PUBLIC ORDER MANAGEMENT

Extinguishing Fire
Background

One of the dangers of a Public Order management situation is the use of petrol bombs by the protestors. Whilst much of the clothing and equipment issued to FPU officers will be fire retardant, there is still the danger of the officers being set alight by one of these weapons. In extreme circumstances, demonstrators have been known to set themselves alight to highlight their protest. It is therefore important to be aware of the various methods of extinguishing fires, whether they are officers or protestors. It would be unacceptable for the population to see one of them dying in a fire, just in front of a police deployment and the officers not taking reasonable measure to rescue this person, (irrespective of the fact that the person may have set himself on fire).

It is accepted that different units will deploy with different types of fire extinguishers. As far as possible, this module has been designed to include generic terms and descriptions. However, the Instructors should tailor the lesson to the equipment that the FPU will use in practice.

Aim

To understand and apply the techniques to respond to fires in public order situations.

Learning outcomes

At the end of this module the students will be able to:

- List the three elements of a fire
- Apply individual and collective fire-fighting on a human body by using the means available.

Training sequence

The material in this module is designed to be delivered over two 40 minute lessons, the first as a classroom based theory lessons followed by a 40 minute practical lesson, which should include assessment. This is on the assumption that the students have received no previous training in this subject.

Duration

<table>
<thead>
<tr>
<th>Minimum Session time</th>
<th>Lecture/Presentation</th>
<th>Question/Assessment</th>
<th>Session Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Hour 20 mins</td>
<td>40 mins</td>
<td>As part of the session activity</td>
<td>40 mins</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Options</th>
<th>Mission Specific</th>
<th>Optional film</th>
<th>Optional activity</th>
</tr>
</thead>
</table>
Methodology

This module contains a PowerPoint theory presentation, to explain the various techniques. However, the majority of this module should be taught in a practical manner using the format:

- Explanation by the instructor
- Demonstration by the instructor
- Imitation by the students (with instructor correcting where necessary)
- Practice by the students until the technique is perfected

At the end of the final stage, the instructor will be able to assess if the student is competent in the technique, having carried out continuous assessment throughout the preceding lessons.

The instructor should inform participants of the content, format and timing. Knowing what to expect, participants can improve their ability to focus on the subject and benefit better from the session.

- Extinguishing Fires (40 minute classroom lesson)
- Practice (40 minute practical lessons)

When training a full FPU, it is recommended that this module is taught to individual Platoons and then additional practice time is given to bring the whole FPU together for co-ordinated training. Where possible, the FPU should have the opportunity to experience of being subject to petrol bomb attack as this will take the fear away when it happens in a real life situation; however this needs to be carefully managed by a trainer who has experience of training in these circumstances. Fire fighting and medical equipment and personnel must be on standby and the risk of injury to officers must be kept to a minimum.

Instructors are encouraged to add practical examples and mission specific information related to the specific deployment of participants, if known.

Instructor Profile

This module is best presented by an instructor who has practical experience in Public Order Management in peacekeeping operations and who could share his/her experience with the group. They must be practiced and skilled to be able to demonstrate the technique correctly. If there is more than one instructor, at least one should have practical experience as Public Order Management trainer in either domestic policing or a peacekeeping mission.
Instructor Preparations

General Preparations

Equipment:
1. Computer and PowerPoint slides for lesson 1
2. Projector and Screen for lesson 1
3. Full public Order management equipment for each officer for the practical section of the training, fire extinguishers, fire blankets and petrol bombs.

Training Area:
The initial lesson should be carried out in the classroom. The practical session will need a large open area which will not catch fire; a tarmac car park or parade-square are ideal. However, it must be borne in mind that asphalt is likely to melt and therefore, a concrete surface would be the most suitable. Once the basic tactics have been grasped by the students, the FPU will need to practice their tactics in a more urban situation. For this purpose a ‘ghost town’ or public order village is ideal. The realism of this exercise can be achieved through breaking petrol bombs **before** the cordon and not by throwing the Molotov cocktail directly on the officers or their shields, which is likely to result into numerous injuries. It would rather trigger fear among trainees rather than confidence. The security of the practical exercise always supersedes the realism and the intensity of the training.
Session notes

Contents:

CONTENTs

- Aim
- Learning outcomes
- Definition of fire
- How to extinguish fire
- Types and classes of fire extinguisher
- Firefighting in Public Order situations
- Individual techniques
- Human torch techniques
- Summary

Slide 1

AIM

To provide the FPU with the knowledge and skills necessary to respond to fires in public order situations.

Slide 2
Most people are familiar with fire, but may not know how it actually works. When rapid oxidation reduces a molecularly complex material, or fuel, to a more stable state, it is commonly referred to as “fire”, or combustion. What is commonly observed as a result is light, heat, smoke, and ashes (or soot)—all by-products of combustion.

An apple rotting or a nail rusting is SLOW oxidation of a fuel.

A candle burning is controlled and MODERATE oxidation of a fuel.

Fire is a result of RAPID and uncontrolled oxidation of a fuel.

An explosion is ULTRA-RAPID oxidation of a fuel.
FLAME - is a chemical combination of two aerosol substances.

COMBUSTION - is a quick physical and chemical phenomenon (with increasing temperature) between two substances one of which is a gas.

ACCELERANT - is a substance which can provoke combustion when mixed with a fuel (oxygen).

FUELS - are substances which, when combined with oxygen, create a chemical reaction in which strong heat is generated.

**Instructors note:** Slide 5 contains animation.

Slide 6 illustrates the three main elements of a fire; removal of any one of these elements will put the fire out.
Slide 7

Slide 7 illustrates the three types of fire, in Public Order Management situations, fire is normally a fire ball created when a petrol bomb smashed on the ground and the petrol vapours are ignited by the flame on the cloth attached to the device. As petrol bombs are unreliable and do not always ignite, it is sometimes possible for a pool fire when the petrol accumulates and is then finally ignited by another petrol bomb.

How To Extinguish a Fire

- Suffocation
- Cooling
- Subtraction of Fuel / Oxygen

Slide 8

The basic methods for extinguishing a fire are to suffocate it by ensuring that it cannot have access to oxygen, to cool it with a liquid such as water which reduces the heat or finally to remove the fuel or oxygen source, effectively removing one of the three elements of fire.
Types of Fire Extinguishers

- Water
- Dry Powder
- Spray foam
- Carbon Dioxide (CO2)
- Fire blankets

Slide 9

In general, it is internationally accepted that fire extinguishers will be coloured red. They will have instructions on them and they will identify the type of contents. The main details of which are listed below:

**Water:**

**Suitability:** Wood, Cloth, Paper, some Plastics, Coal, People. Fires involving solids

**Dangers:** Not to be used on burning fat or oil or on electrical appliances

**Method of Use:** Point the jet at the base of the flames and keep it moving across the area of the fire. Ensure that all areas of the fire are out.

**Theory:** The water takes away the heat of the fire by cooling the burning material

**Dry Powder Fire Extinguishers:**

**Suitability:** Wood, Cloth, Paper, Plastics, Coal, Liquids such as grease, fats, oil, paint, petrol.

**Dangers:** The powder is not good at getting into tiny spaces in electrical equipment easily so the fire may re-ignite.

**Method of Use:** Point the nozzle at the base of the flames and, with a quick sweeping motion, drive the fire away from you until all the flames are out.

**Theory:** As well as knocking down flames, on burning solids it melts to form a layer or skin that smothers the fire.

**Spray foam:**
Suitability: Limited number of liquid fires.

Dangers: Check manufacturer's instructions for suitability of use on fires involving liquids.

Method of Use: Do not aim jet straight into the liquid. Where the liquid on fire is in a container, point the jet at a surface nearby the burning liquid. Allow the foam to build up and run across the liquid.

Theory: Forms a fire extinguishing film on the surface of a burning liquid. Has a cooling action with a wider extinguishing application than water on solid combustible materials.

Carbon Dioxide (CO2) Fire Extinguishers

Suitability: Liquids such as grease, fats, oil paint, petrol etc.

Dangers: Do not use on chip pan fires. This type of extinguisher does not cool the fire very well and you need to watch that the fire does not start up again. Fumes from CO2 extinguishers can be harmful if used in confined spaces: ventilate the area as soon as the fire has been controlled.

Method of Use: The discharge horn should be directed at the base of the flames and the jet kept moving across the area of the fire.

Theory: Vaporizing liquid gas which smothers the flames by displacing oxygen in the air.

Fire Blankets:

Suitability: Fires involving solids & liquids. Excellent for small fires on clothing and for chip and fat pan fires

Dangers: The blanket must completely cover the fire or it will not be extinguished.

Method of Use: Place carefully over the fire. Keep your hands away from the fire. Place the blanket down away from you.

Theory: Smothers the fire
Internationally there are a number of classes of fire; additional to those shown is type ‘F’ which is cooking fat or chip pan fires which is not relevant to Public Order Management training. Although the symbols shown are not universal they will normally be similar. The picture is to aid those who cannot read the language on the fire extinguisher.

Slide 11

If an officer is set alight by a petrol bomb, provided the flames only cover a small area, the individual can extinguish them by himself. The basic principles of fire extinguishing apply; removing the oxygen is the best course of action. This can be achieved by smothering the flames with the hand, or by lying on the ground if the flames are on the back, effectively removing the oxygen supply to the fire. The flames are caused by a small amount of petrol which will quickly burn off, and if the officer is wearing flame retardant material there will be little effect.
The Molotov cocktail, (also petrol, gasoline or Molotov bomb), is a generic name for a variety of simply manufactured improvised incendiary weapons frequently used by rioters.

In its simplest form, a Molotov cocktail is a glass bottle containing gasoline with a fuse consisting of a fuel-soaked rag.

Once the fuse is lit and the bottle hurled at a target, when it smashes on impact, the ensuing cloud of gasoline is ignited by the fuse causing an immediate fireball followed by a raging fire as the remainder of the fuel is consumed. However they often fail to ignite and the intensity of the fire is short lived as the petrol burns off quickly.

The ‘Human Torch’ is where a person is engulfed in flames. There are a couple of simple methods for dealing with this situation. However, the most important issue is
to get the individual onto the ground as whilst they are standing upright they will be breathing in the flames which may burn the throat and therefore restrict the airway.

The best method of extinguishing this type of fire is with the use of a fire blanket; prepare the fire blanket (see next slides), The officer should approach calmly ensuring that they use the blanket to protect themselves from the flames, talking to the victim all the time to reassure them.

**Instructors note:** Slides 14-17 are a series of animated slides which illustrate the two methods of dealing with the ‘Human Torch’, and an instructor performing the method on a dummy on fire. The PowerPoint version of the presentation on the resource disc must be used for this section of the lesson.
If officers are using a fire extinguisher they must check that it is appropriate for the fire they about to deploy it on first, they should take hold of the hose at the end and point it in the direction of the base of the fire. Care must be taken when using Carbon dioxide extinguishers as they will become very cold on the ‘horn’ which dispenses the CO₂ and this should not be touched by the hand. Once the extinguisher is empty, officers must be careful to ensure that it is placed back in a vehicle and not available for protestors to pick up and use as a weapon.

Instructors note: Slide 19 is an animated slide which shows a number of examples of fire in Public Order management situations. The PowerPoint version of the presentation on the resource disc must be used for this section of the lesson.
The officers should be given a summary of the key points of the lesson before being asked if they have any questions.
Lesson 2 – Practical Extinguishing Fire

Preliminaries

The instructor must ensure that the area selected for the training is large enough to give the students space to work in pairs and teams. The class should be split into pairs for the purpose of practicing the Human Torch. There should be sufficient blankets for one for each pair, however they do not need to be fire blankets, any type of blanket could be used.

Revision

The students should be questioned about three elements of fire and the principles of extinguishing a fire

Introduction

The instructor should explain that they need to be in a position where they can protect each other from fire.

Aim & Learning outcomes

The Instructor should explain that the aim of the lesson is to teach the students the skills necessary to respond to fires in public order situations.

Reason & Incentive

The instructor should explain that the officers may find themselves under attack from demonstrators with petrol bombs and they will need to be in a position to deal with any persons that are set on fire. They also need to be aware of any fire fighting equipment they will be expected to use in mission

Explanation

The explanation of the Human Torch method was given in lesson one, but the instructors should give a brief verbal reminder to the students

Demonstration

The instructors will demonstrate the techniques at normal speed; this should be a full demonstration each of the techniques should be demonstrated in turn.

Imitation

The students will then move into their pairs and carry out each of the two techniques. The instructors will move around the groups and correct any mistakes.

Practice
The students will then practice the techniques, the instructors will be able to assess if they need further practice of if they are able to satisfactorily perform them.

Questions

The students should be asked if they have any final questions on the subject of the lesson. No doubt the students will have been asking questions throughout the progress of the lesson.

Assessment

This should perform part of the lesson as this is a practical element.

Summary

The instructor should summarise the lesson

Instructors note: Where possible, the officers should have the chance to see a Fire Extinguisher being used in the correct method, and if possible they should also have the opportunity to use one. These should be the type of extinguishers that will be deployed with the Unit into the Mission. Where time and resources allow, this should be included in this session.

The use of Petrol Bombs should be introduced to the training of officers once they are familiar with the various tactics in Public Order Management. This should be included in later exercises toward the end of their training and not at this stage, although the Instructors could give them a demonstration of a petrol bomb if time permits. This would be to show the effect that the bomb has on a dummy.