

Report of Fire Evacuation Drills Conducted During October 2010 at Academic, Administration and Central Services Buildings

During the two weeks starting Monday 5th October Safety Services conducted 92 fire evacuation drills in the academic and administration buildings. The drills at the the Sir Robert Hadfield, and the Arts Tower were rescheduled to take account of major refurbishment projects. The drills for these buildings were carried out later in the year.

In addition to the formal drills, 6 small premises, where only one or two people were in the building at the time of the planned drill, a brief fire action talk was thought to be more appropriate than a formal evacuation. The alarm was sounded none the less at these buildings to both ensure that occupants were familiar with the sound of the alarm and also to identify any problems with audibility.

At a further 9 (10 including the Drama Studio) premises the planned drills were aborted because either, nobody was in at the time of the drill, the building was being refurbished or was vacant prior to demolition. It is not planned that these drills be re-scheduled because in all cases the buildings concerned are small and do not have complex means of escape.

The total number of buildings visited this year has increased slightly on previous years due to new buildings, and the relocation of the departments.

In order to minimise inconvenience to departments, a clause was included in the notification circular inviting departments to contact Safety Services if the proposed timing of the drill was likely to cause serious disruption. Several departments used this opportunity and without exception, all requests were accommodated. Unfortunately not all requests for changes were received before the reply by date and there were several last minute requests for changes to the schedule but even in these cases Safety Services were able to modify the schedule to avoid causing excessive disruption.

Assessment of the Drills

As in previous years, a summary of the criteria that are used to assess the drills was sent out with the fire drill notification circular. The intention being that this would act as a timely reminder as to the action required during an evacuation. Listed below is a summary of the criteria that have been used in assessing the drill at each building.

1. Speed of evacuation and how it compared to the target time for the building.
2. The number of people who didn't evacuate or needed to be prompted to leave.
3. Direction given by staff to students and visitors during the evacuation.
4. The number of fire doors that were left open.
5. The extent to which alternative exits (where available) were used.
6. Knowledge and use of the correct emergency procedure and assembly point.
7. The number of people carrying cups of tea, personal belongings etc.
8. Performance of door guards, fire marshals and porters.
9. The number of doors other than fire doors that were left open.

The overall standard of performance at this year's fire evacuation drills was broadly similar to the very high standard achieved last year. The drills at 93% of buildings were rated as Good,

Very Good or Excellent and none of the drills were below the minimum acceptable standard. In previous years there have been a small number of people failing to evacuate, however this year there were none. There have been people that have re-entered the building against the fire alarm, or have moved through zoned areas. The use of alternative exit routes at most buildings was very good. The implementation of an effective fire marshalling regime for many of the larger buildings has generally resulted in improved speed of evacuation, better use of alternative exits and fewer people remaining in the building.

- 1. Speed of Evacuation:** The speed of evacuation at almost all buildings was within the expected evacuation time. At only 3 buildings did the drill take longer than the expected evacuation time. At the Sir Fredrick Mappin building and Regent Court, some people did not use their nearest exits, and this accounted for them missing the target time. At the Information Commons the delay as in previous years, was due to under-use of the alternative exits. Safety services did intervene and encouraged people to use the protected stairways and this was a vast improvement on last years evacuation. The evacuation times that are demonstrated during drills are achieved in what might be termed 'ideal conditions'. There is a degree of forewarning that an evacuation is to take place and all escape routes are available. In a real fire involving a principal escape route, the actual time to get everyone out can be considerably longer. Hence the need to react quickly and to keep escape routes free of anything that could cause an obstruction or contribute to fire spread.
- 2. Persons Remaining in the Building:** No one was found to be still in during checking by Safety Services. However there was a report of someone gaining reentry before the standdown was given, details will be reported separately directly to the Registrar and Secretary with a recommendation that disciplinary action be taken if appropriate. Open access computer rooms, where members of staff are rarely present, remain a significant area of concern. In these areas there is a tendency for some students to take an inordinately long time leave the room (collecting belongings, finishing work, etc.) or even ignore the alarm completely. It is therefore recommended that where possible a member of staff is nominated to 'sweep' open access computer rooms to ensure that everyone leaves as quickly as possible. Additionally, departmental induction training for students must stress the need to react quickly to the fire alarm.
- 3. Use of Alternative Means of Escape:** At 81 of the 90 buildings most or all occupants used their nearest exit. This is on a par with last year's results. In those buildings where the nearest exits were not used the problem would appear to stem from one of two areas. Firstly, it would appear that inadequate supervision is provided by staff to students, visitors and guests, leading to a strong tendency for overuse of the buildings main entrance. Secondly, in those buildings where the alternative escape routes are secured by devices that entail breaking a glass bolt or panel, there remains a distinct reluctance to use them. It has been Safety Services recommendation for some time that these types of security devices be phased out as soon as possible.
- 4. Assembly Points:** At 86 of the 90 buildings most or all of the occupants went to the correct location. This is a slight increase on last years results. At the buildings where there were problems the single biggest cause was lack of adequate encouragement from staff.
- 5. Doors Wedged Open:** The problem of fire doors being wedged open was evident at 31 buildings. Within these buildings a total of 64 fire doors were found wedged open. This number has gone up this year, with some buildings having a large number of fire doors open,

this remains a significant area of concern. Improvements are crucial in this area to limit the risk to both life and property in the event of fire, especially if any of the main escape routes were unavailable as a result of the fire. Although fire doors are the most critical to be closed, Safety Services advice is to close all doors to help to ensure that damage to the building and its contents is minimised. At 29 buildings all doors were found to be closed. This has decreased dramatically on previous years.

- 6. Buildings Without a 'Call Point' Alarm System:** Of the premises visited during this years round of fire drills, only a couple do not have a modern call point fire alarm system. The method for raising the alarm is by shouting fire and making people aware verbally. As mentioned in previous years this is not a foolproof system but in 4 out of the five buildings it is reasonable in the circumstances. At the remaining building, the TV Studio on Leavygreave Road, it is recommended that a modern alarm system be provided.
- 7. Door Guards:** As required by the University's health and safety code of practice each department is asked to nominate a sufficient number of door guards to deter re-entry until it is safe to go back in. During this years drills inadequate door guarding was a problem at 11 of the 90 buildings. This result has greatly improved on those seen in previous years.
- 8. Personal Possessions:** This area showed an increase compared to last years result. A total of 61 people (59 last year) were seen evacuating with unnecessary items from 26 (24 last year) different buildings. In most cases this was limited to cups of tea/coffee or for want of a better description, 'work items'. It is quite conceivable that in some cases the items concerned were in transit when the alarm sounded and so people merely continued with them out of the building. It is nevertheless important that people realise that anything being carried that is dropped or spilled will be hazard to others and so this behaviour must be discouraged.
- 9. Fire Training:** Every effort is made to inform occupants of their mistakes after the drill is complete but at the larger buildings this is not always possible, nor is it a substitute for undertaking fire training at least once per year. It is essential that everyone knows what to do in the event of a fire so that they can look after themselves and any students, visitors or guests for whom they have responsibility. The number of people undertaking fire training has improved significantly over the last few years, therefore we need to establish why some areas we have seen an improvement in and others, have suffered this year. None the less, every effort must be made to ensure that people are undertaking fire training annually.
- 10. Portering Staff & Technical Services:** The assistance given by the porters and staff from Technical Services is invaluable during fire drills and is greatly appreciated. Thanks go to all concerned.
- 11. Contractors:** There has been a marked increase in contractors being present during this year's drills, and we need to ensure that they evacuate any buildings that they are working in or around once the alarm sounds. They also need to be familiar with requirements that they may have regarding alarm activation, such as contacting control, and not silencing this alarm.

Any fire precautions problems that were noted by or reported to Safety Services during the fire drills will be actioned by either Estates Services or Safety Services as appropriate.

Our thanks go to everyone who participated and contributed to the success of this years fire drill program.

NB – Arts Tower and Sir Robert Hadfield will be included on the Fire Drill Summary 2010 data, once the drills have been conducted.

Safety Services
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