

OODA CARVER Ops Risk Dashboard - About & Methodology

- Purpose**

A serverless dashboard for rapid risk triage in field and GSOC settings. The app helps analysts turn ad-hoc CARVER inputs into a living risk picture that updates in real time. It runs entirely in the browser and deploys on GitHub Pages.

- Who it is for**

Security risk managers, NGO field teams, GSOC operators, and analysts who need a pragmatic risk view that travels well and does not depend on a backend.

What the app does

- Imports or captures assets and threats, then computes Likelihood and Impact from CARVER.
- Visualizes portfolio posture, a 5x5 risk matrix, and a sortable register.
- Exports CSV or JSON and a Markdown report.
- Prints a report to PDF using the browser print dialog.
- Works offline once loaded. No data leaves the browser unless the user exports.

Core methodologies

1) CARVER scoring

CARVER fields recorded per asset: **C, A, R, V, E, Rz**

- C** Criticality
- A** Accessibility
- R** Recuperability - higher score means lower resilience and harder recovery
- V** Vulnerability
- E** Effect
- Rz** Recognizability

Scales supported: 1 to 5 or 1 to 10. Internally normalized to the active scale.

2) Mapping CARVER to Likelihood and Impact

This build follows your pragmatic, readable mapping.

- Likelihood L** = average of **A, V, Rz**
- Impact I** = average of **C, E, R**
- Risk score** = **L x I**

Buckets used across the app:

- Very Low: 0 to < 5
- Low: 5 to < 10
- Medium: 10 to < 15
- High: 15 to < 20

- Critical: ≥ 20

3) ISO 31000 alignment

The workflow mirrors ISO 31000.

1. **Establish context** - choose scale and role, define assets.
2. **Identify risks** - enter CARVER values and notes.
3. **Analyze** - the app computes L, I, and the matrix position.
4. **Evaluate** - sort and compare in the register and distribution view.
5. **Treat** - add mitigation notes and export actions.
6. **Monitor** - adjust scores as conditions change and re-export.

4) OODA Loop integration

- **Observe** - import field observations and telemetries as assets with CARVER attributes.
- **Orient** - the dashboard, matrix, and distribution view create shared situational understanding.
- **Decide** - use the sortable register and top-risks list to select actions.
- **Act** - export CSV or JSON for tasking, print the report, and push updates back to the field.

Repeated cycles shorten decision time while improving fidelity.

Key features at a glance

- **Risk Distribution**: vertical bar chart sorted by risk for any number of assets, with hover details.
- **5x5 Matrix**: color-consistent tiles with readable popups that inherit the rating color.
- **Register**: inline editing with auto-recompute and auto-save to local storage.
- **Role filters**: Ops, Sec, Comms column presets for faster reviews.
- **Data portability**: CSV and JSON import-export plus Markdown report.
- **Serverless**: static HTML, no API keys, GitHub Pages ready.

Data model

Each record keeps the following fields:

- **name** string - asset or threat label
- **type** string - category such as Plant, Site, Convoy, Node, Threat
- **country** string
- **location** string
- **C, A, R, V, E, Rz** integers within the active scale
- **notes** string

Derived fields rendered by the app: **L, I, totalCarver, P(a), risk score**.

P(a) is computed as total CARVER divided by maximum possible for the active scale. It is a quick proxy of overall exposure across the six factors.

Typical use cases

1. ****NGO site survey****

Map clinics, warehouses, and movement corridors. Score quick CARVER values from the field, generate a register, and prioritize mitigations for routes and facilities.

2. ****Telecom or radio network GSOC****

Track VHF sites, satcom nodes, and power dependencies. Watch the distribution for single-point-of-failure drift and reprioritize site hardening tasks.

3. ****Election support and convoy planning****

Maintain a living list of polling sites and convoy legs. Adjust A, V, and Rz with changing crowd dynamics or checkpoints and reprint the matrix before dispatch.

4. ****Rapid crisis reprioritization****

During a surge or incident, update R and E to capture recovery drag and consequence spread. Decision makers see immediate shifts in top-risks and matrix clustering.

Analyst workflow

1. ****Load data****: upload CSV or JSON, or start from the sample set.
2. ****Tune scale and role****: choose 1 to 5 or 1 to 10 and select the column preset.
3. ****Score quickly****: edit CARVER values in the table. The register and visuals update automatically.
4. ****Validate****: check clustering on the matrix and outliers in Risk Distribution.
5. ****Report****: export CSV or JSON for systems, and print Report to PDF for briefings.

Deployment and privacy

- Single file app that runs in any modern browser.
- Static deployment on GitHub Pages.
- Local storage only until you export. No telemetry and no cookies created by the app.

Extensibility ideas

- Team sync via a lightweight share link using GitHub Pages branch JSON.
- Optional geotag fields and a small leaflet map for route and site context.
- Pluggable risk treatments library keyed to matrix cells.
- Import validator that checks scale consistency and missing fields.

Acknowledgments

This build incorporates CARVER tradecraft, ISO 31000 risk management principles, and the OODA decision cycle. It is tuned for field pragmatism - minimal friction with maximum clarity.