

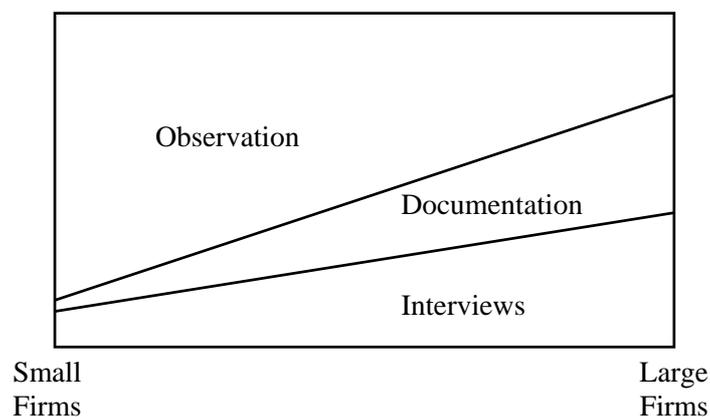
September 1997

The 'Good, the Bad and the Ugly' *-presentation by Peter Woolgar, HSE Principal Inspector* *(How to set up an effective Safety* *Management System and HSE impressions of* *how industry has coped with this task.)*

In referring to the "Good, Bad and the Ugly" of the title, **Peter** started his talk by saying that he wanted to dispel the myth that HSE used the 'Loaded Gun' approach. Rather, they preferred to achieve the desired result by a combination of Education, Cajoling and Enforcement.

He quoted examples of disasters over recent years, such as Zeebrugge, Kings Cross, Piper Alpha and Clapham, which had all revealed a series of **Management Inadequacies** as the major cause of the accident. The way to prevent these problems was to introduce the principles laid down some years ago in HSG 65, Successful Health and Safety Management. Although it was rather difficult to read, it contained excellent guidance and provided the standard for a recent HSE survey of Local Authorities, NHS Trusts and Universities.

The HSE Survey was based on a **combination of Observation, Documentation and Interviews**, which varied according to the size of the firm, as follows:-



HSE try to drive firms further along the X-axis during the survey so that they can see from interviews whether the policy has penetrated down through the structure. The Five Stages of the **Safety Management Task, i.e. Policy, Organising, Planning & Implementation, Monitoring and Review** were derived from the same principles used in production management. They are closely inter-linked and not applied in discrete stages, but as part of a continuing process. The Health and Safety Policy is not just a collection of pious hopes but, in terms of HSG 65, an expression of what you intend to do in a proactive sense and not just a reaction to Accidents. Peter then displayed the well known Heinrich Accident

Triangle which illustrated that if no action was taken on damage only accidents at the base then these represented lost opportunities to prevent many lost-time accidents. He then referred us to another HSE Survey, this time of Accident Costs, where the direct costs of accidents were shown to vary between £1 - £8 for every £36 of indirect accident costs. Like an Iceberg, most of the costs lie hidden beneath the surface.

It is important that the H&S policy accepted that ALL accidents are PREVENTABLE if proper management action is taken. This must be systematic and be taken right from the top of the organisation. It was also important to recognise the mutually beneficial link between Safety and Quality programmes. It is also important to distinguish the crucial difference between an '**Organisation**' and '**Organising**' where success was built on the Safety Culture which relied on the blending of the 4Cs of **Co-operation, Communication, Competence, and Control**.

Co-operation	Between H&S Officers, Safety Reps, Managers, Technical Staff and Employees	Involves Problems/Solutions, H&S Standards and systems of Work.
Communications		Must include special messages as well as routine production safety measures. Written Safety Communications should not be hidden away with other items
Competence	Should cover H&S Officers, Line Managers**, Front Line Staff	** Line managers often don't know the basics of H&S management and may tend to leave it to others (Safety Officer?)
Control		Standards are needed for specific safety tasks as well as the number and quality of Supervisors

The way out of this situation was not always straightforward, however, and Peter quoted an example of a firm where they had a high ratio of Health and Safety professionals to production staff, reasonably good line managers, a good H&S Policy, with comprehensive Risk Assessment and good communications in a regular Newsletter. However, Health and Safety Management was poor because Industrial Relations had broken down, communication was not working and, hence, Co-operation was non-existent.

Similarly, Health and Safety performance was low in a NHS Trust, where there was even a Director appointed to act as a Champion of the H&S function. But,

on his own set of managerial objectives, Health and Safety was listed on Page SIX and hardly ever got discussed before time ran out on the review meeting! Hence there was no planned safety programme and the safety function was virtually dying.

Peter then emphasised the importance of having a plan and said that it that it should be appropriate for all levels in the organisation, should ensure overall direction and an improvement in performance. It should be based on a Risk Assessment process and the safety performance standards should be appropriate for your Company, in terms of its size and complexity. The Performance Standards should have the following qualities-

Specific

Measurable

Achievable (Agreed with those who have to deliver them)

Realistic

Timescale - suitable

Peter then took up the theme of measuring performance by reminding us of the old adage that "What gets measured gets done" and said that there were basically two types. Reactive Monitoring is concerned with things like Accident and Incident reporting and investigation which is inherently Negative. On the other hand, however, Active Monitoring looks at Positive Actions that are taken like Inspections, Management Communications and monitoring of repair programmes. It reinforces the positive message given by the Safety programme.

The Review Stage of the Safety Management task aims to:-

- Improve policy and overall performance
- Improve organisational effectiveness
- Improve specific control of risks

In the four years of the HSE Survey, said Peter, none of the organisations examined had completed this stage. He wanted to encourage firms to manage Health and Safety on an Economic Basis whereby **Total Costs** were minimised at the point where the **Cost of the Control Programme** equalled the **Cost of Programme Failure**.

Peter concluded his presentation on '**The Good, the Bad and the Ugly**' by saying that the HSE were not after '**A Fistful of Dollars**', but just '**A Few Dollars More**'.

The meeting was then opened up for questions from the floor.

David Hughes started off this part of the proceedings by relating from his experiences how important it was to get the support of the 'man-at-the-top' for any programme.

George Allcock asked for the speaker's views on whether the Safety Committee could play any part in this review process. **Peter Woolgar** replied that they could be very effective, as long as they realise that they are part of the management process.

David Hughes described how a change of management in a firm introduced a committee to obtain feedback on Health and Safety matters from various departments. **Peter** replied that this feature was just one aspect of communication and that you must look further at its design to achieve the right change in direction.

Peter Evans referred to the SMART technique and stated that it needed to reach down to all levels, not just stay in the domain of management. **Peter Woolgar** agreed, but warned that it was important to get operational confidence at management level before extending its use to the lower levels. **Mike Hoare** agreed with this approach of starting at the top and working down the organisation. **Peter Woolgar** added that in doing this it is important to remember that communication is a two way business and needs to progress UP also.

Michelle Sneyd of Birmingham Mint asked what was the view of the position of a Health and Safety Officer who did not have access to the Managing Director and where the in the perception of the lower levels of staff the officer's duties should be to log accidents, take care of housekeeping and make sure that there were no problems with toilets. **Peter** answered by saying that he thought that Michelle's question had provided its own answer and that he obviously did not think that this was a very enlightened use of a safety specialist. The role should be as an adviser on safety practice to the most senior management level possible.

Ken Talbot said that the five stage approach was very similar to the Management By Objectives approach that he had first encountered in 1949/50, which seemed to be a useful tool in the Health and Safety Field. He asked if MBO was still in use in many organisations? **Peter Woolgar** expressed some surprise at this as he thought that it was a relatively new technique but added that most NHS Trusts and Local Authorities used it. They are made dynamic by arranging to developing improvements in them in successive years. It was stated from the floor that the City Housing Department Managers had monthly reviews of

progress and objectives. **Peter** stated that it was also important to provide the resources to achieve the objectives.

Roy Gill of Laing (Midlands) then took over to talk about the scaffolding requirements in a very informative session but without, as he put it, committing the audience to 'Death by Viewfoil'! Firstly, he pointed out that these regulations were in line with the HSE philosophy of 'setting objectives' as opposed to being over-prescriptive. Nevertheless, they set performance standards in the schedules which had to be viewed alongside Industry Standards, Best Practice, Technological Developments and New Initiatives when various options for risk control measures. In specifying duties imposed by these regulations, it was significant that Regulation 4 emphasised the particular roles of middle management and operatives in addition to those of employers.

A major consideration was safe access to a safe working position at heights, especially at over 2 metres. The new approach required an assessment of whether more work could be pre-fabricated at ground level and what type of access was best for any particular type of job (e.g. General Scaffold, Scaffold Tower or Mobile Elevating work Platform). Roy presented a detailed checklist of preparatory work that had to be done before careful consideration of the workplace design requirements. He quoted a recent case where a powered hoist had been used, incorrectly, to provide support for a scaffold, instead of being designed with its independent ties to the structure. The first choice for safe working should always be a work platform with guard rails, with harnesses, lines and nets used only as a last resort. Special care should be taken when designing for short term jobs, or working near holes or fragile surfaces. Another aspect of working at heights was the important need to make sure that materials did not fall and cause injuries or damage to property.

On the subject of excavations, Roy emphasised the need to check for buried services, to support excavations so that they did not collapse and to establish an exclusion zone to protect both excavations and workers. He went on to say that regular inspections by competent persons was an essential part of ensuring that initially sound safety measures remained effective throughout the duration of the work.

Underpinning all of this was the requirement to ensure that all staff were adequately trained to do their job. This includes the assessment to assess and monitor sub-contractors to make sure that they are competent and that they live up to their promises in practice.

The next part of the presentation was made by **Steve Ives of Tarmac Construction** who spoke about the management of transport on sites. He referred briefly about the relevant legislation and specifically to the guidance in

HS(G) 151, Protecting the Public, Your Next Move and HS(G) 136, Workplace Transport Safety. He stressed that the usual cause of major injury or fatal accidents was either human error, complacency, overloading or poor maintenance. The underlying causes of these problems were shortcomings with either the H & S policy, safe(?) systems of work or training. These very often appeared as organisational factors, such as poor access arrangements, temporary roads, no protection at excavations or inappropriate storage arrangements. Tarmac had found that good planning could cure most of these problems to ensure

- Good access routes constructed at an early stage
- Safety for people along designated routes
- Special consideration
 - for Weather
 - for interface with the public
- Access to the highway
- Good signage on site, at the entrance and on the approaches.

Steve then showed several ways of segregating pedestrians and vehicles, such as Earth bunds, Vertical Concrete Barriers (VCBs - 3-ton blocks frequently seen on Motorways), Scaffold Walkways, Cones or Barriers at exit points. Other considerations were protection of the structure under construction from being hit by vehicles, Temporary works, Protection of underground services, Protection of other plant and provision of lighting.

One of the biggest killers in vehicle accidents was probably 'The Reversing Vehicle and the best solution was to eliminate the need to reverse, wherever possible. If that could not be achieved other measures would be to exclude pedestrians from reversing areas, fit audible reversing devices, proximity devices/CCTV or to provide banksmen. In conclusion he added that the main principles to follow were:-

- Good Planning
- Protecting Pedestrians
- Good Basic and Site Induction Training
- Provision and use of PPE
- Raising Transport Awareness.

Warwick Adams of Tilbury Douglas then took over to give his presentation on Fire Safety on Construction Sites and started by clarifying why the new Fire Precautions (Workplace) Regulations 1997 did NOT apply to Construction Sites. He then went on to talk about legislation which DID apply, such as the Fire Certificates (Special Premises) Regulations 1976 which applied to temporary construction buildings. The CHSWR ensures fire safety requiring the following:-

- Reg 18 Prevention of risks from fire etc.

- Reg 19 Emergency routes and exits.
- Reg 20 Emergency procedures (For any foreseeable emergency)
Including the need for instruction and testing.
- Reg 21 Fire detection and fire fighting.

In addition there is a very important document called the **Fire prevention on Construction Sites (The Joint Code of Practice on the Protection from fire of Construction Sites and Buildings Undergoing Renovation) - 4th Edition 1997**. It is issued by the Construction Confederation (Construction Industry Publications, Tel: 0121 742 0824), the Loss Prevention Council and the Association of British Insurers. This code of practice contains:

- New definitions on fire detection and alarm systems, hot work and Employers/Clients.
- A requirement for buildings and stores of fire risk materials to be protected against arson.
- For material store to be outside, with controlled access and non essential wrapping to be removed.
- For smoking only in designated areas.
- Increased scope on guidance for temporary accommodation.

Its real power stems from the fact that it is incorporated into the Standard Form of Building Contract, issued by the Joint Contracts Tribunal, and non-compliance could mean that insurance cover is invalid. So the civil costs of non-compliance may be more of a threat than the HSE! It is also interesting to note that whilst the statutory requirements are focused on protection of human safety, the joint code is more orientated towards protection of property. Warwick concluded by referring the audience to a new guidance booklet HS(G) 168, Fire Safety in Construction Work (ISBN 0 7176 1332 1) to be published by HSE on 17th November 1997.

Barry Wilkes of the University of Central England asked if there was any definitive advice on securing ladders. **Roy Gill** replied that there were many proprietary systems on the market, but the problem was ensuring that they were used properly. It was suggested that the use of stilts, by ceiling fixers, offered an interesting alternative, although stability was always a problem!

Anwar Afzal of Kendrick Construction asked for clarification on the issuing of fire certificates on construction sites and **Warwick Adams** replied that they were just for the temporary buildings associated with the construction work. **Anwar** then asked how it was possible to ensure compliance with the use of harnesses at

heights. **Roy Gill** responded by saying that behaviour had to be monitored closely so that non-compliance could be dealt with rapidly and firmly. An alternative may be to change the method of working to avoid the need for harnesses.

Brian Duncley of Balfour Beatty enquired about whether a scaffolder could correctly use a harness whilst erecting the scaffolding. **Roy Gill** said that as long as the fixed anchorage point was above the harness ring then it was acceptable. He was happy that the CITB method of erection complied. **Brian** then went on to ask what the panel's view was about the different interpretations of requirements given by various HSE Inspectors. **Bob Cartwright** stated that this was a common problem and quoted a recent experience where Bryants had received an Improvement Notice because they were finishing of the last house on a site, which had previously been used to provide welfare facilities.

There being no other questions, Bob Cartwright drew the meeting to a close and asked the audience to join with him in offering the usual thanks to the speakers for such interesting and varied presentations.