

Aware Mate Operational Test Summary

Anonymised external summary | December 2025

72-hour live bridge trial indicates operational feasibility for Aware Mate in routine watchkeeping, with passed headline KPIs, positive crew usability and defined privacy-by-design controls.

98.7%

system uptime

93%

trackable watch-time coverage

2.4 s

P95 alert latency

0.08/h

false critical alerts

4.6/5

crew acceptance (n=5)

1. Trial scope

- 72-hour operational bridge trial in December 2025 on a RO-PAX vessel in routine service.
- Objective: verify end-to-end capture, inference, alerting, logging and reporting in a real bridge environment.
- Conditions covered: daylight and IR-assisted night operation.
- Evidence sources: on-device logs, annotated segments, commissioning checklist and crew debrief.

2. System & integration

- On-board, human-in-the-loop alertness monitoring system using non-identifying behavioural indicators.
- Inputs include eyelid closure/PERCLOS, gaze stability, head pose/posture and object-in-hand cues.
- Advisory only; no automated navigation decisions.
- Configured with local audio alerting, manual mute/override and optional BNWAS dry-contact escalation.

3. Observed results

- All headline KPI categories passed against the trial thresholds.
- Alert latency was 1.8 s mean and 2.4 s P95 (95% of alerts within 2.4 s).
- Annotated subset: 4% missed critical events, 88% / 82% distraction precision/recall and 87% head-tilt accuracy.
- Day and night operation remained stable. Strong dawn glare caused brief tracking degradation, with no cascaded false critical alarms. No commissioning FAIL items were recorded.

4. Governance, limits & next step

- Edge-only deployment; no cloud video by default; no identity recognition; no emotion recognition.
- Off-vessel export limited to anonymised/aggregated metrics; 14-day retention for derived logs; RBAC + audit logging enabled.
- Recommended next step: repeat on additional bridge layouts to broaden representativeness.