



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

To: All Chief Fire Officers

6 June 1995

Dear Chief Officer

DEAR CHIEF OFFICER LETTER 8*/1995

1. 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 RADIO EQUIPMENT FOR USE WITH BREATHING APPARATUS

2. This Item affirms guidance contained in Item 2 of DCOL 6/1992. It confirms that radio equipment purchased for use with breathing apparatus should be certified by an appropriate body and the standard to which it should be certified.

B REGULATORY SPECIFICATIONS FOR PORTABLE RADIOS

3. This Item is issued in response to requests to publicise standards and does not indicate any alteration to the specification.

C GENERIC CODE OF PRACTICE FOR MOBILE RADIO 999 EMERGENCY ACCESS

4. The generic Code of Practice describes the arrangements intended to be applied between the mobile telephone companies (or their call handling agents) and the Emergency Authorities (EAs) for forwarding 999 calls made by mobile telephone customers. The CoP has been agreed by the Public Telecommunication Operators (fixed and mobile) and the EAs through the auspices of the Home Office 999 Liaison Committee. Chief Fire Officers should ensure that the CoP is passed to the brigade Communications Officer.

D METHODS OF DECONTAMINATION AFTER CHEMICAL INCIDENTS: CFBAC RESEARCH REPORT NO 63

5. The Home Office Fire Research and Development Group's Fire Experimental Unit were asked to consider the effectiveness of the methods used by brigades to decontaminate firefighters' chemical protective clothing. This research project has been completed and copies of the FRDG summary report are enclosed.

* Please note that DCOL 7/1995 requesting annual returns for HM Inspectorate of Fire Services was issued on a limited distribution

**E STANDARDS FOR STORAGE OF FIRE HAZARDOUS MATERIALS:
CFBAC RESEARCH REPORT NO 64**

6. This Item advises Chief Fire Officers about the publication of a research report with an accompanying video on the standards for storage of fire hazardous materials.

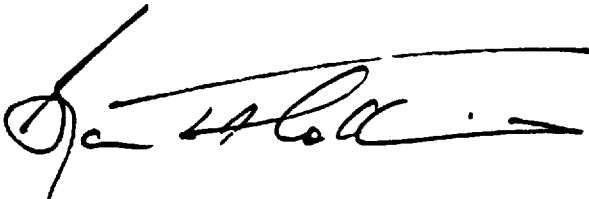
F FIRE SERVICE VEHICLE MAINTENANCE: MANUAL OF BEST PRACTICE

7. This Item informs Chief Fire Officers that the Joint Committee on Appliances, Equipment and Uniform has commended the fire service vehicle maintenance "Manual of Best Practice" for use by brigades. The manual was circulated to Chief Fire Officers by CACFOA in September 1994.

G CITIZEN'S CHARTER MARK AWARD 1995

8. This Item informs Chief Officers about the scheme under which users of the service can now nominate brigades to receive a Charter Mark award this year. It also gives a contact point where brigades can obtain copies of a booklet which explains how to apply for a Charter Mark.

Yours faithfully



**BRYAN T A COLLINS
Her Majesty's Chief Inspector
of Fire Services**

ITEM A
DCOL 8/1995

RADIO EQUIPMENT FOR USE WITH BREATHING APPARATUS

1. This Item seeks to up-date the guidance contained in DCOL 6/1992 Item 2 and follows a consultancy study carried out on behalf of the Home Office. The study confirmed the guidance given in DCOL 6/1992 Item 2, which this Item replaces.

2. Radios purchased for use with breathing apparatus should be certified by an EEC Approved Certification Body for use in Zone 1 with gas group IIC and a minimum temperature requirement of T4. Such radio equipment will be marked with the following symbol:

EEx ib IIC T4 or T5 or T6

3. When purchasing such radios, it is strongly recommended as an additional requirement that they should satisfy a degree of ingress protection of at least IP 54 as specified in BS EN60 529: 1992. This requirement would enable the radios to be used with explosive dust atmospheres.

4. Recent research has confirmed that the equivalent USA approval standard is:

Class 1, Division 1, Groups A and B.

Protection against dust is indicated by approval to Class 2, Groups E, F and G. It is recommended if the USA equivalent is used, only radios and interfaces approved by Underwriters Laboratory or Factory Mutual are used.

<u>Principal North American Authorities</u>	<u>Country</u>	<u>Standard Intrinsic Safety</u>
Underwriters Laboratories	USA	UL 913
Factory Mutual	USA	Class No 3610

5. Any interface equipment provided between the radio and the breathing apparatus and the resulting electrical system should be certified to an identical standard. (DCOLs 4/1988 and 10/1991).

6. It was not intended that radios in use with breathing apparatus in brigades in 1992 should be replaced immediately but that as such equipment reached the end of its natural life, it should be replaced with the equipment of the appropriate standard.

Telephone contact numbers: (Technical) 0171 217 8462 / 8067
Mr M Phillips / Mr B Hill
(Administrative) 0171 217 8449 / 8744
Ms Y Evans / Mr A Wheeler

File reference: FEP/90 59/1507/7

ITEM B
DCOL 8/1995

REGULATORY SPECIFICATIONS FOR PORTABLE RADIOS

1. Attached is a copy of the latest specifications MG-20 Issue 3, which covers the regulatory requirements for the fire service UHF-FM portable radios. The specification is the work of the Home Office Radio Frequency and Communications Planning Unit (RFCPU). The attached is issued in response to requests to publicise standards and does not indicate any alteration to the specification.

2. It is a requirement of the 1949 Wireless Telegraphy Act, that all use of radio should be covered by a licence unless it has been made exempt. All radio equipment, including that which is exempt from licensing, must meet certain minimum standards of performance and be type approved to an appropriate specification.

3. The Home Office sets its own standards of performance for equipment to operate in the frequency bands it manages. Currently these standards are based where possible upon national or European specifications. Where there are no such relevant documents the Home Office publishes its own specifications. Manufacturers or suppliers are required to submit a sample of their equipment to a recognised test house following which RFCPU will consider granting equipment type approval for use in Home Office managed frequency bands.

4. The following Home Office staff may be able to give you further guidance on the choice of portable radios:

Type approval Mr G Streeter (RFCPU) 0171 217 8093

Operational issues AIFS W Amabilino (HMFSI) 0171 217 8660

5. It is not expected that there will be manpower or cost implications arising from this Item.

File reference: FEP/92 58/59/1

ITEM C
DCOL 8/1995

GENERIC CODE OF PRACTICE FOR MOBILE RADIO 999 EMERGENCY ACCESS

1. Attached for the attention of Chief Fire Officers is a copy of the generic Code of Practice for the mobile (cellphone) telephone network.
2. The Memorandums of Understanding for Cellular Radio and the Personal Communications Network have been combined to form this new generic code. Item 3 of DCOL 11/1992 and Item 3 of DCOL 4/1993 are superseded by the enclosed Code of Practice.
3. The code describes the arrangements intended to be applied between the mobile telephone companies (and their call handling agents) and the four Emergency Authorities in England, Wales, Northern Ireland and Scotland for forwarding emergency 999 calls originating from mobile (cellphone) customers. The contents of the code have been agreed by the Public Telecommunication Operators (fixed and mobile) and representatives of the Emergency Authorities through the auspices of the Home Office 999 Liaison Committee.
4. Brigades should aim to provide at least two weeks' notice of changes to emergency contact numbers to Cellnet, Orange and Vodafone who will follow their mutually agreed update procedure with BT; and to Mercury, the call handling agent for One-2-One. The date and time that the new numbers become effective should also be clearly stated.
5. Chief Fire Officers should ensure that the Code of Practice is made available to control room staff.
6. It is not expected that there will be any significant manpower or cost implications arising from this guidance.

Telephone contact number: 0171 217 8639

File reference: FEP/93 59/67/9

ITEM D
DCOL 8/1995

**METHODS OF DECONTAMINATION AFTER CHEMICAL INCIDENTS
CFBAC RESEARCH REPORT NO 63**

Background

1. The Home Office Fire Research and Development Group (FRDG) was asked to undertake research into the effectiveness of the various methods used by fire brigades for decontaminating firefighters in chemical protective clothing following chemical incidents. This work was undertaken by the Fire Experimental Unit (FEU) and a copy of the Summary Research Report (Number 63) is enclosed.

The Study

2. A questionnaire circulated to all brigades in the UK identified the most common chemical protective clothing used and the methods of decontamination employed by brigades.

3. From the results of the questionnaire, it was decided to carry out trials using the three following types of suits:

- (a) a non-coverall (BA outside) CPS suit, made of PVC,
- (b) a coverall suit, made of neoprene, and
- (c) a gas-tight suit made of hyperlon/neoprene.

4. The project was confined to primary decontamination - necessary to safely extricate the firefighter from protective clothing at the scene of an incident. No work was undertaken on secondary decontamination - necessary to make protective clothing safe to re-use.

5. Four safe dummy contaminants were used to represent a range of hazardous chemicals which might adhere to suits. These were talcum powder, wallpaper paste, rape seed oil and golden syrup. It was decided to use fluorescein in all the dummy contaminants as a method for determining the amount of contaminant remaining after decontamination. Very small quantities of this substance show up under strong ultraviolet light.

6. A number of different decontamination methods, based on the responses to the questionnaire, were trialed using each of the contaminants on all three types of suit.

Results of the Trials

7. It was found that none of the decontamination methods used were completely successful in removing all the contaminant but some methods were found to be more successful than others.

8. Overall it was found that methods that used some form of

scrubbing with detergent gave a greater degree of decontamination.

9. It was found that methods which used hoses or main jet/spray branches out-performed the portable shower units, when used alone.

10. Vacuum cleaners appeared to be relatively ineffective against dry powder contaminants.

Recommendations

11. Some brigades may find that the best methods of decontamination identified in the report offer significant improvements on their current procedures.

12. After primary decontamination has been effected, brigades should consider whether any further action is necessary before a used suit is returned to operational service. This will depend on the chemical encountered and the degree of contamination. Appropriate records, including the nature of contaminants, should be kept.

Financial and manpower implications

13. There are no significant financial or manpower implications to this item.

Telephone contact number: 0171 217 8745

File reference: FEP/95 217/1500/1

ITEM E
DCOL 8/1995

**STANDARDS FOR STORAGE OF FIRE HAZARDOUS MATERIALS:
CFBAC RESEARCH REPORT NO 64**

1. Paragraph 6 of Fire Service Circular 59/1976 advised fire authorities that in order to effectively reduce the number of factory premises which would be liable for fire certification, provision had been made in Article 4(2)(c) of the Fire Precautions (Factories, Offices, Shops and Railway Premises) Order 1976 for a fire authority to be able to determine the kind and quantity of explosive or highly flammable materials stored on premises which did not attract the need for a fire certificate. Appendix 1 and Appendix 2 to Annex B of the circular provided guidance on highly flammable solids which were divided into lists S1 and S2. The lists were updated in 1977.
2. The accuracy of the 1976/77 guidance was questioned following firstly the fire at James Brown Ltd in 1983 which resulted in the deaths of 3 people from fumes from burning acrylic fabrics and secondly the Maysfield Leisure Centre fire in Belfast in 1984 when 6 people died from toxic fumes of burning cellular foam. Such incidents highlighted the omission from the circular of synthetic fibres and cellular foam.
3. The lists were updated in Fire Precautions Act 1971 Circular Number 23 issued on 8 April 1992 on the basis of a hazard rating using the UN method of classification for combustibles and the HSE medium scale fire test. Paragraph 13 of the 1992 circular also highlighted the need for a fire risk assessment approach to be adopted before deciding whether or not a fire certificate was necessary.
4. The Home Office commissioned the South Bank University to carry out a series of tests to provide a scientific basis by which the combustibles identified in the 1992 circular could be verified and to develop a procedure whereby new materials could be added to the lists.
5. A summary report of the project has been produced and a copy is enclosed. A video has also been produced which shows the programme of tests using a cone calorimeter to determine the rate of heat release and a computer model FLUENT to investigate the growth of fires in storage areas. A copy of the video is enclosed for Chief Fire Officers only.
6. The research has shown that some changes to the S1 and S2 lists are necessary. A revised circular to fire authorities identifying changes to the lists and reference sources for new materials will be issued this year.

Telephone contact numbers: (Policy) Mrs Joyce Noakes
0171 217 8693
(Technical) Mr E Burke
0171 217 8719

File reference: FEP/94 64/91/1

ITEM F
DCOL 8/1995

FIRE SERVICE VEHICLE MAINTENANCE: MANUAL OF BEST PRACTICE

1. In its Occasional Paper No 1, published in 1986, the Audit Commission noted that fire brigades were spending about £35m a year on transport, mainly on the maintenance of fire appliances, and suggested that some larger brigades might have cost reductions opportunities worth up to £200,000. The Commission also observed that brigade workshops often undertook very specialist work in-house and questioned whether this was cost-effective.

2. Subsequently, the Home Office set up a Joint Working Party to consider the Audit Commission's Paper and concluded that there were three areas which merited careful investigation:

- a) the need for a detailed computer maintenance programme for brigade workshops;
- b) an examination of the way by which bonus schemes for maintenance personnel operate;
- c) a systematic, or thematic, review to determine the best practice which brigades should be encouraged to follow with regard to vehicle maintenance and replacement policies.

3. Following this, the Home Office identified areas in which positive improvements could be achieved, including:

- a) the use of output measures and performance indicators, and the development of a model of best practice, taking account of work carried out during the OMPIS trial;
- b) an examination of vehicle servicing frequency and development of minimum standards compatible with fire service needs on which an ideal schedule can be constructed;
- c) work on the calculation of the size of reserve fleets necessary to guarantee standards of service, and exploration of possible sharing of reserve fleets.

4. It was agreed by the Joint Committee on Appliances, Equipment and Uniform in September 1992 that CACFOA would take the lead in determining how these objectives could be met within existing structures.

5. Subsequently an ad-hoc group, chaired by Mr David Pain (Vice Chairman of CACFOA's Appliances Equipment and Uniform Committee) and comprising Brigade Engineers and Fleet Managers drawn from each of the CACFOA districts, made recommendations for best practice for the maintenance of fire service vehicles and a

"Manual of Best Practice" was prepared as a result of those recommendations.

6. This Manual was circulated to Chief Fire Officers, by CACFOA, in September 1994.

7. The Joint Committee on Appliances, Equipment and Uniform considered the Manual at its meeting in March 1995 and has commended it to brigades for use as a model of best practice.

Financial and manpower implications

8. It is anticipated that the adoption by brigades of the principles contained in the Manual, together with the ready availability of relevant advice and information therein, will assist brigades in the overall management of their vehicle workshops and is, therefore, likely to be cost effective.

Telephone contact number: 0171 217 8745

File reference: FEP/94 61/127/1

ITEM G
DCOL 8/1995

CITIZEN'S CHARTER MARK AWARDS 1995

1. Chief Officers recently received a letter from the Home Secretary about the Charter Mark scheme 1995 which explained that users of the service can nominate brigades to receive a Charter Mark award this year. Under the scheme the Citizen's Charter Unit will write to brigades nominated by the public, enclosing a copy of the nomination and inviting them to apply for a Charter Mark. The Charter Unit has sent stocks of a leaflet and posters about the user nomination scheme to fire prevention officers. Brigades are encouraged to put the leaflets and posters on public display and to respond positively to any nominations.

2. Copies of the booklet "Make your Mark: Charter Mark awards 1995: Guide for applicants", with full details of how to apply for a Charter Mark this year, can be obtained from:

Graham Catt
Central Secretariat
Home Office
Rm 940
50 Queen Anne's Gate
London SW1H 9AT
(Telephone 0171 273 2762)

3. Any enquiries about this Item should be directed to Mr J P Bould (Fire Service Division) at the number below.

Telephone contact number: 0171 217 8257