F. R. Note No.76/1953 Research Programme Objective A1/1

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

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INCIDENTS CAUSED BY FIREWORKS AND BONFIRES IN ENGLAND AND WALES

ON THE 5th NOVEMBER, 1952

bу

G. G. Auber

## Summary

On the 5th November and the early morning of the 6th November there were 142 fires involving fireworks and 507 involving bonfires. Four Fire Brigades each attended more than 5 fires caused by fireworks and 5 attended more than 20 bonfires. There were 56 fires caused by fireworks in buildings, of which the main cause, accounting for 15 of them, was fireworks entering, or being thrown into, the buildings. There were 86 fires in the open, the main cause, accounting for 19 of the incidents, being fireworks igniting trees, hedges, undergrowth etc.

Of the 507 incidents involving bonfires, 246 were in streets or roadways and 252 on enclosed or open ground; 6 of the latter spread to buildings.

There were 33 casualties in fires caused by fireworks and 5 in fires connected with bonfires; none of the injuries was fatal.

September, 1953

Willo No. F. 1005/11/32

Cunard Building, 15 Regent Street, London, S.F.1.

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#### Introduction

This note supplements the information given in F. S. Note No.143/1952 and was prepared at the request of the Fire Service Department of the Home Office. It gives the distribution over Fire Brigades in England and Wales of incidents caused by fireworks and bonfires on the 5th of November and the night of the 5th-6th November, 1952 together with details of the supposed causes of the incidents and the numbers of casualties. The analysis includes all reports dated the 5th November and those in which the time of discovery was in the early hours of the 6th November (i.e. between midnight on 5th November and 8.30 a.m. on the 6th).

Bonfires include fires attributed to children igniting rubbish.

#### Frequency of incidents

Table 1 shows the number of incidents which were attended by each Fire Brigade. Four brigades attended more than five incidents caused by fireworks; these were Essex, Kent and Canterbury, London and Birmingham. Twenty-four brigades attended more than five bonfires and five of these, London, Birkenhead, Kingston upon Hull, Liverpool and Nottingham, each attended more than twenty.

### Supposed causes of fires

Details of the supposed causes of fires are shown in Table 2. There were 142 incidents involving fireworks, 56 of which occurred inside buildings or other structures, and 86 in the open. Nineteen fires were caused by fireworks igniting trees, hedges, undergrowth, etc., 15 by fireworks entering or being thrown through broken or open windows or doors, 11 by fireworks being pushed into street pillar boxes and 18 by fireworks exploding and causing injury.

Five hundred and seven incidents were connected with bonfires, 246 of them being in streets or roadways; of these there were 77 in which the surface of the road was reported to be damaged. Two hundred and seventeen fires connected with bonfires occurred on enclosed or open ground, with no fire spread, and there were 6 in which the fires spread to buildings.

#### · Casualties

Table 2 also shows the number of casualties associated with the various causes. There were 20 casualties caused by fireworks exploding in the open air, of which 12 were known to have been children, holding fireworks in their hands. Six people were injured by fireworks which were handled carelessly, burning the persons or igniting their clothing.

Altogether there were 33 casualties in fires involving fireworks (none of them firemen) and 5 in fires involving bonfires (4 of which were firemen).

There were no fatal casualties.

Fires other than those involving fireworks

Two hundred and fifteen fires other than those involving fireworks and bonfires occurred on the 5th of November.

TABLE 1

NUMBER OF FIRES CAUSED BY FIREWORKS AND BONFIRES ON THE 5th OF NOVEMBER, 1952,
ATTENDED BY FIRE BRIGADES IN ENGLAND AND WALES

	No. of fire	es caused		No. of fire	es caused
Fire Brigade	b	7	Fire Brigade	b	
	fireworks	bonfires		fireworks	bonfires
COUNTIES		٠.			
COUNTIES			·	·	
Bedfordshire	1	2	Bolton	-	-4
Berks, and Reading	1	1	Bournemouth	3 2	-
Brecon Co. and	1	-	Bradford	2	16
Radnor			Brighton	<b>-</b>	6
Buckinghamshire	1	_	Bristol `	1 1	-10
Cheshire	1	4	Burton on Trent	-	1
Cornwall	1	-	Cardiff	1 1	11
Denbigh and		2	Carlisle	1 1	8 6
Montgomery	· · · · · ·		Chester	-	6
Derbyshire	1	2	Croydon	1	- '
Devonshire	1	1	Dewsbury	-	1
Dorsetshire	. 6	2	Doncaster	1	2
Essex	· 6	- '	Dudley	i –	2
Flintshire	-	1 :	East Ham	1	-
Hampshire	2 3 6	_	Exeter	1	6
Hertfordshire	3 .	_	Great Yarmouth	- '	4
Kent and Canterbury	6	8	Hastings	1	1
Lancashire	4 2	12	Huddersfield	_	1
Leicestershire and	2	3	Kingston upon Hull	1	49
Rutland	į		Leeds	3	1
Lincs. (Holland)	-	1	Leicester	<b>-</b>	14
Lincs. (Kesteven)	· ` -	2	Liverpool	-	54
Lincs. (Lindsey)			Manchester	4	4
London C. C.	32	84.	Merthyr Tydfil	-	1
Middlesex	2	7	Middlesbrough	1	11
Monmouthshire	1 1	1	Newcastle on Tyne	\ · -	14 '
Norfolk	3	-	and Gateshead	}	
Northumberland	1	1	Newport (Mon.)	] -	1
Nottinghamshire	-	ĺ . <b>1</b> ,	Norwich	· <del>-</del>	2
Salop	1	· •	Nottingham	-	24
Somersetshire	3	1.	Oxford		3
Staffordshire	- 2	: 2	Plymouth	-	3
Suffolk and Ipswich	2	3	Preston	2	_
Surrey	2 3 1		Rotherham	-	2 2
Sussex, East		4	St. Helens	-	2
Sussex, West	1 1		Salford	2	
Westmorland	1	_	Sheffield	1	1
Worcester Co. and	1 1 .	2	Southampton	4	1
Worcester C.B.			South Shields	_	1
Yorks. (East Riding)	-	1	Stoke on Trent	1	1
Torks. (North Riding	} - +	3	Sundorland	<b>-</b> .	9
Yorks. (West Riding)	2 .	10	Swansea	-	9 3 6 1 2 2
COUNTY BOROUGHS	<u>,</u>		Wallasey	-	6
			West Ham	1	] 1 ]
Barrow in Furness	1	6	Wigan	1	2
Birkenhead	3	29	Wolverhampton	_	.2
Birmingham	13	8	York	-	1
Blackburn	_	1		<u> </u>	
Blackpool	1	8 .	Total	142	507
		<u> </u>		146	201

TABLE 2

FIRES CAUSED BY FIREWORKS AND BONFIRES IN ENGLAND AND WALES (Incidents occurring on the 5th November, 1952)

Figures in brackets refer to number of Fire Brigade casualties

Supposed cause of incident	Number of fires	Number of casualties
FIREWORKS		
Inside buildings, other structures		
Entered or thrown through broken or open window	15	-
or door	6	
Pushed through slit of letter box in building Pushed into street letter pillar box	11	
Box of fireworks ignited by cigarette end,	5	
firework, etc.		
Fireworks ignited clothing, curtains, or other	3	-
contents of houses Fireworks ignited contents of sheds, garages,	4	_
tents, cellars etc rubbish only	'	-
Fireworks ignited contents of sheds, garages,	3	-
tents, cellars, etc other than		
rubbish		
Fireworks ignited internal structure of shed,	1	- (
garage, etc.	7	
Children playing with matches ignited fireworks Children playing with fireworks ignited contents	3	_
of house or structure	*	_
Children playing with fireworks at window of	1	-
workshop ignited rags inside		
Sparks from fireworks ignited fireworks	2	-
Other causes involving fireworks in buildings	1	
In the open (i.e. backyards or gardens of private houses)		
Exploded causing injury - firework held in child's hand	11	12
Exploded causing injury - other circumstances or	7	8
circumstances not reported		
Firework handled carelessly, burning person, or	6	6
igniting clothing on person Firework ignited clothing not on person, or	2	
canvas cover or tarpaulin		_
Firework ignited hayricks, baled straw, stacked	5	-
oats, contents of Dutch barn, heap of		
wood .		
Firework ignited outside structures of buildings,	8	-
including roofs, garage doors, etc.	4.0	
Fireworks ignited tree, undergrowth, hedge,	19	- 1
grass, gorse, etc. Firework ignited rubbish only	7	
Mirework ignited paintwork of car or lorry	7 2 2	_
Firework ignited miscellaneous or undefined	2	-
materials	1	
Thrown firework - into car, van, lcrry or omnibus	3	-
: Thrown firework - exploded in child's face, or	3	4.
hit passer-by Thrown firework - ignited undergrowth, bushes,	4	<b>.</b> -
trees, etc.		
Thrown firework - ignited other materials	2 2	2
Firework carried on person ignited by bonfire or firework	-	4
Fireworks ignited by bonfires, fireworks,	2	1
smoking materials, etc.	_	,
Firework ignited escaping gas from fractured main	1	-
- <del></del>		<del></del>

## TABLE 2 continued

# FIRES CAUSED BY FIREWORKS AND BONFIRES IN ENGLAND AND WALES (Incidents occurring on the 5th November, 1952)

Figures in brackets refer to number of Fire Brigade casualties

Supposed cause of incident	Number of fires	Number of casualties
BONETRIE		
In readway No fire spread Road surface reported damaged	169 77	(3) 3 (1) 1
On enclosed or open ground  No fire spread  Fire spread to buildings  Fire spread to hazards in the open  Bonfire set alight so as to ignite garage door  Bonfire set alight in tree, igniting tree  Spark from bonfire igniting undergrowth, govse,  tree, heath  Spark from bonfire igniting contents of buildings  or outhouses (not rubbish)	217 6 9 2 4 8	1
In buildings	1	
In buildings, igniting rubbish Derelict barge ignited for bonfire	8	- ·
Total	507	(4) 5
Total number of fires and total number of casualties	649	(4) 38