



TfL Corporate Archives Research Guides: World War II 75th Anniversary Edition

Protecting the Transport Network during WWII

"Transport kept London alive" claimed The Times in a 1945 article. So how was the vast network protected in order to keep running? Using original material from the Corporate Archives collections we bring you some of the answers...



ROOF SPOTTERS for our Griffith House offices include 7 women : Mrs. I. Vance (left) is a deputy chief tracer, Mrs. E. Clements (right) a clerk on staff records. Here they are in the crow's nest : note their toposcope, which shows the suburbs, and their anti-glare glasses.

Griffith House roof spotters. June 1941. Archive ref num: LT000030/078

During the height of bombing in London, over 18,000 tons of bombs were dropped. Infrastructure was the key target including the London Passenger Transport Board's (LPTB) stations, depots, factories, and railway tracks.

A huge effort was mounted by the organisation to protect these assets and to thereby keep London moving.



Staff undertaking tasks to protect the railway and administrative premises, including fitting floodgates, hooding rail signals, using a periscope in Chiswick Works and despatch riders. November 1939. Archive ref num: LT000030/018

Squads of staff were trained to deal with high explosive, incendiary and gas bombs, fire-fighting, and decontamination of vehicles in a calm and business-like manner.

Multiple ARP exercises were conducted at Chiswick, Northfields, and Fulwell to ensure staff were prepared.

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A R P

London Transport Stage Effective Displays at Cricklewood and Northfields



"Casualties" receive prompt attention

REALISM was the key-note of the A.R.P. demonstrations carried out on March 30, at Cricklewood garage and Northfields depot. The Vice-Chairman, together with many Officers and senior officials of the Board, representatives from the Government Defence Departments, Main Line Railways, local authorities and Press, witnessed full dress rehearsals of exercises adopted by the Board to deal with all emergencies in case of air raids. Trained squads were seen dealing with high explosive, incendiary and gas bombs, fire-fighting, decontamination of vehicles, and casualties, in a calm and business-like manner. To achieve this end, it has been the Board's policy to make each garage and depot self-supporting, and the demonstrations were representative of the scheme as a whole.

At Cricklewood garage the proceedings commenced by the assumption that the local air raid siren had been sounded. The Garage Warden immediately warned all garage staff, who proceeded in an orderly fashion to their protected

points in the pits. The senior officials, together with the Garage Warden, then took up their positions in the control room, from whence operations can be directed during an air raid. Certain of the garage staff taking part in the demonstrations paraded in their protective clothing.

We heard the approach of enemy planes and, amidst loud explosions, saw the falling of high explosive bombs from the garage roof, while incendiary bombs flared up. A fire-fighting squad dealt with the incendiary bombs by means of envelopment by sand and removal in special containers. A bus, which had caught fire in the meantime, was handled skilfully by this squad, the fire extinguished, and the vehicle removed to a safe position. A most spectacular effect was then seen when a small oil store was struck and caught fire. This also was dealt with and had to be partly demolished before the fire was got under control.

Certain casualties had taken place during this exercise and we saw a highly efficient display of first-aid treatment to the several cases of injury.

Article on ARP demonstrations at Cricklewood and Northfields, May 1939.

Archive ref num: LT000030/017

FULWELL'S A.R.P. FLARE

Further evidence of the efficiency of the Board's A.R.P. organisation was seen during a demonstration at Fulwell depot, on April 28.

In the principal scene one building blazed furiously, while another had its end wall completely demolished by a bomb. A man was trapped beneath the debris, but the rescue squad quickly got to work with their acetylene equipment, and the victim was released and taken away. Gas bombs exploded, and in the yellow smoke there loomed up the staggering figure of another casualty, who collapsed in the thickest of the haze.



Fulwell's decontamination squad ready for action

First, the yellow air-raid warning was received, then the red message came through . . . the depot sirens sounded and everyone rushed to take cover in the shelters provided. The drone of approaching aircraft was heard through the loud speakers, and a series of explosions immediately afterwards indicated that a bombing raid was in progress. Meantime, the decontamination squad were at work on a large area which had been splashed by liquid mustard gas. A lorry drove up, and the air-raid victims, now on stretchers, were hurriedly but carefully lifted into this improvised ambulance and taken to hospital.

Then the specially prepared building caught fire, but it flared up so quickly that for a moment it threatened to beat the fire brigade, who were hastily coupling their hoses, while other fire-fighters went into action with foam extinguishers.

At the same time, the main water supply was cut off, but the brigade were able to use an emergency supply of some 3,000 gallons stored in one of the pits. By this time the fire was under control, and when Hounslow depot sent a message asking for fire-fighting assistance, the fire pump was coupled to a lorry and the brigade drove off, leaving a squad armed with extinguishers to complete their work.

The display was not without its lighter incidents. For instance, one casualty was so intent on playing his part that he collapsed long before the enemy aircraft arrived, while a member of the decontamination squad was wearing two left boots!

The enthusiasm of all those who took part in this demonstration had much to do with its success, and each man deserves praise for his part in this display of good team work.

* * * *

A further display of A.R.P. work was given by the staff of Romford garage in response to an invitation by the Romford National Service Committee. A burning Green Line Coach was a feature of the display, which was organised specially to demonstrate how effectively the general public with just some knowledge can help themselves and others, should the occasion arise.

Demonstration of Air Raid Protection effectiveness through practical exercises at Fulwell depot. June 1939. Archive ref num: LT000030/017

By the outbreak of war, electric floodgates on the Bakerloo line and at Waterloo on the Northern line had been completed. The Northern line

between Strand and Kennington and 24 other stations had floodgates and watertight doors installed.

In view of the danger of gas attack, modifications were made in the ventilating apparatus of the tubes, to lessen the risk of gas being drawn into the system.

Inevitably, hits and resultant damage did occur. The LPTB's head office at 55 Broadway suffered on more than one occasion.



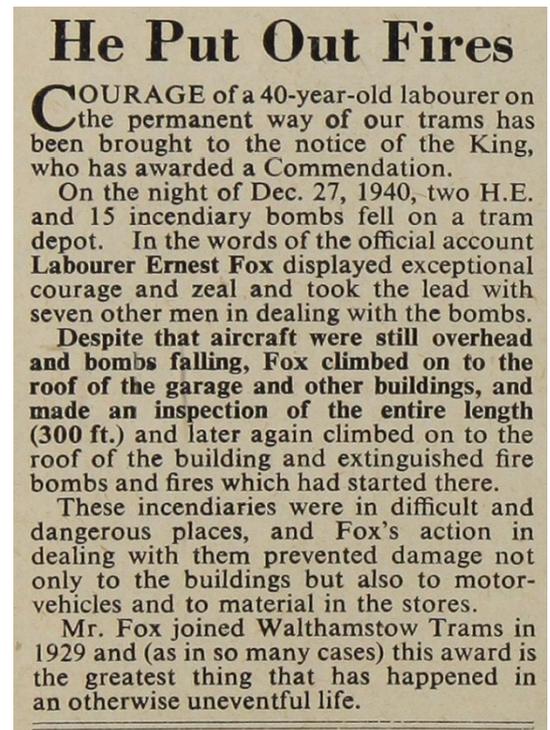
*55 Broadway, 1929. Archive ref num:
LT000605/005*

From a report dated 18th October 1940:

“The bomb hit the building on a balcony on the ninth floor where it exploded doing considerable damage to the fourth, fifth and sixth floors; parts of the external walls of the fifth floor were completely blown out.”

On 27th December 1940, 2 H.E. and 15 incendiary bombs fell on a tram depot. Whilst bombs were still falling Labourer Ernest Fox climbed onto the roof of the garage and other buildings and made an inspection of the full 300 foot length.

On the night of 10th May 1941, 300 bombers were over London. Bombs scored direct hits on the LPTB tube lines at 20 different places. Tunnels were pierced at 4 points and tracks blocked at 9. Tram tracks were damaged on 14 roads and 21 roads were closed.



*Commendation for Ernest Fox.
March 1941. Archive ref num:
LT00030/078*

Trolleybus wire was brought down at 18 places, tramway conduits were damaged at 13 points. 3 bus garages were damaged, 2 seriously. Services still ran, with some diversions and modifications, the next day.

In all, 249 flying bombs and 75 rockets fell on LPTB properties or so near as to damage them in 1944-1945 alone.

Yet to the LPTB and its staff protecting the network was simply part of "their war job."

Protecting Offices is Their War Job

GRIFFITH House, our "youngest" block of offices (it was opened in June, 1940), has a complete A.R.P. organisation, the whole of which is administered and manned by the staff of the nine departments that work there. When we say manned, we include women staff, for some of them do roof-spotting (see *Pennyfare*, June, 1941).

A grand flow of voluntary spirit has generated the organisation, no little credit for its success being due to the departmental representatives, who formed themselves into a committee.

Altogether 170 of the Griffith House staff are named in the duty schedules in one capacity or other—as fire watchers, fire fighters, roof spotters, first-aid squad, floor and shelter wardens. And all of them have joined as one in support of the Chief Warden, Mr. J. E. Cowderoy, and of his deputy, Mr. A. C. Ross.

Fire Watchers Too

The fire watchers, whose duties cover the building nightly from 5 p.m. to 9 a.m. and on Saturday afternoons and all day Sundays, are entitled to special mention for ready sacrifice of home comfort.

On the opposite page you see a photograph of the fire-fighting squad. The leader, Mr. Beadle, is in the office of the Staff Supt. (Railways). He and his brother firemen have undertaken further duty, that of instructing the fire watchers in the use of the stirrup pump, which is tested by each team as it takes over.

Air Raid Protection arrangements for the Griffith House block of offices. August 1941. Archive ref num: LT000030/078

The story has been compiled using information in records at the Transport for London Corporate Archives. The Corporate Archives seeks to preserve and make accessible records, not to interpret them. A wider range of material is available for physical consultation.

Email: CorporateArchives@tfl.gov.uk