

# **HOME OFFICE**

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Our reference:

Your reference:

FEP/89 247/351/1 FEP/89 49/90/1 FIR/75 732/4/1 FEP/87 58/73/1 FEP/89 64/1500/1 FEP/90 74/1519/1 FEP/89 59/67/4 FEP/87 1/59/1 FEP/90 18/74/2 FEP/90 298/336/1

3 August 1990

To: All Chief Officers

FIRE SERVICE COLLEGE MORETON-IN-MAKSH GLOS. GLSG ORH

3 APR 1991

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Dear Chief Officer

DEAR CHIEF OFFICER LETTER 10/1990

### <u>Items</u>

- 1. AUTOMATIC DOOR RELEASES ON FIRE DOORS TO STAIRCASE ENCLOSURES IN SLEEPING RISK PREMISES
- 2. FIRE REPORTS ON INCIDENTS INVOLVING ELECTRIC BLANKETS
- 3. EMERGENCY ACTION CODES AND SUPPLEMENTARY INFORMATION FOR DEALING WITH INCIDENTS INVOLVING DANGEROUS SUBSTANCES CONVEYED IN BULK BY ROAD (HAZCHEM LIST No 6)
- 4. CELLULAR RADIO
- 5. WATER ACT 1989 MANUAL OF FIREMANSHIP, BOOK 7
- 6. THE DANGEROUS SUBSTANCES (NOTIFICATION AND MARKING OF SITES) REGULATIONS, 1990
- 7. WIRELESS TELEGRAPHY LICENSES: CHANGES TO FEES AND LICENSING ARRANGEMENTS



- 8. REEF KNOT
- HIGH RISE MAST RESCUE NETWORK
- 10. DEFENCE FIRE SERVICE

Yours faithfully

SIR REGINALD DOYLE Her Majesty's Chief Inspector of Fire Services



AUTOMATIC DOOR RELEASES ON FIRE DOORS TO STAIRCASE ENCLOSURES IN SLEEPING RISK PREMISES

Fire-resisting, self-closing doors can often present difficulties to persons using them. This is particularly the case in residential care premises and nursing homes where elderly or infirm persons have to negotiate the doors.

- 2. One aim of any means of escape scheme in such premises should therefore be to reduce to a minimum the need for residents to have to pass through fire-resisting, self-closing doors in the course of their normal movements about the premises. It follows that toilets and communal rooms should, wherever possible, be accessible to residents without the need to negotiate fire-resisting doors.
- 3. However, in adapted premises, it is often not possible to achieve the ideal and situations arise whereby residents frequently have to pass through one or more fire-resisting doors in the course of their daily activities. This has an adverse effect on the quality of their lives and presents a risk of injury.
- 4. Such problems can be resolved, in part, by fitting automatic door releases to the fire-resisting doors but, until now, such devices have not been recommended for those doors which form part of a staircase enclosure because of the importance of keeping the staircase enclosure free from smoke and the uncertainty of where to site smoke detectors to ensure sufficiently rapid actuation of the release mechanism.
- 5. However, publication of the most recent British Standard 5839: Part 1 (Fire Detection and Alarm Systems for Buildings, Part 1, Code of Practice for System Design, Installation and Servicing), which specifies automatic fire warning systems for life safety, has led to the formulation of criteria which are suitable for enabling the acceptance of automatic door releases on fire doors giving access to stairway enclosures. These criteria are described in the appendix to this note.
- 6. This guidance should be borne in mind when using the Draft Guide to Fire Precautions in Existing Residential Care Premises and the Guide to Fire Precautions in Hotels and Boarding Houses which is currently being revised.
- 7. There are no significant cost or manpower implications arising from the issue of this guidance.

File reference number: FEP/89 247/351/1

CRITERIA FOR THE ACCEPTANCE OF AUTOMATIC DOOR RELEASES ON FIRE DOORS TO STAIRCASE ENCLOSURES IN SLEEPING RISK PREMISES

As a general rule, no form of automatic door release should be used to render the self-closing device on a fire-resisting door inoperative if the door forms part of a stairway enclosure.

- 2. However, where the self-closing door causes major difficulties for occupants or creates a real risk of injury, eg. in residential care premises where the door is in regular use by residents and there is no other viable solution, consideration may need to be given to permitting the use of such a device.
- 3. If it is considered that the major difficulty or risk to residents from using any fire-resisting door is sufficient to justify relaxation of the general rule and automatic door releases are permitted, the following criteria should be applied:-
  - (i) The door release mechanism should conform to British Standard 5839: Part 3 1988 and be fail safe (ie in the event of a fault or loss of power the release mechanism should be triggered automatically).
  - (ii) All doors fitted with automatic door releases . should be linked to a full cover life safety automatic fire warning system complying with BS 5839: Part 1 (ie type L1).
  - (iii) All automatic door releases in the premises should be triggered by any of the following:-
    - a. the actuation of any automatic fire detector;
    - b. the actuation of any manual fire alarm call point;
    - c. any fault in the fire warning system;
    - d. any loss of power to the fire warning system.
    - (iv) Automatic door releases must be provided with a ready means of manual operation from a position at the door.

- (v) Each door fitted with an automatic door release should be closed at a pre-determined time each night and remain closed throughout the sleeping hours. Or, if for reasons of management this is impracticable, it should be the specific responsibility of a competent member of staff to operate the release mechanisms at least once each week to ensure:
  - a. that the mechanisms are working effectively; and
  - b. the doors close effectively onto their frames.
- (vi) The fire warning system and the automatic door release mechanisms should be subject to an effective maintenance contract with a competent maintenance contractor.

#### FIRE REPORTS ON INCIDENTS INVOLVING ELECTRIC BLANKETS

Fire authorities in England and Wales were requested in Dear Chief Officer Letter No 66/75 of 26 November 1975 to forward reports on electric blanket fires to (what is now) the Department of Trade and Industry (DTI). These reports have usually been forwarded to DTI on a form headed "Overblanket Reports 1975/76".

- 2. DTI have requested that a halt be called to this arrangement. The primary purpose of the form was to provide basic data for detailed analysis of electric blanket safety aimed at reducing the incidence of fires. However, the original need for this analysis has now been met and although the information still continues to serve DTI as a valuable check on electric blanket fires, they have come to the conclusion that this continuing use cannot in itself justify the call on fire authority resources to provide reports.
- 3. Electric blankets still represent, of course, a significant potential fire hazard and DTI may need to seek our co-operation on this or a similar subject at some time in the future but, for the present, the arrangement to send them any electric blanket fire reports should be discontinued forthwith. Accordingly, DCOL No 66/75 should be cancelled.
- 4. I am grateful for the co-operation of fire authorities during this long monitoring exercise and am pleased to pass on DTI's thanks to the fire brigades for their invaluable assistance.

File reference number: FIR/75 732/4/1

EMERGENCY ACTION CODES AND SUPPLEMENTARY INFORMATION FOR DEALING WITH INCIDENTS INVOLVING DANGEROUS SUBSTANCES CONVEYED IN BULK BY ROAD (HAZCHEM LIST NO 6)

A revised list of dangerous substances, including emergency action (Hazchem) codes and supplementary information, has been agreed by the Hazchem Technical Sub-Committee of the Joint Committee on Fire Brigade Operations. It replaces List No 5 which was issued to Chief Fire Officers under cover of Dear Chief Officer Letter No 7/1987 on 19 July 1987 and subsequently amended. Dear Chief Officer Letter 7/1987 is hereby cancelled.

- 2. Full details of the information contained in the list and of the changes from previous editions are given in the introductory notes to the list. Chief Fire Officers will wish to note that the publication of the new list has been a joint venture by the Home Office and the National Chemical Emergency Centre at the United Kingdom Atomic Energy Authority's Harwell Laboratory. Harwell's computing expertise coupled with its inhouse facilities for computer type-setting and reprographic services has provided a more effective means of producing and updating the list. The new edition contains amendments and new entries 3093-3154. Deletions concern individual entries for organic peroxides which are replaced by new Generic entries, 3101-3120.
- 3. The National Chemical Emergency Centre has provided one copy of List No 6 for each Chief Fire Officer. Additional copies are available from the National Chemical Emergency Centre (HAZCHEM), Harwell Laboratory, Oxfordshire, OX11 ORA. Telephone 0235 432919. The purchase price is £22.50 per copy; ISBN No 0-86252-483-0.
- 4. Unless fire authorities wish to purchase additional copies of the list there are no direct cost or resource implications arising out of the issue of this letter.

File reference number: FEP/89 64/1500/1

## CELLULAR RADIO

DCOL 7/1990 contained a copy of a "Memorandum of Understanding" which set out the arrangements recently agreed between the Emergency Authorities, British Telecom and the Cellular Radio Companies (Callnet and Racal Voadaphone) for the handling of emergency 999 calls from cellular radio users.

Annex 1 of the Memorandum of Understanding provides details of British Telecom, Cellnet and Racal Vodaphone telephone contact numbers. I attach a revised Annex which gives the new London telephone codes.

File reference number: FEP/89 59/67/4

# Contact points

## CELLULAR RADIO COMPANIES

1.1 For on-line call trace facilities, contact the Cellular Operations Centres.

CELLNET	VODAPHONE	
(0860)	(0836 & 0831)	
071-251 3922	081-847 3153	
or 071-251 5711	081-847 2131	

1.2 For operational aspects, advice of control room contact numbers, post event traces and misroute advice.

CELLNET	<u>VODAPHONE</u>
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Network Planning Department TSCR Ltd Hanover House 49-60 Borough Road London SE1 1DS	Engineering Department (Telecomms) Racal Vodafone Ltd The Courtyard 2-4 London Road Newbury Berks RG13 1JL
071-378 7141 ext 5042	0635 33251
Fax 071-407 6707	Fax 0635 523615

## 2. MOTHERWELL OAC

Supervisor's contact numbers for assistance and advice 0698 62601 or 0698 62401

# 3. SHOREDITCH OAC

Supervisor's contact numbers for assistance and advice 071-729 6770 or 071-739 2222

May 1990

# WATER ACT 1989 - MANUAL OF FIREMANSHIP, BOOK 7

Item 2 of DCOL 8/89 brought to the notice of the Fire Service those provisions of the Water Act 1989 which could affect the Service.

These provisions have a bearing on the content of Section 1 of Chapters 7 and 8 of Book 7 of the Manual of Firemanship.

Each of the first sections of Chapters 7 and 8 should now be deleted and substituted by the attached texts.

File reference number: FEP/90 18/74/2

# MANUAL OF FIREMANSHIP - BOOK 7

#### CHAPTER 7

## Mains Water Supplies

# 1. Legislation

# a) Water Act 1989, Water (Scotland) Act 1980, Northern Ireland

The Water Act 1989 (which applies only to England and Wales) updated many of the provisions in the Water Act, 1945, in particular those relating to the supply and quality of water. It also provided for the former water authorities to be privatised and established the appointment of a Director General of Water Services to protect the interests of customers. The Director General (initially together with the Secretary of State for the Environment (England) and the Secretary of State for Wales) will be responsible for regulating the provision of services by all water and sewage undertakers.

In Scotland, the Water (Scotland) Act 1980 and previous Scottish legislation devolves the responsibility for water resources into the nine Regional Councils and the three Island Councils. There is also a Central Scotland Water Development Board which co-ordinates the water resources for Central Scotland and is empowered to deliver bulk supplies of water to the Councils.

In Northern Ireland, responsibility for water resources lies with the Department of the Environment (Northern Ireland).

## b) Fire Services Act 1947

Sections 13, 14, 15 and 16 of the Fire Services Act 1947 also contain provisions for the supply of water for firefighting.

Section 13 of the Act requires that:

"A fire authority shall take all reasonable measures for ensuring the provision of an adequate supply of water and for securing that it will be available for use, in case of fire".

Under Section 14(1) of the Act, the fire authority may enter into an agreement with statutory water undertakers for the purpose of implementing Section 13 on such terms as to payment or otherwise as may be specified in the agreement.

No water undertakers shall unreasonably refuse to enter into any such agreement proposed by a fire authority.

[NB. Section 81 of the Water Act 1989 prohibits water undertakers from charging for water taken for fighting fires, testing firefighting and other emergency services provided by a fire authority. The exemption also covers the availability of water for those purposes.]

However, Section 23 of the Water (Scotland) Act 1980 states only that:

"the undertakers shall allow any person to take, without payment, water for extinguishing fires from any pipe on which a hydrant is fixed."

The obligation of water undertakers under Section 14(4) are enforceable under Section 20 of the 1989 Act by the Secretary of State. So any complaints about a water undertaker not carrying out his obligations should be directed to the Secretary of State if they cannot be resolved by the water company or the Customer Services Committee.

A fire authority is empowered under Section 15(1) of the Act to make agreements to secure the use, in case of fire, of water under the control of any person other than water undertakers; to improve the access to any such water, and to lay and maintain pipes and carry out other works in connection with the use of such water in case of fire.

Section 16 of the Act provides that if a person is proposing to carry out works for the supply of water to any part of the area of a fire authority he is required to give not less than six weeks notice in writing to the fire authority prior to the commencement of the works. In the case of works affecting any fire hydrant the authority or person executing the work is normally required to give the fire authority written notice at least seven days before the work has begun. In any emergency, when it would be impracticable for notice to be given in the time stipulated, notice is to be given as early as may be."

#### MANUAL OF FIREMANSHIP - BOOK 7

#### CHAPTER 8

### **Hydrants**

# 1. Statutory requirements

Section 47 of the Water Act 1989 reads as follows:

- 47. 1. It shall be the duty of a water undertaker\* to allow any person to take water for extinguishing fires from any of its water mains or other pipes on which a fire-hydrant is fixed.
  - 2. Every water undertaker shall, at the request of the fire authority concerned, fix fire-hydrants on its water mains (other than its trunk mains) at such places as may be most convenient for affording a supply of water for extinguishing any fire which may break out within the area of the undertaker.
  - 3. A water undertaker shall, at the request of the owner or occupier of any factory of place of business, fix a fire-hydrant, to be used for extinguishing fires and other purposes, at such place on any suitable water main or other pipe of the undertaker as is as near as conveniently possible to that factory or place of business.
  - 4. It shall be the duty of every water undertaker to keep every fire-hydrant fixed on any or its water mains or other pipes in good working order and, for that purpose, to replace any such hydrant when necessary.
  - 5. It shall be the duty of a water undertaker to ensure that a fire authority has been supplied by the undertaker with all such keys as the authority may require for the fire-hydrants fixed on the water mains or other pipes of the undertaker.
  - 6. The expenses incurred by a water undertaker in complying with its obligations under subsections 2 to 5 above will be borne:
    - a) in the case of a hydrant fixed in pursuance of a request made (whether before or after the transfer date) by the owner or occupier for the time being of that factory or place, according to whether the person who made the original request did so in his capacity as owner or occupier; and

 $<sup>\</sup>star$  Section 14(3) of the Fire Services Act 1947 provides that Section 47 of this Act shall apply to all water undertakers.

- b) in any other case, by the fire authority concerned.
- 7. Nothing in this section shall require a water undertaker to do anything which it is unable to do by reason of the carrying out of any necessary works.
- 9. In any proceedings against any water undertaker for an offence under subsection 8 above it shall be a defence for that undertaker to show that it took all reasonable steps and exercised all due diligence to avoid the commission of the offence.
- 10. For the purposes of sub-section 3 above a water main or other pipe is suitable, in relation to a factory or place or business, if:
  - a) it is situated in a street which is in, or near, to that factory or place of business; and
  - b) it is of sufficient dimensions to carry a hydrant and it is not a trunk main.

Although the cost of installing, maintaining and renewing hydrants is borne by the fire authority, the water undertaker is entitled to allow other individuals or concerns to use fire-hydrants and occasionally damage is caused in this way. Under Section 14(3)(b) of the Fire Services Act 1947 when damage is caused to a hydrant as a result of any use made of it with the consent of the water undertaker when not used for firefighting or other purposes of a fire brigade, the fire authority shall not be liable for the cost of repairing or replacing the hydrant incurred as a result of the damage.

Section 14(5) of the same Act makes it an offence to use a fire-hydrant without proper authority, or to damage or obstruct a hydrant otherwise than in consequence of using the hydrant with the consent of the undertakers."

THE DANGEROUS SUBSTANCES (NOTIFICATION AND MARKING OF SITES) REGULATIONS 1990

The Dangerous Substances (Notification and Marking of Sites)
Regulations 1990, were laid before Parliament on 16 February 1990
and, with certain exceptions, come into force on 1 September 1990.
The Regulations have been prepared by the Health and Safety
Commission following recommendations from its Advisory Committee on
Dangerous Substances. Their aim is to ensure that:

- i. authorities responsible for enforcing health and safety legislation and local fire authorities are in possession of information about sites with dangerous substances which will help them in defining priorities for carrying out their separate inspection programmes;
- ii. firefighters arriving at an incident at a site are warned of the presence of dangerous substances and of the need to make use of information previously gathered for firefighting purposes.
- 2. The Regulations will apply to any site with a total quantity of 25 tonnes or more of dangerous substances (as defined in the Classification, Packaging and Labelling of Dangerous Substances Regulations 1984). With effect from 1 September 1990, the Regulations require persons in control of sites to notify in writing a short list of information to both the local enforcing authority for health and safety at work legislation and the local fire authority. The requirement is intended to complement but not to duplicate other notification requirements already in force. A list of exceptions from the requirement is contained in Schedule 1 to the Regulations.
- 3. With effect from the same date, the Regulations also require persons in control of sites with a total quantity of 25 tonnes or more of dangerous substances to display warning signs at access points. The only sites excepted from the access marking requirements are petrol filling stations. The signs must be displayed at such places as will give adequate warning to firefighters before entering the site in an emergency that dangerous substances are present. The warning signs required are triangular, edged in black with a yellow background, and containing an exclamation mark. No supplementary text is required. The format is consistent with that defined for warning signs in British Standard 5378 Part 1.
- 4. The Regulations include a power for an inspector of an enforcing authority (mainly the local fire authority) to require the display of other specified warning signs at on-site locations of dangerous substances subject to certain qualifying criteria. The term "inspector" means an inspector appointed under section 19 of the Health and Safety at Work etc Act 1974 by the enforcing

authority. Regulation 10 provides for transitional arrangements. Thus an inspector may exercise the power at any time with effect from 1 September 1990 but there is no obligation on a person in control of a site to comply with an inspector's requirements until 1 March 1993.

- 5. The Health and Safety Commission intends to monitor the operation of the Regulations and, to review them against the background of three years' operational experience.
- 6. Chief Fire Officers should note that the Health and Safety Executive is producing guidance on enforcement and related matters to non-HSE enforcing authorities which will take the form of a HELA Circular. This will be circulated to all Chief Officers. The Health and Safety Executive is also producing an interpretative guide to the Regulations, which should be available before 1 September 1990. It will include a pro-forma for making written notifications.
- 7. Copies of the Dangerous Substances (Notification and Marking of Sites) Regulations 1990, SI 1990 No 304, ISBN 0 11 003304 3 can be obtained from HMSO, price £2.25. Copies of the interpretative guide, HS(R) 29, The Dangerous Substances (Notification and Marking of Sites) Regulations 1990, ISBN 0 11 8854356 will shortly be available from HMSO, price £3.50.

File reference number: FEP/89 49/90/1

# WIRELESS TELEGRAPHY LICENCES CHANGES TO FEES AND LICENSING ARRANGEMENTS

Chief Officers will recall that the Department of Trade and Industry (DTI) wrote to all Fire Brigades in March 1988 giving details of the increase in the Fire block radio licence fee from £25 to £2,000 per user per year. The increased fee was effective from 1 April 1988. In the letter the DTI advised that the new £2,000 licence fee would recoup less than half the costs of DTI's management of radio for the Police and Fire Services. Subsequently the DTI advised the Home Office that there would be a further increase in the licence fee to £4,000 per Brigade per year.

- 2. Following the April 1988 increase in licence fees, several of the smaller Forces and Brigades complained to the DTI that the flat rate licence fee was unfair. They felt that some apportionment of the fee should be applied to reflect the size of individual users and their use of radio. The Home Office and representatives from the Police and Fire Services examined a number of options and it was agreed that the best basis for apportionment of the licence fees, though not ideal, would be to adopt a simplified banding structure based on the population served by each user. The Joint Committee on Fire Brigade Communications were kept informed of progress on the assessment of various methods of determining the apportionment of the licence fee and have agreed the method finally chosen.
- 3. The current position on licence fees is that DTI will charge each Brigade £2,000 when their block licence is next renewed and will charge the appropriate differential licence fee from 1 April 1991. Details of the differential licence fee for each Brigade are enclosed for your information in the Annex.
- 4. The DTI have asked for the enclosed questionnaire to be completed by all Brigades and returned to them so that they can update their records. Their address is at the bottom of the questionnaire.
- 5. Should you have any enquiries about this letter, please contact R H K Hewlett of the Home Office Radio Frequency and Communications Planning Unit, Horseferry House, Deal Ryle Street, London SW1P 2AW (telephone 071-217 8467).

File reference number: FEP/87 58/73/1

# FIRE SERVICES IN ENGLAND AND WALES

POPULATION (1000s)	BRIGADE	FEE (£)
951 537	COUNTY OF AVON FIRE BRIGADE BEDFORDSHIRE FIRE SERVICE	4,350.00 3,850.00
741	ROYAL BERKSHIRE FIRE & RESCUE SERVICE	3,850.00
638	BUCKINGHAMSHIRE FIRE BRIGADE	3,850.00
661	CAMBRIDGESHIRE FIRE & RESCUE SERVICE	3,850.00
952	CHESHIRE FIRE BRIGADE	4,350.00
555	CLEVELAND COUNTY FIRE BRIGADE	3,850.00
400	COUNTY OF CLWYD FIRE BRIGADE	3,350.00
<b>4</b> 55 <b>4</b> 84	CORNWALL COUNTY FIRE BRIGADE	3,350.00
919	CUMBRIA COUNTY FIRE SERVICE	3,350.00
999	DERBYSHIRE FIRE SERVICE DEVON FIRE AND RESCUE SERVICE	4,350.00
638	DORSET FIRE BRIGADE	4,350.00
592	DURHAM COUNTY FIRE BRIGADE	3,850.00
336	DYFED COUNTY FIRE BRIGADE	3,850.00
	EAST SUSSEX FIRE BRIGADE	3,350.00
1,513	ESSEX COUNTY FIRE & RESCUE SERVICE	3,850.00 4,350.00
1,500	FIRE AUTHORITY NORTHERN IRELAND	4,350.00
517	GLOUCESTERSHIRE FIRE & RESCUE SERVICE	3,850.00
2,586	GREATER MANCHESTER COUNTY FIRE SERVICE	4,850.00
55	GUERNSEY FIRE BRIGADE	1,500.00
443	GWENT FIRE BRIGADE	3,350.00
236	GWYNEDD FIRE SERVICE	3,350.00
1,527	HAMPSHIRE FIRE BRIGADE	4,350.00
662	HEREFORD & WORCESTER FIRE BRIGADE	3,850.00
996	HERTFORDSHIRE FIRE BRIGADE	4,350.00
848	HUMBERSIDE FIRE & RESCUE SERVICE	4,350.00
66	ISLE OF MAN FIRE BRIGADE	1,500.00
129	ISLE OF WIGHT FIRE & RESCUE SERVICE	1,500.00
80	JERSEY FIRE SERVICE	1,500.00
1,510	KENT FIRE BRIGADE	4,350.00
1,386	LANCASHIRE COUNTY FIRE BRIGADE	4,350.00
879	LEICESTERSHIRE FIRE & RESCUE SERVICE	4,350.00
585	LINCOLNSHIRE FIRE BRIGADE	3,850.00
6,700	LONDON FIRE BRIGADE	5,350.00
·1,450	MERSEYSIDE FIRE BRIGADE	4,350.00
534	MID-GLAMORGAN FIRE SERVICE	3,850.00
748	NORFOLK FIRE SERVICE	3,850.00
560	NORTHAMPTONSHIRE FIRE & RESCUE SERVICE	3,850.00
303	NORTHUMBERLAND FIRE & RESCUE SERVICE	3,350.00
706	NORTH YORKSHIRE FIRE BRIGADE	3,850.00
1,000	NOTTINGHAMSHIRE FIRE & RESCUE SERVICE	4,350.00
591	OXFORDSHIRE FIRE SERVICE	3,850.00
111	POWYS FIRE SERVICE	1,500.00
402	SHROPSHIRE FIRE SERVICE	3,350.00
457	SOMERSET FIRE BRIGADE	3,350.00

391	SOUTH GLAMORGAN COUNTY FIRE & RESCUE SERVICE	3,350.00
1,314	SOUTH YORKSHIRE COUNTY FIRE SERVICE	4,350.00
1,022	STAFFORDSHIRE FIRE & RESCUE SERVICE	4,350.00
641	SUFFOLK COUNTY FIRE SERVICE	3,850.00
1,025	SURREY COUNTY FIRE BRIGADE	4,350.00
1,134	TYNE & WEAR METROPOLITAN FIRE BRIGADE	4,350.00
480	WARWICKSHIRE FIRE & RESCUE SERVICE	3,350.00
361	WEST GLAMORGAN COUNTY FIRE SERVICE	3,350.00
2,600	WEST MIDLANDS FIRE SERVICE	4,850.00
714	WEST SUSSEX FIRE BRIGADE	3,850.00
2,051	WEST YORKSHIRE FIRE SERVICE	4,850.00
543	WILTSHIRE FIRE BRIGADE	3,850.00
	TOTAL	219,050.00

Population figures are from the 1990 Fire Directory.

#### REEF KNOT

At its meeting on 13 June 1990, the Joint Committee on Fire Brigade Operations considered information which had been received, from several sources, casting doubt on the safety of using the reef knot for operational purposes. Brigades are advised that use of the reef knot for joining two lines of equal thickness is not recommended as it can slip or part. It can, however, continue to be used in first aid.

File reference number: FEP/90 74/1519/1

#### HIGH RISE MAST RESCUE NETWORK

Chief Officers will be aware that operations involving the rescue of persons from high rise mast structures can pose particular problems for the emergency services, and, possibly, that a number of prominent organisations owning or responsible for such masts have recently developed a nationwide mutual aid rescue scheme to assist each other and support the emergency services at high rise mast incidents. This guidance, which has been endorsed by the Joint Committee on Fire Brigade Operations, provides a background to and details on the rescue scheme along with an indication of the operational considerations which brigades may wish to take into account when planning for high rise mast incidents.

#### HIGH RISE MASTS

- 2. Section 2 of the Health and Safety at Work Act places a duty on employers to safeguard the health, safety and welfare of personnel working on masts. Organisations such as the BBC, IBA, CAA, BT and Home Office Directorate of Telecommunications therefore employ highly trained and experienced riggers, all of whom are:
  - (a) provided with suitable protective equipment, including full body harness;
  - (b) qualified in first aid;
  - (c) trained in rescue techniques and provided with rescue equipment;
  - (d) required to pass stringent medical tests; and
  - (e) covered by insurance to work on the masts of other organisations.
- 3. In addition, all riggers employed by the aforementioned organisations, and others, are required to work in teams of between 2 and 6 and abide with the following strict safety routines.
  - (a) ascent while alone on site is prohibited;
  - (b) ascent during hours of darkness is only permitted in an emergency, and then only when adequate lighting is in use;
  - (c) communication links must be established (ie mast to ground, ground to control);
  - (d) unauthorised persons are not permitted on site;
  - (e) riggers must be conversant with the problems and dangers arising from adverse weather conditions;

- (f) safety helmets, complying with BS 5240 or BS 4423, must be worn by all personnel on site;
- (g) safety harness, complying with BS 1397, must be worn by all personnel going aloft;
- (h) safety boots, complying with BS 1870, should be worn;
- (i) equipment, including rescue equipment, must not be carried by hand whilst climbing, but rather hauled aloft in a bag or other container as necessary;
- (j) gloves must be worn when handling steel wire ropes;
- (k) when radio or visual signals are not possible, signals are given by whistles or horn in the following manner:
  - (i) stop one long blast
  - (ii) hoist two long blasts
  - (iii) lower three long blasts
  - (iv) make fast aloft and return to ground immediately
     series of short blasts to be repeated aloft
    as acknowledgement
- (1) operations, involving the rescue of untrained persons (eg parachutists, balloonists, children) should not be undertaken until the appropriate authority (identified on a plate at the base of the mast) has confirmed that any potentially dangerous radio/TV transmission and other power sources etc have been isolated.
- 4. Notwithstanding the intense training, provision of specialist rigging equipment and strict safety routines, there have been a number of incidents around the country when an accident or illness has befallen a rigger whilst aloft, and where a rescue operation has been necessary. In some cases, the local emergency services have not been able to effect a rescue and it has been necessary to seek the assistance of experienced riggers from other sites. Mindful of this, and the complications which can arise if a rescue party does not comprise personnel of comparable fitness and expertise or if persons who are not suitably equipped and experienced endeavour to effect the rescue, the named organisations have arranged for aerial rescue teams to undertake rescue operations on each other's masts and support the emergency services at incidents.

# THE RESCUE SCHEME

5. In broad terms, the scheme works on the basis of each of the named organisations providing a contact point for use by the participating organisations and the emergency services etc. Each contact point will be aware of the whereabouts of its own rigging

teams at any point in time. Given basic details of an incident, namely the ordnance survey grid reference number and the official and locally recognised name of the site, the contact point should be able to provide confirmation of the assistance which can be made available, including the estimated time of arrival.

- 6. The joint rescue network is subject to further refinement, nevertheless the organisations participating are confident that the training and expertise of their riggers is such that the rescue teams will be able to quickly assess the situation, render first aid as necessary, and bring the person safely to the ground without putting themselves at risk or adding to the injuries of the person being rescued. Rescue teams attending the scene will come under the control of the operator's senior rigger on site. The organisers have, however, gone to some lengths to stress that the rescue scheme has been developed to assist the emergency services deal with the special problems encountered at high risk mast incidents on their sites. They are aware of the benefits to be derived from fostering and maintaining good liaison with the fire and other emergency services at both national and local levels.
- 7. A list of the names and telephone numbers of contact points is attached. The Home Office Directorate of Telecommunications, the BBC, IBA, CAA and BT have nominated their Central Safety Officers as the appropriate contact point during working hours. Out of hours contact can be achieved by the usual radio breakdown call-out system. It is recommended that Brigades requesting assistance should ensure that Brigade Control makes clear to the contact point that emergency assistance is required.

# FIRE BRIGADE PLANNING

- 8. As indicated, specialist techniques and equipment are often required to effect safely the rescue of a person injured or trapped on a high rise mast. It is also recognised that the task may not fall within the normal area of expertise of the emergency services. It is recommended, therefore, that brigades who might be called upon to participate in such operations arrange for fire crews to visit known sites and that good liaison is maintained with site operators. There are also a range of logistical problems and other considerations which should be taken into account during preplanning. These include:
  - (a) the height of the mast structure (this can be up to 1,000 feet);
  - (b) remote locations in low risk fire cover areas;
  - (c) difficult access for fire appliances;
  - (d) poor weather conditions;
  - (e) the considerable time it would take to climb a tall mast;
  - (f) possible limited access to casualty;

- (g) limited working area on mast;
- (h) communications (eg mobile VHF radio schemes may encounter operating difficulties due to proximity effects ("blocking") when used very close to masts - advice on overcoming or eliminating this can be sought from site operators);
- (i) hauling rescue equipment aloft;
- (j) the possibility that scaffolding or other obstructions will make lowering the casualty very difficult; and
- (k) the strict safety routines employed by aerial rigging teams (see paragraph 3).

# LIAISON WITH JOINT RESCUE SERVICE

- 9. The participating organisations have advised that they are prepared to assist brigades in their pre-planning by providing details of mast locations and basic data relating to each site. Contact should be made via the Safety Officers identified on the attached list. In the case of local authority sites, a request should be made to the appropriate Chief Constable.
- 10. The organisations have also expressed a willingness to make agreed sites and suitable masts available to brigades for training, mast familiarisation, equipment evaluation/testing, practical exercises etc. Again, contact should be made via the Safety Officers in the attached list.

# **HELICOPTERS**

- 11. Past experience has shown that it is highly unlikely that helicopters can be used to effect a rescue from a mast, particularly on the more complex structures. Helicopters could be used, however, for transporting personnel and equipment to the scene of a rescue or for evacuating any casualties to the hospital.
- 12. There are no cost or manpower implications arising from the issue of this guidance.

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# NAMES AND NORMAL WORKING HOURS CONTACT NUMBERS FOR LIAISON ON JOINT MAST RESCUE SCHEME AS AT MAY 1990

Mr P Condron, Safety Officer British Broadcasting Corporation BBC Transmission Group PO Box 98 WARWICK CV34 6TN

0926 416301 0926 411212 Ext 16301

Mr S Mallatratt, Safety Officer
Independent Broadcasting Authority
IBA Safety Group
Castle Chambers
Lansdowne Hill
SOUTHAMPTON SO1 OEQ

0703 223485/6

Mr L O Atkinson, Safety Liaison Officer Directorate of Telecommunications Room 728, Horseferry House Dean Ryle Street London SW1

071-217 8101

Mr P Hartley, Safety Officer British Telecommunications NPW 833 Room 4A14 Angel Centre London EC1V 4P1

071-239 0800

Mr S Sharples, Safety Officer Civil Aviation Authority K317 CA House 45-59 Kingsway London WC2B 6TE

071-379 7311 Ext 5263/5236

## DEFENCE FIRE SERVICE

Chief Officers should be aware that on 1 April 1990 the civilianised Navy Department Fire Prevention Service (NDFPS), the civilianised Army Department Fire Service (ADFS), the civilianised Air Force Department Fire Service (AFDFS) and the RAF Fire Service were unified into the newly created "Defence Fire Service".

- 2. The Director of Defence Fire Services (D and Def FS) is an RAF Officer of Air Commodore rank. The Deputy Director is a Chief Fire Service Officer. The Deputy Director's responsibilities will broadly cover the formulation of technical fire policy for the Armed Services, together with the technical proficiency and standards of the newly formed fire service. The current Deputy Director is Mr Pat Gaunt, formerly the Air Force Department Chief Fire Service Officer.
- 3. On the ground little will change. The military depots etc will continue as now.
- 4. This item is for Chief Officers' information. There are no manpower or financial implications.

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