

Reliability Academy

Reliability Engineering Training Courses

Action Error Analysis (AEA)

Goal: Sometimes methods like FMEA or HAZOP do not address all the risks properly when complicated operation or installation tasks are involved in the system. AEA is a systematic method to find risk potential in human actions, such as operator tasks, installation of safety systems and maintenance of complicated equipment. As a straight forward method, AEA resembles the well known method FMEA. The goal of this course is to add AEA to the toolbox of reliability and safety engineers in order to have a more complete coverage of the risk analysis effort.

1. Risk Analysis Terms and Concepts

-Basic terms and concepts used in risk analysis

2. Basics of the Action Error Analysis (AEA)

- AEA background, strengths and weaknesses
- Scope of the target system
- Preparations for AEA: needed documents and descriptions
- Organizing AEA sessions
- AEA analysis forms

3. Performance of the AEA

- How to perform AEA effectively: Simple AEA sequence explained
- Risk priority number
- Reporting and Actions: Typical report
- Typical mistakes in performing AEA
- Is AEA enough or should we use other methods too?

4. Exercises and Team work

-AEA on example systems

5. Summary

- Discussion, Q&A