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Fire Research Note

No. 702

PRELIMINARY ANALYSIS OF FIRE REPORTS
FROM FIRE BRIGADES IN THE UNITED KINGDOM, 1967

by

S. E. CHANDLER

March, 1968

FIRE
RESEARCH
STATION

**Fire Research Station,
Borehamwood,
Herts.
Tel. 01-953-6177**

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

PRELIMINARY ANALYSIS OF FIRE REPORTS FROM
FIRE BRIGADES IN THE UNITED KINGDOM, 1967

by

Introduction

S. E. Chandler

A preliminary analysis of reports shows that, during 1967, local authority fire brigades attended 139 641 fires in England and Wales, 18 374 in Scotland and 2 780 in Northern Ireland. The number of incidents attended by each brigade is given in Table 1.

Three firemen were killed at the scene of fires. In England and Wales 358 members of the fire services were injured at fires; the corresponding figures for Scotland and Northern Ireland were 33 and 6 respectively.

Fire brigades assisted in the rescue of 623 persons from hazardous situations at fires in England and Wales, 113 in Scotland and 53 in Northern Ireland. A further 1 209 persons were rescued by other persons in England and Wales; the corresponding figures for Scotland and Northern Ireland were 122 and 90 respectively. Five hundred and seventy-five people in England and Wales escaped by emergency means from fires; there were 55 such escapes in Scotland and 26 in Northern Ireland. Further details of casualties, rescues and escapes are given in Tables 2, 3, 4 and 5.

There were 5 incidents in which mass evacuation of premises was deemed advisable. There were three hospitals, one a mental hospital, amongst these incidents - two were in Scotland and the other in Northern Ireland. Also evacuated were a school in Scotland and a departmental store in Northern Ireland. The number of persons involved is not known for some of these fires.

The analysis is based on reports received up to 2nd March, 1968 and the figures are subject to revision when outstanding reports are received.

**FIRES ATTENDED BY FIRE BRIGADES
IN THE UNITED KINGDOM, 1967**

Column 1 shows the number of attendances at fires other than those confined to heathland or grassland.

Column 2 shows the number of attendances at fires confined to heathland or grassland.

Column 3 shows the total number of attendances.

Fire Brigades	1	2	3
<u>England and Wales - County Fire Brigades</u>			
Anglesey	133	37	170
Bedfordshire	622	96	718
Berks. and Reading	1 026 ⁽³⁾	242	1 268
Brecon Co. and Radnor	111	13	124
Buckinghamshire	1 212	279	1 491
Caernarvonshire	240	103	343
Cambridgeshire and Ely, Isle of	726	36	762
Cardiganshire and Carmarthenshire	377	148	525
Cheshire	2 564	1 316	3 880
Cornwall	593	200	793
Cumberland	494	93	587
Denbigh and Montgomery	548	120	668
Derbyshire ⁽¹⁾	1 372	481	1 853
Devonshire ⁽¹⁾	904	250	1 154
Dorsetshire	665	665	1 330
Durham Co. ⁽¹⁾	2 356	607	2 963
Essex	2 492	1 167	3 659
Flintshire	406	99	505
Glamorganshire ⁽¹⁾	1 458	577	2 035
Gloucestershire	1 001	204	1 205
Hampshire	1 788	1 099	2 887
Herefordshire	311	39	350
Hertfordshire	2 113	562	2 675
Huntingdonshire and Peterborough	564	71	635
Kent and Canterbury	3 208	1 011	4 219
Lancashire	7 049 ⁽⁴⁾	2 814	9 863
Leicestershire and Rutland	836	186	1 022
Lincs. (Holland)	224	18	242
Lincs. (Kesteven)	354	40	394
Lincs. (Lindsey)	1 018	158	1 176
London	25 672	3 450	29 122
Merionethshire	71	21	92
Monmouthshire	526	194	720
Norfolk	850	218	1 068
Northamptonshire	800	120	920
Northumberland	1 062	313	1 375
Nottinghamshire	1 239	743	1 982
Oxfordshire	514	61	575
Pembrokeshire	195	78	273

Table 1 (Cont'd.)

**FIRES ATTENDED BY FIRE BRIGADES
IN THE UNITED KINGDOM, 1967**

Fire Brigades	1	2	3
<u>County Fire Brigades (cont'd.)</u>			
Shropshire	791	170	961
Somerset	983	112	1 095
Staffordshire	1 479	623	2 102
Suffolk (East) Suffolk (West) and Ipswich	1 282	291	1 573
Surrey	1 840	932	2 772
Sussex, East	737	202	939
Sussex, West	976	125	1 101
Warwickshire	1 167(4)	363	1 530
Westmorland	142	25	167
Wight, Isle of	149	53	202
Wiltshire	789(3)	84(5)	873
Worcester Co. and Worcs. C.R.	988(4)	275	1 263
Yorks (East Riding)	443	32	475
Yorks (North Riding)	1 125	151	1 276
Yorks (West Riding)	3 920	1 155	5 075
<u>England and Wales - County Borough Fire Brigades</u>			
Barnsley	157	69	226
Barrow in Furness	249	59	308
Bath	229	7	236
Birkenhead	1 208	199	1 407
Birmingham	4 153	760	4 913
Blackburn	626	41	667
Blackpool	521	64	585
Bolton	738	119	857
Bootle	648	114	762
Bournemouth	315	215	530
Bradford	1 108	88	1 196
Brighton	427	63	490
Bristol	1 269	230	1 499
Burnley	512	89	601
Burton on Trent	123	30	153
Bury	320	81	401
Cardiff(1)	980	106	1 086
Carlisle	256	27	283
Chester	282	107	389
Coventry	1 011	297	1 308
Darlington	313	-	313
Derby	493	74	567
Dewsbury	282	50	332
Doncaster	263	70	333
Dudley	420	266	686
Eastbourne	125	16	141

Table 1 (Cont'd.)

FIRES ATTENDED BY FIRE BRIGADES
IN THE UNITED KINGDOM, 1967

Fire Brigade	1	2	3
County Borough Fire Brigades (cont'd.)			
Exeter	298	19	317
Gloucester	228	17	245
Great Yarmouth	218	27	245
Grimsby	453	48	501
Halifax	370	57	427
Hastings	122	38	160
Huddersfield	351	59	410
Kingston upon Hull	1 695	170	1 865
Leeds	1 782	275	2 057
Leicester	1 077	170	1 247
Lincoln	261	53	314
Liverpool	6 110	695	6 805
Luton	344	75	419
Manchester	4 532	677	5 209
Merthyr Tydfil	133	27	160
Middlesbrough	586	36	622
Newcastle on Tyne and Gateshead	1 777	159	1 936
Newport (Mon.)	377	104	481
Northampton	267	23	290
Norwich	434	187	621
Nottingham	1 332	262	1 594
Oldham	619	49	668
Oxford	278	14	292
Plymouth(1)	575	71	646
Portsmouth	852	130	982
Preston	542	67	609
Rochdale	417	44	461
Rotherham	154	112	266
St. Helens	420	209	629
Salford	1 075	43	1 118
Sheffield(1)	1 341	362	1 703
Solihull	164	39	203
Southampton	612	256	868
Southend	378	68	446
Southport	230	25	255
South Shields	304	85	389
Stockport	542	147	689
Stoke on Trent	683	302	985
Sunderland	819	197	1 016
Swansea	393	176	569
Tynemouth	278	64	342
Wakefield	164	53	217
Wallasey	581	179	760
Walsall	553	260	813
Warley	496	163	659
Warrington	369	133	502
West Hartlepool(2)	667	68	735
West Bromwich	586	215	801
Wigan	349	115	464
Wolverhampton	633	159	792
York	287	33	320
Total number of fires attended in England and Wales	139 641	32 779	172 420

Table 1 (cont'd.)

FIRES ATTENDED BY FIRE BRIGADES
IN THE UNITED KINGDOM, 1967

Fire Brigade	1	2	3
<u>Scotland</u>			
Glasgow	5 208	245	5 453
Lanark	1 870	187	2 057
Central	1 138	178	1 316
Western	1 327	127	1 454
South Western	848	58	906
South Eastern	2 554	285	2 839
Fife	694	173	867
Perth and Kinross	361	26	387
Angus	1 183	198	1 381
North Eastern	1 125	136	1 261
Northern	369	84	453
Total number of fires attended in Scotland	16 677	1 697	18 374

Fire Brigade	1	2	3
<u>Northern Ireland</u>			
North	485	58	543
South	566	75	641
West	455	49	504
Belfast	1 078	14	1 092
Total number of fires attended in Northern Ireland	2 584	196	2 780

- (1) Boundaries altered from 1.4.67
- (2) Brigade ceased to exist from 1.4.67. and
Hartlepool brigade was created. The
total shown is that for West Hartlepool
up to 31.3.67. plus that for Hartlepool
from 1.4.67.
- (3) Date of last report 31.10.67.
- (4) Date of last report 30.11.67.
- (5) Date of last report 30.9.67.

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	1	258	259	-	37	37	-	4	4
Overcome by gas or smoke	1	304	305	-	35	35	-	5	5
Other and undefined injuries	-	82	82	1	10	11	-	1	1
Total	2	644	646	1	82	83	-	10	10
NON FATAL CASUALTIES²	358	3 458	3 816	32	308	340	6	73	79
TOTAL	360	4 102	4 462	33	390	423	6	83	89

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

2. See Table 3 for details of nature of injuries to fire brigade personnel.

Table 3

NATURE OF INJURIES (NON-FATAL) TO FIRE BRIGADE PERSONNEL

Nature of injury	England and Wales	Scotland	Northern Ireland	United Kingdom
Burns and scalds	76	9	-	85
Bruises, cuts, abrasions	127	12	2	141
Dislocations, sprains, fractures	26	2	3	31
Overcome by gas or smoke	68	2	-	70
More than one of the above injuries	12	1	-	13
Shock ¹	4	-	-	4
Other and undefined injuries	45	6	1	52
TOTAL	358	32	6	396

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

Table 4

SEX AND AGE OF FATAL CASUALTIES IN THE UNITED KINGDOM

Age (years)	Male	Female	Total
Under 1	6	9	15
1 - 5	56	41	97
6 - 15	15	16	31
16 - 40	71	42	113
41 - 65	106*	76	182
66 - 80	65	107	172
Over 80	39	78	117
Not stated, unknown	10	2	12
TOTAL	368	371	739

*Includes 3 fire brigade personnel

Table 5

PERSONS RESCUED OR ESCAPED BY EMERGENCY MEANS FROM FIRES
ATTENDED BY FIRE BRIGADES IN THE UNITED KINGDOM, 1967

Appliances or Methods Used	Number of Persons			
	England and Wales	Scotland	Northern Ireland	United Kingdom
Rescue with Fire Brigade assistance from Buildings				
Escape (hand operated)	64	11	3	78
Ladder: extension	112	3	1	116
first floor	19	5	-	24
hook	3	-	-	3
turntable (mechanical)	13	9	-	22
other or undefined	19	6	-	25
Ladder and line	2	-	-	2
Line	4	-	-	4
Other apparatus	15	6	-	21
Without apparatus	359	69	49	477
Road vehicles	11	3	-	14
Ships	1	1	-	2
Other specified hazards	1	-	-	1
Total	623	113	53	789
Rescue without Fire Brigade assistance from				
Aircraft	13	-	-	13
Buildings				
Carried or assisted out	76	88	58	913
Jumping sheet	6	7	-	13
Ladder	164	5	6	175
Lowered from windows, roof etc.	141	6	22	169
Other or undefined methods	31	13	-	44
Road vehicles	28	2	4	34
Caravans	8	-	-	8
Ships	5	-	-	5
Railway train (diesel multiple unit)	44(1)	-	-	44
Other specified hazards	2	1	-	3
Total	1 209	122	90	1 421

Table 5 (Cont'd.)

PERSONS RESCUED OR ESCAPED BY EMERGENCY MEANS FROM FIRES
ATTENDED BY FIRE BRIGADES IN THE UNITED KINGDOM, 1967

Appliances or Methods Used	Number of Persons			
	England and Wales	Scotland	Northern Ireland	United Kingdom
Escape by emergency means from				
Aircraft				
Baled out	7	-	-	7
Through exits or from debris	10	-	-	10
Buildings				
Climbing over roof	47	3	8	58
Fixed fire escape	10	-	1	11
Jumping from upstairs window, roof etc.	190	33	5	228
Ladder	37	1	4	42
Sliding down drainpipe, sheets etc.	36	1	1	38
Through ground floor windows	17	5	2	24
Other or undefined methods	35	2	-	37
Road vehicles	160 ⁽²⁾	3	3	166
Caravans	3	-	-	3
Ships	20	1	2	23
Other specified hazards	3	6	-	9
Total	575	55	26	656
Total persons rescued or escaped	2 407	290	169	2 866

1. This train was on fire in a tunnel.
2. Includes two full buses that were on fire.

There were three incidents in which large numbers were evacuated from hospitals in sections not immediately affected by fire, one in Scotland and two in Northern Ireland. Also in Scotland a school was evacuated and in Northern Ireland, a departmental store. These evacuations are not shown in Table 5.

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY

MEMORANDUM FOR THE RECORD
DATE: 10/15/54
TO: [Illegible]

FROM: [Illegible]

SUBJECT: [Illegible]

[Illegible text]

[Illegible text]

[Illegible text]

[Illegible text]

[Illegible text]

[Illegible text]

