Solving problems is everyday work for many people, but those who have been around for a while realise that many of the problems have happened before. The problem was not so much ‘solved’ as ‘reduced’.

In Aerospace, the level of oversight and the inherent safety culture mean that the important problems do get fixed. However, the complexities of the industry mean that many smaller problems do not get fully addressed. That is, the root causes are not identified and are therefore not removed or suppressed. This is despite the requirement, in AS9100, that systems exist to take corrective actions, to prevent repeat issues and to address and prevent potential problems. Exactly how this is done has been left to individual companies. There are many problem solving methodologies and structures, all of which can work.

For many years Nadcap has promoted, and continues to demand, Root Cause Corrective Action for all audit NCRs. Suppliers have been encouraged to apply the same disciplines to resolving all problems that may arise. The RCCA course addresses the underlying thinking required to get to the Roots of problems and can be used with almost any methodology, but it does not present any special structure for documentation requirements.

The Aero-Engine Supplier Quality Committee of SAE, representing the major aero-engine manufacturers, has decided that more is needed. A new standard, AS13000, has been issued which presents the problem solving methodology to be applied to problems in the aero-engine supply chain. It is being mandated by the end users for product-related issues right down the supply chain.

The method is based on the 8D format. This has been used for many years and is now the common standard in the Automotive industry. 8D supplies a process and reporting system that drives the problem solving with particular reference to product quality.

Most problem solving training courses, including eQuaLearn’s RCCA course, are general in nature. They are still effective and useful, but the 8D process is targeted at product issues. 8D links strongly into Quality Planning, cross referencing with such things as FMEA and Process Control systems. The process requires that particular tools are used as well as listing many product related issues that have to be addressed during the process.

AS13000 also requires that each team includes someone who has been trained and evaluated in the methodology. The standard includes a knowledge base, and it is around that this course has been prepared. The course includes a formal evaluation which must be successfully completed before a certificate is issued.

8D Problem Solving is a 2-day course covering all the aspects of using the 8D methodology to contain, solve and eliminate problems.

The course content covers the initial understanding of 8D, what it is and how it relates to other Quality Planning systems. It then goes into the various steps of the 8D structure, such as forming a
team, identifying the problem, containing the problem and so on and so forth. At the end of the course there is an exit assessment or test.

The training includes reference to, and guidance in the use of, common problem solving tools, such as Brainstorming, Is/Is-not analysis, 5-why, flowcharting, etc.

After the course attendees should be capable of completing 8D reports at all stages of the process. They should have an understanding of how each step works and the key things that have to be addressed.

Successful completion of the exit assessment means that they will meet the ‘qualified practitioner’ requirement of AS13000.

Attending the course would be beneficial to anyone who is required to complete, or manage the completion of 8D reports. Anyone who wishes to understand how 8D works. Anyone who may be involved in 8D based problem solving, as a manager, supporter or team member.