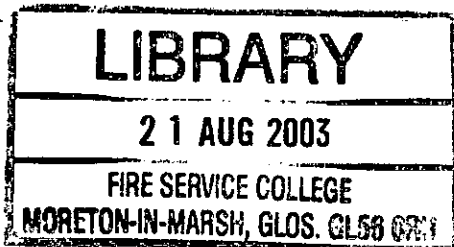




OFFICE OF THE
DEPUTY PRIME MINISTER



To: All Chief Fire Officers

Dear Chief Officer

DEAR CHIEF OFFICER LETTER 3/2003

This letter deals with matters described briefly below. More detailed information is contained in the relevant "Items" attached.

A HEAT EXPOSURE TRAINING.

This item highlights three key studies in this area which have recently been published.

B HELICOPTER INCIDENTS.

This item is to provide guidance on a possible conflict between information as detailed in Fire Service Manual, Volume 2, Fire Service Operations, Aircraft Incidents and the Generic Risk Assessment 4.3.

C FIRE SERVICE MANUAL- OPERATIONS.

Chief Fire Officers will wish to be aware of the publication on 20th August 2003, of the following **Fire Service Manual**:

Volume 2 Fire Service Operations – Acetylene Cylinder Incidents and Natural Gas Incidents.

D FIRE SERVICE MANUAL-EQUIPMENT.

Chief Fire Officers will wish to be aware of the publication of the following **Fire Service Manual**:

Fire Service Manual, Volume 1 Fire Service Technology, Equipment and Media – Fire Service Equipment

It is planned to publish the first Part of this Manual **Inspection and Testing of Equipment** on 3rd September 2003. This Part will replace Technical Bulletin 1/94, which is to be withdrawn as a result.

E BRITISH STANDARDS

This item details a number of new, amended or revised British Standards.

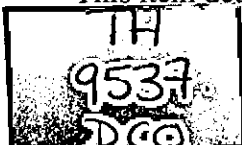
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Date: 18 August 2003



F ENSURING BEST PRACTICE FOR PASSIVE FIRE PROTECTION IN BUILDINGS.

5

This item introduces a new publication that is intended to give practical guidance to bodies involved in building design and construction to increase the quality of passive fire protection using best practice techniques.

G REDUCING UNWANTED FIRE SIGNALS IN HEALTHCARE PREMISES

This item brings attention to a new Fire Practice Note issued by NHS Estates which sets out recommendations and guidance for the reduction of unwanted fire signals in healthcare premises.

Yours faithfully



SIR GRAHAM MELDRUM CBE

H11486

HEAT EXPOSURE TRAINING

1. Health and safety legislation requires employers to reduce risks to health for their employees as far as is reasonably practicable. Exposure to elevated temperatures during training has been identified as a hazard to which firefighters and their instructors are exposed. However, it is essential that firefighters are trained to cope with the dangers which they might encounter at an incident. Although some risk can therefore be regarded as justifiable, it is clearly essential to strike a balance between providing realistic training whilst avoiding unnecessary risk.

Three key pieces of research have recently been completed for the office and are now available. Two studies conducted by The Institute of Occupational Medicine :-

“Firefighter Training: Guidance on the Management of the Risk of Heat Stress”; and “Firefighter Training : Physiological and Environmental Aspects”.

These studies examined the effects and value of three main types of training in elevated temperatures. The three types of training were heat and humidity, fire behaviour and search and rescue. The guidance will be published as a section of the Fire Service Manual and the second study as a Fire Research Division Research Report.

Thirdly, University of Portsmouth have completed research entitled “Determination of the Physical Capabilities of Firefighter Instructors at the End of a Hot Fire Training Exercise”. It includes fitness test recommendations for safety officers and instructors. It has been published as a Fire Research Division Research Report.

Please note that DCOL 11/1999 has now been superseded by the guidance provided in Item A DCOL 1/2001.

If you would like a copy of any of the studies contact Martin Thomas (details below).

Contact point:

Martin Thomas, Fire Research Division

Tel: 01608 650012 Fax: 01608 650013

Email: MartinD.Thomas@odpm.gsi.gov.uk.

HELICOPTER INCIDENTS

It has been brought to the attention of the Fire Service Inspectorate, Operational Practices Section, that there is a conflict with advice given, regarding approach to helicopters, in the Fire Service Manual (FSM), Volume 2, Fire Service Operations, Aircraft Incidents and the Guide to Operational Risk Assessment, Incidents Involving Transport Systems- Aircraft, Generic Risk Assessment 4.3

As part of the "List of Considerations for Incident Commanders at Incidents Involving Aircraft" (H&S Risk Assessment Section 4 page 30) the GRA states;

"Helicopter -- Approach from the rear on the opposite side from the tail rotor".

The FSM Page 31 suggests this for helicopters that have crashed but this advice is contradicted by "warning of extreme danger in this area" on page 32.

The matter has been discussed with the Military, Civil Aviation Authority, International Fire Training Centre and HMI Health & Safety Adviser and the following information is given which will hopefully remove any confusion.

ALL helicopter incidents should ideally be approached from the front in full view of the pilot and crew. It is recognised that in a crash situation this may not be possible and in these circumstances the Incident Commander will have to decide on the most appropriate approach following completion of the Dynamic Risk Assessment (DRA). The DRA should take into account all the hazards as detailed within the GRA and FSM.

Please ensure that all copies of the GRA and FSM are amended accordingly. It is not intended to produce revised copies of the documents in the foreseeable future.

If you have any questions regarding this note please contact Keith Ring in the Operational Practices Section of the HMI on 020 7944 5694 or 07919 044091.

**FIRE SERVICE MANUAL, VOLUME 2 FIRE SERVICE OPERATIONS – ACETYLENE
CYLINDER INCIDENTS AND NATURAL GAS INCIDENTS.**

1. This two-part manual has been published to provide information and guidance to Brigades when dealing with Acetylene Cylinder and Natural Gas incidents.
2. The Acetylene Cylinder guidance replaces Technical Bulletin 2/1992, Generic Risk Assessment (GRA) 5.2 and the interim guidance issued to brigades in September 2001. The advice it contains will be reflected in the revision of the GRA's currently being carried out. Appendix 5 is a revised "Considerations" aide memoir to replace that in the GRA 5.2
3. The Natural Gas section replaces chapter 2 of the Manual of Firemanship part 6b and contains new material to reflect the enormous changes which have taken place in the gas industry since 1967 when the first natural gas was piped ashore from the North Sea to mainland Britain
4. The FSM is published following wide consultation with all key stakeholders and has resulted in a more risk assessed approach to the application of cordons.
5. It has been noticed that the term "Exclusion Zone" has recently been used at incidents and brigades should be aware of its literal meaning. The correct terms of Hazard Zone (defined in the guidance) and inner cordon should be used.
6. When reviewing your current guidance, in accordance with the information contained within this new manual, your attention is particularly drawn to section 2.5.2. This section allows additional flexibility in the reduction of the size of the hazard zone.
7. More research is currently in hand regarding Acetylene Cylinder incidents and the problems they present.
8. The British Compressed Gases Association are currently developing a standard support system for all incidents involving cylinders, including these types of incident. More details will be forwarded when the system is in place. With better understanding, it is expected that incidents involving acetylene cylinders could be managed safely with less disruption. Until a new system is in place brigades are encouraged to continue with existing arrangements for obtaining specialist advice including that available from the industry.

Published by TSO. ISBN 0 11 341226 6 £15.95 (Brigade discount scheme applies)

As usual, a free copy will be forwarded to each Chief Fire Officer direct from the publishers on publication.

Any queries regarding publication issues should be directed to: Assistant Inspector Tony Boyer
☎/Fax. 01202 658590 email: tboyer-hmfsi@btconnect.com

Any queries regarding operational issues should be directed to: Assistant Inspector Simon Webb
☎ 020 7944 5783 email: simon.webb@odpm.gsi.gov.uk

FIRE SERVICE MANUAL, VOLUME 1 FIRE SERVICE TECHNOLOGY, EQUIPMENT AND MEDIA – FIRE SERVICE EQUIPMENT

This Manual is being produced in two parts to replace Manual of Firemanship, Book 2 – Fire Brigade Equipment and Technical Bulletin 1/1994 – Periodic Inspection and Testing of Fire Service Equipment. It is planned to publish this Manual on 3rd September 2003 containing the first part, **Inspection and Testing of Equipment**.

The second part covering **Fire Service Equipment**, including equipment detail and risk assessments will be published in due course. This second part will be included in the initial cost and will be automatically forwarded to purchasers when available. To facilitate easy updating, the Manual will be produced in loose-leaf format.

The first part of the Manual takes account of new and revised legislation published since the issue of Technical Bulletin 1/1994 that impinges on the activities of the fire service in relation to the selection, use, examination, maintenance, inspection and testing of the equipment used by Brigades. For example “Provision and Use of Work Equipment Regulations 1998 (PUWER)” and “Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)”.

The Manual also takes account of any amendments and revisions to British and European Standards and experience gained in the examination, maintenance, inspection and testing of equipment since the publication of Technical Bulletin 1/94.

The guidance in this Manual is intended to assist Brigades in the production of a systematic process to manage equipment in the workplace and to help them in fulfilling their obligations under the various items of legislation. Brigades are strongly encouraged to adopt within their organisation both the principles and the specific inspection and test criteria contained in the Manual.

As in the previous Technical Bulletin 1/94, this Manual also contains information on specific types of equipment in widespread use in the fire service. The Manual does not however provide a comprehensive list of either all the equipment that may be carried on appliances or used by fire fighters or of the actual tests necessary for the specific equipment.

A number of changes have been made to some of the information on the specific items in Chapter 4 since the publication of Technical Bulletin 1/94, which has also been extended to cover personal protective equipment (PPE).

By the publication of the Manual, Technical Bulletin 1/94 is withdrawn and should no longer be referred to.

Published by TSO. ISBN 0 11 341274 6 £15.95 (Brigade discount scheme applies)

As usual, a free copy will be forwarded to each Chief Fire Officer direct from the publishers on publication.

Any queries regarding Publication issues should be directed to: Assistant Inspector Tony Boyer
☎/Fax. 01202 658590 email: tboyer-hmfsi@btconnect.com

Any queries regarding Technical issues should be directed to: Assistant Inspector Peter Silk
☎ 020 7944 5714 email: Peter.silk@odpm.gsi.gov.uk

STANDARDS and PUBLISHED DOCUMENTS

PD 7974-7: 2003 - Application of fire safety engineering principles to the design of buildings

Part 7: Probabilistic risk assessment.

This new Published Document was published and came into effect on 26th June 2003.

This Published Document is part of a series of documents introduced in support of BS 7974: 2001, Application of Fire Safety Engineering principles to the design of buildings – Code of Practice.

This Published Document provides guidance on probabilistic risk analysis. It sets out the general principles and techniques of risk analysis that can be used in fire safety engineering. It also outlines the circumstances where this approach is appropriate and gives examples illustrating their use.

This Published Document incorporates data for probabilistic risk assessment and criteria for assessment. The data included is based on fire statistics, building characteristics and reliability of fire protection systems. The criteria included covers life safety and property protection, both in absolute and comparative terms.

This Published Document does not contain guidance on techniques for hazard identification or qualitative risk analysis.

Probabilistic risk assessment of fire in buildings (with the exception of nuclear, chemical process, offshore and transport) is not widely used and so a discussion of possible future developments is included.

BS EN 60598-2-22: 1999 (Incorporating Corrigendum No.1 and Amendment No.1) Luminaires – Part 22: Particular requirements – Luminaires for emergency lighting

This Standard was published and came into effect on 15th March 1999. The amended version came into effect from 20th June 2003.

This amendment specifies requirements for emergency lighting luminaires for use with electrical light sources on emergency power supplies not exceeding 1000 volts.

- This European Standard covers CENELEC Common modifications and amendments in the following sections;
- Scope
- Definitions
- Marking
- External and internal wiring
- Endurance test and thermal test
- Functional safety
- Changeover operation
- High temperature operation
- Annex A – batteries for emergency luminaires

This section also includes relevant requirements and tests that shall be conducted and complied with for control gears, as specified in IEC 60924, that incorporate additional facilities such as remote control devices, indicators, changeover devices, etc.

The Standard does not cover the effects of non-emergency voltage reductions on luminaires incorporating high pressure discharge lamps.

BS ISO 12472: 2003: Fire Resistance of timber door assemblies – Method of determining the efficacy of intumescent seals.

This Standard was published and came into effect on 25th June 2003.

This International Standard specifies a test method for determining the effective sealing capability of intumescent materials or systems in the context of sealing door-to-frame clearances in timber door assemblies. Intumescent seals extend the duration for which the gap between the leaf edge and the frame will satisfy the integrity criteria of the fire resistance test, and sealing systems can be compared using this method. The method is suitable for evaluating the efficacy of exposed intumescent sealing systems used in conjunction with timber fire resisting doors of up to 1-hour fire resistance. It is not suitable for comparing concealed intumescent seals. The results can be applied to proven, single-acting, single-leaf, latched, timber door assemblies of sizes up to that given in the field of direct application.

This International Standard is applicable to timber door assemblies whose intumescent seals have been tested in accordance with ISO 3008 and have satisfied the integrity and, if appropriate, the insulation criterion, whilst incorporating another form of heat-activated seal for a period appropriate to the application. The suitability of any sealing system for use on timber door assemblies of any other configuration (i.e. unlatched single doors, double leaf assemblies etc., or doors constructed of other materials) can only be evaluated by subjecting a full-sized door assembly, complete with seals, to testing in accordance with ISO 3008.

The method does not provide any measure of the ability of the seal to resist the flow of smoke (although a gap that is sealed will provide a reduction in the flow of hot products of combustion) or any information as to the additional protection that could be needed at hardware/ironmongery positions.

BS EN 12094-3: 2003 – Fixed Firefighting Systems – Components for gas extinguishing systems

Part 3: Requirements and test methods for manual triggering and stop devices.

This Standard was published and came into effect on 1st July 2003.

The Standard is part of a series of Standards with the general title of “Fixed firefighting systems – Components for gas extinguishing systems”.

This European Standard specifies requirements and describes test methods for manual triggering and stop devices of CO₂, Inert Gas or Halocarbon Gas fire extinguishing systems. A Halocarbon extinguishing agent contains as its primary components one or more organic compounds containing one or more of the elements fluorine, chlorine, bromine or iodine.

BS EN 12094-9: 2003 – Fixed Firefighting Systems – Components for gas extinguishing systems

Part 9: Requirements and test methods for special fire detectors.

This Standard was published and came into effect on 1st July 2003.

The Standard is part of a series of Standards with the general title of “Fixed firefighting systems – Components for gas extinguishing systems”.

This European Standard specifies requirements and test methods for special fire detectors, other than fire detectors covered by EN 54-1, used in CO₂, Inert gas or Halocarbon gas and other fire extinguishing systems. A Halocarbon extinguishing agent contains as its primary components one or more organic compounds containing one or more of the elements fluorine, chlorine, bromine or iodine.

This European Standard covers special fire detectors, which react by;

- Bursting a glass bulb
- Melting of a fusible element.

BS EN 12094-10: 2003 – Fixed Firefighting Systems – Components for gas extinguishing systems

Part 10: Requirements and test methods for pressure gauges and pressure switches.

This Standard was published and came into effect on 17th July 2003.

The Standard is part of a series of Standards with the general title of “Fixed firefighting systems – Components for gas extinguishing systems”.

This European Standard specifies requirements and describes test methods for pressure gauges and pressure switches. The Standard is applicable for pressure gauges for monitoring of pilot, control, alarm and storage containers of fire extinguishing systems filled with non-liquid inert gases or pressurised halocarbon gases. The same applications apply to pressure switches with the addition of remote indication of leakage also being applicable.

The European Standard does not cover discharge indicating pressure switches.

BS EN 12094-11: 2003 – Fixed Firefighting Systems – Components for gas extinguishing systems

Part 11: Requirements and test methods for mechanical weighing devices.

This Standard was published and came into effect on 1st July 2003.

The Standard is part of a series of Standards with the general title of “Fixed firefighting systems – Components for gas extinguishing systems”.

This European Standard specifies requirements and describes test methods for mechanical weighing devices of CO₂, Inert Gas or Halocarbon Gas fire extinguishing installations. A Halocarbon extinguishing agent contains as its primary components one or more organic compounds containing one or more of the elements fluorine, chlorine, bromine or iodine.

This European Standard does not cover weighing devices for non-transportable containers, which are filled and refilled on site, e.g. CO₂, low-pressure containers.

BS EN 12094-12: 2003 – Fixed Firefighting Systems – Components for gas extinguishing systems

Part 12: Requirements and test methods for pneumatic alarm devices.

This Standard was published and came into effect on 1st July 2003.

The Standard is part of a series of Standards with the general title of “Fixed firefighting systems – Components for gas extinguishing systems”.

This European Standard specifies requirements and test methods for surface mounted audible alarm devices powered by pneumatic energy (pneumatic alarm devices) to warn persons in flooding zones of CO₂, Inert Gas or Halocarbon Gas fire extinguishing installations. A Halocarbon extinguishing agent contains as its primary components one or more organic compounds containing one or more of the elements fluorine, chlorine, bromine or iodine.

EN 12094-16: 2003 – Fixed Firefighting Systems – Components for gas extinguishing systems

Part 16: Requirements and test methods for odorizing devices for CO₂ low pressure systems.

This Standard was published and came into effect on 2nd April 2003.

The Standard is part of a series of Standards with the general title of “Fixed firefighting systems – Components for gas extinguishing systems”.

This European Standard specifies requirements and describes test methods for odorizing devices for CO₂ low-pressure systems that release an odorizing substance into the extinguishant during discharge.

This European Standard is applicable to odorizing devices for CO₂ low-pressure systems, which are not pressurised before discharge.

Contact for each of the above standards:

HMFSI contact:

AIFS Mick Eady

Tel: 020 7944 5587

mike.eady@odpm.gsi.gov.uk

BS EN 54-12: 2002 - Fire detection and fire alarm systems -

Part 12: Smoke detectors – line detectors using an optical light beam

This Standard was published and came into effect on 31 July 2003.

This Standard is part of the EN 54 series of European standards with the general title of Fire detection and fire alarm systems.

This European Standard specifies requirements, test methods and performance criteria for line smoke detectors utilising the attenuation and/or changes in attenuation of an optical beam, for use in fire detection systems installed in buildings.

This Standard does not cover:

- Line smoke detectors designed to operate with separations between opposed components of less than 1m;
- Line smoke detectors whose optical path length is defined or adjusted by an integral mechanical connection;
- Line smoke detectors with special characteristics, which cannot be assessed by the test methods in this European Standard.

HMFSI contact:

HMI Geoff Bowles

020 7944 5527

geoff.bowles@odpm.gsi.gov.uk

NOTE: The context of the above Standards has not been checked with relative information that may be cited in fire service manuals. Brigades should ensure that personnel currently holding reference material, e.g. fire safety manuals, are made aware of these changes in order that any relevant existing information can be updated as appropriate.

ENSURING BEST PRACTICE FOR PASSIVE FIRE PROTECTION IN BUILDINGS.

This item introduces a new publication that is intended to give practical guidance to bodies involved in building design and construction to increase the quality of passive fire protection using "Best Practice" techniques.

The guide is intended to offer effective and feasible recommendations and selection criteria when using passive fire protection (PFP) in buildings. In doing this it provides Building Control Bodies and Fire Safety Officers with accessible and meaningful information that will enable them to more accurately assess the appropriateness of PFP systems for the building.

The guide covers areas relating to duties and responsibilities of Designers, Constructors, Manufacturers, Regulators and Enforcers; Designing for and maintaining PFP in buildings. There is also information where to get advice and help together with a list of up to date references, standards and bibliography.

The guide is published by BRE at a cost of £25. Further information can be obtained from the following website, www.asfp.org.uk

HMFSI contact:

AIFS Mick Eady

Tel: 020 7944 5587

mike.eady@odpm.gsi.gov.uk

**REDUCING UNWANTED FIRE SIGNALS IN HEALTHCARE PREMISES
- FIRE PRACTICE NOTE 11**

This Fire Practice Note (FPN) provides guidance in respect of the measures necessary to identify, control and reduce unwanted fire signals generated by automatic fire detection and alarm systems in healthcare premises. It is intended for use throughout all healthcare premises, including the Acute and Primary Care sectors.

Unwanted fire signals (UwFS) from automatic fire detection systems within healthcare premises are responsible for generating a significant proportion of false alarm calls to the fire service. This guidance is intended, as part of the fire safety management of healthcare premises, to reduce the burden placed on NHS organisations and the fire service by avoidable, unnecessary fire calls.

This FPN is intended to supplement the guidance contained in BS 5839-1: 2002 which came into effect on 15 July 2003, superseding the 1988 edition of this British Standard Code of Practice, which is now withdrawn. This FPN should also be read in conjunction with Health Technical Memorandum (HTM) 82 (1996).

This FPN has been produced in support of the CACFOA/BFPSA/Home Office (now ODPM) national campaign to reduce false alarms generated by automatic fire detection systems.

Copies of this FPN will be supplied direct to fire authorities. Further copies can be obtained from The Stationery Office by telephone: 0870 600 5533 or E Mail: book.orders@tso.co.uk

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geoff.bowles@odpm.gsi.gov.uk

**The Fire Service
College**



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