TREVOR’S CORNER Number 15: THREE QUESTIONS

Do We Need To Follow All The Rules?

The two following quotations are from the introduction by Vladimir Horowitz to Deutsche Grammophon CD 445517-2:

“Mozart believed that the left hand should always remain strictly in time, while the right hand may enjoy rhythmic freedom.”

“Some 60 years later, Chopin paraphrased Mozart: ‘The left hand is the conductor: it must not waver or lose ground; do with the right hand what you will and can.’”

Mozart’s views can be applied to process safety (and many other problems). Some safety rules are “Left hand” ones, that should always be followed. Others are “Right hand” ones, recommendations that managers should consider but need not always follow. The results of a quantitative risk assessment (QRA) are often “Right hand” ones. For example, after a serious accident a manager might decide to make greater changes than those justified by a QRA, in order to satisfy the concerns of employees and the public. Or he might make fewer changes than recommended by a QRA as he knows the plant will be shut down soon. He but might make changes in operations rather than changes to the equipment.

Are Meetings Worthwhile?

I have attended many meetings on accidents in the last 50 plus years. Those that shared or exchanged information were on the whole worthwhile. Those that were intended to discover the causes of a company’s accidents as a whole, and how to prevent them, were mainly a waste of time. Why? Because everyone present has different views, different levels of knowledge, different experience. Any novel suggestions are opposed by someone so the only proposals they can all agree on are generalities. As a process safety adviser in the UK chemical company, ICI, I soon learned not to suggest in a meeting what I was going to do, as someone might disagree. Instead I described what I had done and discussed my new, untried ideas with people who were able to comment on cost, practicality, etc.

I have often argued that official reports on accidents include only the more obvious causes and recommendations and that new ideas like inherently safer design, Hazop and QRA are produced by individuals or small groups of like-minded people. New ideas rarely arise in meetings.

Why Does Equipment Fail in Service?

The following quotations are from an article by Ian Walmsley in the UK Journal, Modern Railways, January 2011, entitled “Why do trains fail in service?” Most of what he writes applies to other equipment.

Imagine the old juggler’s routine of spinning plates marked, Reliability, Availability and Cost. If you spend your time spinning up reliability you stop more trains for repairs, so availability starts to wobble. Take on more staff or buy more replacement parts and your budget lies shattered on the floor …
The success of this imperfect system depends on the depot engineer who must motivate, manage, direct and discipline the system to make sure everything works. Despite this grief it is still the best job I ever had …

For various reasons some things don’t get done and will eventually fail. The approach of some less experienced managers is then, for example, “Bearing X was greased during the examination three weeks ago, so we must grease it more often so that it won’t fail again”. The approach should have been “Who signed this as done but hadn’t done it?”…

I have worked in a few depots which could manage with half the staff, as long as it was the right half.