

The Human Element in Navigation

What the Data Reveals Beyond the Scores

From 82% in 2020 to 93.5% in 2026, VDR assessment scores show clear improvement. Yet human-element concerns remain.

↑ 15%

Distraction from phones, media and visitors: the fastest rising bridge finding

↑ 12%

Under keel clearance calculation errors: the second fastest rising finding

2 in 3

Bridge Findings happen when a Pilot is on board the vessel

Only **13%** of Navigation Findings are about Faulty Equipment. **The rest are about people.**

SELF-ASSESSED COMPETENCE VS. VR-ASSESSED REALITY

High Self-Confidence. **A Different Reality in VR.**

Situational Awareness



Decision-Making



Every officer rated themselves 4 out of 5 or higher. Stress was the only area where they rated themselves lower.

Self-ratings (1 to 5) are shown as a percentage of the maximum. Read the gap as a direction, not an exact figure.

THREE HUMAN FACTORS THE DATA CAN NO LONGER IGNORE

1

Technology Is Only as Good as the Decisions Behind It

35% of watchkeeping findings involve misuse of radar, ECDIS or AIS.

2

When Pressure Rises, Teamwork Is Tested

Most bridge findings happen with a pilot on board, and officers rate stress management as their weakest area.

3

Knowing the Procedure Doesn't Mean Following It

Half of human-element audit findings involve procedures that exist but are not followed, yet compliance is the highest self-rating.

OFFERED FOR DISCUSSION

If Officers Rate Themselves Highly on Compliance, Why Aren't Procedures Always Followed?

Is a Master-Pilot Exchange Just a Checklist, or a True Test of Teamwork?

None of these is a knowledge problem alone. They are behaviours.