

SORA Assessment Report

Generated: 28 March 2026 at 15:21

Flight Geography Label: *Not labelled*

1. Operator

Operator Name	Grey Rock Innovations Ltd t/a Drone Services Direct		
Operator ID	GBR-OP-HMMXXSPD2ZTLb	Accountable Manager	Dorian Ellis
Email	hello@dronedesk.io	Phone	03300439373

2. UAS

Manufacturer	DJI
Model	Matrice 300 RTK
Serial Number	SN89789798978

3. Operation

Type	Mapping/survey - Solar installations
Location	SORA Test Flight Location Grove, Oxfordshire
Description	202603_00023

4. Flight Geography Calculations

Primary Parameters

Parameter	Symbol	Value	Notes/Formula
UAV Type	-	ROTORCRAFT	Type of UAV being operated
Max. speed	v_0	23.06m/s	Maximum speed in meters per second
Max. UAV dimension	CD	m	Largest dimension of the UAV
Equipped with parachute	-	No	Emergency parachute system
Gravity	g	9.81m/s ²	Gravity
Alt. measurement type	-	Barometric	Type of altitude measurement system
Alt. measurement error	H_δ	1.00m	Expected altitude measurement error
GPS inaccuracy	S_{GPS}	3.00m	GPS positioning inaccuracy
Position holding error	S_{POS}	3.00m	Error in maintaining position
Map error	S_K	1.00m	Mapping/charting accuracy error
Pilot reaction time	t_{RZ}	1.00s	Time for pilot to respond to situation

Flight Geography (FG)

Parameter	Symbol	Value	Notes/Formula
Flight height	H_{FG}	75m	Operating height above ground
Min. height for small FG	H_{FG}	2.70m	$H_{FG} = CD * 3$
Min. width for small FG	S_{FG}	2.70m	$S_{FG} = CD * 3$

Contingency Volume (CV)

Parameter	Symbol	Value	Notes/Formula
Lateral manoeuvre	-	Stopping	Type of lateral contingency manoeuvre
Reaction distance	S_{RZ}	23.05m	$S_{RZ} = v_0 * t_{RZ}$
Contingency manoeuvre distance	S_{CM}	46.95m	$S_{CM} = 0.5 * (v_0^2 / (g * TAN(\phi)))$
Vertical Contingency			
Vertical manoeuvre	-	Convert forward energy to potential energy	Type of vertical contingency manoeuvre

Parameter	Symbol	Value	Notes/Formula
Reaction height	H_{RZ}	16.15m	Height required for response
Contingency manoeuvre height	H_{CM}	27.10m	Calculated based on selected manoeuvre

Ground Risk Buffer (GRB)

Parameter	Symbol	Value	Notes/Formula
Termination method	-	Simplified (1 to 1)	Method of flight termination
Controlled ground area	-	No	Does operator have full control of the ground area (FG, CV & GRB)

Adjacent Volume (AV)

Parameter	Symbol	Value	Notes/Formula
Flight continuance	t_f	180s	Period of continued flight at max speed

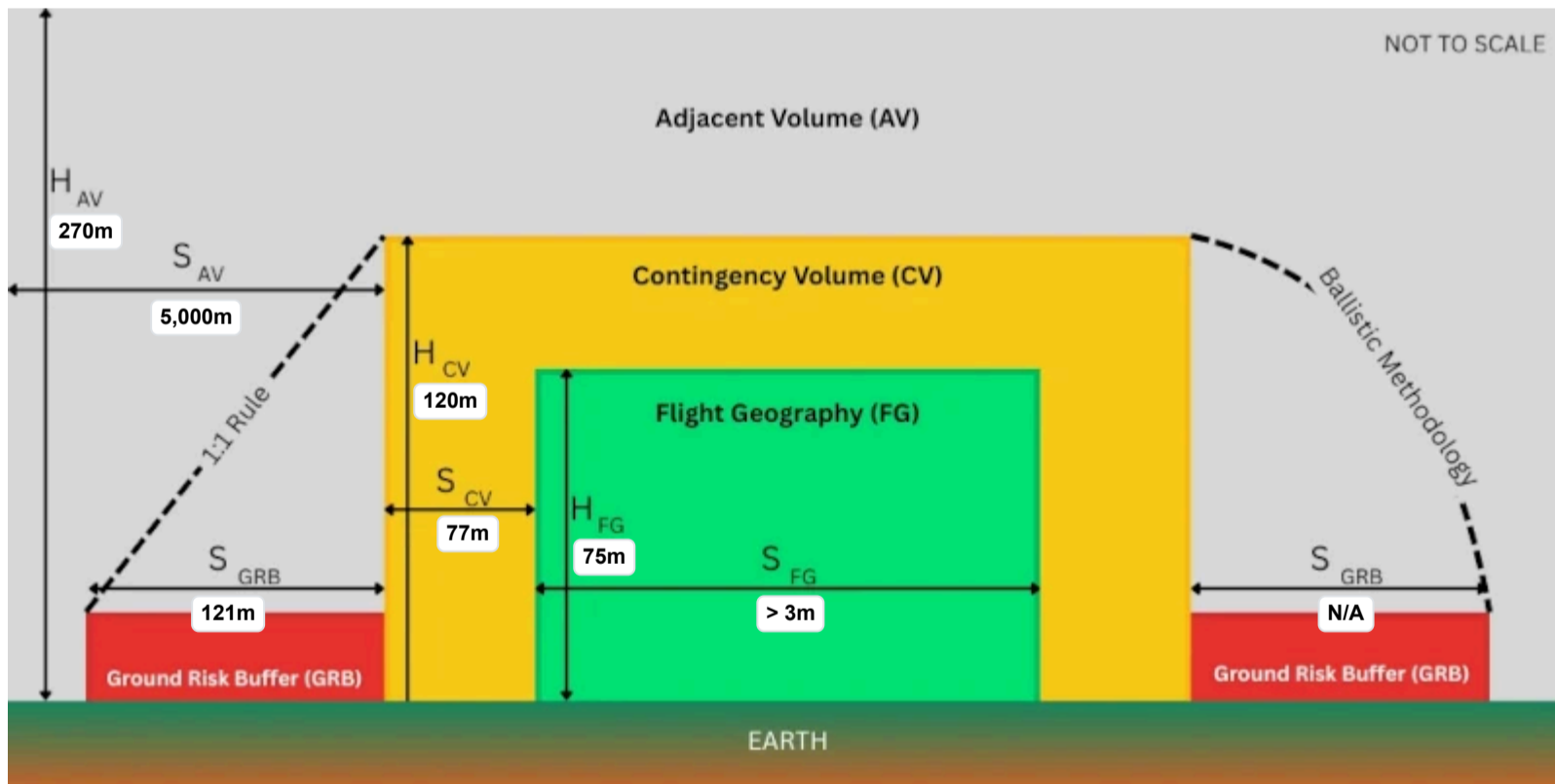
Line of sight

Parameter	Symbol	Value	Notes/Formula
Ground visibility	GV	5000m	Maximum 5,000m

Calculated Results

Minimum Lateral CV	Minimum Vertical CV	Minimum Lateral GRB
$S_{CV} = S_{GPS} + S_{POS} + S_K + S_{RZ} + S_{CM} = 77m$	$H_{CV} = H_{FG} + H_{\delta} + H_{RZ} + H_{CM} = 120m$	$S_{GRB} = H_{CV} + (0.5 * CD) = 121m$
Adjacent Volume Lateral	Adjacent Volume Vertical	
$S_{AV} = 120 * v_0 = 5,000m$	$H_{AV} = H_{CV} + 150 = 270m$	
Attitude Line of Sight	Detection Line of Sight	Max. Visual Line of Sight
Calculated based on UAV size = 313m	$DLOS_{max} = 0.3 * GV = 1,500m$	$VLOS_{max} = MIN(ALOS_{max}, DLOS_{max}) = 313m$

Visualization



5. Flight Geography Geometry

Pilot Locations

Pilot	Latitude	Longitude	Max Distance to CV
Pilot	51.633792	-1.448886	638.1 m (BVLOS)

Geometry Details

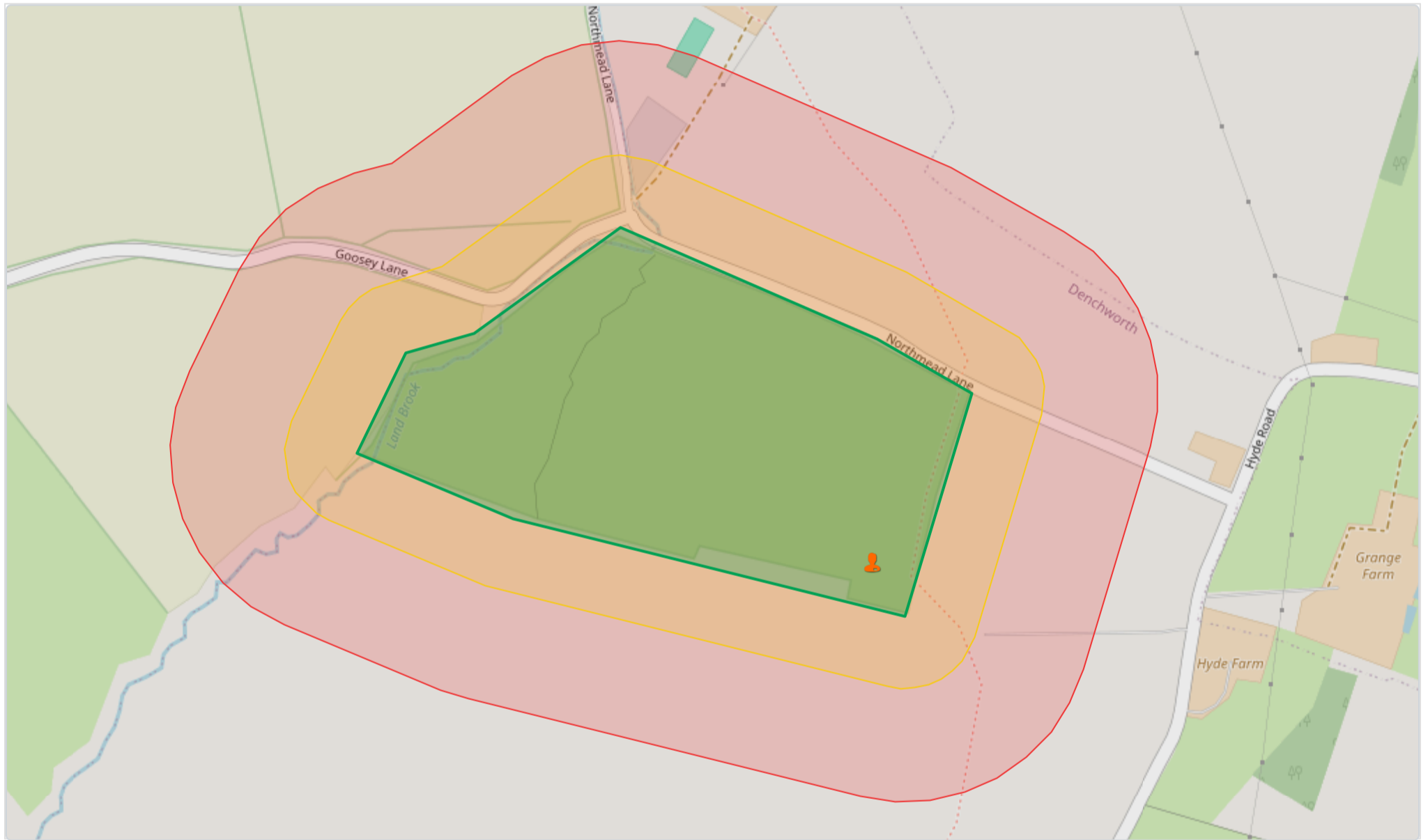
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Type	Polygon
Area	158,561 m ²
Perimeter	1.66 km

Center	51.635405, -1.452440
Bounding Box	N: 51.637095, S: 51.633379 E: -1.447341, W: -1.456804

Polygon Vertices

#	Latitude	Longitude
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2	51.635896	-1.456053
3	51.636082	-1.455002
4	51.637095	-1.452749
5	51.636029	-1.448801
6	51.635510	-1.447341
7	51.633379	-1.448371
8	51.634311	-1.454401

Flight Geography Map



■ Flight Geography
 ■ Contingency Volume
 ■ Ground Risk Buffer
 ■ Adjacent Volume
 ● Pilot

KML Export

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6. Population Analysis

Metric	Value	Zone
Maximum Population Density	13.1 ppl/km²	FG + CV + GRB
People Count in Flight Geography + Contingency Volume	4	FG+CV
Average Population Density	240 ppl/km ²	AV (excl. FG+CV+GRB)
Max Density Method	Sliding-window kernel — 554m radius (0.964 km ²)	FG + CV + GRB
Sample Points Evaluated (Max Zone)	113	FG + CV + GRB
Grid Cells Analyzed (Avg Zone)	5,166	AV
Average Cell Size	57.83 × 92.14 m (5,329 m ²)	-
Calculation Timestamp	2026-03-28T15:17:28.103Z	-

6.1 Possible Assemblies of People (FG + CV + 1km)

✔ No possible assemblies found within 1000m of the operational volume (FG+CV boundary).

Per SORA methodology, the presence of assemblies of people within 1km of the operational volume must be determined. The "Stadiums & Large Venues" data layer was searched and no venues were found within the search radius.

7. Ground Risk Assessment

iGRC Determination

Lookup Parameter	Value	Category
Maximum Population Density	13.1 ppl/km ²	< 50 ppl/km ²
UAV Characteristic Dimension	0.90 m	≤1m / ≤25m/s
UAV Max Speed	23.06 m/s	

Population Density	UAS CD/Speed				
	1m / ≤25m/s	3m / ≤35m/s	8m / ≤75m/s	20m / ≤120m/s	40m / ≤200m/s
Controlled ground area	1	2	3	4	5
< 5 ppl/km ² (sparsely populated)	2	3	4	5	6
5-50 ppl/km ²	3	4	5	6	7
50-500 ppl/km ²	4	5	6	7	8
500-5,000 ppl/km ²	5	6	7	8	9
5,000-50,000 ppl/km ²	6	7	8	9	10
> 50,000 ppl/km ² (gatherings)	7	8	9	10	11

The iGRC is determined by cross-referencing the population density row with the UAS size/speed column.

Ground Risk Mitigations

Mitigation	Level Applied	Notes/Evidence
M1(A) Strategic mitigations - Sheltering	Not applied	-
M1(B) Strategic mitigations - Operational restrictions	Not applied	-
M1(C) Tactical mitigations - Ground observation	Not applied	-
M2 Effects of UA impact dynamics are reduced	Not applied	-

Initial GRC (iGRC): **3**Mitigation Adjustment: **+0**Final GRC: **3**

8. Air Risk Assessment

Airspace Classification & Conditions

Question	Response
Airspace Class	G
Is this atypical airspace? (e.g., segregated, restricted)	No
Operating above FL660?	No
Operating in or near known IFR flight paths?	No
Operating in a VFR corridor?	No
Operating below 500ft AGL in uncontrolled airspace?	Yes
Is all traffic in the area known and cooperative?	No
Tactical mitigation VLOS	Direct <i>Notes: Maintaining VLOS throughout</i>

Strategic Mitigations

Mitigation	Status	Notes/Evidence
SM1 Operational restriction by boundary	Not implemented	-
SM2 Operational restriction by chronology	Not implemented	-
SM3 Operational restriction by time of exposure	Not implemented	-
SM4 Special Use Airspace (SUA)	Not implemented	-
SM5 Other airspace requirements	Not implemented	-
SM6 Pre-agreement of ANSP services	Not implemented	-
SM7 Pre-agreement of UTM services	Not implemented	-
SM8 NOTAM of intended operation	Not implemented	-
SM9 Military low flying notification	Not implemented	-
SM10 Outreach to local flying clubs and pilots	Not implemented	-

Initial ARC: **ARC-C**

Strategic Mitigations Applied

Residual ARC: **ARC-B**

9. SAIL Determination

The Specific Assurance and Integrity Level (SAIL) is determined by cross-referencing the Final GRC with the Residual ARC:

Final GRC	ARC-a	ARC-b	ARC-c	ARC-d
≤2	1	2	4	6
3	2	2	4	6
4	3	3	4	6
5	4	4	4	6
6	5	5	5	6
7	6	6	6	6
≥8	Category requires certified operations			

$$\text{Final GRC } \mathbf{3} + \text{Residual ARC } \mathbf{ARC-B} = \text{SAIL Level } \mathbf{SAIL 2}$$

Appendix A: Calculation Methodology

A.1 Zone Definitions

The SORA methodology defines several operational volumes that extend outward from the Flight Geography:

Zone	Definition	Purpose
FG (Flight Geography)	The user-defined operational area where the drone will fly	Core operational volume
CV (Contingency Volume)	Buffer of 77m around FG	Area for safe recovery if drone leaves FG
GRB (Ground Risk Buffer)	Additional 121m buffer (cumulative: 198m from FG edge)	Area at risk if control is lost in CV
AV (Adjacent Volume)	Additional 5000m buffer (cumulative: 5198m from FG edge)	Extended risk consideration area

A.2 Cell Area Calculation

Population data is sourced from the GHS-POP grid at 3 arc-second resolution. Cell areas are calculated using geodesic (ellipsoidal) geometry via the Turf.js library:

```
Cell Area = turf.area(cellPolygon)
```

This accounts for the Earth's curvature and the fact that cell width varies with latitude (cells are narrower near the poles). At latitude 51.64°, the average cell size is approximately 57.83 × 92.14 m (5,329 m²).

A.3 Intersection & Coverage Calculation

For each population grid cell that overlaps an analysis zone:

```
Intersection Area = turf.area(turf.intersect(cellPolygon, zonePolygon))
Coverage = Intersection Area ÷ Cell Area
```

Coverage is expressed as a decimal between 0 and 1, where 1.0 means the entire cell is within the zone.

A.4 People Count (FG+CV Zone)

The total population within the Flight Geography plus Contingency Volume is calculated by summing weighted populations:

```
Weighted Populationcell = Raw Populationcell × Coveragecell
People Count = Σ (Weighted Populationcell) for all cells in FG+CV
```

This ensures that cells only partially within the zone contribute proportionally to the total.

A.5 Maximum Population Density (FG+CV+GRB Zone)

The maximum density is used to determine the intrinsic Ground Risk Class (iGRC). This assessment implements the **JARUS SORA Annex F v2.5 Section 3.9.1 sliding-window kernel** method, which replaces simple single-cell peak density with a spatially-averaged kernel density that reflects realistic exposure over the dispersion area.

A.5.1 Dispersion Radius

The kernel radius is derived from the Annex F equation (21) for the lateral dispersion of a falling UAS from operating altitude z (m AGL):

$$r = 4z \div \tan(30^\circ), \text{ minimum } 400 \text{ m}$$

For this operation (FG operating altitude: **80 m AGL**), the dispersion radius is:

$$r = \max(400, 4 \times 80 \div \tan(30^\circ)) = 554 \text{ m}$$

The kernel circle area is therefore **0.964 km²**.

Altitude selection rationale: Section 3.9.1 defines z as "the altitude of the operation under normal operating conditions." Within the SORA semantic model, the Flight Geography (FG) is the volume where normal operations take place. The Contingency Volume (CV) is entered only when a contingency procedure has already been triggered, which by definition is an abnormal state, and exiting the Operational Volume entirely constitutes a loss-of-control event. Accordingly, the FG ceiling (**80 m AGL**) is used as z , rather than the CV ceiling (120 m AGL). Using the CV height would be a conservative extension of the guidance rather than a reading of what the text prescribes.

A.5.2 Kernel Density Calculation

For each GHS-POP cell centre that lies inside the FG+CV+GRB zone boundary, a circular kernel of radius r is centred on that sample point. All neighbouring cell populations whose centres fall within radius r and within the zone boundary (clipped to prevent double-counting with the Adjacent Volume) are summed:

```
Kernel Population = Σ Raw Populationneighbour where neighbour centre is within  $r$  and within zone
```

```
Kernel Density = Kernel Population ÷ Kernel Areakm²
```

The maximum kernel density across all sample points in the zone is reported as the Maximum Population Density and used for iGRC determination:

```
Maximum Density = MAX(Kernel Densitysample) for all sample points in FG+CV+GRB
```

A.5.3 Rationale

The single-cell approach divides a cell's population count by only that cell's area (~4,750 m² at UK latitudes), which vastly overestimates peak density for sparsely-populated cells. A cell containing 2 people would yield 421 ppl/km² — an implausible local density for a rural cell. The kernel approach sums over the realistic crash-scatter area, producing a density figure that is both compliant with Annex F and consistent with the spatial scale of actual exposure risk.

Boundary clipping: Only cells whose centres lie within the FG+CV+GRB polygon are included in the kernel sum, ensuring no population from the Adjacent Volume contributes to the maximum density figure.

A.6 Average Population Density (AV Zone, excluding FG+CV+GRB)

The average density is calculated for the "donut" zone between the GRB boundary and the AV boundary. This uses coverage-weighted averaging:

$$\text{Weighted Density}_{\text{cell}} = \text{Cell Density}_{\text{cell}} \times \text{Coverage}_{\text{cell}}$$

$$\text{Average Density} = \frac{\sum(\text{Weighted Density}_{\text{cell}})}{\sum(\text{Coverage}_{\text{cell}})}$$

This formula ensures that cells with greater overlap with the zone contribute more to the average, producing a true area-weighted mean density.

Worked Example

Cell	Raw Density (ppl/km ²)	Coverage	Weighted Density
A	100	0.50	50.00
B	200	1.00	200.00
C	150	0.25	37.50
TOTAL	-	1.75	287.50

$$\text{Average Density} = 287.50 \div 1.75 = 164 \text{ ppl/km}^2$$

Appendix B: Data Sources

Data Layer	Source	Details
Population Density	Copernicus GHS-POP R2023A	Global Human Settlement Population Grid (R2023). Joint Research Centre (JRC), European Commission. Epoch: 2025 Resolution: 3 arc-seconds [57.83 × 92.14 m (5,329 m ²) at latitude 51.6354°] Coord. system: WGS84 Citation: Schiavina, M., Freire, S., Alessandra Carioli, A., MacManus, K. (2023): GHS-POP R2023A - GHS population grid multitemporal (1975-2030). European Commission, Joint Research Centre (JRC). doi:10.2905/2FF68A52-5B5B-4A22-8F40-C41DA8332CFE
Assemblies of People	Open Street Map	Overpass API Parameters: {"query": "nwr[\"leisure\"=\"stadium\"]; nwr[\"building\"=\"stadium\"]; nwr[\"amenity\"~\"events_venue conference_centre exhibition_centre\"]; nwr[\"leisure\"~\"horse_racing dog_racing\"]; nwr[\"landuse\"~\"recreation_ground fairground\"]; nwr[\"amenity\"~\"showground fairground\"]; nwr[\"leisure\"=\"track\"] \"sport\"~\"motor karting\"]; nwr[\"highway\"=\"raceway\"]"} }
Lookup	Source	Details
Max Density Kernel Method	JARUS SORA v2.5 Annex F Section 3.9.1	Sliding-window kernel for maximum population density; dispersion radius per equation (21): $r = 4z / \tan(30^\circ)$, minimum 400 m. JARUS doc_29, June 2024.
Flight Geography Calculations	JARUS SORA v2.5 Annex A Section A.5 (insecure link)	Guidelines on collecting and presenting system and operation information for a specific UAS operation, JARUS
iGRC Determination	AMC1 Article 11 (UK SORA) 1.62: Table 3 - iGRC Determination	Specific Operations Risk Assessment methodology, CAA/JARUS/EASA
Ground Risk Mitigations	AMC1 Article 11 (UK SORA) 1.94: Table 5 - Strategic Ground Risk Mitigations	Specific Operations Risk Assessment methodology, CAA/JARUS/EASA
ARC Determination	AMC1 Article 11 (UK SORA) 1.110: Figure 5 - Quantitative Air Risk Flowchart	Specific Operations Risk Assessment methodology, CAA/JARUS/EASA
ARC Strategic Mitigations	AMC1 Article 11 (UK SORA) ANNEX C: GM1 Strategic Mitigation Collision Risk Assessment	Specific Operations Risk Assessment methodology, CAA/JARUS/EASA
SAIL Determination	AMC1 Article 11 (UK SORA) 1.135: Table 6 - SAIL Determination	Specific Operations Risk Assessment methodology, CAA/JARUS/EASA

Appendix C: Per-Cell Audit Data

Flight Geography + CV (FG+CV) - Area used for people count

Cells analyzed: 13 | Total coverage area: 47,165 m² | Max density: 295 ppl/km² | Avg density: 80 ppl/km² | Total weighted pop: 4

#	Cell Center	Raw Pop	Cell Area (m ²)	Coverage %	Coverage Area (m ²)	Wtd Pop
1	51.63750, -1.45333	0.0415	5,329	69.96%	3,728	0.0291
2	51.63750, -1.45250	0.1765	5,329	80.23%	4,275	0.1416
3	51.63750, -1.45167	0.0935	5,329	56.95%	3,035	0.0532
4	51.63667, -1.45250	0.0519	5,329	100.00%	5,329	0.0519

5	51.63667, -1.44750	1.5688	5,329	13.97%	745	0.2192
6	51.63583, -1.44750	0.6386	5,329	99.77%	5,317	0.6372
7	51.63583, -1.44667	0.7663	5,329	72.96%	3,888	0.5591
8	51.63500, -1.44750	0.4694	5,329	100.00%	5,329	0.4694
9	51.63500, -1.44667	0.7823	5,329	79.11%	4,216	0.6189
10	51.63417, -1.44750	0.6465	5,329	100.00%	5,329	0.6465
11	51.63417, -1.44667	0.9636	5,329	30.94%	1,649	0.2981
12	51.63333, -1.44750	0.0373	5,329	80.66%	4,299	0.0301
13	51.63333, -1.44667	0.1223	5,329	0.47%	25	0.0006
TOTALS		6.4	-	-	47,165	3.8

$Avg\ Density = \frac{\Sigma(Weighted\ Population)}{\Sigma(Coverage\ Area\ m^2) \div 1,000,000} = \frac{3.8}{(47,165 \div 1,000,000)} = 80\ ppl/km^2$

FG + CV + GRB — Zone used for maximum density (iGRC determination)

Kernel method: **JARUS Annex F Section 3.9.1 sliding-window kernel** — radius **554 m**, kernel area **0.964 km²**.

Each row is one GHS-POP cell centre that lies inside the zone. The kernel sums all populated neighbour cell populations within radius *r* and inside the zone boundary, then divides by the kernel circle area. The row with the highest kernel density determines the reported maximum density.

Sample points evaluated: 113 | Max kernel density: 13.1 ppl/km²

#	Sample Centre	Populated Neighbours in Kernel	Kernel Pop Sum	Kernel Density (ppl/km ²)	Max?
1	51.63833, -1.45417	7	1.17	1.2	
2	51.63833, -1.45333	11	4.39	4.6	
3	51.63833, -1.45250	14	7.75	8.0	
4	51.63833, -1.45167	15	8.39	8.7	
5	51.63833, -1.45083	18	10.02	10.4	
6	51.63750, -1.45667	7	1.17	1.2	
7	51.63750, -1.45583	7	1.17	1.2	
8	51.63750, -1.45500	7	1.17	1.2	
9	51.63750, -1.45417	7	1.17	1.2	
10	51.63750, -1.45333	12	5.04	5.2	
11	51.63750, -1.45250	16	9.36	9.7	
12	51.63750, -1.45167	18	9.84	10.2	
13	51.63750, -1.45083	22	11.77	12.2	
14	51.63750, -1.45000	23	12.61	13.1	★ MAX
15	51.63750, -1.44917	23	12.61	13.1	★ MAX
16	51.63750, -1.44833	23	12.61	13.1	★ MAX
17	51.63750, -1.44750	23	12.61	13.1	★ MAX
18	51.63667, -1.45833	5	0.80	0.8	
19	51.63667, -1.45750	7	1.17	1.2	
20	51.63667, -1.45667	7	1.17	1.2	
21	51.63667, -1.45583	7	1.17	1.2	
22	51.63667, -1.45500	7	1.17	1.2	
23	51.63667, -1.45417	7	1.17	1.2	
24	51.63667, -1.45333	13	5.08	5.3	
25	51.63667, -1.45250	18	9.51	9.9	
26	51.63667, -1.45167	20	10.80	11.2	
27	51.63667, -1.45083	23	12.61	13.1	★ MAX
28	51.63667, -1.45000	23	12.61	13.1	★ MAX
29	51.63667, -1.44917	23	12.61	13.1	★ MAX
30	51.63667, -1.44833	23	12.61	13.1	★ MAX
31	51.63667, -1.44750	23	12.61	13.1	★ MAX
32	51.63667, -1.44667	21	12.47	12.9	
33	51.63667, -1.44583	18	11.82	12.2	
34	51.63583, -1.45917	2	0.14	0.1	

35	51.63583, -1.45833	5	0.80	0.8	
36	51.63583, -1.45750	7	1.17	1.2	
37	51.63583, -1.45667	7	1.17	1.2	
38	51.63583, -1.45583	7	1.17	1.2	
39	51.63583, -1.45500	7	1.17	1.2	
40	51.63583, -1.45417	7	1.17	1.2	
41	51.63583, -1.45333	13	5.08	5.3	
42	51.63583, -1.45250	18	9.51	9.9	
43	51.63583, -1.45167	20	10.80	11.2	
44	51.63583, -1.45083	23	12.61	13.1	★ MAX
45	51.63583, -1.45000	23	12.61	13.1	★ MAX
46	51.63583, -1.44917	23	12.61	13.1	★ MAX
47	51.63583, -1.44833	23	12.61	13.1	★ MAX
48	51.63583, -1.44750	23	12.61	13.1	★ MAX
49	51.63583, -1.44667	21	12.47	12.9	
50	51.63583, -1.44583	18	11.82	12.2	

Showing first 50 of 113 sample points. Use the MAX CSV export for the full dataset.

AV (excl. FG+CV+GRB) - Donut zone used for average density calculation

Cells analyzed: 5166 | Total coverage area: 26,890,049 m² | Max density: 18,090 ppl/km² | Avg density: 825 ppl/km² | Total weighted pop: 22,171

#	Cell Center	Raw Pop	Cell Area (m²)	Coverage %	Coverage Area (m²)	Wtd Pop
1	51.68417, -1.45250	0.2278	5,324	6.54%	348	0.0149
2	51.68417, -1.45167	0.2278	5,324	0.97%	51	0.0022
3	51.68333, -1.44417	0.9614	5,324	44.80%	2,385	0.4307
4	51.68333, -1.44333	0.4825	5,324	38.63%	2,056	0.1864
5	51.68333, -1.44250	0.0043	5,324	32.46%	1,728	0.0014
6	51.68333, -1.44167	0.0014	5,324	26.28%	1,399	0.0004
7	51.68333, -1.43917	1.0547	5,324	7.76%	413	0.0818
8	51.68333, -1.43833	2.1089	5,324	1.77%	94	0.0373
9	51.68250, -1.44417	0.9663	5,324	100.00%	5,324	0.9663
10	51.68250, -1.44333	0.8234	5,324	100.00%	5,324	0.8234
11	51.68250, -1.44250	0.2845	5,324	100.00%	5,324	0.2845
12	51.68250, -1.44167	0.1593	5,324	100.00%	5,324	0.1593
13	51.68250, -1.44083	0.1168	5,324	100.00%	5,324	0.1168
14	51.68250, -1.43917	1.0532	5,324	100.00%	5,324	1.0532
15	51.68250, -1.43833	1.9309	5,324	99.82%	5,314	1.9274
16	51.68250, -1.43750	0.1755	5,324	93.23%	4,963	0.1636
17	51.68167, -1.46333	0.0475	5,324	100.00%	5,324	0.0475
18	51.68167, -1.46250	0.0792	5,324	100.00%	5,324	0.0792
19	51.68167, -1.46167	0.1006	5,324	100.00%	5,324	0.1006
20	51.68167, -1.46083	0.0671	5,324	100.00%	5,324	0.0671
21	51.68167, -1.44417	0.2707	5,324	100.00%	5,324	0.2707
22	51.68167, -1.44333	0.6642	5,324	100.00%	5,324	0.6642
23	51.68167, -1.44250	2.6059	5,324	100.00%	5,324	2.6059
24	51.68167, -1.44167	0.7761	5,324	100.00%	5,324	0.7761
25	51.68167, -1.44083	0.2969	5,324	100.00%	5,324	0.2969
26	51.68167, -1.43250	0.5712	5,324	76.57%	4,077	0.4374
27	51.68167, -1.43167	2.1267	5,324	56.92%	3,031	1.2106
28	51.68167, -1.43083	4.4343	5,324	37.27%	1,984	1.6529
29	51.68167, -1.43000	5.5734	5,324	17.62%	938	0.9823
30	51.68167, -1.42917	13.6237	5,324	1.55%	82	0.2109

31	51.68083, -1.48000	0.0476	5,324	8.33%	443	0.0040
32	51.68083, -1.47917	0.7611	5,324	28.52%	1,518	0.2170
33	51.68083, -1.47833	0.5709	5,324	48.79%	2,598	0.2785
34	51.68083, -1.46333	0.1426	5,324	100.00%	5,324	0.1426
35	51.68083, -1.46250	0.2853	5,324	100.00%	5,324	0.2853
36	51.68083, -1.46167	0.2506	5,324	100.00%	5,324	0.2506
37	51.68083, -1.46083	0.2012	5,324	100.00%	5,324	0.2012
38	51.68083, -1.44417	0.0097	5,324	100.00%	5,324	0.0097
39	51.68083, -1.44333	2.1898	5,324	100.00%	5,324	2.1898
40	51.68083, -1.44250	6.5589	5,324	100.00%	5,324	6.5589
41	51.68083, -1.44167	2.0459	5,324	100.00%	5,324	2.0459
42	51.68083, -1.44083	0.7389	5,324	100.00%	5,324	0.7389
43	51.68083, -1.43333	0.1817	5,324	100.00%	5,324	0.1817
44	51.68083, -1.43250	1.2998	5,324	100.00%	5,324	1.2998
45	51.68083, -1.43167	4.1309	5,324	100.00%	5,324	4.1309
46	51.68083, -1.43083	4.9668	5,324	100.00%	5,324	4.9668
47	51.68083, -1.43000	7.4866	5,324	100.00%	5,324	7.4866
48	51.68083, -1.42917	13.1744	5,324	96.43%	5,134	12.7036
49	51.68083, -1.42833	16.9891	5,324	78.32%	4,170	13.3066
50	51.68083, -1.42750	16.7872	5,324	58.67%	3,124	9.8497
TOTALS		22785.3	-	-	26,890,049	22171.1

$Avg\ Density = \frac{\sum(Weighted\ Population)}{\sum(Coverage\ Area\ m^2) \div 1,000,000} = \frac{22171.1}{(26,890,049 \div 1,000,000)} = 825\ ppl/km^2$

Showing first 50 of 5166 cells. CSV export of full cell analysis available on request.