



HOME OFFICE
HORSEFERRY HOUSE, DEAN RYLE STREET
LONDON SW1P 2AW

To: All Chief Fire Officers

17 September 1997

Dear Chief Officer

DEAR CHIEF OFFICER LETTER 13/1997

This letter deals with a number of matters which are summarised below. More detailed information is contained in the relevant Items attached to the letter.

A FIRECODE: FIRE RISK ASSESSMENT IN NUCLEUS HOSPITALS

This item advises Chief Fire Officers of the issue of this document by NHS Estates which contains recommendations and guidance on fire precautions and fire risk assessment in Nucleus hospitals.

B ACPO AND PITO NATIONAL PAGING SERVICES FRAMEWORK ARRANGEMENT

This item advises Chief Officers of a national paging services framework arrangement which may be used by fire brigades

C HOME OFFICE RESPONSE TO THE AUDIT COMMISSION'S REPORT 'IN THE LINE OF FIRE'

This item advises Chief Fire Officers of the progress made so far with the work on fire cover standards which is taking place in the wake of the Audit Commission Report 'In the Line of Fire' (published February 1995).

D FURTHER ADVICE ON DEALING WITH TRANSPORT INCIDENTS INVOLVING DANGEROUS SUBSTANCES

Item A of Dear Chief Officer Letter 5/1997 announced the publication of Hazchem List 9 and explained the changes in operational guidance associated with the introduction of the new List. This item further explains and clarifies some of these areas.

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E AMENDMENT TO THE MANUAL OF FIREMANSHIP

This item informs Chief Fire Officers of an amendment to the Manual of Firemanship.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Sir Bryan Collins', written in a cursive style. The signature is positioned above the printed name and title.

**SIR BRYAN COLLINS
HER MAJESTY'S CHIEF INSPECTOR OF FIRE SERVICES**

FIRECODE: FIRE RISK ASSESSMENT IN NUCLEUS HOSPITALS
FIRE PRACTICE NOTE 1: LAUNDRIES

The above Firecode gives advice on the assessment of fire risk in Nucleus hospitals. Nucleus hospitals are those which conform to the Department of Health's "Nucleus" concept by using standard designs (although minor modifications may have been agreed by the local fire authority). Nucleus extensions - conforming to the same principles - have also been built to existing hospitals. All the standard designs are included in "AutoCAD release 13" format on the CD ROM provided with this publication (see inside back cover of attached copy).

2. The guidance supersedes that in the 1989 document "Nucleus Fire Precautions Recommendations" and came into effect on 1 April 1997. It is aimed at hospital fire officers, fire safety advisers, estates staff with a responsibility for fire safety and external building consultants, and should be used for the assessment of existing fire precautions and minor extensions or alterations. It does not provide guidance on the *design* of new Nucleus hospitals or major extensions.
3. The fire risk assessment of a Nucleus hospital should be undertaken using this document together with Firecode HTM 86 "Fire risk assessment in hospitals". The fire risk assessment procedure is similar to that of HTM 86 with individual risks, hazards and precautions being assessed, and additional advice is provided in the form of replacement worksheets.
4. The guidance is not suitable for "Nucleus related" hospitals which, although superficially resembling a Nucleus hospital, do not fully adopt the Nucleus planning and design principles. The fire precautions in these hospitals were designed to comply with HTM 81 "Fire precautions in new hospitals" and should be assessed against that document.
5. The Nucleus concept was ended in 1992 and no new design guidance will be issued. Similarly, with the publication of this document, the procedure for designating hospitals as complying with the principles of Nucleus has been withdrawn. As no new Nucleus hospitals will be designated by the Department of Health, all new hospitals and major extensions to existing Nucleus hospitals should be designated to comply with HTM 81 "Fire precautions in new hospitals".
6. This document has no statutory force, and there is no obligation to follow the guidance in it - other strategies for fire safety are possible. If an alternative form of risk assessment or fire safety strategy is used, the responsibility for achieving the same standards of fire safety as prescribed in this guidance rests with the designer or user.
7. The Home Office has agreed to distribute this Firecode to all Chief Fire Officers and recommends that it should be used in conjunction with other parts of Firecode when advice is sought from fire authorities. Additional copies may be purchased from The Stationery Office (formerly HMSO) for £35 (thirty five pounds), ISBN 0-11-322059-6. There are no cost

implications apart from the purchase of further copies, and no extra manpower implications arising from the issuing of this guidance.

8. The enclosed covering letter from NHS Estates also advises that Fire Practice Note 1 "Laundries" has been superseded by guidance in HTM 83 "General Fire Precautions" and the Home Departments' "Guide to Fire Precautions in Existing Places of Work that Require a Fire Certificate".

Home Office contact: Geoff Hubbard 0171 217 8319

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**ACPO AND PITO NATIONAL PAGING SERVICES FRAMEWORK
ARRANGEMENT**

- 1 Chief Fire Officers may wish to note that the Devon and Cornwall Constabulary, acting as lead force on behalf of the Association of Chief Police Officers and the Police Information Technology Organisation, have tendered for the supply of paging services. The framework agreement will enable permitted users, including fire authorities, to obtain a high quality telephone service at substantially lower prices than are generally available.
- 2 Two suppliers, PageOne and BT Mobile have been selected as the preferred suppliers to the arrangement which commenced 10 April 1997. Details of the service, which was launched in March, and prices are attached.

Telephone contact number AIFS Tessa White 0171 217 8049

Note: a copy of the information is enclosed for fire brigades only.

IN THE LINE OF FIRE: AN UPDATE

Introduction

This paper aims to keep you up to date with the work on fire cover standards which is taking place in the wake of the Audit Commission Report 'In the Line of Fire' (February 1995). It describes the work of the Joint Committee on the Audit Commission Report, and outlines the sorts of outcomes the Committee hopes to achieve.

The Audit Commission Report

'In the Line of Fire' was a wide-ranging value for money review of the fire service in England and Wales, containing numerous suggestions for specific ways to make better use of resources. Work on these specific 'audit' points is continuing in various ways - district audit, reviews of firefighters' conditions of service and pensions, Fire Service Inspectorate monitoring of efficient use of training facilities, etc.

But the Audit Commission also brought together persuasive evidence that there is scope for a radical change to the arrangements for dealing with fire cover in Great Britain; change which could result in savings of lives, suffering and property. The main thrust of these 'fire cover' points aimed at producing a shift from firefighting (cure) to fire safety (prevention), arguing that fire cover should be related more closely to risk, and that fire prevention work would reduce calls for firefighting. The Report encompassed multi-agency efforts to promote fire safety, combined with an enhanced role for the fire service in relation to such promotion and, most substantially, it argued for research on risk assessment and fire cover matters, with a view to ensuring that changes are empirically based.

It is this work to carry forward the major fire cover 'policy' recommendations of the Audit Commission which this describes.

The Joint Committee on the Audit Commission Report

The Central Fire Brigades Advisory Council (CFBAC) agreed in May 1995 that a committee open to all members, including local authority associations, should consider the way forward, and the Scottish CFBAC joined in the establishment of a Joint Committee on the Audit Commission Report (JCACR). An initial meeting of the JCACR was held in November 1995 and agreed to consider those recommendations of the Audit Commission Report which could be developed in the short to medium term. These were:

- a review of fire cover; particularly for A and C risk categories which do not currently reflect relevant socio-demographic factors, time-bounded or seasonal variations in fire risk or the different fire risk factors from modern building materials and methods;
- an examination of the long-term aim of amending the national guidance to allow brigades greater local flexibility in the determination of fire risk and cover; and,

- to consider a change of emphasis from firefighting to fire safety.

With this in mind, the Committee's has opened up three broad areas of discussion: fire risk, fire service response, and fire safety measures; they will have to be brought together in due course, but can usefully be studied independently in the first instance. At its second meeting in April, 1996, the Committee agreed an initial work programme, and work was set in hand on reviewing deficiencies in the 1985 Standards of Fire Cover (CACFOA), evaluating alternative risk assessment methods (Home Office consultants), and considering the scope for flexible response to automatic fire alarms (Home Office).

Risk Assessment

The third meeting of the JCACR in July 1996 had a presentation of the initial work on risk assessment by the consultants, Entec UK Ltd. The starting point was the sought-for goal of risk assessment:

to provide a demonstrable basis for striking an optimal balance between, on the one hand, expected levels of public and firefighter life, property and environmental risk, and, on the other, the level, type and deployment of fire safety, firefighting and special service resources for normal and exceptional fire and other emergency incidents.

The main conclusions were that alternative methods existed for determining the resources and their deployment; these methods were extensively applied (in different forms) in other industries; and it was realistic to envisage the phased introduction of risk assessment in the fire service, using a combination of various methods matched to the characteristics of the risks in different brigade areas. The three main risk assessment methods in the 'toolbox' to be drawn on were fire risk analysis, quantitative risk analysis, and geographic/demographic risk analysis.

A key consideration was the level of resolution required when carrying out the assessment - where the risk did not vary significantly (e.g., housing estates), area-based categories could be applied; in areas of mixed risk, generic risk assessment and points-based scoring could provide greater detail; and unique high risk premises would require site-specific assessments.

The Committee also had a presentation of London Fire Brigade's work on risk assessment, and further discussion of these presentations and the way forward on risk assessment took account of the CACFOA Review of the 1985 Standards of Fire Cover, and a draft paper on Responses to Automatic Fire Alarms.

There was general agreement on the need for change in the current national framework of risk categorisations for the fire service: the 'normal requirements' fire authorities were required to deal with under the Fire Services Act 1947 were undefined, and the Standards of Fire Cover had acquired an inappropriate quasi-legal authority which was deterring Brigades from demonstrably justified local flexibility based on a risk assessment approach.

The use of Standards of Fire Cover attendances as performance indicators and the application of Health and Safety at Work requirements to firefighters were both factors which increasingly constrained CFOs when considering how to re-deploy resources. Clarification that the Standards of Fire Cover were only guidance would strengthen the discretion of fire authorities;

however, it would be desirable to retain a basis for measuring and comparing performances of Brigades in order to satisfy the public (as well as for 'mutual aid' purposes). The current Standards were the basis for resource allocation, and there was a danger that judgements based on different risk assessment methods would lead to inconsistency; avoidance of this was, and should remain, part of the overall goal identified by Entec.

It was agreed that Entec should be asked to undertake further work to elaborate the methods for practical application of risk assessment techniques, so that the Committee could consider whether the approach should be worked up to demonstrate how risk assessment might work in practice.

The draft Entec report on this further work was presented to members of the JCACR at two workshop sessions in September 1996. There was general recognition that the report contained useful material for development into the necessary range of risk assessment methods, and various amendments were suggested (at the workshops and separately in writing). The final report reflecting these points was presented at the 4th meeting of the JCACR in November 1996. The main conclusions were that the next stage of the work should be to undertake a pilot national risk assessment study which would involve working up some of the more widely-applicable risk assessment methods and then proceed to trials. In order to trial the assessment of predominance, it would be necessary to examine a range of types of premises and special services. The trial would involve two main parts:

- a) national level risk assessment: a desk-based risk assessment of a sample of dwellings, commercial premises and RTAs, to develop a set of risk categories, service planning guidelines and associated risk assessment forms to be used locally by brigades;
- b) local brigade risk categorisations: a survey of a range of areas by one or more fire brigades using the above risk categories, followed by the integration of the results of the survey of each type of premises and RTAs in each area to establish predominance.

The trials were intended to confirm the practicality of the particular methods and give some preliminary evidence of costs and benefits. The Committee agreed that further work should be set in hand on the lines proposed (national level first, followed by piloting in three brigades from March 1997). It is expected that this work will be completed by September 1997.

Fire Service response options

The meeting of the JCACR in July 1996 also considered a proposal for research on response options. There was support for the idea of some ground-clearing work to clarify basic issues, taking account of points in the CACFOA reference paper and bringing together information on matters such as how firefighting responses in other countries differed from that in the United Kingdom. The Home Office drew up a draft specification reflecting the points made and proposing that the work be undertaken with seconded firefighters, project managed by consultants.

W S Atkins were commissioned in December 1996 to lead this work, seeking to establish what was needed in order to fight the normal range of incidents, in terms both of firefighters and of equipment, and to categorise the possible responses. As part of this process, a questionnaire

was sent to all Chief Fire Officers and Firemasters, seeking brigades' views on the strength and weaknesses of different responses, along with planned visits to a number of brigades.

The study team completed their work in April 1997. In summary, they identified a list of generic incident types, also tasks, personnel and equipment requirements by which specific incidents could be characterised. From this, a range of attack strategies for each specific incident type was identified, together with the personnel and equipment requirements of each strategy. This research has produced a valuable overview of brigades' practices in responding to incidents. In particular, it has demonstrated that there are already substantial variations, notwithstanding the apparently prescriptive nature of the current Standards of Fire cover; this suggests that brigades should not find it difficult to incorporate further flexibility, when more flexible Standards are developed. We are now considering the extent to which brigades will need access to the details of the task analysis work and, if so, how it should be made available.

Fire Safety

The Audit Commission Report envisaged fire safety as a key element in the 'virtuous circle' of reform in the national framework: - improved resource use leads to reduced fire risk and falling fire costs, releasing further resources for prevention rather than cure (In the Line of Fire: the National Picture, page 45).

The Audit Commission recommended that national research should assess the costs and effectiveness of fire safety to assist in determining the relative balance of resources to be devoted to firefighting as opposed to fire safety. They suggested that research could usefully establish whether deaths and injuries could best be reduced through direct firefighting intervention, through fire safety or by a mixture of both, thus assisting optimum resource allocation.

At the 4th meeting of the JCACR in November 1996 it was agreed that the Home Office would prepare a summary of work already published and known about as a reminder for the Committee. However, an informal review of the literature to hand has not revealed anything of particular value to the JCACR. A survey of practices overseas is being undertaken. It will ask how the balance of effort between fire safety and fire fighting within brigades is determined, also how the effectiveness of fire safety measures is assessed. It is envisaged that the findings of this survey will be tabled for discussion at the 7th meeting of the JCACR.

Other work

At the July 1996 meeting of the JCACR, there was discussion of the need for more information, to ensure in the medium term that the continuing work on fire cover is built on reliable foundations. It was envisaged that further information would be needed on the activities of Fire Brigades, in terms of the number, nature and timing of incidents, special service calls, road traffic accidents, etc., and the Home Office (consulting others with an interest) was asked to elaborate a specification for research to meet the wider information needs of the Committee's future work. Information requirements are important in each aspect of the Committee's work, and will be covered in the Response Options and Fire Safety projects. Accordingly, separate work on longer term information requirements is being held over for the time being; it is certain that any move to local risk management (as proposed by

the Audit Commission) would entail substantial changes in the role of the Fire Service Inspectorate, and additional information would be essential to enable them to monitor performance.

On the question of flexibility, initial reactions to consideration of reduced responses to suspected false alarms from automatic fire alarms indicated that the prospects are not good for advancing this issue separately from the main work on fire cover. However, this is an important element of the Committee's remit and, as with the work on information requirements, the potential and scope should become clearer as other work progresses.

Conclusions

The aim is to start bringing the various strands of work together by the Autumn of 1997. We plan, therefore, to have a meeting in October 1997 at which the Committee can see the emerging proposals with a view to any further work (including consideration of how the preferred options might be costed) before submission to the CFBACs. Overall, the aim is to complete the business of the Committee by the end of the current calendar year.

Fire and Emergency Planning Directorate,
Home Office,
July 1997

**FURTHER ADVICE ON DEALING WITH TRANSPORT INCIDENTS
INVOLVING DANGEROUS SUBSTANCES**

1. Item A of Dear Chief Officer Letter 5/1997 announced the publication of Hazchem List 9 and explained the changes in operational guidance associated with the introduction of the new List. This item further explains and clarifies some of these areas.

Marking of vehicles carrying dangerous goods

2. Under the new "Carriage of Dangerous Goods by Road Regulations 1996, as announced under item F of Dear Chief Officer Letter 12/1996, a vehicle carrying dangerous goods is required to display an orange coloured panel on the front and rear of the vehicle.

3. A UK vehicle carrying a Hazchem plate at the rear will, in addition, show a blank orange panel at the front of the vehicle, regardless of whether it is a tanker carrying a single load or a multi-load or a vehicle carrying a tank container.

4. A tanker on an international journey regulated by the ADR agreement and carrying a single load will show an ADR plate on the front and rear of the vehicle. The ADR plate will show the UN number and Hazard Identification Number of the substance being transported. An "ADR" tanker transporting a multi-load or a vehicle carrying a tank container will show a blank orange panel at both the front and rear of the vehicle.

5. A vehicle carrying dangerous goods in packages will show blank orange plates at both the front and rear of the vehicle, regardless of whether it is a UK vehicle or a vehicle on international journey.

The use of Hazchem codes

6. Brigades are reminded that Hazchem codes have been specifically designed for use in dealing with hazardous substances transported in bulk.

7. It is understood that some brigades may be using the Hazchem code for dealing with hazardous substance incidents other than for bulk transport incidents with the result that they may be taking inappropriate and time consuming action unnecessarily. There may, for example, be a small leak of a hazardous substance i.e. a laboratory flask where the Hazchem code for that substance may indicate the use of chemical protective clothing but where it might be entirely inappropriate to don CPC for such an incident.

8. Hazchem codes should not therefore be relied upon to indicate operational procedure for any incidents other than for bulk transport incidents except under the specific advice of a technical specialist.

Extinguishing media

9. In the light of modern operational techniques and available equipment the use of jets is

no longer considered appropriate. This is because of the risks created by the uncontrolled spreading of chemicals, particularly corrosive, highly toxic or environmentally sensitive materials, thus increasing the hazard to people and the environment. A spray is also more desirable as the cooling effect of a spray is superior to a jet. It is also recognised that it is not always possible to recommend water fog from a high pressure hose reel as a fine spray, as the incident might be outside the reach of an appliance's hose reels, such as possibly in railway marshalling yards. As a result the media codes "1" and "2" have been re-classified as "coarse spray" and "fine spray" respectively.

10. Modern water spray equipment is very effective in controlling practically all non water-reactive chemical spills, except in the case of flammable liquids with low water solubility's, where foam or alcohol resistant foam is usually more appropriate.

11. A coarse spray is considered more desirable where there is a need to apply a large volume of water into a concentrated area of material i.e. flammable solids. A fine spray is recommended for all incidents involving gases, some combustible liquids and highly toxic, corrosive or environmentally sensitive materials.

12. It is not considered to be helpful to specify droplet sizes to define "coarse spray" and "fine spray", as it would be of little help on the fireground if using a branch which can produce a variable spray. The terms "fine spray" and "coarse spray" are merely intended as a general guide in the application of the media to a particular material. The degree of "finess" or "coarseness" of the spray required will be dependent on the particular incident and, using modern equipment, firefighters will be able to adjust the spray from the branch according to the perceived effect on the material involved.

The use of Gas-Tight Chemical Protective Clothing

13. It is a characteristic of the UN numbering system for dangerous substances that some substances having similar properties but different degrees of danger may share the same UN identification number. An example is UN 2788 which may be classified as toxic (Hazard Identification Number 60) or highly toxic (Hazard Identification Number 66).

14. Under the current Hazchem system some highly toxic and highly corrosive substances require the use of gas-tight chemical protective clothing for personal protection. These are shown in the current Hazchem List as having an Additional Personal Protection (APP) code of B. With the existing system of Hazchem codes it is only possible to show when chemical protective clothing is necessary: the code is unable to show where liquid-tight chemical protective clothing is sufficient, or where the higher level of protection given by gas-tight chemical protective clothing is recommended.

15. It is therefore very important that details of the substance involved in any incident are passed immediately to Brigade Control. There are circumstances where, due to the anomaly described above, the incident may or may not require the wearing of gas-tight chemical protective clothing. If, after Brigade Control has checked its chemical database or Hazchem List, there still remains a doubt, a worst case should always be assumed i.e. that a more highly toxic or highly corrosive classification of the substance is involved, and they should advise the wearing of gas-tight chemical protective clothing at the incident.

16. The most effective way to obtain accurate details of the substance involved is by contact with the specialist advice telephone number shown on the transporting vehicle's Hazchem plate.

Home Office contact: Dennis Ricketts 0171 217 8745
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ITEM E
DCOL 13/1997

AMENDMENT TO THE MANUAL OF FIREMANSHIP

Manual of Firemanship -

Amendment to
Book 8 Building construction and structural fire protection
Part 5, Chapter 13, Section 2 Offices, page 132, 1st para line 4

amend BS 5588 Part 3, 1983
to BS 5588 Part 11, 1997

Home Office contact: 0171 217 8146

