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DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH AND FIRE OFFICES' COMMITTEE JOINT FIRE RESEARCH ORGANIZATION

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FIRES CAUSED BY FAULTS IN FLUORESCENT LIGHTING EQUIPMENT III

Incidents attended by the Fire Brigades in the United Kingdom during 1951

by D.W. Millar

This note extends the information available on fires caused by faults in fluorescent lighting equipment. In F.S.Noto No.115/1950 and No.123/1951 analyses were given of reports of incidents involving fluorescent lighting equipment attended by the Fire Brigades in the United Kingdom during 1950. The present note records the results of a similar analysis of incidents which occurred during 1951.

There were 48 incidents, 46 in England and Wales and 2 in Scotland. Fifteen of the fires started in chokes, 14 in transformers, 3 in resistances, 4 in wiring and 3 in condensers. One fire was caused by heat from a fused lighting tube igniting a wooden beam, and another started in unspecified apparatus associated with lighting equipment. In all these incidents there was a breakdown or overheating in the component mentioned.

The remaining fires include an incident where an employee, while adjusting the installation, caused a short circuit, and a fire which started in a condenser in equipment which was switched on after the lighting tube had been removed. There was also a fire in which a bird's nest built around the transformer of the equipment caused a short circuit. Finally there were four fires where the location of the fire was not stated.

Damage was confined to the apparatus in 33 of the incidents; 6 fires spread beyond the apparatus and caused minor damage confined to the room of origin. Slight damage was caused to the roof by a fire in a fluorescent sign over the main entrance to a shop, and 7 fires damaged the ceiling and floor above the room in which the fire started. The only serious fire occurred in a bookshop in which severe damage was caused to approximately two-thirds of the shop and its contents. The fire spread to the stairway of the flat above the shop.

There was one non-fatal casualty, a male aged 23 years, who received a shock while adjusting a lighting tube.