

Operational use of turntable ladders

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1 Introduction

- 1.1 The purpose of this policy is to provide Incident Commanders (IC) and Turntable Ladder (TL) operators with the information and guidance needed to facilitate the safe deployment of the turntable ladders.
- 1.2 London Fire Brigade has 11 front line aerial stations, consisting of 8x32m TLs with an articulating (pivoting) 5m top ladder section, and 3x64m TLs which are straight ladders.
- 1.3 The 32m TLs are highly specified, with an extensive range of capabilities to assist IC and firefighters to resolve incidents safely and effectively.
- 1.4 One of the key advantages of the 64m TL over the 32m TL is the additional working height for a range of scenarios. The 64m TL is still usable for general TL appliance work such as industrial fires and special services.
- 1.5 Turntable ladders have a range of uses:
 - Rescue operations (including below ground level).
 - Casualty retrieval with on-board stretcher equipment.
 - Observation platforms.
 - Water tower.
 - Foam delivery.
 - External dry riser if the fixed installation is unavailable or defective.
 - High level ventilation.
 - Floodlighting.
 - Bariatric rescue.
 - Line operations interoperability.
 - High level thermal imaging.
 - Other special service incidents such as assisting other agencies, animal rescue, high level access, and when securing items in a precarious position.

This list is not exhaustive.

2 Hazards and risks

- 2.1 Collisions during ladder movements and jacking operations. For example when working on or near:
 - Roadways - [Policy number 979](#) – Rescue – NOG
 - Overhead obstructions.
 - Obstructions below the cage.
 - Protruding buildings.
- 2.2 Trip hazards associated with the protruding jack beams and feet.
- 2.3 Capsize or collapse of appliance due to:
 - Unstable ground, such as presence of drain/inspection covers (locate jacks a minimum of 1m away), pavements, kerbs or soft ground;
 - overloading;
 - working on a gradient;
 - high wind speeds.

Note: Jacks should not be deployed on or near unsupported walls, drains or obscured ground such as puddles or snow.

- 2.4 Working at height - falls from the appliance cage, ladder or appliance decking.
- 2.5 Exposure - working for extended periods in open areas in either hot or cold weather conditions can lead to sunburn/sunstroke or hypothermia.
- 2.6 Electricity – electrocution and electric shock risk posed by contact with low or high voltage overhead power lines [Policy number 978](#) – Utilities and fuel.
- 2.7 Exposure to high intensity radio transmissions in close proximity to aerial transmitter sites [Policy number 298](#) - Operations at radio transmitter sites.
- 2.8 Fire, explosion, blast hazard caused by flashover/backdraught, ruptured gas mains or cylinders erupting from buildings.
- 2.9 Objects and/or debris falling from above.
- 2.10 Respiratory hazards and visual impairment caused by smoke due to wind change/worsening conditions/escalation of fire.

3 Pre-planning

- 3.1 Where exceptional risks for the siting of turntable ladders are identified by crews these should be recorded on the Operational Risk Database (ORD) and TL access should form part of the pre-planning in accordance with [Policy number 800](#) – Management of operational risk information.
- 3.2 As part of Development and Maintenance of Operational Professionalism (DaMOP), sub/stn officers should arrange regular training in various scenarios, with TL crews from local stations, focusing on the siting TLs and use of the vehicle.
- 3.3 TL crews are also expected to complete DAMOP objectives in line with the agreed learning outcomes for TL trained staff.

4 Operational procedures

- 4.1 All operational personnel need to know the basic capabilities of the Brigade's TL fleet (see appendix 1).
- 4.2 On receipt of a call to an incident that attracts a TL as part of the Pre-Determined Attendance (PDA), the nearest available TL will be mobilised. If a 64m TL is mobilised, the nearest Aerial Support Pump (ASP) will also be mobilised to assist operations and provide a safe system of work – see Appendix 3 for more information.
- 4.3 If a 64m aerial is part of the PDA for the incident, the ICs should identify if it is required at an incident at the earliest opportunity, and return it to base along with the ASP if not required, to ensure availability for other calls. Whilst the IC should always consider returning resources that are not required, they should be mindful that there are a maximum of three 64mTLs available at any one time and a maximum of nine ASPs, that may be travelling large distances under blue light conditions.
- 4.4 [Policy number 987](#) - Incident command - Organisation at incidents – NOG, details considerations regarding siting of appliances. Turntable ladders have a larger footprint than pumping appliances and require a stable supported surface, such as a roadway, before they can be safely deployed. Pavements, grass verges and alleyways should be avoided unless it can be confirmed that they are able to support the full down pressure of a TL's jack plates. Jack down pressure can be as much as 7 Tonnes for the 32m TL. Operators will be able to give guidance and advice to the IC regarding these issues.

- 4.5 When the IC's plan utilises a turntable ladder at an incident, they should recognise that the TL crew will know the capabilities and limitations of their appliance. Whilst the IC will determine if a TL is to be deployed, once the decision is made the IC must take the advice of the TL crew. If the IC overrules the advice of the TL crew in exceptional circumstances this must be recorded as a key decision.
- 4.6 Fire appliance commanders should always consider the appropriate siting of their own appliances upon arrival at an incident. Appliances should be parked so that special appliances can gain access and get to work without disrupting existing operations.
- 4.7 As part of their dynamic risk assessment, ICs should also consider the potential for turntable ladders to be used at the incident. Once pumping appliances begin to deliver water, or are augmented from a hydrant, they will be difficult to re-site.
- 4.8 Where a TL is in attendance at an incident, the Aerial crew (and ASP crew if in attendance) should not be separated from the TL, nor should they be detailed to carry out other tasks on the incident ground unless there is an imminent threat to life.
- 4.9 All personnel must only:
- Access the decking or into the cage with permission of the TL operator.
 - Enter the cage, lift or get on the decking by using the built in steps and handrails.
- 4.10 All TLs are equipped with safety scene lighting to keep the area immediately above and around the appliance lit when working in darkness. It does however not lessen the need for TL crews to keep in mind all the obstructions and hazards they may encounter relating to TL operation.

Siting and loading turntable ladders

- 4.11 Jacks must not be deployed on or near the following:
- Drain/inspection covers (minimum distance 1m away);
 - pavements and kerbs;
 - soft and un-made up ground;
 - obscured ground, such covered by puddles or snow; and
 - unsupported walls.
- 4.12 When working near high voltage power cables, aerial crews must use the following safe working distance rules as for other equipment (see [Policy number 978](#) – Utilities and fuel):
- 10m operationally (no water),
 - 20m training (drills),
 - 30m water tower.
- 4.13 Turntable ladders are earthed through their jack plates. Crews have been trained in specific procedures should the appliance accidentally come into contact with live electric cables. No other personnel must touch or go within 10 metres of the appliance until such time as the electric current has been discharged and the appliances certified safe by an attending engineer. The incident ground commander will need to speak to the duty transport officer to arrange this.
- 4.14 TL crews must not position their appliance cage near mobile phone transmitters or microwave antennae [Policy number 298](#) - Operations at radio transmitter sites.
- 4.15 During prolonged operations, stability checks at regular intervals must be instigated by the operator to ensure that there is no creeping of the jacks under load. This risk increases when an aerial appliance is being used as a water tower, as water on the ground may create movement

under the jacks. Depending on the ground/surface these may need to be checked more frequently.

- 4.16 Operators of turntable ladders must be aware of and adhere to the loading regulations for their individual appliance.
- 4.17 To protect from overloads, mechanical damage or uncontrolled ladder movements, turntable ladders have a range of safety cut out functions. These functions are for additional safety, and must never take the place of the operators own situational awareness.
- 4.18 Both turntable ladders types can work on gradients. The IC should:
 - Liaise with the TL crew and observe any limitation they advise;
 - best practise is to ensure that the appliance cab is facing uphill; and
 - avoid icy surfaces wherever possible.

Breathing apparatus

- 4.19 On all occasions where BA is being used on a TL the turret operator should ensure a clear view of the cage/head whenever possible. If the cage/head becomes enveloped in smoke or be otherwise out of view, the base operator should confirm with the firefighter working at the head that it is safe to continue operations, and should inform the IC of the change in conditions.
- 4.20 The turret console operators seat must be sited in "safe air" (i.e. an atmosphere that will not cause respiratory discomfort or injury) and the operator must not wear BA, as the BA facemask may restrict vision. If this cannot be achieved then the IC must consider re-siting of the TL or not using one at all.
- 4.21 TL cages must not be used as BA entry control points.
- 4.22 Where a TL is used to provide means of access for personnel wearing BA, or where the cage is occupied by firefighters wearing BA whether or not they are TL operators, the appliance must only be operated by means of the turret console. Under no circumstances should the ladder be moved when used for this purpose, this is in order to maintain the access/egress for crews committed.
- 4.23 Firefighters working at the head of a TL must only wear BA on the order of the IC. BA can be worn at the head of a TL (for example when using the monitor) and following points must be adhered to:
 - [Policy number 466](#) - RPE - breathing apparatus – operational procedures, section 4.6 and section 21.
 - All BA command and control procedures; the Entry Control Operative (ECO) should make an entry in the remarks column of the location of the wearer and the fact that they are working alone.
 - Regular communication must be maintained between the ECO, the wearer and the aerial operator.
 - The BA wearer must not leave the head/cage.
 - If the cage operator is required to wear BA, all operating of the TL must be conducted at the turret. The turret operator must never wear BA.
- 4.24 Where all forms of communication are lost, or conditions deteriorate, the turret operator must immediately train the head of the appliance away from the hazard area.

Operation in strong winds:

- 4.25 All TL's have specific restrictions placed upon them during windy conditions and this can affect their operational capability. The anemometer fitted to TL's will assist operators to register wind speeds; however, it should be noted that this reading may be inaccurate due to surrounding buildings and local conditions. A strong wind warning is issued to stations to draw operator's attention to the likelihood of strong wind speeds, and there is a large safety margin built in to the TL warning system. If the system detects high winds, it will only allow safe movement.
- 4.26 If the ladder is used as a water tower in a strong wind no person is to be allowed on the ladder and the monitor is to be controlled from the turret console. 'Strong wind' is anything above 20mph, and this needs to be kept in mind when the 64m is in use. Restrictions on the 32m TL begin at 30 mph.
- 4.27 TL's must not be used for training or display purposes when strong winds are present. Brigade Control no longer send strong wind warnings to stations, so it is the crew's responsibility to monitor the weather conditions when they are using the appliance.
- 4.28 TL operators are to risk assess the wind conditions when deciding whether to carry out standard tests following a strong wind warning being received.

5 Operational capabilities

- 5.1 Both 32m and 64m TLs have an extensive range of capabilities, which are detailed below. This is not an exhaustive list.
- 5.2 A 64m TL will be mobilised with an ASP for the purposes of operating the onboard pump and/or rescue elevator (see Appendix 3).

Water and foam delivery:

- 5.3 Before water is discharged into or onto any building the IC must consider:
 - Water loading – TL's can supply up to 2000 litres of water per minute. (2 metric tons)
 - Water pressure and its effect on the fabric of the building, debris and personnel.
 - Fire travel - application of water from a TL may have the effect of pushing fire through the building and affect crews working elsewhere and other occupants.
 - Damage control and flooding.
 - Water run-off.
- 5.4 Prior to its use as a water tower, a thorough risk assessment must be undertaken by either the IC, operations commander or sector commander if delegated to do so by the IC, in consultation with the TL Crew. Personnel should be withdrawn to a place of safety immediately prior to the operation of a water tower and the fact a water tower is being used must be communicated clearly to all personnel in the sectors. Once the water tower is in use, the IC, operations commander or sector commander should undertake a further risk assessment before re-committing personnel into the area where the water tower has been in use.
- 5.5 A dedicated water supply pump must be provided to supply the TL. The IC must nominate an appliance pump and its crew to facilitate this. This may mean that the IC has to amend the operational plan and order an additional pump for this purpose and this should be considered when planning resource requirements. The 64m TL is mobilised with an ASP for this purpose.
- 5.6 The dedicated pumping appliance should be sited one length from the base of the TL to maximise flow and minimise frictional loss. The pumping appliance crew will be allocated to the TL crew and will only undertake tasks to assist the TL crew at anytime whilst in use as a water

tower. These tasks include, but are not limited to delivering water and the safe management of hose when the appliance is being extended, elevated, depressed, trained or housed. Additional personnel should be provided where required to perform any other tasks. The ASP crew will remain with the 64m TL at all times.

- 5.7 The TL must be in or near the desired position for water application prior to charging the hose and TL pipework. The ladder can be repositioned once water is on. This is to avoid the weight of the delivery hose being dragged up the ladder, and applies less stress on to hose couplings. This operation is to be led by the TL crew.
- 5.8 The jet from a TL must never be directed into a compartment where firefighters are working, or where there are building occupants, but may be directed on other parts of the building depending on the location and the effects of large quantities of water on the fire, building and floors.
- 5.9 Monitors can be remotely controlled at ground level from the turret console operators seat. There is a camera installed on the monitor so the turret operator can see where the water is being directed.
- 5.10 32m and 64m TLs have the capacity to be utilised as an external dry rising main for high rise firefighting.
- 5.11 If a 64m TL is being used to deliver water or foam, the onboard pump must be operated by a trained Aerial Support Pump Operator (see Appendix 3).

Use of smaller firefighting media

- 5.12 32m and 64m TLs are also equipped for smaller scale firefighting, such as cutting away or in circumstances where the full sized monitor is inappropriate. A 3m length of 45mm hose plus a Rosenbauer RB101 (or similar) is stowed on the appliance for this purpose. It is not designed to be used for compartment firefighting.

PV stop

- 5.13 32m and 64m TLs carry PV stop for isolating solar panels. 32m TLs carry one 9 litre extinguisher of PV stop.

Foam delivery

- 5.14 TLs can deliver secondary aspirated foam that has been proportioned via fire appliance pumps.

Casualty rescue and casualty retrieval

- 5.15 Both 32m and 64m TLs carry a Ferno orange S71 basket stretcher and frame with a load-bearing capability of 270kg to rescue casualties from height, or where access is restricted. The safe working load of the stretcher holder on the cage is 150kg.
- 5.16 Additionally, the 32m TLs carry a reinforcing bar that raises the stretcher capability to 270kg. The 64m TLs cannot use this item.
- 5.17 All TLs also have two crane modes, heavy and light. The light crane function is enabled to facilitate:
 - Attachment of strops for casualty rescue (see TL rescue).
 - Use of the 'shaft rescue function', whereby the TL can automatically lift a casualty in a straight line from a confined space either above or below ground.

- 5.18 Specialist advice should be sought from a tactical advisor rescue (TAR) when carrying out rescue that involves line operations. This is because TL operators are trained to use their equipment to support line operations, but not implement a line system.
- 5.19 All personnel in the cage of an aerial appliance must wear a safety harness and lanyard connected to an anchor point. It is the responsibility of the cage operator to ensure all safety procedures are followed.
- 5.20 For the purposes of their immediate rescue, members of the public do not have to wear a safety harness.

TL rescue

- 5.21 As well as the hazards contained in 2.4, there are a number of hazards associated with the rescue of people using the TL. These include, but are not limited to:
 - Falling debris
 - Fire and heat
 - The higher the elevation required to conduct the rescue, the closer to the building it is necessary to site the appliance
 - Exposure to windy conditions
 - Unusual or concealed firespread
- 5.22 All 32m TLs have a 4 person cage which includes the operator.
- 5.23 32m TL Operators have a range of options to use when carrying out rescues:
 - a) Use the cage to move members of public to a place of safety or the ground.
 - b) Assist people down the ladder.
 - c) Rest the ladder on a building and accommodate up to 12 persons on the ladder at any one time.
- 5.24 64m TLs have a 3 person cage which includes the operator and a 3 person lift. As a result, the 64m TL can carry out rescues in the following ways:
 - a) Use the cage to move members of public to a place of safety or the ground.
 - b) Use the lift to move persons from the cage to ground level.
- 5.25 The lift on the 64m TL is for use at heights of more than 30m, and can move up to 3 casualties or 270kg in weight from 64m to the ground in 40 seconds. This should only be operated by crews trained in the use of the 64m TL. The cage must be used for heights below 30m.
- 5.26 Two trained aerial support pump operators must be in attendance to operate the rescue lift (together with the cage and turret operators). This is described in more detail in Appendix 3.

Line operations

- 5.27 The 32m TLs are able to assist with line operations, and carry a range of equipment to assist with this:
 - a) 1x6m strop
 - b) 2x3m strops
 - c) Attachments to the cage to facilitate suspended working beneath the ladder
 - d) Bears paw and bridle for attachment to stretchers

- e) Rated anchor points on the top extension
 - f) Rated anchor points in the turret at the base of the ladder
- 5.28 Additionally, the 32m TL will carry the 'safety 5' piece of equipment. This enables safe working at height for all firefighters when other line operations options are exhausted or not available. TL operators are not trained in level two line operations ([Policy number 979](#) - rescue – NOG). This function is carried out by appropriately trained FRU personnel. TL operators provide advice and support on the TL capabilities that support line operations. The "Safety 5" is installed with lighting and a fixed camera, so the Turret Operator can monitor the safety of the firefighters in relation to TL operation.
- 5.29 The 32m TL has a lifting eye on the top of the top extension which has a safe working load of 1000kg.

Observation platform and other services

- 5.30 When used as an observation platform it is vital that communication between operator and sector commanders is established and maintained (normally via handheld radios). This is so that information relating to building construction or potential hazards such as solar panels or communication aerials/antennae, can be passed to the IC.
- 5.31 Turntable ladders are equipped with cameras with thermal imaging. This can be relayed to the turret console and to a mobile app.
- 5.32 TLs are equipped with powerful floodlighting that can be used to support incidents such as night-time operations at RTCs or river incidents.
- 5.33 There may be occasions when other agencies, e.g Dangerous structure engineers (DSE), HART, Police or other members of the public may need to travel in the cage. On all occasions they must be accompanied by a trained Cage Operator, wearing a harness, helmet and appropriate PPE.

6 Further operational considerations

- 6.1 When requesting a TL, Control will always mobilise the nearest appliance unless the message specifies a 64m or 32m TL. Specifying a particular TL may result in a longer attendance time. When considering reliefs, ICs should give early consideration to changing crews over and leaving the working appliance in place, if they are of the same type. If this isn't possible, access in and out for the TL and ASP should be maintained. ICs should ensure that fuel and fluid levels are monitored whenever an appliance is being used for extended periods.
- 6.2 If the TL (and ASP when in attendance) are not required at an incident, they must be released as soon as possible and operators arriving as part of the TL attendance should only carry out TL activities except in exceptional circumstances.

TL cage (32m only)

- 6.3 The 32m TL cage must be removed to carry out the following operations;
- Rescue loader RL500 (bariatric carrier).
 - Safety 5 attachment for line operations.
- 6.4 The 64m TL cage must not be removed.

7 Terminology

- 7.1 TL operators must adhere to the terminology below when preparing to operate the appliance from the 'stowed' position.

TL Turret to Operator	TL Operator to Turret
1. "Are you in the cage, with the gates locked, and hooked on to an anchor point?"	2. "Yes I am in the cage, gates locked and hooked onto an anchor point."
1. "You are free to train"-to be spoken when the ladder/boom has elevated 10° from the headrest.	2. "Free to train received."
2. "You can extend/house, elevate/depress, train left/right the ladder."	1. "I am going to extend/house, elevate/depress, train left/right the ladder."

- Elevate - to raise the ladder/booms through an arc.
- Depress - to lower the ladder/booms through an arc.
- Extend - to increase the length of the ladder/telescopic booms.
- House - to decrease the length of the ladder/telescopic booms.
- Train right/left - to rotate the turntable to the left or right.
- Plumbing - to keep the centre line of the ladder in a vertical plane by eliminating any tilt to one side when the ladder is extended on a gradient or camber.
- 4th Extension - the largest ladder section
- 3rd extension - the next largest ladder section
- 2nd extension - the next largest ladder section
- 1st extension - the top (smallest) ladder section
- Articulating ladder - the pivoting top 5m of the top extension of the 32m appliances. Use 'elevate' and 'depress' to communicate movement evolutions.
- In the case of the 64m TL, this has 7 extensions, numbered 1(top) to 7 (bottom) of the ladder set.

Communications

- 7.2 In the event of the appliance fixed communication system becoming defective, the TL should remain in operational service using hand held fireground radios. All personnel are issued with fireground radios. If their radio becomes defective they should use the station spare radio. Faults with the fixed communication system will be treated as Code 1 defect.
- 7.3 In the event of losing communications while in operational use, the crew/operators should revert to handheld fireground radios in the first instance, and then train the booms/ladder to a place of safety. Turret console operators have overall control, and are responsible for maintaining the safety of the cage.
- 7.4 If the normal working TL controls have failed, operators can utilise the emergency controls located under the base operator's seat. The emergency controls on the TL can be operated by one person at the Turret console in conjunction with the cage operator.
- 7.5 If a TL operating system stops functioning whilst in use, whenever possible and safe to do so, the appliance is to be left running with the ladder set left in situ, but trained to a place of safety if required by using the auxiliary systems the operators are trained in. The reason for this is that stopping the road engine will have the effect of 'resetting' the vehicle electronics and thus

potentially losing valuable data that might otherwise assist with investigations. This event must be reported immediately via the incident command vehicle as a safety event to Resource Management and Logistics (RML) who will notify a senior accident investigator and duty transport officer, who may attend to carry out an investigation. A mobile repair technician (MRT) will be dispatched to the location.

- 7.6 The IC, operations commander or sector commander if delegated, should consider the most appropriate method of bringing any personnel in the cage to safety in consultation with the TL operator. If necessary, an additional TL should be requested for this purpose. It should be borne in mind that the TLs have multiple systems for moving the ladder to a place of safety or making it up which would be quicker than waiting for another appliance.



8 Related documents

- Operator manual
- Chassis manual
- Theory manual
- [Policy number 772](#) - Reliefs at incidents
- [Policy number 978](#) – Utilities and fuel
- [Policy number 298](#) - Operations at radio transmitter sites
- [Policy number 466](#) - RPE BA operational procedures
- [Policy number 979](#) - rescue – NOG

Appendix 1 - Aerial appliances - main attributes – a guide for officers

There are 11 frontline aerial appliances in the Brigade - 8 32m TLs and 3 64m TLs. They are operated by qualified crews, and no personnel are allowed onto the appliance without permission from the operators.

IMPORTANT - At the time of publishing the aerial fleet is changing. This table reflects the NEW APPLIANCES ONLY. The 64m TLs will be frontline from May 2021.

32m TL (Suffix 3)	64m TL (Suffix 4)
A21 Paddington A24 Soho A33 Tottenham E22 Greenwich E31 Forest Hill G30 Wembley G40 Hayes H21 Clapham	E35 Old Kent Road F41 Dagenham H34 Wimbeldon
	
<p>Physical Attributes</p> <p>Working Height: 32m</p> <p>Maximum Projection: 27.6m</p> <p>Cage Capacity: 4 Persons</p> <p>Jack Spread: 2.5 – 5.2m variable</p> <p>Jack Ground Pressures: up to 7t</p> <p>17t Laden Weight</p> <p>Can reach up to 10m below ground level</p> <p>Wind Restrictions begin at 30mph</p>	<p>Physical Attributes</p> <p>Working Height: 64m</p> <p>Maximum Projection: 21.5m</p> <p>Cage Capacity: 3 persons</p> <p>Jack Spread: 2.5 – 6.2m variable</p> <p>Jack Ground Pressures: up to 13t</p> <p>Wind Restrictions begin at 20mph</p>
<p>Additional Features</p>	<p>Additional Features</p>

32m TL (Suffix 3)	64m TL (Suffix 4)
<p>Manufacturers Specifications for Water Tower Output: 2000 l/m @ 5.8 bar @ tip (10 bar @ base)</p> <p>Stretcher Frame for Casualty Rescue (Orange Ferno - FRU/LAS compatible) 200/300kg</p> <p>Floodlighting Tower</p> <p>Thermal imaging camera</p> <p>Line operations interoperability</p> <p>Safety 5 SHW equipment</p> <p>Light and heavy crane function</p> <p>Can deliver secondary aspirated foam</p> <p>Bariatric Rescue Loader RL500</p>	<p>Manufacturers Specifications for Water Tower Output: 2000 l/m @ 5.8 bar @ tip (16 bar @ base)</p> <p>Stretcher Frame for Casualty Rescue (Orange Ferno - FRU/LAS compatible) 200kg</p> <p>Floodlighting Tower</p> <p>Thermal imaging camera</p> <p>Can deliver secondary aspirated foam</p> <p>Light and heavy crane function</p>

Appendix 2 - Mobilising

Where available, the nearest TL will be mobilised as part of a PDA to:

- A1 HR - All high-rise residential premises (unless removed by local pre-planning) as defined in [Policy number 633](#) - High rise firefighting.
- A1 - All calls to fire in non-residential high rise premises as defined in [Policy number 633](#) – High rise firefighting.
- B12 - Persons threatening to jump (at the discretion of Control).
- B10 - Person in a precarious position (at the discretion of Control).
- Forward Mobilising Control Point.

An Aerial Support pump will attend all 64m TL incidents to support operations.

Appendix 3 – Aerial support pumps (ASP)

Aerial Support Pumps are required to support the deployment of the 64m TL. An ASP is a pumping appliance which is riding with at least two individuals who are trained to carry out this task. The entire crew of the ASP will remain with the 64m TL in order to assist the crew of the TL at an incident.

The purpose of the ASP is to provide a safe system of work for the use of the onboard pump or rescue lift on the 64m TL. All other operations on the 64m TL can take place without the ASP (for instance: rescues using the cage or deploying the jacks).

An ASP is mobilised on all incidents that attract a 64m TL, or when a 64m TL is requested from the incident ground. The ASP provides a dedicated pump and crew to be utilised by the crew of the 64m TL.

On arrival at the incident, the officer in charge of the ASP must inform the incident commander that they are in attendance for aerial support, and must not be used for any other role on the fireground, except in exceptional circumstances. ASPs must also form part of the relief plan if the 64m TL remains in operation at the incident. If a 64m TL is no longer required, the ASP must be returned to maintain operational availability.

Using the on board pump

The ASP crew will book in at the command unit, report to the officer in charge of the 64m TL and don their ASP jerkins (located on the TL). The ASP crew will assist the crew of the 64m TL to deploy the monitor and ensure a dedicated water supply from an appliance is secured. When the onboard pump on the 64m TL is in use, the pump must be operated by an 'AS' trained individual at all times. The 64m TL cage and the turret are operated by the 64m TL operators. The additional personnel from the ASP should be used for hose management and establishing and maintaining a secure working area around the 64m TL. ASP personnel will work under the direction of the officer in charge of the 64m TL.

Using the Rescue Lift

The Rescue lift is utilised for "Mass casualty rescue. The Rescue Lift must have an 'AS' trained individual in the lift at all times when in use for rescues. The role of the 'AS' operator is to provide reassurance and guidance for members of the public using the lift, including assisting them down from the cage to the lift. The 'AS' operator must wear a harness and fall arrest, and be secured to the anchor points on the 64m TL at all times when carrying out this role.

The second 'AS' operator is responsible for assisting members of the public exiting the lift at ground level, either on to the TL working platform or utilising the TL's fly-ladder. The ASP operator in the lift should remain in the lift at all times so it can remain in use to assist other members of the public. The additional personnel from the ASP should be used to escort members of the public from the lift to outside of the hazard zone and to secure a safe working area around the 64m TL.

The cage operator must remain in the cage at all times when carrying out mass casualty rescue in order to ensure that members of the public do not overload the ladder. With three persons in the lift only one is permitted in the cage. The ladder cannot be moved when the lift is in operation. However it can be moved in exceptional circumstances when the lift is stationary.

The remaining crew from the ASP will ensure that all members of public are escorted out of the hazard zone and that the secure area around the 64m TL is maintained.

The Monitor and Lift cannot be used at the same time.

Document history

Assessments

An equality, sustainability or health, safety and welfare impact assessment and/or a risk assessment was last completed on:

EIA	11/12/12	SDIA	H - 19/11/12	HSWIA		RA	
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Audit trail

Listed below is a brief audit trail, detailing amendments made to this policy/procedure.

Page/para nos.	Brief description of change	Date
Page 3, para 1.2 Page 7, para 4.33	Bullet point removed - Line operations (with line rescue teams – TL only). Complete paragraph deleted.	26/03/2013
Page 14	'Subjects list' table - template updated.	05/12/2014
KPS Page 3, para 2	Added hazard of exposure leading to sunburn. New hazard inserted covering exposure to UV radiation.	07/05/2015
Section 4	Added details around TL working in strong winds so as to replace Policy 20.	12/06/2015
Page 3, para 2.5	Paragraph amended to reflect additional hazard	24/07/2015
Throughout	Minor amendments.	20/04/2016
Page 1 Page 6	Owner title changed to reflect the change in organisational structure. Incorrect references to policy number 466 now removed.	03/01/2019
Throughout	This policy has been reviewed as current with changes made throughout including a change of policy title. Please re-read to familiarise yourself with the content.	25/11/2020
Page 14	Changes made to appendix 2 – mobilising.	25/01/2021
Throughout	Reference to Aerial Support Pumps added throughout along with Appendix 3.	08/10/2021
Pg 7, para 5.15 Pg 8, para 5.27 Pg13, App1 Pg 15	Correct weights added, wrong weights deleted. Deleted 64m. 32m TL (suffix 3), light and heavy crane function added. Shaft rescue function deleted. 64m TL (suffix 4), light and heavy crane function added. "Using the rescue lift", 'Cage' changed to 'Lift'.	28/01/2022
Throughout	All cross references to cancelled policies have been updated.	04/03/2022
Throughout	All cross references to cancelled policies have been updated.	08/03/2022
Throughout	Hyperlinks to cancelled PN238 replaced with PN987.	04/04/2022

Page/para nos.	Brief description of change	Date
Throughout	References to cancelled PN769 updated.	15/03/2024
Pg 9. Para. 5.33	Working with others in the cage added.	17/06/2024

Subject list

You can find this policy under the following subjects.

Aerial ladder platform	Turntable Ladder
Assets	Equipment
Hydraulic Platform	Firefighting
Aerials	

Freedom of Information Act exemptions

This policy/procedure has been securely marked due to:

Considered by: (responsible work team)	FOIA exemption	Security marking classification