

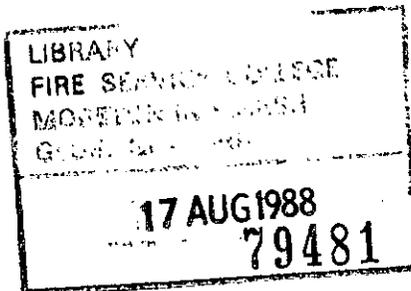


FEP/80 7/6/8
 FIR/86 620/21/1
 FEP/87 59/67/1
 FEP/88 9/309/1
 FEP/86 17/20/4
 FEP/87 45/157/2
 FEP/88 66/83/1
 FEP/87 52/61/2
 Our reference: FEP/88 1505/1507/3

HOME OFFICE
 Queen Anne's Gate LONDON SW1H 9AT
 Direct line: ~~01-212 3000~~ 01-273 2845
 Switchboard: ~~01-212 3000~~ 01-273 3000

Your reference:

To all Chief Officers



5 August 1988

Dear Chief Officer

Dear Chief Officer Letter 5/1988

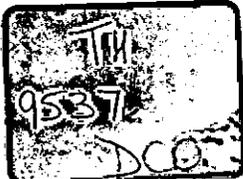
ITEM	PAGE
A. INCIDENTS ON RAILWAY PROPERTY	1-3
B. FIRE DETECTION AND ALARM SYSTEMS FOR BUILDINGS	4
C. NATIONAL FIRE SAFETY WEEK	5
D. EXPLOSIONS AND FIRES IN RESUSCITATION APPLIANCES	6
E. FIRES IN PRISON SERVICE ESTABLISHMENTS	7-11
F. FUTURE MOBILISATION AND COMMUNICATION SYSTEMS	12-14
G. CELLULAR RADIO	15-16
H. FIRE SERVICE DRILL BOOK	17-19
I. MANUAL OF FIREMANSHIP BOOK 3	20

Yours faithfully

R D H DOYLE
 Her Majesty's Chief Inspector
 Services

The Fire Service College

00124228



INCIDENTS ON RAILWAY PROPERTY

1. Chief Fire Officers were advised in my letter of 4 December 1987 (DCOL 10/87) that, as a result of certain technical difficulties, British Rail were unable to provide an absolute guarantee that electrified third rail track systems would not become re-energised during an operational incident. I reported then that the Home Office, British Rail and the Railway Inspectorate were examining the existing safety arrangements, and stressed that, in the meantime, fire crews should treat all such track as being "live" at all times.
2. It is now apparent that the technical difficulties confronting British Rail, namely vandalism to lineside switches and the possibility of incident track becoming re-energised as a result of a train straddling "dead" and "live" sections, will not be overcome within the foreseeable future. British Rail have been made fully aware of the need to provide firefighters with as safe a working environment as possible, and, to that end, revised procedural instructions aimed at reducing the chances of mishap have been issued to railway personnel. A copy of the revised instructions is attached.
3. They require British Rail Operations Control to await clearance from the respective emergency service control before restoring either traffic or power to the incident track. The emergency service control will also be consulted before neutral sections of track, that is track at either end of the incident section which has been isolated to prevent traffic entering the affected area, are re-energised. This procedure, termed "shortening", is undertaken to facilitate the movement of traffic. There is, for the reasons outlined in paragraph 2 above, a possibility that the incident section will also become energised at this time and it is important that firefighters are clear of the track. Chief Fire Officers will wish to ensure that Brigade Control personnel are familiar with the revised procedures, in particular, the need to inform British Rail Operations Control as soon as possible once firefighters are

clear of the track and restriction of rail movement or current isolation is no longer required.

4. I must again stress that notwithstanding the revised instructions to railway personnel, fire crews should continue to treat electrified third rail track systems as being "live" at all times. On no account should firefighters rely upon any assumption that such track is or will remain de-energised.

5. The outcome of a general review of existing guidance to the fire service for incidents on railway property, contained in DCOL 3/1984 and the Manual of Firemanship, will be reported in due course.

6. This note is for Chief Fire Officers' information. There are no financial or manpower implications.

File reference: FEP/88 9/309/1

Telephone number of contact: 01-273 3942

INCIDENTS ON RAILWAY PROPERTY

1. Chief Fire Officers were advised in my letter of 4 December 1987 (DCOL 10/87) that, as a result of certain technical difficulties, British Rail were unable to provide an absolute guarantee that electrified third rail track systems would not become re-energised during an operational incident. I reported then that the Home Office, British Rail and the Railway Inspectorate were examining the existing safety arrangements, and stressed that, in the meantime, fire crews should treat all such track as being "live" at all times.
2. It is now apparent that the technical difficulties confronting British Rail, namely vandalism to lineside switches and the possibility of incident track becoming re-energised as a result of a train straddling "dead" and "live" sections, will not be overcome within the foreseeable future. British Rail have been made fully aware of the need to provide firefighters with as safe a working environment as possible, and, to that end, revised procedural instructions aimed at reducing the chances of mishap have been issued to railway personnel. A copy of the revised instructions is attached.
3. They require British Rail Operations Control to await clearance from the respective emergency service control before restoring either traffic or power to the incident track. The emergency service control will also be consulted before neutral sections of track, that is track at either end of the incident section which has been isolated to prevent traffic entering the affected area, are re-energised. This procedure, termed "shortening", is undertaken to facilitate the movement of traffic. There is, for the reasons outlined in paragraph 2 above, a possibility that the incident section will also become energised at this time and it is important that firefighters are clear of the track. Chief Fire Officers will wish to ensure that Brigade Control personnel are familiar with the revised procedures, in particular, the need to inform British Rail Operations Control as soon as possible once firefighters are

T00000

UUUUUU

FIRE DETECTION AND ALARM SYSTEMS FOR BUILDINGS

PUBLICATION OF BS 5839: PART 1 : 1988 CODE OF PRACTICE FOR SYSTEM DESIGN, INSTALLATION AND SERVICING

1. The attention of Chief Fire Officers is drawn to the publication of BS 5839 : Part 1 : 1988 which was published on 31 May. BS 5839 : Part 1 : 1980 is now withdrawn.
2. Several important changes are made. The revised code introduces classifications to allow the specification of fire detection and alarm systems by principal purpose (ie life or property protection) and extent of protection according to risk. Following recent research, the provision of detection in rooms adjoining escape routes is recommended, particularly for sleeping accommodation. Recommendations to cover recent advances in new technology (including "intelligent" micro-processor based fire detection systems) are also included, together with measures for the avoidance of false alarms and means to restrict the effect of faults in systems in which circuits cover more than one zone. Monitoring of all circuits is recommended and the maximum permissible delay in the response to operation of manual call points is reduced.
3. Item D of DCOL No. 11/1987, issued in December 1987, gave advance notice of the publication of the new Standard and offered broad guidance on its interpretation, particularly the type of fire warning system to be provided in varying types of occupancies. However, attention is now also drawn to the requirements for Control and Indicating equipment in Section 15. In order to allow manufacturers time to produce equipment to the new specification in BS 5839 : Part 4, the British Standards Institution has indicated that control and indicating equipment conforming to BS 3116 : Part 4 may be accepted for systems installed, commissioned and handed over before 1 January 1990.
4. There are no additional cost or manpower implications arising from this further letter.

Home Office
Fire and Emergency Planning Department

August 1988

FEP/86 17/20/4

Telephone number of contact: 01-273-2867

000004

NATIONAL FIRE SAFETY WEEK 1988

The purpose of this letter is to notify Chief Fire Officers that Fire Safety Week 1988 will run from 24-29 October, and that its theme will be smoke detection and related matters.

2. The domestic side of the Week will run under the slogan "Wake up. Get a smoke alarm", and the industrial side under the slogan "Fire - Detect and control it". The Home Secretary has accepted an invitation from the Fire Protection Association (FPA) to launch the Week. The FPA and local fire liaison panels will use the Week to promote detection and control systems in industry, commerce and the public sector. The Week will also be used as a springboard by at least two manufacturers and distributors of smoke alarms to launch their own publicity campaigns.

3. As you will be aware, a pilot television advertising campaign was run by the Home Office in the Tyne Tees television area earlier this year, using the "Wake up. Get a smoke alarm" slogan and urging the purchase and installation of smoke alarms. Research has shown that the overall effect of this campaign was good and it is now anticipated that this campaign will be extended nationally during the coming winter.

4. Fire Safety Week will help to provide smoke alarm publicity until this campaign begins. The Home Office will use it to promote purchase and installation of alarms through printed publicity material, the press, and through radio. The fact that they are not a substitute for general fire precautions, and also the need for special care in the home because of the presence of potentially dangerous upholstered furniture will be stressed.

5. Many brigades are already undertaking their own smoke alarm campaigns. Fire Safety Week will provide an opportunity to draw these initiatives together for a greater national impact. However, proper maintenance of smoke alarms does not necessarily follow after purchase and installation, and any publicity should bear this in mind.

6. It will of course be for each brigade to determine what action can best be taken in support of the Week on a local basis. On the assumption that such activity is contained within existing resources, it should not involve any significant additional direct cost or manpower implications for fire authorities. The resource implications of this circular are therefore minimal.

FEP/87 45/157/2

Home Office contact tel no: 01-273 2765

000005

EXPLOSIONS AND FIRES IN RESUSCITATION APPARATUS

1. Two incidents of explosions and fires (commonly known as 'ignitions') in oxygen resuscitation apparatus in use with Fire Brigades have been brought to our attention recently. In each case the cause was oil/grease contamination of component parts of the resuscitation apparatus.
2. The purpose of this item is to remind Brigades of the warnings contained in Book 6 of the Manual of Firemanship concerning oil/grease contamination in the presence of oxygen and to reiterate to Brigades the need for scrupulous cleanliness when undertaking any operation involving equipment which utilises oxygen so as to avoid possible contamination by oil or grease. Only a very small quantity of oil/grease contamination may be necessary to initiate an explosion and/or fire. The requirement for a high standard of cleanliness extends not only to the maintenance of equipment but to the storage of both the equipment and components in stations and workshops and the stowage on appliances. Extra care should also be taken should it be found necessary either to change an oxygen cylinder or undertake any other maintenance of resuscitation equipment at an incident due to the greater likelihood of contamination occurring.
3. Should a Brigade utilise an external contractor to undertake any work involving oxygen equipment then, if the contractor is not a body familiar with the dangers associated with oil/grease in the presence of oxygen, such as BOC, British Coal etc, the Brigade should ensure that the contractor is made aware of the need for scrupulous cleanliness. This is especially important where small 'diving shops' who more usually deal with compressed air apparatus are used for maintenance.
4. In addition to the need for cleanliness Brigades should also ensure that any components or fittings used on a particular item of apparatus are both designed for and compatible with oxygen. The use of non-standard or Brigade modified components is to be avoided. Again, Brigades should make external contractors aware of this recommendation.
5. Should any doubt exist as to whether equipment or components have been contaminated and/or adequately cleaned then it is essential that the manufacturers of the equipment be consulted.

File Reference Number: FEP/88 66/83/1

Telephone Number of Contact: 01 273 3114

000003

FIRES IN PRISON SERVICE ESTABLISHMENTS

1. The guidance set out below is issued following discussion within the Joint Committee on Fire Brigade Operations. The need for it was highlighted by events at a number of incidents affecting operations which occurred in some British prison establishments following disturbances caused by inmates. It is necessarily of a general nature and makes no attempt to cover every eventuality since the circumstances at prison incidents are likely to vary at the outset and change, possibly dramatically, during the course of an operation. This guidance has been prepared in consultation with the Prison Departments of the Home Office and of the Scottish Home and Health Department.

Safety of Firefighters

2. The safety of firefighters must be considered a major priority at any incident in a prison service establishment. Officers in charge should not hesitate to withdraw personnel if their life or safety are clearly at risk.

Pre-planning

3. The purpose of pre-planning should be to minimise the need to take "on the spot" decisions in potentially stressful circumstances. It is therefore desirable that operational plans and 1(1)(d) files for prison service establishments be as comprehensive as possible. Prisons vary significantly in layout and it is necessary for the detail of each plan to be determined by the Brigade in the light of local circumstances and after full consultation with the Prison Authorities. The need for an adequate pre-determined attendance and officer response to the risk is stressed. Consideration should also be given to arrangements designed to alert the brigade to any anticipated disturbances.

4. Once prepared, the operational plan should be evaluated and refined by training and, wherever possible, joint exercises involving prison personnel and those fire crews most likely to attend any fire or disturbance at the prison. It is important that fire officers and personnel are made familiar with the provision and availability of prison firefighting facilities, particularly water supplies, and with agreed arrangements for ready access to secure areas of the establishment, including individual cells. Fireground communications should be tested for effectiveness in the prison establishment. Fire service, police and prison personnel should be familiarised with an agreed audible warning device evacuation signal or signals.

Briefing

5. Officers in charge of appliances and all personnel should be thoroughly briefed before being committed to any incident at a prison. They should be reminded of their role and of any particular risks to their safety and of their responsibility to ensure that fire appliances and equipment, which include a range of potential weapons, do not fall under the control of prisoners. Personnel should be advised to observe the precautions which they would normally take against the possibility that a person needing to be rescued may carry a serious infection. Fire service personnel should be reminded to refrain from commenting to the press on any aspect of the incident other than firefighting operations.

Proceeding to an Incident

6. Routes into any prison service establishment should be carefully selected in consultation with the Prison Authorities in order to ensure that fire appliances and equipment are not positioned in areas of danger. To that end, it is desirable for holding areas, preferably outside the prison grounds, to be designated and the siting of appliances to be decided in the operational plan. Only the minimum of appliances and equipment should be mobilised from the holding area. The use of two-tone horns and blue flashing lights should be avoided, particularly in

or close to prison grounds.

Liaison with Prison Service Staff

7. It is essential that a senior fire officer maintains close liaison with designated senior members of the prison authorities throughout the time that the Fire Service is involved at the scene of the disturbance. However, officers should be mindful of the need not to expose firefighters to any greater risk than is operationally necessary, for example, by committing firefighters to an area of the establishment where it is agreed with senior prison personnel, firefighters may be put at undue risk to life and safety.

Firefighting

8. All firefighters should be fully dressed in firefighting gear, including helmets, in order to ensure that they are clearly identifiable and not mistakenly perceived by inmates as exceeding their normal responsibilities. The use of both personnel and equipment should be confined to those activities which constitute normal operational practices.

9. Effective fireground command and control is essential at all times. Personnel should not work alone in the prison environment. Breathing apparatus control procedures should be followed and second man attachments on BA sets should not be used to take prison personnel into a building. In the event of evacuation, normal procedures for the use of an audible warning signal and of nominal rolls should be followed (see also paragraph 4).

General

10. Prison Governors are provided with detailed advice on fire prevention and fire precautions, the provision of firefighting equipment and facilities, and the action required in the event of fire in a Prisons Fire Precautions Manual issued by the Home Departments for England and Wales, and Scotland. The Manual,

which is currently being updated and will take account of suggestions received from the Joint Committee on Fire Brigade Operations and others, makes clear that Governors should maintain a close liaison with the local fire brigade. It also recommends that Brigade personnel should be encouraged to visit the establishment frequently so that operational plans can be drawn up and practised. Chief Fire Officers will be provided with a copy of the revised Manual in due course.

11. Chief Fire Officers will be aware that, prison service establishments being Crown Premises, their powers under the Fire Services Act 1947 are limited. Governors are, however, advised in the Prisons Fire Precautions Manual that at fire incidents, the fire officer in charge should on arrival take full control of firefighting and rescue operations, and that the prison fire officer should place himself under the direction of the senior fire officer present. However, the circumstances likely to be encountered during a riot are such that close liaison between the senior fire officer and the prison management is particularly important.

12. When appliances are despatched to prison incidents it would be appreciated if Chief Fire Officers would provide the Fire and Emergency Planning Department, G1 Division, with a report as early as possible, giving details of the circumstances with particular emphasis on any difficulties encountered. A suggested format is given in the Annex to this letter.

13. There are no manpower or financial implications arising from the issue of this guidance.

Telephone number of contact: 01 273 3942

File reference number: FEP/87 52/61/2

000010

PRISON INCIDENT REPORT

1. Brigade.
2. Date(s).
3. Periods of any disturbances.
4. Prison location(s).
5. Brief report of incidents highlighting serious fires, rescues, difficulties encountered, etc.
6. Number of appliances deployed to the Prison.
7. Injuries to Brigade personnel.
8. Damage to appliances and equipment.
9. Other comments, including effectiveness of local liaison with Prison Authorities and Brigade's operational plan.

FUTURE MOBILISATION AND COMMUNICATIONS SYSTEMS

Chief Officers should be aware that the Home Office, at the instigation of the Joint Committee on Fire Brigade Communications (JCFBC) and with the support of the Joint Committee on Fire Research (JCFR), has commissioned a research project into the problems of replacing the current generation of fire brigade communications and mobilising systems.

2. The JCFBC, recognising the importance of taking into account the experience gained during the acquisition of the current generation of systems and the non-availability of British Telecom's "Solent" system from 1994, believe that such research should be pursued as a matter of urgency, a view which is shared by the Fire and Emergency Planning Department (FEPD) of the Home Office and the Scientific Research and Development Branch (SRDB).

3. Following submissions from the Chief and Assistant Chief Fire Officers Association and the Hampshire Fire Brigade, the FEPD has included a project in the Home Office Fire Research Programme.

4. In order to make the most efficient use of available expertise a steering group has been formed comprising members of existing user groups, representatives of the Directorate of Telecommunications, the SRDB and G1 and G2 Divisions of the Department and of CACFOA. The chairman of the Group is Assistant Inspector of Fire Services, Mr K Phillips. The current suppliers of appropriate equipment (ie BT/IAL, CGS, Remsdaq, Ferranti and Dowty) have agreed to periodic consultations.

Progress

6. The steering group have embarked upon the compilation of a definitive problem description which will define all the areas to be addressed by the study, namely:

i. project management from concept through acquisition, training, system support, enhancement and evolutionary replacement;

ii. technical areas, including model requirements, standardisation, reliability and effectiveness, and proven new developments;

iii. financial matters, including comparison techniques and rationalisation possibilities; and

iv. management information and interfaces to other systems, eg direct transfer of FDR information.

Attention will also be paid to ergonomic considerations.

7. In due course a consultancy contract will be awarded.

8. An extensive familiarisation exercise involving visits to a number of brigades has started and is likely to continue over the next 2 years.

Timing and reporting

9. The project will enter its next phase in August and September of this year when tendering for the consultancy will take place. It is hoped that a contract will be let to enable the study to commence by October.

10. It is the intention of the steering group to report periodically throughout the contract to the JCFBC and the JCFR.

11. A final report, which will be in textual and software form, should be available by autumn, 1990. This should allow time for those brigades who originally replaced systems in the early 1980s to take practical advantage of the study's findings well before the withdrawal of maintenance support for the Solent system in 1994.

Presentation of project information

12. It is ultimately intended to provide information in a form which brigades will find of practical use, ie text packages and computer software which can be operated in a straightforward manner via a standard range of personal computers in a do-it-yourself format.

13. In order to augment the efforts of brigade management the information will be presented in such a way as to allow brigades to assess their own requirements, obtain cost analysis and comprehensively plan a project.

14. It is not the purpose of the study to recommend any particular system or manufacturer but to provide Chief Fire Officers with sound information to enable them to choose a system best suited to their particular requirements, based on value-for-money principles.

Point of contact

15. Any queries about the project should be addressed to Mr K T Phillips at this address (telephone 01-273 3842).

File reference FEP/88 1505/1507/3

000014

CELLULAR RADIO

Earlier this year British Telecom (BT) brought into operation an Auto-Manual Centre (AMC) at Motherwell, Scotland, to receive cellular 999 radio calls. At present the Motherwell AMC deals with calls from England, Wales and Northern Ireland only, arrangements for the provision of a cellular 999 service in Scotland currently depending on agreement among the Scottish Police, British Telecom and the two cellular companies (Cellnet and Racal-Vodafone).

2. The intention is that calls from Scotland and Northern Ireland will access the Motherwell AMC as a first choice, with the London AMC at Shoreditch providing a back-up facility. Similarly, Motherwell will act as back-up to Shoreditch for calls coming from England and Wales.

3. With the provision of the second AMC at Motherwell, British Telecom has modified its procedures so that when the BT operator connects a cellular 999 call to a fire brigade or other emergency service control room the operator will announce "This is Shoreditch/Motherwell, connecting you to cellular customer"

Contact numbers

4. There are two contact numbers for Motherwell, namely:
(0698) 62601 and (0698) 62401,
which can be used by any emergency service which needs to contact Motherwell about a cellular 999 call handled by that AMC.

The Shoreditch contact numbers are:

01-253 2222 and 01-607 2222

which are in future to be used for call-backs on calls emanating from that AMC only.

5. This letter is supplementary to DCOLs 10 and 13/1985 and has no significant financial or manpower implications.

File reference: FEP/87 59/67/1
DT/87 50/94/1

Telephone number of contact: 01-273 3583

000016

FIRE SERVICE DRILL BOOK

1. There have been recent enquiries from brigades concerning the following two items contained in the Fire Service Drill Book and in the Manual of Firemanship:

- A. Footing a ladder; and
- B. Notes on the use of roof ladders.

The Fire Service Inspectorate has considered the points raised and has proposed amendments to the relevant sections of the Drill Book. These amendments have been endorsed by the Joint Training Committee. In the case of footing a ladder where the advice conflicts with that given in the Manual of Firemanship, an addendum to the relevant section of the Manual of Firemanship was also endorsed by the Committee.

2. The amendments are detailed in the attached appendix.

File reference: FIR 86 620/21/1
Telephone number of contact: 01-273 2637

FIRE SERVICE DRILL BOOK : AMENDMENTS

A. FOOTING A LADDER

The advice on footing a ladder, given on page 67 para 37 of the Drill Book conflicts with that given on page 30 line 37 of Book 11 of the Manual of Firemanship. The Drill Book states:

"When one man has to 'foot' an extension ladder he should grasp both strings"

Book 11 of the Manual of Firemanship states:

"The fireman at the foot of the ladder should be ready to ease the hose back to prevent it coming off the ladder or making the ladder unstable."

To do this, of course, probably means taking both hands off the strings.

Amendments

i. Fire Service Drill Book page 67 paragraph 37

Delete lines 1 to 3 and the first word from line 4 and insert:

"When footing an extension ladder, a firefighter should place the right foot on the lowest round, bracing the left leg well back, grasp both strings and press on the ladder. If it is necessary for any reason, to let go of the strings, eg. when passing a hose line up or down to firefighters working aloft, the footing is to be reinforced by using the right knee pressed against an adjacent round. Where two firefighters"

ii. Manual of Firemanship, Book 11 page 30 line 37

Add new sentence:

"At no time should a ladder be left unfooted whilst there are firefighters on it and if a firefighter has to remove both hands to lighten hose, etc., it should be ensured, as far as possible, that the firefighter's footing is secure."

B. NOTES ON THE USE OF ROOF LADDERS

It has been pointed out that the guidance given in para 1 of page 70 of the Drill Book makes it difficult for a firefighter to manoeuvre the roof ladder onto the roof and to recover it from the roof. This is because of the distance necessary to bend down from the leg-locked position. It is also claimed that to take a leg-lock above the eaves tends, especially on 10.5m and 9m ladders, to stress the ladder at the foot with a possibility of its moving away from the building. Drills were witnessed by the Inspectorate and these points were demonstrated.

Amendments

- i. Fire Service Drill Book page 70 paragraph 1

Delete and insert:

"An extension ladder should be pitched to a point slightly to one side of the position where the roof ladder is to be used. The ladder should be extended to 2 or 3 rounds above the eaves and extra care should be taken when ladders are resting on plastic guttering. (The weight of a laden ladder could cause flexing of the guttering resulting in the ladder becoming unstable.)"

- ii. Fire Service Drill Book page 70 paragraph 2

Delete line 7 and insert:

"The firefighter should continue to ascend to a suitable point just below the eaves where a leg-lock can be taken with the leg opposite to the side where the roof ladder is being carried."

ITEM [1] OF
DCOL [5]/1988

MANUAL OF FIREMANSHIP - BOOK 3

1. Book 3 (Handpumps, Extinguishers and Foam Equipment) was published on 19 May 1988 and is available from Her Majesty's Stationery Office, priced £5.50. The ISBN is 0 11 340626 6
2. It is hoped to publish Book 6 (Breathing Apparatus and Resuscitation) in a few months' time.

File Reference No: FIR 80 7/6/8

Telephone number of contact: 01 273 2637

000020