

FIRE AT WOOLWORTHS MANCHESTER, 8 MAY 1979

By Dr Chris Foster

The Woolworths store in Manchester was their largest in Europe, with four vast sales floors and a 208 seater restaurant. The building was situated at the corner of Piccadilly and Oldham Street. The self-service restaurant occupied a large portion of the second floor that it shared with the furniture department. After extensive modernisation between 1967-1970 had been completed, as from January 1977 the store fell within the scope of the Fire Precautions Act 1971. Further upgrading of the fire precautions were completed by April 1979 in order to satisfy the requirements for the granting of a fire certificate.



At 13:25 on 8 May 1979 a fire was discovered in a section of the second floor against the external wall overlooking Piccadilly that had been cordoned off for storage purposes, separated from public view by rows of bedroom wardrobes and dresser units with built in lighting. Furniture in this storage area included convertible bed-settees, mattresses, a double divan bed base, settees, kitchen chairs, fireside and rocking chairs, most of which was stacked vertically. The furniture had a high proportion of foamed polyurethane upholstery and was wrapped in a variety of materials such as polyethylene bags, paper and corrugated cardboard.

When the fire was discovered by a contractor working from a ladder on the second floor flames were visible behind the rows of wardrobe units and dresser units, but they had not yet reached the ceiling. Within a few moments flames impinged on the ceiling and the fire quickly spread to the whole of the stock in the temporary storage area. Once that stock was burning the fire grew at an alarming rate, spreading to the nearby furniture on the display floor. Within about two minutes the smoke layer had descended to a depth of about 2m beneath the ceiling over the whole of the second floor, including the restaurant. Although evacuation of the restaurant and other parts of the store was already in progress at this time, nine customers in the restaurant were overcome by the toxic smoke, collapsed and died very close to one of the fire escape staircases. A Woolworths' employee also died nearby. Many members of the staff were rescued by fire crews under very difficult circumstances.



Burgoynes was instructed by the insurers of Woolworths to investigate the cause and circumstances of the fire. Chris Foster liaised with the Fire Service and The Home Office forensic scientists at the scene. Chris assisted with preparations made to carry out full scale tests commissioned by Senior Divisional Officer Bob Graham of the GMFRS. These tests were undertaken at one of the Cardington hangers, a unique

and vast testing facility operated by the Fire Research Station. He attended the tests in which the furniture stock area was reconstructed and ignited in the general area in where flames were first seen. The photographs below record some stages of the development of the fire which reproduced the observations made by witnesses.



30s after ignition



1 minute after ignition



2 minutes after ignition

The Home Office Forensic Scientist reported at the Inquest that the fire was probably caused by a complicated mechanism leading to electrical arcing. This, it was proposed, became possible because wiring of an extension lead used to supply power to the display lights on the wardrobes and dressing units bordering the stock area had become trapped in two locations against an aluminium corner protector on panelling against the external wall which became 'live'. Chris Foster, whose report was presented to the coroner, disagreed with the interpretation of evidence that led to these findings as did Divisional Officer Graham. While not completely eliminating the possibility that the source of ignition was associated with electrical activity, Chris believed the fire could have been caused by human agency, in which category lie carelessly discarded smokers' materials and deliberate ignition. In this regard Bob Graham concluded that the fire could have resulted from direct ignition of the furniture or its packaging. The Coroner concluded that the cause of the fire remained a mystery.

The Woolworths incident precipitated moves to legislate for reduced ignition tendencies of furniture. Bob Graham was instrumental in maintaining pressure in this direction, the outcome of which was enactment of the Furniture and Furnishings (Fire Safety) Regulations 1988.