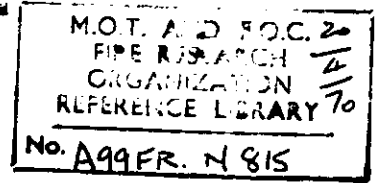


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Fire Research Note No. 815



PRELIMINARY ANALYSIS OF FIRE REPORTS
FROM FIRE BRIGADES IN THE UNITED KINGDOM
1969

by

S. E. CHANDLER

April 1970

FIRE RESEARCH STATION

F.R. Note No.815.
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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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INTRODUCTION

A preliminary analysis of reports shows that, during 1969, local authority fire brigades attended 222 304 fires in England and Wales, 25 759 in Scotland and 5 162 in Northern Ireland. The United Kingdom provisional total of 253 225 fires is the highest ever. The Northern Ireland total was undoubtedly increased substantially as a result of civil disturbances. The number of incidents attended by each brigade is given in Table 1.

Nine firemen were killed at the scenes of fires, five in one incident. In England and Wales 410 members of the fire services were injured at fires; the corresponding figures for Scotland and Northern Ireland were 31 and 11 respectively.

Fire brigades assisted in the rescue of 836 persons from hazardous situations at fires in England and Wales, 226 in Scotland and 58 in Northern Ireland. A further 1 386 persons were rescued by other persons in England and Wales; the corresponding figures for Scotland and Northern Ireland were 154 and 86 respectively. Six hundred and eighty-two people in England and Wales escaped by emergency means from fire; there were 55 such escapes in Scotland and 24 in Northern Ireland. Further details of casualties, rescues and escapes are given in Tables 2, 3 and 4.

There were ten incidents in which mass evacuation of premises was thought to be advisable. Seven of these fires were in England and Wales (two hotels, three hospitals, a bus and a school), two in Scotland (an hotel and a school) and one in Northern Ireland (a children's hostel). These incidents have not been classified as rescue or escape incidents and are not included in Table 4. As well as these evacuations there were three incidents in hotels (two in England and Wales, one in Northern Ireland) where large numbers had to be rescued; these are included in Table 4.

The analysis is based on reports received up to 6th March, 1970 and the figures are subject to revision when outstanding reports are received.

Table 1

Fires attended by Fire Brigades
in the United Kingdom, 1969

Fire Brigades	Total fires	Total fires other than those confined to grassland and heathland	Fires confined to grassland and heathland
<u>England and Wales - County Fire Brigade</u>			
Anglesey	229	125	104
Bedfordshire	1 037	826	211
Berks. and Reading	1 973	1 404	569
Brecon Co. and Radnor	165	130	35
Buckinghamshire	2 251	1 589	662
Caernarvonshire	683	425	258
Cambridgeshire and Ely Isle of	926	839	87
Cardiganshire and Carmarthenshire	819	515	304
Cheshire	4 737	3 287	1 450
Cornwall	1 200	742	458
Cumberland	853	589	264
Denbigh and Montgomery	930	688	242
Derbyshire	1 937	1 439	498
Devonshire	1 494	1 142	352
Dorsetshire	1 639	836	803
Durham Co.	2 644	1 948	696
Essex	4 736	3 098	1 638
Flintshire	701	475	225
Glamorganshire	3 388	1 914	1 474
Gloucestershire	1 812	1 345	467
Hampshire	3 897	2 224	1 673
Herefordshire	426	341	85
Hertfordshire	3 800	2 624	1 176
Huntingdonshire and Peterborough	740	636	104
Kent and Canterbury	4 914	3 604	1 310
Lancashire	13 531	9 390	4 141
Leicestershire and Rutland	1 306	1 022	284
Lincs. (Holland)	244	231	13 (1)
Lincs. (Kesteven)	390	351	39 (1)
Lincs. (Lindsey)	993	859	134
London	40 715	34 308 (2)	6 407
Merionethshire	120	89 (3)	31
Normanbyshire	1 185	61 (7)	565
Norfolk	1 192	901	291
Northamptonshire	1 102	857	145
Northumberland	1 705	1 282	423
Nottinghamshire	1 935	1 364	571
Oxfordshire	767	639	128
Pembrokeshire	428	259	169

Table 1 (cont'd)

Fires attended by Fire Brigades
in the United Kingdom, 1969

Fire Brigades	Total fires	Total fires other than those confined to grassland and heathland	Fires confined to grassland and heathland
<u>County Fire Brigades (cont'd)</u>			
Shropshire	1 204	896	308 (1)
Somerset	1 336	1 125	211
Staffordshire	2 842	1 853	989
Suffolk(East) Suffolk(West) and Ipswich	1 732	1 367	365
Surrey	3 665	2 104	1 561
Sussex East	1 330	901	429
Sussex West	1 568	1 291	277
Warwickshire	2 105	1 558	547
Westmorland	178	141 (1)	37 (1)
Wight. Isle of	302	232	70
Wiltshire	1 370	1 192	178
Worcester Co. and Worcs. C.B.	1 835	1 301	534
Yorks (East Riding)	507	477	30
Yorks (North Riding)	919	804	115
Yorks (West Riding)	5 498	4 205	1 293
<u>England and Wales - County Borough Fire Brigades</u>			
Barnsley	243	175	68
Barrow in Furness	414	307	107
Bath	233	214	19
Birkenhead	1 532	1 271	261
Birmingham	5 626	4 499	1 127
Blackburn	791	622	169
Blackpool	794	672	122
Bolton	1 284	988	296
Bootle	1 368	1 175	193
Bournemouth	582	341	241
Bradford	1 474	1 332	142 (1)
Brighton	697	560	137
Bristol	2 022	1 555	467
Burnley	896	755	141 (1)
Burton on Trent	184	146	38
Bury	724	540	184 (1)
Cardiff	1 658	1 348 (4)	310
Carlisle	408	337	71
Chester	451	366	85
Coventry	1 725	1 327	398
Darlington	444	444	-
Derby	756	654	102 (1)
Dewsbury	299	237	62
Doncaster	320	294	26
Dudley	833	423	410

Table 1 (cont'd)

Fires attended by Fire Brigades
in the United Kingdom, 1969

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 (cont'd)</u>			
Eastbourne	206	187	19
Exeter	371	338	33
Gloucester	292	245	47
Great Yarmouth	234	206	28
Grimsby	645	602	43
Halifax	534	442	92
Hartlepool	747	667	80
Hastings	256	182	74
Huddersfield	499	435	64
Kingston upon Hull	2 200	2 071	129
Leeds	2 615	2 169	446
Leicester	1 310	1 102	208
Lincoln	270	216	54
Liverpool	8 084	7 129	955
Luton	725	522	203
Manchester	6 203	5 425	778
Merthyr Tydfil	226	161	65
Newcastle on Tyne and Gateshead	2 181	2 009	172
Newport (Mon.)	747	533	214
Northampton	440	392	48
Norwich	526	407	119
Nottingham	1 724	1 514	210
Oldham	810	759	51
Oxford	365	341	24
Plymouth	923	702 (3)	221
Portsmouth	1 056	897	159
Preston	836	681	155
Rochdale	694	582 (4)	112 (1)
Rotherham	538	435	103
St. Helens	797	597 (4)	200 (1)
Salford	1 872	1 787	85
Sheffield	1 842	1 582	260
Solihull	257	186	71
Southampton	1 219	786	433
Southend	457	367	90
Southport	350	269	81 (1)
South Shields	529	392	137
Stockport	777	638	139
Stoke on Trent	1 174	718	456
Sunderland	1 166	866	300
Swansea	717	471	246

Table 1 (cont'd)

Fires attended by Fire Brigades
in the United Kingdom, 1969

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 (cont'd)</u>			
Tees-side	2 349	2 026	323
Tynemouth	381	301	80
Wakefield	197	148	49
Wallasey	881	730	151
Walsall	1 108	698	410
Warley	784	601	183 (1)
Warrington	547	420	127
West Bromwich	1 024	666	358
Wigan	595	441	154
Wolverhampton	1 042	708	334
York	388	341	47
Total number of fires attended in England and Wales	222 304	172 077	50 227

Fire Brigades	Total fires	Total fires other than those confined to grassland and heathland	Fires confined to grassland and heathland
<u>Scotland</u>			
Glasgow	6 804	6 349	455
Lanark	3 294	2 674	620
Central	2 304	1 649	655
Western	2 324	1 767	557
South Western	1 617	1 281	336
South Eastern	3 589	3 005	584
Fife	1 381	1 064	317
Perth and Kinross	488	371	117
Angus	1 660	1 346	314
North Eastern	1 532	1 263	269
Northern	766	514	252
Total number of fires attended in Scotland	25 759	21 283	4 476

Table 1 (cont'd)

Fires attended by Fire Brigades
in the United Kingdom, 1969

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	896	709	187
South	1 130	930	200
West	922	693 (5)	229
Belfast	2 214	2 133 (5)	81
Total number of fires attended in Northern Ireland	5 162	4 465	697

- (1) Date of last report received 30.9.69.
- (2) The record for this brigade includes 1075 fire calls of which there will be no further particulars owing to an industrial dispute.
- (3) Date of last report received 31.10.69.
- (4) Date of last report received 30.11.69.
- (5) The records for these brigades include fire calls during the civil disturbances for which there is very little information.

Table 2

Nature of injuries of casualties in fires

Casualties	England and Wales			Scotland			Northern Ireland		
	Fire brigade	Other casualties	Total	Fire brigade	Other casualties	Total	Fire brigade	Other casualties	Total
FATAL CASUALTIES¹									
Burns and scalds	-	271	271	-	38	38	-	5	5
Overcome by gas or smoke	-	338	338	-	73	73	-	7	7
Other and undefined injuries	8	67	75	1	11	12	-	11	11
Total	8	676	684	1	122	123	-	23	23
NON FATAL CASUALTIES									
Burns and scalds	53	2 542	2 595	3	235	238	1	64	65
Bruises, cuts, abrasions	177	253	430	12	22	34	1	14	15
Dislocations, sprains, fractures	52	66	118	6	14	20	2	2	4
Overcome by gas or smoke	49	439	488	8	82	90	1	14	15
More than one of the above injuries	14	73	87	1	11	12	-	6	6
Shock ²	1	529	530	-	63	63	4	10	14
Other and undefined injuries	64	114	178	1	9	10	2	6	8
Total	410	4 016	4 426	31	436	467	11	116	127
T O T A L	418	4 692	5 110	32	558	590	11	139	150

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

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

Table 3

Sex and age of fatal casualties in the United Kingdom*

Age (years)	Total	Male	Female
Under 1	23	16	7
1 - 4	129*	73	56
5 - 14	30	12	18
15 - 44	156	116	40
45 - 64	150	75	75
65 - 74	135	45	90
75 and over	195	56	139
Not stated, unknown	11	10	1
Total	829*	403	426

*One death of a three year old child whose sex was not recorded is not included in this table

Table 4

Persons rescued or escaped by emergency means from fires
attended by fire brigades in the United Kingdom, 1969

Appliances or methods used	Number of persons			
	United Kingdom	England and Wales	Scotland	Northern Ireland
Rescue with fire brigade assistance from Buildings				
Escape (hand operated)	72	60	12	-
Ladder: extension	141	88	53	-
first floor	62	51	11	-
hook	6	6	-	-
turntable (mechanical)	171	100 (1)	19	52 (2)
other or undefined	188	169 (3)	15	4
Ladder and line	7	3	4	-
Line	5	5	-	-
Other apparatus	62	51	11	-
Without apparatus	354	287	65	2 (4)
Road vehicles	5	3	2	-
Ships	35	1	34	-
Other specified hazards	12	12	-	-
Total	1 120	836	226	58
Rescue without fire brigade assistance from Buildings				
Automatic escape lines	1	1	-	-
Carried or assisted out	1 213	1 028	107	78
Jumping sheet	13	10	3	-
Ladder	148	131	17	-
Lowered from windows, roof etc.	150	128	16	6
Other or undefined methods	38	36	2	-
Road vehicles	31	25	5	1
Caravans	8	6	1	1
Ships	2	2	-	-
Other specified hazards	22	19	3	-
Total	1 626	1 386	154	86

Table 4 (cont'd)

Persons rescued or escaped by emergency means from fires
attended by fire brigades in the United Kingdom, 1969

Appliances or methods used	Number of persons			
	United Kingdom	England and Wales	Scotland	Northern Ireland
Escape by emergency means from Aircraft				
Baled out	8	8	-	-
Through exits or from debris	1	1	-	-
Thrown clear	3	2	1	-
Method not stated	3	3	-	-
Buildings				
Climbing over roof, window ledges etc.	21	21	-	-
Fixed fire escape	12	12	-	-
Jumping from upstairs window, roof etc.	278	246	24	8
Ladder	51	45	4	2
Sliding down drainpipe, sheets etc.	43	41	2	-
Through ground floor windows	57	51	4	2
Other or undefined methods	121	115	2	4
Road vehicles	118	108 (5)	6	4
Caravans	8	3	1	4
Ships	12	8	4	-
Railway locomotive	2	2	-	-
Other specified hazards	23	16	7	-
Total	761	682	55	24
Total persons rescued or escaped	3 507	2 904	435	168

- (1) Includes 50 rescued from hotel by turntable ladders, escapes, hook ladders and lines. Numbers by each method unknown.
- (2) Includes 50 rescued from hotel by turntable ladders and escapes.
- (3) Others are known to have been rescued by this method at an hotel but no particulars obtained.
- (4) There was also an incident at an hotel in which an unknown number was rescued by this method.
- (5) Includes two full coach loads.