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Presentations on "Safe Systems of Work in Practice" by Harry Jakeman and George Allcock.

Harry opened the batting with a testing question to the audience about where a definition of "Safe System of Work" could be found. After an embarrassed silence he let us off the hook by giving us the answer in a very comprehensive review of the legal history surrounding the requirements for safe systems of work. He outlined the distinction between Statutory Law, which is made in Parliament and Common Law, which is "Judge made Law" as a result of carefully considered precedents in many years of court decisions. This decision process is based on a basic Duty of Care which we all owe to each other, to try to guard against causing injury. He cited the classic case of Donaghue v. Stevenson (1932) which determined just how much employers would have to foresee the consequences of their actions in devising risk control measures. Another case, Wilson's & Clyde Coal vs. English (1938) gave us a very clear picture of the basic duty of care owed by a Master to his Servant. There is a clear link between the subsequent HASAW 1974, Section 2 and this decision which called for the employer to take 'Reasonable Care' of his employee under these headings:-

- Provision of competent colleagues
- Provision of safe Machines, Tools and Materials
- provision of a safe system of general management with adequate supervision.

Reading between the lines, this also neatly stated the case for Risk Assessment, decades before Europe woke up to the idea! The case also laid down the crucial management principle that the mine owner could NOT delegate Responsibility for Safety under any circumstances - only the authority to carry out specified duties. In other words - The buck stops with the man who signs the policy statement!

Harry then went on to quote examples of other cases which give good guidance on acceptable standards of competence:-

- The case of Black Vs Fife Coal Co.Ltd., where an employer negligently appointed a colliery manager who had no experience of Carbon Monoxide in a pit where its presence was a possible danger.
- Then in the case of Hudson vs.Ridge (1957), an employer was considered negligent because he knowingly employed a worker who continually engaged in horseplay.

The duty of care also extends to anything which a person may be expected to work with, or on, ranging from Machinery and Safety Equipment to, in one instance, a horse! Again, legal precedents give useful guidance:-

- In the action of Bradford vs. Robinson Rentals (1966), an employer was judged to be negligent when he ordered a driver to travel 500 miles in freezing weather, in an old van without a heater and with a leaking radiator.
A packer contracted dermatitis when his employer introduced a new lavatory cleanser containing acid which came into contact with the operatives’ hands. The employer was considered negligent, *Pellici vs. Jeyes* (1964), when he did not provide gloves because there had not been any previous case of dermatitis.

A similar health case, *Watson vs. Readymix Concrete* (1961), the court decided that it was not sufficient to merely issue barrier creme, as its effectiveness was known to vary widely with different processes.

In considering the need to provide a system of General Management, it is very helpful to look at the case of the *General Cleaning Contractors vs Christmas* (1953). This concerned an accident to a cleaner who fell from a window sill when a sash which provided his only handhold suddenly closed. The court decided that the employers were NOT negligent in failing to provide ladders or hooks for safety belts. They WERE negligent, however, in failing to have a system whereby window cleaners were instructed to test windows and always to see that one was kept open.

In a very perceptive decision, Lord Oaksey said:-

"It is well known to employers that their workpeople are very frequently, if not habitually, careless about the risks which their work may involve. It is for that very reason that the law demands that employers should take reasonable care to lay down a reasonably safe system of work. Employers are not exempt from this by the fact that their workmen are experienced. Workmen are not in the same position as employers. Their work is not performed in the calm atmosphere of the Board-room."

Lord Reid added:-

"Where a practice of ignoring an obvious danger has grown up, I do not think that it is reasonable to expect an individual workman to take the initiative in devising and using precautions. It is the duty of the employer to devise a suitable system, to instruct his men what they must do and to supply any implements which may be required".

In conclusion Harry reminded the meeting about the main arguments in Lord Robens' book *Human Engineering*, written about the time of the 1974 Act:-

- The Employer must be satisfied that the Employee knows the Dangers.
- The Employer must be satisfied that the Employee knows the Precautions to meet the Dangers.
- The Precautions must be available.
- The Employee must know that the Precautions are available.

It follows from this that the HASAWA 1974 is a transfer of Common Law Duty of Care into Statute Law and that Safe Systems of Work consist of five steps:-
At this point, Harry handed over to George Allcock who presented his experiences gained during the reorganisation of health and safety arrangements in a manufacturing firm.

The reorganisation was triggered off by a series of problems with the safety culture in this firm, including an accident which culminated in a prosecution. The main thrust of the new arrangements was to carry out systematic risk assessment on which to base improved written systems of work, supported by Permit-to-Work procedures. A vital element of this approach was to train manual workers and team leaders to take part in the risk assessment process so that they were truly committed to changing to new methods and maintaining them. It also increased the quality of the assessments because the assessors knew the jobs and what the hazards were.

It was important to:-

- Record the Task/Activity involved.
- Identify the relevant Plant/Equipment and its location.
- Identify any hazardous materials to be used.
- Describe the Type of Hazard likely to be present.

The next stage was to assess the risk in order to prioritise the development of "Controls Measures". It is important to remember that risks are only reduced by positive ACTIONS to improve safe working methods NOT, just, 'Model Assessments' on paper. Following the listing of hazardous activities, a risk assessment was carried out by the teams on a single side of A4 paper so that the whole process was easily assimilated. This led to the development of written control measures (following the well known HSE Hierarchy of Controls), some of which included a formal "written system of work", comprising:-

- Precautions and Control Measures.
  - Before starting work
  - During Work, including emergency measures.
  - Making safe at the end of work.
- Name and signature of the person approving the System of work
- Names of the Authorised Persons allowed to carry out the work.

Where a serious risk was foreseen, this procedure was sometimes supported by a written Permit-to-Work (PTW) document containing:-

- The measures to be taken before work was started, during the work.
George concluded that sometimes it was appropriate to use a PTW on the first few occasions that a new procedure was operated. Then this requirement could be relaxed when the operators were more familiar with it and more competent.

David Hughes offered the opinion that many new installations were not designed for safe operations and quoted the example of a new foundry shaker that was noisy, had poor Local Exhaust Ventilation and was badly positioned from the ergonomic standpoint.

Tony Thorne from CENTEC was concerned because the relaxation of a 'Safe System of Work' with time could be dangerous. George replied that this sort of relaxation had to be applied selectively and with great caution. He quoted the example of a drill change on a CNC machine where a PTW system was essential but other control measures could be used, like posting of notices with lists of tasks and names of Senior Authorised Persons to add to the visible communication of instructions.

Jon Meikle of Safety Concern asked if there was a definition of "fragile Roofs" and added that he had seen a roof-light marked with the words "Non Fragile". Harry Jakeman advised that it was best to err on the safe side by treating all roof lights as 'fragile'.