Course Syllabus

Course Title:	**Navigational Audits – From Checklist to Corrective Action**

Course Duration:	16.5 Hours
Course Difficulty:	Advanced
Course Category:	Compliance

Learning Outcomes

- Plan, conduct and report a structured navigational audit that produces defensible, evidence-based findings
- Build the audit criteria matrix for any vessel from convention, flag, class, company and industry requirements
- Audit passage planning and voyage execution against the appraisal, planning, execution and monitoring cycle
- Assess watchkeeping, lookout and bridge resource management as a system rather than as individual error
- Evaluate the carriage, condition, calibration and operational use of bridge equipment and navigation systems
- Verify navigational records against recorded data and recognize the red flags that indicate poor record-keeping
- Grade findings against objective evidence and drive root-cause corrective action through to verified closure
- Feed navigational audit results into management review so that fleet navigational performance improves measurably

References:	SOLAS 1974 as amended, Chapter V, Safety of Navigation / SOLAS Chapter IX and the ISM Code, 2018 Edition, Clauses 8, 9, 11, 12 and 13	STCW Convention and Code, 2010 Manila Amendments, Chapter VIII and Tables A-II/1 and A-II/2 / COLREGs 1972 as amended, Rules 5 to 10, 19 and 34
	IMO Resolution A.893(21), Guidelines for Voyage Planning / MSC.1/Circ.1503/Rev.1, ECDIS – Guidance for Good Practice	MLC 2006, Regulation 2.3 and Standard A2.3, hours of work and hours of rest / ICS Bridge Procedures Guide, OCIMF TMSA and SIRE 2.0 vetting criteria

Course Subject	Time
Introduction • How to use this course • Course purpose, scope and the boundary of a navigational audit • Competences, learning outcomes and indicative learner time • Coverage crosswalk to the learning outcomes • Content currency, verification and the limits of this course	
Chapter 1: Introduction to Navigational Audits • What a Navigational Audit Is – Definition, Scope and the Boundaries That Keep It Auditable • Why Navigational Audits Matter – Casualty Patterns, Consequences and the Improvement Loop • Types and Approaches – Planned and Targeted, Internal and External, Desktop and On-Board • The Audit Team and Its Roles – Lead Auditor, Auditor, Observer and the Independence Requirement • Reading This Course – Source-Status Labels, Citation Form and the Running Example	1.5 Hour

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Course Subject	Time
Chapter 2: The Regulatory and Industry Framework • The Audit Criteria Hierarchy – Ordering Convention, Flag, Class, Company and Industry Requirements • SOLAS Chapter V – The Core Navigational Criteria and What Each Regulation Actually Requires • STCW Competency and Watchkeeping Requirements – The Benchmark the Auditor Tests Against • The ISM Code – Where the Navigational Audit Legally Lives • COLREGs as Audit Criteria – Turning Rules of the Road into Auditable Evidence • IMO Resolutions and Circulars – Recommendatory Weight and How to Cite It in a Finding • Flag State, Class and Company Requirements – Exemptions, Equivalents and the SMS as Primary Criterion • Industry Standards and Vetting Regimes – ICS, OCIMF TMSA and SIRE as Benchmark, Not Requirement	1.5 Hour
Chapter 3: Audit Preparation, Planning and the Audit Team • Defining Scope and Objectives – Writing a Scope Statement That Survives Contact With the Ship • The Audit Programme – Frequency, Coverage and Scheduling Against Vessel Operations • Risk-Based Selection – Choosing the Focus From Vessel History, Trade and Previous Findings • The Pre-Audit Desktop Review – Procedures, Previous Findings, Incidents and Port State Records • Building the Audit Checklist – Criteria-Linked, Evidence-Oriented and Not a Scorecard • Sampling Strategy – Selecting Voyages, Ports, Watch Periods and People • Team Assignment, Pre-Briefing and Audit Logistics • The Opening Meeting – Agenda, Tone and Setting Expectations With the Bridge Team • Conducting the Remote and Hybrid Audit – What Presence Adds, and How to Audit Without It	1.5 Hour
Chapter 4: Auditing Passage Planning and Voyage Management • The Four Elements of Passage Planning – Appraisal, Planning, Execution and Monitoring • Auditing the Planning Process – Who Plans, When, With What Data and Under Whose Approval • The Defect Catalogue – Typical Passage Plan Deficiencies and What Each One Signals • Auditing Voyage Execution – Adherence, Amendment, Re-Planning Triggers and Sign-Off • Voyage Management and Information Flow – Passage Orders, Voyage Data and Communication of Change • Worked Case – The Defective Passage Plan on the MV Kestrel Bay	1.5 Hour
Chapter 5: Auditing Bridge Operations, Watchkeeping and Bridge Resource Management • Watch Arrangements – Composition, Adequacy and the Manning Decision Behind Them • Lookout – What Rule 5 Requires and What an Auditor Can Actually Verify • Relieving the Watch – The Procedure, Its Failure Points and the Audit Checkpoints at Each Step • Bridge Resource Management – Roles, Task Allocation, Communication and the Duty to Challenge • Navigational Decision-Making – Collision Risk, Safe Speed, Restricted Visibility and the Master's Override • Observing and Interviewing on the Bridge – Method, the Observer Effect and Question Design	1.5 Hour
Chapter 6: Auditing Bridge Equipment and Navigation Systems • Equipment Inventory and Carriage Requirements – What Must Be Fitted, and the Records That Prove It • ECDIS – Operational Use, Settings, Safety Parameters and the Paperless Decision • ECDIS Alarm Management, Chart Currency and Fallback Arrangements • Radar, ARPA and AIS – Settings, Target Handling and Cross-Checking Discipline • Position Fixing and Monitoring – GNSS, Gyro, Speed Log, Echo Sounder and Under-Keel Clearance • The Voyage Data Recorder – Coverage, Annual Performance Test and Use as Audit Evidence • Maintenance, Defects and Compensating Measures – Auditing the Defective Equipment Procedure	1.5 Hour
Chapter 7: COLREGs Compliance, Collision and Grounding Risk • COLREGs Compliance as Audit Criteria – Evidence-Based Assessment of Rule Observance • Grounding Risk – Under-Keel Clearance, Squat, Siltation and Tidal Windows • Collision Risk – High-Risk Encounter Geometries and the Decisions That Precede Them • Traffic Separation Schemes and Routeing Measures – Compliance, Deviation and Reporting • The Risk-Based Scenario Analysis Method – Building Scenarios From the Vessel's Own Trade	1.0 Hour

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Course Subject	Time
Chapter 8: Auditing Port Approach, Pilotage and Restricted Waters • Port Approach Procedures – Company Standards, Approach Planning and the Berth-to-Berth Principle • Pilotage – The Pilot Card, the Master and Pilot Exchange and the Limits of the Pilot's Role • Pilot Transfer Arrangements – Carriage, Rigging and the Audit Points That Catch Failures • Restricted Waters, Narrow Channels and Anchorage Practice • Tidal Operations and Weather Windows – Auditing the Decision to Proceed	1.0 Hour
Chapter 9: Records, Documentation and Data Review • The Deck Log and Bell Book – Required Entries, Completeness and What an Absence Proves • GMDSS and Radio Records – Tests, Distress Traffic and Equipment Status • Voyage Data Recorder Review – Extracting, Interpreting and Reconciling Recorded Data • ECDIS Audit Trails – Route Changes, Alarm History and Setting Changes • Safety Management System Records – Defects, Nonconformities, Near-Misses and Incident Reports • Record Integrity and Red Flags – Recognizing Falsification Without Accusing	1.0 Hour
Chapter 10: Human Factors, Competency and Familiarisation • Competency Verification – Certificates, Endorsements and the Gap Between Paper and Practice • Familiarisation – Shipboard, Equipment-Specific and After an Incident • Fatigue and Rest Hours – Auditing Records That Are Designed to Comply • Workload, Automation Complacency and Distraction on the Modern Bridge • Safety Culture, Reporting Culture and Leadership – What the Interview Actually Measures	1.0 Hour
Chapter 11: Findings, Reporting, Corrective Action and Effectiveness • Objective Evidence – What Counts, What Does Not, and How Much Is Enough • Grading Findings – Conformity, Observation, Nonconformity and Major Nonconformity • Writing the Finding – The Fact, Criterion and Risk Structure • Common Finding-Writing Errors and How to Correct Them • The Closing Meeting and the Audit Report – Structure, Tone and Distribution • Root Cause Analysis and Corrective Action Planning • Verifying Effectiveness and Feeding the Management Review	1.0 Hour
Chapter 12: The Capstone Audit of the MV Kestrel Bay • The Capstone Brief – Vessel, Company, Trade and the Trigger for the Audit • The Capstone Document Pack – SMS Extracts, Passage Plan, Logbook, Recorded Data and Certificates • Working the Audit – Scope, Sampling, Checklist and Evidence Collection • The Model Findings Register – Twelve Findings Graded and Justified • The Model Audit Report and Corrective Action Plan • Closing the Course – What a Navigational Auditor Actually Carries Forward	1.5 Hour

Course Final Assessment	**1.0 Hour**

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