Temporal Ethical Guidance System for AI

Flight-Plan-Based Trajectory Monitoring, Waypoint Assessment & Corridor Deviation Detection

THE INNOVATION

A temporal ethical guidance system that introduces time as an explicit binding variable between normative ethical models and observed behavioral assessments—adapted from cruise missile navigation principles (TERCOM/TAINS). Defines expected behavioral trajectories as configurable Ethical Flight Plans with waypoints and corridor bounds, tracks agent lifecycle state, computes deviation in multi-dimensional ethical space with Green/Yellow/Red alerting, and maintains probabilistic behavioral estimates between assessments through inertial monitoring with exponential confidence decay.

WHAT IT DOES

✓ Ethical Flight Plans defining expected behavioral trajectories with waypoints and progressive corridor bounds (Day 0 through Day 90+)

✓ Three-variable guidance equation: G(t) = f(FlightPlan(t), Assessment(t), TemporalContext(t)) binding Map, Snapshot, and Time

✓ Agent lifecycle clock with 5 operational phases (Initialization → Calibration → Growth → Maturation → Steady State) + 3 exception phases

✓ Inertial ethical monitoring between assessments with confidence decay: C(t) = e^(−0.693 × h / h_half)

✓ Temporal Go/No-Go enhancement combining standard Pass/Fail with corridor classification and lifecycle phase

WHY IT MATTERS

For over a decade, cruise missile guidance had terrain maps and radar readings but couldn't navigate—because time wasn't in the equation. AI governance faces the same problem.

Existing systems know where an agent should be ethically and where it is now. But without time as an explicit variable, they can't determine if the agent is on course, drifting, or accelerating toward failure.

The Temporal Guidance System solves this: flight plans define the expected trajectory, waypoints check progress, and corridor bounds detect deviation before crisis—turning reactive snapshots into proactive navigation

KEY CLAIMS (13 total)

1. Ethical Flight Plan system with temporal waypoints, corridor bounds, and linear interpolation between waypoints
2. Three-variable guidance equation binding normative model, behavioral assessment, and temporal context
3. Agent lifecycle clock with 8-phase state machine (5 operational + 3 exception) and configurable transitions
4. Inertial ethical monitoring with exponential confidence decay and unscheduled assessment recommendations
5. Temporal Go/No-Go decision matrix combining assessment results with corridor status and lifecycle phase
6. Corridor-based deviation detection with progressive tightening and Euclidean multi-dimensional magnitude

STATUS

- Filing: February 22nd, 2026
- Type: US 63/988,410
- Builds On: Patents 1-6

APPLICATIONS

- Predictive AI governance and early warning
- Regulatory compliance forecasting
- Model update behavioral impact analysis

Live trajectory monitoring is operational:
aiassesstech.com

Scan to verify