Computing Facility for risk and reliability analysis

1   Computing Facility for risk analysis

Following computing facilities are available for performing the risk analysis:

I.   ISOGRAPH'S Fault Tree++: Systems reliability analysis tool containing integrated fault tree, event tree and Markov analysis features for Probabilistic Safety Assessment (PSA).

II. ISOGRAPH'S HAZOP+: The tool is used for Hazard and Operability Study (or HAZOP Study), which is a standard hazard analysis technique used in the preliminary safety assessment of new systems or modifications to existing ones.

III. RISK SPECTRUM PSA (Probabilistic Safety Analysis): Risk Spectrum PSA provides an intuitive user interface for modeling everything from the basic fault tree with AND and OR-gates to advanced fault tree and event tree integration of sequences in linked event trees with boundary conditions and CCF events.

2   Computing Facility for reliability analysis

Following computing facilities are available for performing the reliability analysis:

I.   LDRA TOOL SUITE: It facilitates static / dynamic analysis of C/C++ programs for digital system reliability and is thus helpful in building quality into the software development life cycle.

II. ReliaSoft's ALTA: It facilitates reliability analysis from testing data by providing an intuitive way to utilize complex and powerful mathematical models for quantitative accelerated life testing data analysis.

III. ALD RAM Commander Tool: It facilitates automation of the calculation process for reliability prediction of electronic boards and equipment.
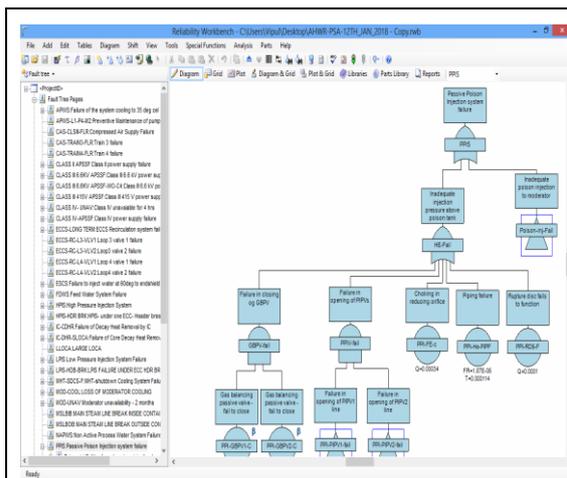
| Figure 1: A typical Fault Tree using Isograph | Figure 2: Reliability prediction in ALD RAM Commander |