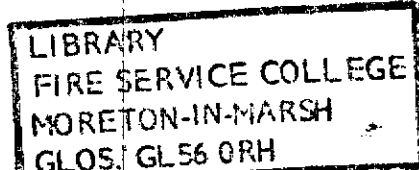


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9 December 1983

To all Chief Fire Officers

Dear Chief Officer

53217

- A. RESCUE DRILLS AND OPERATIONAL TECHNIQUES
- B. LEARNING AT A DISTANCE IN THE FIRE SERVICE

1. This letter provides guidance on two matters, operational techniques for rescue and the availability of a report on learning at a distance.

A. Rescue Drills and Operational Techniques

2. The Joint Training Committee have recommended that the following rescue drills should be retained in the Drill Book:-

- a. The conventional fireman's carry (based on the present E3 and L6 drills) for use in recruit training only; continuation training includes carrying on the level and up and down inclines and stairs.
- b. Rescue by line lowered under foot (the present M2 drill).
- c. Rescue by line using a stretcher or short extension ladder, the main ladder being used as a crane (the present E8 drill).

In addition the Drill Book Sub-Committee are recommending a variant to allow the use of the legs of a lowering line or a rescue sling with a 105/135 ladder.

3. Dear Chief Officer letter No 10/1982 of 25 June 1982 explained that the Drill Book Sub-Committee would review the 'face to face' method of rescue and would consider possible alternative drills, and that further guidance would be issued once the Joint Training Committee had considered the advice of the Drill Book Sub-Committee.

4. This review has been carried out but the Committee are unable to recommend any further rescue drills. It has been agreed, however, that certain operational rescue techniques currently in use in certain brigades should be circulated for the information of the fire service. These are described in the appendix to this letter. The Committee considered the difference between drills and techniques to be that the former are exercised regularly whereas the latter are demonstrated or practised only occasionally, as each technique has minor disadvantages which militate against its universal acceptance for use during regular drills. It is recognised that in general brigades will wish to avoid reliance on a single method of rescue, because circumstances differ at incidents and some improvisation is generally necessary. These techniques should be seen as optional methods of handling casualties under differing circumstances; those firemen familiar with them will have available a range of options for use under operational conditions.

5. The techniques described in the appendix will in due course be included in the Manual of Firemanship and the Drill Book will be amended accordingly.

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DEC

Meanwhile the man at the foot of the ladder (or any other spare man) takes up the slack line, partially taking the weight of the casualty just sufficiently to ensure that the trunk remains upright during descent; the men inside the building retain control of the casualty until the weight is transferred to the line.

Note: If a rescue sling is available this may be used as an alternative to a bowline.

Advantages: Both hands are free to grasp the rounds. Some of the weight is taken by the line. BA sets are not an impediment.

The victim is secured against falling.

Disadvantages: With a 4 man crew, one man has to get on to the ladder around the patient. (Unless the man footing the ladder operates the line.)

c. Vertical Carry

The head of the ladder is pitched level with or just above the centre of the sill with the heel positioned about 30-60cm further from the building than a normal pitch. Two men enter the building and pick up the casualty using the 2 handed seat method. A third man climbs the ladder until his shoulders are level with the sill with both hands grasping the centre of the top round. The casualty is then passed through the window feet first and face upward, and the feet fed between the arms of the rescuer. The men inside the building should maintain a firm grip on the casualty keeping the body inclined backwards into the building. The casualty's trunk should then be slid down between the rescuer's arms, the legs passing either side of him and the men inside the building transferring their grip to the upper arms until the casualty's armpits are resting on the arms of the rescuer.

During the transfer operation the rescuer must maintain his grip removing only one hand, if necessary, to guide the casualty's legs.

When the casualty is firmly in position the rescuer descends by lowering the hands and feet in unison, endeavouring to keep the hands towards the centre of the rounds.

Advantages: Easy to load the patient on to the ladder even from small windows.

Can be carried out rapidly.

Much of the patient's weight is borne by the ladder.

BA sets are not an impediment.

The rescuer can readily immobilise the patient if he regains consciousness.

Heavy casualties are more easily handled.

Disadvantages: The rescuer's wrists tend to chafe on narrow sections of ladders.

RESCUE TECHNIQUES WHICH HAVE RECENTLY BEEN EVALUATED

1. The standard rescue drills, whilst forming a basis for regular training at station level, cannot cater for all the circumstances that may be encountered on the fireground where there is often a need to improvise. The following techniques are possible alternatives to the more widely used traditional methods:-

a. Cradle Carry

The head of the ladder is pitched level with or just above the centre of the sill. Two men enter the building, place the casualty face down and standing on either side, pick up the body, by lifting under the shoulders and thighs. A third man climbs the ladder until his shoulders are just below the sill; he then places his hands around the rear of the strings of the ladder. The casualty's legs are fed out of the window from left to right (viewed from the inside) until the rescuer's left arm is between the casualty's legs with the crotch resting on the arm. The trunk is then placed on to the right arm of the rescuer with its right armpit resting on the rescuer's right arm with the chest of the casualty resting on the ladder. When the casualty is firmly in position the rescuer descends sliding the hands down the rear of the strings, taking particular care when transferring the grip where extensions overlap, and/or when props are encountered. If the casualty appears to be head heavy the left-hand should be slid down a few centimetres lower than the right-hand. If during descent it is necessary to pause, the body can be supported by raising the right knee.

Note: It is possible for this technique to be carried out with the rescuer grasping the rounds during the descent. The left arm should be held slightly lower and both feet transferred consecutively on to each round.

Advantages: Simple to perform

Can be carried out rapidly

Much of the patient's weight is borne by the ladder

BA sets are not an impediment

It is suitable for narrow window openings

Disadvantages: Under drill conditions it is desirable to wear gloves to avoid minor injuries from metal burrs or splinters. Gloves with plastic covered palms offer some resistance when sliding the hands down the strings.

Owing to the width of escapes and 13.5m ladders difficulty in maintaining a grip on the underside of the strings is sometimes experienced.

b. Shoulder Straddle

The head of the ladder is pitched level with, or just above, the centre of the sill. Two men enter the building. A third man provides a lowering line, passes the line's running end under the bottom round or the jack beam, mounts the ladder, and passes the line from behind the ladder, between the top round and head iron (on ladders not fitted with a head iron between the top 2 rounds) before passing it over the head of the ladder into the building, he remains there with his shoulders level with the sill. The men inside the building secure the line around the casualty's chest underneath the armpits, using a bowline, with the knot in the centre of the back. When the line is secured the casualty is picked up using the 2 handed seat and placed in the sitting position on the sill with legs above the head of the ladder and the trunk leaning slightly backwards into the building. The casualty is then eased forward until his thighs are resting, one on each shoulder of the rescuer on the ladder with the lower limbs hanging behind his back.

E.R.

B. Learning at a Distance

6. In 1982 Dundee College of Technology completed a consideration, based on a limited study in a Scottish Brigade (Tayside), of the effectiveness of applying an education technology approach to distance learning, as part of the Home Office fire research programme. Two reports were produced relating to a test of this approach, one on part of the Station Officer examination, and the other on the Leading Fireman examination. These reports have been considered by the Joint Committee on Fire Research of the Central Fire Brigades Advisory Council. Members expressed reservations about the value of the reports, but agreed that copies should be made available to brigades who wish to have them. Copies may be obtained from The Secretary, Joint Committee on Fire Research, Room 941, Home Office, 50 Queen Anne's Gate, London SW1H 9AT.

7. No significant direct costs or manpower implications arise from the issue of this letter.

Yours sincerely

