2	3NZCJBN0440PSL	3	781	00:05:10
8	DJI Mavic 3 Enterprise	F7UEE23BF00A003X	2	334	00:03:41
9	DJI Mini 3	F5YHA23A9031T6K5	1	122	00:00:37
10	DJI Air 3	F6N8A238QML3C145	1	127	00:00:45
11	DJI Mini 2	3NZCK2E04472A8	1	151	00:03:47
12	DJI FPV	37QBHBNBD100PW	3	275	00:01:21
13	DJI Mavic 3	F45TB21AB1AE05FJ	1	268	00:03:33
14	DJI Mini 3	F5YHX24C6002GP64	1	142	00:06:47
15	DJI Mavic 3	F4QZB21BE2AE00V6	1	176	00:00:01
16	DJI FPV	37QBHAL00100FE	1	294	00:02:11
17	DJI Mini 2 SE	L3JML239YL	1	329	00:01:39
18	DJI Mavic Air 2	3N3BH7K00205E7	1	335	00:04:17
- S/N with night detection Red font - S/N previously detected - exceed FAA altitude allowance					



CUI



CUI

S/N: 1588E040452AA001

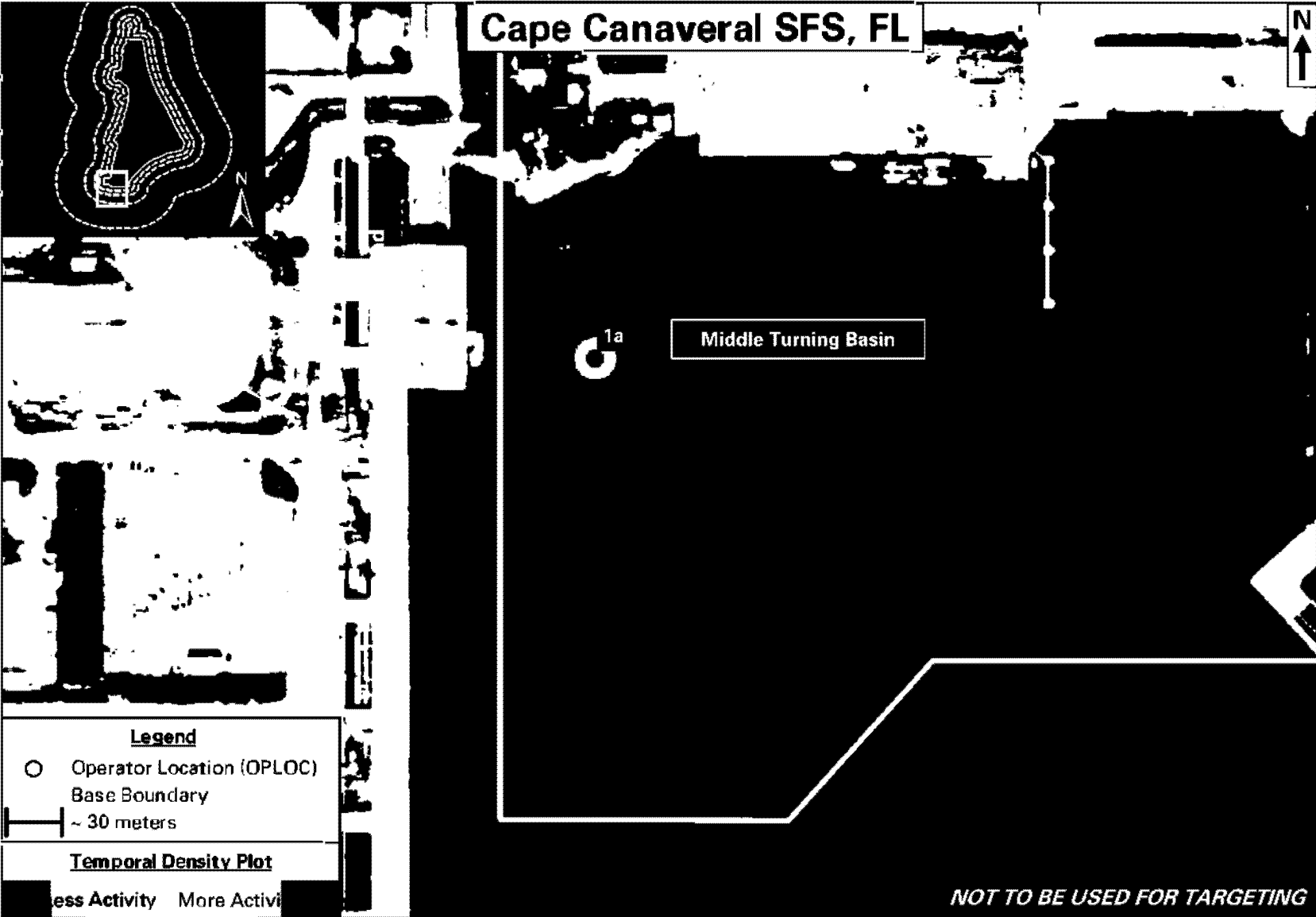
December 01, 2024 – December 31, 2024

Entire Slide is CUI

- 1 S/N: 1588E040452AA001, Parrot UAS
- 1x total event (00:00:26) within base boundary

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-10 19:36:45	2024-12-10 19:37:11	00:00:26	114
– exceed FAA altitude allowance				

- Parrot UAS detected within a restricted area over the Middle Turning Basin
- The operator location was detected outside the base boundary at a salt manufacturer compound along Frank A Kennedy Road.
- No Return To Home (RTH) location was detected for this event.





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimpx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than September 03, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Cape Canaveral SFS. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. (Slides 2-4)
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 (Slides 2-4)
3. Cape Canaveral SFS; PHALANX CONUS Repository; Technical Logs (Slides 2-4)
4. FAA definition of night. https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf (Slides 2-4)
5. Visualize It, Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> (Slides 2-4)

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than June 24, 2026.

DTRA PHALANX Activity Report

Dover Air Force Base, DE (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

—CUI—

—CUI—

Agenda

- Executive Summary
- Current System Overview
- S/N: FOUYKG3100200KS0
- Points of Contact
- Sources
- Terminology



CUI

Executive Summary

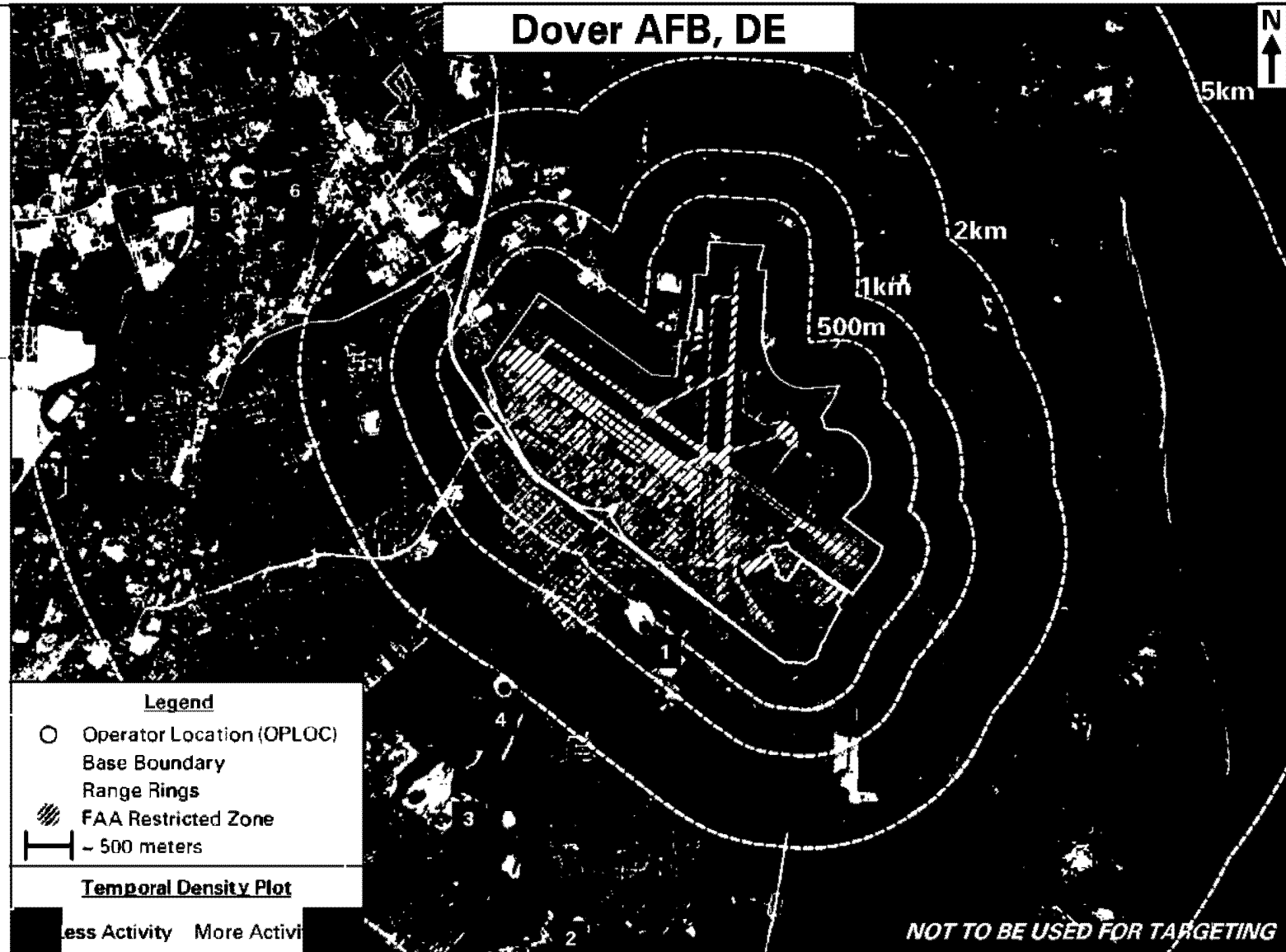
December 01, 2024 – December 31, 2024

Entire Slide is CUI

During this reporting period, there was no activity detected within the base boundary. Most of the activity was detected over recreational and residential areas between 2-5km S and NW of the base. S/Ns: 1, 4 were detected in areas under 0ft AGL ceiling. S/N: 1 was the only detected drone within 2km of the base. Operator locations (OPLOC) for S/N: 1 were detected ~617m SSW of the base in a quarry. Both events occurred over the quarry. S/N: 4 was detected ~2.1km SSW of base over a residential area along Abigail Lane. sUAS detections within 5km of the base boundary significantly increased compared to the previous 4-week reporting period (01 NOV 24 – 30 NOV 24, 2x S/Ns, 3x events, 00:01:26 duration). S/Ns increased 238%, events increased 319%, and duration increased 1541%.

5km Overview

- 7x S/Ns, 13x events, 00:24:20 duration
 - Exceeded altitude allowance: 4x S/Ns (9x events) (S/Ns: 1, 3-4, 7)
 - S/Ns: 1, 4 were detected in areas under 0ft AGL ceiling
 - S/N: 3 was detected above the max 400ft AGL ceiling (3x events)
 - Night detections: 2x S/Ns (4x events) (S/Ns: 4, 7)
- 5x S/Ns previously detected (S/Ns: 1, 3-5, 7)
 - S/N: 1 detected IVO current activity, over a quarry (24 SEP 24)
 - S/N: 4 detected IVO current activity, over a residential area along Abigail Lane (12 SEP 24)
- 6x different platforms, 1x U/I detected (7x rotary-wing)
 - Top by total events: DJI Mavic 3 Enterprise (4x, 31%)
 - Top by total duration: platform (00:11:39, 48%)
 - Top by S/N count: DJI Air 2S, DJI Air 3, DJI Mavic 3 Enterprise, DJI Mavic Air 2, DJI Mavic Pro, DJI Mini 2, U/I DJI UAS (each 1x, 14%)



CUI



CUI

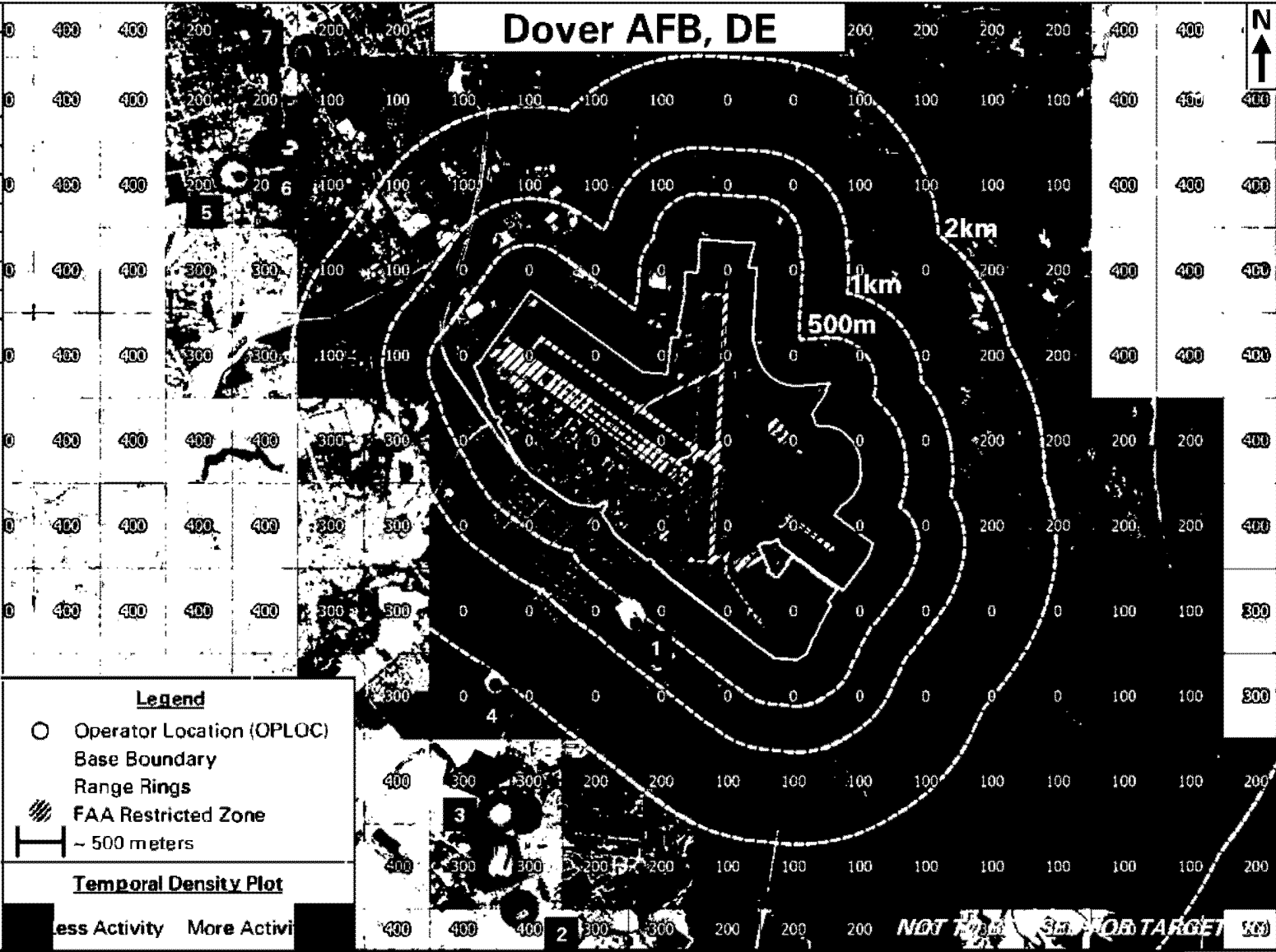
Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	U/I DJI UAS	F0UYKG3100200KS0	2	304	00:05:17
2	DJI Mavic Pro	08RDE3R00101YX	1	312	00:11:39
3	DJI Mavic 3 Enterprise	F5FHD22CD00C9MJE	4	432	00:01:14
4	DJI Mavic Air 2	3N3BH8M012014G	3	85	00:05:19
5	DJI Air 2S	3YTBJB00304NM	1	180	00:00:05
6	DJI Mini 2	3NZCJBS0441GVQ	1	141	00:00:39
7	DJI Air 3	F6N8A2397ML36240	1	224	00:00:07
- S/N with night detection(s) Red font – S/N previously detected – exceed FAA altitude allowance					

- The DJI Mavic Air 2 (S/N:4) and DJI Air 3 (S/N: 7) are Night Mode capable
- Night mode is a software-based program meant to enhance existing ambient light under extreme low-light conditions.
- 57% of all S/Ns and 69% of total events exceeded altitude ceilings
- 4x S/Ns, 9x events (S/Ns: 1, 3-4, 7)
 - S/Ns: 1, 4 were detected in areas under 0ft AGL ceiling
 - S/N: 3 was detected above the max 400ft AGL ceiling (3x events)
- Part 107 (licensed) operators may submit requests to the FAA to operate above designated altitude ceilings up to 400ft AGL (see graphic)



CUI



~~CUI~~

S/N: F0UYKG3100200KS0

December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

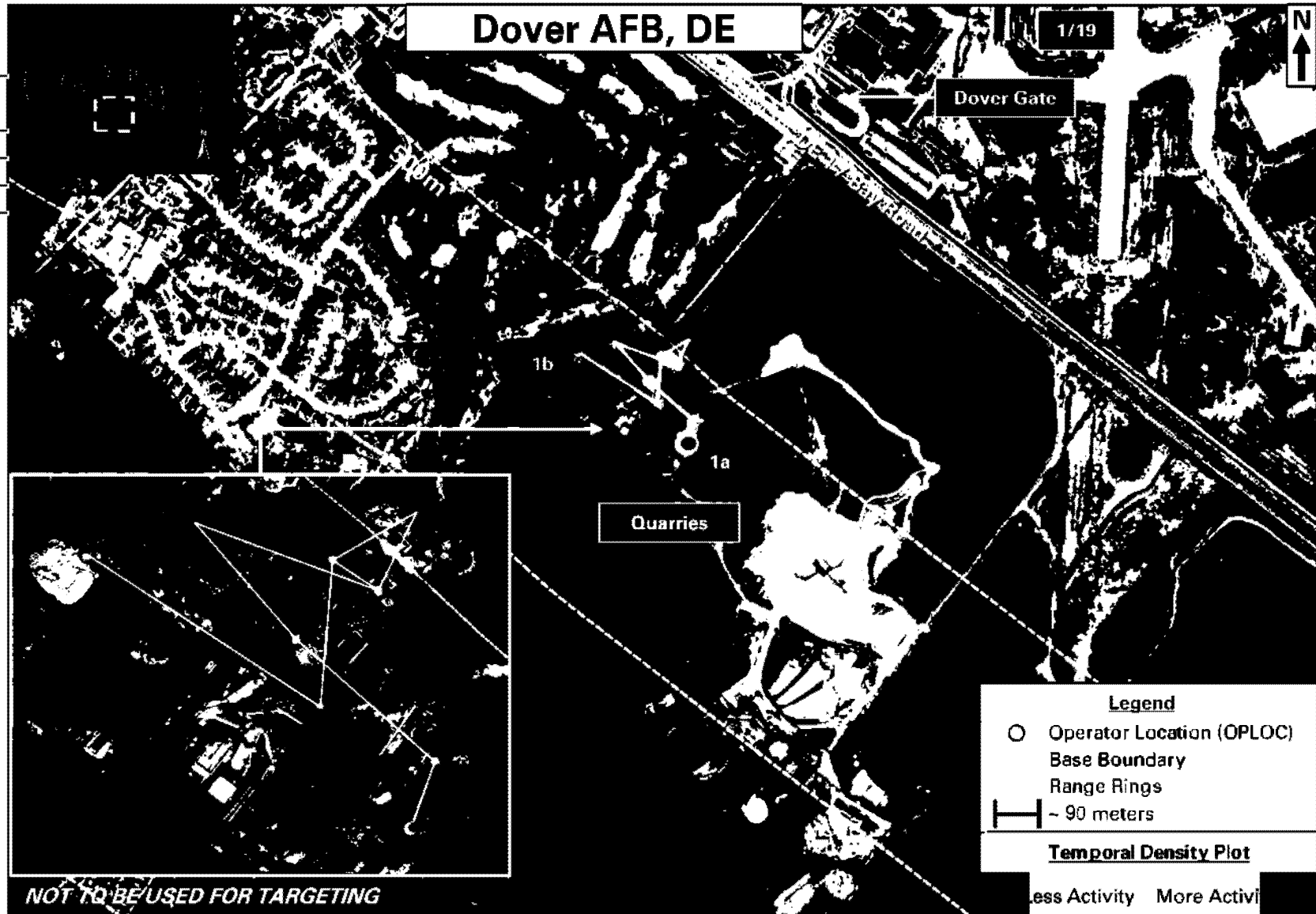
1 S/N: F0UYKG3100200KS0, U/I DJI UAS

- 2x total events (00:05:17) within 1km

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-26 17:14:16	2024-12-26 17:14:16	00:00:01	286
1b	2024-12-26 17:04:38	2024-12-26 17:09:54	00:05:16	304

– exceed FAA altitude allowance

- This activity was detected in an area under a 0ft AGL ceiling
- Part 107 (licensed) operators may submit requests to operate above designated altitude ceilings up to 400ft AGL
- Operator locations (OPLOC) were detected ~617m S/SW of the base boundary in a quarry
- Event 1a was detected IVO the OPLOCs
- Event 1b was detected within ~470m S/SW of the base; its flight began IVO the OPLOCs and ended ~265m to the NW IVO the western perimeter of the quarry
- Drone was detected 2x on 24 JUN 24 and 5x on 24 SEP 24 over the same quarry



~~CUI~~



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimbx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than June 24, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Dover Air Force Base, DE. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. (Slides 2-4)
2. National Security UAS Flight Restrictions. https://udds-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 (Slides 2-4)
3. Dover Air Force Base, DE; PHALANX CONUS Repository; Technical Logs (Slides 2-4)
4. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
5. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> (Slides 2-4)

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:** The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



~~CUI~~

Information Cutoff Date: 27 JAN 25

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than November 01, 2026.

DTRA PHALANX Activity Report

Joint Base McGuire-Dix-Lakehurst, NJ (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- Altitude Allowance
- S/N: F5YHX247F002B3F1
- Points of Contact
- Sources
- Terminology

Component: Defense Threat Reduction Agency
Controlled by: DTRA OI (Phalanx)
CUI Categories: LCOMM
Distribution/ Dissemination Control: N/A
POC: (b)(6)



CUI

Executive Summary

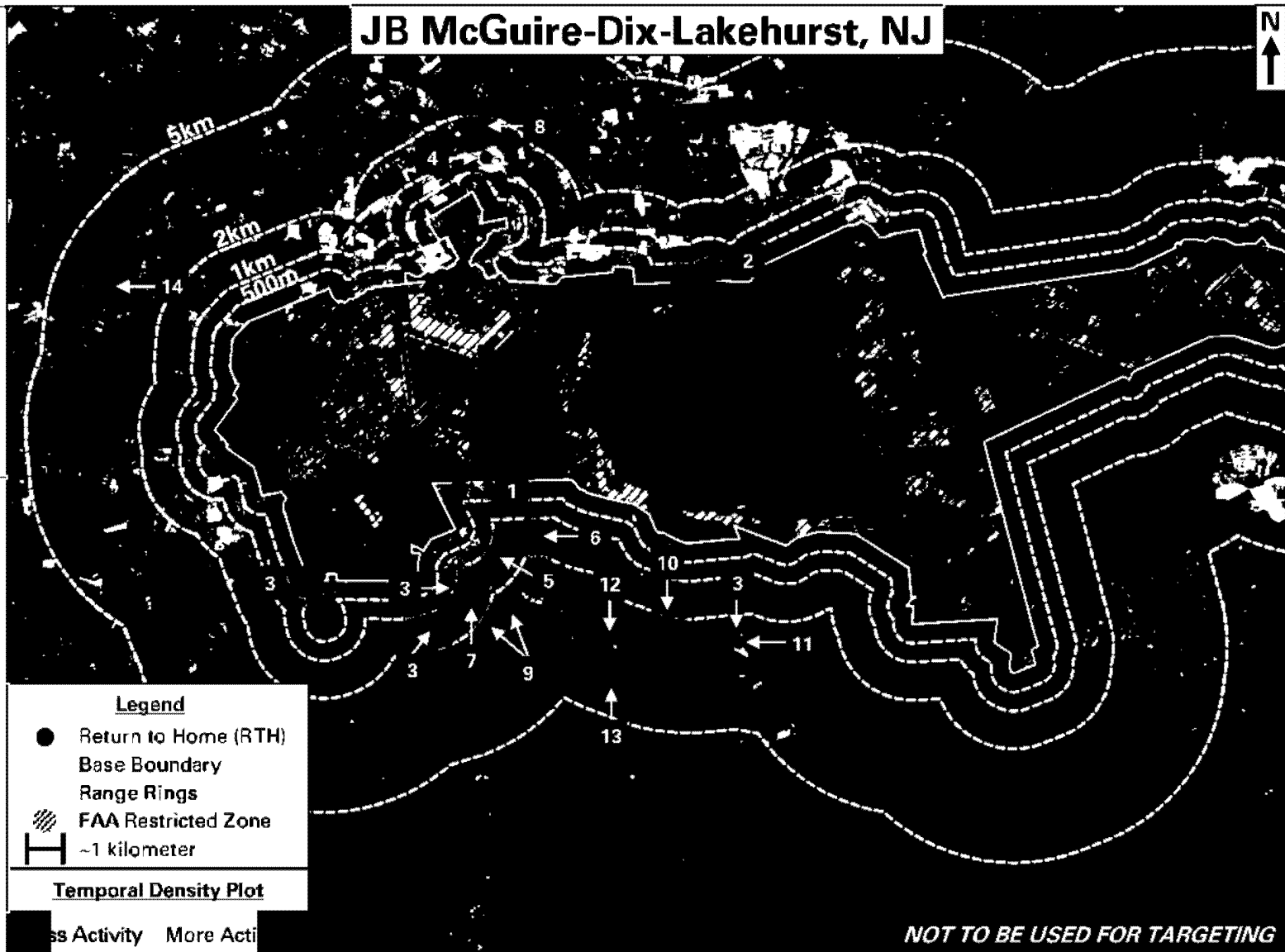
December 01, 2024 – December 31, 2024

Entire Slide is CUI

During the reporting period, S/Ns: 1-3 were detected within 500m of the base boundary. S/N: 1 was detected in a residential area ~40m S from the base boundary at the closest pass. S/N: 2 had a total of 2x detected events; 1x event was detected in a densely forested area ~210m N of the base boundary and the other event was detected ~440m N of the boundary on Cranberry Canners Rd. S/N: 3 had a total of 4x detected events; the closest event was ~180m S of the base boundary in Pemberton Sports Complex. 2x events were detected ~1km S of the base boundary IVO a residential area and 1x event was detected ~2.5km S of the base boundary IVO wetlands. S/N: 13 was the only nighttime detect. S/N: 9, a DJI Matrice 30T, is equipped with nighttime capabilities (night vision, thermal, or infrared cameras) and laser range finder. However, (S/N: 9) activity was ~3.2km S of the base, for a duration of 00:00:02. S/Ns: 1-2, 4-6, 9-10 possibly exceeded FAA altitude allowance. sUAS S/N detections increased 13%, events increased 93%, and duration increased 224% within 5km of the base boundary compared to the previous 4-week reporting period (01 NOV 24 – 30 NOV 24, 12x S/Ns, 13x events, 00:33:41 duration).

5km Overview

- 14x S/Ns, 26x events, 01:52:51 duration
 - Exceeded altitude allowance: 7x S/Ns (14x events) (S/Ns: 1-2, 4-6, 9-10)
 - Night detections: 1x S/N (3x events) (S/N: 13)
- 2x S/Ns previously detected (S/Ns: 4-5)
 - S/N: 4 detected ~1km N of the base boundary in the same location as current activity (25 NOV 24).
 - S/N: 5 detected ~1.2km S of the base boundary IVO current location at Jacks Run (01 NOV 24).
- 11x different platforms detected (11x rotary-wing)
 - Top by total events: U/I DJI UAS (6x, 23%)
 - Top by total duration: U/I DJI UAS (00:48:40, 43%)
 - Top by S/N count: DJI Mavic Mini, DJI Mini SE, and U/I DJI UAS (2x, 14%) each



CUI



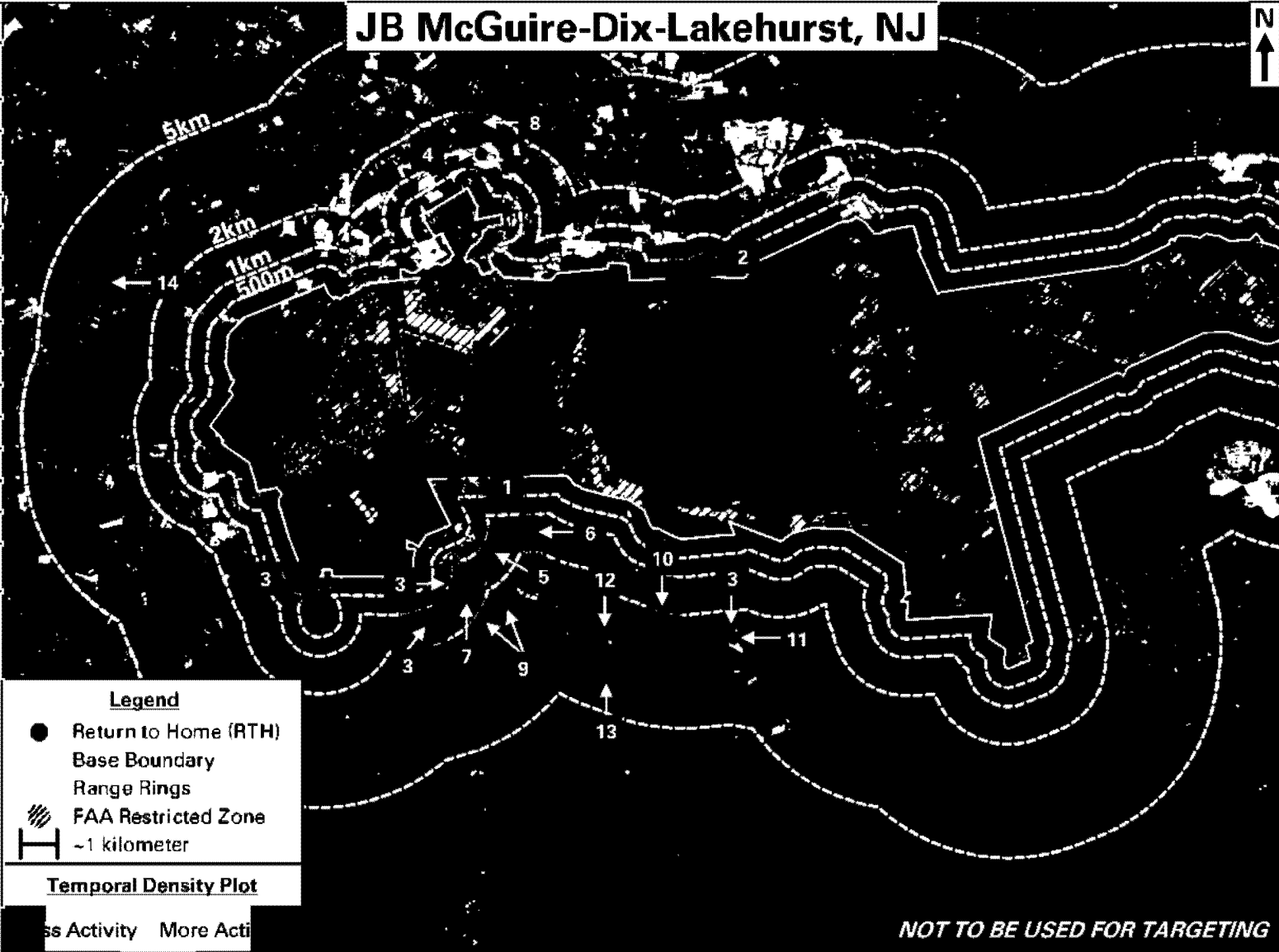
CUI

Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 3	F5YHX247F002B3F1	3	210	00:18:54
2	U/I DJI UAS	F8PJ824AC001R005	2	689	00:09:33
3	U/I DJI UAS	8JECMAD01109CV	4	259	00:39:07
4	DJI Mini SE	4AEAJB10020028	3	414	00:10:49
5	DJI Mini 3 Pro	F4XFA2288ML7EFPW	1	138	00:00:37
6	DJI Air 2S	3YTBJ2P00305NT	2	523	00:00:21
7	DJI Mavic 3	F45TB219D00D00DZ	1	141	00:00:01
8	DJI Mavic Mini	1SDCH6F0167D2W	1	115	00:00:03
9	DJI Matrice 30T	F5BKD235A00CD8J0	2	461	00:00:02
10	DJI Mini 2	3NZSHAE0030318	1	403	00:01:09
11	DJI Mini SE	4AECJ870020277	1	246	00:03:25
12	DJI Mavic Mini	1SDCH7U016B1F2	1	111	00:03:30
13	DJI Mini 2 SE	L16ML25LH8	3	387	00:18:40
14	DJI Mavic Air 2	3N3BJ7M01200X6	1	315	00:06:40
- S/N with night detections Red font - S/N previously detected altitude allowance					
- exceed FAA					





—CUI—

Altitude Allowance

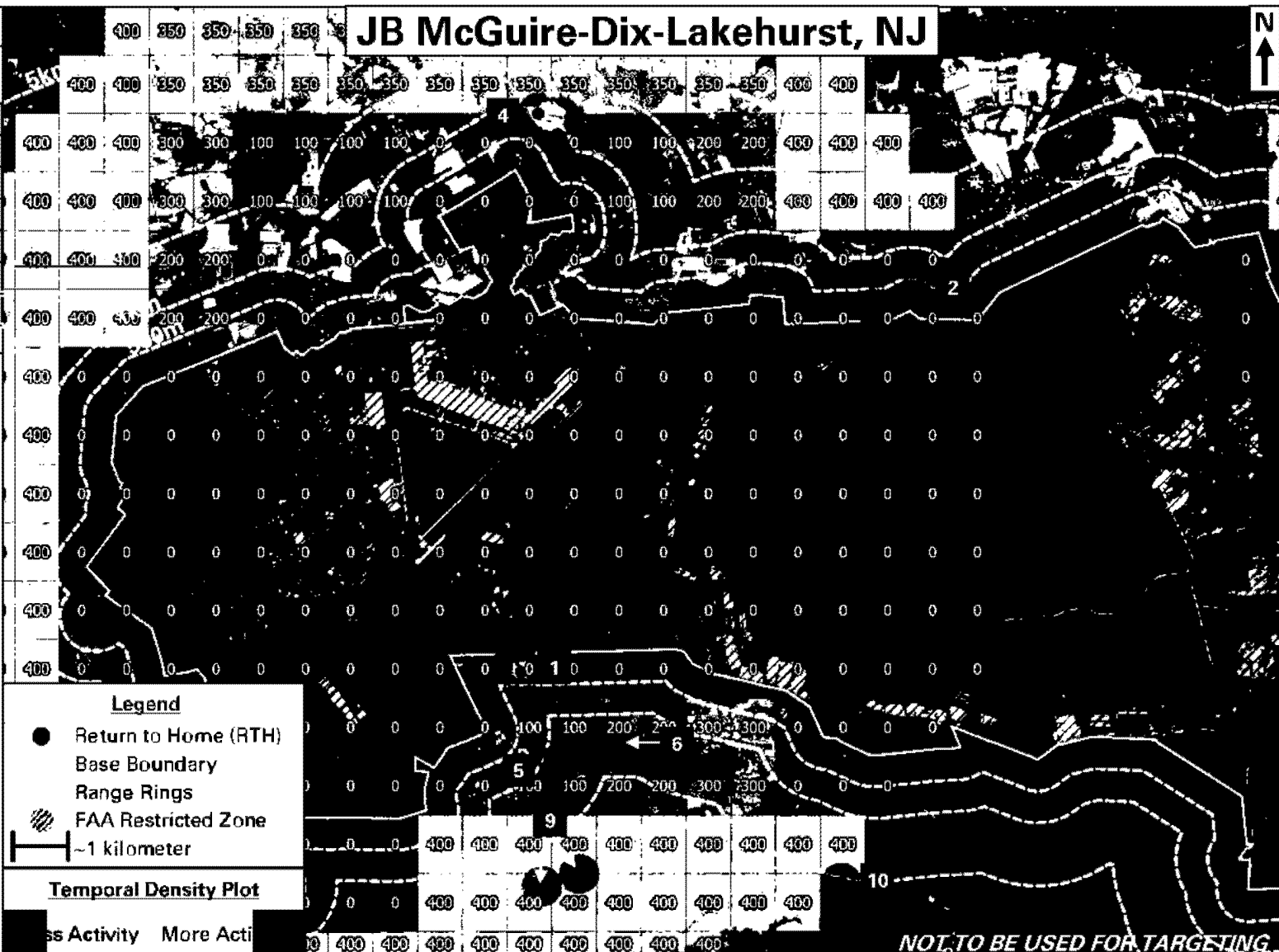
December 01, 2024 – December 31, 2024

Entire Slide is CUI

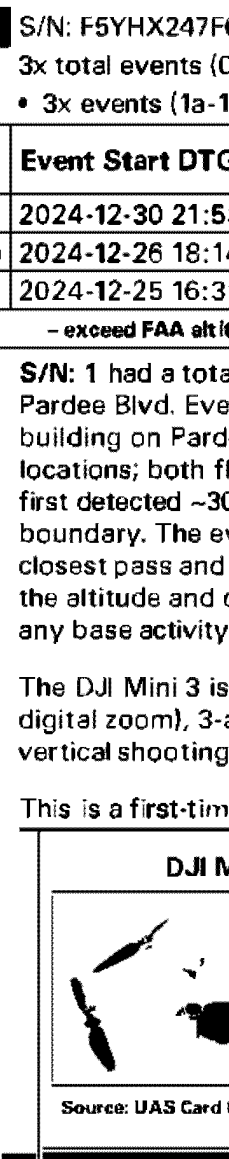
Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 3	F5YHX247F002B3F1	3	210	00:18:54
2	U/I DJI UAS	F8PJ824AC001R005	2	689	00:09:33
4	DJI Mini SE	4AEAJB10020028	3	414	00:10:49
5	DJI Mini 3 Pro	F4XFA2288ML7EFPW	1	138	00:00:37
6	DJI Air 2S	3YTBJP00305NT	2	523	00:00:21
9	DJI Matrice 30T	F5BKD235A00CD8J0	2	461	00:00:02
10	DJI Mini 2	3NZSHAE0030318	1	403	00:01:09

Red font – S/N previously detected | – exceed FAA altitude allowance

- Requests to operate within controlled airspace must be requested via the Low Altitude Authorization and Notification Capability (LAANC).
- Only Part 107 (licensed) operators may request to operate above the designated altitude ceilings up to 400ft AGL (see graphic).
- Activity occurred in areas with ceilings ranging from 0 – 400ft AGL
- 50% of all S/Ns, 54% of total events, and 37% of the total duration exceeded altitude ceilings
 - 7x S/Ns, 14x events, 00:41:25 duration (S/Ns: 1-2, 4-6, 9-10)
 - Exceeded FAA 0ft AGL: 3x S/Ns, 8x events (S/Ns: 1-2, 4)
 - Exceeded FAA 100ft AGL: 1x S/N, 1x event (S/N: 5)
 - Exceeded FAA 200ft AGL: 1x S/N, 2x events (S/N: 6)
 - Exceeded FAA 400ft AGL: 2x S/Ns, 3x events (S/Ns: 9-10)



—CUI—



CUM

GUI

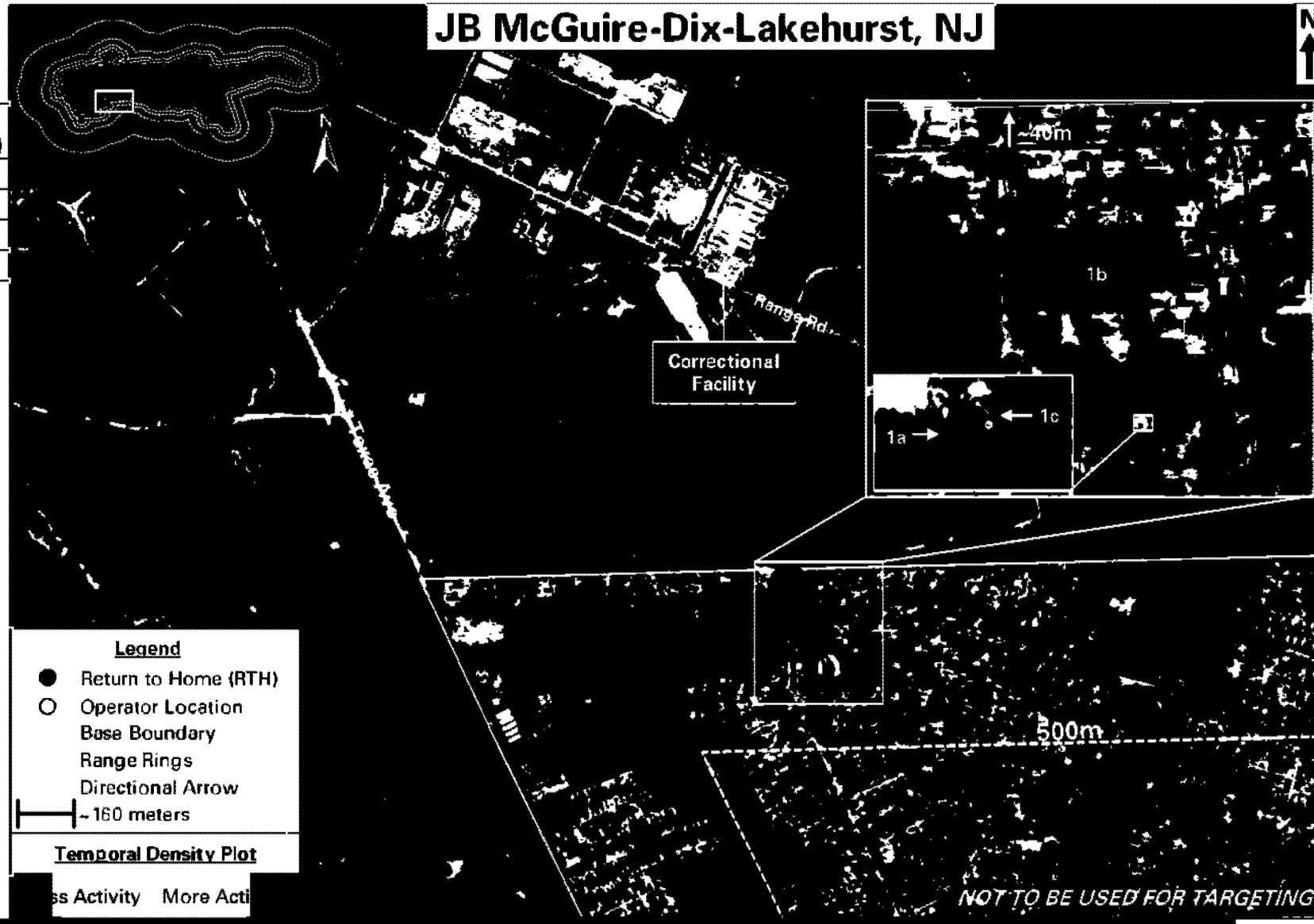
~~Entire Slide is CUI~~

- **S/N: 1** had a total of 3x detected events IVO a residential area on Pardee Blvd. Events **(1a, 1c)** were both detected IVO a residential building on Pardee Blvd and remained within 20m of the operator locations; both flights did not exceed 5m in length. Event **(1b)** was first detected ~30m N of the RTH and traveled N towards the base boundary. The event was ~40m from the base boundary at the closest pass and ~1.2km from the correctional facility. Based on the altitude and distance from base infrastructure, it is unlikely any base activity was observed.
- The DJI Mini 3 is equipped with a professional grade (48MP / 4x digital zoom), 3-axis stabilized gimbal camera that offers true vertical shooting. This is typically used by hobbyists.
- This is a **first-time detect** for this S/N.

- exceed FAA altitude allowance

- **S/N: 1** had a total of 3x detected events IVO a residential area on Pardee Blvd. Events **(1a, 1c)** were both detected IVO a residential building on Pardee Blvd and remained within 20m of the operator locations; both flights did not exceed 5m in length. Event **(1b)** was first detected ~30m N of the RTH and traveled N towards the base boundary. The event was ~40m from the base boundary at the closest pass and ~1.2km from the correctional facility. Based on the altitude and distance from base infrastructure, it is unlikely any base activity was observed.
- The DJI Mini 3 is equipped with a professional grade (48MP / 4x digital zoom), 3-axis stabilized gimbal camera that offers true vertical shooting. This is typically used by hobbyists.
- This is a first-time detect for this S/N.

DJI Mini 3  Source: UAS Card Master	• Weight: ~248g / ~0.54lbs • Dimensions: 251 x 362 x 72mm • Max Speed: ~35 mph / ~58 kph • Flight Time: ~38min (Standard Battery / 51min Intel Flight Battery Plus) • Transmission Distance: • FCC Compliant: 11mi / 18km • 15.5mi / 25km w/Intel Battery Plus Battery • CE Compliant: 4.9mi / 8km • C2 Signal: Lightbridge • Dual Frequency: 2.4-5.8GHz • Image Transmission: 5K • Camera: 48MP/ 4x Digital Zoom • Cost: ~\$600





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimbx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than November 01, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Joint Base McGuire-Dix-Lakehurst. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-5)**
2. National Security UAS Flight Restrictions. https://udds-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-5)**
3. Joint Base McGuire-Dix-Lakehurst; PHALANX CONUS Repository; Technical Logs **(Slides 2-5)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 5)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
6. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slides 2-5)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



~~CUI~~

Information Cutoff Date: 08 JAN 25

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than May 15, 2026.

DTRA PHALANX Activity Report

Joint Base Langley-Eustis, VA (USA)

December 01, 2024 – December 03, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- S/N: 1688BR40EA00H54Z
- Points of Contact
- Sources
- Terminology

Component: Defense Threat Reduction Agency
Controlled by: DTRA OI (Phalanx)
CUI Categories: LCOMM
Distribution / Dissemination Control: N/A
POC: (S)



Executive Summary

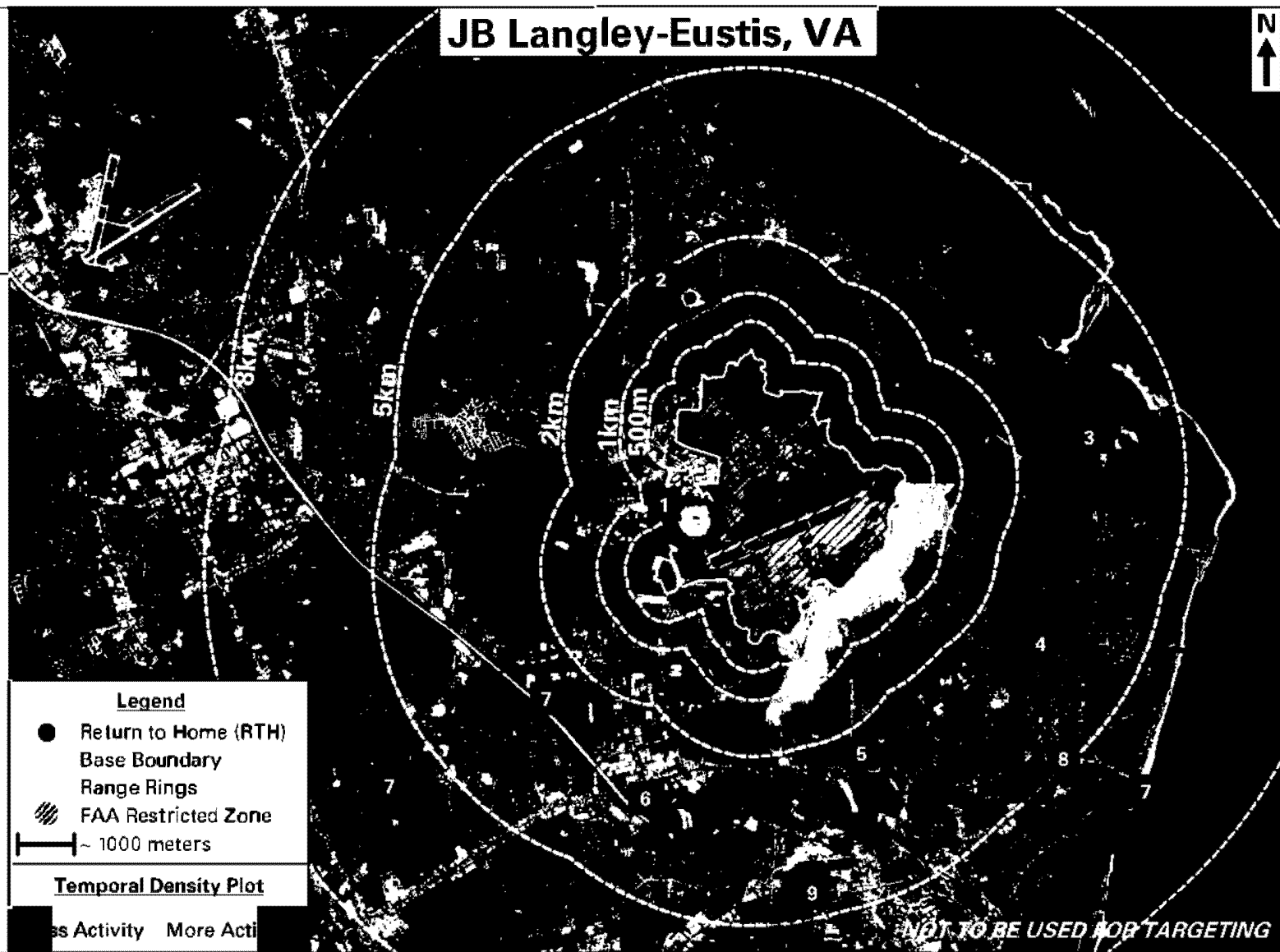
December 01, 2024 – December 03, 2024

Entire Slide is CUI

No sUAS activity was detected within the base boundary during the reporting period. (S/N: 1) operated ~250m W of the base boundary and ~570m from the SW end of the runway near a possible aircraft maintenance hangar (slide 4). (S/Ns: 1, 3, 5-9) possibly exceeded the FAA altitude allowance with (S/Ns: 1, 3-4, and 7) operating within 0ft AGL allowance areas. All 3x events for (S/N: 6) occurred during nighttime hours and is equipped with Night Mode. (S/Ns: 2-9) occurred over residential, recreational, or commercial areas and appear recreational in nature.

8km Overview

- 9x S/Ns, 14x events, 00:41:26 duration
 - Exceeded altitude allowance: 8x S/Ns (11x events) (S/Ns: 1, 3-9)
 - 89% of all S/Ns and 79% of total events exceeded altitude ceilings
 - Night detection: 1x S/N (3x events) (S/N: 6)
 - (S/N: 6) is equipped with Night Mode - a software-based program meant to enhance existing ambient light under extreme low-light conditions.
- 8x S/Ns previously detected (S/Ns: 1-3, 5-9)
 - (S/N: 1) detected operating ~810m NW of base boundary IVO Landing and Impact Research Facility (21 NOV 24).
 - (S/N: 2) detected IVO residential areas ~730m NW of Norfolk NSY, VA (14 AUG 24) and ~4.5km E of NWS Yorktown, VA (06 SEP 24).
 - (S/N: 7) detected IVO Norfolk NSY, VA (21 AUG 24), NWS Yorktown, VA (01 JUL 24), Little Creek Ft Story (17 JUN 24) and NAS Oceana (15 MAY 24) but not geo-located at any of the locations.
- 6x different platforms, 1x U/I Skydio UAS, and 1x U/I DJI UAS detected (8x rotary-wing)
 - Top by total events: DJI Mavic 3 (4x, 29%)
 - Top by total duration: DJI Mavic 3 (00:17:51, 43%)
 - Top by S/N count: DJI Mavic 3 (2x, 22%)





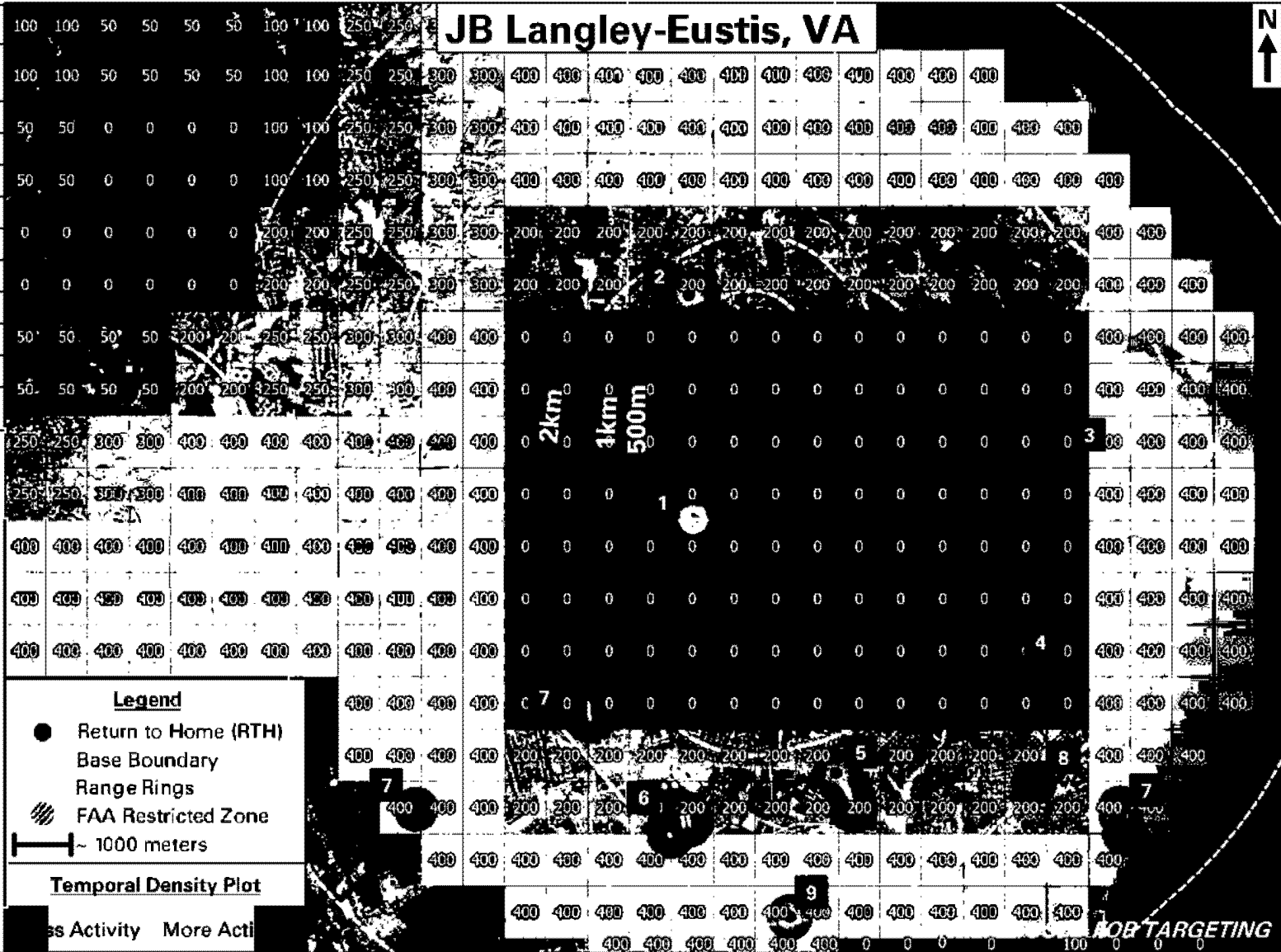
Current System Overview

December 01, 2024 – December 03, 2024

Entire Slide is CUI

Active within 8km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	U/ Skydio UAS	1668BR40EA00H54Z	1	261	00:13:38
2	DJI Mavic Mini	1SDCH7G0169RS7	1	157	00:03:04
3	U/ DJI UAS	F8PJ824AC001R00P	1	128	00:00:29
4	DJI Mini 3	F5YHC22B30021E7E	1	230	00:03:32
5	DJI Mavic 3	F45TB21CG1BE06EB	1	404	00:04:54
6	DJI Mavic 3	F45TB219P00D024E	3	520	00:12:57
7	DJI Mavic 3 Classic	F67QE235H00A003G	3	416	00:01:24
8	DJI Mini 3 Pro	F4XFA233VML85E23	1	294	00:00:01
9	DJI Mini SE	4AECJAH0021M4C	2	427	00:01:27
- S/N with night detections Red font - S/N previously detected - exceed FAA altitude allowance					

- Requests to operate within controlled airspace must be requested via the Low Altitude Authorization and Notification Capability (LAANC).
- Only Part 107 (licensed) operators may request to operate above the designated altitude ceilings up to 400ft AGL (see graphic).





—CUI—

S/N: 1668BR40EA00H54Z

December 01, 2024 – December 03, 2024

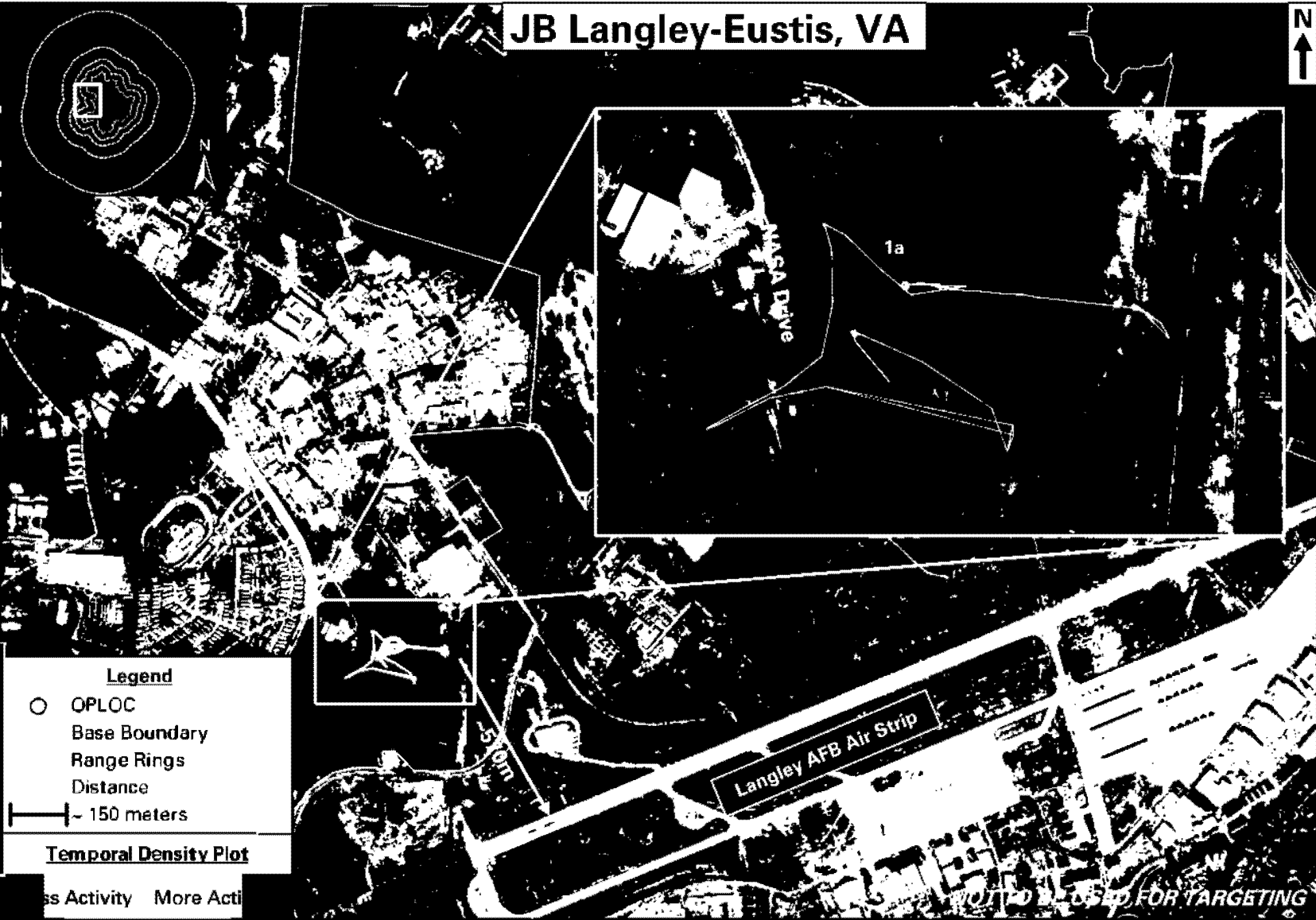
Entire Slide is CUI

1 S/N: 1668BR40EA00H54Z, U/I Skydio UAS

- 1x total event (00:13:38) within 500m
- 1x event (1a) within 500m (00:13:38)

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-02 19:40:33	2024-12-02 19:54:11	00:13:38	261
— exceed FAA altitude allowance				

- Event (1a) occurred within ~250m of the base boundary and ~570m NW of the Langley AFB airstrip between NASA drive and a western apron from hangar to airstrip.
- Activity occurred within a 0ft AGL designated area and may be in violation of FAA altitude restrictions.
- (S/N: 1) most recently detected operating ~500m NW of base boundary over residential and recreational areas (21 NOV 24).





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than May 15, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

December 01, 2024 – December 03, 2024

Entire Slide is UNCLASSIFIED

1. Map of JB Langley-Eustis, VA. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. (Slides 2-4)
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 (Slides 2-4)
3. JB Langley-Eustis, VA; PHALANX CONUS Repository; Technical Logs (Slides 2-4)
4. FAA definition of night. https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
5. Visualize It, Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> (Slides 2-4)

UNCLASSIFIED



UNCLASSIFIED

Terminology

December 01, 2024 – December 03, 2024

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than January 13, 2026.

DTRA PHALANX Activity Report

MacDill AFB, FL (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- Points of Contact
- Sources
- Terminology



CUI

Executive Summary

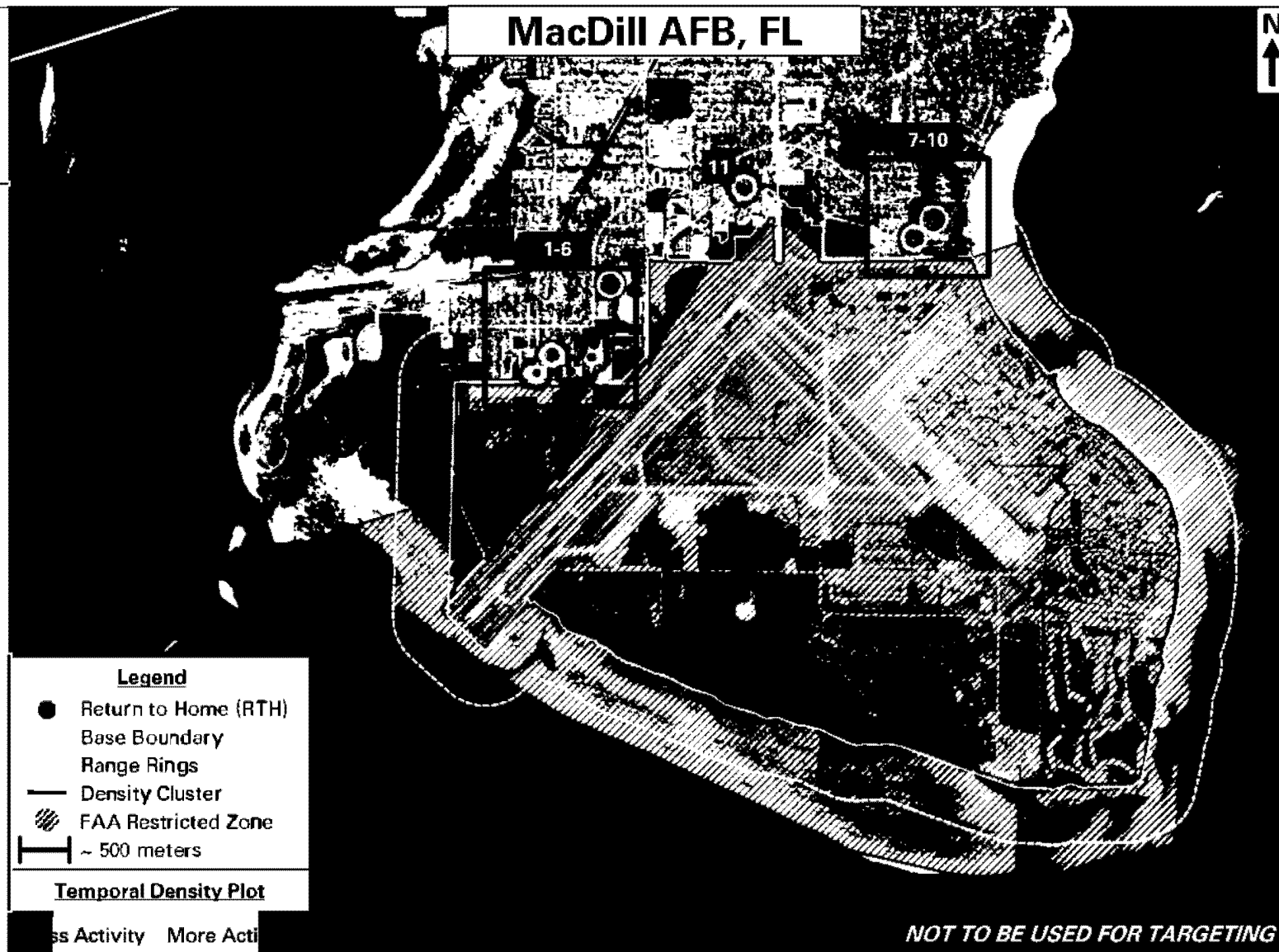
December 01, 2024 – December 31, 2024

Entire Slide is CUI

Activity for the reporting period is limited to 12 events north of the base border. All platforms exceeded the FAA 0ft AGL allowance. However, none violated the FAA restricted zone established over MacDill AFB. sUAS S/Ns detections decreased 37%, events decreased 39%, and duration decreased 66% within 500m of the base boundary compared to the previous 30-day reporting period (01 – 30 NOV 24, 17x S/Ns, 19x events, 01:41:15 duration).

500m Overview

- 11x S/Ns, 12x events, 00:36:03 duration
 - Exceeded altitude allowance: 11x S/Ns (12x events) (S/Ns: 1-11)
- 10x S/Ns previously detected (S/Ns: 1-8, 10, 11)
 - (S/Ns: 1, 6-8) were identified in various locations within 500m range conducting commercial or recreational activity (22 NOV 24, 20 NOV 24, 22 NOV 24, 27 NOV 24) respectively
 - (S/N: 2) detected in a residential area ~230m E of NAS Pensacola Support Area (13 JAN 24)
 - (S/Ns: 3-5, 10-11) previous detects were outside of requested 500m range
- Density Cluster (S/Ns: 1-6) activity appears to be recreational and commercial in nature. (S/N: 4) is noted in two different locations within the density box.
- Density Cluster (S/Ns: 7-10) activity appears to be recreational and commercial in nature.
- (S/N: 11) performed a single flight of 00:03:24 over a commercial property with no indication of threat and platform has limited camera capability.
- 9x different platforms detected (9x rotary-wing)
 - Top by total events: DJI Mavic 2 Pro, DJI Mavic Mini, and DJI Mini 2 (2x, 17%) each
 - Top by total duration: DJI Mavic Mini (00:11:37, 32%)
 - Top by S/N count: DJI Mavic 2 Pro and DJI Mini 2 (2x, 18%) each



CUI



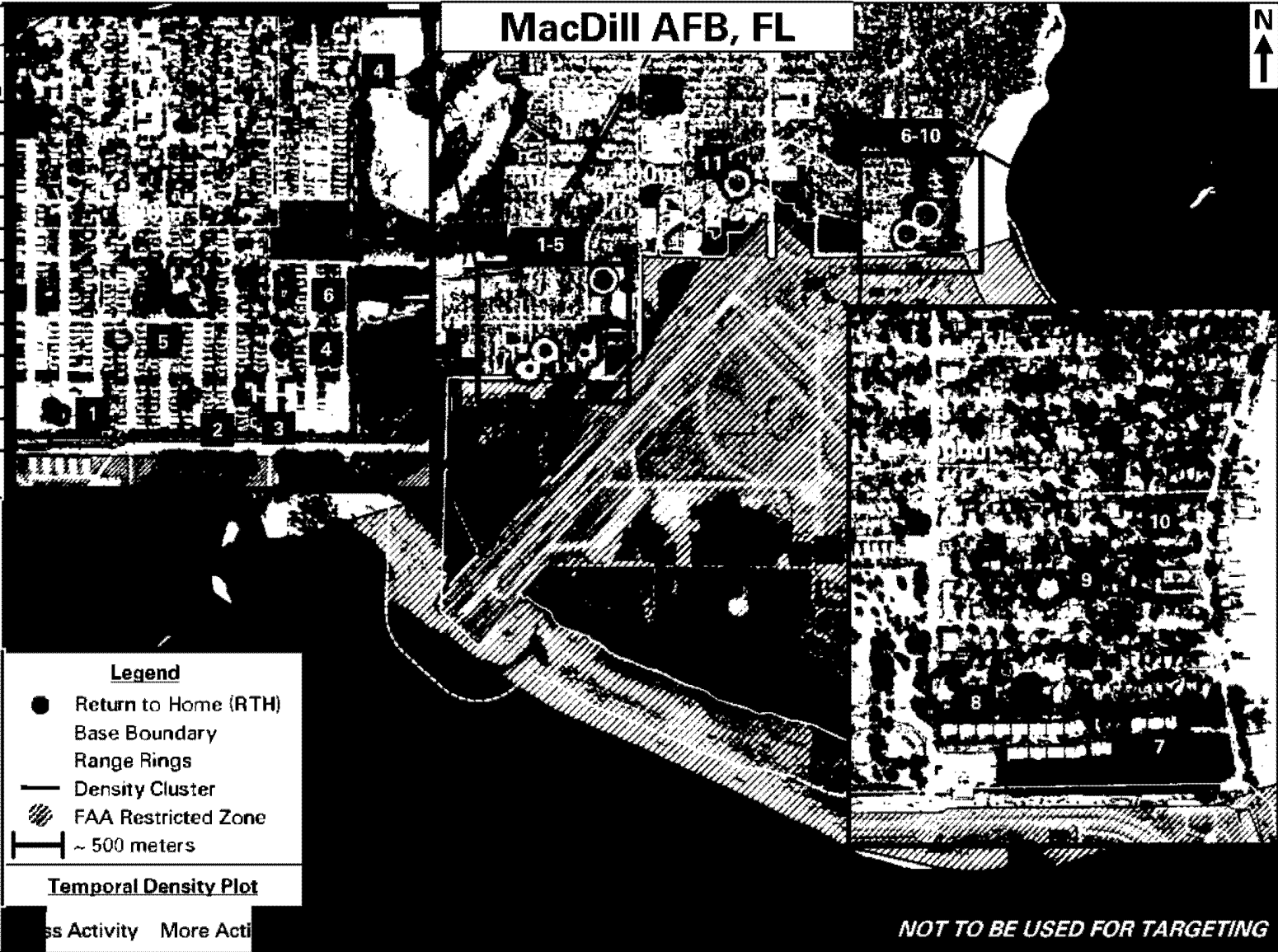
Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 500m					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mavic 2 Pro	163CHBJR0A60SE	1	459	00:02:03
2	DJI Mavic 2 Zoom	0M6CHBHR0A2LC4	1	56	00:01:33
3	DJI Mini SE	4AEAK75002003H	1	154	00:00:22
4	DJI Mavic Mini	1SDCH9U016EP88	2	268	00:11:37
5	DJI Mini 2	3NZCJ7N0244E57	1	203	00:01:23
6	DJI Mavic Air 2	3N33JBD002Y211	1	103	00:01:28
7	DJI Mini 3	F5YHA241R031Q736	1	77	00:01:05
8	DJI Mini 2	3NZCJC20442KN3	1	246	00:01:37
9	DJI Air 3	F6N8A23ACML3SRHJ	1	130	00:06:36
10	DJI Mini 3 Pro	F4XF823CL009T0A9	1	398	00:04:55
11	DJI Mavic 2 Pro	1633J7C001U077	1	278	00:03:24

Red font – S/N previously detected | – exceed FAA altitude allowance.





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than January 13, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of MacDill AFB. ArcGIS. https://services.arcgis.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. (Slides 2-3)
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 (Slides 2-3)
3. MacDill AFB, FL; PHALANX CONUS Repository; Technical Logs (Slides 2-3)
4. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
5. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> (Slides 2-3)

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than May 03, 2025.

DTRA PHALANX Activity Report

Naval Air Station Jacksonville, FL (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- S/N: 1SDLGCW20400LE
- Points of Contact
- Sources
- Terminology

Component: Defense Threat Reduction Agency
Controlled by: DTRA OI (Phalanx)
CUI Categories: LCOMM
Distribution / Dissemination Control: N/A
POC: (S)(6)



— CUI —

Executive Summary

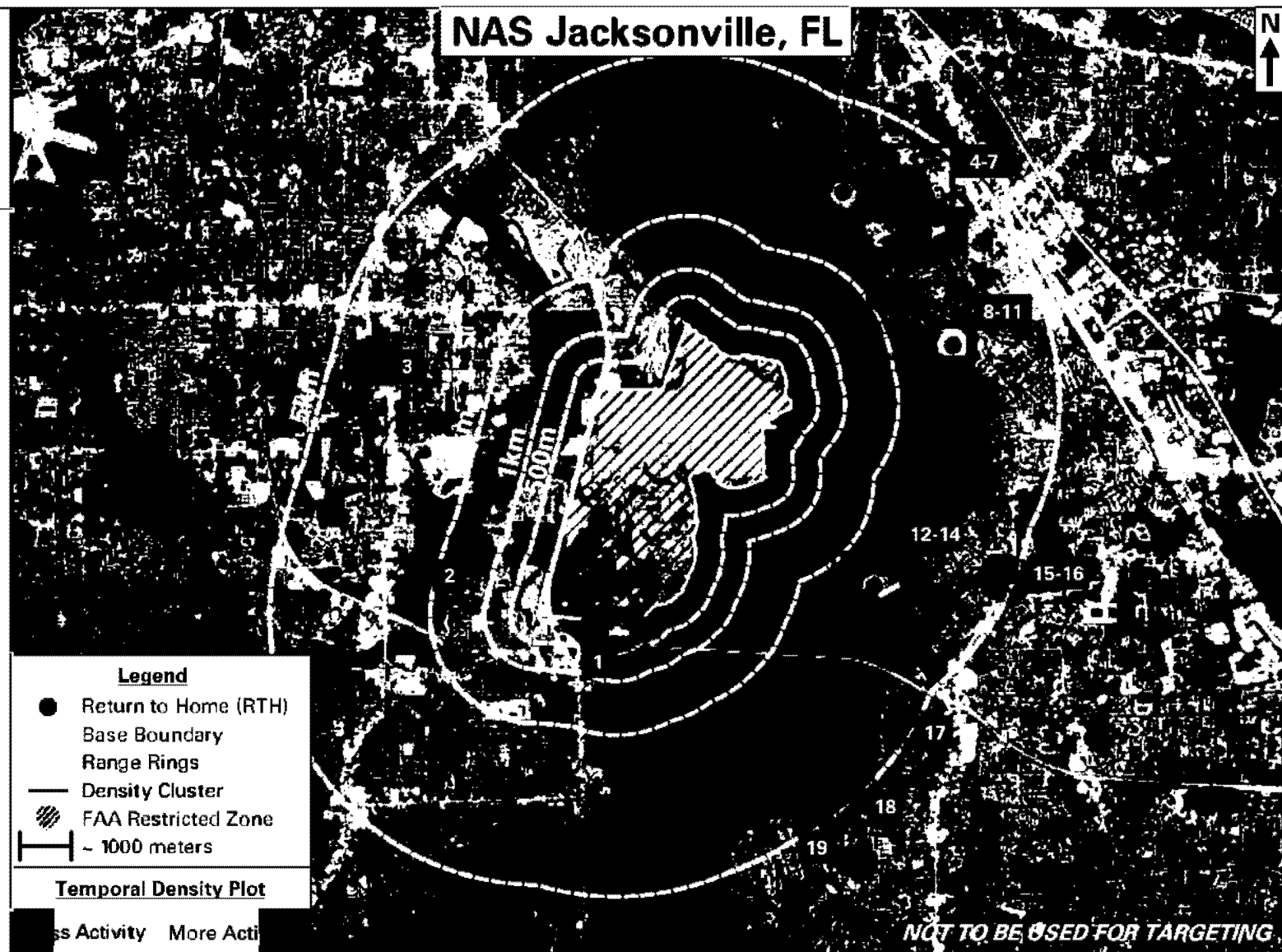
December 01, 2024 – December 31, 2024

Entire Slide is CUI

No activity was detected within the base boundary during the reporting period. S/N: 1 was the closest activity, ~40m S of the base over a residential area. All S/Ns except S/N: 6 likely exceeded the FAA's flight altitude restrictions. Small UAS S/N detections decreased 27%, events decreased 23%, and duration decreased 10% within 5km of the base boundary compared to the previous 4-week reporting period (01 – 30 NOV 24, 25x S/Ns, 35x events, 02:38:56 duration).

5km Overview

- 19x S/Ns, 28x events, 02:27:35 duration
 - Exceeded altitude allowance: 18x S/Ns (27x events) (S/Ns: 1-5, 7-19)
 - Night detection: 1x S/N (1x event) (S/N: 2)
 - S/N: 2 is not equipped with night vision, infrared or a thermal capable camera
- 12x S/Ns previously detected (S/Ns: 1-3, 6, 8-10, 12-13, 15-16, 19)
 - S/Ns: 1-2, 8-10, 12-13, 16 were detected over same location
 - S/N: 3 detected ~17km NE of NAS Jacksonville (11 NOV 24) and IVO NAS Mayport (26 NOV 24)
 - S/N: 6 detected ~14.6km NE of NAS Jacksonville (13 NOV 24)
 - S/N: 15 detected ~4.9km N of MacDill AFB, FL (04 NOV 24)
 - S/N: 19 detected ~22.8km NE of NAS Jacksonville (03 MAY 23)
- S/N: 3 was detected IVO NAS Mayport during the reporting period (03 DEC 24 & 20 DEC 24).
- 9x different platforms detected (9x rotary-wing)
 - Top by total events: DJI Mini 2 SE (7x, 25%)
 - Top by total duration: DJI Mini 2 SE (00:39:12, 27%)
 - Top by S/N count: DJI Mavic Air 2 and DJI Mini 3 (4x, 21%) each



— CUI —



CUI

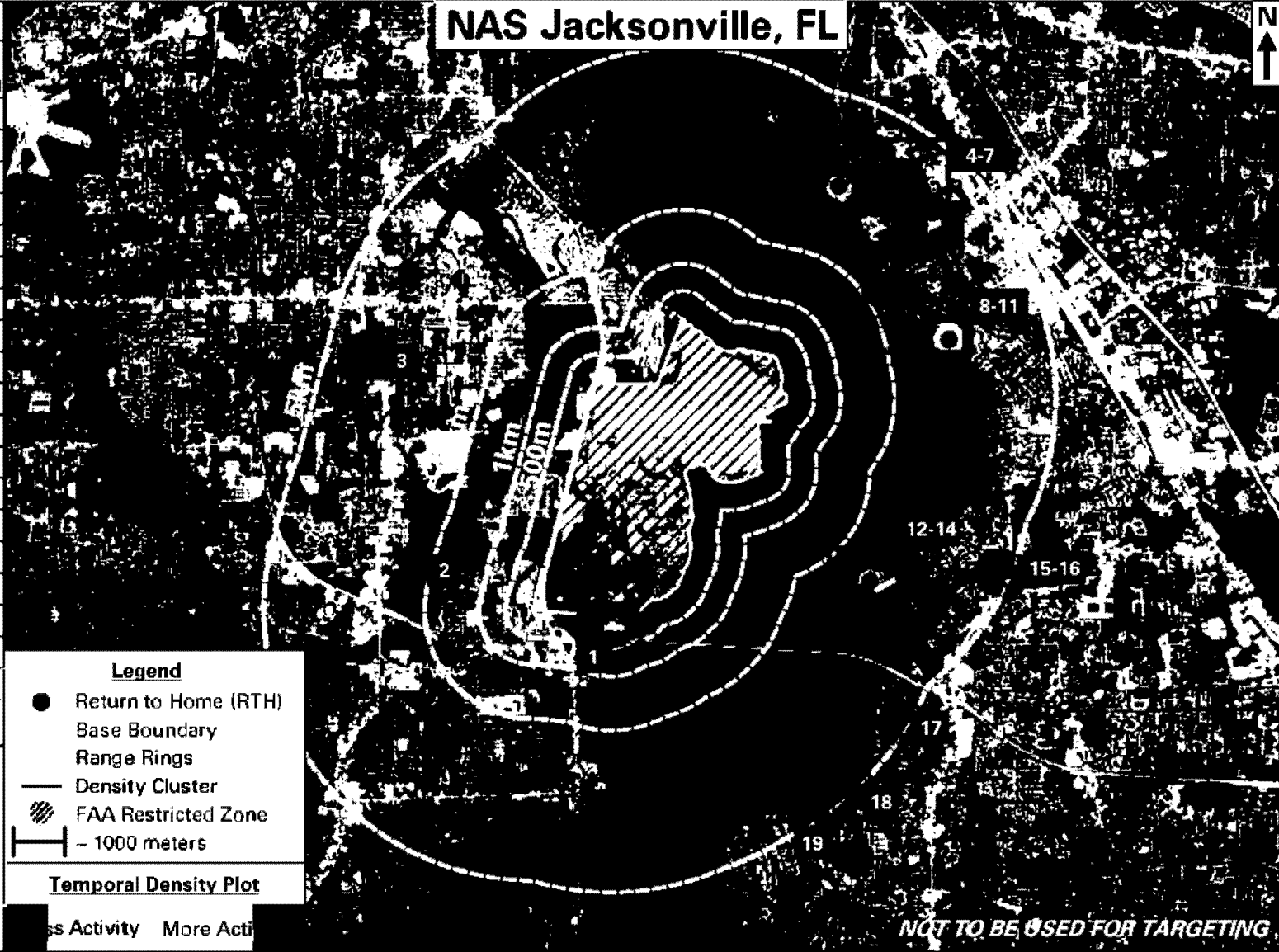
Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mavic Mini	1SDLGCW20400LE	1	431	00:02:20
2	DJI Mini 3	687AL9R00207VG	1	218	00:00:22
3	DJI Mavic 3	F45T7245700EE1HX	2	176	00:00:02
4	DJI Mini 2 SE	F6CDA237RML20MRS	1	202	00:06:55
5	DJI Mini 4 Pro	F6Z9A239KML318Q9	2	218	00:07:49
6	DJI Mini SE	4AEAK1G00200FE	1	241	00:02:02
7	DJI Mini 3	F5YHA23CC0315779	2	173	00:19:28
8	DJI Mavic Air 2	3N3BH9H0120694	1	504	00:06:22
9	DJI Mavic Air 2	3N3BH9Q01203C3	2	474	00:15:07
10	DJI Mini 2	3NZSHB400302CD	2	202	00:13:25
11	DJI Mini 2	3NZCJC90443H8Q	1	130	00:24:42
12	DJI Mavic Air 2	3N3BH7T00201Z6	1	195	00:00:04
13	DJI Mini 2 SE	F8PJA246AML1M079	4	310	00:26:30
14	DJI Mini 2 SE	L1LML2JD0E	2	441	00:05:47
15	DJI Mavic Air 2	3N3BJBL01200V9	1	310	00:09:54
16	DJI Air 2S	3YTBJB700301NS	1	215	00:00:01
17	DJI Mini 3	687XMA50020C8S	1	238	00:05:10
18	DJI Mini 3	F5YHA24340314JPS	1	202	00:00:01
19	DJI Mini SE	4AESJ4500202CL	1	182	00:01:34

– S/N with night detection | Red font – S/N previously detected | – exceed FAA altitude allowance



CUI



CUI

S/N: 1SDLGCW20400LE

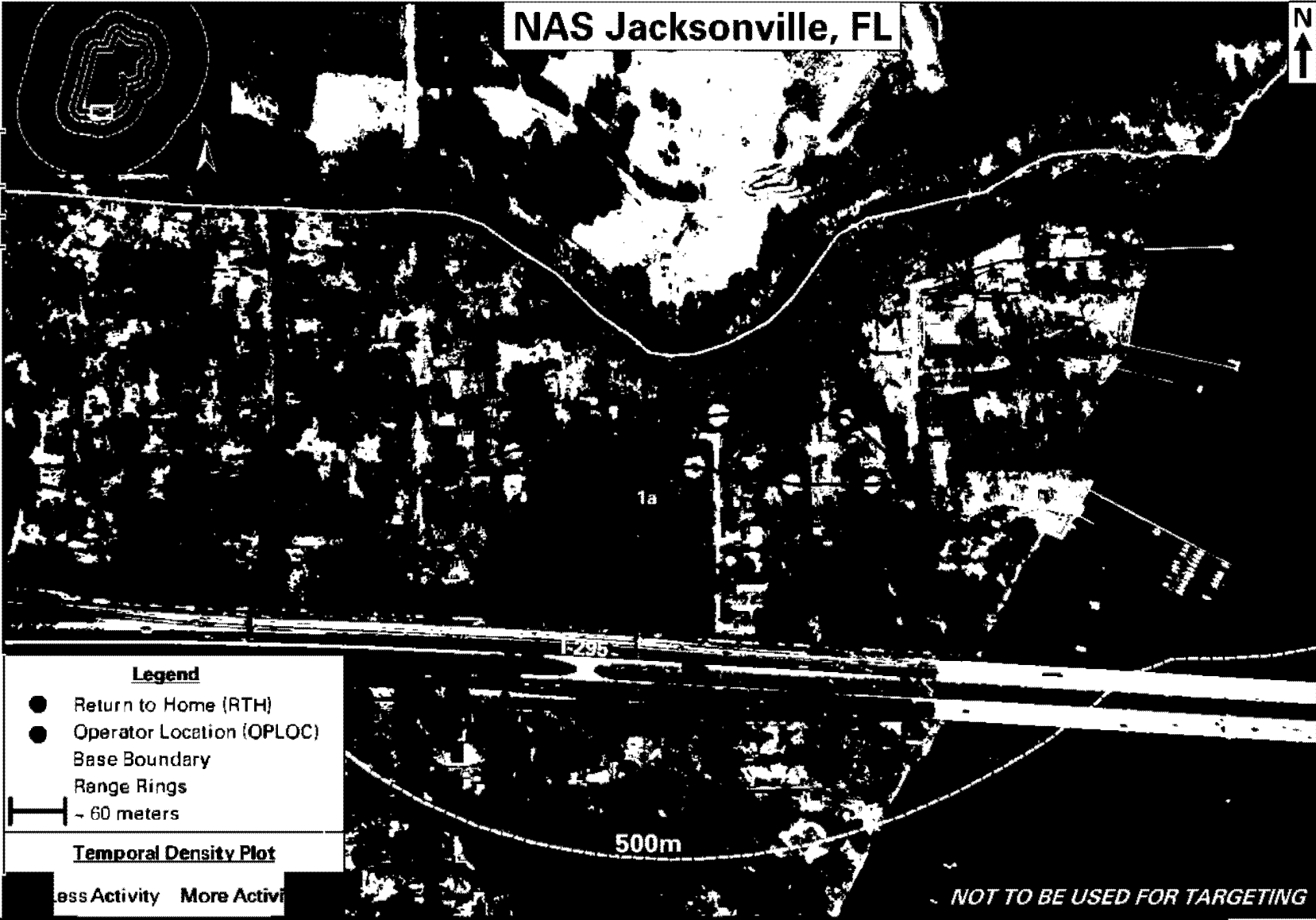
December 01, 2024 – December 31, 2024

Entire Slide is CUI

- 1 S/N: 1SDLGCW20400LE, DJI Mavic Mini
- 1x total event (00:02:20) within 5km
 - 1x event (1a) within 500m of base boundary (00:02:20)

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-01 20:57:12	2024-12-01 20:59:32	00:02:20	431
- exceed FAA altitude allowance				

- Flight track is over residential area ~40m south of the installation perimeter. Flight characteristics appears recreational based on location; this activity also occurred south of base, away from the flight line.
- Previously detected IVO NAS Jacksonville on 10 DEC 23.



DJI Mavic Mini



Source: UAS Card Master

- **Weight:** ~249g/0.55lbs
- **Dimensions:** 245 x 290 x 55mm (unfolded)
- **Max Speed:** ~29 mph/ 46.8 kpm
- **Flight Time:** ~30 Mins
- **Transmission Distance:**
 - Model **MR1SS5**: 5.8 GHz: 4km (FCC); 2500 m (SRRC)
 - Model **MR1SD25**: 2.4 GHz: 2km (MIC/CE); 5.8 GHz: 500m (CE)
- **C2 Signal:** OcuSync 2.0/ Enhanced Wi-Fi
- **Dual Frequency:** 2.4-5.8GHz
- **Image Transmission:** 4K
- **Camera:** 12MP/ 4x Digital Zoom
- **Cost:** ~\$399



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than May 03, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Air Station Jacksonville. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-4)**
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-4)**
3. Naval Air Station Jacksonville; PHALANX CONUS Repository; Technical Logs **(Slides 2-4)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slide 4)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
6. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slides 2-4)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



~~CUI~~

Information Cutoff Date: 03 JAN 25

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than August 12, 2025.

DTRA PHALANX Activity Report

NAS Pensacola, FL (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- Altitude Allowance
- Points of Contact
- Sources
- Terminology

Component: Defense Threat Reduction Agency
Controlled by: DTRA OI (Phalanx)
CUI Categories: LCOMM
Distribution / Dissemination Control: N/A
PO (S)



CUI

Executive Summary

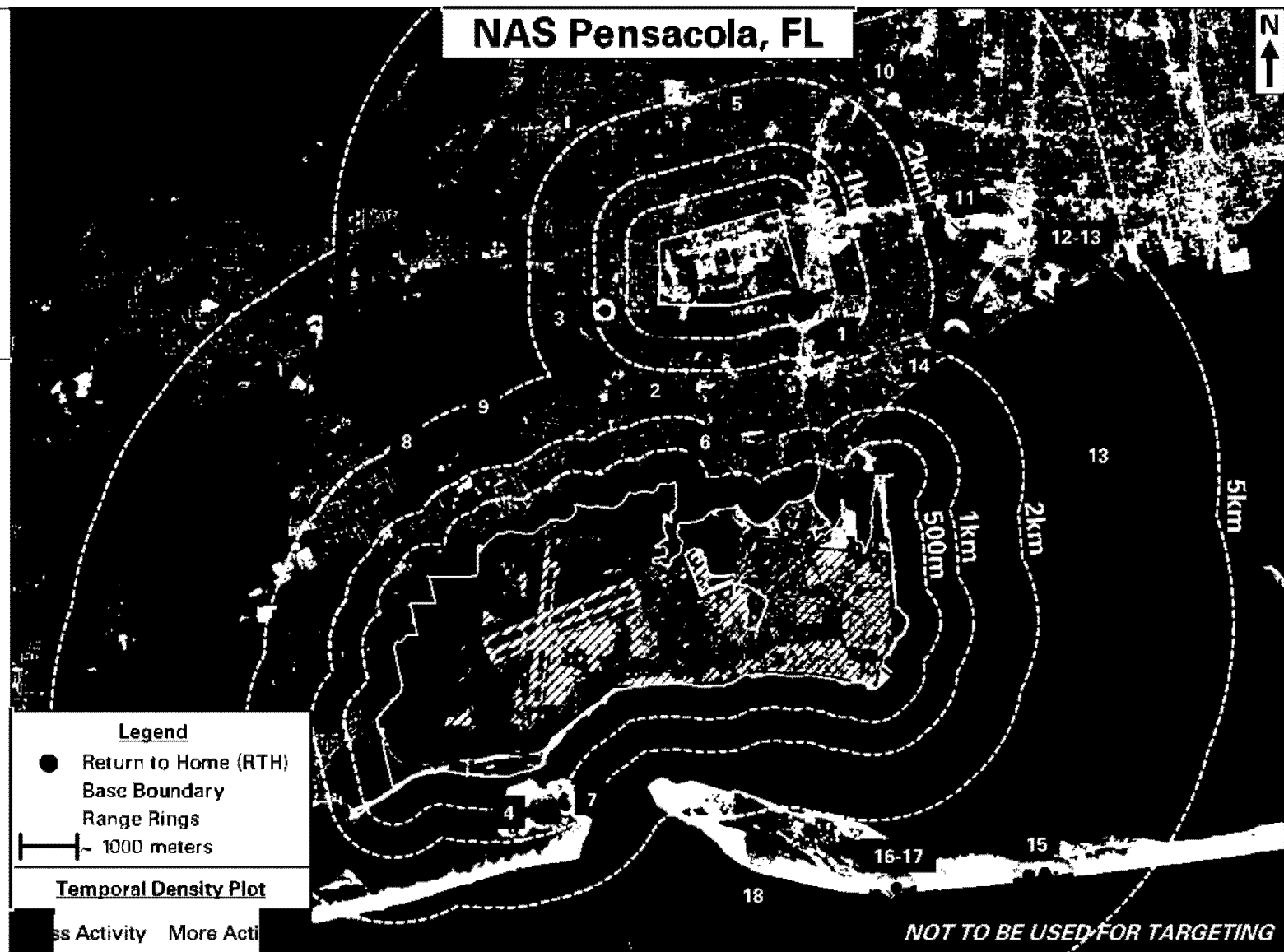
December 01, 2024 – December 31, 2024

Entire Slide is CUI

During the reporting period, most detections were more than 1km away from the base boundary over residential and recreational areas. (S/N: 1) was detected ~178m S of the northern installation in a parking lot along FL295 for ~1second. (S/Ns: 2-3) were also within ~1km SW of northern installation over residential areas, while (S/N: 4) was detected ~633m SSE of the southern installation over the Gulf Intracoastal Waterway IVO Robertson Island. (S/N: 12) accounted for 62% of this period's total duration and was detected ~3.8km E of the northern installation around Sanders Beach Park. sUAS detections within 5km of the base increased compared to the previous 4-week reporting period (01 – 31 NOV 24, 13x S/Ns, 14x events, 00:45:05 duration). S/Ns increased 34%, events increased 80%, and duration increased 212%.

5km Overview

- 18x S/Ns, 26x events, 02:25:19 duration
 - Exceeded altitude allowance: 11x S/Ns (11x events) (S/Ns: 1-4, 6-7, 9-10, 12, 17-18)
 - (S/Ns: 1-4, 6, 9) detected in areas with 0ft AGL ceiling
 - (S/N: 17) exceeded 400ft AGL ceiling
 - Night detection: 1x S/N (1x event) (S/N: 8)
 - DJI Mini 3 does not come standard with cameras or software to enhance night operation
- 7x S/Ns previously detected (S/Ns: 1, 3, 6, 8, 10, 13-14)
 - (S/N: 1) detected ~3.4km E of base over residential area along Bywinds (12 AUG 23)
 - (S/N: 13) detected ~7km SE of Hurlburt AFB, FL over business district (17 SEP 24)
 - (S/N: 14) detected ~7.4km W of AFB over residential area (23 SEP 24)
- 10x different platforms and 3x U/I DJI UAS detected (13x rotary-wing)
 - Top by total events: U/I DJI UAS (8x, 31%)
 - Top by total duration: U/I DJI UAS (01:38:20, 68%)
 - Top by S/N count: DJI Mini 2 (4x, 22%)



CUI



CUI

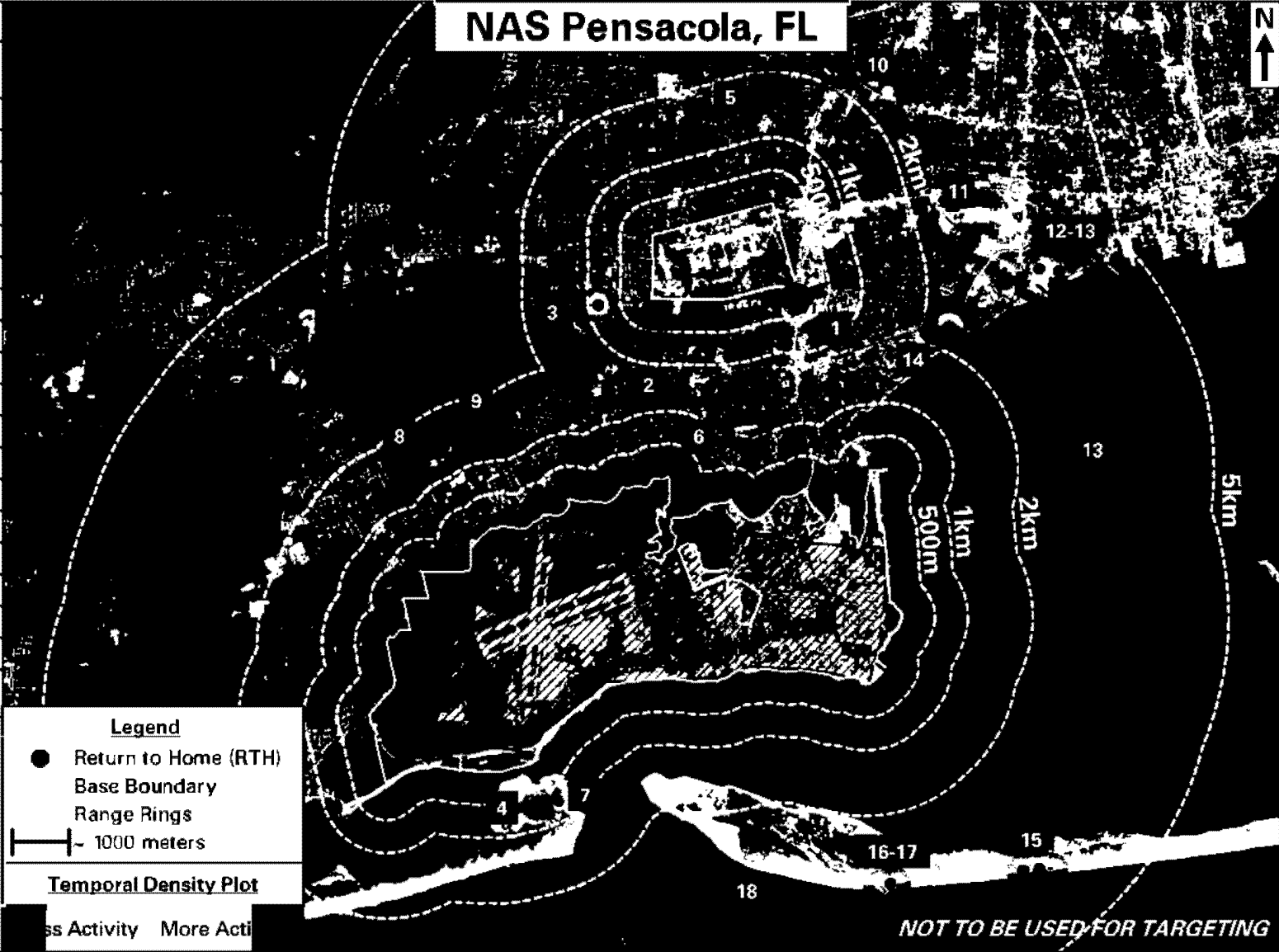
Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 2	3NZCJ68004HBS0	1	242	00:00:01
2	DJI Mini 2	3NZSHC100408WR	1	268	00:03:02
3	DJI Mini 2	3NZCH9V0033UD7	1	314	00:07:41
4	U/I DJI UAS	F8PJA243NML144U1	1	127	00:05:16
5	DJI Mavic Mini	1SDLGBH10403HH	1	238	00:02:40
6	U/I DJI UAS	F8PJA246AML1D1GT	1	291	00:03:13
7	DJI Mini 3 Pro	F4XFD224S0064H40	1	205	00:01:38
8	DJI Mini 3	687AL15001020W	1	61	00:04:37
9	DJI Mini SE	4AECJ8W0020H5U	1	219	00:00:51
10	DJI FPV	37QBHBH00B00LX	1	327	00:00:56
11	DJI Mini 3	F5YHX24B7002FPXR	1	278	00:07:46
12	U/I DJI UAS	F8PJC249R00084SB	6	337	01:29:51
13	DJI Mavic 3	F4QZB21AC2AD00EW	1	123	00:00:39
14	DJI Air 3	F6N8C237T0032J6U	2	363	00:02:12
15	DJI Mini 2	3NZCJ39004B5H5	3	251	00:01:42
16	DJI Mavic Air	0K13G6F00DM069	1	149	00:03:40
17	DJI Mini 2 SE	F6CDA23APML26H64	1	527	00:07:42
18	DJI Mini 3	687CKCE0019K24	1	346	00:01:52
- S/N with night detection Red font - S/N previously detected - exceed FAA altitude allowance					

- DJI Mini 3 (S/N: 8) does not come standard with cameras or software to enhance night operations
- DJI Mavic 3 (S/N: 13) and DJI Air 3 (S/N: 14) are equipped with night mode program meant to enhance existing ambient light under extreme low-light conditions





CUI

Altitude Allowance

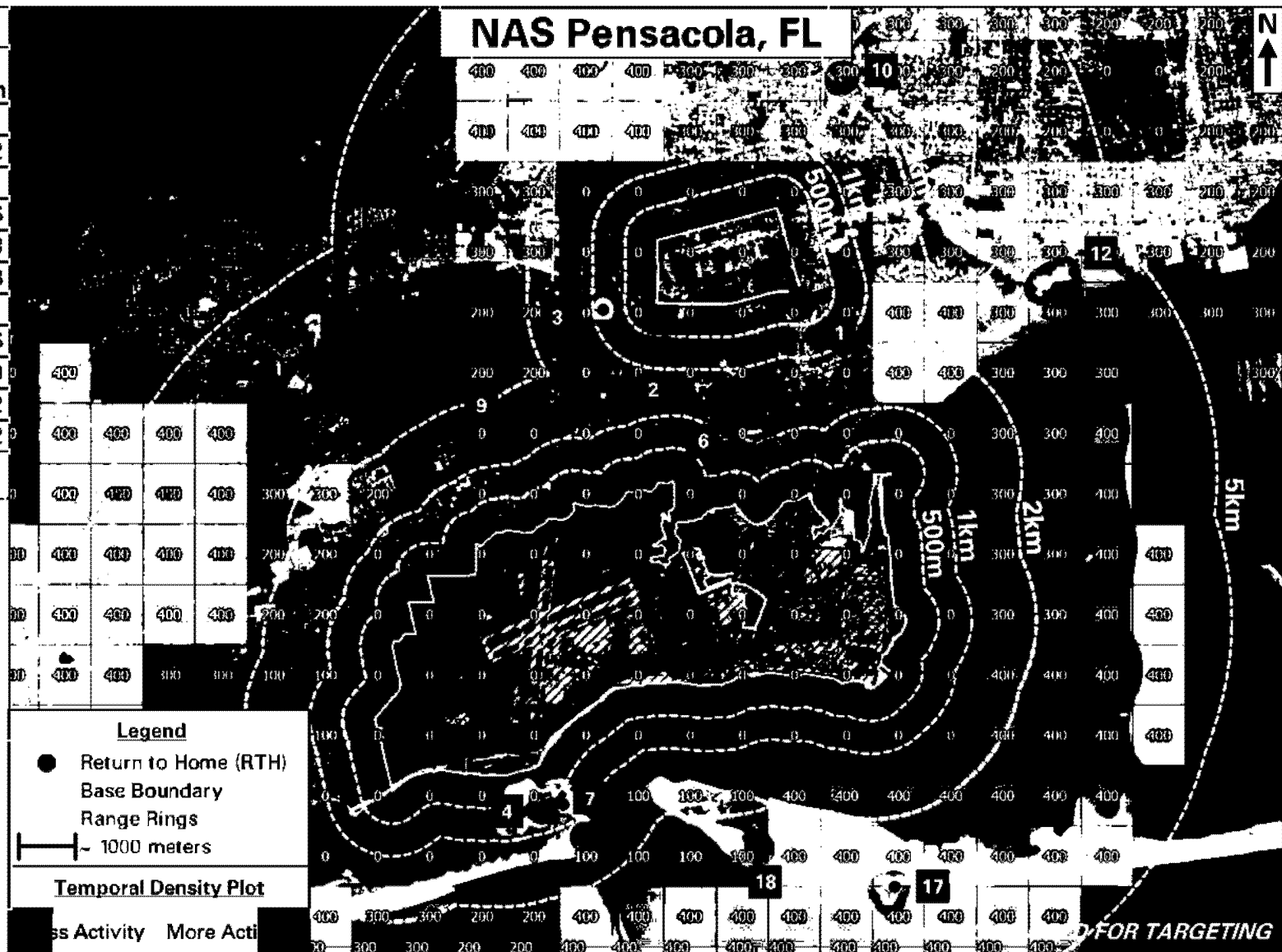
December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 2	3NZCJ68004HBS0	1	242	00:00:01
2	DJI Mini 2	3NZSHC100408WR	1	268	00:03:02
3	DJI Mini 2	3NZCH9V0033UD7	1	314	00:07:41
4	U/I DJI UAS	F8PJA243NML144U1	1	127	00:05:16
6	U/I DJI UAS	F8PJA246AML1D1GT	1	291	00:03:13
7	DJI Mini 3 Pro	F4XFD224S0064H40	1	205	00:01:38
9	DJI Mini SE	4AECJ8W0020H5U	1	219	00:00:51
10	DJI FPV	37QBHBH00B00LX	1	327	00:00:56
12	U/I DJI UAS	F8PJC249R00084SB	1	337	00:16:19
17	DJI Mini 2 SE	F6CDA23APML26H64	1	527	00:07:42
18	DJI Mini 3	687CKCE0019K24	1	346	00:01:52

Red font – S/N previously detected | – exceed FAA altitude allowance

- Requests to operate within controlled airspace must be requested via the Low Altitude Authorization and Notification Capability (LAANC)
- Only Part 107 (licensed) operators may request to operate above the designated altitude ceilings up to 400ft AGL (see graphic)
 - (S/Ns: 1-4, 6, 9) detected in areas under 0ft AGL ceiling
 - (S/N: 17) exceeded 400ft AGL ceiling
- 61% of all S/Ns and 42% of total events exceeded altitude ceilings
 - 11x S/Ns, 11x events (S/Ns: 1-4, 6-7, 9-10, 12, 17-18)



CUI



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimbx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than August 12, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of NAS Pensacola, Florida. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. (Slides 2-4)
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 (Slides 2-4)
3. NAS Pensacola, Florida; PHALANX CONUS Repository; Technical Logs (Slides 2-4)
4. FAA definition of night. https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
5. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> (Slides 2-4)

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:** The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than a December 23, 2025.

DTRA PHALANX Activity Report

National Capital Region Assessment

December 10, 2024 – December 23, 2024



This brief is classified up to

CUI

CUI

Agenda

- Overall Activity Summary
- Top 4 Site Charts
- Activity by Base / Top 5 Platforms (Total Duration)
- Activity by Weekday / Activity by Time (Zulu)
- NCR Area of Interest (3 slides)
- JB Andrews (3 Slides)
- Fort Belvoir (3 Slides)
- South Potomac - Indian Head (3 Slides)
- NSF Thurmont (2 slides)
- Intelligence Community Campus - Bethesda (ICCB) (3 Slides)
- Pentagon (2 Slides)
- Washington Navy Yard (3 Slides)
- Armed Forces Retirement Home (3 Slides)
- NSF Dahlgren (3 Slides)
- Naval Observatory (3 Slides)
- NSF Suitland (3 Slides)
- Points of Contact
- Sources
- Terminology



Overall Activity Summary

December 10, 2024 – December 23, 2024

Entire Slide is CUI

Activity Summary

- 19x S/Ns, 36x events, 04:00:00 duration
- 3x S/Ns detected operating within a base boundary (6x events)
 - All within NSF Dahlgren
- Exceeded altitude allowance or Special Flight Rules Area* (SFRA): 16x S/Ns (25x events)
- Night detections: 3x S/Ns (3x events)
- Previous month comparison (NOV 2024): 87x S/Ns (51% decrease), 151x events (47% decrease), 07:46:21 duration (15% increase)
- 11x S/Ns previously detected
- S/N: F6N8C236W00314EH previously detected at various locations north of JB Andrews. Activity was likely commercial in nature (23DEC23).
- S/N: 0M6CHARR0A2DVK previously detected ~4km west of South Potomac – Indian Head along the bank of the Potomac River (11JUN24).
- S/N: 5FSCJC40111EJB previously detected over a residence ~9km north of JB Andrews and over a commercial area ~2km north of ICCB (06SEP24).
- S/N: F4XFA22AFML78D81 detected along two different roads ~5km from both Ft Belvoir and JB Andrews (25OCT24).
- S/N: 11VKJ5E00201DA previously detected on NSF Dahlgren ~370m N of the current detects on 13NOV24.
- S/N: 8JECMA40018457 previously detected over a residence ~20km N of JB Andrews on 23NOV24.
- S/N: 11VKJ570020IMP previously detected in the same location as the current detect within NSF Dahlgren on 03DEC24.
- S/N: F45T3239600EW0EC previously detected at various locations NE of South Potomac-Indian Head near the current detected location. (08DEC24)
- All other previous detected S/Ns operated in the same locations as current detects.
- Highest Activity by Base
 - Events: South Potomac-Indian Head (13x events)
 - Duration: NSF Dahlgren (01:59:20)
- Highest Activity by Weekday
 - Events: Sunday (10x events)
 - Duration: Thursday (01:45:44)
- Highest Activity by Time (Zulu)
 - Events: 1900Z & 2000Z (7x events)
 - Duration: 1700Z (01:23:30)
- 0x S/Ns detected Intra-COCOM
- 0x S/Ns detected Inter-COCOM
- Intra-CCMD: S/Ns detected at different sites within the CCMD
- Inter-CCMD: S/Ns detected in multiple CCMDs

NOT TO BE USED FOR TARGETING

NSF Thurmont, MD

NSF Dahlgren, VA

National Capital Region

Legend

- Return to Home (RTH)
- Base Boundary
- Range Rings
- FAA Restricted Zone

Temporal Density Plot

Less Activity More Activity

*Count includes duplicates due to overlapping base areas of interest | All detected events covered by the National Capital Region 15-Mile Special Flight Rules Area (SFRA) are counted toward the altitude allowance violations.

CUI



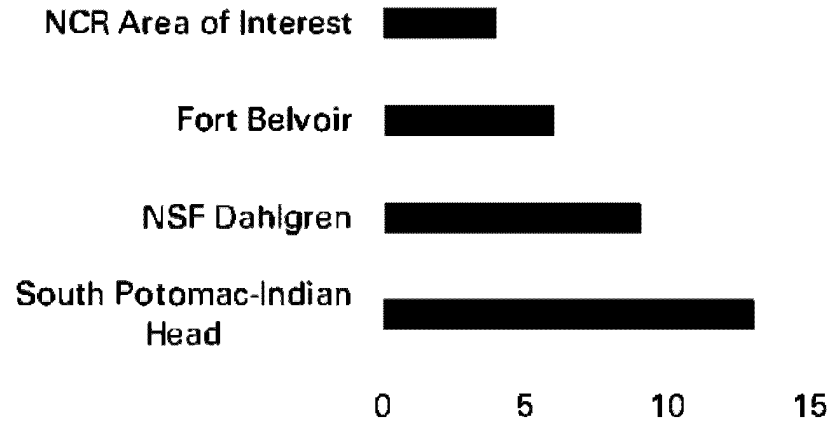
CUI

Top 4 Site Charts

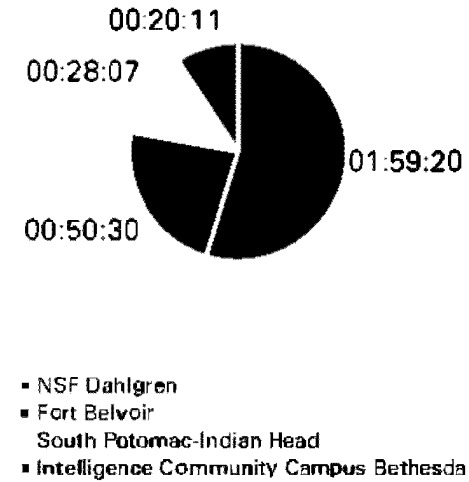
December 10, 2024 – December 23, 2024

Entire Slide is CUI

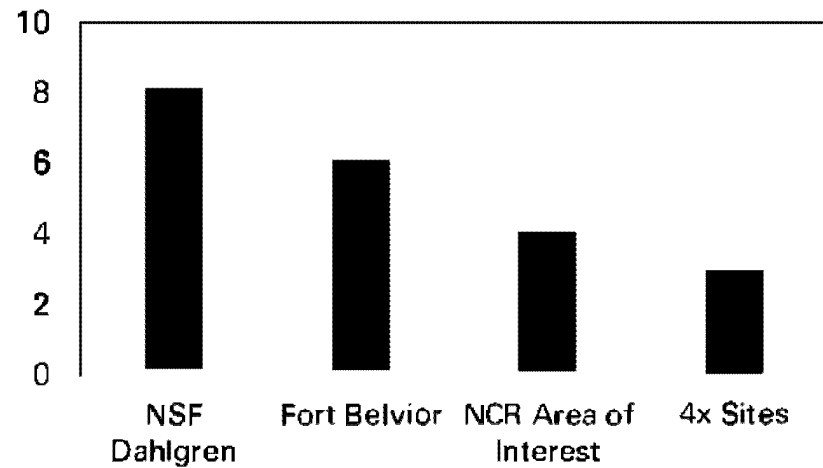
Top 4 Sites - Total Events



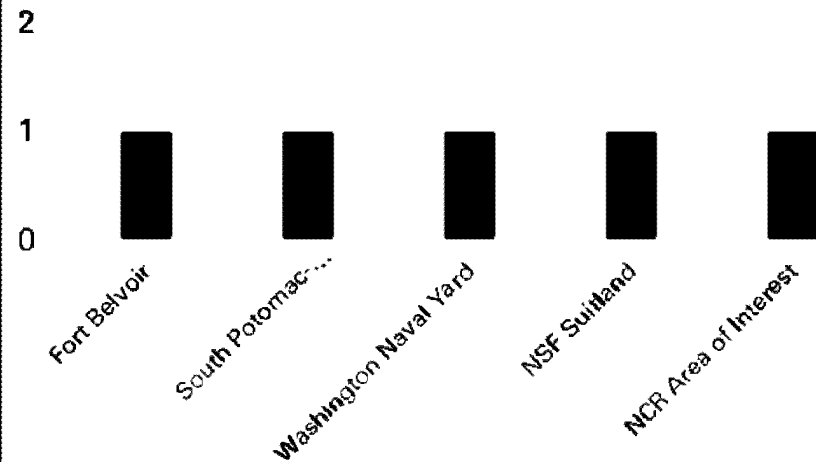
Top 4 Sites - Total Duration



Top 4 Sites - Altitude Violations



Top 5 Sites - Night Events



CUI



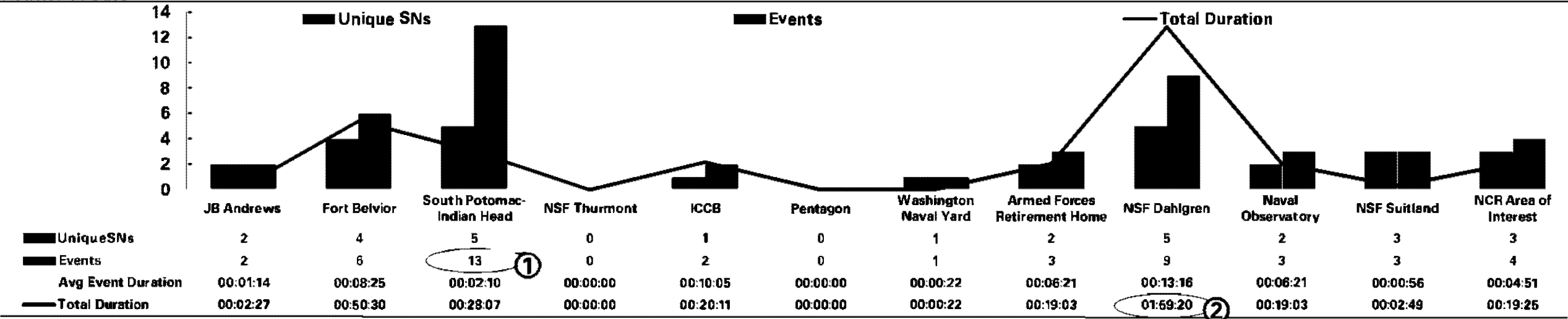
CUI

Activity by Base / Top 5 Platforms (Total Duration)

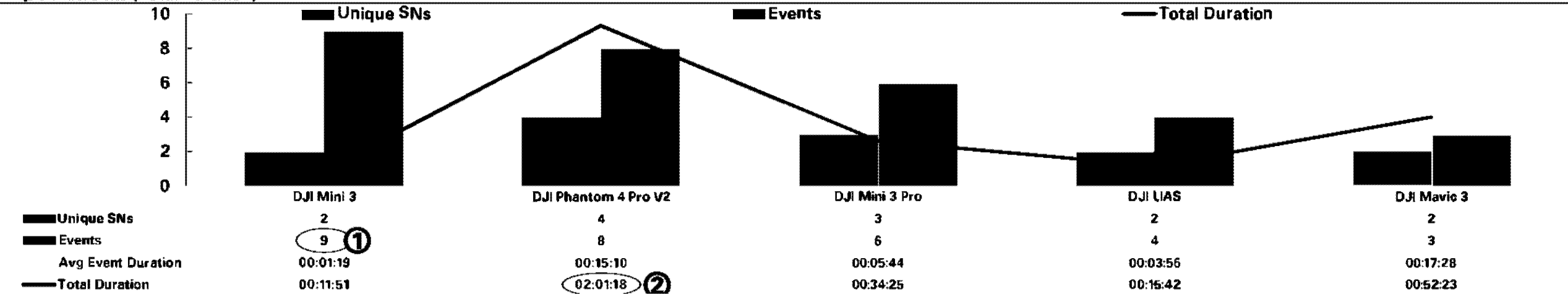
December 10, 2024 – December 23, 2024

Entire Slide is CUI

Activity by Base



Top 5 Platforms (Total Duration)



○ Highest Total Event/Duration (by Base)

○ Highest Total Event/Duration (by Platform)



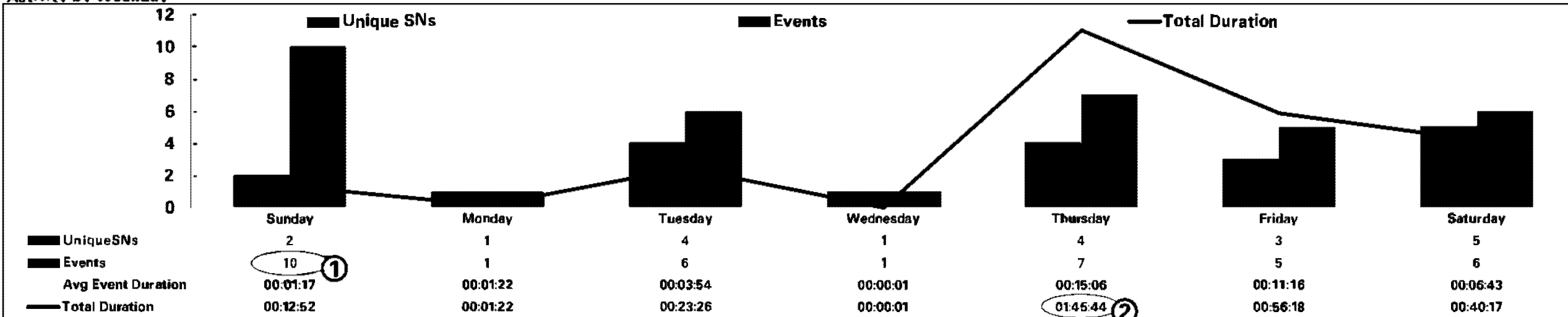
CUI

Activity by Weekday / Activity by Time (Zulu)

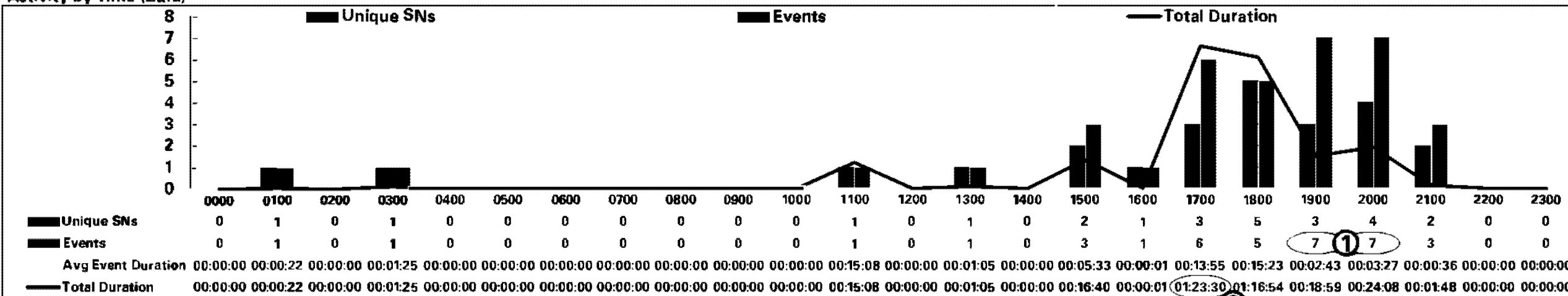
December 10, 2024 – December 23, 2024

Entire Slide is CUI

Activity by Weekday



Activity by Time (Zulu)



○ Highest Total Event/Duration (Weekday)

○ Highest Total Event/Duration (Hour)

CUI



NCR Area of Interest Activity Summary

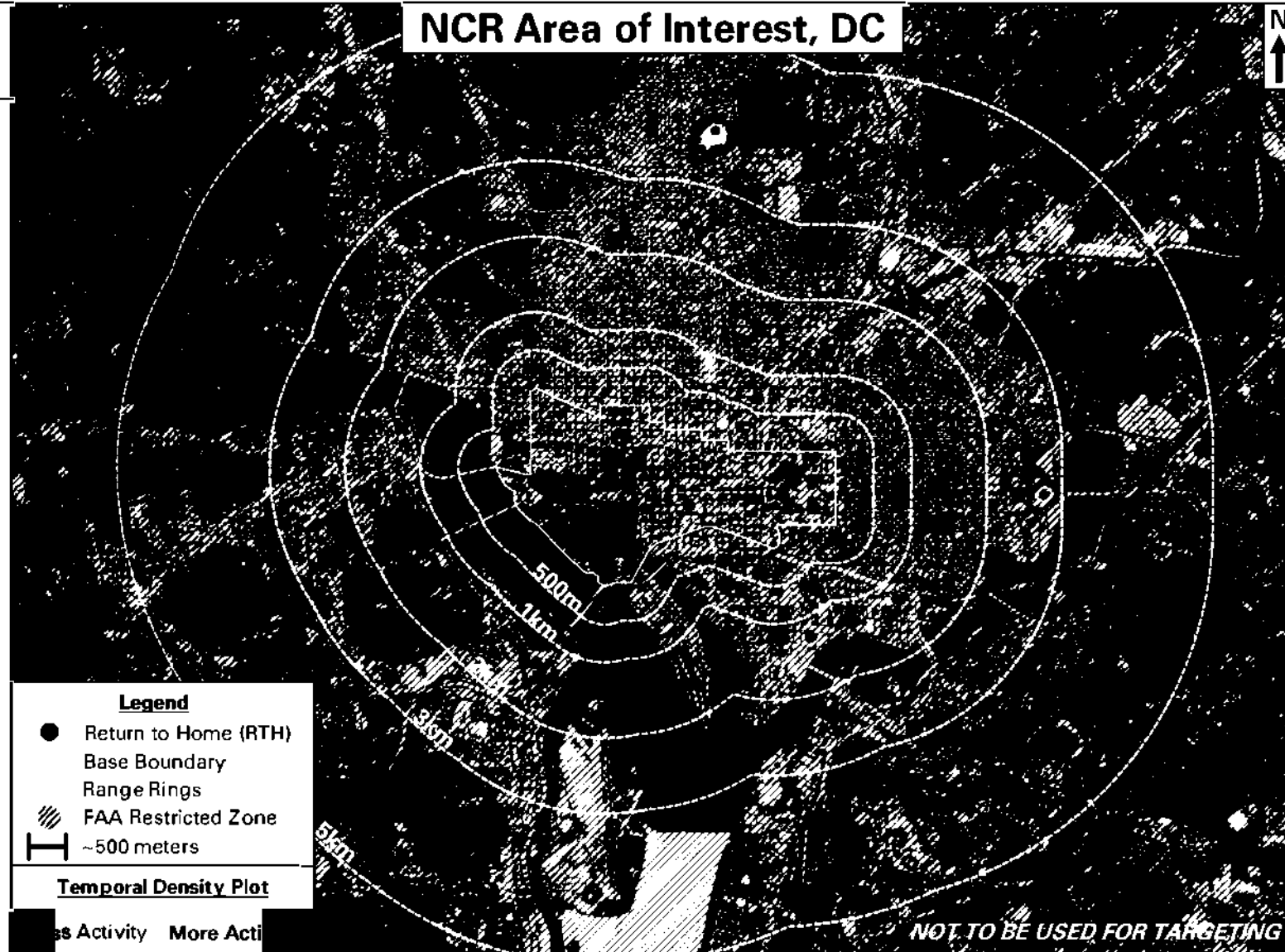
December 10, 2024 – December 23, 2024

Entire Slide is CUI

No activity occurred within 500m of the NCR AOI during the reporting period. The closest activity occurred IVO the Armed Forces Retirement Home (AFRHW) ~4km north (see slide 29).

Activity Highlights

- 3x S/Ns, 4x events, 00:19:25 duration
 - Exceeded altitude allowance: 3x S/Ns (4x events)
 - Night detections: 1x S/N (1x event)
 - No nighttime detections within ~500m from base boundary
- 2x S/Ns previously detected
- S/N: F6N8C236W00314EH (DJI Air 3)
- S/N: F4XFA22AFML78D81 (DJI Mini 3 Pro)
- Highest Activity by Weekday
 - Events: Friday (3x events)
 - Duration: Friday (00:19:03)
- Highest Activity by Time (Zulu)
 - Events: 0100Z, 1500Z, 1600Z & 1900Z (1x event each)
 - Duration: 1500Z (00:11:51)
- Highest Duration by Platform: DJI Phantom 4 Pro V2 (00:16:39)
- 0x detects within 500m, 0x detects within the Base Boundary





~~CUI~~

NCR Area of Interest Data Analysis

December 10, 2024 – December 23, 2024

Entire Slide is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	10 Dec 24	Comparison
	End date	30 Nov 24	End date	23 Dec 24	
	Weeks in total	4	Weeks in total	2	
Total Events	24		4		-63%
Total Duration	01:21:59		00:19:25		-47%
Total SNs	14		3		-52%
Most Active Platform					
By Unique SNs	DJI Mini 3, DJI Mini 3 Pro		DJI Air 3, DJI Mini 3 Pro, DJI Phantom 4 Pro V2		
	3		1		-26%
By Events	DJI Mini 3, DJI Mini 3 Pro		DJI Phantom 4 Pro V2		
	5		2		-11%
By Duration	DJI Mavic 3 Classic		DJI Phantom 4 Pro V2		
	00:50:54		00:16:39		-27%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation's C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

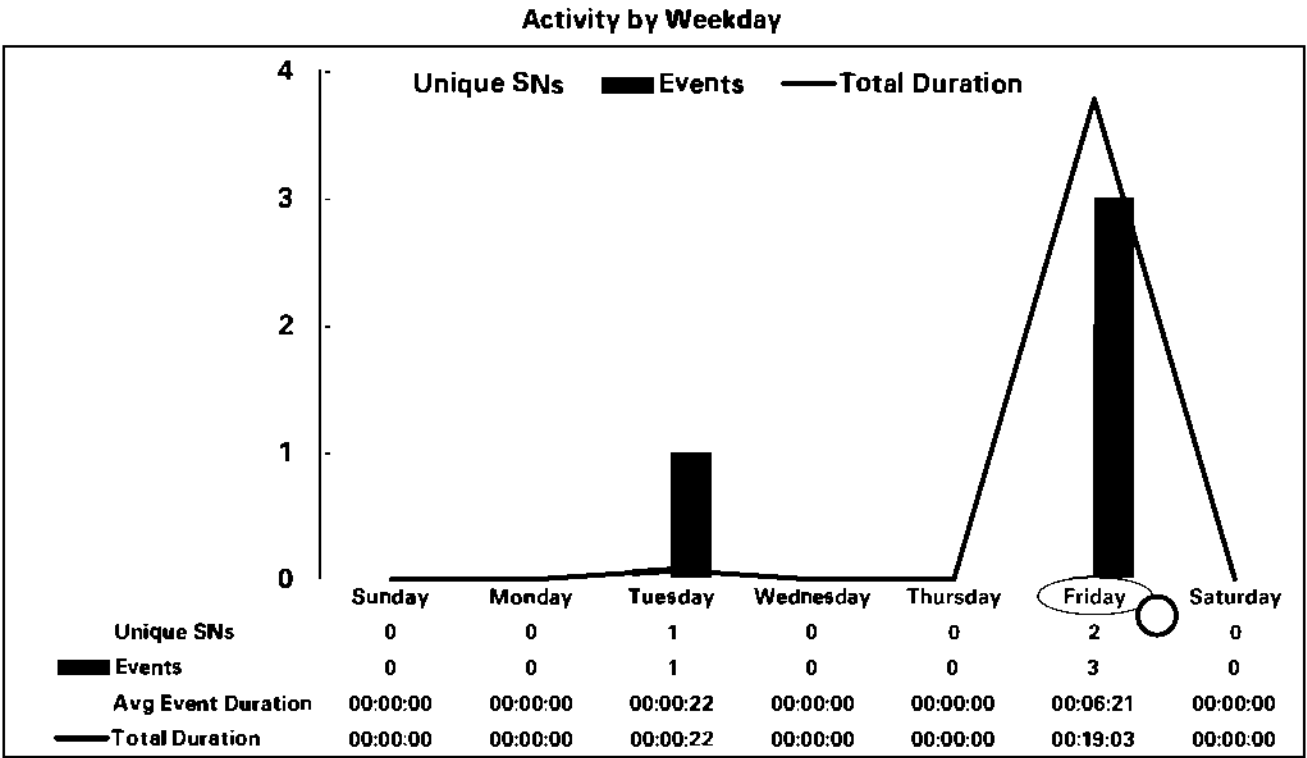


~~CUI~~

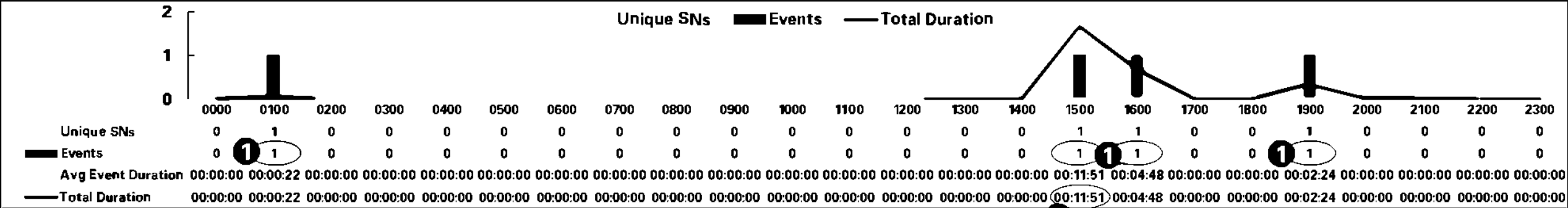
NCR Area of Interest Activity Charts

December 10, 2024 – December 23, 2024

Entire Slide is ~~CUI~~



Activity by Hour



○ Highest Total Event/Duration (Weekday) ② ● Highest Total Event/Duration (Hour)



JB Andrews Activity Summary

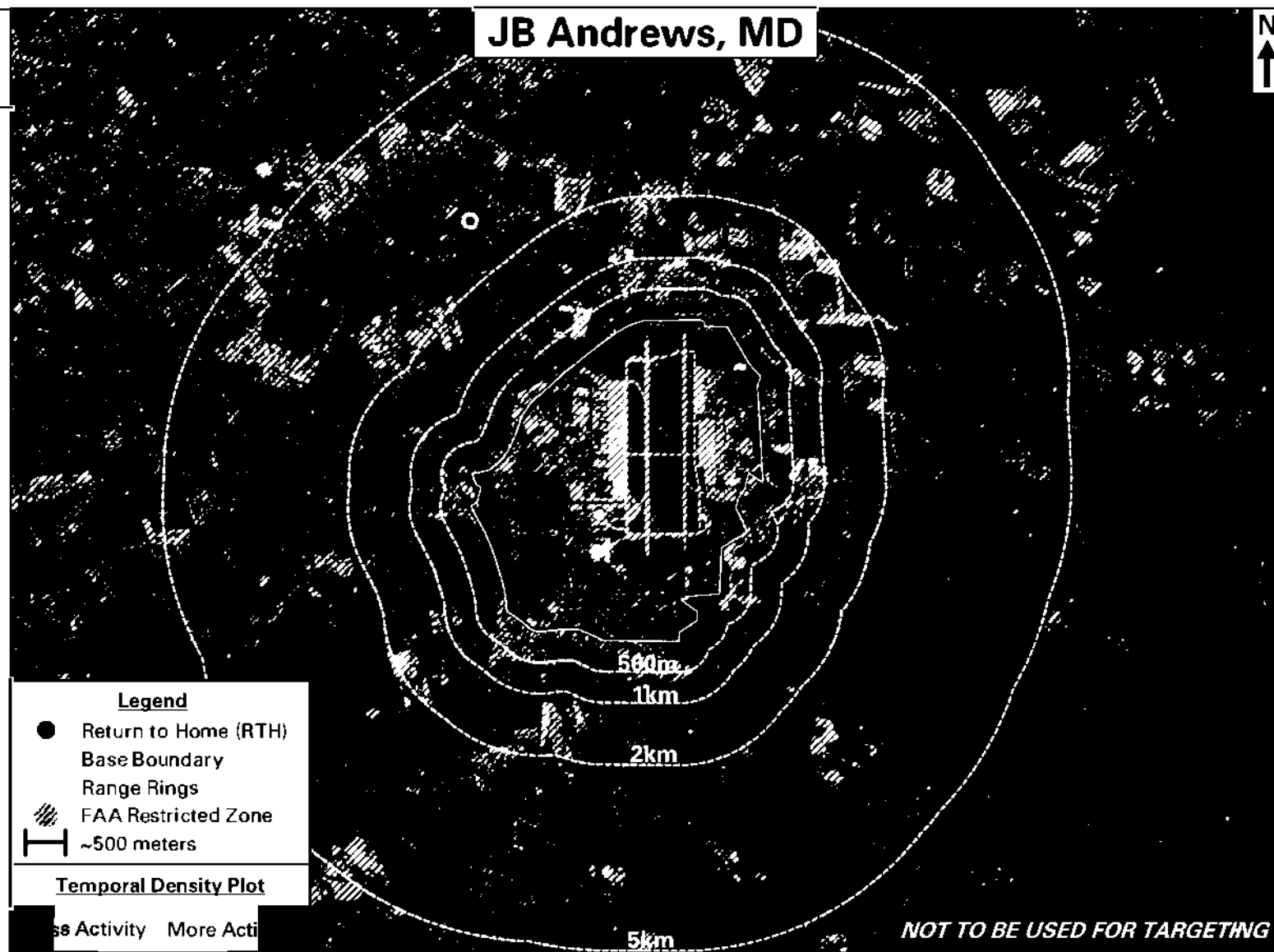
December 10, 2024 – December 23, 2024

Entire Slide is CUI

No activity was detected within 500m of the base boundary during this reporting period. Both events occurred over residential areas and remained over within 50m of the operator locations.

Activity Highlights

- 2x S/Ns, 2x events, 00:02:27 duration
 - Exceeded altitude allowance: 2x S/Ns (2x events)
 - Night detections: None
- 1x S/N previously detected
 - S/N: 5FSCJC40111EJ8 (DJI Mini 2)
- Highest Activity by Weekday
 - Events: Monday & Thursday (1x event each)
 - Duration: Monday (00:01:22)
- Highest Activity by Time (Zulu)
 - Events: 1300Z & 1800Z (1x event each)
 - Duration: 1800Z (00:01:22)
- Highest Duration by Platform: DJI Mini 2 (00:02:27)
- 0x detects within 500m, 0x detects within the Base Boundary





~~CUI~~

JB Andrews Data Analysis

December 10, 2024 – December 23, 2024

Entire Slide is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	10 Dec 24	Comparison
	End date	30 Nov 24	End date	23 Dec 24	
	Weeks in total	4	Weeks in total	2	
Total Events	4		2		-29%
Total Duration	00:07:45		00:02:27		
Total SNs	3		2		
Most Active Platform					
By Unique SNs	U/I DJI UAS, DJI Mini 3, DJI Mini 3 Pro		DJI Mini 2		
	1		2		
By Events	DJI Mini 3 Pro		DJI Mini 2		
	2		2		
By Duration	DJI Mini 3		DJI Mini 2		
	00:05:16		00:02:27		

- This table reflects an increase/decrease in overall activity based off detects reported by an installation's C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

~~CUI~~

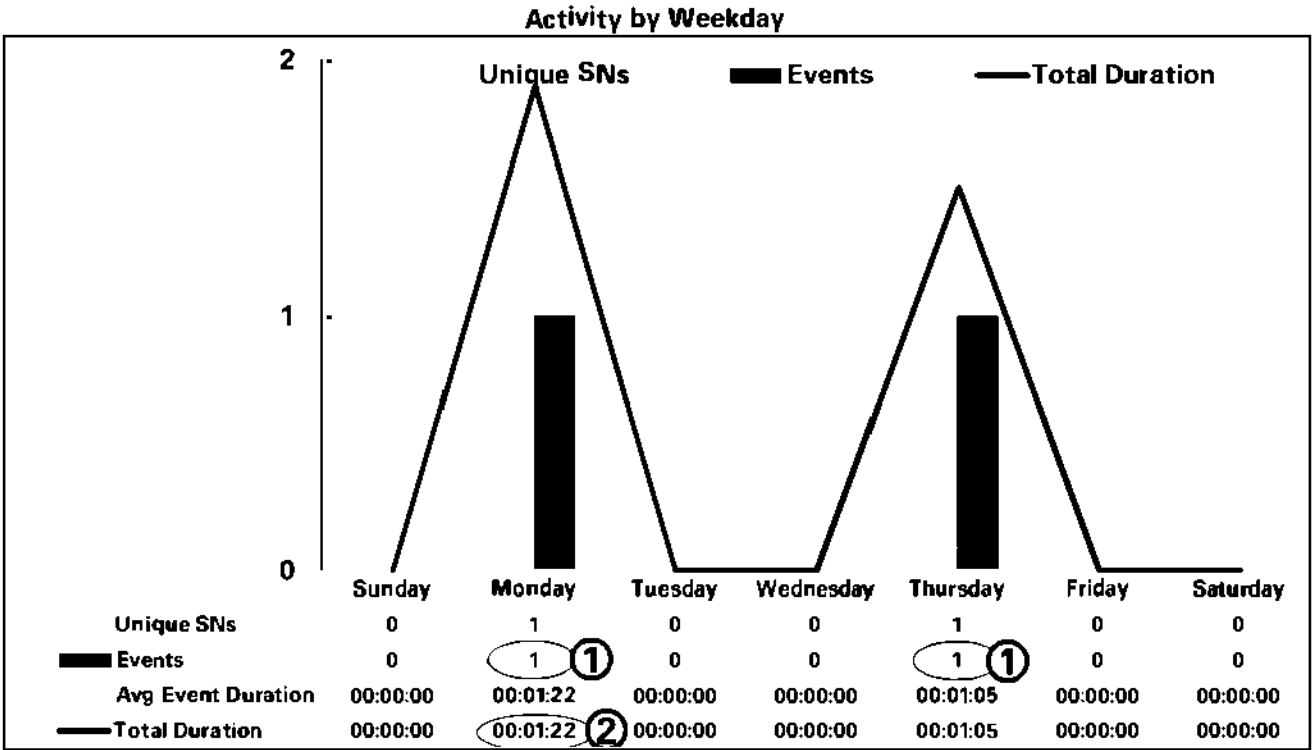


—CUI—

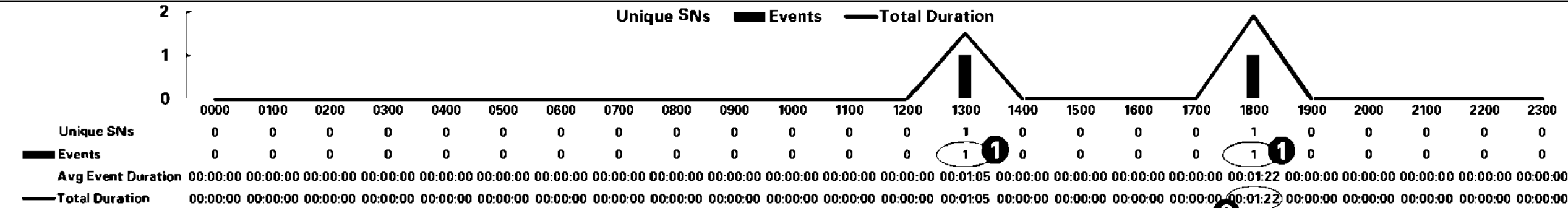
JB Andrews Activity Charts

December 10, 2024 – December 23, 2024

Entire Slide is —CUI—



Activity by Hour



○ Highest Total Event/Duration (Weekday)

● Highest Total Event/Duration (Hour)

—CUI—



Fort Belvoir Activity Summary

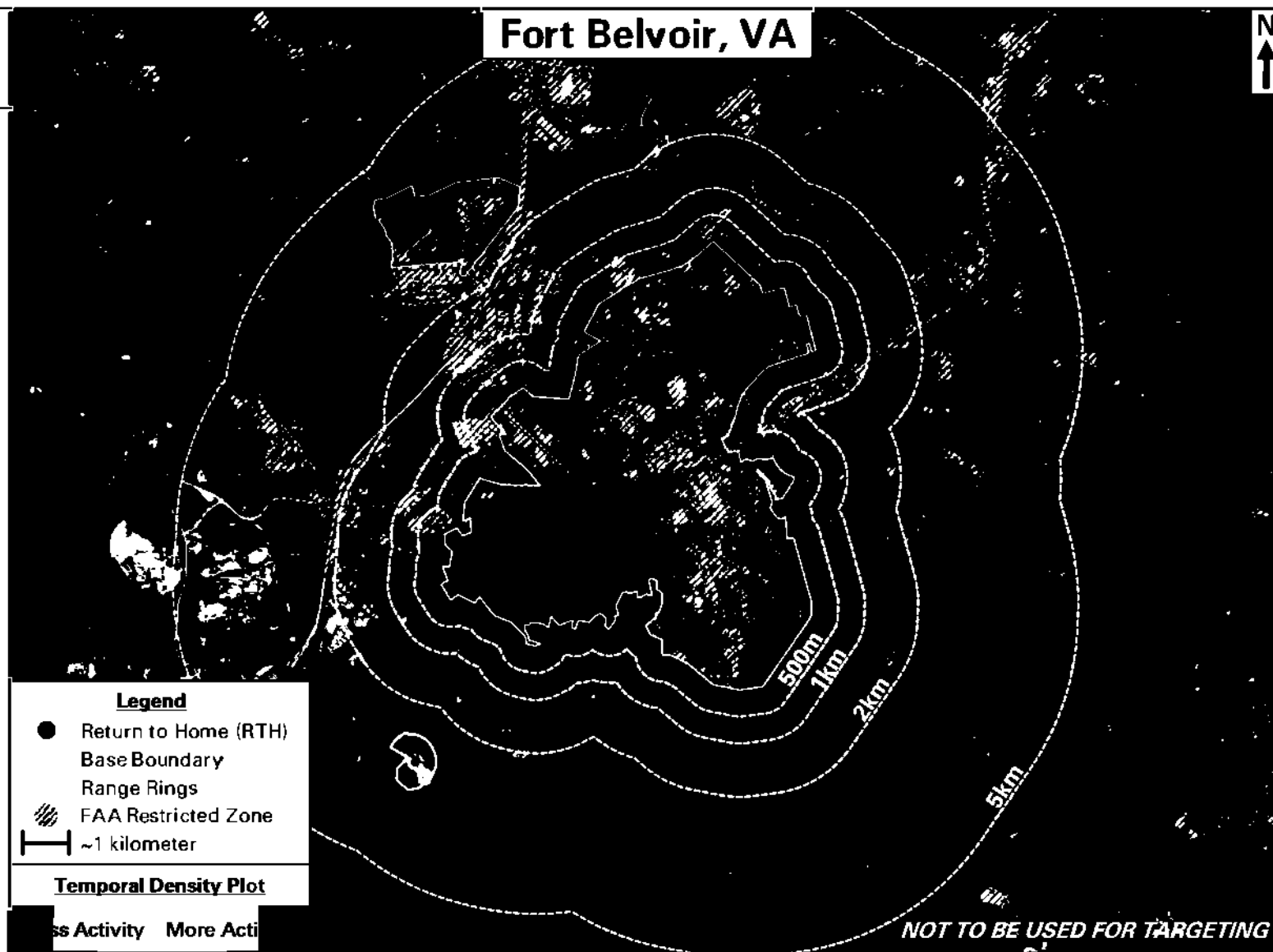
December 10, 2024 – December 23, 2024

Entire Slide is CUI

No events were detected within 500m of the base boundary during the reporting period. All detected events occurred outside 2km from the base boundary over recreational and residential areas.

Activity Highlights

- 4x S/Ns, 6x events, 00:50:30 duration
 - Exceeded altitude allowance: 4x S/Ns (6x events)
 - Night detections: 1x S/N (1x event)
 - S/N: 3YT7K9J003W09Z (DJI Air 2S)
- 1x S/Ns previously detected
 - S/N: F4XFA22AFML78D81 (DJI Mini 3 Pro)
- Highest Activity by Weekday
 - Events: Tuesday, Friday, & Saturday (2x events each)
 - Duration: Friday (00:37:15)
- Highest Activity by Time (Zulu)
 - Events: 1700Z & 1900Z (2x events each)
 - Duration: 1700Z (00:37:15)
- Highest Duration by Platform: DJI Mavic 3 (00:37:15)
- 0x detects within 500m, 0x detects within the Base Boundary.



CUI



~~CUI~~

Fort Belvoir Data Analysis

December 10, 2024 – December 23, 2024

Entire Slide is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	10 Dec 24	Comparison
	End date	30 Nov 24	End date	23 Dec 24	
	Weeks in total	4	Weeks in total	2	
Total Events	50		6		-73%
Total Duration	03:14:36		00:50:30		-42%
Total SNs	13		4		-31%
Most Active Platform					
By Unique SNs	DJI Air 2S, DJI Mavic Air 2, DJI Mavic Pro, DJI Mini 2		DJI Mini 3 Pro		
By Events	2		2		
	DJI Mini 2		DJI Mini 3 Pro		
By Duration	25		3		-73%
	DJI Mini 2		DJI Mavic 3		
	01:28:34		00:37:15		-6%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation's C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

~~CUI~~

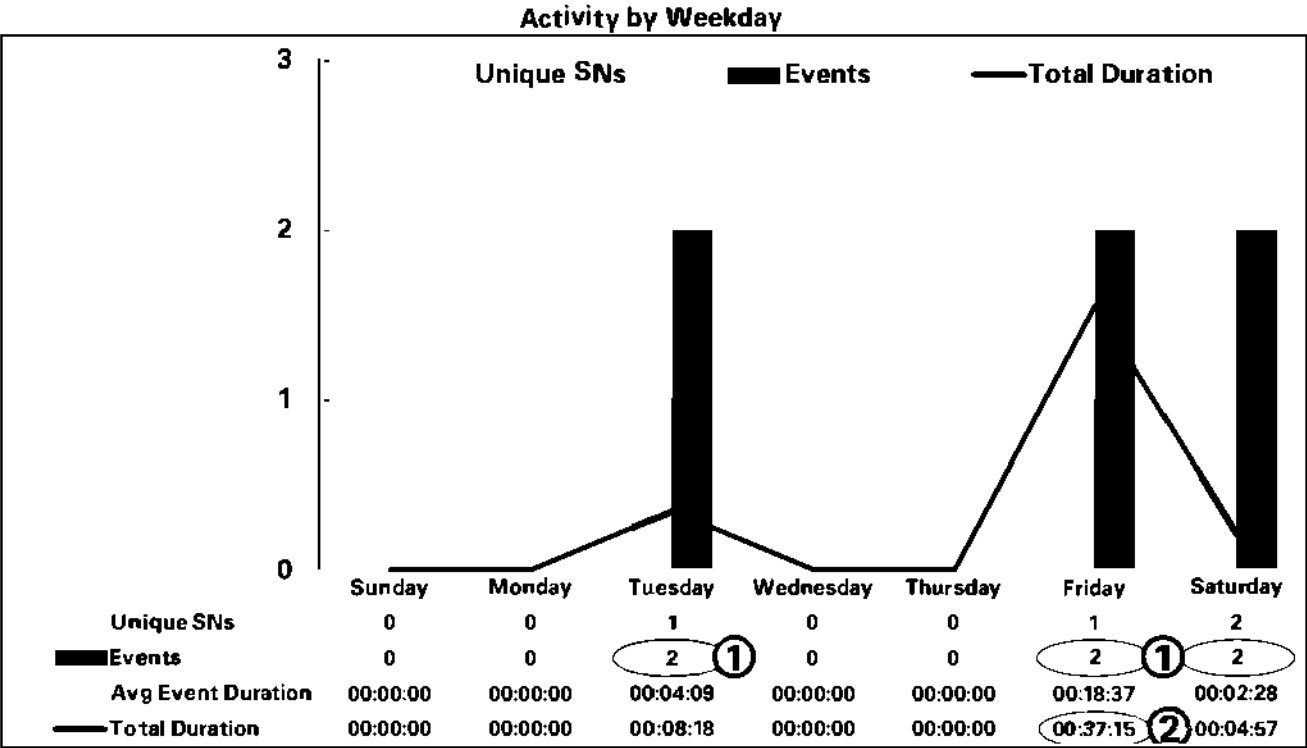


~~CUI~~

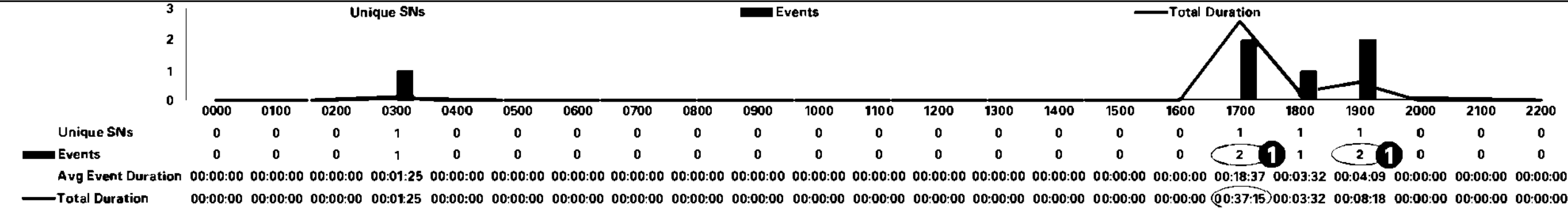
Fort Belvoir Activity Charts

December 10, 2024 – December 23, 2024

Entire Slide is ~~CUI~~



Activity by Hour



○ Highest Total Event/Duration (Weekday)

● Highest Total Event/Duration (Hour)



— CUI —

South Potomac – Indian Head Activity Summary

December 10, 2024 – December 23, 2024

Entire Slide is CUI

3x S/Ns were detected within 500m of the base boundary during this reporting period. (S/N: 1) originated from a parking lot of a local religious center and operated over nearby residential neighborhoods. The closest point of approach was ~98m from the boundary. (S/Ns: 2 and 3) operated from a parking lot in the Smallwood State Park.

Activity Highlights

- 5x S/Ns, 13x events, 00:28:07 duration
 - Exceeded altitude allowance: 3x S/Ns (3x events)
 - Night detections: 1x S/N (1x event)
 - S/N: F45T3239600EW0EC (DJI Mavic 3)

4x S/Ns previously detected

- S/N: 3YTBJCC00301L0
- S/N: 0M6CHARR0A2DVK
- S/N: F45T3239600EW0EC
- S/N: 8JECMA40018457

Highest Activity by Weekday

- Events: Sunday (10x events)
- Duration: Saturday (00:15:08)

Highest Activity by Time (Zulu)

- Events: 2000Z (5x events)
- Duration: 1100Z (00:15:08)

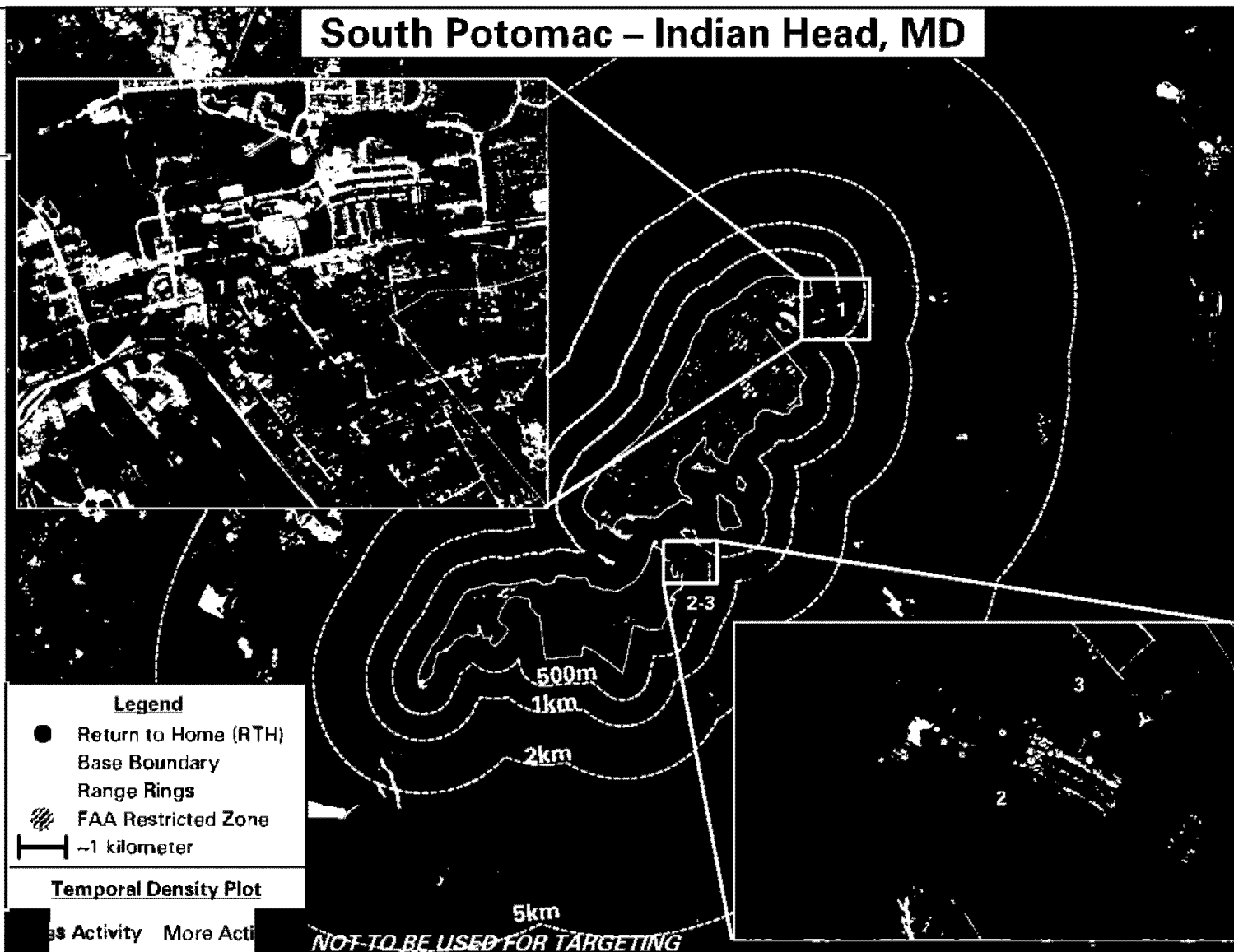
Highest Duration by Platform: DJI Mavic 3(00:15:08)

3x Detects within 500m, 0x Detects within the Base Boundary.

1 S/N: F45T3239600EW0EC (DJI Mavic 3) operated over residential areas from a local religious center and flew within 100m of the boundary.

2 S/N: F5YH72413M0SA23U (DJI Mini 3) operated over a parking lot in the Smallwood State Park.

2 S/N: 8JECMA40018457 (U/I DJI UAS) operated over a parking lot in the Smallwood State Park.



— CUI —



CUI

South Potomac - Indian Head Data Analysis

December 10, 2024 – December 23, 2024

Entire Slide is CUI

Metric	Novem ber 2024		Decem ber 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	10 Dec 24	Comparison
	End date	30 Nov 24	End date	23 Dec 24	
	Weeks in total	4	Weeks in total	2	
Total Events	21		13		-21%
Total Duration	01:19:11		00:28:07		
Total SNs	15		5		
Most Active Platform					
By Unique SNs	DJI Mini 3		DJI Air 2S, DJI Mavic 2 Zoom, DJI Mavic 3, DJI Mini 3, U/I DJI UAS		-26%
	3		1		
By Events	DJI Mavic Air 2		DJI Mini 3		
	4		8		
By Duration	DJI Mavic 2 Enterprise Advanced		DJI Mavic 3		
	00:32:55		00:15:08		

• This table reflects an increase/decrease in overall activity based off detects reported by an installation's C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

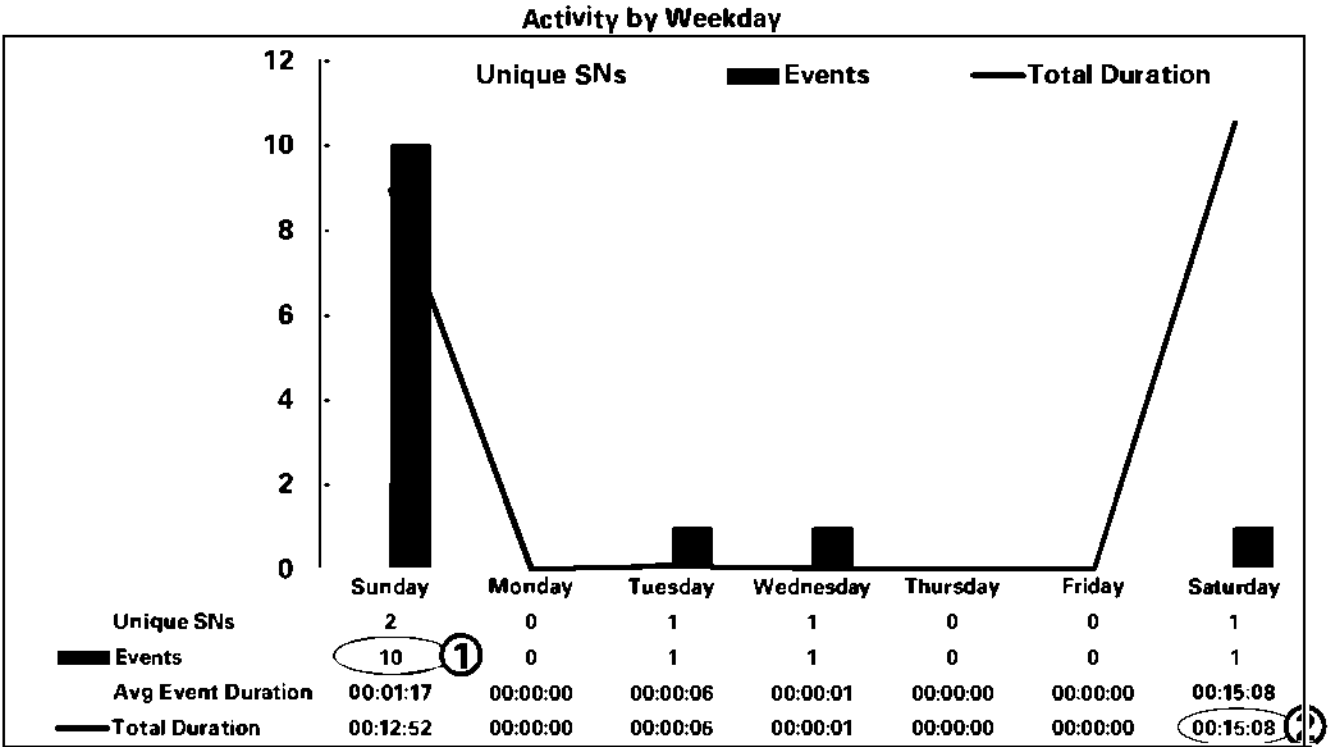
CUI



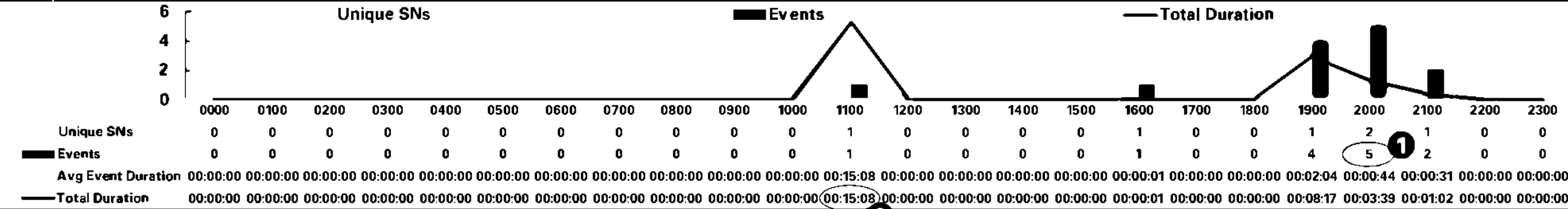
South Potomac - Indian Head Activity Charts

December 10, 2024 – December 23, 2024

Entire Slide is CUI



Activity by Hour



○ Highest Total Event/Duration (Weekday)

2

● Highest Total Event/Duration (Hour)



CUI

NSF Thurmont – Camp David Activity Summary

December 10, 2024 – December 23, 2024

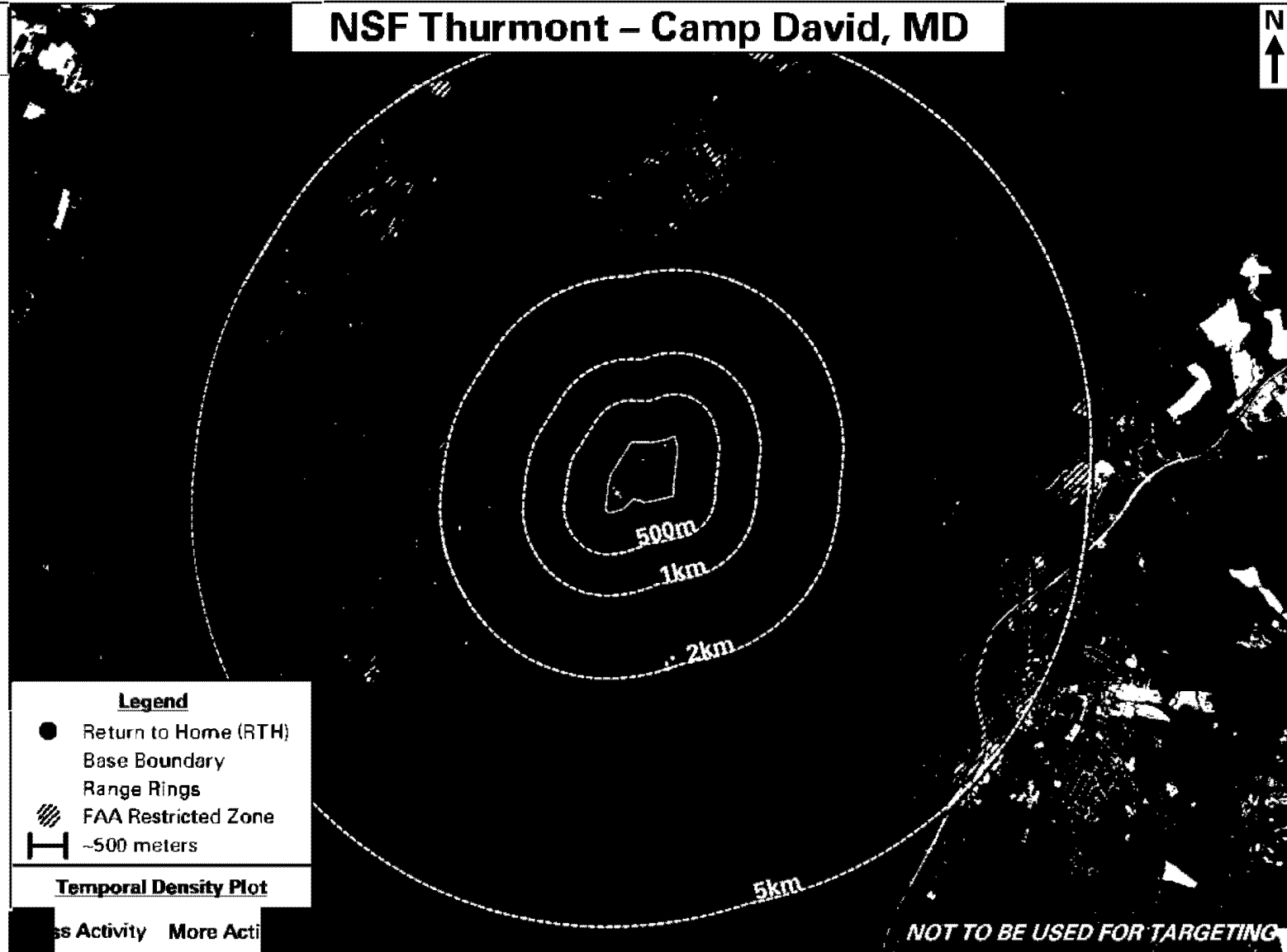
Entire Slide is CUI

During this reporting period, no events were detected within 5km of the boundary.

Activity Highlights

- No activity was detected within 5km of NSF Thurmont during this reporting period.

NSF Thurmont – Camp David, MD



CUI



~~CUI~~

NSF Thurmont Data Analysis

December 10, 2024 – December 23, 2024

Entire Slide is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	10 Dec 24	Comparison
	End date	30 Nov 24	End date	23 Dec 24	
	Weeks in total	4	Weeks in total	2	
Total Events	1		0		-100%
Total Duration	00:03:07		00:00:00		-100%
Total SNs	1		0		-100%
Most Active Platform					
By Unique SNs	DJI FPV		N/A		
	1		0		-100%
By Events	DJI FPV		N/A		
	1		0		-100%
By Duration	DJI FPV		N/A		
	00:03:07		00:00:00		-100%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation's C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

~~CUI~~



CUI

Intelligence Community Campus – Bethesda Activity Summary

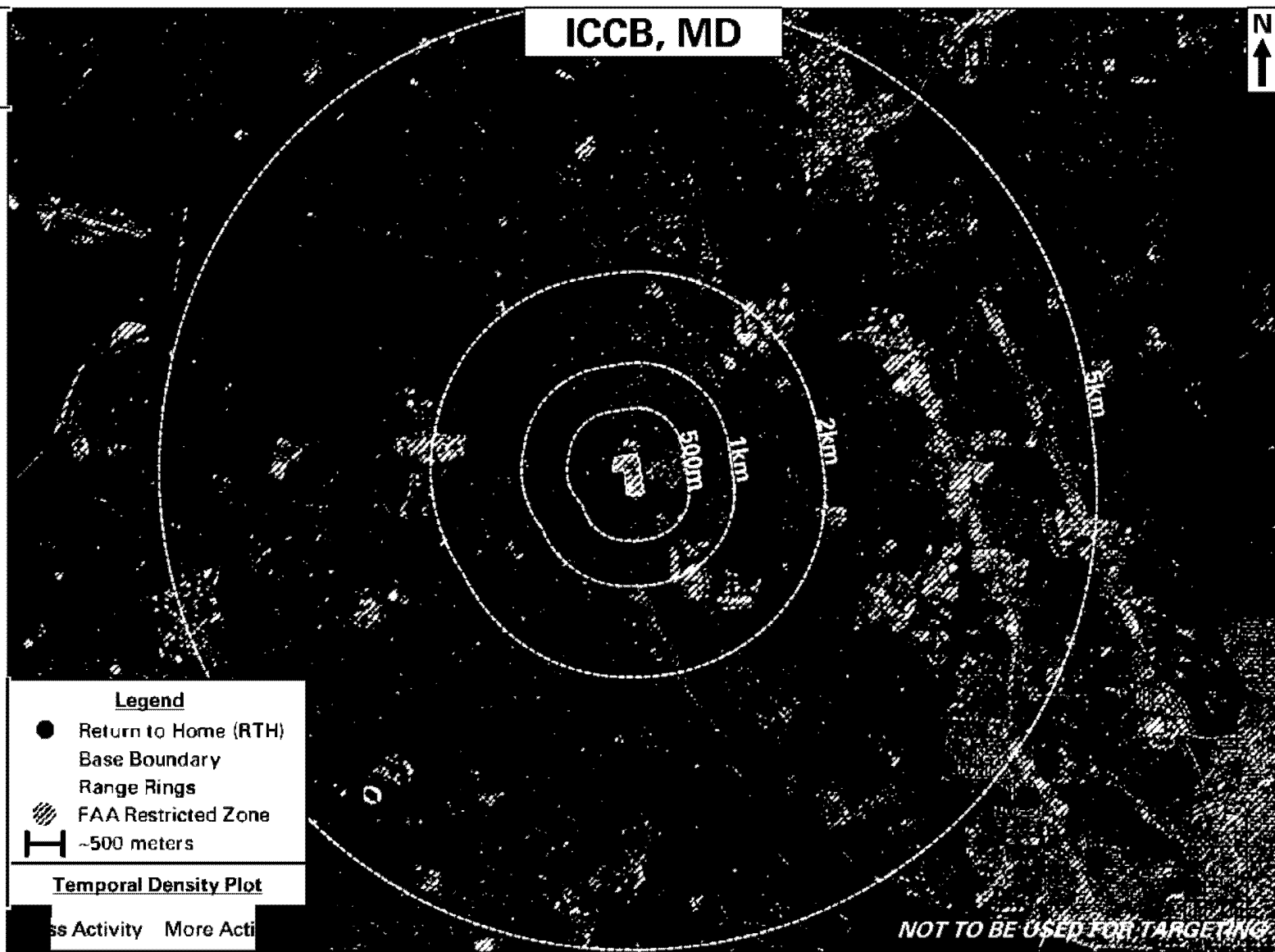
December 10, 2024 – December 23, 2024

Entire Slide is CUI

No events were detected within 500m of the base boundary during this reporting period. The only detected activity within 5km was over a local school ~4km southwest of the base.

Activity Highlights

- 1x S/N, 2x events, 00:20:11 duration
 - Exceeded altitude allowance: 1x S/N (2x events)
 - Night detections: 0x S/Ns (0x events)
- 0x S/Ns previously detected
- Highest Activity by Weekday
 - Events: Saturday (2x events)
 - Duration: Saturday (00:20:11)
- Highest Activity by Time (Zulu)
 - Events: 1800Z & 2000Z (1x event each)
 - Duration: 1800Z (00:13:36)
- Highest Duration by Platform: DJI Mini 3 Pro (00:20:11)
- 0x detects within 500m, 0x detects within the Base Boundary



CUI



December 10, 2024 – December 23, 2024

— CUI —

ICCB Data Analysis

Entire Slide is CUI —

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	10 Dec 24	Comparison
	End date	30 Nov 24	End date	23 Dec 24	
	Weeks in total	4	Weeks in total	2	
Total Events	4		2		-24%
Total Duration	00:59:27		00:20:11		
Total SNs	3		1		
Most Active Platform					
By Unique SNs	DJI Mavic 2 Pro, DJI Matrice 200 V2, DJI Mavic 3 Pro		DJI Mini 3 Pro		
By Events	DJI Mavic 2 Pro		DJI Mini 3 Pro		
By Duration	DJI Mavic 2 Pro		DJI Mini 3 Pro		
	00:35:17		00:20:11		

• This table reflects an increase/decrease in overall activity based off detects reported by an installation's C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

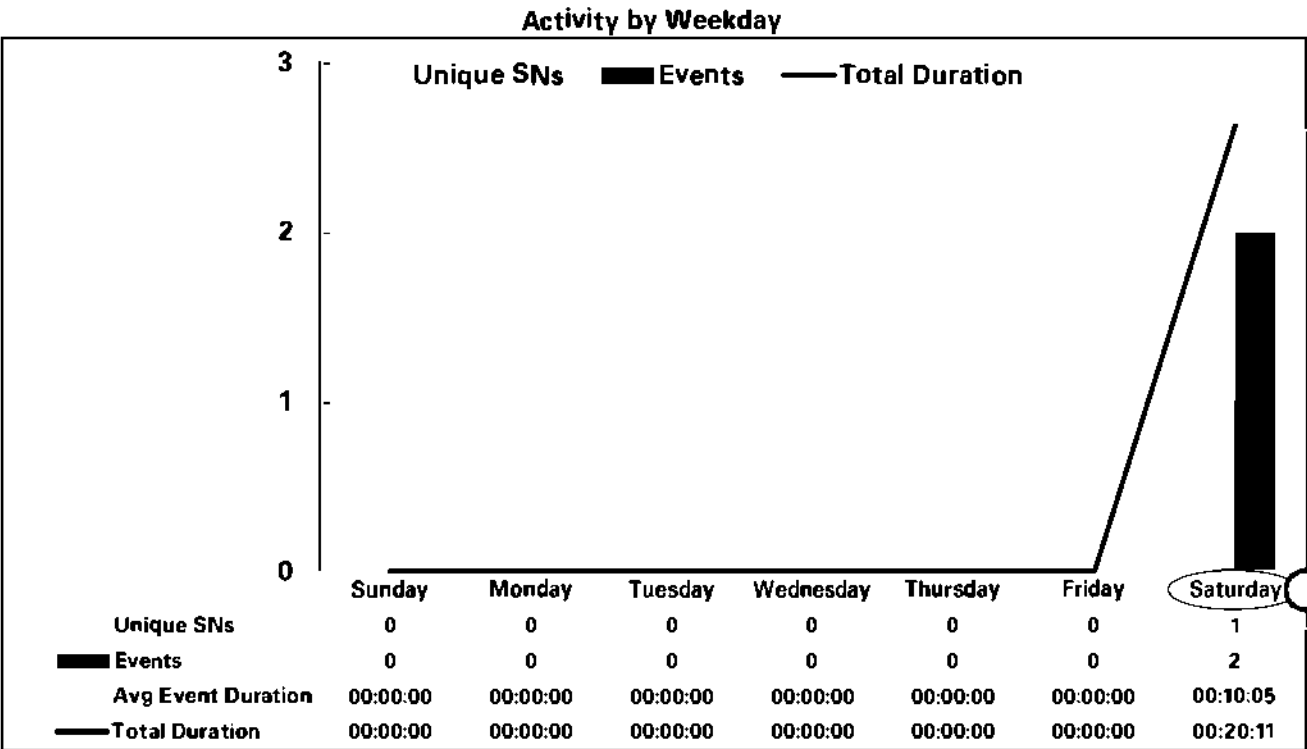


CUI

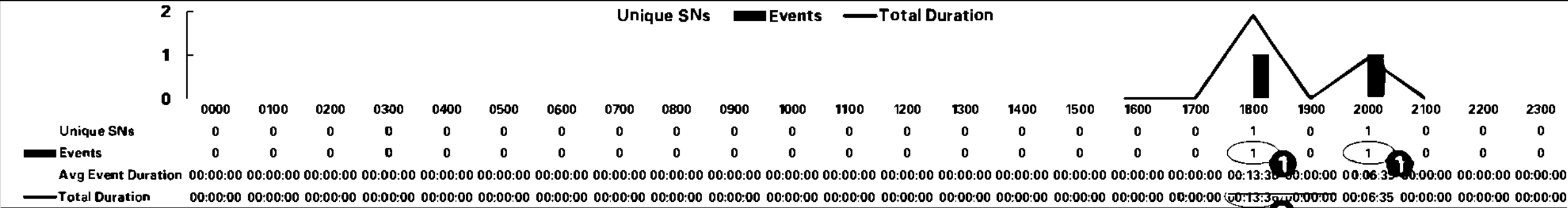
ICCB Activity Charts

December 10, 2024 – December 23, 2024

Entire Slide is CUI



Activity by Hour



○ Highest Total Event/Duration (Weekday) ● Highest Total Event/Duration (Hour)

CUI



CUI

Pentagon Activity Summary

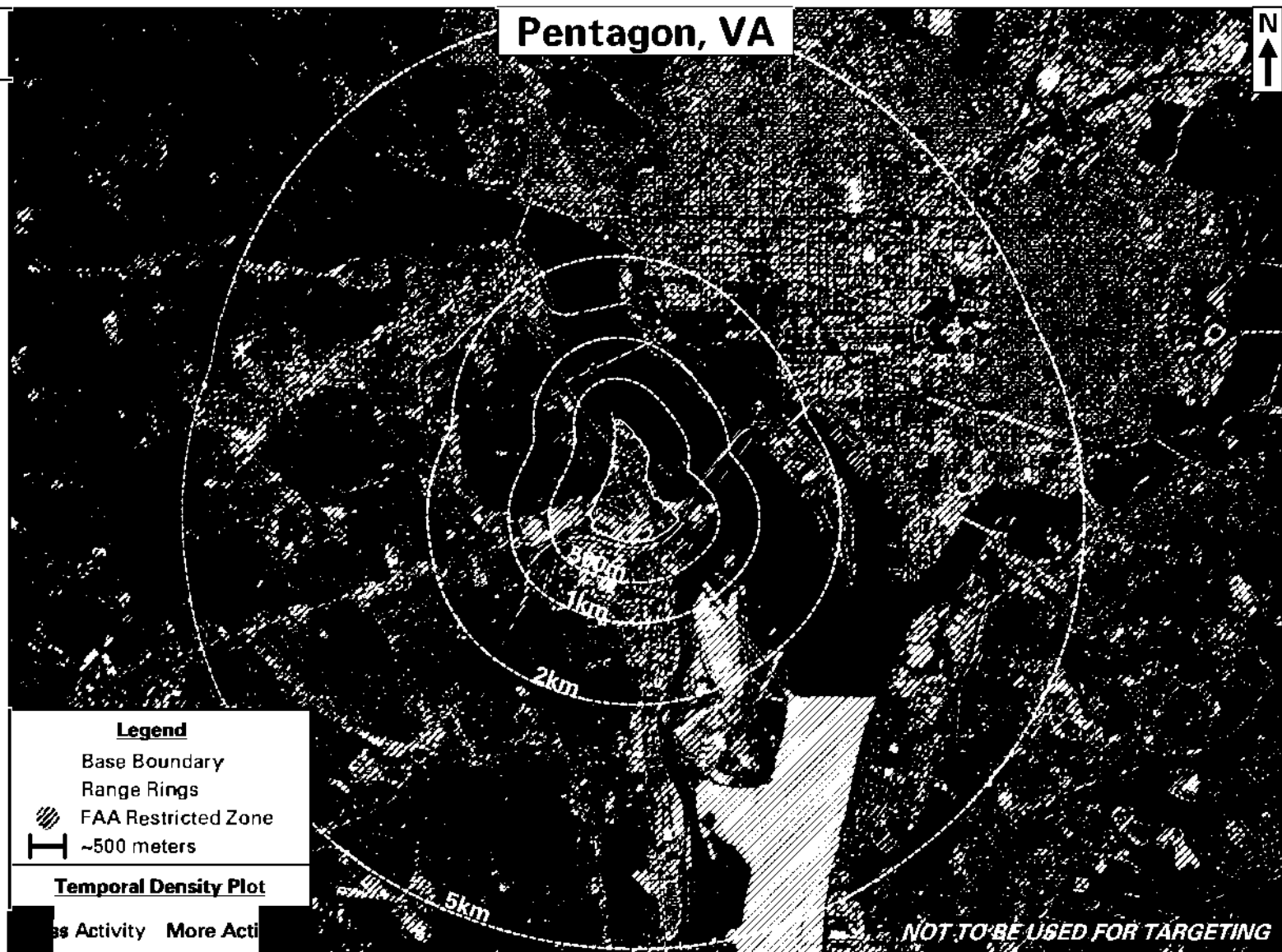
December 10, 2024 – December 23, 2024

Entire Slide is CUI

No activity was detected within 5km of the base boundary during this reporting period.

Activity Highlights

- No activity was detected within 5km of the Pentagon during this reporting period.



CUI



—CUI—

Pentagon Data Analysis

December 10, 2024 – December 23, 2024

Entire Slide is CUI

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	10 Dec 24	Comparison
	End date	30 Nov 24	End date	23 Dec 24	
	Weeks in total	4	Weeks in total	2	
Total Events	15		0		-100%
Total Duration	01:04:33		00:00:00		-100%
Total SNs	8		0		-100%
Most Active Platform					
By Unique SNs	DJI Mini 3, DJI Mini 3 Pro		N/A		
	3		0		-100%
By Events	DJI Mini 3, DJI Mini 3 Pro		N/A		
	5		0		-100%
By Duration	DJI Mavic 3 Classic		N/A		
	00:50:54		00:00:00		-100%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation's C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

—CUI—



CUI

Washington Navy Yard Activity Summary

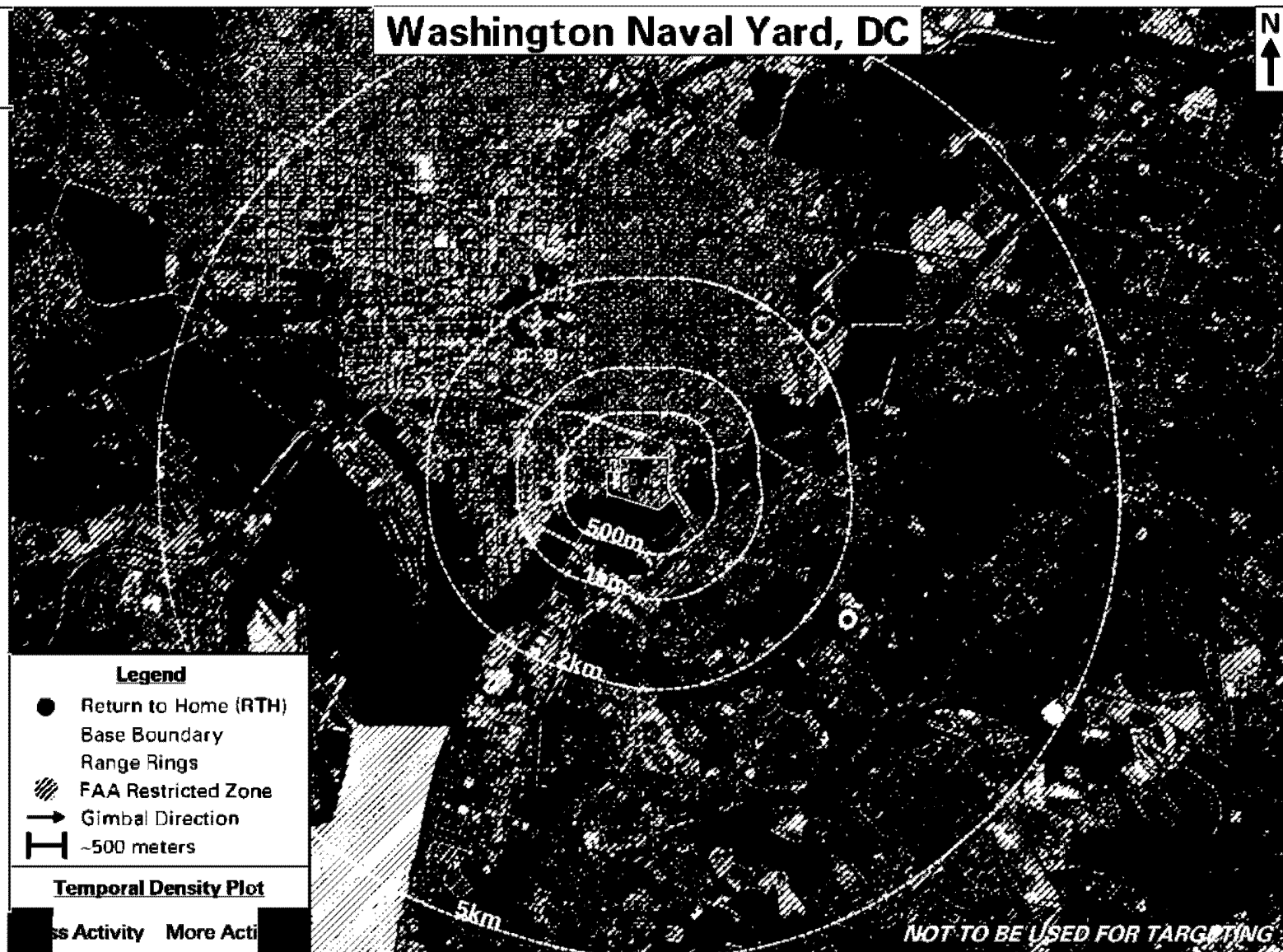
December 10, 2024 – December 23, 2024

Entire Slide is CUI

No activity occurred within the 500m of the base boundary during the reporting period. One S/N briefly operated over a commercial building ~2.2km southeast.

Activity Highlights

- 1x S/N, 1x event, 00:00:22 duration
 - Exceeded altitude allowance: 1x S/N (1x event)
 - Night detections: 1x S/N (1x event)
- 1x S/N previously detected
- **S/N: F6N8C236W00314EH** (DJI Air 3)
- Highest Activity by Weekday
 - Events: Tuesday (1x event)
 - Duration: Tuesday (00:00:22)
- Highest Activity by Time (Zulu)
 - Events: 0100Z (1x event)
 - Duration: 0100Z (00:00:22)
- Highest Duration by Platform: DJI Air 3 (00:00:22)
- 0x detects within 500m, 0x detects within the Base Boundary.



CUI



CUI

Washington Navy Yard Data Analysis

December 10, 2024 – December 23, 2024

Entire Slide is CUI

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	10 Dec 24	Comparison
	End date	30 Nov 24	End date	23 Dec 24	
	Weeks in total	4	Weeks in total	2	
Total Events	19		1		-88%
Total Duration	01:10:48		00:00:22		-99%
Total SNs	11		1		-80%
Most Active Platform					
By Unique SNs	DJI Mini 3		DJI Air 3		
	3		1		-26%
By Events	DJI Mini 3		DJI Air 3		
	5		1		-55%
By Duration	DJI Mavic 3 Classic		DJI Air 3		
	00:50:54		00:00:22		-98%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation's C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

CUI

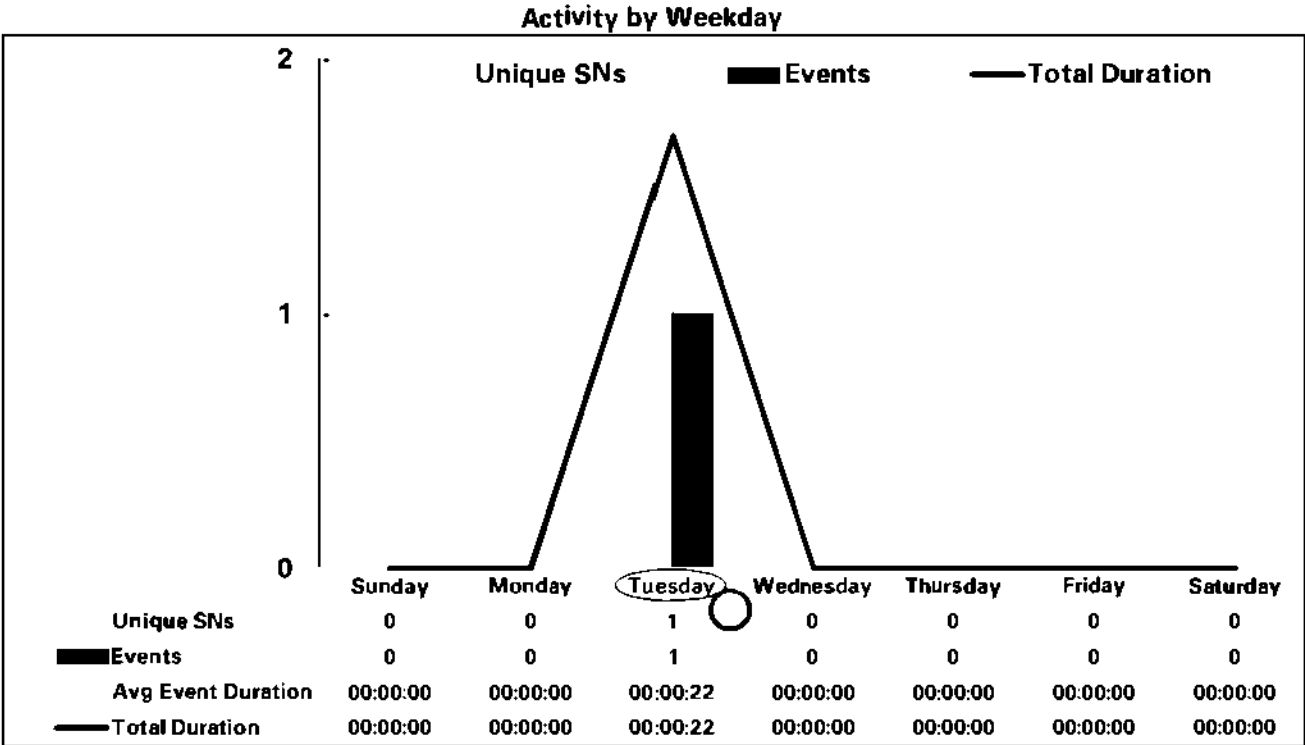


~~CUI~~

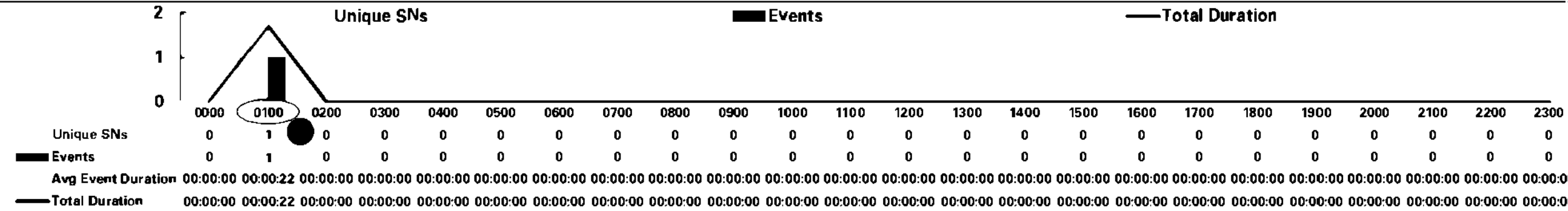
Washington Navy Yard Activity Charts

December 10, 2024 – December 23, 2024

Entire Slide is ~~CUI~~



Activity by Hour



○ Highest Total Event/Duration (Weekday)

● Highest Total Event/Duration (Hour)



Armed Forces Retirement Home Activity Summary

December 10, 2024 – December 23, 2024

Entire Slide is CUI

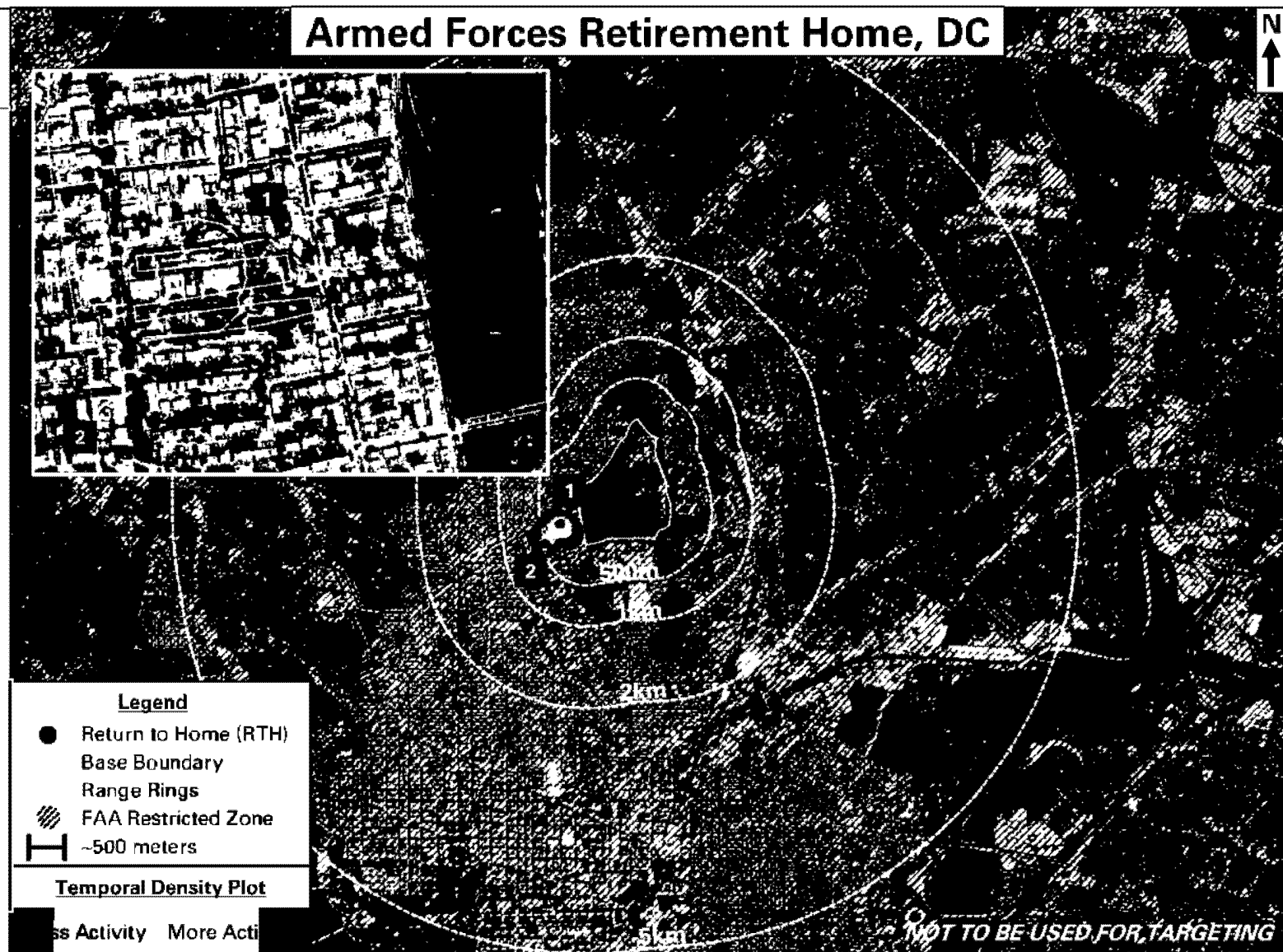
3x events were detected within 500m of the base boundary. (S/N: 1) operated a possible survey pattern over a public housing complex. (S/N: 2) at another residential complex in the same area.

Activity Highlights

- 2x S/Ns, 3x events, 00:19:03 duration
 - Exceeded altitude allowance: 2x S/Ns (3x events)
 - Night detections: None
- 1x S/N previously detected
- S/N: F4XFA22AFML78D81 (DJI Mini 3 Pro)
- Highest Activity by Weekday
 - Events: Friday (3x events)
 - Duration: Friday (00:19:03)
- Highest Activity by Time (Zulu)
 - Events: 1500Z, 1600Z, & 1900Z (1x event each)
 - Duration: 1500Z (00:11:51)
- Highest Duration by Platform: DJI Phantom 4 Pro V2 (00:16:39)

2x detects within 500m. 0x detects within the Base Boundary

- 1 S/N: 11VKJ46002004T (DJI Phantom 4 Pro V2) detected conducting a possible survey flight over a public housing complex.
- 2 S/N: F4XFA22AFML78D81 (DJI Mini 3 Pro) detected operating near a residential complex in the same area as (S/N: 1).



CUI



~~CU~~

Armed Forces Retirement Home Data Analysis

December 10, 2024 – December 23, 2024

Entire Slide is ~~CU~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	10 Dec 24	Comparison
	End date	30 Nov 24	End date	23 Dec 24	
	Weeks in total	4	Weeks in total	2	
Total Events	7		3		-4%
Total Duration	00:09:04		00:19:03		
Total SNs	5		2		-11%
Most Active Platform					
By Unique SNs	DJI Mini 3		DJI Phantom 4 Pro V2, DJI Mini 3 Pro		
	2		1		
By Events	DJI Mini 3		DJI Phantom 4 Pro V2		
	3		2		
By Duration	DJI Mavic Air 2		DJI Phantom 4 Pro V2		
	00:05:24		00:16:39		

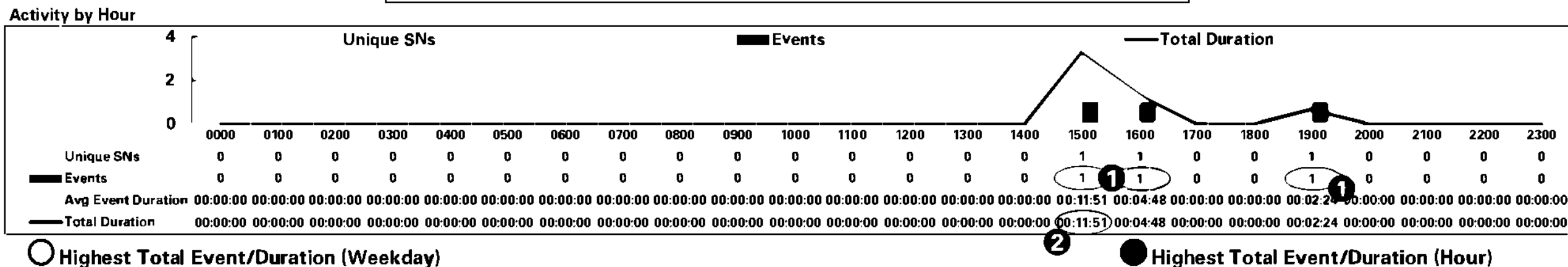
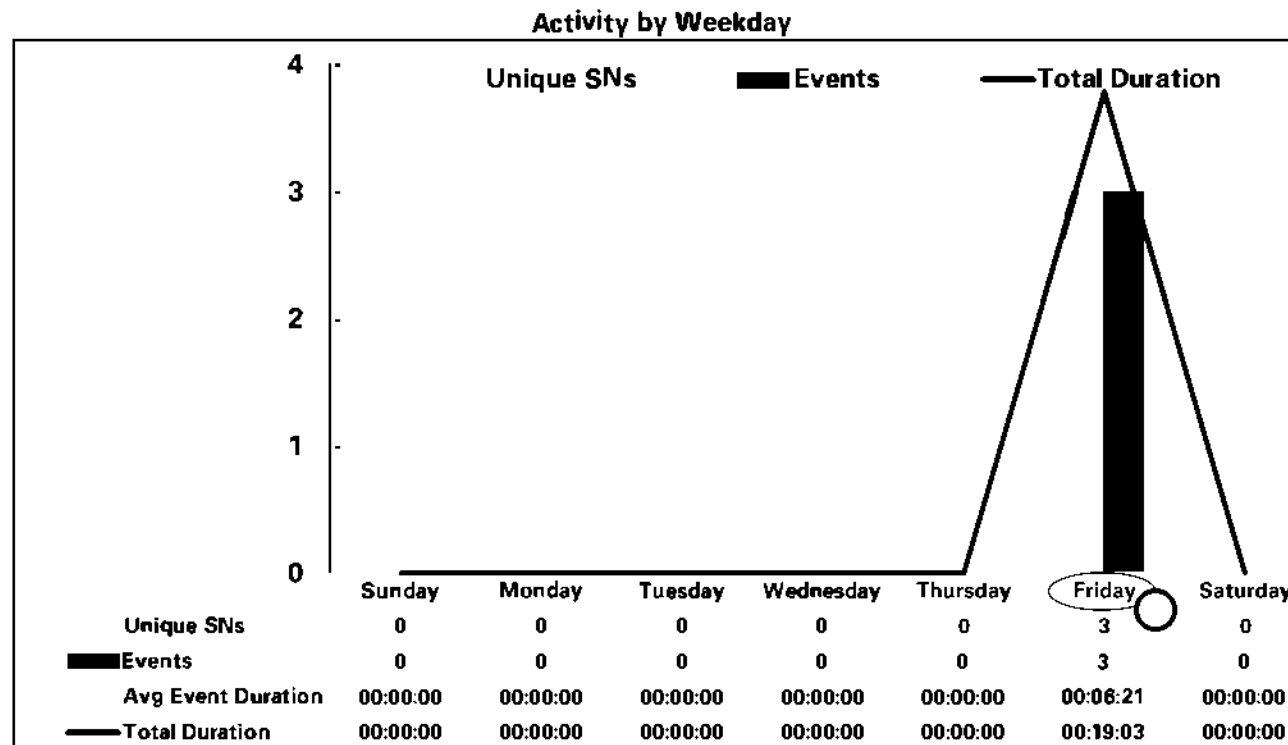
• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity



Armed Forces Retirement Home Activity Charts

December 10, 2024 – December 23, 2024

Entire Slide is CUI



CUI



NSF Dahlgren Activity Summary

December 10, 2024 – December 23, 2024

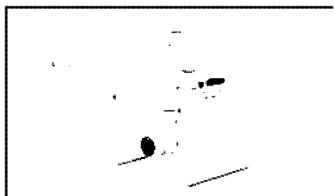
Entire Slide is CUI

3x S/Ns were detected within the base boundary over the runway and conducted 6x events, all within a 20m area. All other activity was detected beyond 1km of the boundary.

Activity Highlights

- 5x S/Ns, 9x events, 01:59:20 duration
 - Exceeded altitude allowance: 4x S/Ns (8x events)
 - Night detections: None
- 4x S/Ns previously detected
- 687CL16001BC9T (DJI Mini 3)
- 11VKJ5700201MP, 11VKJ5E00201DA (DJI Phantom 4 Pro V2)
- F8PJA245EML11GJL (U/I DJI UAS)
- Highest Activity by Weekday
 - Events: Thursday (6x events)
 - Duration: Monday (01:44:39)
- Highest Activity by Time (Zulu)
 - Events: 1700Z (4x events)
 - Duration: 1800Z (00:58:24)
- Highest Duration by Platform: DJI Phantom 4 Pro V2 (01:44:39)
- 0x detects within 500m, 3x detects within the Base Boundary
S/Ns: 11VKJ4700200MM, 11VKJ5700201MP, 11VKJ5E00201DA (DJI Phantom 4 Pro V2) conducted 6x events over the base runway remaining within a 20m area. S/Ns are possibly associated with base operations or training. (S/N: 3) conducted a possible battery swap during the event as it exceeded the maximum manufacturer stated flight time.

DJI Phantom 4 Pro V2



- Weight: ~1375g / ~3lbs
- Dimensions: 350mm diagonal size
- Max Speed: ~45 mph / ~72 kph
- Flight Time: ~30 Mins
- Transmission Distance:
 - FCC Compliant: 5mi/8km
 - CE Compliant: 3.1mi/5km
- C2 Signal: OcuSync 2.0
- Dual Frequency: 2.4-5.8GHz
- Image Transmission: 4K
- Camera: 20MP/ No Zoom
- Cost: ~\$1,599

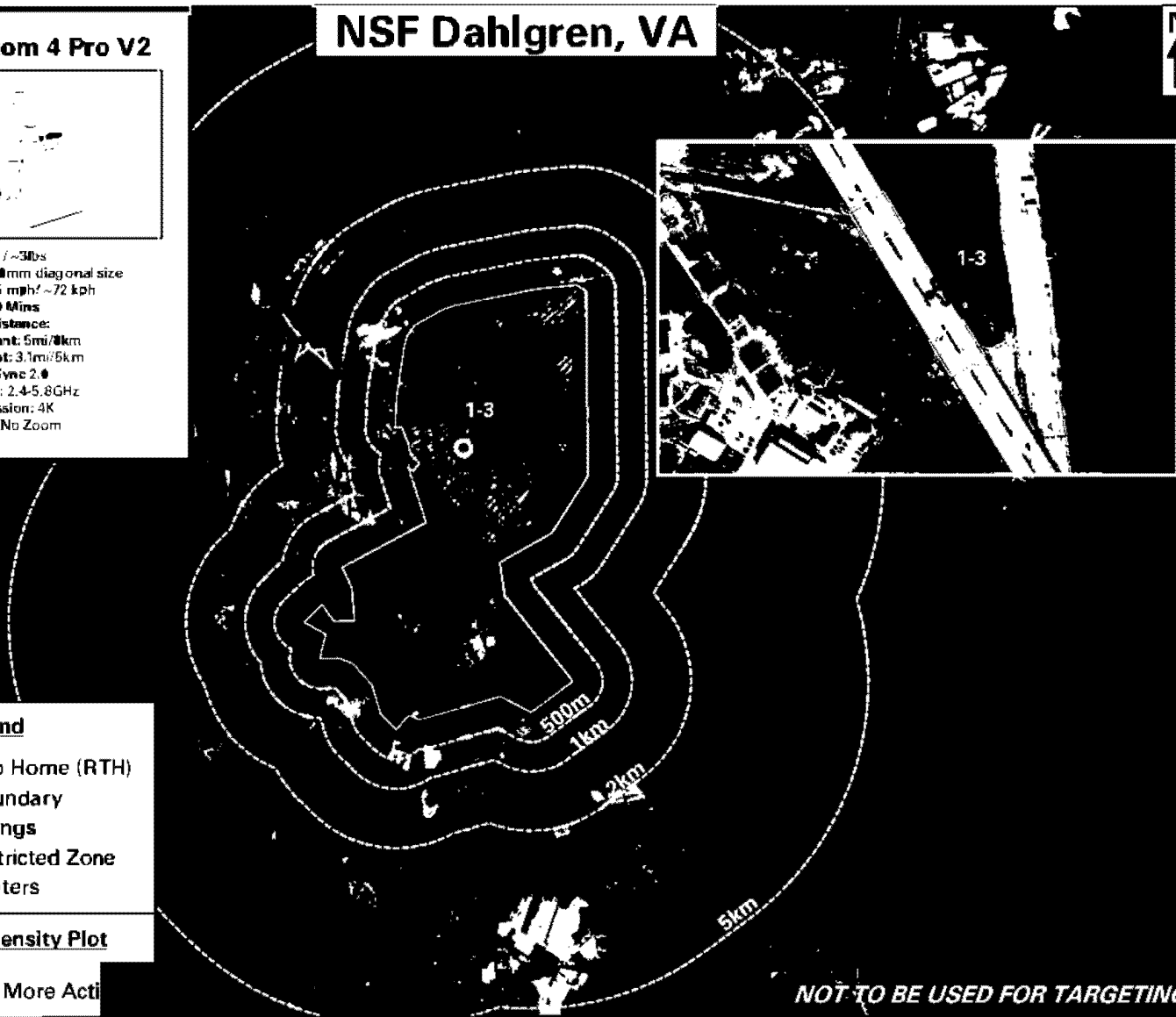
Legend

- Return to Home (RTH)
- Base Boundary
- Range Rings
- FAA Restricted Zone
- ~ 500 meters

Temporal Density Plot

Less Activity More Activity

NSF Dahlgren, VA



NOT TO BE USED FOR TARGETING

CUI



~~CUI~~

NSF Dahlgren Data Analysis

December 10, 2024 – December 23, 2024

Entire Slide Is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	10 Dec 24	Comparison
	End date	30 Nov 24	End date	23 Dec 24	
	Weeks in total	4	Weeks in total	2	
Total Events	48		9		-58%
Total Duration	00:38:12		01:59:20		
Total SNs	39		5		-71%
Most Active Platform					
By Unique SNs	DJI Mavic 3		DJI Phantom 4 Pro V2		
	33		3		-80%
By Events	DJI Mavic 3		DJI Phantom 4 Pro V2		
	40		6		-67%
By Duration	DJI Mavic 3		DJI Phantom 4 Pro V2		
	00:30:46		01:44:39		

- This table reflects an increase/decrease in overall activity based off detects reported by an installation's C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

~~CUI~~

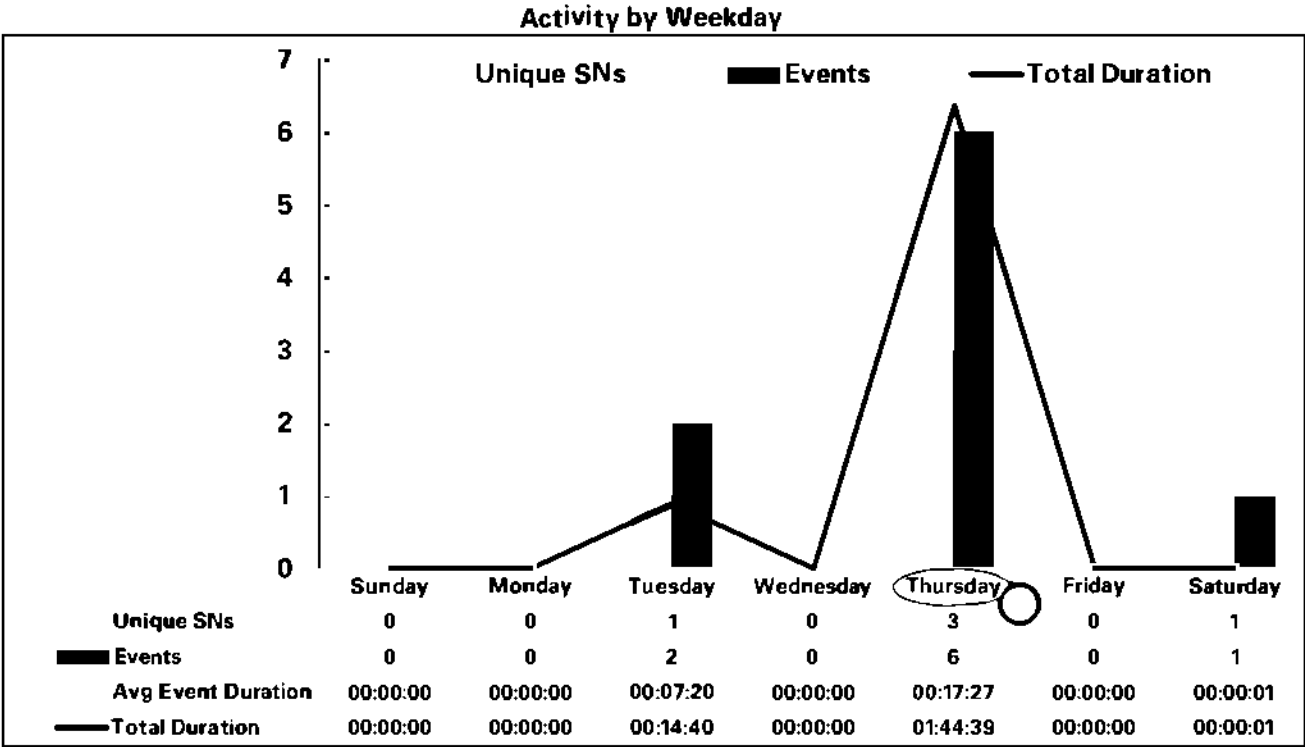


CUI

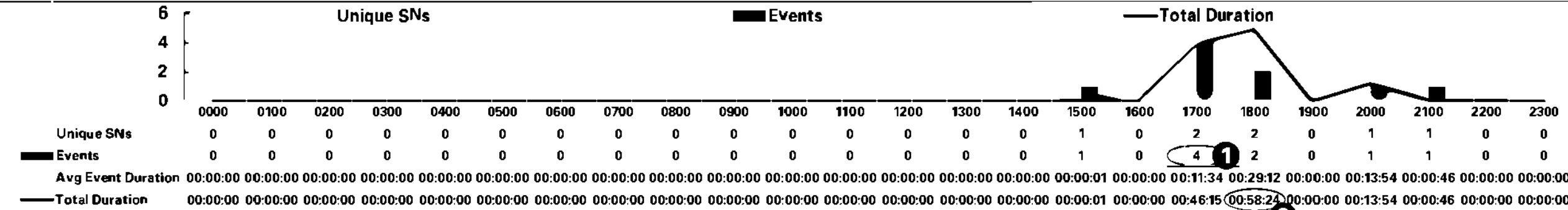
NSF Dahlgren Activity Charts

December 10, 2024 – December 23, 2024

Entire Slide is CUI



Activity by Hour



○ Highest Total Event/Duration (Weekday) ● Highest Total Event/Duration (Hour)



Naval Observatory Activity Summary

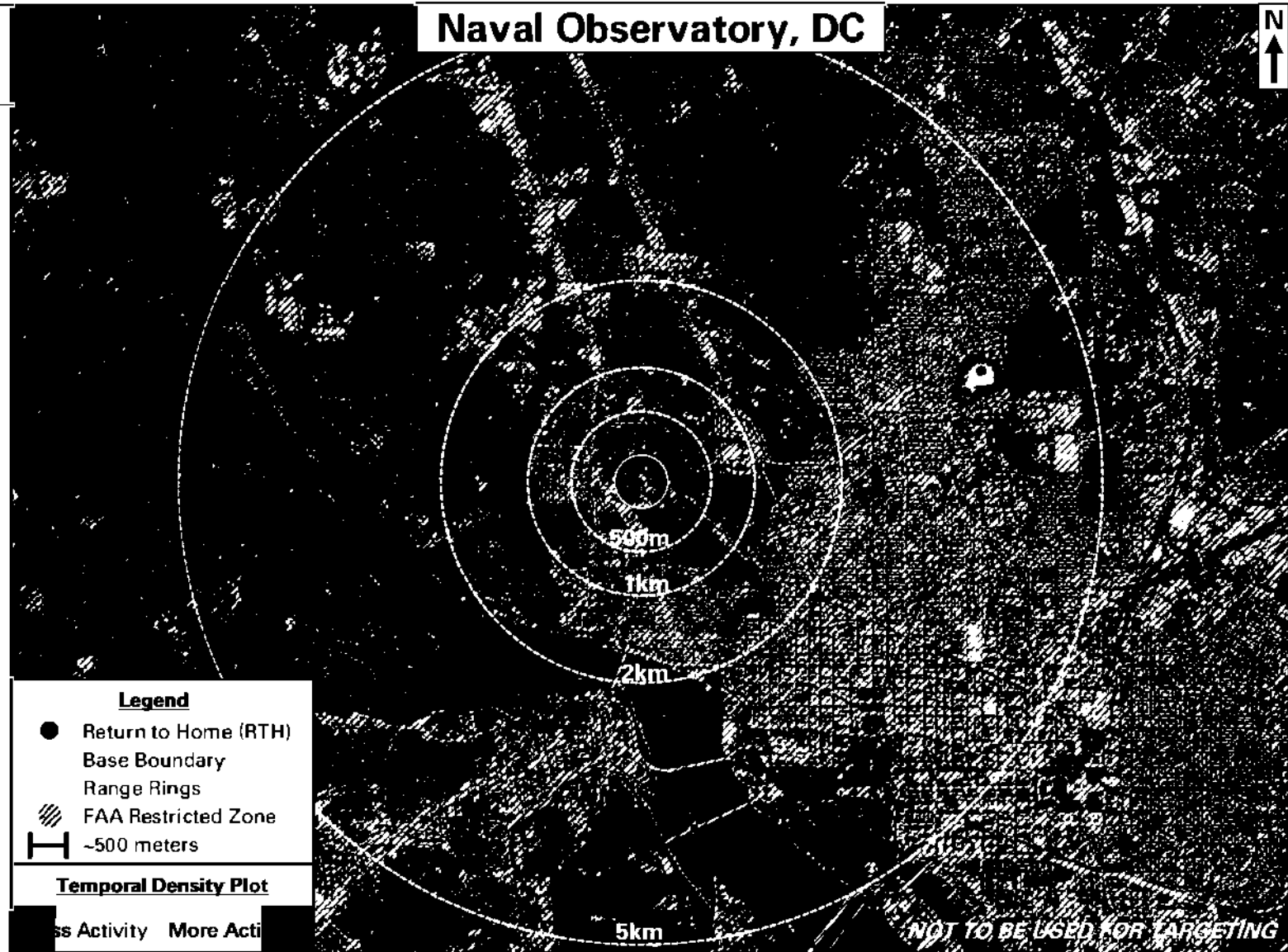
December 10, 2024 – December 23, 2024

Entire Slide is CUI

No events were detected within the base boundary or within 500m. All detected activity occurred near the Armed Forces Retirement Home (AFRHW) (see slide 29)

Activity Highlights

- 2x S/Ns, 3x events, 00:19:03 duration
 - Exceeded altitude allowance: 2x S/Ns (3x events)
 - Night detections: None
- 1x S/N previously detected
- S/N: F4XFA22AFML78D81 (DJI Mini 3 Pro)
- Highest Activity by Weekday
 - Events: Friday (3x events)
 - Duration: Friday (00:19:03)
- Highest Activity by Time (Zulu)
 - Events: 1500Z, 1600Z & 1900Z (1x event each)
 - Duration: 1500Z (00:19:03)
- Highest Duration by Platform: DJI Phantom 4 Pro V2 (00:16:39)
- 0x detects within 500m, 0x detects within the Base Boundary



CUI



~~CUI~~

Naval Observatory Data Analysis

December 10, 2024 – December 23, 2024

Entire Slide is ~~CUI~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	10 Dec 24	Comparison
	End date	30 Nov 24	End date	23 Dec 24	
	Weeks in total	4	Weeks in total	2	
Total Events	8		3		-16%
Total Duration	00:47:17		00:19:03		-10%
Total SNs	6		2		-26%
Most Active Platform					
By Unique SNs	DJI Mavic 2 Pro, DJI Mini 3		DJI Mini 3 Pro, DJI Phantom 4 Pro V2		
	2		1		
By Events	DJI Mavic 2 Pro, DJI Mini 3		DJI Phantom 4 Pro V2		
	3		2		
By Duration	DJI Mavic 2 Pro		DJI Phantom 4 Pro V2		
	00:36:29		00:16:39		

• This table reflects an increase/decrease in overall activity based off detects reported by an installation's C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity



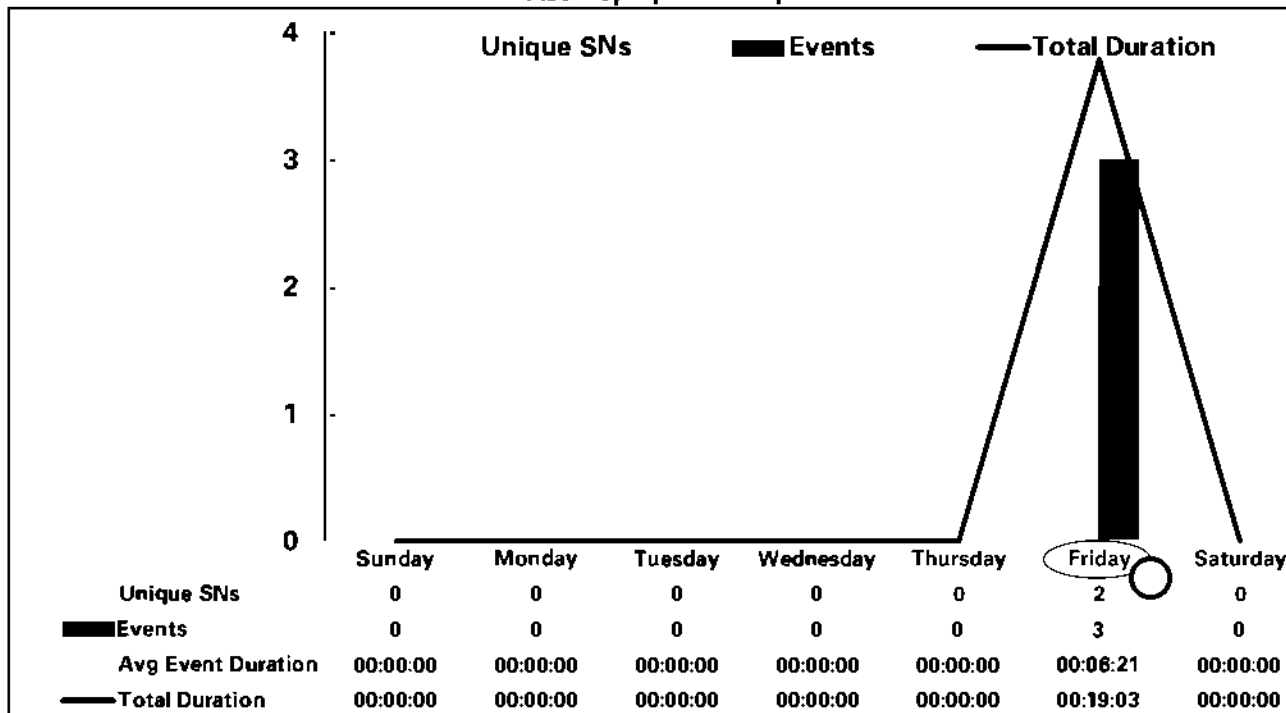
—CUI—

Naval Observatory Activity Charts

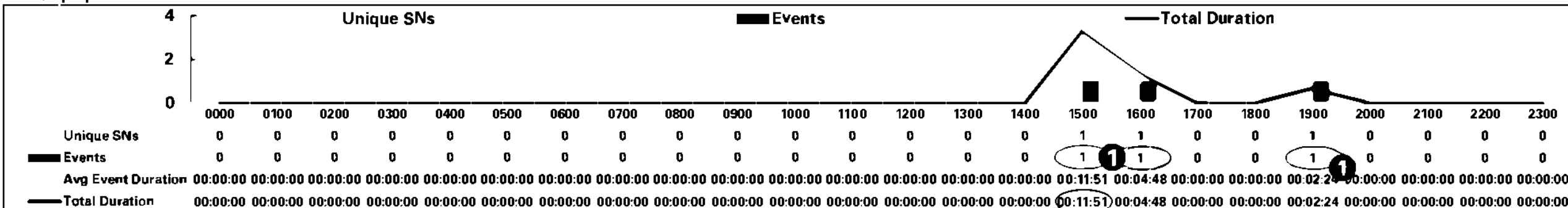
December 10, 2024 – December 23, 2024

Entire Slide is CUI

Activity by Weekday



Activity by Hour



○ Highest Total Event/Duration (Weekday)

②

● Highest Total Event/Duration (Hour)

—CUI—



NSF Suitland Activity Summary

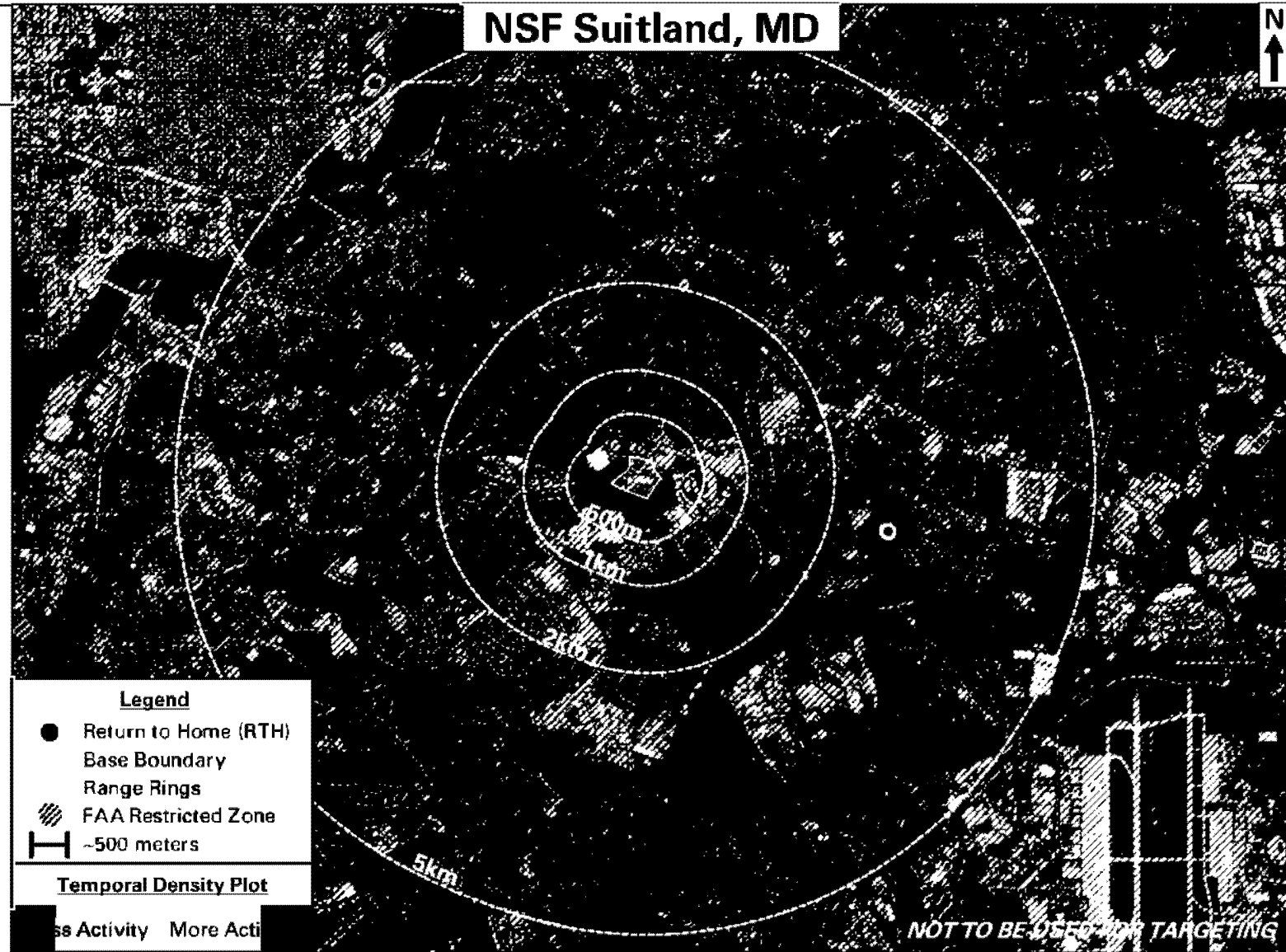
December 10, 2024 – December 23, 2024

Entire Slide is CUI

No events were detected within 500m of the base boundary. All activity occurred in residential, recreational, or commercial areas beyond 2km of the base boundary.

Activity Highlights

- 3x S/Ns, 3x events, 00:02:49 duration
 - Exceeded altitude allowance: 3x S/Ns (3x events)
 - Night detections: 1x S/N (1x event)
- 2x S/Ns previously detected
- S/N: F6N8C236W00314EH (DJI Air 3)
- S/N: 5FSCJC40111EJ8 (DJI Mini 2)
- Highest Activity by Weekday
 - Events: Monday, Tuesday & Thursday (1x event each)
 - Duration: Monday (00:01:22)
- Highest Activity by Time (Zulu)
 - Events: 0100Z, 1300Z & 1800Z (1x event each)
 - Duration: 1800Z (00:01:22)
- Highest Duration by Platform: DJI Mini 2 (00:02:27)
- 0x detects within 500m, 0x detects within the Base Boundary



CUI



~~CU~~

NSF Suitland Data Analysis

December 10, 2024 – December 23, 2024

Entire Slide is ~~CU~~

Metric	November 2024		December 2024		Percentage Change
Length of Reporting Period	Start Date	01 Nov 24	Start Date	10 Dec 24	Comparison
	End date	30 Nov 24	End date	23 Dec 24	
	Weeks in total	4	Weeks in total	2	
Total Events	9		3		-25%
Total Duration	00:19:53		00:02:49		-68%
Total SNs	7		3		-4%
Most Active Platform					
By Unique SNs	DJI Air 2S, U/I DJI UAS		DJI Mini 2		
By Events	DJI Air2S		DJI Mini 2		
By Duration	DJI Air 2S		DJI Mini 2		
	00:10:42		00:02:27		-49%

• This table reflects an increase/decrease in overall activity based off detects reported by an installation’s C-UAS system(s). RED indicates an increase in activity, GREEN indicates a decrease in activity

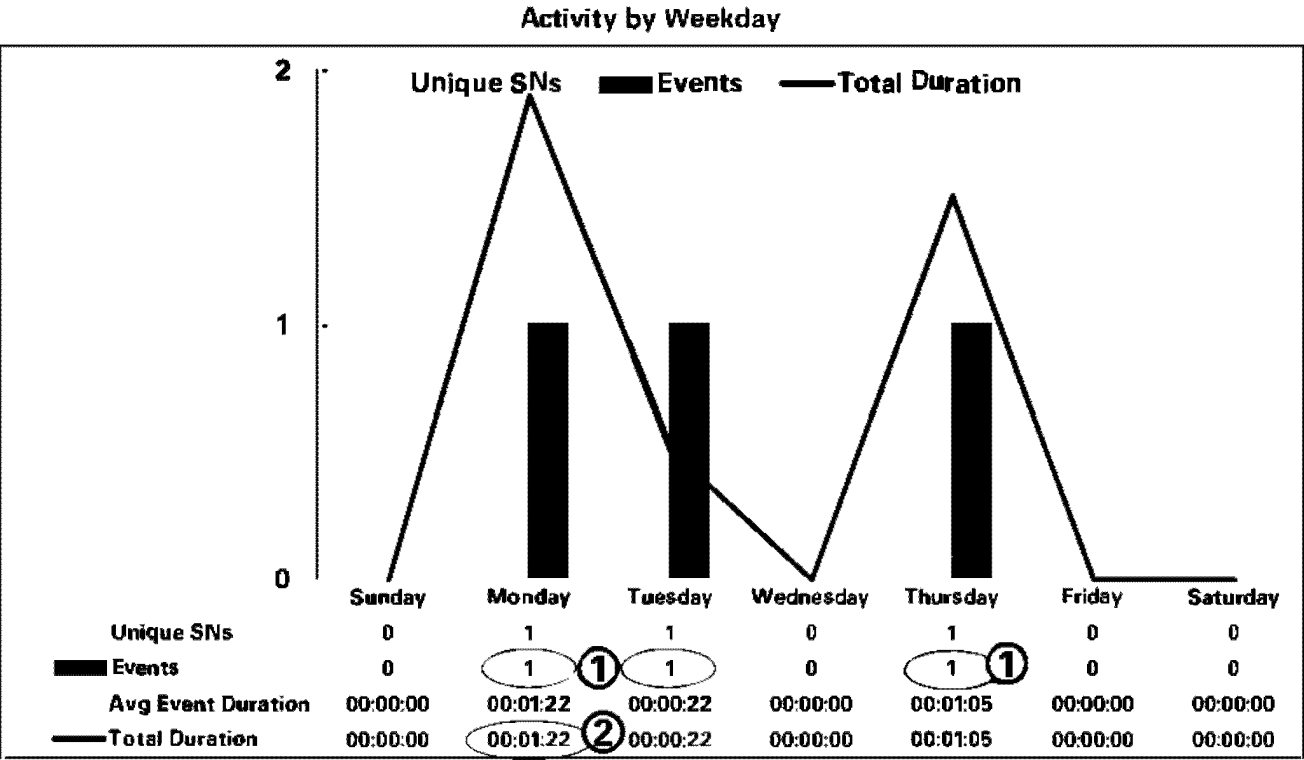


CUI

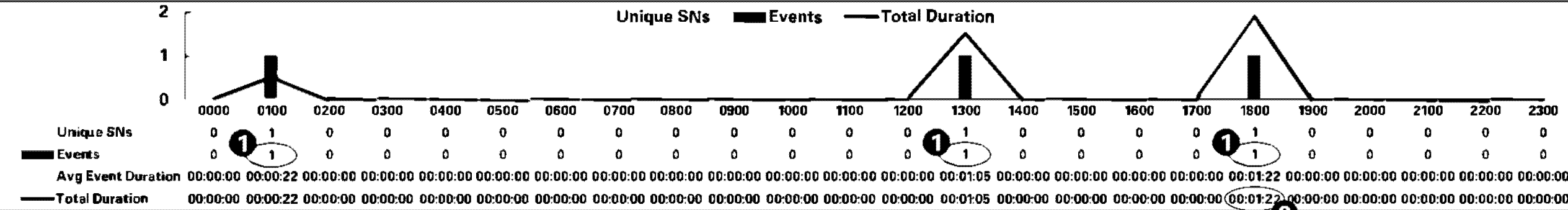
NSF Suitland Activity Charts

December 10, 2024 – December 23, 2024

Entire Slide is CUI



Activity by Hour



○ Highest Total Event/Duration (Weekday)

● Highest Total Event/Duration (Hour)

CUI



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oimbx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-ELIAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than December 23, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. DTRA Team Phalanx Site Elevation Sheet; Reference Log **(Slides 2-6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39)**
2. Map of JB Andrews. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 6)**
3. Map of Fort Belvoir. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 9)**
4. Map of South Potomac – Indian Head. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 12)**
5. Map of NSF Thurmont. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 15)**
6. Map of ICCB. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 18)**
7. Map of Pentagon. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 21)**
8. Map of Washington Navy Yard. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 24)**
9. Map of Armed Forces Retirement Home. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 27)**
10. Map of NSF Dahlgren. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 30)**
11. Map of Naval Observatory. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 33)**
12. Map of NSF Suitland. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 36)**
13. Map of NCR Area of Interest. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slide 39)**
14. National Security UAS Flight Restrictions. https://udds-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39)**
15. JB Andrews; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 6-8)**
16. Fort Belvoir; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 9-11)**
17. South Potomac – Indian Head; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 12-14)**
18. NSF Thurmont; PHALANX CONUS Repository; Technical Logs **(Slide 2-5, 15-17)**
19. ICCB; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 18-20)**
20. Pentagon; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 21-23)**
21. Washington Navy Yard; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 24-26)**
22. Armed Forces Retirement Home; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 27-29)**
23. NSF Dahlgren; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 30-32)**
24. Naval Observatory; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 33-35)**
25. NSF Suitland; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 36-38)**
26. NCR Area of Interest; PHALANX CONUS Repository; Technical Logs **(Slides 2-5, 39-42)**
27. FAA definition of night. https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than June 05, 2025.

DTRA PHALANX Activity Report

Naval Weapon Station Earle, NJ (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview (3 slides)
- S/N: F6Z9C23930035RM0
- S/N: 37QBJ5KBD100BU
- S/N: F4QZ8249L00EQ005
- S/N: 3NZCJBM0440FME
- S/N: F45T7239S00EQ029
- Points of Contact
- Sources
- Terminology



December 01, 2024 – December 31, 2024

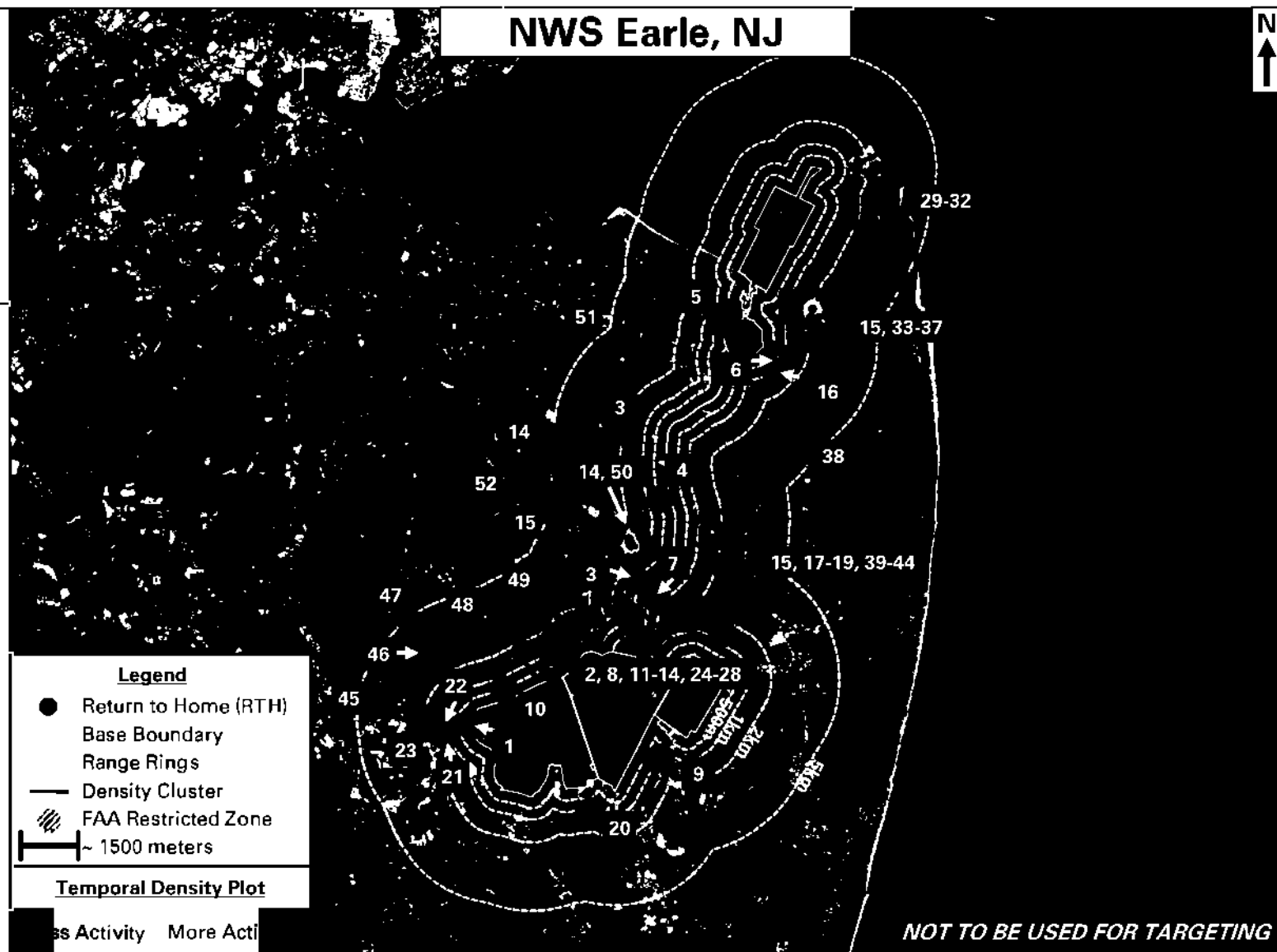
Executive Summary

Entire Slide is CUI

During this reporting period, there was no activity that occurred within the base boundary. (S/Ns: 1-5) were detected within 500m of the base boundary over residential or commercial areas. (S/Ns: 4, 47) were previously detected IVO other bases over a year ago, more than 5km away from their respective base. All other activity occurred over residential, commercial, and recreational areas. sUAS detections within 5km of the base boundary significantly increased compared to the previous 4-week reporting period (01 NOV 24 – 30 NOV 24, 35x S/Ns, 45x events, 02:55:52 duration). S/Ns increased 44%, events increased 100%, and duration increased 96%.

5km Overview

- 52x S/Ns, 93x events, 05:56:31 duration
 - Exceeded 400ft AGL ceiling: 23x S/Ns (26x events) (S/Ns: 6, 9, 14-17, 20-24, 27-28, 30-31, 33, 43, 45, 47, 49-52)
 - Night detections: 13x S/Ns (16x events) (S/Ns: 1, 4, 6, 14, 17, 21-22, 27-28, 41, 44, 46, 51)
- 21x S/Ns previously detected (S/Ns: 1, 4, 6-8, 14-16, 18-19, 21-22, 26, 32-33, 35, 41, 43, 47-48, 50)
 - (S/N: 4) detected ~9.47km SE of McDill AFB, FL on a University Campus (09 SEP 23).
 - (S/N: 47) detected ~21.1km W from Intelligence community Campus Bethesda, MD (16 DEC 23).
 - (S/N: 50) detected ~3.14km W of base over helipad next to Police Station (06 NOV 24).
- 21x different platforms detected (21x rotary-wing)
 - Top by total events: DJI Mavic 3 (11x, 12%)
 - Top by total duration: DJI Mavic Air 2 (01:12:26, 20%)
 - Top by S/N count: DJI Mini 2 SE & DJI Mini 4 Pro (5x, 10%) each



CUI



CUI

Current System Overview (1 of 3)

December 01, 2024 – December 31, 2024

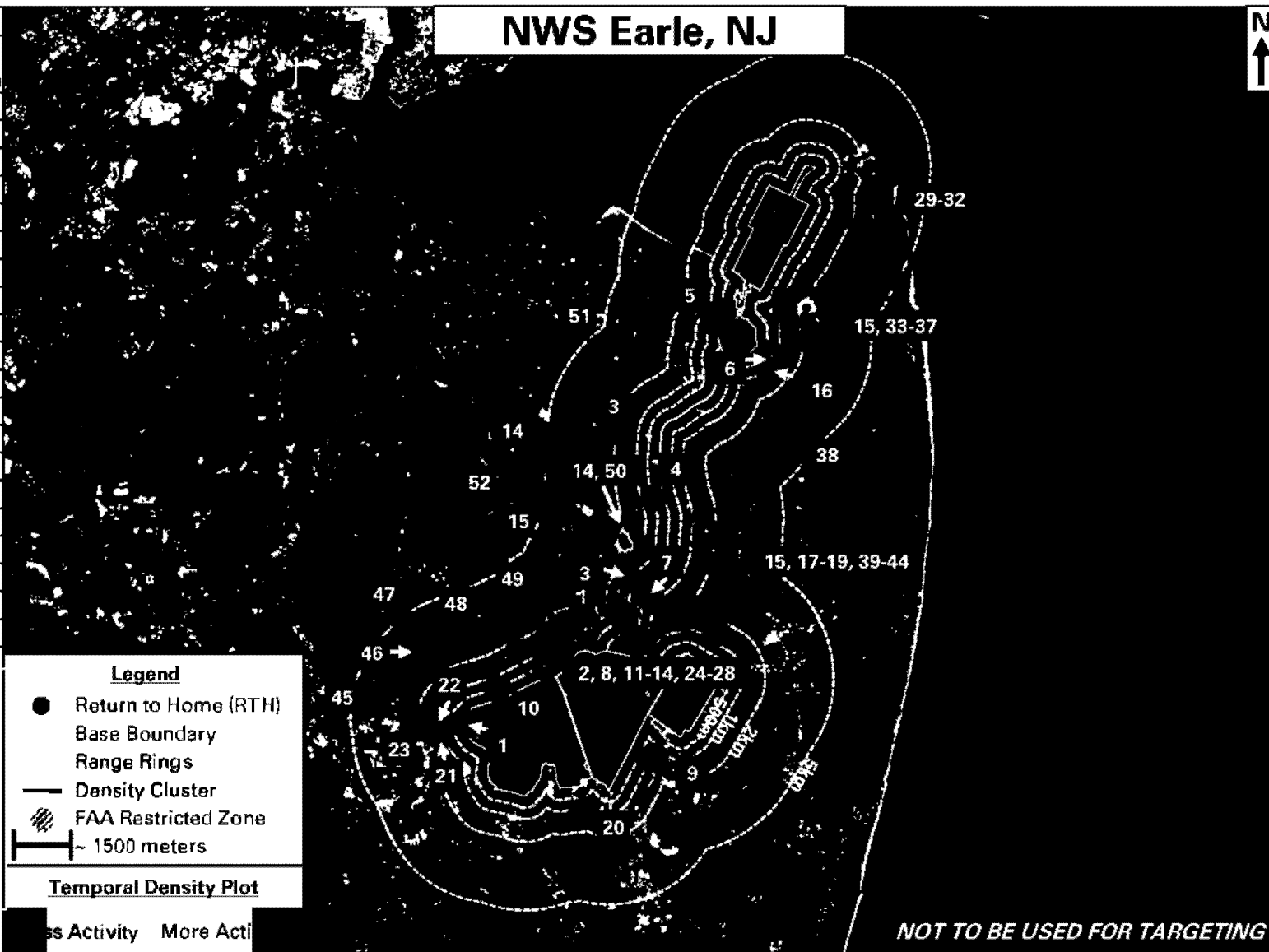
Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mini 4 Pro	F6Z9C23930035RM0	1	145	00:01:05
2	DJI FPV	37QBJ5KBD100BU	1	201	00:00:32
3	DJI Mavic 3	F4QZ8249L00EQ005	2	323	00:02:01
4	DJI Mini 2	3NZCJ8M0440FME	1	336	00:00:01
5	DJI Mavic 3	F45T7239S00EQ029	1	296	00:03:58
6	DJI FPV	37QBJ6FBD1049U	3	1172	00:06:06
7	DJI Matrice 300 RTK	1ZNB9900C00QL	3	155	00:03:05
8	DJI Mavic Air 2	3N3BH8601201DL	1	365	00:09:00
9	DJI Mavic 2 Zoom	0M6CGCMR0A8A1U	1	576	00:01:26
10	DJI Mini 4 Pro	F6Z9A239MML1J9L1	1	109	00:00:14
11	DJI Air 2S	3YTEK88003003P	1	313	00:01:27
12	DJI Mini 3 Pro	F4XFA232GML8M0Y2	1	139	00:04:27
13	DJI Mini 2 SE	6C5AL38001054K	1	181	00:02:44
14	DJI Matrice 200 V2	1DADG72001004E	7	474	00:16:05
15	DJI Mavic 3	F45TB21AU1AE0129	5	562	00:04:33
16	DJI Mavic 2 Pro	163CH85R0A30TN	1	411	00:00:11
17	DJI Mini 4 Pro	F6Z9A23AAML3T350	1	431	00:03:07
18	DJI Mini 3	F5YHA23A90319V2J	2	251	00:00:29
19	DJI Mavic 2 Pro	163CHBJR0A61HH	2	274	00:11:25
20	DJI Mini SE	4AESJ8B00200BM	1	917	00:02:29

– S/N with night detections | Red font – S/N previously detected | – exceed FAA altitude allowance

- (S/Ns: 1, 4, 6, 17) are not platforms that come standard with cameras or software meant to enhance night operations.
- DJI Matrice 300 RTK (S/N: 7) and DJI Matrice 200 V2 (S/N: 14) have the option of night vision, thermal, and infrared cameras.
- DJI Mavic 3 (S/Ns: 3, 5) is equipped with night mode program to enhance ambient light.

NWS Earle, NJ



CUI



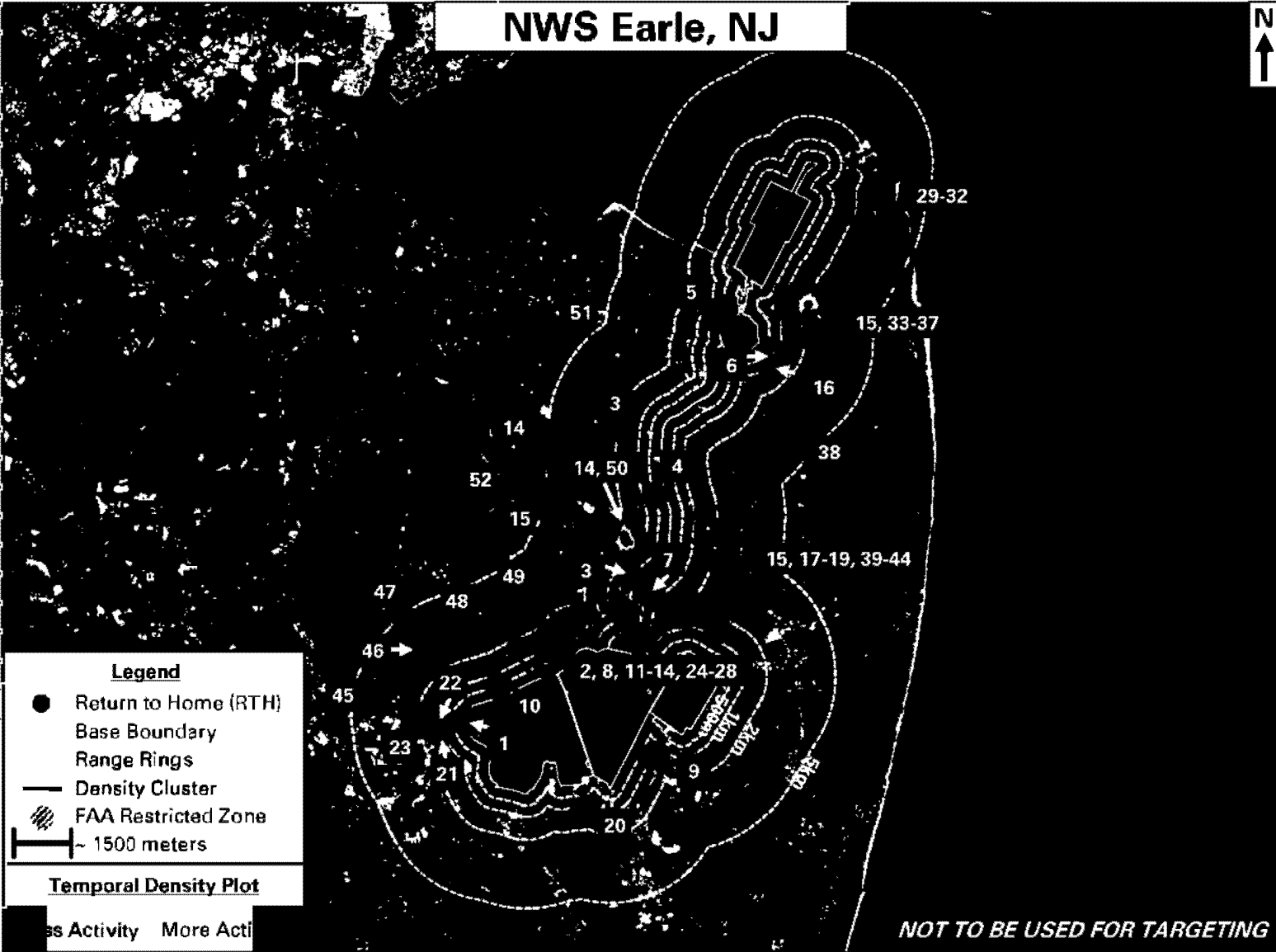
Current System Overview (2 of 3)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
21	DJI Mavic Pro	08RDE4100102QD	1	926	00:07:03
22	DJI Mini 2 SE	F6CDA236LML2FPTV	1	444	00:00:49
23	DJI Mavic Pro	08RDE9W0010003	1	447	00:06:28
24	DJI Mini 3	F5YHX24BG002GBHJ	3	464	00:27:45
25	DJI Mavic 2 Enterprise Advanced	4GCCJ8SR0A0N7A	1	293	00:01:47
26	DJI Mavic 2 Zoom	0M67LB9001Y1J0	1	359	00:10:23
27	DJI Phantom 3	03Z0449705	1	579	00:08:26
28	DJI Mini 2 SE	F6CDC243U003K0M2	4	457	00:03:19
29	DJI Mavic Mini	1SDCH7N016AD96	3	254	00:10:48
30	DJI Mavic 3 Classic	F67QD233U0141197	6	411	00:15:55
31	DJI Mini 4 Pro	F6Z9A239WML3NH50	2	424	00:01:44
32	U/I DJI UAS	F8PJC2489000654R	1	133	00:10:24
33	DJI Mavic Air 2	3N3BHC501202HA	1	500	01:03:25
34	DJI Mavic 3	F45T8246Q00EF1B7	3	83	00:29:03
35	DJI Mini 4 Pro	F6Z9C238S0034G0U	2	195	00:14:52
36	DJI Mavic 2 Zoom	0M63GAW00SX024	1	165	00:09:13
37	DJI Mavic 2 Pro	1637M97001W0UT	2	316	00:00:02
38	DJI Air 2S	3YTBJ6R00302JV	1	280	00:00:01
39	DJI Mini 2 SE	6C5AL3X0010EN5	1	372	00:00:03
40	DJI Mini 2	3NZCJ63004GMTG	2	359	00:00:24

- (S/Ns: 21-22, 27-28) are not platforms that come standard with cameras or software meant to enhance night operations.
- DJI Mavic 2 Enterprise Advanced (S/N: 25) is equipped with night vision, thermal, and RTK.
- DJI Mavic 3 Classic (S/N: 30) and DJI Mavic 3 (S/N: 34) are equipped with night mode program to enhance ambient light.





CUI

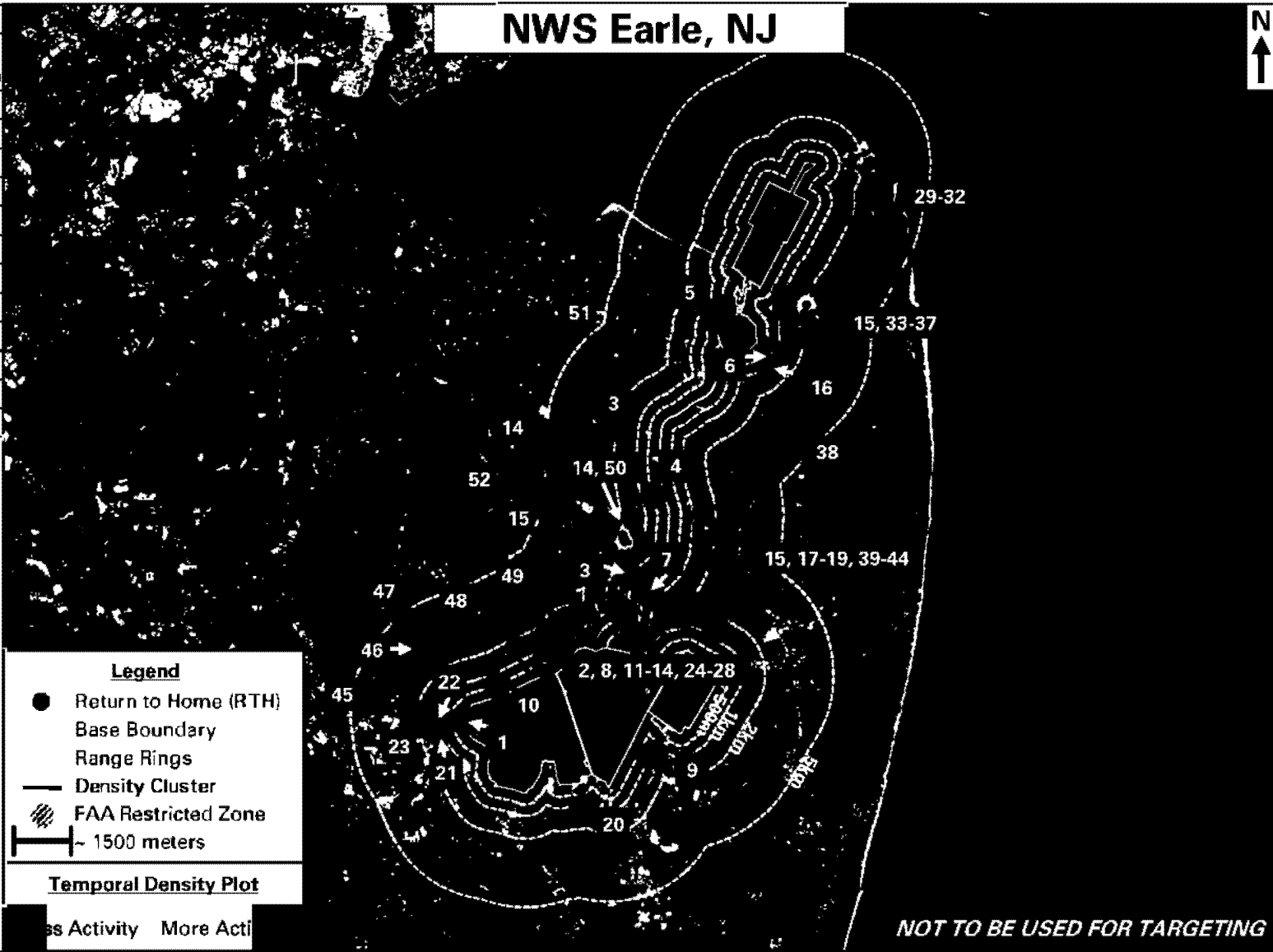
Current System Overview (3 of 3)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
41	DJI Mini 3	687AL1S00110RH	2	395	00:00:23
42	U/I DJI UAS	F8PJC248B001BTR1	1	133	00:03:07
43	DJI Mavic Mini	1SDLGCD20401HY	1	520	00:02:29
44	DJI Mini 2	3NZSHB200303NU	1	277	00:00:01
45	DJI Mini 3	F5YHA243S031JV95	2	614	00:04:34
46	DJI Mini SE	4AEAK3E0020186	1	332	00:02:15
47	DJI Air 2S	3YTB430030B4X	2	880	00:00:55
48	DJI Mavic Air 2	3N37LAE002R0H8	1	303	00:00:01
49	DJI Mini 2 SE	F6CD8249Q002Q3KE	2	434	00:12:39
50	DJI Matrice 200 V2	1DADG64001007S	2	418	00:19:14
51	DJI FPV	37QBHC18D1018B	1	746	00:00:16
52	DJI Air 3	F6N8C236D0030CFL	2	1133	00:14:18

- (S/Ns: 41, 44, 46, 51) are not platforms that come standard with cameras or software meant to enhance night operations.
- DJI Matrice 200 V2 (S/N: 50) has the option of night vision, thermal, and infrared cameras.
- DJI Air 3 (S/N: 52) is equipped with night mode program to enhance ambient light.



CUI



CUI

S/N: F6Z9C23930035RM0

December 01, 2024 – December 31, 2024

Entire Slide is CUI

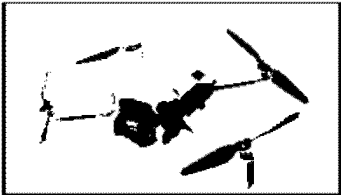
- 1 S/N: F6Z9C23930035RM0, DJI Mini 4 Pro
- 1x event (00:01:05) within 500m

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-23 22:06:48	2024-12-23 22:07:53	00:01:05	145

– S/N with night detection

- Night detection occurred ~50m W from base boundary over a residential area IVO Quail Run Ct – Ashbury Ave intersection.
- Operator location and return to home were collocated along Ashbury Ave.
- DJI Mini 4 Pro does not come standard with cameras or software meant to enhance night operations.
- (S/N: 1) was most recently detected, but non-geolocated, IVO NWS Earle for a duration of 00:00:31 on (30 OCT 24).

DJI Mini 4 Pro



Source: UAS Card Master

- Weight: ~249g / ~9.4oz
- Dimensions: 298 x 373 x 101 mm
- Max Speed: ~36mph/ ~55 kph
- Flight Time: ~34 Mins / 45Mins Intel Battery
- Max Flight Distance: 20mi/32km
- Transmission Distance:
 - FCC Compliant: 12 mi/20km
 - CE Compliant: 6.2 mi/10km
 - SRCC Compliant: 6.2 mi/10km
- C2 Signal: OcuSync 4.0
- Dual Frequency: 2.4-5.8GHz
- Image Transmission: 4K, HD/Digital Zoom/ Rotating Camera
- Obstacle Avoidance: 360 degree
- Camera: 48MP/ 4x Digital Zoom
- Cost: ~\$799 Base Model Non-HUD Remote



NOT TO BE USED FOR TARGETING



~~CUI~~

S/N: 37QBJ5KBD100BU

December 01, 2024 – December 31, 2024

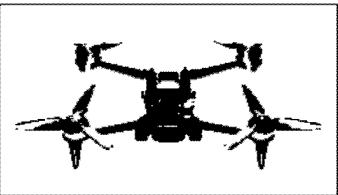
Entire Slide is ~~CUI~~

- 2** S/N: 37QBJ5KBD100BU, DJI FPV
- 1x event (00:00:32) within 500m

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
2a	2024-12-29 19:13:12	2024-12-29 19:13:44	00:00:32	201

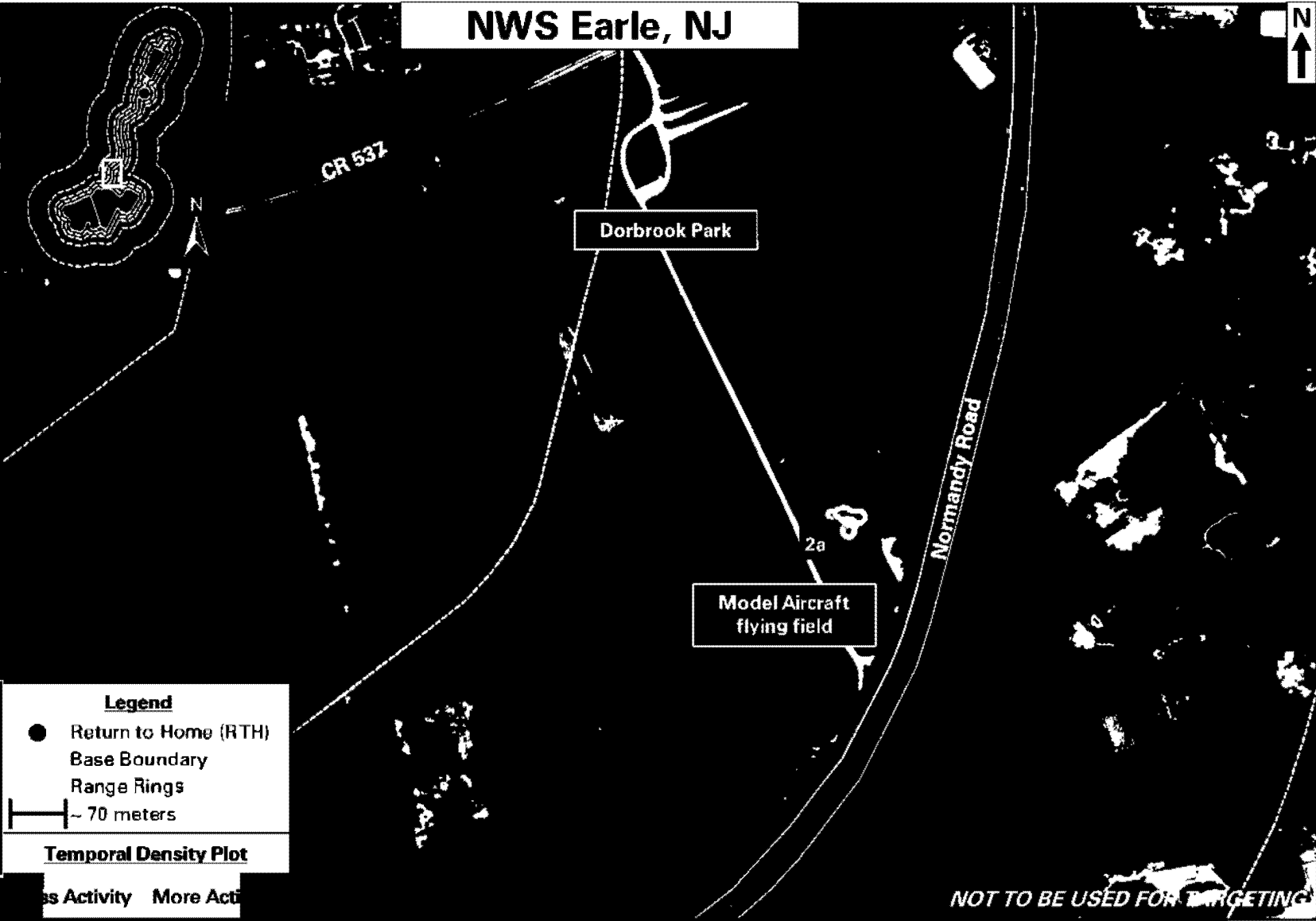
- Detected ~80m W of base boundary over model aircraft flying field adjacent Normandy Road.
- No operator location was detected.
- (S/N: 2) was not previously detected within the Phalanx repository.

DJI FPV



Source: UAS Card Master

- Weight: ~755g / 1.12lbs (with propellers)
- Dimensions: 255x312x127mm
- Max Speed: ~57 mph / ~156 kpm
- Flight Time: ~3-10 Mins
- (~20 Mins at ~24.0mph/39.9 kpm)
- Transmission Distance:
 - FCC Compliant: 6.2mi/10km
 - CE Compliant: 3.7mi/6km
- C2 Signal: OcuSync 3.0
- Dual Frequency: 2.4-5.8GHz
- Image Transmission: 4K HD
- Camera: 12MP/ No Zoom Camera
- Cost: ~\$2,399





CUI

S/N: F4QZ8249L00EQ005

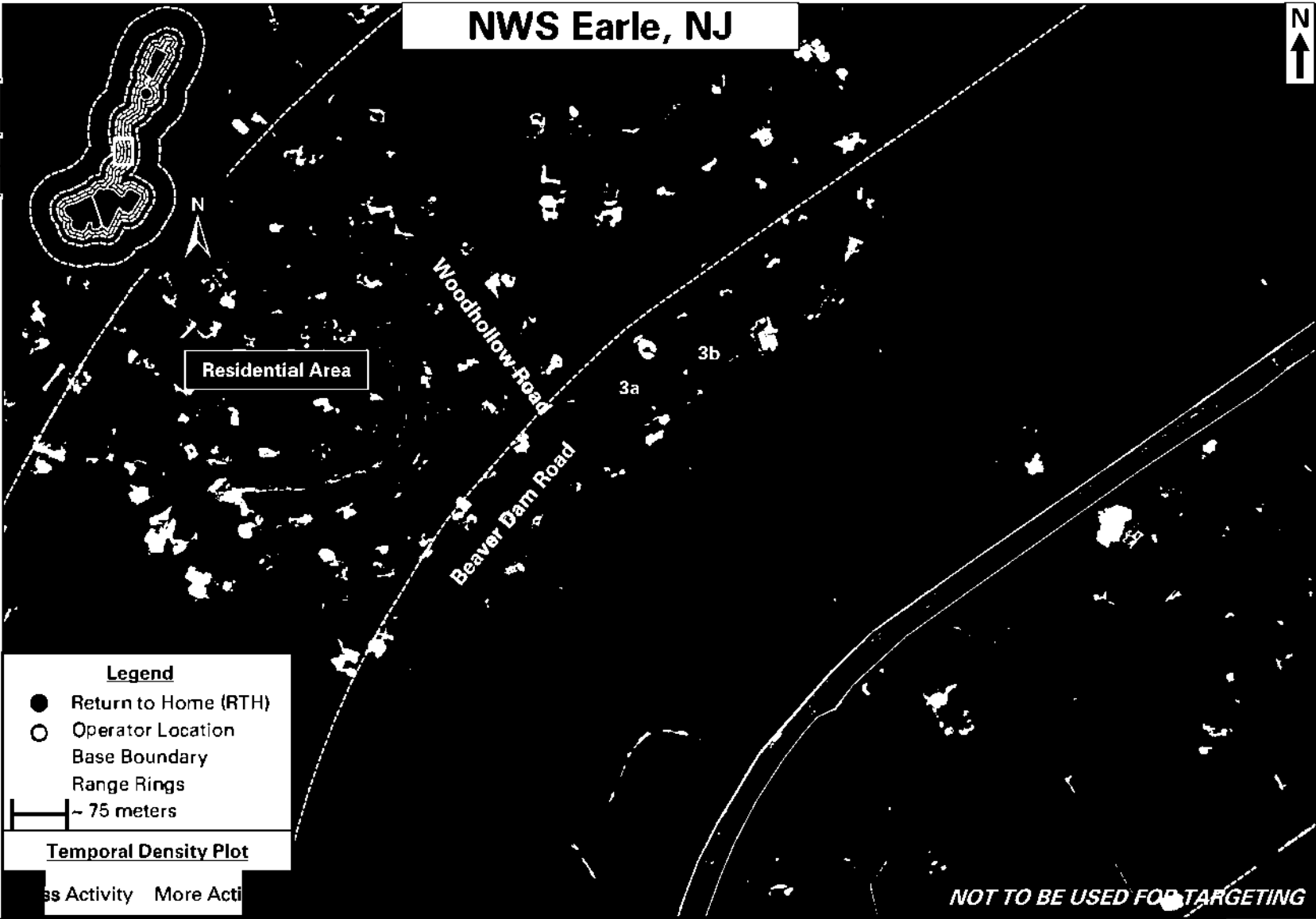
December 01, 2024 – December 31, 2024

Entire Slide is CUI

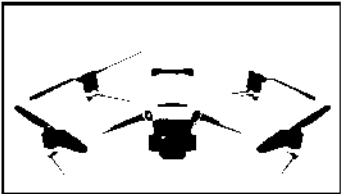
- 3 S/N: F4QZ8249L00EQ005, DJI Mavic 3
- 2x total events (00:02:01) within 500m

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
3a	2024-12-23 18:02:58	2024-12-23 18:02:58	00:00:01	181
3b	2024-12-23 14:19:25	2024-12-23 14:21:25	00:02:00	323

- Detected ~463m S of base boundary over residential area along Beaver Dam Road.
- Operator location and return to home were collocated along Beaver Dam Road.
- (S/N: 3) was not previously detected within the Phalanx repository.



DJI Mavic 3



Source: UAS Card Master

- Weight: ~895g / ~31.57oz (propellers and battery included / without RTK Module)
- Dimensions: 223x96.3x122.2
- Max Speed: ~47 mph / ~72 kpm
- Flight Time: ~46 Mins
- Transmission Distance:
 - FCC Compliant: 9.32mi/15km (Max Flight Distance 32km)
 - CE Compliant: 4.97mi/8km
 - SRRC: 4.97mi/8km
- C2 Signal: OcuSync 03+
- Frequency: 2.400-2.4835 GHz / 5.725-5.850GHz
- Image Transmission: 5k
- Camera: 20MP / 4x Digital Zoom/7x Optical Zoom (Total: 28x Hybrid Zoom)/Night Mode Capable
- Cost: ~\$3,628



~~CUI~~
S/N: 3NZCJBM0440FME

December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

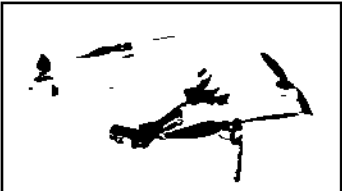
- 4** S/N: 3NZCJBM0440FME, DJI Mini 2
- 1x total event (00:00:01) within 500m

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
4a	2024-12-23 22:56:56	2024-12-23 22:56:56	00:00:01	336

– S/N with night detection

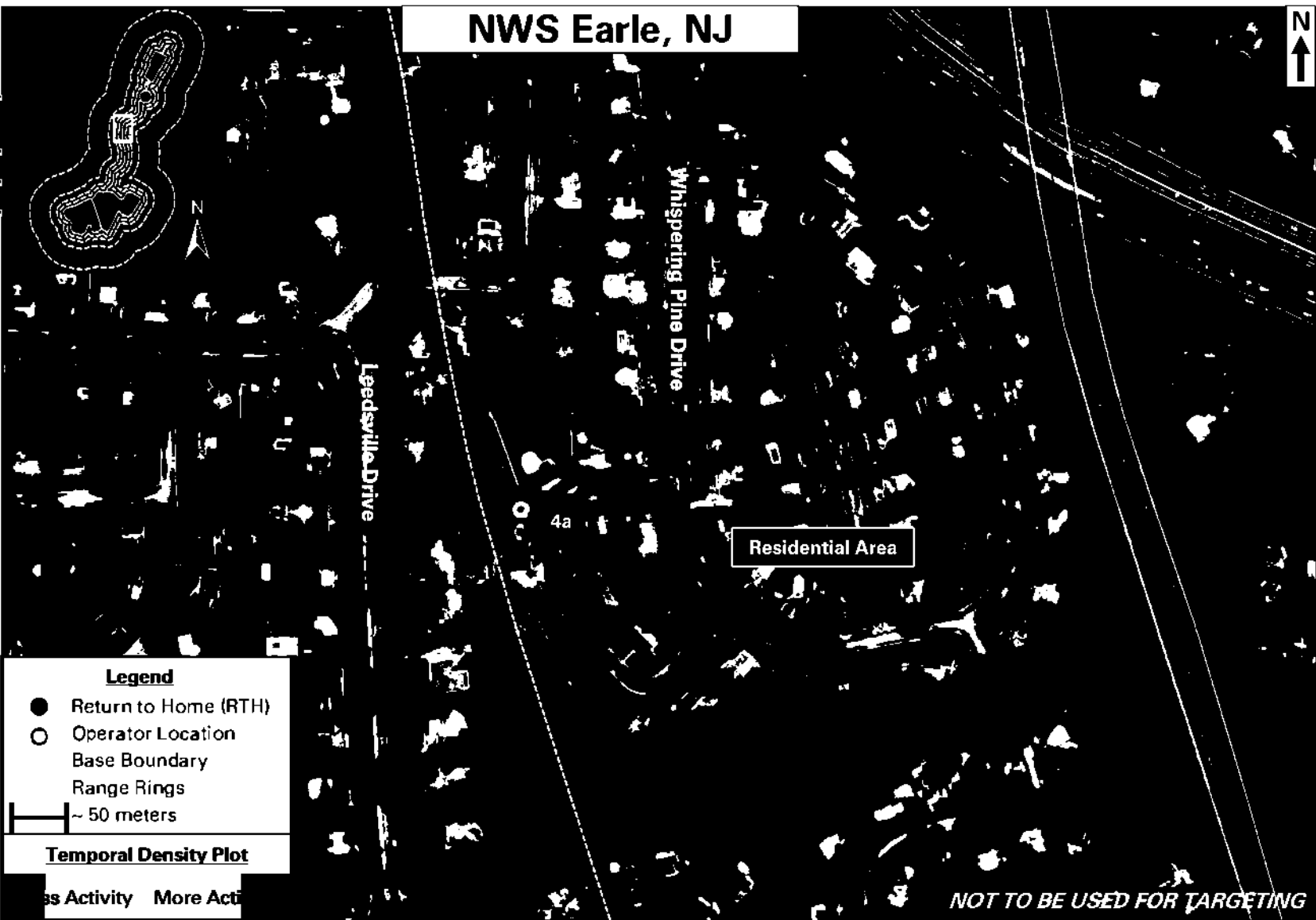
- Detected ~478m W away from base boundary over a residential area along Bluefield Rd.
- Operator location and return to home were collocated along Bluefield Rd.
- (S/N: 4) was previously detected ~9.47km SE from MacDill base boundary on a University Campus (09 SEP 23).

DJI Mini 2



Source: UAS Card Master

- Weight: ~249g / ~8oz
- Dimensions: 138x81x58mm
- Max Speed: ~35.3mph / ~57.6 kpm
- Flight Time: ~31 Mins
- Transmission Distance:
 - FCC Compliant: 6.2 mi/10km
 - CE Compliant: 3.7 mi/6km
- C2 Signal: OcuSync 2.0
- Dual Frequency: 2.4-5.8GHz
- Image Transmission: 4K
- Camera: 12MP / 2x Digital Zoom
- Cost: ~\$449



~~CUI~~



CUI

S/N: F45T7239S00EQ029

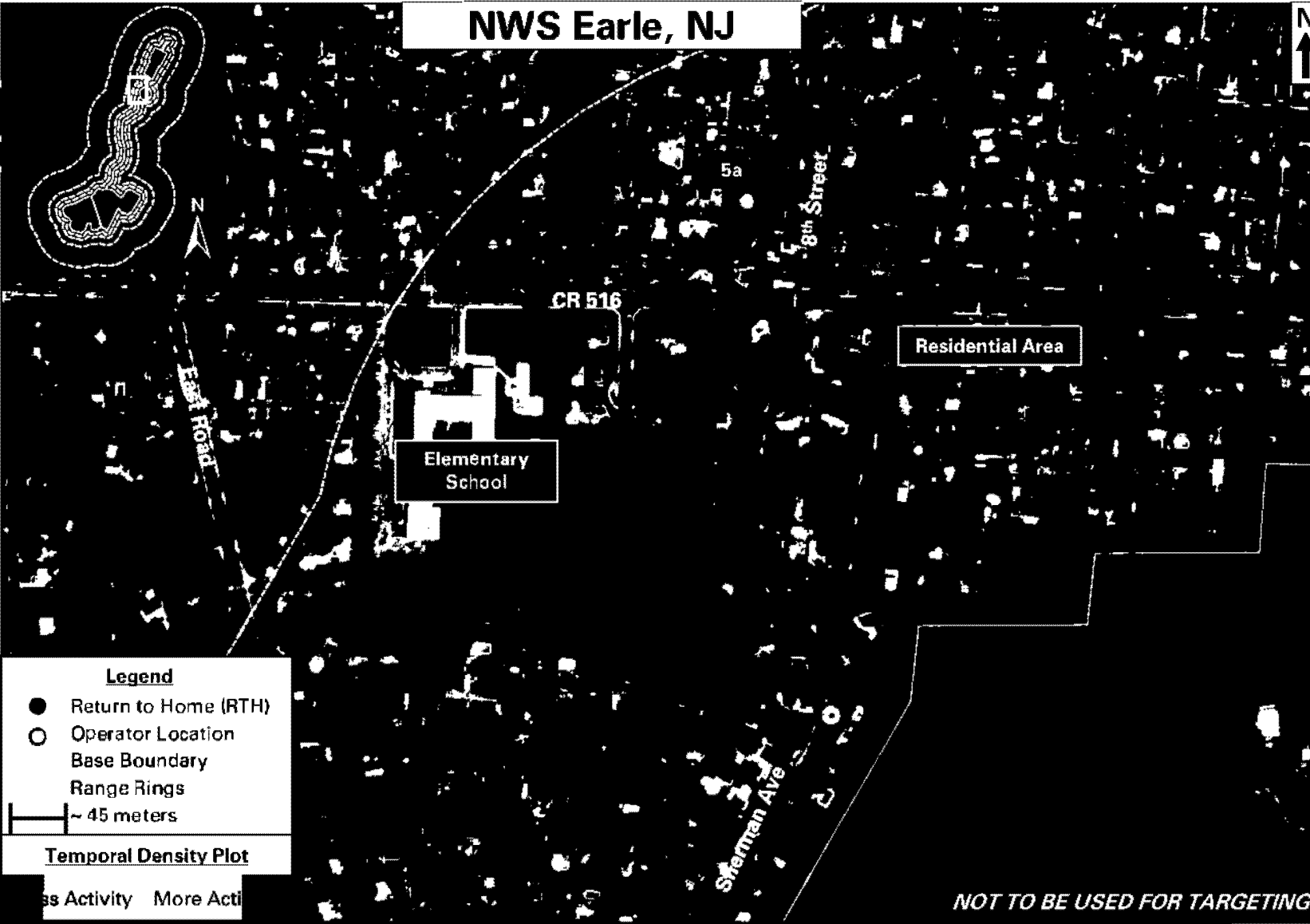
December 01, 2024 – December 31, 2024

Entire Slide is CUI

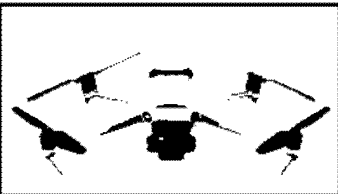
- 5 S/N: F45T7239S00EQ029, DJI Mavic 3
- 1x event (00:03:58) within 500m

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
5a	2024-12-13 16:45:01	2024-12-13 16:48:59	00:03:58	296

- Activity detected over residential area and school along CR516; Track started IVO a residence along 7th Street and travelled counterclockwise around the elementary school where it ended within ~45m of base along Sherman Ave.
- Operator location and return to home were collocated ~255m NW of base boundary along IVO the intersection of CR516 and 8th Street.
- (S/N: 5) was not previously detected within the Phalanx repository.



DJI Mavic 3



Source: UAS Card Master

- Weight: ~895g / ~31.57oz (propellers and battery included / without RTK Module)
- Dimensions: 223x96.3x122.2
- Max Speed: ~47 mph/ ~72 kph
- Flight Time: ~46 Mins
- Transmission Distance:
 - FCC Compliant: 9.32mi/15km (Max Flight Distance 32km)
 - CE Compliant: 4.97mi/8km
 - SRRC: 4.97mi/8km
- C2 Signal: OcuSync 3+
- Frequency: 2.400-2.4835 GHz / 5.725-5.850GHz
- Image Transmission: 5k
- Camera: 20MP/ 4x Digital Zoom/7x Optical Zoom (Total: 28x Hybrid Zoom)/Night Mode Capable
- Cost: ~\$3,628



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oimbx.oim-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than June 05, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Naval Weapon Station Earle. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-10)**
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-10)**
3. Naval Weapon Station Earle; PHALANX CONUS Repository; Technical Logs **(Slides 2-10)**
4. PHALANX UAS Card Master; Image, and Technical Data **(Slides 6-10)**
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



~~CUI~~

Information Cutoff Date: 04 MAR 25

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than June 14, 2026.

DTRA PHALANX Activity Report

Seymour Johnson Air Force Base, NC (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- Points of Contact
- Sources
- Terminology

Component: Defense Threat Reduction Agency
Controlled by: DTRA 01 (Phalanx)
CUI Categories: LCOMM
Distribution/ Dissemination Control: N/A
FOC: (S)



December 01, 2024 – December 31, 2024

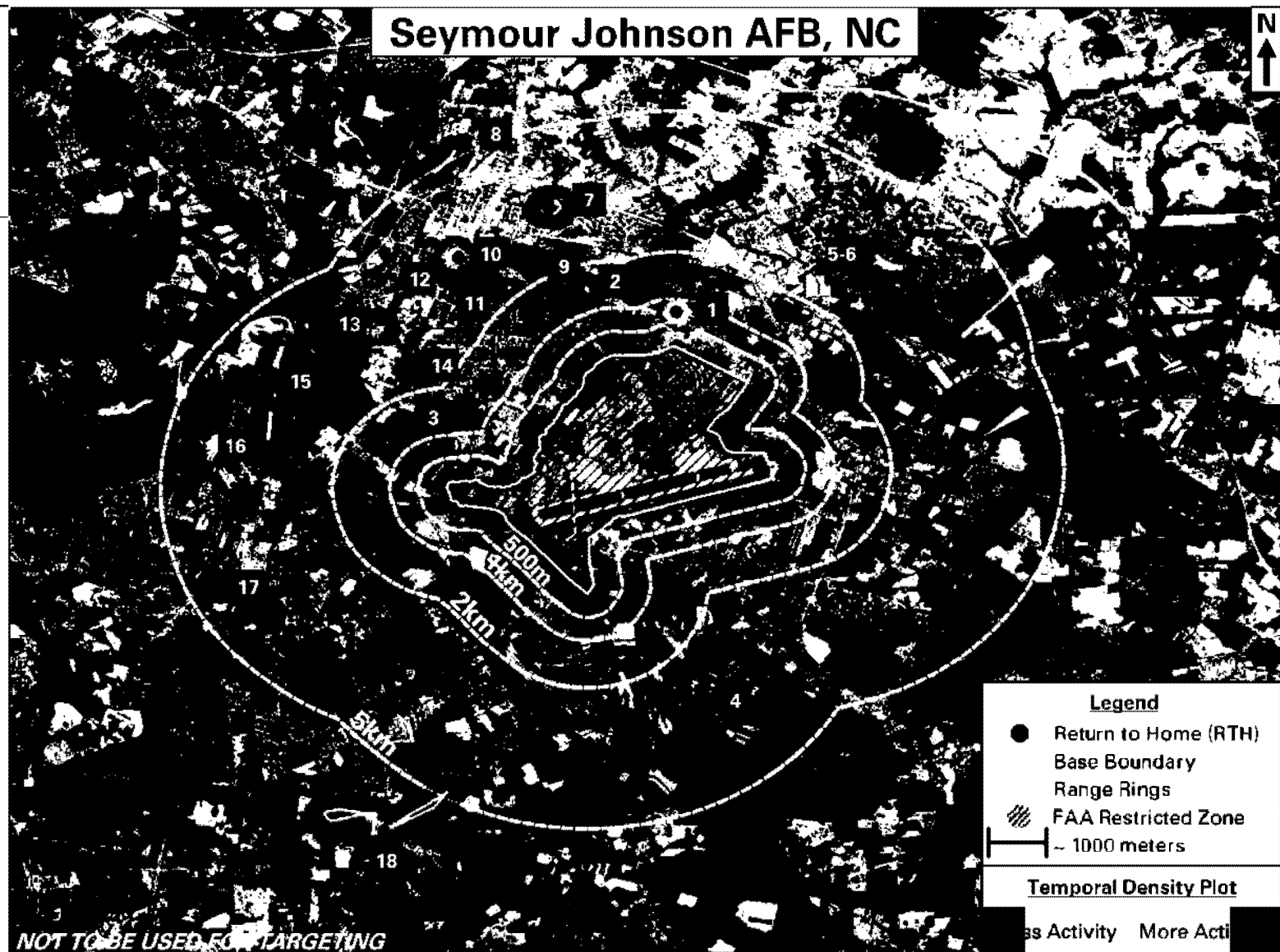
Executive Summary

Entire Slide is CUI

No activity was detected within 500m of the base boundary. Overall activity was concentrated west of the base boundary IVO residential and agricultural areas. This is the first report since JUL 2024. Activity within 5km of the base boundary decreased in S/Ns by 38%, decreased in events by 21%, and increased in duration by 59% when compared to the previous reporting period (01-31 JUL 24, 29x S/Ns, 39x events, 00:55:50 duration).

5km Overview

- 18x S/Ns, 31x events, 01:28:47 duration
- Exceeded altitude allowance: 7x S/Ns (8x events) (S/Ns: 1-2, 5-7, 14, 16)
- Night detections: 3x S/Ns (5x events) (S/Ns: 9, 12, 17)
- 3x S/Ns previously detected (S/Ns: 7, 12, 16)
- S/Ns: 7, 12, 16 were all previously detected IVO the same general area as their current detections.
- 9x different platforms detected (9x rotary-wing)
- Top by total events: DJI Mini 3 (11x, 35%)
- Top by total duration: DJI Mavic Air 2 (00:24:04, 27%)
- Top by S/N count: DJI Mini 3 (7x, 39%)



CUI



CUI

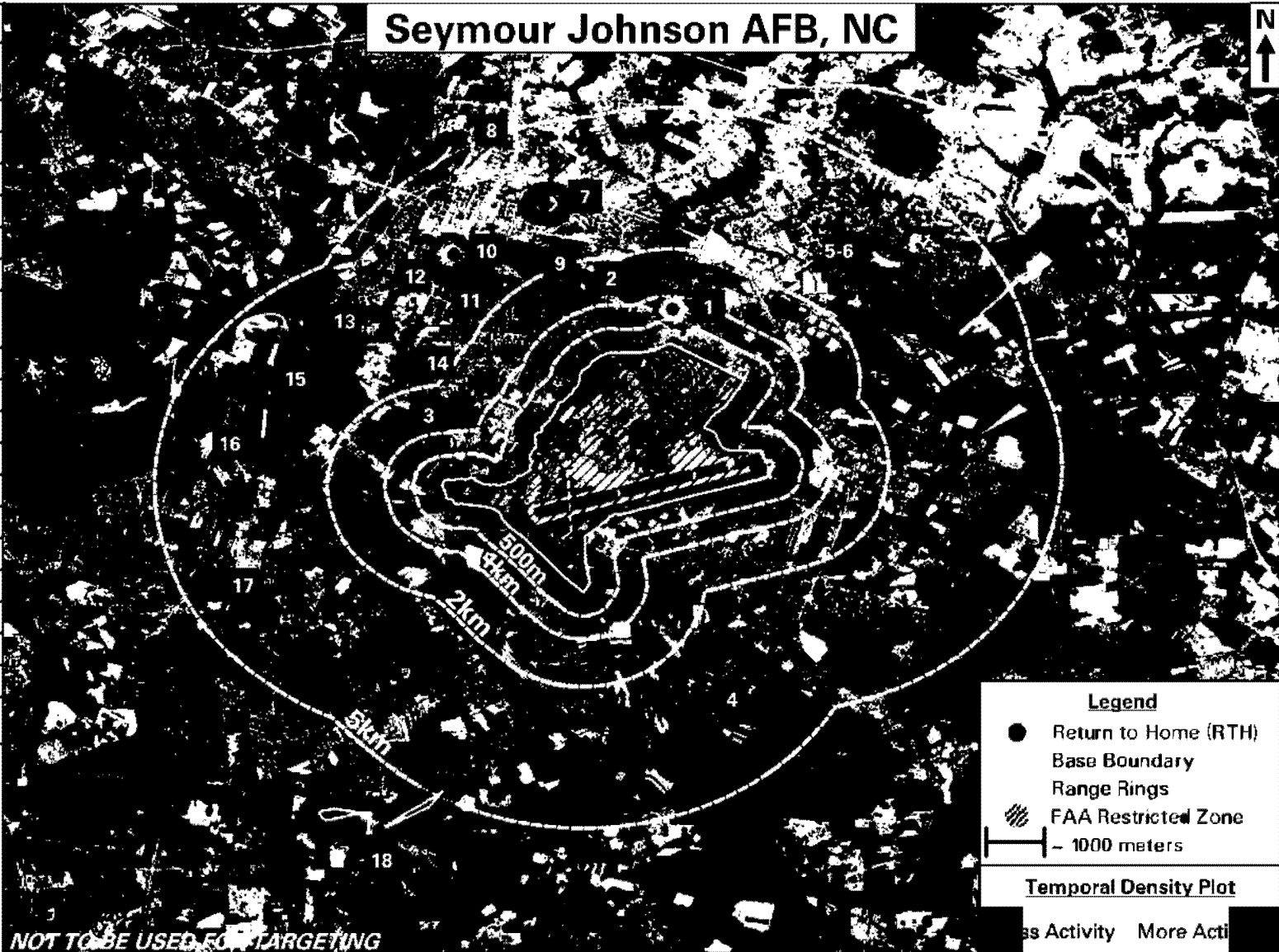
Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mavic Air 2	3N3BJ7M01204CP	1	328	00:08:59
2	DJI Mini 4 Pro	F6Z9A2446ML3VWBU	1	106	00:04:07
3	DJI Mini 3	687AKCH0010VR9	1	43	00:00:01
4	DJI Mini 3	F5YHX24BB002FUQZ	3	79	00:01:24
5	DJI Mini 2 SE	F6CDA235GML2S392	1	173	00:07:50
6	DJI Mini 3	F5YHA23B8031M21B	1	190	00:07:02
7	DJI Phantom 4 Pro V2	11VKGCP00201QB	2	430	00:06:19
8	DJI Mini 2 SE	F6CDA23BJML2P254	1	184	00:02:09
9	DJI Mini 3	687ALC600200F6	2	36	00:00:09
10	DJI Mavic Air 2	3N3BH6R00203R5	1	105	00:15:05
11	DJI Mini 3	687AL1S0010ZWR	1	56	00:04:06
12	DJI Mavic Pro	08RDE3Q001007V	1	148	00:02:10
13	DJI Matrice 30T	F5BKB243100F011L	8	292	00:11:20
14	DJI Mini 4 Pro	F6Z9A242MML32C6Y	1	271	00:00:15
15	DJI Mini 3	F5YHA23CC03136JG	1	121	00:02:23
16	DJI Mini 3	687CKBA00131NR	2	400	00:01:40
17	U/I DJI UAS	L2HML2713G	2	174	00:02:28
18	DJI Air 3	F6N8A23C4ML3TEEF	1	382	00:11:20

– S/N with night detections | Red font – S/N previously detected | – exceeded
FAA altitude allowance





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than June 14, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Seymour Johnson Air Force Base, NC. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-3)**
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-3)**
3. Seymour Johnson Air Force Base, NC; PHALANX CONUS Repository; Technical Logs **(Slides 2-3)**
4. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
5. Visualize It. Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> **(Slides 2-3)**

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



~~CUI~~

Information Cutoff Date: 12 FEB 25

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than July 14, 2025.

DTRA PHALANX Activity Report

Naval Shipyard, Portsmouth ME (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview (2 Slides)
- Points of Contact
- Sources
- Terminology

Component: Defense Threat Reduction Agency
Controlled by: DTRA OI (Phalanx)
CUI Categories: LCOMM
Distribution / Dissemination Control: N/A
POC: (S)



Executive Summary

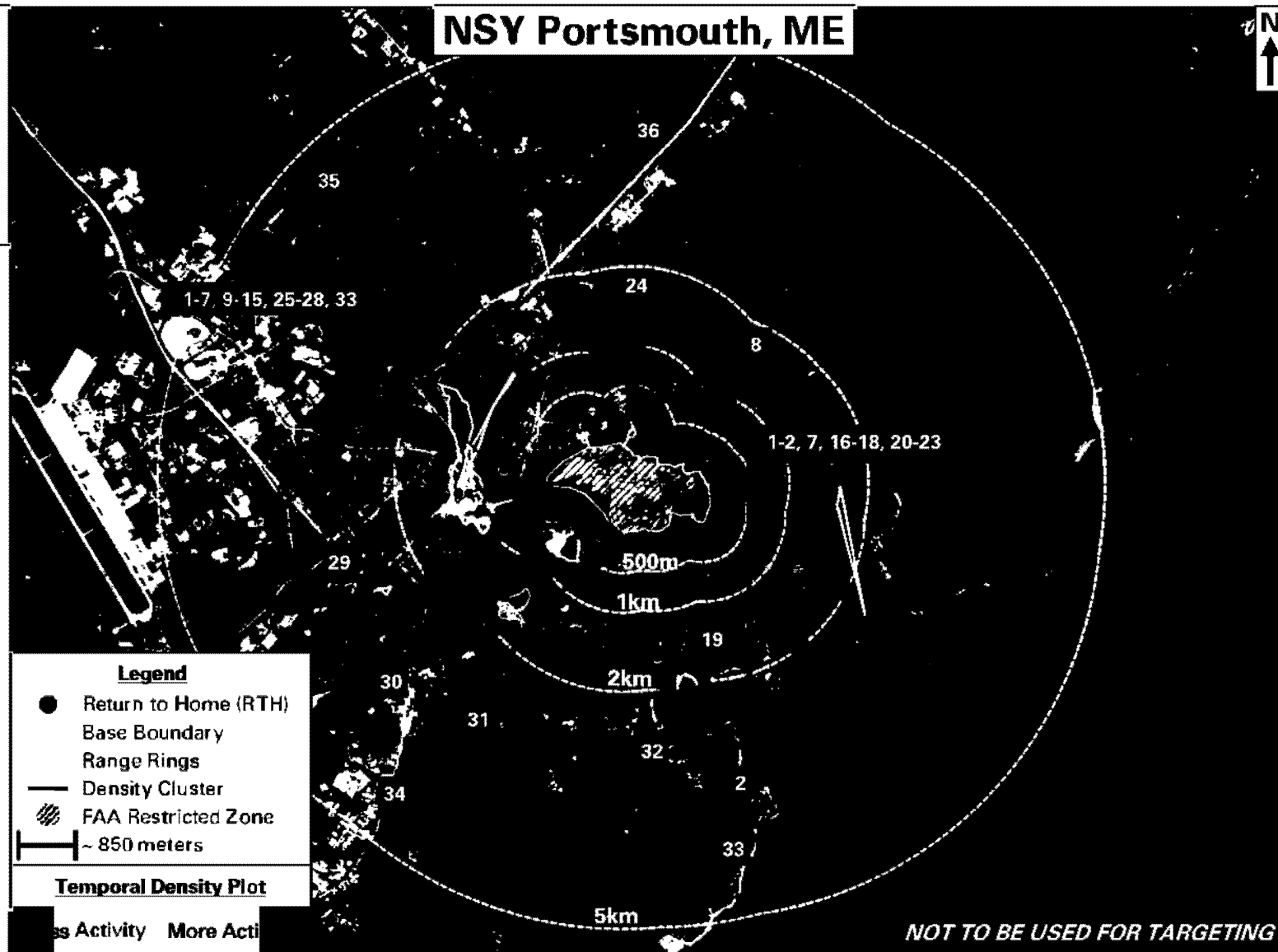
December 01, 2024 – December 31, 2024

Entire Slide is ~~CUI~~

36x platforms were detected during the month of December 2024. Even though (S/Ns: 1-2) were within 500m of the base boundary, based on their flight patterns, recreational location and the platforms' properties, this activity was possibly recreational. There was a significant increase in activity compared to the previous reporting period. Caveat: last reported period covered 2 locations with a 9-week period (01 OCT – 30 NOV 24, 23x S/Ns, 37x events, 02:38:19 duration). S/Ns increased 213%, events increased 246%, and duration increased 495%.

5km Overview

- 36x S/Ns, 64x events, 07:51:18 duration
 - Exceeded altitude allowance: 26x S/Ns (39x events) (S/Ns: 1-8, 10-11, 13-18, 20, 24, 26-31, 35-36)
 - Night detections 4x S/Ns (7x events) (S/Ns: 3, 6, 14, 19)
- 18x S/Ns previously detected (S/Ns: 1, 3-5, 7-9, 12-14, 16-17, 22, 24-25, 29, 33, 36)
 - S/N: 22 previously detected at Nellis Air Force Base, NV (25 FEB 24)
 - S/N: 3-5, 7-9, 12-14, 16-17, 24-25, 29, 33, 36 were previously detected IVO their current respective locations
- 15x different platforms, 1x UA DJI UAS detected (16x rotary-wing)
 - Top by total events: DJI Mini 2 SE (14x, 22%)
 - Top by total duration: DJI Mini 2 SE (02:57:40, 38%)
 - Top by S/N count: DJI Mini 2 SE, DJI Mavic 3, DJI Mini 3 (5x each, 14%)





CUI

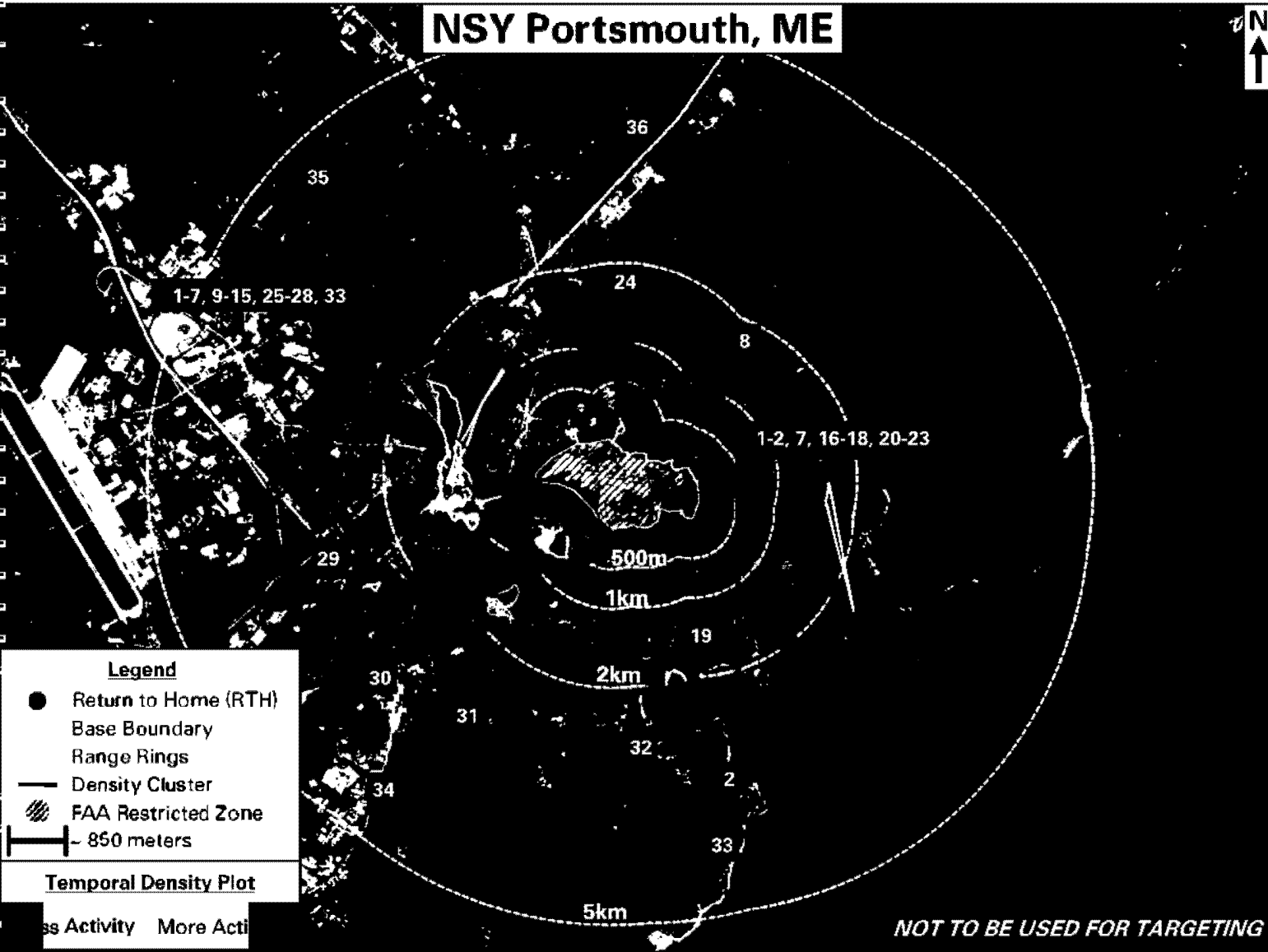
Current System Overview (1 of 2)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mavic 3	F45TB21CR2AE067R	5	142	00:07:12
2	DJI Mavic 2 Pro	1637KAL001X1S9	4	500	00:23:05
3	DJI Mini 2 SE	F6CDA23APML29YC3	3	438	00:22:39
4	DJI Mini 2	3NZCJBR04418YR	2	444	00:18:24
5	DJI Mavic 2 Zoom	0M6CHASR0A2HAP	1	290	00:15:46
6	DJI Mini 3	F5YHX24BN002GHAT	1	333	00:08:40
7	DJI Mini 2 SE	F6CDA23C9ML2BU11	6	323	02:02:35
8	DJI Mini 3	F5YHA2437031G537	2	333	00:24:00
9	DJI Air 2S	3YT7LB3003S2YB	1	175	00:09:54
10	DJI Air 2S	3YTBJ490030228	1	280	00:01:23
11	DJI Mavic Mini	1SDLH2C006027L	1	310	00:04:00
12	DJI Mini SE	4AEAK4800202RM	1	169	00:02:40
13	DJI Mini 3	687CKB70012K1T	2	313	00:23:56
14	DJI Mavic 2 Pro	1633G75001U021	4	907	01:13:05
15	DJI Mavic 3	F45TB219P00D01G2	1	343	00:08:43
16	DJI Mini 3	687AL2L00104MB	1	188	00:08:21
17	DJI Mavic Mini	1SDCH4T0164CAN	3	467	00:10:48
18	DJI Mini 3 Pro	F4XFC23890080GNB	1	113	00:04:51
19	DJI Mavic 2 Pro	163CGBER0A51TN	2	385	00:10:48
20	DJI Mini 3	F5YHA2445031PC8Q	3	152	00:10:30
21	DJI Air 2S	3YTBJC300301G3	1	339	00:00:01
22	DJI Mavic 3 Pro	F6MKC235B024S9QS	1	123	00:02:26
23	DJI Mini 2 SE	F6CDC247A003M4LS	1	139	00:10:37
24	DJI Mini 2 SE	F6CDA245GML2TN72	1	1350	00:14:22

- S/N with night detection(s) | Red font- S/N previously detected | - exceed FAA altitude allowance. | Negative values for Max AGL (ft) are due to calculations based on base elevation not accounting for surrounding terrain.



CUI



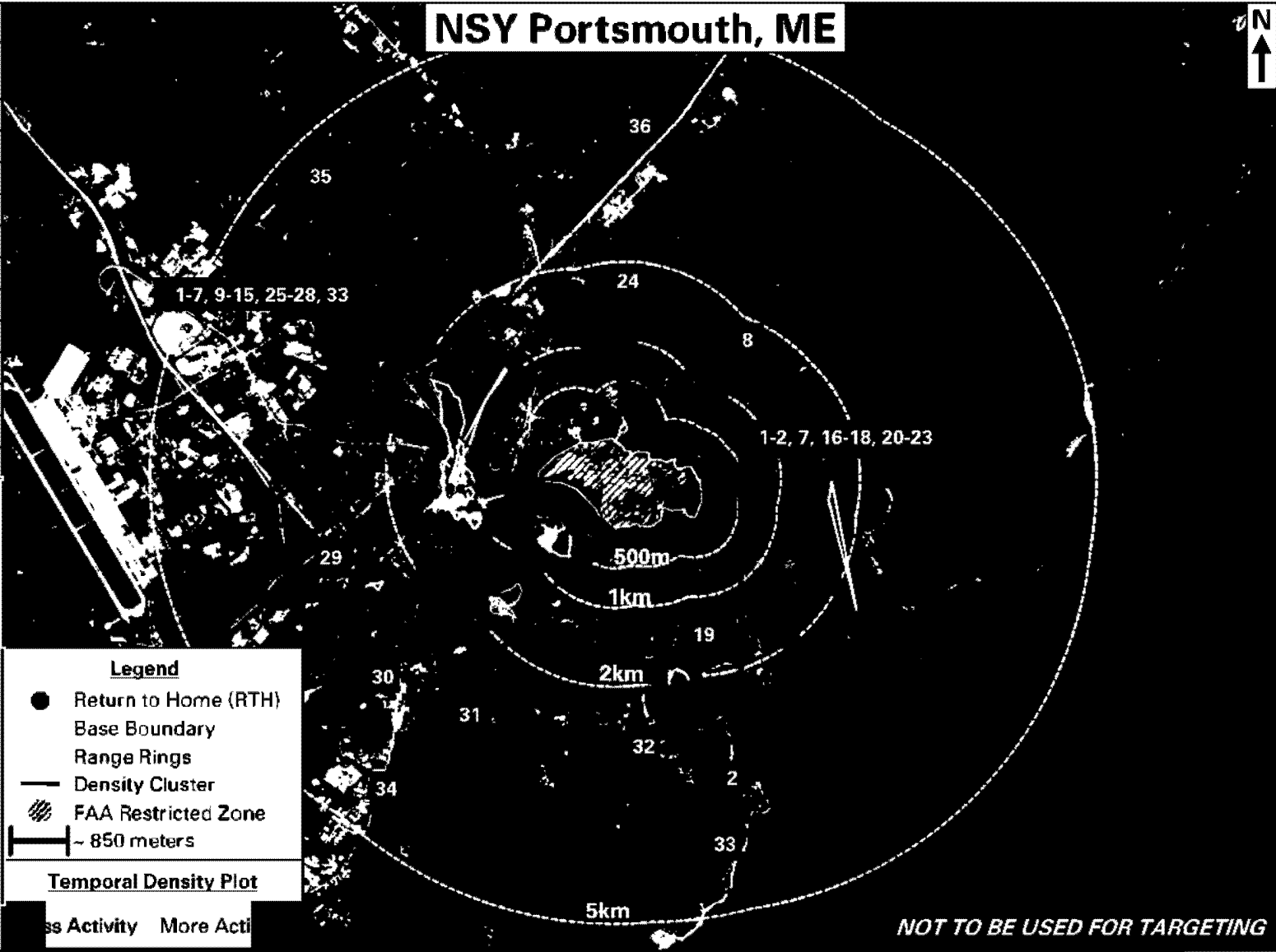
CUI

Current System Overview (2 of 2)

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
25	DJI Mavic 3 Enterprise	F5FJD23C800D7JSM	1	-172	00:00:26
26	DJI Mavic 3	F45TB21CB2AE02DG	1	458	00:09:45
27	DJI Air 2S	3YT3K2L003H042	1	353	00:03:51
28	DJI Mavic Air 2	3N34JBA002S72E	2	677	00:03:17
29	DJI Phantom 4 RTK	0UYKH9900200BX	1	343	00:04:57
30	U/I DJI UAS	8JECM9U0017RGL	1	333	00:01:03
31	DJI Mavic Mini	1SDCH490162DSY	1	261	00:00:06
32	DJI Mavic 3	F45TB21AQ1BE01ED	1	116	00:00:07
33	DJI Mavic Air 2	3N33HC9002Z066	1	274	00:00:01
34	DJI Mini 2 SE	F6CDC247A003M4PP	3	359	00:07:27
35	DJI Mavic 3	F45T7245V00EE09G	1	228	00:01:11
36	DJI Mavic 3 Classic	F67QD233M0141023	1	388	00:00:21





UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than July 14, 2025.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Norfolk Naval Shipyard Portsmouth, VA. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. **(Slides 2-4)**
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 **(Slides 2-4)**
3. Norfolk Naval Shipyard Portsmouth, VA; PHALANX CONUS Repository; Technical Logs **(Slides 2-4)**
4. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED



Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than January 27, 2026.

DTRA PHALANX Activity Report

Shaw Air Force Base, SC (USA)

December 01, 2024 – December 31, 2024



This brief is classified up to

~~CUI~~

~~CUI~~

Agenda

- Executive Summary
- Current System Overview
- S/N: F45T7242200EB1Y0
- Points of Contact
- Sources
- Terminology



Executive Summary

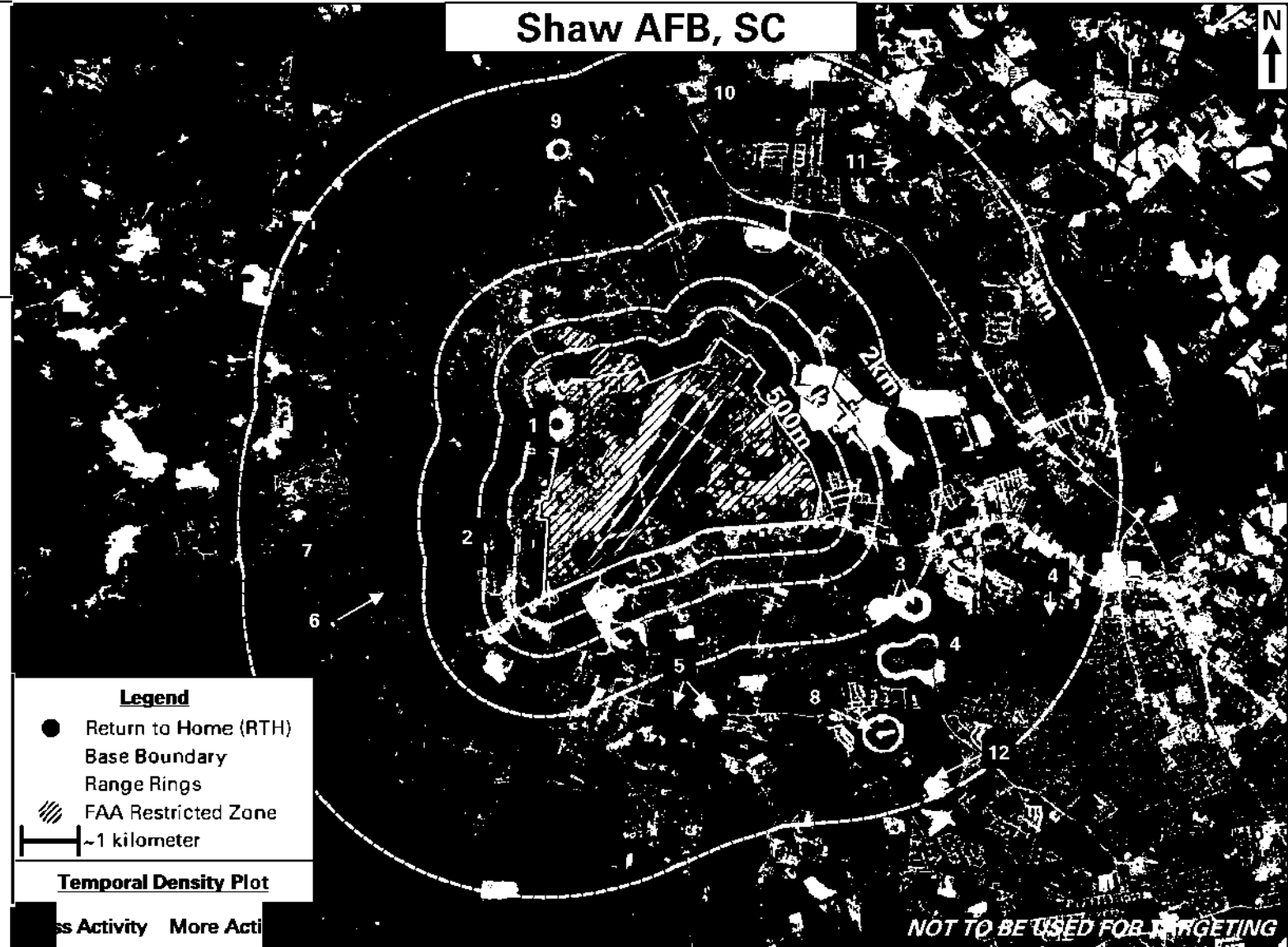
December 01, 2024 – December 31, 2024

Entire Slide is ~~CU~~

During the reporting period, **S/Ns: 1-12** all appeared recreational in nature as all detections occurred over residential neighborhoods, local business, and parks. **S/N: 1** was the only detection within 500m of base boundary which was detected ~70m W of the base boundary IVO a U/I building. **S/Ns: 1-2, 7** exceeded FAA altitude allowances, while **S/Ns: 1, 6** are equipped with a night mode capable camera for use during nighttime flights. sUAS detections within 5km of the base boundary significantly decreased compared to the previous 4-week reporting period (01 NOV 24 – 30 NOV 24, 26x S/Ns, 39x events, 03:18:29 duration). S/Ns decreased 55%, events decreased 48%, and duration decreased 89%.

5km Overview

- 12x S/Ns, 21x events, 00:22:48 duration
- Exceeded altitude allowance: 3x S/Ns (3x events) (**S/Ns: 1-2, 7**)
- Night detections: 0x S/Ns (0x events)
- 6x S/Ns previously detected (**S/Ns: 2-3, 7-9, 12**)
- (**S/N: 2**) previously detected IVO of its current location where it was detected ~1.25km W of the base boundary near a residential home on (27 JAN 24).
- 9x different platforms detected (9x rotary-wing)
 - Top by total events: DJI Mini 4 Pro (8x, 38% each)
 - Top by total duration: DJI Mini 4 Pro (00:15:58, 70%)
 - Top by S/N count: DJI Mini 4 Pro (3x, 25%)





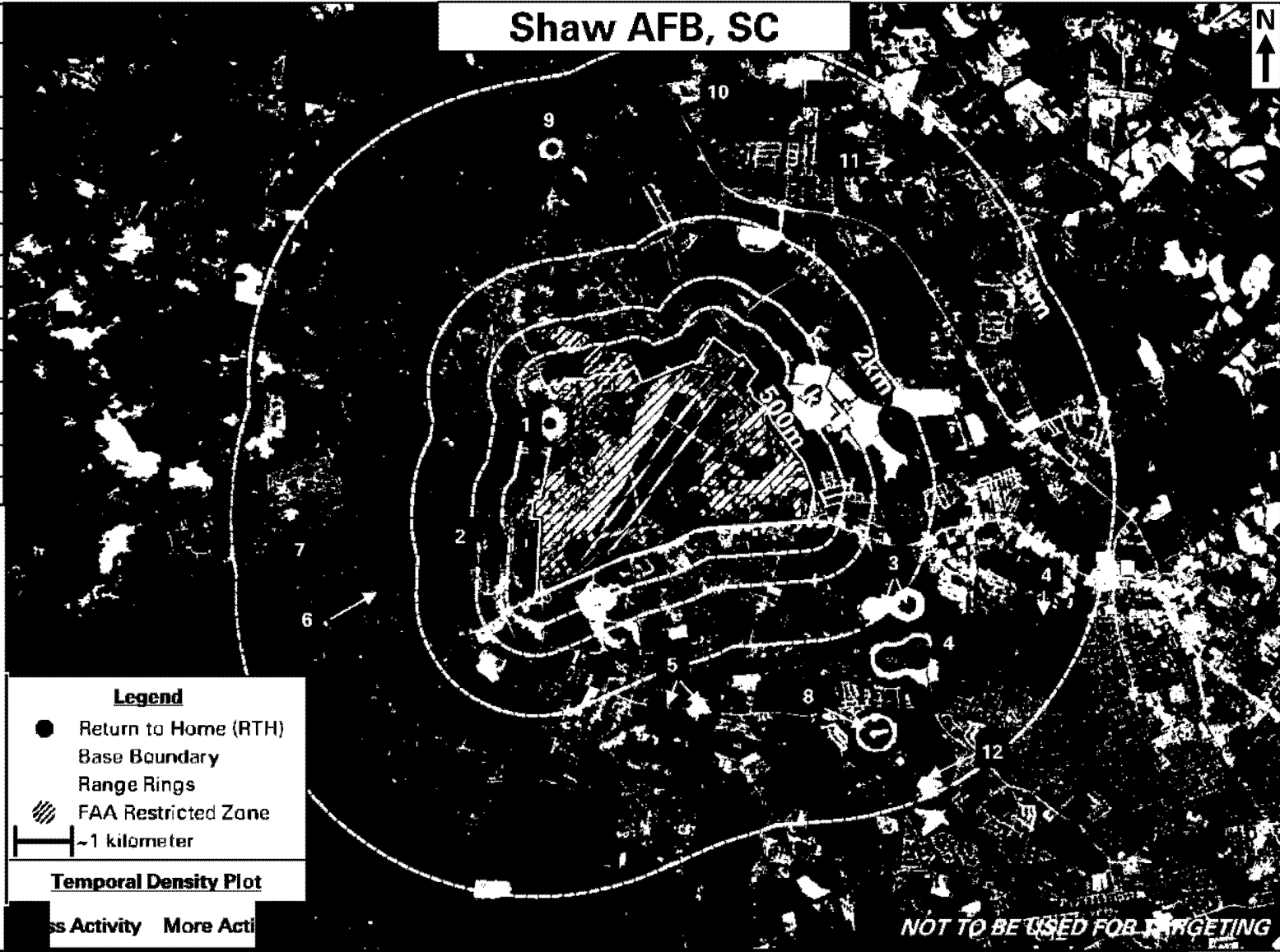
CUI

Current System Overview

December 01, 2024 – December 31, 2024

Entire Slide is CUI

Active within 5km					
#	Platform	Serial Number	Events	Max AGL (ft)	Total Duration
1	DJI Mavic 3	F45T7242200EB1Y0	1	152	00:00:26
2	DJI Mavic Pro	08RDE6K00102A5	1	279	00:00:52
3	DJI Air 3	F6N8A23CNML35CWX	2	367	00:02:26
4	DJI Mini 4 Pro	F6Z9A23CJML3NWN6	4	384	00:09:30
5	DJI Mini 2 SE	F6CDA2366ML2EHG6	3	112	00:00:34
6	DJI Mavic 3 Classic	F67PE231X00300US	1	365	00:00:01
7	DJI Air 2S	3YTBJ8E00303CU	1	420	00:00:01
8	DJI Mini 4 Pro	F6Z9A242MML37879	2	160	00:06:26
9	DJI FPV	37OBHCJ00100D9	2	194	00:02:28
10	DJI Mavic Air 2	3N3BH6G00204YE	1	207	00:00:01
11	DJI Air 3	F6N8C236800306HQ	1	157	00:00:01
12	DJI Mini 4 Pro	F6Z9A243PML33FCP	2	147	00:00:02
Red font – S/N previously detected – exceed FAA altitude allowance					





—CUI—
S/N: F45T7242200EB1Y0

December 01, 2024 – December 31, 2024

Entire Slide is CUI

- 1** S/N: F45T7242200EB1Y0, DJI Mavic 3
- 1x total event (00:00:26) within base boundary
 - 1x event (1a) within depicted (00:00:26)

#	Event Start DTG (Z)	Event End DTG (Z)	Total Duration	Max AGL (ft)
1a	2024-12-04 17:04:40	2024-12-04 17:05:06	00:00:26	152
— exceed FAA altitude allowance				

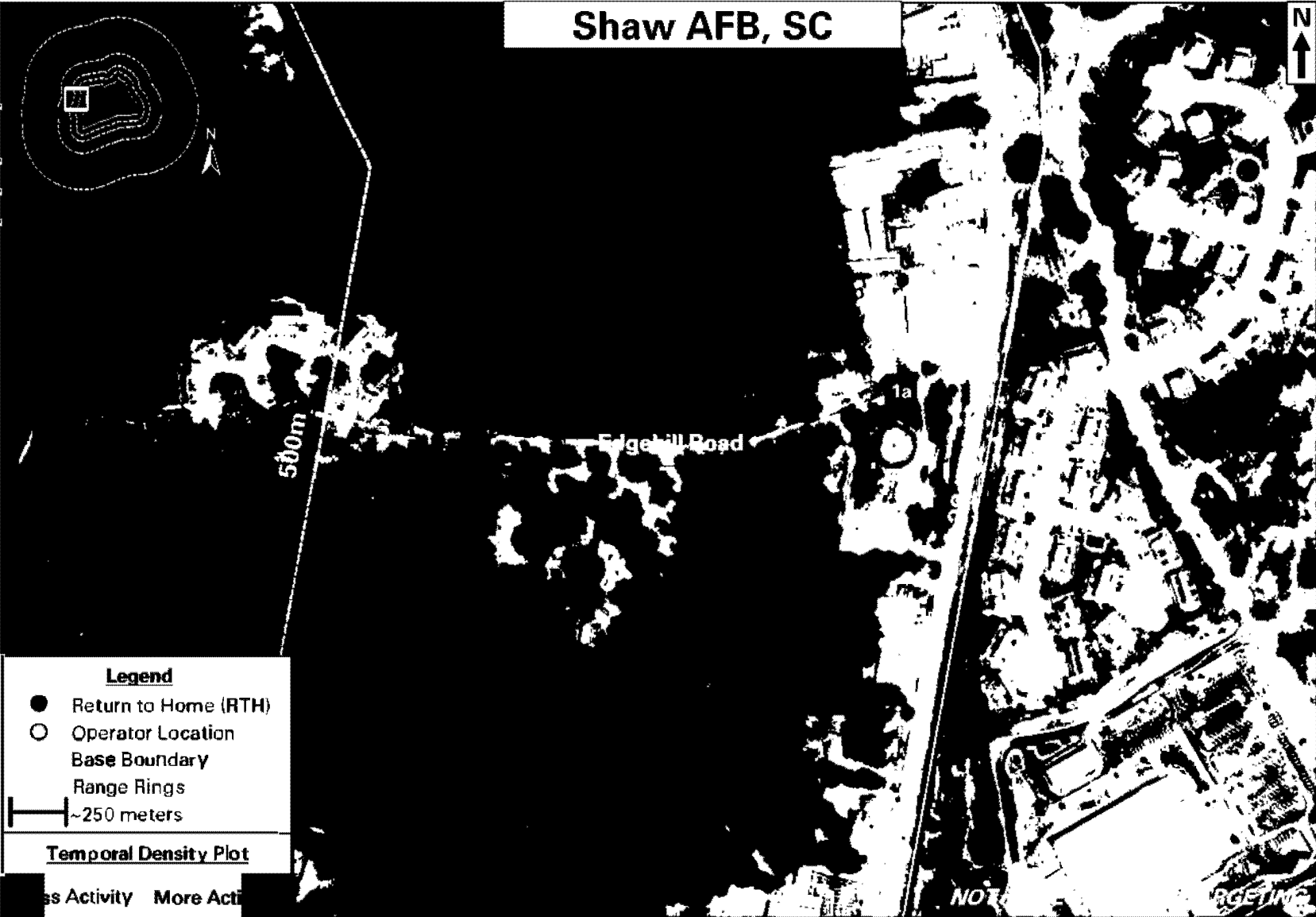
- (S/N: 1) was detected ~70m W of base boundary IVO a U/I building along Edgehill Road. Due to its limited activity, this event could be deemed recreational in nature.
- The DJI Mavic 3 has a ~46 min flight time and its camera is equipped with digital zoom (4x) and optical zoom (7x) which offers a total of 28x digital zoom for long distance observation/recording. In addition, this platform is equipped with Night Mode. Night Mode is not Night Vision; it is a software-based program meant to enhance existing ambient light under extreme low-light conditions.
- Based on its current location and camera capability; an operator could zoom in to the base to observe base activities.
- This is a first-time detection for this S/N.

DJI Mavic 3



Source: UAS Card Master

- **Weight:** ~895g/31.57oz (propellers and battery included / without RTK Module)
- **Dimensions:** 221x963x90.3mm
- **Max Speed:** ~47 mph/72 kph
- **Flight Time:** ~46 Mins
- **Transmission Distance:**
 - FCC Compliant: 9.32mi/15km (Max Flight Distance 30km)
 - CE Compliant: 4.97mi/8km
 - SARIC: 4.97mi/8km
 - MIC: 8km
- **C2 Signal:** OcuSync 3.0+
- **Frequency:** 2.400-2.4835 GHz/ 5.725-5.850GHz
- **Image Transmission:** 4K
- **Camera:** 20MP/4x Digital Zoom/7x Optical Zoom (Total: 28x Hybrid Zoom)/Night Mode Capable Enabling
- **Cost:** \$3628.00 (Drone Only)



—CUI—



UNCLASSIFIED

Points of Contact

Entire Slide is UNCLASSIFIED

Phalanx Group Email

dtra.belvoir.oj.mbx.oj-opx-c-suas@mail.mil

Phalanx Branch Chief:

(b)(6)

Deputy Branch Chief:

(b)(6)

Production Chief:

(b)(6)

C-sUAS Data Analyst:

(b)(6)

Consistent with the December 08, 2020 Secretary of Defense memorandum "Authorization for Supporting DoD Components to Analyze Unmanned Aircraft System Activity," this Phalanx product and all information contained within shall be permanently deleted and removed from all USG computers, IT storage equipment, and any and all other IT equipment and related accessories. Paper and other physical copies are also required to be destroyed in a manner that makes them unreadable, indecipherable, and unrecoverable. These activities must occur no later than January 27, 2026.

UNCLASSIFIED



UNCLASSIFIED

Sources

Entire Slide is UNCLASSIFIED

1. Map of Shaw Air Force Base, SC. ArcGIS. https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS. WMTS Service. Map. (Slides 2-4)
2. National Security UAS Flight Restrictions. https://udfs-faa.opendata.arcgis.com/datasets/0270b9d8a5d34217856cc03aaf833309_0?geometry=83.672%2C-86.592%2C-83.672%2C89.284 (Slides 2-4)
3. Shaw Air Force Base, SC; PHALANX CONUS Repository; Technical Logs (Slides 2-4)
4. PHALANX UAS Card Master; Image, and Technical Data (Slides 4)
5. FAA definition of night.
https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/airplane_handbook/12_afh_ch11.pdf
6. Visualize It, Federal Aviation Administration. <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad> (Slides 2-4)

UNCLASSIFIED



UNCLASSIFIED

Terminology

Entire Slide is UNCLASSIFIED

- **Activity Cluster:** An area of activity that contains track(s) of interest with two or more sUAS.
- **Data Masking:** The process of anonymizing transmitted data by erasing, nullifying, or encrypting attributes by the platform to obscure the information from third parties.
- **Density Cluster:** A highly concentrated area of sUAS activity.
- **Event:** A grouping of detections less than 3 minutes apart with the same Serial Number.
- **Night:**
 - The time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the Air Almanac, converted to local time. (FAA)
 - The time between sunset and sunrise (Article 64 of Japan's Civil Aeronautics Act) (South Korea's Article 129 of the Aviation Safety Act, Article 310 of the Enforcement Rules)
- **Operator Location (OPLOC):** Location of a drone's ground control station as determined by the c-sUAS system.
- **Return to Home (RTH):** A point designated by the operator as the drone's default return location.
- **Return to Launch (RTL):** A default return location designated by the drone's initial launch point.
- **Serial Number (S/N):** An identifier assigned to a system or component by the manufacturer.
- **sUAS:** Those UAS that are typically commercially available, improvised or locally fabricated and employed in the operational environment. These sUAS typically weigh under 55 lbs./25 kg. (14 CFR 107.3 & JP 3-30)
- **Temporal Density Plot:** Density of sUAS activity based on the duration of a geo-located event.
- **Track:** The actual path of an aircraft above or a ship on the surface of the Earth. (JP 3-01)
- **Unmanned Aircraft:** An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called UA. (JP 3-30)
- **Unmanned Aircraft System:** That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS. (JP 3-30)

DTRA Unmanned Aircraft System (UAS) Technical Exploitation Lexicon (2nd Edition 16 AUG 2019)

[Link to Lexicon](#)

UNCLASSIFIED