NavalBrain



SERVING THE COMMERCIAL SHIPPING SECTOR

Know your *vessel.*

Approaching your problems from their core. Using ***vessel physics*** and a holistic approach to adapt to each vessel's ***needs and goals***.

Six tools, one platform. NavalBrain turns your already existing data like the noon reports, AIS tracks and documents into fuel saved, emissions cut and decisions you can defend.

- **NavalHull**
- **NavalBurn**
- **NavalRetrofit**
- **NavalRoute**
- **NavalDecision**
- **NavalReport**

PHYSICS IN. EUROS OUT.

navalbrain.com



Clean data in. *Money out.*

Most noon reports carry mistakes. A decimal in the wrong place, a draft copied from yesterday. Your current systems take them in silently, and every decision built on them inherits the error.

NOON REPORT VALIDATOR

Every report is checked before it is used. Cross-checked and certified with multiple sources of truth. Clean data = Clean decisions

REAL EXAMPLE · ONE VESSEL, ONE QUARTER

Same ship. Same fouling. *Different bill.*

Without NavalBrain- ***Fouling found at the calendar cleaning***

90 days

With NavalBrain - ***Clean data, fouling flagged in week 3***

30 days

Days of excess fuel burn before the hull is cleaned

120 t	≈€97,000	≈370 t
fuel saved	fuel cost saved	CO_2 avoided

One ship, one quarter. Now multiply it by your fleet.

Basis: 25 t/day of VLSFO at ≈810/t, vessel with 8% fouling penalty (2 t/day), 3.114 t CO_2 per tonne of fuel. EU ETS savings on EU voyages come on top.

Burn less. *Earn more.*

NavalHull 01

See what your hull is costing you, every day.

The problem. Fouling builds quietly. The engine works harder and the bunker bill climbs. Firms send divers, and they find nothing.

- Hull condition tracked daily along with a built-in digital twin.
- Fuel, CO_2 and euros lost to fouling, per day.
- The best moment to clean, with the payback shown.

NavalBurn 02

Know where every tonne of fuel goes.

The problem. Reported, warranted and actual consumption rarely agree, and claims are fought with spreadsheets.

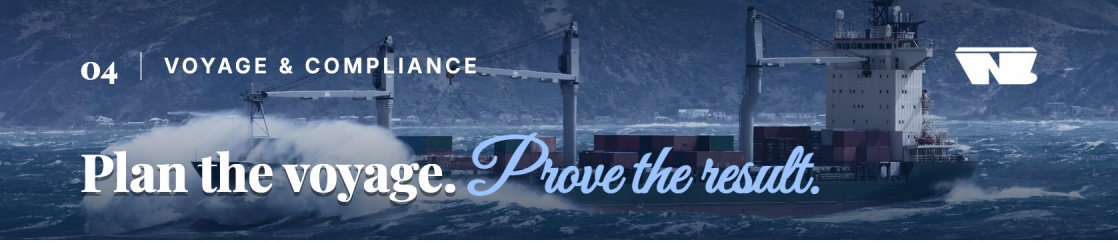
- Expected vs actual burn, corrected for weather and draft.
- Over-consumption flagged early, with the likely cause.
- Physics-backed figures you can show a charterer.

NavalRetrofit 03

Fit the upgrades that pay back. Skip the rest.

The problem. Every maker promises big savings. A wrong retrofit costs capital, dry-dock time and years of regret.

- Each option simulated on your vessel and her real trades.
- Fuel saved, payback, NPV and IRR, worst to best case.
- Financial, Compliance and Technical approach



Plan the voyage. *Prove the result.*

NavalRoute 04

Arrive on time, on less fuel, with no wait at anchor.

The problem. A fast passage is wasted if the ship then waits days at anchor. Speed orders rarely keep up.

- Route and speed planned around weather and currents.
- Arrival timed to the port queue, within charterparty terms.
- Every option priced in fuel, emissions and euros.

NavalDecision 05

Hard calls, made with a holistic approach.

The problem. Clean now or later? Slow down or keep schedule? Each department sees one piece of the answer.

- **9 AI agents** examine every option, then vote:

  Hydrodynamic · Machinery · Structural · Seakeeping · Stability · Charter party · Regulatory · Financial · **Orchestrator**

- Each agent votes for a decision based on its point-of-view. The Director then examines and recommends, with the reasoning shown.

NavalReport 06

The report writes itself.

The problem. Superintendents lose days each month rebuilding the same emissions reports in different formats.

- Ask in plain words. NavalReport builds the report.
- CII, EU ETS, FuelEU and performance, any period.
- Excel, Word or PDF, on demand or every week.

Know the physics. Do the math. *Save fuel.*



Physics first.
Every figure traces back to how your ship actually moves through the water. No black boxes.

Your data stays yours.
Our AI runs on our own hardware. Vessel data is never sent to outside AI providers.

Works with what you have.
Noon reports, IoT/telemetry, AIS, sea trials and vessel documents. No new sensors on board.

Euros, not just charts.
Every result ends in money: fuel, emissions, penalties and payback.

GETTING STARTED

1
Share
Noon reports and documents for two of your vessels.

2
Baseline
We build each vessel's performance baseline.

3
Results
Savings, risks and reports, per vessel, in euros.



Know more.
Burn less.
Perform better.

See it on your own fleet.

Send us the data for two vessels. We'll show you what their hulls, fuel and compliance are really costing, in euros.

navalbrain.com enquiries@navalbrain.com

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