

Independent Review Protocol

Version 1.0 · Classification: PUBLIC · Effective: April 2026

Every FIG environmental reconstruction undergoes independent review by a qualified maritime professional before publication and blockchain timestamping. This protocol defines the minimum standards governing that review. The reviewer's identity is confidential. The standard is public.

1 REVIEWER QUALIFICATION REQUIREMENTS

The appointed reviewer must satisfy all of the following criteria:

- Hold one or more of: Master Mariner (Class 1), accredited Marine Accident Investigator, Chartered Naval Architect, or Meteorologist / Oceanographer with operational maritime experience.
- Minimum 15 years of operational, investigative, or regulatory maritime experience.
- No commercial, personal, or institutional relationship with any party involved in the incident under review.
- No prior involvement in the original accident investigation.

2 REVIEW SCOPE

The reviewer independently assesses the reconstruction against the following criteria:

- **Data source integrity** — ERA5 provenance, coordinate accuracy, temporal alignment, and plausibility.
- **Methodological soundness** — unit conversions, interpolation methods, threshold definitions, and analytical logic.
- **Conclusion validity** — whether stated findings are fully supported by the reconstructed environmental data.
- **Operational realism** — consistency with known maritime physics, seamanship, and operational practice.
- **Assumption transparency** — identification of any unstated assumptions, analytical gaps, or limitations.

3 INDEPENDENCE REQUIREMENTS

- Reviewer identity is held under NDA and is not disclosed in published materials.
- The reviewer has no editorial influence over FIG analytical outputs — the review is pass/fail with documented rationale.
- FIG may not selectively disclose, suppress, or amend review findings.
- The reviewer's anonymised credential summary and verdict are sealed into the evidence package.

4 VERDICT CATEGORIES

- **PASS** — Reconstruction meets evidential standard. Approved for publication and blockchain timestamping.
- **CONDITIONAL PASS** — Minor clarifications required. Approved subject to documented amendments and re-review.
- **FAIL** — Material deficiency identified. Reconstruction must be revised and re-submitted for full review.

5 EVIDENCE SEALING

The review verdict, anonymised reviewer credential summary, and review date are included in the final evidence package. The complete package — reconstruction data, analytical outputs, and independent review verdict — is blockchain-timestamped on the Polygon network. The timestamp hash is published alongside the reconstruction report.