

CASE FILE 32 / 237UAP00372

# 237UAP00372

Radar/correlation-focused public UAP report; score 62

NORMAL-OBJECT FAVORED

REPORT NO.	UAP-OM-32-237UAP00372	DISPOSITION	NORMAL-OBJECT FAVORED
PRIMARY CASE	237UAP00372	GENERATED	2026-05-20 18:32 UTC
REPORT TIME	2024-06-03T18:52:00+00:00	OBSERVER	41.45708, -74.17176
SOURCE CASE IDS	237UAP00372		

## Abstract

This case file evaluates a reported UAP sighting against historical Starlink orbital elements. The primary external-object candidate is a 3-object same-launch group from 2024-01-24, spanning azimuth 117.15-131.98 deg and elevation 17.02-31.72 deg. The analysis distinguishes plausible geometric overlap from unresolved witness-language features.

This is a standalone independent analysis prepared from public-source records and public orbital datasets. It is not an official government determination, classification marking, or agency-authored report.

# 1. Executive Summary

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237UAP00372 is assessed as normal-object favored because the available public evidence gives a case-specific ordinary-object candidate: strong ADS-B aircraft candidate N187GJ CRJ9 a15b4c at 4.4 km, azimuth 25.7 deg, elevation 56.74 deg, 1.13 min from report. Dense satellite presence alone is not treated as causation in this packet.

## 1.1 Key Findings

- Source score 62 based on: radar/primary-return language, negative official correlation, duration cue, UAP/UFO language.
- Report time used: 2024-06-03T18:52:00+00:00.
- External object layer used: Starlink.
- Disposition standard: NORMAL-OBJECT requires case-specific causal fit. Satellite density above the horizon is context only and cannot by itself resolve the report.
- Case-specific ordinary-object evidence: strong ADS-B aircraft candidate N187GJ CRJ9 a15b4c at 4.4 km, azimuth 25.7 deg, elevation 56.74 deg, 1.13 min from report.
- Non-causal context / rejection screens: very dense orbital-object sky background; context only, not causation.
- Objects above horizon: 299; at/above 10 deg: 152.
- Top compact same-launch/designator group: 3 objects from 2024-01-24.
- No explicit Starlink/balloon wording was found in the source excerpt used for ranking.

## 1.2 Bottom Line

**NORMAL-OBJECT FAVORED:** A case-specific ordinary-object candidate exists from source language, orbital geometry, launch-object context, or compact trajectory grouping. Dense ordinary sky traffic alone is not treated as causation.

# 2. Source Control

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The source-control table identifies the public report records reviewed for this case and lists public access links where available. The table is included so this PDF remains interpretable when distributed by itself.

CASE ID	REPORT DATE FIELD	FACILITY / TITLE	TEXT EXTRACT	PUBLIC PDF LINK
237UAP00372	18:52 06/03/2024 Paged: YES	SWF	text extract present	<a href="#">237UAP00372.pdf</a>

### 3. Original Report Evidence

PRIMARY EXCERPT USED FOR MATCHING	Facility observed a UAP 4 NM SW of SWF beginning approximately 1800. Object appeared to be stationary at 4,000 feet, no impact to operations. Object is estimated to be 50 feet long, boomerang shaped, and is not observed on RADAR. Object remained in vicinity for approximately 50 minutes before disappearing into the clouds. TY, PD notified.
REPORT TIME USED	2024-06-03T18:52:00+00:00
OBSERVER COORDINATE USED	41.45708, -74.17176
OBSERVER SOURCE BASIS	aviation_offset:4 NM SW of SWF (public text extract 237UAP00372)

### 4. Methodology

- Spacetime extraction.** The report time and observer coordinate were extracted from the public text report and normalized to UTC. Aviation fixes/radials were resolved during earlier preprocessing where applicable.
- External object dataset.** The object layer used historical Space-Track/TLE-derived Starlink element rows. The analytic mode for this case is historical Starlink element propagation and same-launch/designator sky grouping.
- Propagation.** Orbital elements were propagated to the report minute and observer location. For launch-object checks, samples around the report minute were retained. For Starlink group checks, objects above the horizon were clustered by sky position and filtered for same-launch groupings.
- Comparison.** The output was compared against the report's count of lights, direction cue, motion language, altitude/radar language, and whether the file itself already suggested a satellite explanation.
- Causation standard.** Mere object presence above the horizon is treated as background context only. A normal-object disposition requires a case-specific causal fit, such as a named launch object, a compact same-launch trajectory group, or source language that directly supports that object class.
- Disposition assignment.** *Identified* means a specific normal object fits the report spacetime and the hard reported features do not materially conflict. *Normal-object favored* means a case-specific ordinary aerospace/orbital candidate exists, but it is not a full named identification. *Insufficient* means the file is too thin to carry high anomaly value. *High-value unresolved* is used when radar, video, rapid maneuver, or multi-witness features remain after reasonable normal-object checks.

## 5. External Object Evidence

### 5.1 Search Volume and Density

This table is a screening layer only. Objects above the horizon show background opportunity; they do not establish causation unless a specific object or compact trajectory group matches the reported behavior.

STARLINK CATALOG IDS CONSIDERED	6099	HISTORICAL ELEMENT ROWS	6076
ABOVE HORIZON AT REPORT MINUTE	299	AT/ABOVE 10 DEG	152
LARGEST SAME-SKY CLUSTER	133		

### 5.2 Same-Launch / Same-Designator Candidate Groups

#	LAUNCH DATE	COUNT	AZIMUTH SPAN	ELEVATION SPAN	MOTION LABELS	MEMBERS
1	2024-01-24	3	117.15-131.98 deg	17.02-31.72 deg	eastward, setting, westward, setting	STARLINK-31271, STARLINK-31222, STARLINK-31172
2	2020-09-03	3	328.04-331.43 deg	11.35-18.18 deg	eastward, rising, eastward, setting	STARLINK-1723, STARLINK-1724, STARLINK-1760

### 5.3 Primary Group Members

OBJECT	NORAD	LAUNCH	AZ	EL	RANGE KM	APPARENT MOTION	ELEMENT AGE H
STARLINK-31271	58827	2024-01-24	117.15	31.72	849.21	eastward, setting	0.56
STARLINK-31222	58828	2024-01-24	119.22	23.86	1034.52	eastward, setting	0.57
STARLINK-31172	58837	2024-01-24	131.98	17.02	1278.09	westward, setting	2.55

### 5.4 Bright-Sky Context: Top Starlink Objects by Elevation

OBJECT	AZ	EL	RANGE KM	APPARENT MOTION	LAUNCH DATE
STARLINK-3914	35.44	75.85	558.69	eastward, setting	2022-05-06
STARLINK-3365	185.1	70.21	574.01	westward, setting	2022-01-19
STARLINK-4451	140.08	66.4	616.36	eastward, setting	2022-08-12
STARLINK-5437	75.1	65.72	485.78	eastward, setting	2022-12-17
STARLINK-30065	338.22	63.0	392.66	eastward, setting	2023-02-27
STARLINK-30174	184.0	59.92	640.96	westward, setting	2023-08-11
STARLINK-30334	297.16	59.22	645.99	eastward, setting	2023-08-27
STARLINK-5383	79.61	59.15	645.91	westward, setting	2022-12-28
STARLINK-5933	121.31	53.87	700.85	westward, setting	2023-03-17
STARLINK-30762	133.2	53.28	686.21	westward, setting	2023-10-30
STARLINK-5036	320.47	49.43	695.74	eastward, rising	2022-09-24
STARLINK-30752	62.69	49.24	625.27	eastward, setting	2023-10-29

### 5.5 Largest Sky Clusters

#	COUNT	AZIMUTH SPAN	ELEVATION SPAN	MOTION LABELS
1	133	4.56-355.29 deg	10.02-46.6 deg	eastward, rising, eastward, setting, nearly fixed azimuth, setting, westward, level,

#	COUNT	AZIMUTH SPAN	ELEVATION SPAN	MOTION LABELS
				westward, rising, westward, setting
2	5	62.69-83.1 deg	39.76-65.72 deg	eastward, setting, westward, setting
3	4	101.37-140.08 deg	48.11-66.4 deg	eastward, setting, westward, setting
4	2	184.0-185.1 deg	59.92-70.21 deg	westward, setting
5	1	35.44-35.44 deg	75.85-75.85 deg	eastward, setting

5.6 Space-Track SATCAT Enrichment

Space-Track SATCAT metadata was pulled as a cached subset for NORAD catalog IDs appearing in this packet's evidence tables. This section adds owner/type/status context to the propagated object candidates.

PACKET SATCAT SUBSET ROWS	5370	FETCHED	2026-05-19T01:19:50+00:00
THIS CASE NORAD IDS CHECKED	35	SATCAT ROWS MATCHED	35
TOP OWNERS	US: 35		
OBJECT TYPES	PAYLOAD: 35		

5.7 Space-Track Metadata for Top Propagated Objects

NORAD	OBJECT NAME	TYPE	OWNER	LAUNCH DATE	DECAY DATE
52490	STARLINK-3914	PAYLOAD	US	2022-05-06	n/a
51145	STARLINK-3365	PAYLOAD	US	2022-01-19	2024-12-29
53492	STARLINK-4451	PAYLOAD	US	2022-08-12	n/a
54782	STARLINK-5437	PAYLOAD	US	2022-12-17	2024-12-12
55701	STARLINK-30065	PAYLOAD	US	2023-02-27	2024-07-25
57609	STARLINK-30174	PAYLOAD	US	2023-08-11	n/a
57719	STARLINK-30334	PAYLOAD	US	2023-08-27	n/a
54827	STARLINK-5383	PAYLOAD	US	2022-12-28	n/a
55961	STARLINK-5933	PAYLOAD	US	2023-03-17	n/a
58197	STARLINK-30762	PAYLOAD	US	2023-10-30	n/a
53917	STARLINK-5036	PAYLOAD	US	2022-09-24	n/a
58171	STARLINK-30752	PAYLOAD	US	2023-10-29	n/a

5.9 NASA / NOAA / ADS-B Expansion Layer

This source layer adds free NASA context that was previously missing from most packet cases. It is contextual evidence; it does not replace aircraft, satellite, balloon, or radar causation tests.

HOURLY UTC	2024060318
CLOUD AMOUNT	83.33%
PRECIPITATION	0.08 mm/hr
10 M WIND	1.22 m/s
TEMPERATURE	26.38 C
RELATIVE HUMIDITY	51.02%
DONKI +/-1 DAY	CME: unavailable; FLR: unavailable; GST: unavailable; HSS: unavailable; IPS: unavailable; MPC: unavailable; RBE: unavailable; SEP: unavailable; WSAEnliSimulations: unavailable

### 5.10 Horizons Sky Geometry Context

OBJECT	AZ	EL	APP MAG
Sun	241.25	58.99	-26.71
Moon	267.22	26.85	-7.40
Venus	241.38	58.75	-3.90
Mars	268.21	15.61	1.10
Jupiter	251.17	48.90	-2.00
Saturn	279.57	-19.76	1.01

- Sun elevation was 59.0 deg, so this was daylight geometry, not a dark-sky sighting.
- Moon was above horizon at azimuth 267.2 deg / elevation 26.8 deg.
- Planets above horizon: Venus (58.7 deg), Mars (15.6 deg), Jupiter (48.9 deg).
- NASA POWER cloud amount for the hour was 83.33%, with precipitation 0.08 mm/hr.

### 5.11 Free Source Availability and Remaining Work

LAYER	STATUS	CASE-SPECIFIC NOTE
ADSB.LOL HISTORICAL RELEASE LISTING	screened/present	planes-readsb-staging-0 2038.0 MiB; planes-readsb-prod-0 2039.0 MiB; planes-readsb-mlatonly-0 53.0 MiB
ADSB TRACKS DOWNLOADED	not yet exhausted	Requires targeted extraction from large daily history archives before claiming aircraft exhaustion.
NOAA GOES IMAGERY	not yet exhausted	Needed for cloud/lightning visual context.
NOAA GOES ABI/GLM MANIFEST	screened/present	Public S3 object availability for the report hour.
NOAA NEXRAD WEATHER RADAR	not yet exhausted	Weather radar only; not ATC radar.
NOAA IGRA RADIOSONDE	screened/present	Needed for balloon drift plausibility.
ASOS/METAR WEATHER OBSERVATIONS	screened/present	Nearest station surface observations around report time.

- ADSB.lol historical: extract aircraft traces from adsblol/globe\_history\_2024 for 2024-06-03, then filter +/-60 min and 250 nmi around 41.4571,-74.1718.
- NASA POWER/Horizons/DONKI: batch context for 237UAP00372 at 2024-06-03T18:52:00+00:00.
- NOAA GOES: pull nearest ABI/GLM products for the UTC hour and render cloud/lightning map.
- NOAA NEXRAD: select nearest radar stations and render Level-II/III weather radar sweep around event time.
- NOAA IGRA: find nearest radiosonde station launches bracketing the event and model wind drift for balloon-like descriptions.
- Space-Track gp\_history/decay: fetch exact historical element rows and decay/reentry status for top candidate NORAD IDs.

### 5.12 Weather, Imagery, and Balloon Query Plan

This plan identifies the concrete free sources needed for the next case-specific weather and balloon checks. These are not treated as completed exclusions until the data are downloaded and plotted.

GOES SATELLITE	GOES16
GOES ABI PREFIX	<a href="https://noaa-goes16.s3.amazonaws.com/ABI-L2-CMIPF/2024/155/18/">https://noaa-goes16.s3.amazonaws.com/ABI-L2-CMIPF/2024/155/18/</a>
GOES GLM LIGHTNING PREFIX	<a href="https://noaa-goes16.s3.amazonaws.com/GLM-L2-LCFA/2024/155/18/">https://noaa-goes16.s3.amazonaws.com/GLM-L2-LCFA/2024/155/18/</a>

### 5.13 Nearest Weather-Airport Candidates

STATION	NAME	DISTANCE KM	COORDINATE
KSWF	New York Stewart International Airport	7.40	41.50, -74.11
KPOU	Dutchess County Airport	30.50	41.63, -73.88
KHPN	Westchester County Airport	58.20	41.07, -73.71
KDXR	Danbury Municipal Airport	58.30	41.37, -73.48

STATION	NAME	DISTANCE KM	COORDINATE
KTEB	Teterboro Airport	68.10	40.85, -74.06

- KSWF: [IEM ASOS/METAR daily CSV query](#)
- KPOU: [IEM ASOS/METAR daily CSV query](#)
- KHPN: [IEM ASOS/METAR daily CSV query](#)

5.14 Nearest Radiosonde Stations

STATION	NAME	DISTANCE KM	COORDINATE
USM00072501	UPTON; NY.	127.80	40.87, -72.86
USM00072518	ALBANY COUNTY AIRPORT; NY.	147.00	42.75, -73.80
USM00072403	STERLING; VA.	394.00	38.98, -77.49
USM00072402	WALLOPS ISLAND; VA.	407.60	37.93, -75.48
USM00072528	BUFFALO/GREATER BUFFALO INT.;	409.20	42.94, -78.72

5.15 ASOS/METAR Surface Weather Observations

surface visibility ranged 10-10 statute miles; no precipitation was reported in the retained observations; low/broken/overcast cloud layers were present in at least one observation. Surface ASOS/METAR observations describe airport-level weather and visibility; they do not by themselves prove conditions at the sighting altitude or line of sight.

STATION	DISTANCE KM	NEAREST OBS UTC	VIS SM	SKY	WIND DEG/KT	METAR
KSWF	7.40	2024-06-03T18:45:00 +00:00	10.00	CLR, M, M, M	20.00 / 6.00	KSWF 031845Z 02006KT 10SM SKC 29/11 A2990
KPOU	30.50	2024-06-03T18:53:00 +00:00	10.00	OVC11000, M, M, M	330.00 / 4.00	KPOU 031853Z 33004KT 10SM OVC110 29/12 A2988 RMK AO2 SLP115 T02940122
KHPN	58.20	2024-06-03T18:56:00 +00:00	10.00	BKN06000, M, M, M	150.00 / 7.00	KHPN 031856Z 15007KT 10SM BKN060 27/16 A2989 RMK AO2 SLP116 T02720156

5.16 NOAA IGRA Radiosonde Wind Profile

Nearest sounding implies mean 0-12 km wind drift toward 212.9 deg at 7.64 m/s; a passive balloon could drift about 55.0 km in two hours under this crude layer-average model. Radiosonde winds are sparse station soundings; balloon drift remains approximate without launch time, ascent rate, object altitude, and exact line-of-sight bearing.

STATION	NAME	DISTANCE KM	SOUNDING UTC	MEAN DRIFT BEARING	MEAN SPEED M/S	2H DRIFT KM	MAX WIND
USM00072501	UPTON; NY.	127.80	2024-06-04T00:00 :00+00:00	212.90	7.64	55.00	36.00 at 20.00 m

5.17 NOAA GOES ABI/GLM Public File Manifest

GOES public S3 objects are listed for the report hour where available. This is an availability manifest, not yet a rendered satellite image.

SATELLITE	GOES16	BUCKET	noaa-goes16
ABI SAMPLE FILES	12	GLM SAMPLE FILES	12

ABI sample objects:

- [ABI-L2-CMIPF/2024/155/18/OR\\_ABI-L2-CMIPF-M6C01\\_G16\\_s20241551800188\\_e20241551809496\\_c20241551809563.nc](#)
- [ABI-L2-CMIPF/2024/155/18/OR\\_ABI-L2-CMIPF-M6C01\\_G16\\_s20241551810188\\_e20241551819496\\_c20241551819565.nc](#)
- [ABI-L2-CMIPF/2024/155/18/OR\\_ABI-L2-CMIPF-M6C01\\_G16\\_s20241551820188\\_e20241551829496\\_c20241551829568.nc](#)
- [ABI-L2-CMIPF/2024/155/18/OR\\_ABI-L2-CMIPF-M6C01\\_G16\\_s20241551830188\\_e20241551839496\\_c20241551839564.nc](#)

GLM lightning sample objects:

- [GLM-L2-LCFA/2024/155/18/OR\\_GLM-L2-LCFA\\_G16\\_s20241551800000\\_e20241551800200\\_c20241551800216.nc](#)
- [GLM-L2-LCFA/2024/155/18/OR\\_GLM-L2-LCFA\\_G16\\_s20241551800200\\_e20241551800400\\_c20241551800419.nc](#)
- [GLM-L2-LCFA/2024/155/18/OR\\_GLM-L2-LCFA\\_G16\\_s20241551800400\\_e20241551801000\\_c20241551801017.nc](#)
- [GLM-L2-LCFA/2024/155/18/OR\\_GLM-L2-LCFA\\_G16\\_s20241551801000\\_e20241551801200\\_c20241551801219.nc](#)

5.18 ADSB.lol Historical Aircraft Track Extraction

This layer uses the downloaded ADSB.lol daily history archive to test actual aircraft tracks near the report coordinate and minute. It is not treated as a primary-radar substitute; it is a transponder/receiver-derived aircraft screen.

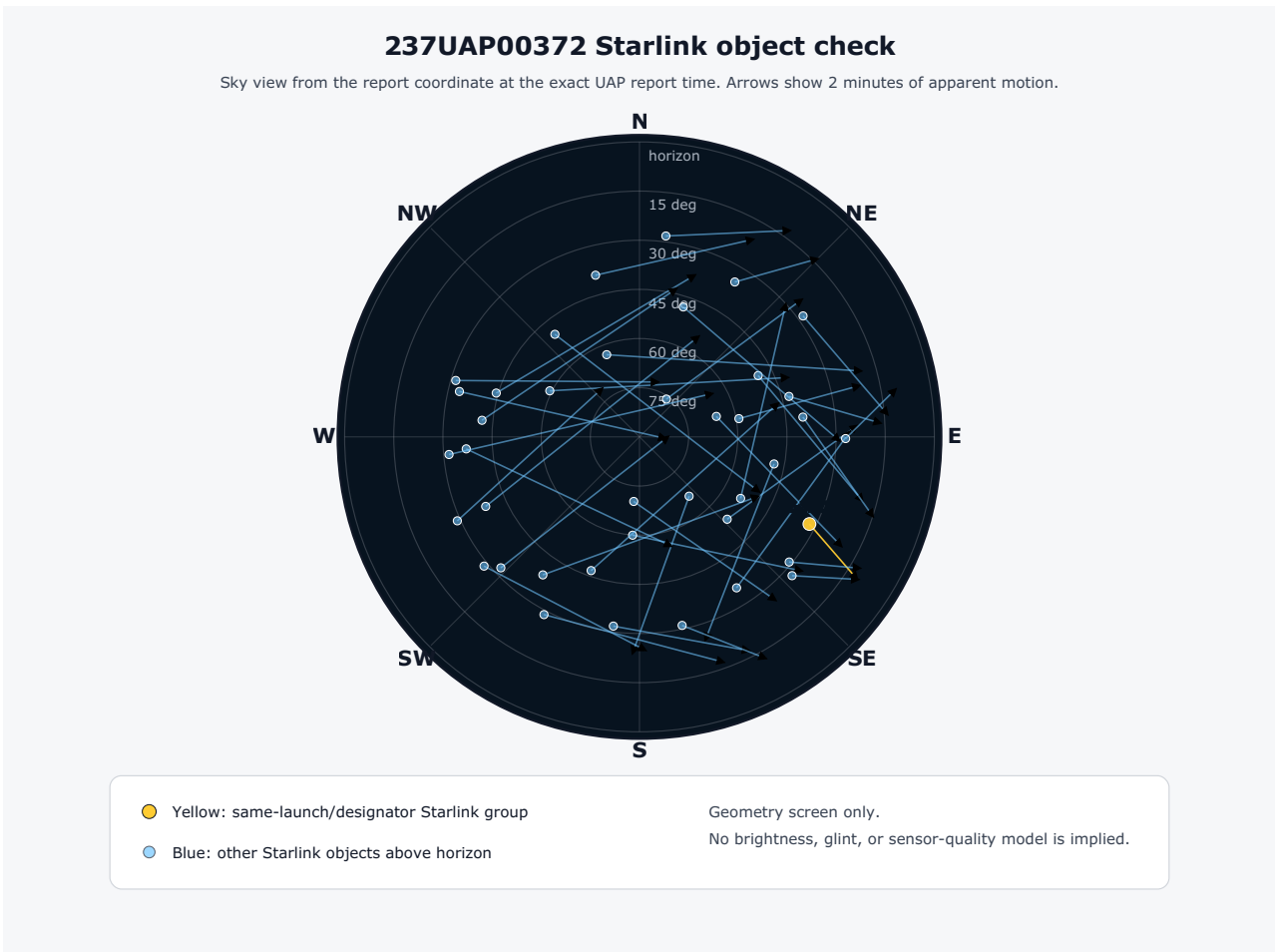
ARCHIVE WINDOW	2024-06-03T17:37:00+00:00 to 2024-06-03T20:07:00+00:00	RADIUS	300.00 nmi
TRACE FILES SCANNED	18616	TRACKS RETAINED	1200
SUPPORT STATUS	aircraft strong candidate present	BEST-CANDIDATE NOTE	ordinary-object favored if the report's count, color, direction, and motion can be reconciled with the candidate track(s).
STRONG CANDIDATES	53	PLAUSIBLE CANDIDATES	199
REPORTING-AIRCRAFT TRACKS EXCLUDED	0	WEAK CANDIDATES	177

5.19 Top ADS-B Candidate Tracks

AIRCRAFT	STATUS	SCORE	MIN DIST KM	NEAREST DT MIN	ALT FT	AZ	EL
N187GJ CRJ9 a15b4c	strong aircraft candidate	88.93	3.60	0.07	23975	25.70	56.74
N756HA CL30 aa3103	strong aircraft candidate	84.70	25.50	0.12	39225	131.30	24.97
C-FUJA E75S c035bb	strong aircraft candidate	82.10	18.10	0.05	35000	90.40	29.51
N20267 C172 a19cbb	strong aircraft candidate	77.97	9.60	0.01	700	301.10	1.21
C-GMBY CL60 c0648b	strong aircraft candidate	77.03	41.90	0.12	37000	77.60	13.88
F-HNCO A21N 39b44e	strong aircraft candidate	76.97	15.80	0.12	7050	267.70	7.79
N1876P GLF6 a15de5	strong aircraft candidate	75.78	21.10	0.01	6525	56.20	4.78
N3189J BCS3 a36825	strong aircraft candidate	75.30	4.60	0.02	15650	128.60	34.58



## 6. Annotated Evidence Figure



Generated figure copied from the local evidence-plot output. It is included as an analytic visualization, not as original sensor imagery.

## 7. Analytic Comparison

CRITERION	REPORT EVIDENCE	ANALYTIC TREATMENT
TIME CONSTRAINT	2024-06-03T18:52:00+00:00	Directly used in propagation; this is a hard filter, not descriptive context.
LOCATION CONSTRAINT	41.45708, -74.17176	Directly used as observer point for azimuth/elevation/range computation.
COUNT / PATTERN	not explicit	Primary same-launch group contains 3 propagated objects in a compact sky sector.
MOTION LANGUAGE	stationary, disappear	Apparent motion labels in the object table provide a plausible but not definitive comparison.
RADAR / OFFICIAL CHECK	not observed on ATC radar	No ATC radar return can be consistent with distant orbital objects or visual aircraft-light hypotheses, but it does not prove the match.
ANALYTIC DISPOSITION	normal-object	237UAP00372 is assessed as normal-object favored because the available public evidence gives a case-specific ordinary-object candidate: strong ADS-B aircraft candidate N187GJ CRJ9 a15b4c at 4.4 km, azimuth 25.7 deg, elevation 56.74 deg, 1.13 min from report. Dense satellite presence alone is not treated as causation in this packet.

## 8. Caveats, Limitations, and Collection Gaps

- No raw cockpit video, ATC replay, radar plot, or witness interview transcript was reviewed unless explicitly stated in the public source text.
- Aviation-derived coordinates can represent a nearby fix/radial or report point, not necessarily the actual line-of-sight intercept point.
- Starlink visibility depends on illumination, observer altitude, atmospheric conditions, and apparent brightness; this analysis tests geometry, not photometry. No brightness model is used unless explicitly stated elsewhere in the case file.
- TLE propagation is appropriate for screening and reconstruction but is not a substitute for authoritative operational ephemerides.
- When many satellites are above the horizon, generic presence is weak evidence and is not treated as causation. The report emphasizes named launch-object checks or compact same-launch trajectory groups.
- Normal-object favored is not the same as a perfect named-object identification; it requires a case-specific ordinary-object candidate stronger than simple object density.

Appendix A. Public Report Text Extracts

237UAP00372

SKYWATCH INCIDENT REPORT

PRIMARY CODE: UNIDENTIFIED AERIAL PHENOMENON  
Date: 18:52 06/03/2024 Paged: YES  
Status: Closed  
POD: DEN  
Reporting Facility: SWF

REMARKS

Facility observed a UAP 4 NM SW of SWF beginning approximately 1800. Object appeared to be stationary at 4,000 feet, no impact to operations. Object is estimated to be 50 feet long, boomerang shaped, and is not observed on RADAR. Object remained in vicinity for approximately 50 minutes before disappearing into the clouds. TY, PD notified.

## Appendix B. Computational Evidence Digest

This appendix preserves the principal computed values used in the assessment, shortened to the fields most relevant to audit and review.

```
{
  "report_time_utc": "2024-06-03T18:52:00+00:00",
  "source_excerpt": "Facility observed a UAP 4 NM SW of SWF beginning approximately 1800. Object appeared to be stationary at 4,000 feet, no impact to operations. Object is estimated to be 50 feet long, boomerang shaped, and is not observed on RADAR. Object remained in vicinity for approximately 50 minutes before disappearing into the clouds. TY, PD notified.",
  "historical_starlink_element_rows": 6076,
  "observer": {
    "lat": 41.45708419671656,
    "lon": -74.17175852017886,
    "source": "aviation_offset:4 NM SW of SWF (public text extract 237UAP00372)"
  },
  "case_id": "237UAP00372",
  "starlink_above_horizon_at_report_time": 299,
  "starlink_catalog_ids_considered": 6099,
  "largest_same-sky_cluster_count": 133,
  "starlink_at_or_above_10_deg": 152,
  "same_launch_sky_groups": [
    {
      "azimuth_range_deg": [
        117.15,
        131.98
      ],
      "count": 3,
      "elevation_range_deg": [
        17.02,
        31.72
      ],
      "ground_track_labels": [
        "SE"
      ],
      "launch_date": "2024-01-24",
      "members": [
        {
          "azimuth_deg": 117.15,
          "azimuth_plus_2m_deg": 123.16,
          "azimuth_plus_5m_deg": 125.76,
          "element_age_hours": 0.56,
          "element_epoch": "2024-06-03T18:18:14.424480+00:00",
          "elevation_deg": 31.72,
          "elevation_plus_2m_deg": 10.7,
          "elevation_plus_5m_deg": -2.57,
          "epoch_altitude_km": 488.25,
          "ground_track_bearing_deg": 132.56,
          "ground_track_label": "SE",
          "launch_date": "2024-01-24",
          "name": "STARLINK-31271",
          "norad_id": "58827",
          "range_km": 849.21,
          "sky_motion_label": "eastward, setting",
          "subpoint_lat": 38.484,
          "subpoint_lon": -67.3081
        },
        {
          "azimuth_deg": 119.22,
          "azimuth_plus_2m_deg": 123.54,
          "azimuth_plus_5m_deg": 125.83,
          "element_age_hours": 0.57,
          "element_epoch": "2024-06-03T18:17:44.690784+00:00",
          "elevation_deg": 23.86,
          "elevation_plus_2m_deg": 7.65,
          "elevation_plus_5m_deg": -4.24,
          "epoch_altitude_km": 487.89,
          "ground_track_bearing_deg": 133.75,
          "ground_track_label": "SE",
          "launch_date": "2024-01-24",
          "name": "STARLINK-31222",
          "norad_id": "58828",
          "range_km": 1034.52,
          "sky_motion_label": "eastward, setting",
          "subpoint_lat": 37.2399,
          "subpoint_lon": -65.4884
        },
        {
          "azimuth_deg": 131.98,
          "azimuth_plus_2m_deg": 131.35,
          "azimuth_plus_5m_deg": 131.24,
          "element_age_hours": 2.55,
          "element_epoch": "2024-06-03T21:24:55.931328+00:00",
          "elevation_deg": 17.02,
          "elevation_plus_2m_deg": 4.44,
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        "elevation_plus_5m_deg": -6.22,
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            "azimuth_plus_5m_deg": 76.48,
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            "elevation_plus_2m_deg": 16.31,
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        "name": "STARLINK-1760",
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        "subpoint_lon": -86.5829
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        "ground_track_bearing_deg": 52.48,
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        "subpoint_lon": -73.2857
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        "subpoint_lon": -74.3579
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        "elevation_plus_5m_deg": 3.2,
        "epoch_altitude_km": 567.77,
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        "name": "STARLINK-4451",
        "norad_id": "53492",
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        "subpoint_lon": -72.4719
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"range_km": 485.78,
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  "element_epoch": "2024-06-03T22:00:00.999936+00:00",
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  "elevation_plus_2m_deg": 19.49,
  "elevation_plus_5m_deg": 0.26,
  "epoch_altitude_km": 353.93,
  "ground_track_bearing
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## Appendix C. Source Exhaustion Checklist

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This checklist records which source layers were actually applied to this individual report. It separates checked evidence from unexhausted collection gaps so the disposition is auditable when the PDF is read alone.

SOURCE LAYER	STATUS	CASE-SPECIFIC NOTE
NARA PUBLIC UAP/FAA REPORT	reviewed	Source IDs: 237UAP00372
TIME AND OBSERVER COORDINATE	extracted	2024-06-03T18:52:00+00:00 at 41.45708, -74.17176
ORBITAL OBJECT PROPAGATION	screened	Starlink
SPACE-TRACK SATCAT METADATA	screened	35 NORAD IDs checked; 35 matched in local SATCAT subset
LAUNCH-OBJECT/SUPGP LAYER	not applicable	not a launch-object case
NASA/JPL KNOWN SMALL-BODY LAYER	not selected	CAD/Horizons secondary screen included when this case had NEO-relevant timing/ geometry
NASA POWER/HORIZONS/DONKI CONTEXT	screened	Hourly weather, sky geometry, and space-weather context where local JSON is present
AIRCRAFT/ADS-B LAYER	screened	18616 trace files scanned; 1200 tracks retained; aircraft strong candidate present
NOAA GOES IMAGERY LAYER	not exhausted	Cloud/lightning imagery layer for the report hour
NOAA GOES ABI/GLM MANIFEST	screened	Public S3 object listing for the report hour
NOAA/NEXRAD WEATHER RADAR LAYER	not exhausted	Weather radar only; not ATC/primary radar
NOAA IGRA RADIOSONDE LAYER	screened	Balloon drift plausibility layer
ASOS/METAR SURFACE WEATHER	screened	Nearest station visibility, cloud, wind, precipitation, and METAR observations
WEATHER/BALLOON SOURCE PLAN	planned	Nearest weather-airport, GOES, and radiosonde queries are listed where local plan JSON is present
FINAL ANALYTIC DISPOSITION	normal-object favored	Presence-only satellite density is context only; a stronger case-specific fit is required for normal-object disposition



## References and Source Links

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2. National Archives and Records Administration. *Record Group 615: Unidentified Anomalous Phenomena Records Collection*. <https://www.archives.gov/research/topics/uaps/rg-615>
3. National Archives and Records Administration. *Bulk Downloads for Records Related to Unidentified Anomalous Phenomena (UAPs)*. <https://www.archives.gov/research/catalog/catalog-bulk-downloads/uap-bulk-download>
4. National Archives Catalog. *Records from the Federal Aviation Administration Relating to Unidentified Anomalous Phenomena, National Archives Identifier 493468575*. <https://catalog.archives.gov/id/493468575>
5. National Archives direct digital object. *237UAP00372.pdf, FAA UAP report record copied from RG 615 bulk digital objects*. <https://s3.dualstack.us-east-1.amazonaws.com/NARAprodstorage/lz/electronic-records/rg-615/493468575/237UAP00372.pdf>
6. Hugging Face dataset. *oxzoid/space-track-tle-history: historical TLE archive used for Starlink screening*. <https://huggingface.co/datasets/oxzoid/space-track-tle-history>
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9. NASA POWER. *Hourly point API documentation for meteorological context*. <https://power.larc.nasa.gov/docs/services/api/temporal/hourly/>
10. NASA/JPL Solar System Dynamics. *Horizons API documentation for observer geometry and apparent magnitude queries*. <https://ssd-api.jpl.nasa.gov/doc/horizons.html>
11. NASA. *DONKI space weather API documentation*. <https://api.nasa.gov/>
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13. ADSB.lol. *Historical open-data release documentation*. <https://www.adsb.lol/docs/open-data/historical/>
14. OpenSky Network. *REST API documentation*. <https://openskynetwork.github.io/opensky-api/rest.html>
15. OpenSky Network. *Historical data via Trino documentation*. <https://openskynetwork.github.io/opensky-api/trino.html>
16. NASA GIBS. *Global Imagery Browse Services API documentation*. <https://nasa-gibs.github.io/gibs-api-docs/>
17. NASA Earthdata. *Common Metadata Repository search API documentation*. <https://cmr.earthdata.nasa.gov/search/site/docs/search/api.html>
18. NOAA / AWS Open Data. *GOES public dataset registry*. <https://registry.opendata.aws/noaa-goes/>
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20. NOAA NCEI. *Integrated Global Radiosonde Archive*. <https://www.ncei.noaa.gov/products/weather-balloon/integrated-global-radiosonde-archive>
21. Iowa Environmental Mesonet. *ASOS/AWOS/METAR data download service*. <https://mesonet.agron.iastate.edu/request/download.phtml>
22. Celestrak. *Spacetrack Report No. 3: Models for propagation of NORAD element sets*. <https://celestrak.org/NORAD/documentation/spacetrk.pdf>
23. Celestrak. *Supplemental GP element sets documentation and current endpoint index*. <https://celestrak.org/NORAD/elements/supplemental/>