



*Safety & Loss Prevention
Subject Group*

IChem^E

Newsletter

EDITORIAL:

Year 2000 is over and little is now heard of the Millennium Bug. Did anybody experience a problem?

The Frank Lees Medal is to be awarded this year for the best paper on safety/loss prevention appearing in an Institution Journal or Bulletin. Readers are invited to nominate a paper for the S&LP Subject Group to consider.

All of us in your S&LP Subject Group Committee wish you a safe and happy New Year.

SAFETY4INDUSTRY

The IChemE has launched a new online safety resource. Safety4industry.com will enable users to participate in an online conference, to learn how leading organisations are reducing risks within their respective industries and access an exhibition offering a comprehensive range of products and services.

The objective of the site is to encourage users to take an elementary approach to risk assessment and compliance. It also provides the opportunity to find out more about industry training including continuing professional development (CPD).

The site will continuously be refreshed every 90 days and anyone wishing to exhibit or give a paper should contact Eb Adeyeri, (Email: eadeyeri@icheme.org.uk). The site can be located at www.safety4industry.com.

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HELL'S FIRE

Our Safety Inspector was quick

To uncover Prometheus's trick.

He proved that Hell's pyre

Was made from the fire

That was stolen, then flogged to Old Nick.

IDENTIFYING HAZARDS

He who knows not and knows that he knows not is a child - *teach him.*

He who knows and knows not that he knows is asleep - *wake him.*

He who knows and knows that he knows is wise - *follow him.*

He who knows not and knows not that he knows not is a fool - *shun him.*

Don't be a fool - use **The Accident Database.**

DEMANNING AND OUTSOURCING - THE IMPLICATIONS FOR INDUSTRY

Our Subject Group held a successful meeting in London with 40 attending and seven excellent papers being presented.

The HSE presented two papers titled "Contractorisation: a regulatory view" and "Cutting to the Core: a regulatory perspective on demanning". Both these papers drew attention to the responsibilities that industry had to ensure safety was not compromised. Papers on "Responsible contracting" described the approach of a major contractor. "Managing organisational change safely" described a risk assessment method for any manning change based on their management of change system.

A presentation "Control room staffing" described recently developed guidelines and case studies on conducting staff assessment of control rooms in chemical and allied industries. A research paper on this method would be published in the new year.

A paper on "Safety review of demanning versus control system automation" described how automation could reduce manning safely.

The final paper by a barrister described what may well be the environment if new legislation on corporate killing became law. Some concern was expressed that safety may be

driven underground and destroy any culture of sharing.

Hazards XVI Analysing the Past, Planning the Future. 6-8 November 2001

Papers are invited in all relevant areas including the following topics:

- Case studies
- Incident investigation including the consideration of proposed legislation
- Impact of new technology (including automation)
- Environmental impact
- Safety and the environment – competition or collaboration
- Inherently safer and environmentally friendlier design including case studies
- New developments in process safety and environmental protection
- Transportation and storage of hazardous materials
- Emergency planning for chemical plants
- Protecting on-site personnel (including occupied building studies)
- Safety report experiences
- IPC/IPPC experiences
- Equipment in hazardous areas, including consideration of the ATEX Directives
- Computer and computer software failures/ errors as actual and potential causes of loss

Synopses of papers are needed by 5th January 2001 to Mike Adams, Rawgreen, New Hutton, Kendal, Cumbria LA8 0AS
 Tel/FAX 44-(0)-1539-732845
 E-mail: mike.j.adams@talk21.com

BENEVOLENT FUND GIFTS

Christmas may have gone but for those still looking for gifts the Chemical Engineering Benevolent Fund might have just what you are looking for. From ties to sweatshirts and tankards to goblets there are a range of gifts available in return for a contribution to the Fund. Check out the range on the IChemE web site (www.icheme.org <<http://www.icheme.org/>>) or contact the London Office on 020 7222 2681. For further information about the work of the Ben Fund contact Sue Fortunka on 01788 578214.

ACCIDENT DATABASE - VERSION 4

This IChemE's well-established Accident Database is now used by organisations all over the world and as a teaching aid in universities around the globe. Detailing incidents, accidents and near-misses from the process industries, it has proven itself to be an invaluable safety management tool.

Version 4, due for launch in January 2001, now includes over 13,000 records and many original records have been enhanced with new information or diagrams. The keyword structure has also been improved to make searching even more efficient.

Is *your* organisation learning from the valuable lessons the Accident Database holds?

If you would like to receive a free trial of Version 4, please contact Jo Cheshire at IChemE on

Tel: 01788 578214 Fax: 01788 560833
Email: jcheshire@icheme.org.uk

EPSC AWARD FOR A SIGNIFICANT CONTRIBUTION TO PROCESS SAFETY

The European Process Safety Centre is seeking nominations for the EPSC Award for a significant contribution to process safety in Europe. This prestigious Award will be made on the occasion of the EFCE 10th Symposium on Loss Prevention and Safety Promotion in the Process Industries to be held in Stockholm on 19-21st June 2001.

The EPSC Safety Award is presented to an individual or team who have made a significant contribution to process safety in Europe. The contribution may be in the form of a project, report, published paper, conference paper or book which, in the consideration of the EPSC Award panel, has considerably advanced the theory or practice of process safety.

The work nominated can have been carried out by any person or team working in the field of process safety in Europe from an academic or industrial background. The deadline for nominations is **28th February 2001**.

If you would like to nominate someone for this award, or just discuss your ideas, then please contact Lee Allford at:

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BOOK REVIEW

Title: *Trevor Kletz: 'By Accident... a life preventing them in industry'*
Foreword: Sir John Harvey-Jones
Publisher: PFV Publications
ISBN: 0-9538440-0-5
Pages: 160. September 2000.

This autobiography of Trevor's life in industry and his retirement makes fascinating reading for many reasons. Firstly it is a book which shows that a life in industry as a scientist and engineer can be interesting and rewarding. There are very few such books to encourage the younger generation into these professions. Secondly it shows his development and experiences which guided, rather than directed, his career into the safety field. Thirdly it gives the background to all of his work for which he is well known. For myself I found it particularly interesting as one who had been in Dyestuffs Division of ICI in the 1954/61 period and our paths very nearly crossed at Wilton. Had I stayed a little longer I am sure that we would have met much earlier.

The book describes his early introduction to chemistry via a chemistry set, his interview at Dyestuffs and Billingham Divisions and his early work in the Research Department where he became an expert in infra-red spectroscopy. Subsequently he moved into the production area with responsibility for various plants and then to the Technical Department and process investigation where he experienced his first fatal accident investigation. After various special duties Trevor became the Division Safety Adviser on 1st January 1968 "to advise design and operating staff on the action they should take to avoid accidents and dangerous occurrences." He decided to concentrate on fires and explosions and thus began his long association with loss prevention. He had only

one brief excursion into other areas, that of job assessment, before returning to his real love of loss prevention.

Trevor describes many of his ideas and experiences in loss prevention and what lead him into the areas of Inherently Safer Design, Hazard Analysis, Case Histories and Safety Discussions. Trevor gives the background to the origins of Hazard and Operability Analysis and admits to not being the inventor of it although his subsequent championing of it undoubtedly made it into a decisive system for identifying hazards in process design.

Trevor is fulsome in recognition of the work of others in ICI who helped in the loss prevention field and many are mentioned by name. His great contribution to the safety field was supported by senior people in ICI particularly Edward Challis who encouraged him in his work. This relationship clearly demonstrates the importance of support and leadership from the top to achieve safety objectives. However Trevor refrains from mentioning others in different companies who did not share information on accidents while accepting his Safety Newsletter.

This book is full of interesting comments during a lifetime career in the chemical industry on the various ideas that come and go such as Work Study, Manpower Utilisation, Divisional Culture, etc. I liked the comment "The fashion at this time ... was to solve problems by putting more people to work on them. (Later the fashion changed and problems were solved by getting rid of people.)"

The book is well written and absorbing reading. It is difficult to put the book down and before you know time has flown by.

Although one would wish to carry on reading the book it can be put down and easily picked up again and the trail of experience continued. I can strongly recommend it to the young to show how a career in the industry can be very satisfying, to the middle career person to see the importance of people and to the retired person who will recognise the experiences described.

Dr. John Bond



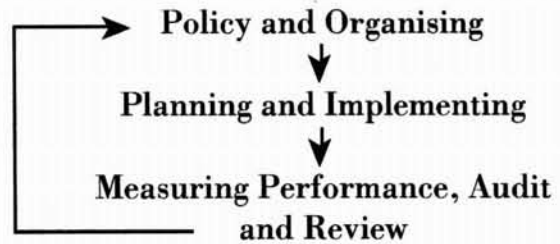
Title: *Improving Maintenance - A guide to reducing human error.*
Publisher: An HFRG Book from the Human Factors in Reliability Group in conjunction with the HSE.
Price: £16.00
ISBN: 0 7176 1818 8

This guidance has been written for managers, engineers and others responsible for maintenance in large and small companies and who are concerned with the performance of people. The importance of maintenance in efficient operation is well recognised but it is a regrettable fact that many accidents occur during these activities or as a result of them.

This guidance helps in:

- Identifying the issues that affect performance.
- Identifying the activities most at risk from human failure.
- Supporting risk assessments.
- Developing cost effective measures.

The usual system is adopted of:



The guidance is divided into four sections:

1. Maintenance risks
2. Human performance in maintenance.
3. Assessment method.
4. Maintenance management issues.

The first section outlines the various maintenance risks and gives examples. The second section discusses the Individual, Job and Organisation factors that affect human performance in maintenance staff.

The third section on assessment methods is most useful and provides a structured method to identify the relative importance of each factor in maintenance. The assessment is based on:

- Identifying areas for assessment
- Assessing by incident review or workplace questionnaire
- Implementing by priority and planning action

Areas and topics for assessment are listed but will depend on the size of the organisation. Assessment is carried out by incident review or workplace questionnaire. Incident review is only used if there is sufficient case histories known. This method provides a way of collating the underlying causes. A score sheet is provided in the appendix and may be copied for future use. Two fully worked examples are given.

The workshop questionnaire makes use of the views of the staff to identify those of the 18 management issues that concern them and hence need improvement. An example of the questionnaire is given.

The final section gives guidance on improving each of the 18 maintenance management issues.

To choose only one of the issues, Organisational Learning, the guidance states: "The ability of an organisation to learn from its past experience is essential if the company is to successfully avoid repeating past failures and is to keep ahead of the competition." I

would have liked to have seen it add '...to learn from its past experience and that of others is essential'

This guidance publication is very well presented and carries on the high standard of content set by "Successful Health and Safety Management". It is strongly recommended to all management involved in maintenance across all industry and organisations. It is, in my view, a good blueprint for other management activities to copy and for students, who might well become managers in any discipline, to read learn and inwardly digest.

Dr. John Bond

NEWS BRIEF

Canadian Cops are on the Scent

Politicians in Halifax, Nova Scotia, have forbidden the wearing of all scents in public places. Anyone who breaks the rules - which are enforced in municipal offices, hospitals, classrooms, and on buses - face a fine or imprisonment. The authorities, backed by campaigners, insist that underarm deodorants, herbal shampoos and colognes are hazardous to public health. Pupils have been suspended for wearing hair gel and an 84 year-old woman was ejected from City Hall for wearing cologne while making a civic inquiry.

A Report in *The Scotsman*.

"Suspicious characters wanted"

Loss Prevention Manager

The management of our in-store Loss Prevention team is a challenging and diverse role.

We are looking for an experienced individual capable of managing and motivating a team of Loss Prevention Investigators and Security Guards across a number of stores..."

Advert for Marks and Spencer in *Manchester Evening News*.

Unconfirmed Report

Bobby Leach, the second person to go over the Canadian side of the Niagara Falls in a barrel, broke practically every bone in his body. He survived and went around the world lecturing on his experience. He visited Wellington and slipped on a piece of orange peel and died. Can anyone confirm this report?

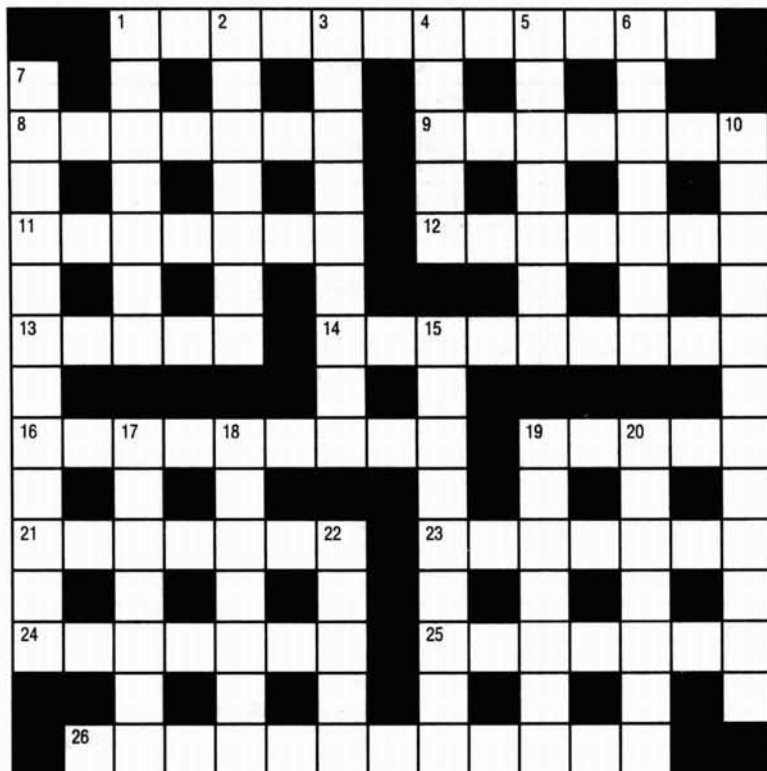
Listen to the Views of your Local Community

In 1772 a high ranking Maori was fishing in the Bay of Islands on the North Island in New Zealand when he was drowned in a canoe accident. The local Maori tribe put a 'talu' on the area, a prohibition of fishing for fear that eating the fish might involve eating a small part of their drowned elder.

However a French ship under the command of Marion du Fresne arrived in the area to claim New Zealand for the French Crown. Although warned of the 'talu' on fishing in the area, he ignored the warning and allowed his crew to fish in the area. The Maori tribe were so incensed at the violation of their 'talu' that they massacred Marion du Fresne and his crew.

The Maoris were not adverse to cannibalism of their prisoners and so the Frenchmen were popped into their cooking pot. The place where all this happened is known as Assassination Cove. We can always learn from incidents.

CROSSWORD PUZZLE No. 7



DOWN

1. Don't move! Even though a support has been installed. (4, 3)
2. One shouldn't do this if a fly's undone! (7)
3. Practice swing of golfing motorist? (4, 5)
4. Machine that could be almost lethal. (5)
5. Hazard of the tanning industry perhaps. (7)
6. Japanese way of dealing with paperwork. (7)
7. Not a charge by local authority for dealing with civic mishaps. (8, 4)
10. Firemen, police, paramedics, coastguards, etc. (9, 3)
- 15, 19. If Ned dies revving furiously, find out if he was practising this. (9, 7)
17. Potentially disastrous outpouring of salad dressing. (3, 4)

ACROSS

1. Re-organised less often, say, the school curriculum should nevertheless include it. (6, 6)
8. Dangerous places for high-rise window cleaners – and tree top babies! (7)
12. Edgy about a Frenchman, but often has strength. (7)
11. Little devil told fibs to indicate his meaning. (7)
12. Train or coach. (7)
10. Item in diary needs care if space is restricted. (5)
11. Applying for e.g. spare parts cells for wider margins. (9)
16. How not to keep accident records. (2, 7)
19. Not up but right in – a watery way to go. (5)
21. A consequence of the Flood. (7)
23. Ned in 15, 19d, does his revving like this. (7)
24. = (5, 2)
25. Limit a test to conceal counterfeit. (7)
26. Mr Plimsoll drew the line at too much of this. (5, 7)

18. Wrap it up! (7)
19. See 15.
20. Two hardworking creatures with only one penny between them. (7)
22. A retreating clown isn't one of the crowd. (5)

ANSWERS TO No. 6 CROSSWORD PUZZLE



Answers will appear in the next issue.

FORTHCOMING MEETINGS OF SUBJECT GROUPS AND OTHER MEETINGS OF INTEREST TO THE SAFETY AND LOSS PREVENTION SUBJECT GROUP

Group	Title of Meeting	Place & Contact	Date
IChemE	Human Behaviour & Human Error (4 day course)	University of Sheffield Tracy Lepkowska* tlepkowska@icheme.org.uk 01788 578214	15/18 Jan-01
Pira International	Dangerous Goods Regulations: New Rules - New Format	Bristol/Leeds www.pira.co.uk	16/25-Jan-01
IChemE approved	Fire Dynamics and Modelling	Leeds www.leeds.ac.uk/fuel/shortc/sc.htm	22/26-Jan-01
CIA	Chemical Business Outlook Conference	London CIA	25-Jan-01
IChemE	Applied Hazard & Operability Studies (3 day course)	University of Sheffield Tracy Lepkowska* as above	5-8 Feb-01
IChemE	Dust Explosion Hazards (1 day course)	Cork, Ireland Tracy Lepkowska* as above	21 Feb-01
IChemE	Major Hazards & Emergency Planning (4 day course)	University of Sheffield Tracy Lepkowska* as above	26 Feb - 1 Mar-01
IChemE	Fire Safety Design (5-day course)	University of Leeds Julie Charlton fue6jc@leeds.ac.uk 0113 233 2514	12-Mar-01
S&LP Subject Group	Area Classification. Joint meeting with Institute of Petroleum	John Picken, I.Chem.E. Tel: 01788-578214	April 01 (Provisional)
AICHE	35 th Annual Loss Prevention Symposium (incorporating the 5 th Bi-Annual Process Plant Safety Symposium)	Houston, Texas, USA Dennis Hendershot Dennis.C.Hendershot@rohmbaas.com	22-Apr-01
IChemE	Safety Management and Risk Assessment (4 day course)	University of Sheffield Tracy Lepkowska* as above	23 / 26 Apr-01
IChemE	Fire & Safety Law (5-day course)	University of Leeds Julie Charlton fue6jc@leeds.ac.uk 0113 233 2514	12-Mar-01
Safety and Loss Prevention SG	Exothermic Emergency Venting	Zeneca, Huddersfield Gus Carroll gus.carroll@yulecatto.com 01279 459538	15-Mar-01
Environmental Protection SG	Environmental Protection: public perception and the consultative process	Chemical Industries Association Clive Hadfield chal@lineone.net 01270 762630	21/22-Mar-01
IChemE	Classification of Hazardous Areas (1 day course)	Cork, Ireland Tracy Lepkowska* as above	24 Apr-01
IChemE	Applied Hazard & Operability Studies (3 day course)	Harrogate Tracy Lepkowska* as above	30 Apr - 2 May-01
IACEE	8 th World Conference Continuing Engineering Education	Toronto, Canada www.pdc.utoronto.ca	12/17-May-01
IChemE	Computer Control: Safe Practice (4 day course)	University of Sheffield Tracy Lepkowska* as above	14/17 May-01
IChemE	Industrial Electrostatic Hazards (1 day course)	Cork, Ireland Tracy Lepkowska* as above	15 May-01
IChemE	Chemical Hazard Assessment (1 day course)	Cork, Ireland Tracy Lepkowska* as above	16 May-01
IChemE	Explosion Hazards of Solvents & Gases (1 day course)	Cork, Ireland Tracy Lepkowska* as above	12 Jun-01
IChemE	HAZOP Study & Its Management (2 day course)	Leeds Tracy Lepkowska* as above	18/19 Jun-01
EFCE & The Royal Swedish Academy of Engineering Sciences	10 th International Symposium on Loss Prevention and Safety Promotion	Stockholm, Sweden Conference Secretariat LP2001@stocon.se	19-Jun-01
EFCE	3 rd European Congress of Chemical Engineering	Nuremburg, Germany Christina Hass ECCE@dechema.de	26-Jun-01
Institution of Chemical Engineers in Australia	6 th World Congress of Chemical Engineering	Melbourne, Australia Meeting Planners chemeng@meetingplanners.com.au	23-Sep-01
North West Branch (IChemE)	Hazards XVI - analysing the past; planning the future	UMIST, Manchester Mike Adams mike.j.adams@talk21.com	6-Nov-01