



COURSE OVERVIEW TM0036 **RCA Facilitators**

Course Title

RCA Facilitators

Course Date/Venue

August 24-28, 2025/Meeting Plus 9, City Centre Rotana, Doha, Qatar

Course Reference

TM0036

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



Course Description



This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art simulators.

This course is designed to provide participants with a detailed and up-to-date knowledge of RCA Facilitators. It covers the root cause analysis (RCA) covering its significance in operations, benefits, types of problems suited for RCA and relationship with incident investigation and reliability; the role of an RCA facilitator, determine when RCA is required and the use of risk matrices and incident escalation criteria; the RCA frameworks and methodologies, data collection and investigation planning and problem definition and scoping; and facilitating effective RCA teams, the 5 whys technique and cause-and-effect (fishbone/ishikawa) diagram.



During the course, participants will learn the timeline and event mapping, barrier and systems analysis and use RCA software tools; the root versus contributing causes, types of human error and human performance improvement (HPI) principles; using change analysis and comparative techniques, RCA findings verification, developing effective recommendations and presentation and reporting skills; the corrective and preventive actions (CAPA) development and RCA leadership and governance; leading investigations during high-pressure incidents, facilitating time-sensitive root cause investigations and the regulatory and compliance requirements; overcoming common pitfalls, integrating root cause program, RCA metrics and performance track; and facilitator skills development.





Course Objectives

Upon the successful completion of this course, each participant will be able to: -

- Get certified as a “*Certified Root Cause Analysis (RCA) Facilitator*”
- Discuss root cause analysis (RCA) covering its significance in operations, benefits, types of problems suited for RCA and relationship with incident investigation and reliability
- Explain the role of an RCA facilitator, determine when RCA is required and use risk matrices and incident escalation criteria
- Perform RCA frameworks and methodologies, data collection and investigation planning and problem definition and scoping
- Facilitate effective RCA teams, identify the 5 whys technique and cause-and-effect (fishbone/ishikawa) diagram
- Carryout timeline and event mapping, barrier and systems analysis and use RCA software tools
- Determine root versus contributing causes, types of human error and human performance improvement (HPI) principles
- Use change analysis and comparative techniques, verify RCA findings, develop effective recommendations and employ presentation and reporting skills
- Discuss corrective and preventive actions (CAPA) development and RCA leadership and governance
- Lead investigations during high-pressure incidents, facilitate time-sensitive root cause investigations and follow regulatory and compliance requirements
- Overcome common pitfalls, integrate root cause program, track RCA metrics and performance and discuss facilitator skills development

Exclusive Smart Training Kit - H-STK®



*Participants of this course will receive the exclusive “Haward Smart Training Kit” (H-STK®). The H-STK® consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.*

Who Should Attend

This course provides an overview of all significant aspects and considerations of RCA facilitators reliability engineers, process engineers, maintenance engineers, electrical, mechanical, civil, and instrument engineers, operations supervisors, maintenance supervisors, plant technicians or operators, HSE engineers/officers, quality assurance (QA) staff, quality control (QC) staff, incident investigators, risk managers, project engineers, asset integrity engineers, shutdown and turnaround coordinators, department heads, shift supervisors, team leaders, internal auditors (safety, maintenance, operational), compliance and regulatory affairs officers, designated RCA facilitators and other technical staff.

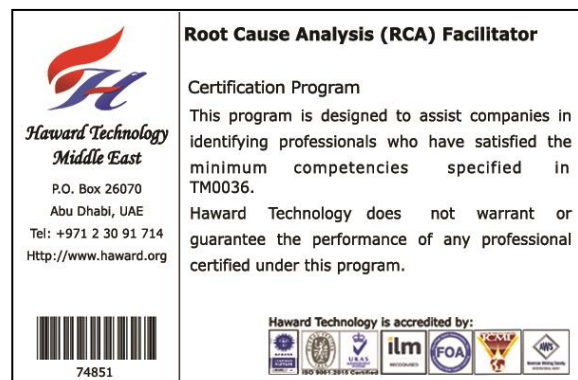
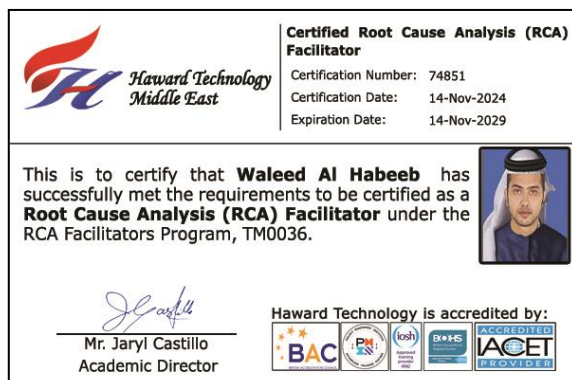
Course Certificate(s)

- (1) Internationally recognized Competency Certificates and Plastic Wallet Cards will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Successful candidate will be certified as a “*Certified Root Cause Analysis (RCA) Facilitator*”. Certificates are valid for 5 years.

Recertification is FOC for a Lifetime.

Sample of Certificates

The following are samples of the certificates that will be awarded to course participants:-





- (2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.

* Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology *

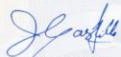
 **Haward Technology Middle East**
Continuing Professional Development (HTME-CPD)

CEU Official Transcript of Records

TOR Issuance Date: 14-Nov-24
HTME No. 74851
Participant Name: Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
TM0036	RCA Facilitators	Nov 10-14, 2024	30	3.0

Total No. of CEU's Earned as of TOR Issuance Date **3.0**

TRUE COPY

Jaryl Castillo
Academic Director

Haward Technology has been approved as an Accredited Provider by the International Association for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1-2018 Standard which is widely recognized as the standard of good practice internationally. As a result of their Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for programs that qualify under the ANSI/IACET 1-2018 Standard.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking Continuing Education Units (CEUs) in accordance with the rules & regulations of the International Association for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology is accredited by

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* Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology *

Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

-  British Accreditation Council (BAC)
Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.
-  The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

Course Fee

US\$ 6,000 per Delegate. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.



Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. John Burnip, EHS, SAC, STS, NEBOSH-ENV, NEBOSH-IGC, NEBOSH-IFC, NEBOSH-PSM, NEBOSH-IOG, TechIOSH, is a **NEBOSH Approved Instructor** and a **Senior HSE Consultant** with over **50 years** of practical **Offshore & Onshore** experience within **Oil, Gas, Refinery, Petrochemical** and **Nuclear** industries. His wide experience covers **NEBOSH** International General Certificate in Occupational Health & Safety, **NEBOSH** National Certificate in Construction Health & Safety, **NEBOSH** Certificate in Process Safety Management, **NEBOSH** Environmental Management Certificate, **NEBOSH** Certificate in Fire Safety, **NEBOSH** International Oil & Gas Certificate, Root Cause Analysis (**RCA**), **PHA**, **HAZOP**, **HAZCOM**, **HAZMAT**, **HAZID**, **Hazard & Risk Assessment**, **Emergency Response**

Procedures Behavioural Based Safety (**BBS**), **Confined Space Entry**, **Fall Protection**, **Emergency Response**, **H₂S**, Safety Management System (**ISO 45001**), **Accident/Incident Investigation** System and Report **PSM**, **Risk Assessment**, **SCE FMEA Failure Investigations**, Site Management Safety Training (**SMSTS**), **Occupational Health & Safety** and **Industrial Hygiene**, **Crisis Management & Damage Control** in Oil & Gas Industry, **Enhancing HSSE Safety Performance & Effectiveness**, **Overhead & Gantry Crane Safety**, **HSSE Principles & Practices Advanced**, **Lifting & Rigging Equipment** Lifting Tackles Inspection License/Relicense, **API 780 Security Risk Assessment Methodology** for Petroleum & Petrochemical, **Advanced Process Safety Management** with **PHA**, **Quantitative and Qualitative Risk Assessment**, **IADC/API Mobile Drilling Rig Inspections**, **Maintenance and Audits**, **H₂s Training and Rescue with Respiratory Equipment**, Job Safety Analysis (**JSA**), **Work Permit & First Aid**, Project HSE Management System, Health & Hygiene Inspection, **PTW Control**, Process Modules **Fire & Gas Commissioning**, **MSDS**, **Ergonomics**, **Lockout/Tagout**, **Fire Safety & Protection**, **Spill Prevention & Control**, **Tower & Scaffold Inspection**, **Scaffolding Operations**, **Scaffolding Equipment**, **Bracket Scaffolds**, **Scaffolding Labelling**, **Pre-fab Scaffolding**; Erecting, Maintaining & Dismantling **Scaffolding** in accordance with the **British Standards Code of Practice 5973**; **Heavy Lifting** operations, **Cantilevered Hoists**, **Offshore Operations**, **Offshore Construction**, **Basic Offshore Safety Induction & Emergency Training (BOSIET)**, **Onshore Fabrication & Offshore Pipelaying & Hook-Up**, **Crane Inspection**, **Crane Operations**, **Oilfield Startup & Operation**, **Steel Fabrication**, **OSHA**, **ISO 9001**, **ISO 14001**, **OHSAS 18001** and **IMO (SOLAS) Regulations**. Mr. Burnip has greatly contributed in upholding the highest possible levels of safety for numerous International Oil & Gas projects, Generation Systems & Platform Revamp, **LPG & Gas Compression**, **Marine**, **Offshore** and **Power Plant Construction**. Currently, he is the **HSE Advisor** of **Solvay** wherein he is responsible in planning and implementation of the corporate safety program (**OSHA codes**).

During Mr. Burnip's long career life, he had successfully carried out numerous projects in **Europe**, **North America**, **South America**, **Southeast Asia**, **Middle East** and the **North Sea**. He had worked for **Delta Offshore Group**, **Solvay Asia Pacific**, **Likpin Dubai**, **SADRA/DOT**, **ZADCO**, **McDermott International (USA, Qatar, Egypt, India, Oman, Dubai and Abu Dhabi)**, **PDO**, **Shell**, **ARAMCO**, **Salman Field**, **Leman Offshore Gas Field**, **GEC**, **Harland & Wolff PLC Belfast** in North Ireland, **Howard Doris – Kishorn** in Scotland, **Westinghouse Electric** in Brazil and South Korea and **Chevron Oil** in Scotland as the **Commissioning Project Engineer**, **Project & Safety Engineer**, **Estimating Engineer**, **Senior Instrument Engineer**, **Instrument Field Engineer**, **Lead Instrument Engineer**, **Instrument Engineer**, **Engineer**, **Emergency Response Training Manager**, **HSE Advisor**, **HSE Instructor**, **HSE Supervisor**, **Instrumentation Supervisor**, **Instrumentation Specialist**, **Project Coordinator**, **Instrumentation Technician** and **Tank Farm Instrumentation Technician**.

Mr. Burnip has a **Bachelor's degree in Business Studies** from the **Somerset University (UK)**. He is a **Certified/Registered Tutor** in **NEBOSH Certificate in Environmental Management**, **NEBOSH International General Certificate**, **NEBOSH International Certificate in Fire Safety & Risk Management**, **NEBOSH Process Safety Management Certificate** and **NEBOSH International Oil & Gas Certificate**; a **Certified Safety Auditor (SAC)**; a **Certified ISO 45001 Auditor**; an **Environmental Health and Safety Management Specialist** on **Fall Protection**, **Elevated Structures**, **Material Handling**, **Trenching & Excavations**; a **Welding Brazing Safety Technician**; a **Certified Safety Administrator (CSA)** - General Industry; a **Safety Manager/Trainer** – General Industry; a **Petroleum Safety Manager (PSM)** - Drilling & Servicing; a **Petroleum Safety Specialist (PSS)** - Drilling & Servicing; a **Safety Planning Specialist**; a **Safety Training Specialist**; a **Certified Instructor/Trainer**; a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management (ILM)** and further holds a **Certificate in Mechanical Engineering Craft Practice** from the **City & Guilds of London Institute**; a **NEBOSH Level 3 Construction Certificate (UK)**; and holds a **Cambridge Teaching Certificate**. He is a well-regarded member of the **National Association of Safety Professionals**, the **Association of Cost Engineers (UK)**, **Institution of Occupational Safety & Health (TechIOSH)** and an **Associate Member** of **World Safety Organization**. Further, he has conducted innumerable trainings, workshops and conferences worldwide.



Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Practical Workshops & Work Presentations
- 30% Hands-on Practical Exercises & Case Studies
- 20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1: Sunday, 24th of August 2025

0730 – 0800	<i>Registration & Coffee</i>
0800 – 0815	<i>Welcome & Introduction</i>
0815 – 0830	PRE-TEST
0830 – 0930	Introduction to Root Cause Analysis (RCA) <i>Definition of RCA & its Significance in Operations • Benefits: Incident Prevention, Cost Reduction, Compliance • Types of Problems Suited for RCA • Relationship with Incident Investigation & Reliability</i>
0930 – 0945	<i>Break</i>
0945 – 1030	Understanding the Role of an RCA Facilitator <i>Key Facilitator Responsibilities & Competencies • Neutrality, Communication & Leadership Qualities • Managing Group Dynamics & Biases • Ethics & Confidentiality in RCA Facilitation</i>
1030 – 1130	Triggering Events for RCA <i>Determining When RCA Is Required (Based on Severity, Frequency, Potential) • Use of Risk Matrices & Incident Escalation Criteria • Reactive versus Proactive Triggers • Integration with Organizational Safety Management Systems</i>
1130 – 1215	RCA Frameworks & Methodologies <i>Overview of Common RCA Models (5 Whys, Fishbone, Taproot®, Apollo, etc.) • Differences Between Shallow & Deep Analysis • Choosing the Right Method Based on Incident Type • Aligning Methodology with Company Standards</i>
1215 – 1230	<i>Break</i>
1230 – 1330	Data Collection & Investigation Planning <i>Planning an Effective RCA Session (Timeline, Scope, Team) • Types of Data: Physical Evidence, Digital Logs, Interviews, Procedures • Interviewing Techniques & Note-Taking • Securing the Incident Scene & Chain of Custody</i>
1330 – 1420	Problem Definition & Scoping <i>Problem versus Symptom Clarification • Writing a Clear & Precise Problem Statement • Defining the Boundaries & Timeline of the Incident • Use of the “Is/Is Not” Method</i>
1420 – 1430	Recap <i>Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow</i>
1430	<i>Lunch & End of Day One</i>



Day 2: Monday, 25th of August 2025

0730 – 0830	Facilitating Effective RCA Teams Selecting Cross-Functional Participants • Establishing Roles & Responsibilities • Building Trust & Psychological Safety • Managing Dominant Personalities & Quiet Participants
0830 – 0930	5 Whys Technique Overview & Structure of 5 Whys • Avoiding Logic Jumps & Circular Reasoning • Group Practice with Real-World Examples • Validation of Root Causes Identified
0930 – 0945	Break
0945 – 1100	Cause-&-Effect (Fishbone/Ishikawa) Diagram Constructing the Main Effect & Category Branches • Identifying Causal Relationships • Facilitating Brainstorming Sessions • Linking to Root Causes & Evidence
1100 – 1215	Timeline & Event Mapping Developing a Sequence of Events Leading to Failure • Identifying Key Milestones & Decision Points • Time Correlation of Multiple Systems/Failures • Use of Incident Logs & Control Room Records
1215 – 1230	Break
1230 – 1330	Barrier & Systems Analysis Identification of Failed, Missing, or Inadequate Safeguards • Human, Technical & Organizational Barriers • Barrier Effectiveness Rating • Use of Swiss Cheese & Bowtie Diagrams
1330 – 1420	Using RCA Software Tools Overview of Common RCA Software (e.g., Realitycharting®, Causelink®, Taproot® Software) • Building Cause Maps Digitally • Uploading Evidence & Linking Findings • Collaborative Remote RCA Facilitation Features
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Two

Day 3: Tuesday, 26th of August 2025

0730 – 0830	Determining Root versus Contributing Causes Definitions & Examples • Criteria for a True Root Cause • Techniques to Validate Causal Logic • Avoiding Scapegoating & Blame
0830 – 0930	Understanding Human Factors Types of Human Error: Slips, Lapses, Mistakes, Violations • Influence of Fatigue, Environment, Procedures, Training • Human Performance Improvement (HPI) Principles • Cognitive Biases & Decision-Making Traps
0930 – 0945	Break
0945 – 1100	Using Change Analysis & Comparative Techniques Comparing What Went Wrong versus What Should Have Happened • Change Analysis Tables • Cause-And-Effect Cross-Examinations Deviation-Based Reasoning
1100 – 1215	Verification of RCA Findings Validating Root Causes with Evidence • Correlating Data with Root Cause Tree • Confirming Reliability with Independent Reviewers • Avoiding Common Fallacies in Root Cause Validation



1215 – 1230	<i>Break</i>
1230 – 1330	Developing Effective Recommendations <i>SMART Criteria (Specific, Measurable, Achievable, Realistic, Timely) • Levels of Recommendations: Short, Mid, Long-Term • Prioritizing Based on Severity & Recurrence Potential • Assigning Owners & Accountability</i>
1330 – 1420	Presentation & Reporting Skills <i>Structuring RCA Reports: Executive Summary to Appendices • Use of Visual Aids (Charts, Maps, Tables) • Communicating Findings to Leadership • Conducting RCA Presentation & Feedback Sessions</i>
1420 – 1430	Recap <i>Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow</i>
1430	<i>Lunch & End of Day Three</i>

Day 4: Wednesday, 27th of August 2025

0730 – 0830	Corrective & Preventive Actions (CAPA) Development <i>Root Cause Linkage to Action Items • Preventive versus Corrective Action Differences • Integration with Maintenance & Process Changes • Action Tracking & Verification</i>
0830 – 0930	RCA Leadership & Governance <i>Establishing RCA Program Structure • KPIs & Metrics for RCA Performance • RCA Program Audit & Continuous Improvement • Escalation & Support from Leadership</i>
0930 – 0945	<i>Break</i>
0945 – 1100	Facilitating RCA Under Pressure <i>Leading Investigations during High-Pressure Incidents • Managing Emotionally Charged Sessions • Time-Sensitive Root Cause Investigations • Balancing Thoroughness with Urgency</i>
1100 – 1215	Regulatory & Compliance Requirements <i>OSHA, EPA, API, ISO & Other Mandates • Legal Defensibility of RCA Reports • Confidentiality & Legal Privilege Considerations • Documentation & Retention Practices</i>
1215 – 1230	<i>Break</i>
1230 – 1330	Overcoming Common Pitfalls <i>Incomplete Data Collection • Jumping to Conclusions • Action Items Not Addressing Root Cause • Lack of Follow-Through or Leadership Buy-In</i>
1330 – 1420	Group Case Study & Simulation – Day 1 <i>Assignment of Roles & Incident Scenario • Timeline & Fact Collection • Building Event Maps & Cause Diagrams • Facilitator Leads Structured Session</i>
1420 – 1430	Recap <i>Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow</i>
1430	<i>Lunch & End of Day Four</i>



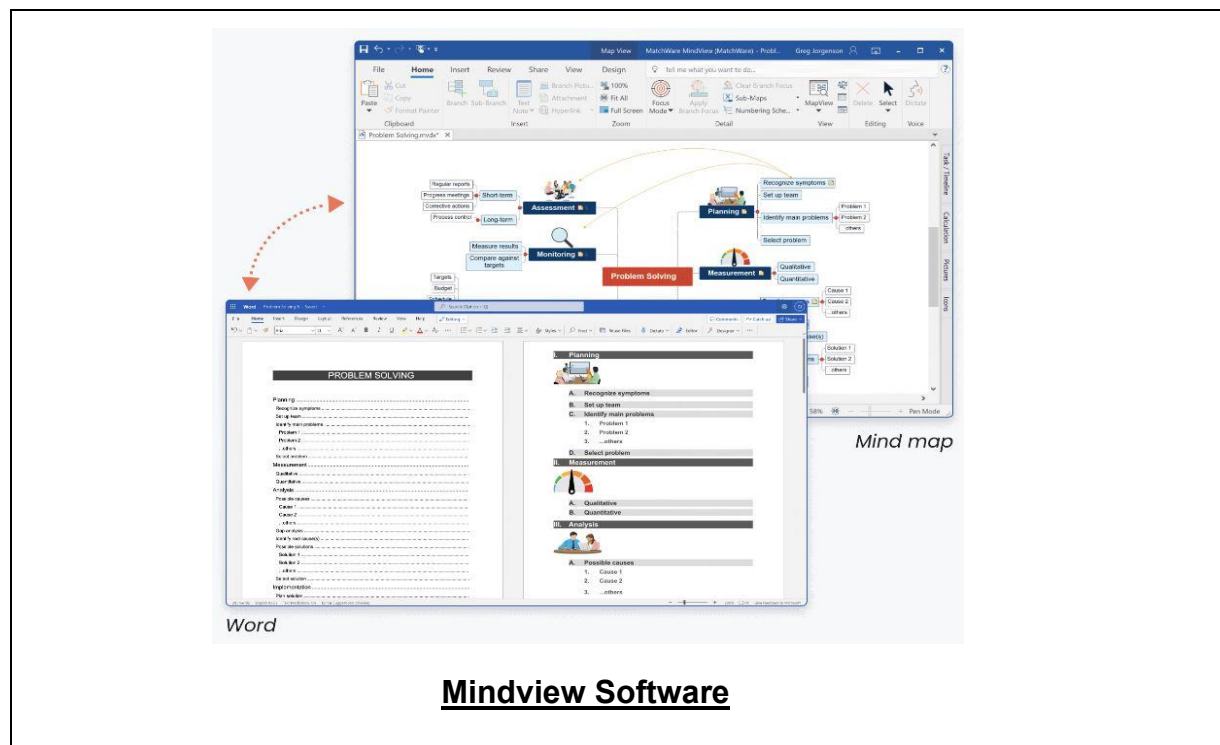
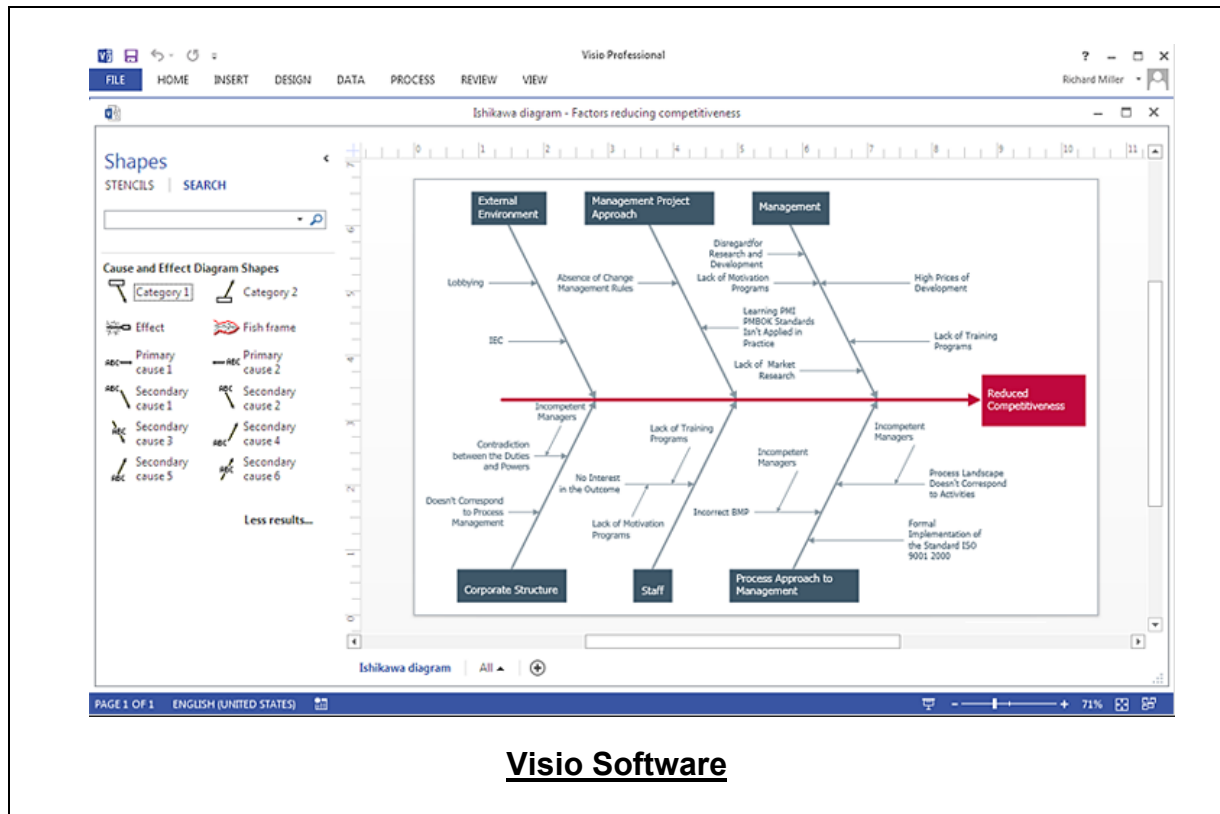
Day 5: Thursday, 28th of August 2025

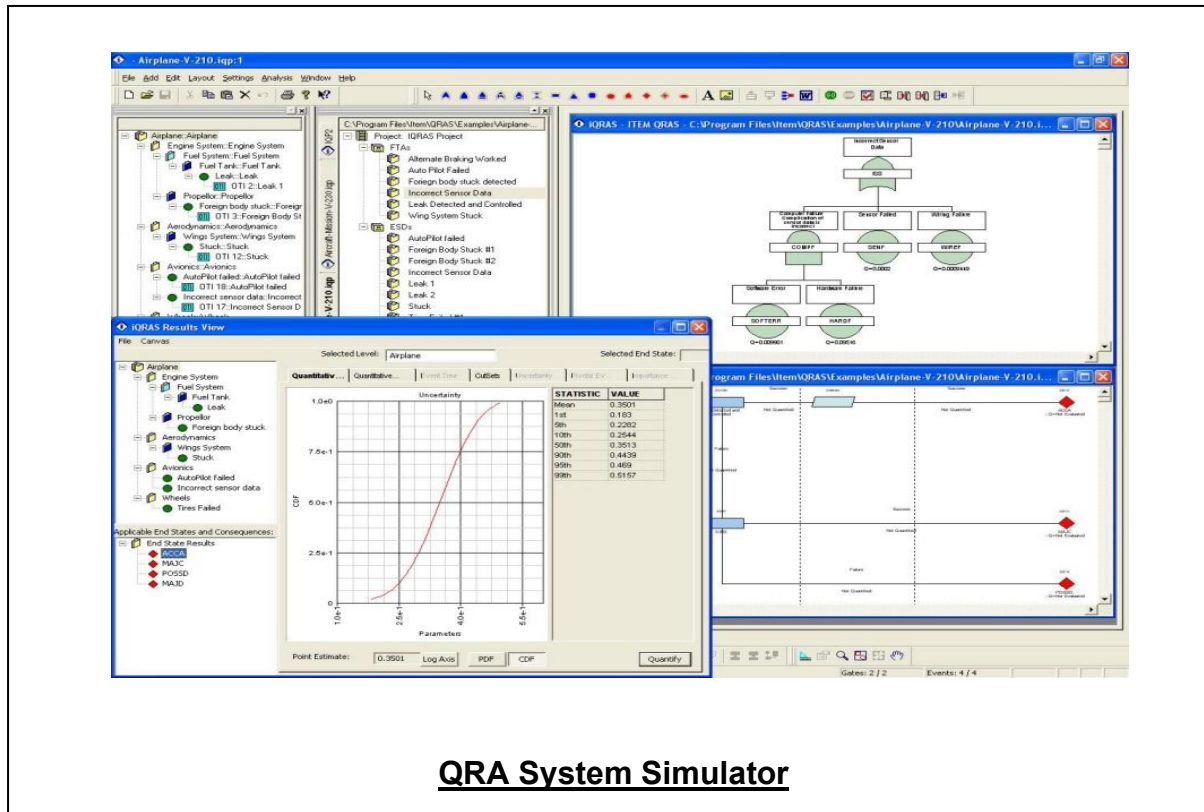
0730 – 0830	Group Case Study & Simulation – Day 2 Root Cause Identification • Recommendation Development • Presentation of Findings to Mock Panel • Feedback & Improvement Points
0830 – 0930	Root Cause Program Integration Linking RCA Outcomes to MOC & PHA • Trend Analysis & Systemic Risk Identification • Lessons Learned Database & Sharing • Aligning RCA with Reliability & Operational Excellence Programs
0930 – 0945	Break
0945 – 1030	RCA Metrics & Performance Tracking RCA Closure Rates & Implementation Tracking • Repeat Incident Analysis • Cost Savings & Value Creation Metrics • Integrating RCA Metrics in Safety Dashboards
1030 – 1130	Facilitator Skills Development Advanced Questioning & Active Listening • Conflict Resolution & Neutral Moderation • Driving Consensus & Engagement • Personal Facilitation Style Improvement
1130 – 1230	Course Review & Knowledge Assessment Final Assessment (Written or Digital) • Review of Methodologies, Tools & Practices • Feedback on Facilitation Techniques • Practical Problem-Solving Challenge
1230 – 1245	Break
1245 – 1345	Certification, Feedback & Closeout Certificate of Completion Issuance • Open Forum Q&A • Participant Feedback Session • Post-Course Resources & Ongoing Support
1345 – 1400	Course Conclusion Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course
1400 – 1415	POST-TEST
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course



Simulator (Hands-on Practical Sessions)

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using our state-of-the-art simulators “Visio Software”, “Mindview Software” and “QRA”.





Course Coordinator

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