

Fire Research Note No. 758



PRELIMINARY ANALYSIS OF FIRE REPORTS FROM FIRE BRIGADES IN THE UNITED KINGDOM, 1968

by

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March 1969

FIRE RESEARCH STATION

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KEY WORDS: Fire statistics.

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MINISTRY OF TECHNOLOGY AND FIRE OFFICES' COMMITTEE JOINT FIRE RESEARCH ORGANIZATION

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PRELIMINARY ANALYSIS OF FIRE REPORTS FROM FIRE BRIGADES IN THE UNITED KINGDOM, 1968

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INTRODUCTION

A preliminary analysis of reports shows that, during 1968, local authority fire brigades attended 186 571 fires in England and Wales, 22 979 in Scotland and 3 685 in Northern Ireland. The number of incidents attended by each brigade is given in Table 1.

Four firemen were killed at the scene of fires. In England and Wales 327 members of the fire service were injured at fires; the corresponding figures for Scotland and Northern Ireland were 26 and 14 respectively.

Fire brigades assisted in the rescue of 789 persons from hazardous situations at fires in England and Wales, 160 in Scotland and 12 in Northern Ireland. A further 1 469 persons were rescued by other persons in England and Wales; the corresponding figures for Scotland and Northern Ireland were 205 and 94 respectively. Six hundred and five people in England and Wales escaped by emergency means from fires; there were 41 such escapes in Scotland and 33 in Northern Ireland. Further details of casualties, rescues and escapes are given in Tables 2, 3, and 4.

There were 11 incidents in which mass evacuation of premises or a mass rescue was either necessary or advisable. These incidents involved two hospitals, two hotels, a school evening class, three buses, a railway train, a football ground and a departmental store. All the incidents except the departmental store, which was in Northern Ireland, were in England and Wales. There was an attendance of 34 000 at the football ground and the ground was evacuated; in the remaining incidents, the number of persons at risk was not generally known.

The analysis is based on reports received up to 7th March, 1969 and the figures are subject to revision when outstanding reports are received.

Table 1.

FIRES ATTENDED BY FIRE BRIGADES IN THE UNITED KINGDOM, 1968

Fire Brigades	Total fires	Total fires other than those confined to grassland and heathland	Fires confined to grassland and heathland
England and Wales - County Fire Brigade Anglesey Bedfordshire Berks. and Reading Brecon Co. and Radnor Buckinghamshire Caernarvonshire Caernarvonshire Cambridgeshire and Elv, Isle of Cardiganshire and Carmarthenshire Cheshire Conswall Cumberland Denbigh and Montgomery Derbyshire Devonshire Dorsetshire Durham Co. Essex Flintshire Glamorganshire Herefordshire Herefordshire Hertfordshire Huntingdonshire and Peterborough Kent and Canterbury Lancashire Leicestershire and Rutland Lincs. (Holland) Lincs. (Lindsey) London Merionethshire Northumberland Nottinghamshire Oxfordshire	$\begin{array}{c} 175\\832\\1&098\\168\\1&533\\706\\4&163\\1&030\\838\\2&1&915\\1&379\\1&173\\2&3&619\\1&379\\2&361\\1&379\\2&32798\\4&16\\12&473\\1&115\\219\\362\\1&033\\1&452\\2&043\\1&452\\2&043\\530\end{array}$	heath land 96 710 743 (1) 147 1 215 317 663 408 2 855 682 564 587 1 323 1 028 654 1 968 2 616 390 1 759 1 060 1 791 288 2 205 526 3 153 8 424 873 203 323 828 26 123 89 612 89 612 89 816 1 103 1 275 455 (4)	$\begin{array}{c} 79\\ 122\\ 355\\ 21\\ 366\ (2)\\ 216\\ 43\\ 210\\ 1\ 308\\ 348\\ 274\\ 95\\ 592\\ 351\\ 459\\ 764\\ 1\ 003\\ 91\\ 1\ 077\\ 249\\ 1\ 003\\ 91\\ 1\ 077\\ 249\\ 1\ 069\\ 35\\ 593\\ 44\ (3)\\ 993\\ 4\ 049\\ 242\\ 16\\ 39\\ 206\\ 3\ 193\\ 41\\ 313\\ 204\\ 118\\ 349\\ 768\\ 75\ (3) \end{array}$
Pembrokeshire	325	200 (4)	125

Table 1 (Contd).

FIRES ATTENDED BY FIRE BRIGADES IN THE UNITED KINGDOM, 1968

			<u> </u>
Fire Brigades	Total fir⊕s	Total fires other than those confined to grassland and heathland	Fires confined to grassland and heathland
<u>County Fire Brigades</u> (contd)			
Shropshire Somerset Staffordshire Suffolk(East) Suffolk(West) and Ipswich Surrey Sussex East Sussex West Warwickshire Westmorland Wight, Isle of Wiltshire Worcester Co. and Worcs. C.B. Yorks (East Riding) Yorks (North Riding) Yorks (West Riding)	882 1 148 2 363 1 495 2 300 1 051 1 123 1 693 172 215 1 036 1 281 570 996 5 627	1 614 1 236 1 265 (5) 754 967 1 323 133 (2) 185 953 1 030 521 865	137 151 749 (2) 259 1 035 297 156 370 (2) 39 30 83 251 49 131 1 700
England and Wales - County Borough Fire Brigades Barnsley Barrow in Furness Bath Birkenhead Birmingham Blackburn Blackpool Bolton Bootle Bournemouth Bradford Brighton Bristol Burnley Burton on Trent Bury Cardiff Carlisle Chester Coventry Darlington Derby Dewsbury Doncaster Dudley	$\begin{array}{c} 250\\ 171\\ 220\\ 1\ 498\\ 4\ 890\\ 676\\ 707\\ 1\ 078\\ 1\ 391\\ 476\\ 1\ 298\\ 593\\ 1\ 663\\ 847\\ 184\\ 619\\ 1\ 317\\ 341\\ 383\\ 1\ 347\\ 333\\ 719\\ 296\\ 330\\ 687\\ \end{array}$	$ \begin{array}{r} 155\\ 108\ (3)\\ 205\\ 1\ 345\\ 4\ 273\\ 531\ (6)\\ 608\\ 813\\ 1\ 203\\ 292\\ 1\ 166\\ 486\\ 1\ 333\\ 688\\ 147\\ 414\\ 1\ 149\\ 280\\ 341\\ 998\\ 333\\ 629\\ 243\\ 303\\ 376\\ \end{array} $	95 63 (3) 15 153 617 145 99 265 188 184 132 107 330 159 37 205 168 61 42 349 NIL 90 53 27 311

Table 1 (Contd)

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FIRES ATTENDED BY FIRE BRIGADES IN THE UNITED KINGDOM, 1968

Fire Brigades	Total fires	Total fires other than those confined to grassland and heathland	Fires confined to grassland and heathland
<u>County Borough Fire Brigades (contd)</u> Eastbourne	157	142	15
Exeter	262	248	14
Gloucester	256	235	21
Great Yarmouth	238	229	9
Grimsby	566	509	57
Halifax	600	471	129
Hartlepool	762	716	46
Hastings	298	166	132
Huddersfield	430	346	84
Kingston upon Hull	2 017	1 851	166
Leeds	2 383	1 936	447
Leicester	1 198	1 019	179
Lincoln	345	269	76
Liverpool	8 4 9 8	7 716	782
Luton	558	4444	114
Manchester	5 871	5 021	850
Merthyr Tydfil	217	149	68
Middlesbrough (up to 31.3.68 only)	140	118	22
Newcastle on Tyne and Gateshead	1 822	1 627	195
Newport (Mon.)	524	409 .	115
Northampton	371	345	26
Norwich	545	416	129
Nottingham	1 577	1 379	298
Oldham	. 760	689	71 (3)
Oxford	327	311	16
Plymouth	943	819	124
Portsmouth	936	828	108
Preston	771	657	114
Rochdale	683	570	113
Rotherham	452	336	116
St. Helens	711	509	202
Salford	1 425	1 335	90
Sheffield Solihull	1 813	1 470	343
Southampton	176	134 648	42
Southand	384	342	236
Southeart	278	239	42 39
South Shields	504	378	126
Stockport	833	659	174
Stoke on Trent	740	699	41
Sunderland	1 1 1 52	886	266
Swansea	714	477	237
			271

Table 1 (Contd)

FIRES ATTENDED BY FIRE BRIGADES IN THE UNITED KINGDOM, 1968

Fire Brigades	Total fires	Total fires other than those confined to grassland and heathland	Fires confined to grassland and heathland
County Borough Fire Brigades (contd) Tees-side (new authority from 1.4.68)	1 802	1 632	170
Tynemouth	322	255	67
Wakefield	190	147	43
Wallasey	715	591	124
Walsall	879	594	285
Warley	625	510	115
Warrington	543	376	167
West Bromwich	784	588	196
Wigan	530	414	116
Wolverhampton	908	722	186 ,
York	390	342	48
Total number of fires attended in England and Wales	186 571	148 753	37 818 ·

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Fire B rigades	Total fires	Total fires other than those confined to grassland and heathland	Fires confined to grassland and heathland
Scotland			
Glasgow Lanark Central Western South Western South Eastern Fife Perth and Kinross Angus North Eastern Northern	6 950 2 907 1 926 2 051 1 368 3 056 1 154 416 1 424 1 297 430	6 495 2 365 1 404 1 755 1 131 2 656 891 355 1 202 1 133 365	455 542 522 296 237 400 263 61 222 164 65
Total number of fires attended in Scotland	22 979	19 752	-3 227

Table 1 (contd)

FIRES ATTENDED BY FIRE BRIGADES IN THE UNITED KINGDOM, 1968

Fire Brigades	Total fires	Total fires other than those confined to grassland and heathland	Fires confined to grassland and heathland
<u>Northern Ireland</u> North South West Belfast	754 792 695 1 444	593 644 575 1 369	161 148 120 (2) 75
Total number of fires attended in Northern Ireland	3 685	3 181	504

((1)	Date	of	last	report	31. 7.68
((2)	"	*1	**	et .	30. 9.68
((3)	79		н	11	30. 6.68
((4)	**	"	14	11	30.11.68
((5)	11	н	H	**	31. 8.68
((6)	**	**		78	31.10.68

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Table 2

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NATURE OF INJURIES OF CASUALTIES IN FIRES

	Eng	land and Wal	les	Scotland			Northern Ireland		
Casualties	Fire brigade	Other casualties	Total	Fire brigade	Other casualties	Total	Fire brigade	Other casualties	Total
FATAL CASUALTIES ¹									
Burns and scalds Overcome by gas or smoke Other and undefined injuries	2 - 1	262 353 67	264 353 68	- - 1	36 54 34	36 54 35	-	6 4 1	6 4 1
Total	3	682	685	1	124	125	-	11	11
NON FATAL CASUALTIES									
Burns and scalds Bruises, cuts, abrasions Dislocations, sprains, fractures Overcome by gas or smoke More than one of the above injuries Shock ² Other and undefined injuries	46 143 27 49 14 2 46	2 259 230 46 431 150 414 138	2 305 373 73 480 164 416 184	2 12 1 6 1 1 3	180 23 3 56 20 82 17	182 35 4 62 21 83 20	- 9 3 1 - - 1	53 5 - 10 - 6 8	53 14 3 11 - 6 9
Total ,	327	3 668	3 995	26	381	407	14	82	96
TOTAL	330	4 350	4 680	27	505	532	14	93	107

1. Casualties who are certified as having died from "Burns and asphyxiation" are included under "Overcome by gas or smoke"

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2. Casualties who suffer shock in addition to another injury are classified according to the other injury.

Table 3

Age (years)	Total	Male	Female
Under 1	32	18	14
1 - 5	110	67	43
6 - 15	34	22	12
16 - 40	141	91	50
41 - 65	196	99	97
66 - 80	185	74	111
0 ver 80	93	37	56
Not stated, unknown	18	10	8
TOTAL	809*	418	391

SEX AND AGE OF FATAL CASUALTIES IN THE UNITED KINGDOM

* Thirteen deaths not yet classified on either sex or age

on this table.

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Table 4

PERSONS RESCUED OR ESCAPED BY EMERGENCY MEANS FROM FIRES ATTENDED BY FIRE BRIGADES IN THE UNITED KINGDOM, 1968

	Number of Persons					
Appliances or Methods Used	United Kingdom	England and Wales	Scotland	Northern Ireland		
Rescue with Fire Brigade assistance from Buildings Escape (hand operated) Ladder: extension first floor hook turntable (mechanical) other or undefined Line Oxyacetylene cutting gear Other apparatus Without apparatus Road vehicles Ships Railway train Other specified hazards	75 131 46 3 81 48 2 3 28 531 7 1 4 1	66 98 37 3 58 46 2 3 28 439 7 1 - 1	9 30 5 - 23 2 - - 87 - 87 - 4	- 34		
Total	961	789	160	12		
Rescue without Fire Brigade assistance from Aircraft Buildings Automatic escape lines Carried or assisted out Jumping sheet Ladder Lowered from windows, roof etc. Other or undefined methods Road vehicles Caravans Ships Railway train (diesel multiple unit) Other specified hazards	98 2 1 127 20 201 255 26 31 3 2 * 3	97 2 925 10 185 194 24 25 2 2 2 2 3	- 137 10 4 47 2 4 1 - - -	1 		
Total	1 768	1 469	205	94		

In one incident in a rush-hour train, passengers got out or were rescued. It is not known how many needed assistance in getting out. (see also Introduction)

Table 4 (Contd)

PERSONS RESCUED OR ESCAPED BY EMERGENCY MEANS FROM FIRES ATTENDED BY FIRE BRIGADES IN THE UNITED KINGDOM, 1968

	Number of Persons					
Appliances or Methods Used	United Kingdom	England and Wales	Scotland	Northern Ireland		
Escape by emergency means from Aircraft Baled out Through exits or from debris Buildings Automatic escape lines Climbing over roof, window ledges etc. Fixed fire escape Jumping from upstairs window, roof etc. Ladder Sliding down drainpipe, sheets etc. Through ground floor windows Other or undefined methods Road vehicles Caravans Ships Other specified hazards	3 11 1 77 6 278 32 27 36 150 36 5 6 11	3 11 1 72 6 249 27 25 34 124 31 5 6 11	- - 2 - 24 - 2 - 2 - 2 - 7 1 - - -			
Total	679	605	41	33		
Total persons rescued or escaped	3 408	2 863	406	139		

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