UKWA: ‘Raising Standards’
Chester 26 March 2001

Fire Protection in Warehouses

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Accidents happen….

…and fires can have a major impact on operations….
Disaster strikes: Firefighters tackle the blaze at Ideal Shopping Direct’s premises in Peterborough last night

Ideal Shopping hit by fire

SHARES in Ideal Shopping Direct, a television shopping channel, were suspended today after a fire “substantially destroyed its TV studios and warehouse”.

Ideal World, which broadcasts on digital television including Sky, put up a notice stating: “We are experiencing technical difficulties at present. Normal service will be resumed as soon as possible.”

The company’s nominated adviser, Grant Thornton, said it hoped to issue a further statement in due course.

The shares were suspended at 71p. They were offered for sale at 157p each when the company floated on the Alternative Investment Market in February last year and raced up to a high of 300p.

The fire broke out yesterday evening at the company’s headquarters in Peterborough, Cambridgeshire. Phone lines to Ideal appeared to be out of order today.

Ideal raised £7.5 million when it was brought to the market last year by stockbroker Peel Hunt. At the time the broker said demand for the shares was so strong that it had increased the placing from the £6.5 million initially planned.

Ideal was set up as a mail-order catalogue company by two former marketing directors, Paul Wright and Valerie Kay.

It was decided to float on the stock market when the company moved into television shopping in a bid to steal market share from Britain’s dominant home shopping programme, QVC.

In its last full year, calendar year 1999, Ideal made pre-tax profits of £450,000 on sales of £11.5 million. It had been due to announce figures for 2000 about now.
This presentation will:

- Review facts and figures on warehouse fires
- Suggest a management approach to fire safety
- Consider the position of the case of City Logistics v County Fire Officer
- Clarify the necessary actions which should be taken by warehouse managers
- Explode some myths about sprinklers
Historically the UK’s largest fire losses are in warehouses....

- COD Donnington (twice !)
- RAF Hullavington
- BAC Weybridge (at 2000 prices this would have cost the insurers between £250 - 350 million)
Each year the Fire Protection Association receives detailed reports of fires where the loss exceeds £50,000 from the insurers. From this data they produce the ‘Large Fire Loss Analysis’ - normally 18 months after the end of the year in question. The data is normally consistent with fire brigade/Home Office statistics.
Fire Brigade and Home Office Data

- The Home Office statistics do not contain a single category for ‘Warehouses’
- In 1999, there were 5637 fires in ‘Retail Distribution’ premises and 4678 fires in ‘Industrial and Transport’ premises
- Experience suggests that warehouses account for some 25% of these fires
- There are probably around 2500 warehouse fires each year in the UK
Casualties in Warehouse Fires

- The HO data records 1 fatality and 12 injuries in ‘Transport and Communications premises’
- There were 2 fatalities and 201 injuries in fires in ‘Wholesale and Retail Distribution premises’
Numbers of Very Large Warehouse Fires
1994-99 (FPA)
Very Large Fires in Warehouses: Fire Losses in £ million 1994-9

(FPA)
### Causes of Fire in Warehouses

<table>
<thead>
<tr>
<th>Source: FPA Large Fire Loss Index</th>
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<tr>
<td>Arson/Deliberate</td>
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<tr>
<td>Electricity</td>
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<tr>
<td>Hot Work</td>
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<td>Spontaneous Combustion</td>
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<td>Smoking</td>
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<td>Under Investigation</td>
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<td>Unknown</td>
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Other impact of fires

- Injury and death to fire fighters
- Fire spread to neighbouring buildings
- Environmental impact - including smoke and fire water run-off (likely future EC directive)
- Liability implications - insurance availability?
- Loss of jobs, destruction of assets
- Proposed corporate manslaughter law?
Managing Fire Safety in Warehouses
Fire Safety in Warehouses: The Management Plan (1)

• Appoint a manager to take charge
• Undertake a risk assessment
• Comply with the law
• Keep records of all fire safety activity
• Implement improvements
  – In fire prevention
  – To prevent fire and smoke spread
  – In fire detection and supression
Fire Safety in Warehouses: The Management Plan (2)

- Establish a fire safety action plan
- Train staff in carrying out the plan
- Maintain equipment
- Liaise with fire brigade
- In larger premises develop a salvage and damage control plan
- Protect records
City Logistics v County Fire Officer

- Sub judice!
- Remitted by the QB judge to the Crown Court for a second hearing
- Leave to appeal refused
- Points of law established:
  - Fire authority do have power to ask for fire protection equipment
  - Statutory bar does not apply
  - ‘Sacrificial’ buildings not acceptable
But:

- Judge’s refusal to grant leave to appeal being challenged
- This case will be heard before the original case is re-heard by a new Crown Court
- No other activity possible (ie guidance from Home Office or DETR) until all legal activity is completed.
Implications

• The case does **not** mean that:
  – ‘The fire brigades will be visiting all warehouses carrying big sticks’
  – ‘All warehouses will have to fit sprinklers’
  – ‘We’ll have to spend a fortune on fire’

• Nor does it mean that all existing warehouses are unsafe or require modification
So what do I have to do? (1):

• If you have an existing Fire Certificate issued under the Fire Precautions Act 1971 and no material alteration has taken place in your building - nothing!
• If the building has been altered and your Fire Certificate has not been updated by the fire authority you need advice
• If you employ more than 20 persons and don’t have a fire certificate you should take advice
So what do I have to do? (2):

- Undertake a fire risk assessment in accordance with the the *Fire Precautions (Workplace) Regulations 1997* (as amended).
- If more than five persons are employed recorded your findings
- If your risk assessment discloses any ‘high risks’ then take steps to reduce these
So what do I have to do? (3):

- Train staff in the duties expected of them in case of fire
- If this includes fire fighting or other emergency action this must be included in the training programme
- Repeat the risk assessment whenever circumstances alter (for example if the materials stored change)
Sprinkler Myths

• Not all sprinkler systems in warehouses need tanks and pumps if mains pressure and flow is adequate
• All the heads do not go off at once
• Sprinklers do not false alarm due to smoke, dust etc
• Sprinkler head failures are very rare
• 80% of fires are controlled by 10 or fewer heads opening
SPRINKLER SYSTEMS

OVER A RECENT 12 YEAR PERIOD 16 800 FIRES WERE CONTROLLED
BY AUTOMATIC SPRINKLER SYSTEMS

NO OF SPRINKLER HEADS OPERATING

1

UP TO 2

UP TO 5

UP TO 10

UP TO 20

UP TO 30

MORE

THAN 30

26

44

65

78

87

92

100

FIRES CONTROLLED %

REMEMBER: DURING A FIRE ONLY THOSE SPRINKLER HEADS CLOSEST TO
THE FLAMES WILL OPERATE

Source: FPA 1994
Sprinklers discharge up to 15 times less water than fire hoses.
Sprinkler Benefits

- No one has ever died in a fire in a sprinklered building in the UK
- Insurance discounts (> 60%) may be available
- Sprinklers detect, warn of and extinguish fires
- Fires in sprinklered buildings tend to cost 80% less than equivalent fires in non sprinklered buildings
- Less water/fire damage= swift return to business as usual
It used to be like this.....
QuickTime™ and a Photo CD Decompressor are needed to view this picture.
But now you can protect your property cost-effectively….

….using the right blend of risk management techniques and application of modern fire systems
Fire Protection in Warehouses

Thank you for your attention

Stewart Kidd’s Web site:
http://www.risk-consultant.com

BASA Web Site:
http://www.basa.org.uk