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This circular is	Relevant to the National Framework		
Status	This circular provides guidance on fighting fires in high rise buildings		

Fighting Fires in High Rise Buildings (Generic Risk Assessment Review)

Issued by:

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Addressed to:

The Chair of the Fire and Rescue Authority
The Chief Executive of the County Council
The Clerk to the Fire and Rescue Authority
The Clerk to the Combined Fire and Rescue Authority
The Commissioner of the London Fire and Emergency Planning Authority
The Chief Fire Officer

Summary

This circular gives guidance on fighting fire in high rise buildings in advance of the review of GRA 3.2 'Fighting Fires - in High Rise Buildings'. This will allow FRS's to consider their current operational procedures and make any appropriate changes.

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1.0 Background

- 1.1 Following a number of high rise incidents, a CFOA Operations Working Group, comprising representatives from London, Kent, West Midlands, Strathclyde and Hertfordshire, chaired by ACO P.Hazeldine has considered operational procedures for high rise fire fighting and identified good practice.
- 1.2 Separately a review of all the (GRA) 'Guides to Operational Risk Assessment' is currently being undertaken in conjunction with CFOA regional leads. The outcome of the BDAG Research will also be taken into account.
- 1.3 This Fire Service Circular is being forwarded to all fire and rescue services in advance of the revisions to the 'GRA 3.2, Fighting Fires – In High Rise Buildings', in order that FRSs can give consideration to their current operational arrangements and any changes that may need to be made.

2.0 Provisional Outcomes

- 2.1 High rise buildings vary in design and layouts. There is also the potential of significant risk in the event of a serious fire. Pre-planning and 'operational intelligence' are of great significance to successful operations. Although developments in fire fighting PPE are advantageous against flame and radiated heat, there is concern about heat stress arising from increased core body temperature. Attendances at high rise incidents are renowned for being physically demanding resources intensive.
- 2.2 It is particularly important that where operational personnel have 'high rise buildings' in their station area that personnel are familiar with, and understand the guidance contained in the current 'GRA 3.2 Fighting Fires- In High Rise Buildings' and the additions outlined in this circular. Regular familiarisation visits and pre-planning under Section 7 (2) d Inspections should be undertaken. These visits will assist in the maintenance of knowledge of the site, equipment and any particular hazards associated with the building, where appropriate, formal information cards should be available.

3.0 Provisional Guidelines

- 3.1 Adopt a clear definition for 'high-rise buildings', as contained in the current GRA 3.2, as well as for fire and rescue service purposes. A high rise should be considered as a building containing floors at such a height that external fire fighting and rescue operations may not be feasible.
- 3.2 Undertake specific risk assessments of high rise buildings. Where available, empirical evidence should be used as part of the rating process; this will assist in determining the weight of resources and the range of equipment that will be required, to safely and effectively manage the incident. Where a FRA has an s12 and/or s13 arrangement with another FRA, the risk assessments must be made available to them.

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- 3.3 Make information readily available for the first crews in attendance at incidents at High Rise buildings. Adoption of the Strathclyde identification plate is a good example for residential premises.
- 3.4 Consider the use of premise information boxes for making readily available more detailed information concerning the premises for larger buildings or use on commercial premises.
- 3.5 Review of all the critical tasks that are required to provide a safe system of work for initial deployment at a High Rise building and ensure the appropriate resources are available to meet the risk assessment that reflects those needs (Resource Deployment).
- 3.6 Ensure that the national Incident Command System (ICS) system is instituted at the earliest stage possible when dealing with a high rise buildings incident.
- 3.7 Ensure the bridgehead is located two floors below the fire floor. **N.B.** Technical Bulletin 1197 is under review, however, the guidance on the deployment of BA at bridgeheads is extant and should be maintained as the minimum standard.
- 3.8 Develop worse case scenarios i.e. communications failure, lift failure, fire service personnel trapped in lift due to mechanical failure, defective riser installation, wet riser pump failure. Strathclyde Fire Brigade have an example of good practice in this area and all F&RS should consider ensuring in their respective procedures such scenarios are covered.
- 3.9 Clearly identify the minimum equipment required for dealing with high-rise incidents and the most effective method of moving/transporting this equipment to the bridgehead.
- 3.10 Give early consideration to information gathering\risk assessments, following which first attendance crews should take the appropriate mode of operations until sufficient resources (make up) are at the scene before adopting an offensive strategy.
- 3.11 Give early consideration to the adoption of a safety\hazard cordon at the incident to ensure personnel and members of the public are protected from such hazards as falling debris.
- 3.12 Adopt fire fighting techniques that provide for an additional covering jet from the bridgehead to protect fire fighting personnel actively involved in the incident/rescue/fire fighting. *It is important that this operational procedure is given the strongest consideration and adopted for all high rise incidents.*
- 3.13 Ensure early consideration of flashover / backdraught potential, including the wind and weather conditions at high level, and any internal ventilation systems. All of which may effect fire development and impact on fire crews.
- 3.14 Develop specific tactical plans for high rise risks as appropriate, and as identified in the site specific risk assessment.

3.15 Consider the use of diagrammatic examples of high-rise fire fighting tactics, both ICS and deployment of resources for both training and operational orders. Ensure that Incident Commanders take account of age and fitness of personnel, the tasks being carried out, and any strenuous activities carried out immediately prior to attending. Similarly, where personnel have undertaken BA operations earlier in any incident a further assessment must be made with particular reference to the effects of heat stress and hydration on those being recommitted.

4.0 Future Considerations

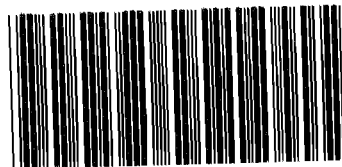
4.1 Communications continue to remain an issue at high-rise incidents and research to enhance fire ground communications, particularly in high rise buildings is being considered.

4.2 There is ongoing work associated with BDAG research and this will impact of on operational practices. As previously mentioned the GRA 3.2 Fighting Fires – In High Rise Buildings is under review and subject to stakeholders views we will seek confirmation that this advice and the revisions to the GRA are included in a new document. As and when these are complete and issued, we should look at monitoring the impact and adoption of such procedures across the country.

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