



***Her Majesty's
Chief Inspector
of Fire Services
for Scotland***

*Report for
1996 - 97*



THE SCOTTISH OFFICE
Home Department



THE SCOTTISH OFFICE HOME DEPARTMENT

Her Majesty's Chief Inspector of Fire Services for Scotland

Report for 1996 - 97

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INTRODUCTION

Annual Report of A N Morrison Esq CBE QFSM DTech FIFireE

Her Majesty's Chief Inspector of Fire Services for Scotland for the year 1996-97

To: The Right Honourable Donald Dewar MP,
Her Majesty's Secretary of State for Scotland.

Sir

1. I have the honour to present my Annual Report upon the 8 fire brigades in Scotland for the financial year 1996-97. This is the fourth such Report I have had the pleasure of submitting since taking office as Her Majesty's Chief Inspector of Fire Services and, as was the case with prior publications, this document provides an objective review of service delivery to the public by the fire brigades in Scotland.
2. HM Inspectorate of Fire Services is charged with examining and improving the efficiency, effectiveness and standards of the Fire Service in Scotland, and the ways in which it provides a service to the public. The aim of our team is to promote a high quality of service and value for money objectives which take full account of public expectations, in accordance with the principles set out in the Citizen's Charter, and inspire public confidence.
3. Brigade Inspection Reports are submitted to the Secretary of State for Scotland. In line with our commitment to openness all Reports are published. They aim to:
 - i. inform the public about the performance of their fire service;
 - ii. draw brigade achievements and good practice to notice;
 - iii. identify publicly the scope for improvement;
 - iv. help accelerate improved value for money in the fire service; and
 - v. promote greater public awareness of the Inspectorate's role and function.
4. Information gathering begins each year with the receipt from brigades of statistics covering many aspects of their performance, operations and administrative matters. This includes staffing, recruitment, training, equal opportunities, buildings, vehicles and fire safety and the arrangements in place for dealing with complaints from the public.
5. Inspections are undertaken of all 8 Scottish brigades each year. The Inspectorate carries out a full 'primary' inspection of 4 of the brigades, with the remaining 4 undergoing an 'intermediate' inspection. The 'intermediate' inspection checks that action has been taken on recommendations from previous inspections and looks at any changes which have occurred since the previous 'primary' inspection was carried out.

6. The duration of an inspection will depend on the size and the nature of the brigade concerned and whether it is a 'primary' or an 'intermediate' inspection. Inspections are normally undertaken by myself along with the 2 Senior Assistant Inspectors and the Lay Inspector, and consist of:

- i. visits to fire stations and other brigade premises;
- ii. discussions with senior officers on various aspects of the brigade's performance;
- iii. pre-planned fire station drills and exercises; and
- iv. meetings with representatives of staff associations.

At the conclusion of an inspection, I undertake to discuss the team's preliminary findings with the Firemaster.

7. A leaflet entitled 'The Role of HM Inspectorate of Fire Services', which gives further background to the principles and job of the Inspectorate, is available from the Fire Inspectorate.

8. The current establishment of the Fire Service Inspectorate is as follows:

Her Majesty's Chief Inspector of Fire Services	1;
Her Majesty's Inspector of Fire Services	1;
Senior Assistant Inspector of Fire Services	1;
Assistant Inspector of Fire Services	2; and
Lay Inspector (part-time)	1.

9. The staff in post are:



HM Chief Inspector of Fire Services

Andrew Neil Morrison CBE QFSM DTech FIFireE

Appointed: 5 January 1994

Formerly: Firemaster,
Grampian Fire Brigade, 1985 -1993



Lay Inspector of Fire Services (Part time)

David Dick OBE DIC CEng FIEE

Appointed: 12 October 1994

Formerly: Principal, Stevenson College of Further
Education, Edinburgh 1969 - 1987



Senior Assistant Inspector of Fire Services

Allan Smith Whitton QFSM GIFireE

Appointed: 29 April 1996

Formerly: Deputy Firemaster,
Central Scotland Fire Brigade, 1984 - 1996



Senior Assistant Inspector of Fire Services

Charles George Newcombe Stewart

Appointed: 6 March 1995

Formerly: Senior Divisional Officer,
Strathclyde Fire Brigade, 1992 - 1995



Assistant Inspector of Fire Services (Crown Inspection)

Graham Donald Goodall BSc MIFireE

Appointed: 9 May 1994

Formerly: Station Officer,
Merseyside Fire Brigade, 1987 - 1994



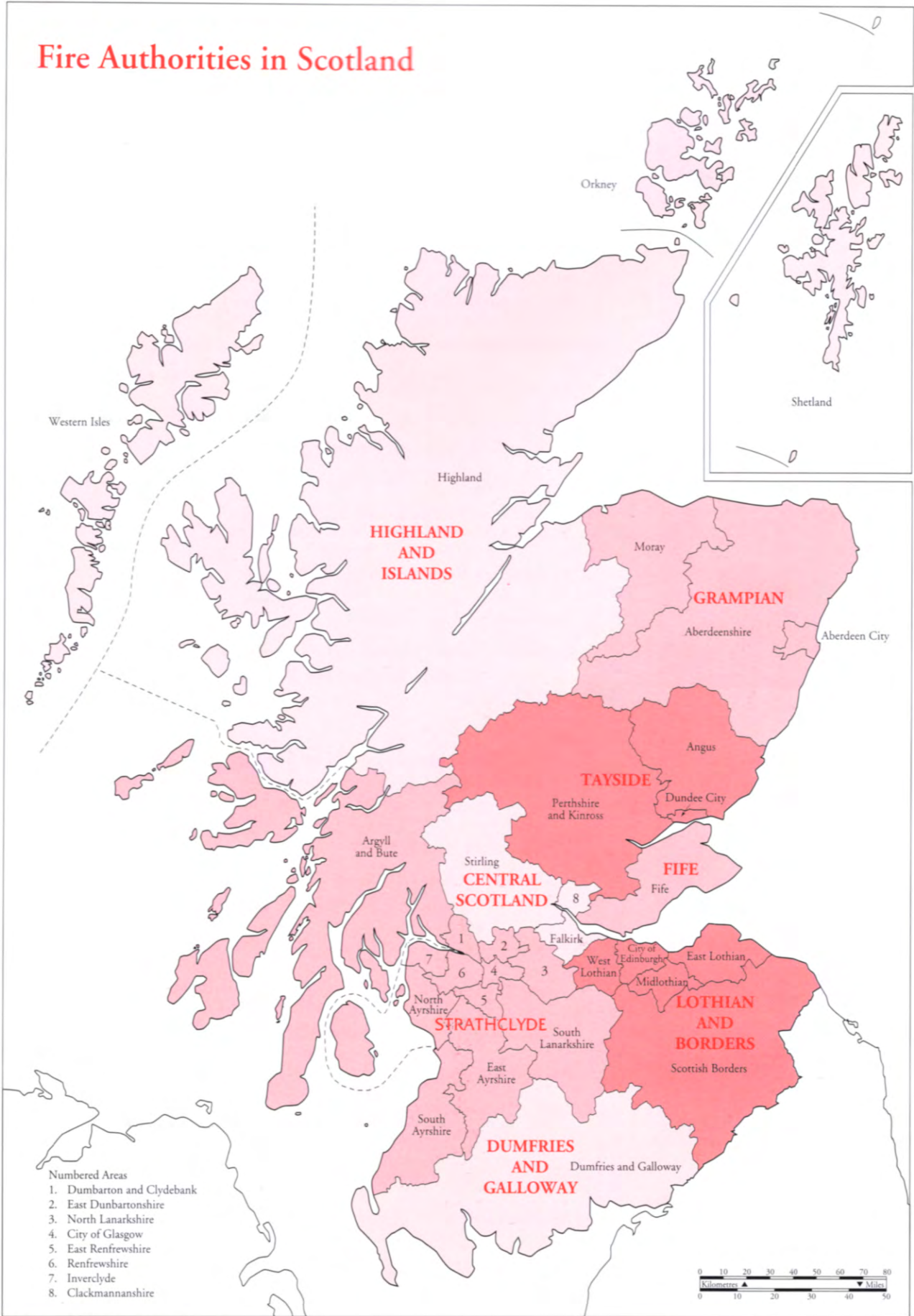
Assistant Inspector of Fire Services (Crown Inspection)

Duncan Carrick

Appointed: 28 April 1997

Formerly: Divisional Officer II
Dumfries and Galloway Fire Brigade, 1991 -1994

Fire Authorities in Scotland



Introductory Remarks

9. At the outset of the period covered by my Report, on 1 April 1996, new joint fire boards became the authorities responsible for the administration of 6 of the 8 Scottish fire brigades. This was made necessary by the establishment of 29 new unitary authorities in mainland Scotland in place of the former 9 Regional and 53 District Councils. Whereas there were previously only 2 joint boards - Highland and Islands and Lothian and Borders - there are now only 2 areas - Dumfries and Galloway and Fife - where the new unitary authority directly administers the fire brigade. The joint boards administering the Highland and Islands and Lothian and Borders Fire Brigades were reconstituted, and new joint boards were constituted to administer the Central Scotland, Grampian, Strathclyde and Tayside Fire Brigades, with members in each case appointed by the unitary authorities which replaced the former Regional Councils. The adjacent map indicates the new unitary authorities as well as the areas covered by the 8 brigades. Throughout the year under review I am pleased to Report that a great deal of work has been undertaken by all concerned to ensure a smooth, efficient and, as far as possible, seamless transition of functions to the new authorities. Members of the newly formed joint fire boards and councils, suitably advised in professional and operational matters by Firemasters and their officers, have risen to the challenges presented and, although the learning curve for all participants has been significant in the first full year of operation, it is already becoming clear that the high degree of co-operation and preparation, undertaken in the transitional stages, has returned a positive dividend in the progress made by each authority.

10. As a result of the European Directives on Health and Safety matters, regulations were prepared and Approved Codes of Practice issued by the Health and Safety Commission. The principal regulations, commonly known as the '6-pack', are:

- i. the Management of Health and Safety at Work Regulations 1992;
- ii. the Workplace (Health, Safety and Welfare) Regulations 1992;
- iii. the Manual Handling Operations Regulations 1992;
- iv. the Provision and Use of Work Equipment Regulations 1992;
- v. the Personal Protective Equipment at Work Regulations 1992; and
- vi. the Health and Safety (Display Screen Equipment) Regulations 1992.

To ensure that brigades were taking due account of with these Regulations I have, during the 1996-97 series of inspections, paid particular attention to this aspect of their work and, where any discrepancies were found, have made appropriate recommendations. These recommendations have, in turn, attracted the attention of the Health and Safety Executive (HSE) and subsequent investigations undertaken by their officers have led to demands for further progress in some instances. Clearly there is a need for a greater level of understanding and co-operation between members of my Inspectorate and those employed by the HSE. To that end I have initiated a series of regular meetings with the principal officials of the HSE and have taken steps to arrange a seminar, at the Scottish Fire Service Training School (SFSTS) in Gullane during 1997, to be attended by interested parties such as Firemasters and the conveners of joint fire boards or councils along with inspectors drawn from my own Inspectorate and that of the HSE. I am hopeful that the aims and objectives of compliance with the '6-pack' will be more readily achieved as a result.

11. In my last Report I referred to the problems encountered in recruiting personnel to the retained and volunteer sectors of the Fire Service, capable of giving fire cover in their local area over the full 24 hour period, which were proving to be extremely difficult. More mobile workforces result in many more people being employed in areas remote from their

home base and the ability to respond to fires, particularly in the day time hours, is compromised as a result. Although this problem remains with us, an ongoing investigation, currently being carried out under the Chairmanship of Sir Bryan Collins, HMCIFS for England and Wales, will hopefully shed some light on the best practice to be adopted in our attempts to alleviate this situation. However, in the period under review, problems of a different nature confronting this sector of the Service, particularly those in the more remote areas, have become more acute as a result of the Health and Safety issues referred to in the previous paragraph and in addition the training for competence measures in prospect as a result of deliberations following the Report of the Training Strategy Group, published in August 1994, under the auspices of the Joint Training Committee. The implementation of the requirements which will arise from the foregoing will prove to be extremely difficult and costly. I am aware that the Chief and Assistant Chief Fire Officers' Association (CACFOA) District No. 7 (Scotland) is preparing a document entitled "Volunteers: A Case for Change" which will no doubt be pursued through the joint committee structure. I look forward with interest to its progress.

12. It is disappointing to record that the number of fire fatalities registered in Scotland during 1996-97 rose from 92 in the previous year to 102. However, although any increase in fire deaths is to be deplored, a positive aspect to be considered is one where, due to the concentrated programme conducted by all Firemasters to encourage the installation and maintenance of smoke alarms, and the increasing involvement of all brigades in community education fire safety programmes, the incidence of fire deaths remains significantly below the average of 123 registered over the past decade. In my view the answer to reducing this mean statistic still further lies in the formation of many more community education teams throughout Scottish fire brigades in order that the fire safety message can be promoted in a greater number of schools, sheltered housing complexes, community centres and other places located in areas where risk is identified. In this way we hope to create a cascade system of best practice information to all sectors of the community. Unfortunately, it must be registered that current financial constraints are proving to be an inhibiting factor to that aspiration. It is clear to me however, that in any process of learning which proves advantageous to the young people of our country, the education authorities must have a vested interest. Equally, the benefits of conveying the fire safety message to the elderly, the disabled, and to the more socially deprived sectors of our community must be desirable and advantageous to the social work departments of these same councils. There would appear, therefore, to be every reason to promote the concept of a joint funding programme to enable the formation of more teams to convey this important message to as broad a base as possible. A further factor in this equation is that the Department of



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Photograph courtesy of D.C. Thomson & Co Ltd

Health is becoming increasingly concerned with the number of fire related casualties, registered at a level of 1,929 in Scotland throughout the period under review, and is interested in reducing the accidents and resultant costs of treatment arising from them to the health service. As those interests are very much in harmony with the aims and objectives of our community safety teams, it is my intention to liaise with all interested parties with a view to identifying ways and means to extend the boundaries of the fire safety message to all relevant areas.

13. During the period under review the Inspectorate published Reports on each of the 8 fire brigades in Scotland and, for the first time, conducted an inspection before compiling and publishing a Report on the Isle of Man Fire and Rescue Service. In the case of all inspections carried out, the full range of management functions, personnel contacts, operational and fire safety workloads were commented upon in tandem with the financial controls exacted in providing this service to the public. A compilation of the statistics relating to individual brigade performances in 1996-97 provided national figures on which the following profile is based:

- ◆ the total number of emergency calls attended by brigades in 1996-97 was 114,066, a decrease of 12.8% on the previous year;
- ◆ the total number of Fires was 19,527, a decrease of 5.3% over 1995-96;
- ◆ the total number of Chimney Fires was 5,348, a decrease of 13.8% on 1995-96;
- ◆ the total number of Secondary Fires was 31,519, a decrease of 21.6% on the previous year. Predictions or year-by-year comparisons of the incidence of such fires are difficult because they occur out of doors and the number of outbreaks in any year is affected by weather conditions in that year;
- ◆ the total number of Malicious false alarm calls was 9,005, a decrease of 6.6% on 1995-96. This continues the encouraging downward trend in such calls and is due in the most part to brigades educating the public along with improvements in telephone technology;
- ◆ the total number of Faulty Apparatus false alarm calls was 23,859, an increase of 52.9% on 1995-96. This may be explained by the possible increased installation of fire warning equipment and a nationally implemented change in the method of collecting statistical information for Faulty Apparatus and Good Intent false alarm calls;
- ◆ the total number of Good Intent false alarm calls was 16,027, a decrease of 38.6% on 1995-96 due to the latter reason given immediately above;
- ◆ the total number of Special Service incidents was 8,781, a decrease of 29.7% on 1995-96. This decrease was due mainly to the severe flooding experienced throughout Scotland in the previous year;
- ◆ the total number of fire safety inspections carried out in 1996-97 was 76,578, a 2.7% increase on 1995-96.



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14. During my inspection of brigades I was convinced that all Firemasters, and their staff, are doing all within their power to encourage the recruitment of females and members of ethnic minority groups to the Fire Service. However, the fact remains that these groupings are very much under-represented in the work force and until the public perception of what is widely considered to be a white male dominated organisation is changed through publicity and education, any meaningful and positive change in this statistic will be difficult to achieve. In the meantime, and in an effort to change this perspective, Firemasters continue to advertise posts in such a way as to make clear their intention to recruit from the entire spectrum of human resource and to target females or members of ethnic groups through open nights at fire stations or visits to club premises in the community. Whilst it is recognised that current numbers, although small, are increasing, it is to be hoped that the Firemasters' endeavours in this direction will begin to show more positive results as the public perspective of this discipline starts to change. To assist the process of change further, my Senior Assistant Inspector of Fire Services, Mr C Stewart and the Lay Inspector, Mr D Dick have, over the recent round of inspections, gathered a great deal of relevant information which, when complete, will be compiled into a specific thematic Report on "Equal Opportunities in the Fire Service in Scotland". This Report will be published in the early part of 1998 and it is to be hoped that the information and guidance contained there will assist Firemasters in their quest to change the public perspective of the firefighter's role and its relevance to a wider range of persons seeking employment.

15. Early retirement through ill-health poses an entirely different set of problems. Quite apart from the difficulties being experienced in seeking to recruit suitable personnel as replacements, the costs of training and equipping recruits are high. This, coupled with the reduction in the skills base, due to the loss of experienced personnel, necessitates an increased training commitment serving to add further pressure to an already constrained budget in many cases. An additional financial drain arising from ill-health retirements in the wholetime service lies in the early payment of commutation sums and pensions. Quite clearly a declining contribution level through the early retirement of a number of personnel and the resultant increase in pension payments combine to exacerbate the already significant deficit between income and expenditure in every brigade's pension scheme. I am aware that a consultation document relating to a review of the Fire Brigade Pension Scheme has been prepared.

16. At a time of significant advance in the technology available to assist the firefighter in the course of his/her duty, coupled with the not inconsiderable need for investigation into the safety measures to be adopted in terms of protective clothing equipment assessment, etc, as is required by the previously mentioned Health and Safety legislation, it is regrettable that the Home Office budget for fire research (which is relevant to the whole of the UK) has been much reduced, from £860,000 in 1995-96 to £590,000 in the period covered by this Report. This represents a lowering of available resources of £270,000 (31.4%) at a time when the need for pertinent research is undeniably at a high level.

17. Finally I would draw attention to the positive way in which fire brigades in Scotland are responding to the demands placed upon them. The pursuit of high quality management and service delivery is leading to a continuous cycle of improvement, a process which is enhanced through the Firemasters' willingness to liaise with their counterparts in an effort to identify best practice, so embracing cost effectiveness in all aspects of positive progress made. I am certain that the publication of HM Inspectorate's inspection Reports has been a positive feature in such developments through the identification of recommended courses to be adopted to secure greater efficiency and value for money in any brigade. It is most encouraging to record that, in the vast majority of cases, Firemasters have responded positively to the Inspectorate's recommendations. However it must be recognised that several instances of non-compliance with the recommended course arose primarily through financial constraint. If brigades are to meet and tackle important changes in the immediate future and, in planning and adapting strategies, to meet those various challenges, a sound management base supported by an appropriate financial foundation will be essential. HM Inspectorate will continue to support the advances made by the Fire Service through an objective, analytical and effective inspection process which will, at all times, pursue a policy to assist brigades to operate at maximised efficiency levels and provide the public with service delivery that optimises value for money.





SECTION A: GENERAL

Developments in 1996-97

Fire Safety Legislation

1. On 21 May 1996, the then Government announced its decisions made in response to the Report of the Interdepartmental Review of Fire Safety Legislation and Enforcement. The Review's Report concluded that fire certification under the Fire Precautions Act 1971 (the 1971 Act) is imprecisely targeted and recommended the following main points:

- ◆ discontinue fire certification in its present format;
- ◆ the requirement to have a fire certificate should not apply to many low life-risk premises currently designated;
- ◆ introduce a simpler and less costly form of certification for high life-risk premises based on risk assessment;
- ◆ fire authorities should have the power to exempt premises from the new certification requirements.

The then Government decided that the issue of targeting fire certification more accurately was to fall into 2 clear stages. The first stage was to seek to widen the scope for fire authorities to exempt premises from the requirement to have a fire certificate and would have avoided the need to alter primary legislation. The second stage was to focus certification on high life-risk premises, using a revised system based on risk assessment.

2. The new criteria for exempting premises were to be made by an Order under section 1(3A) of the 1971 Act amending the existing criteria in paragraph 6 of the Fire Precautions (Factories, Offices, Shops and Railway Premises) Order 1989. This would have provided the framework in which fire authorities could consider whether to exempt individual premises. As the first stage of the process to target fire certification more accurately at high-risk premises would be limited to what could be achieved by secondary legislation, it would not be possible in law to base the statutory exemption scheme on a system of risk assessment. However, the legal framework would be supplemented by guidance to fire authorities on how they might decide, using a system of fire risk assessment, whether to exempt premises which meet the statutory criteria. The principal effect of exemption of premises currently certificated under the 1971 Act (by virtue of the 1989 Order) would be that their fire safety provisions would largely fall to be controlled under the regime established by the proposed Fire Precautions (Workplace) Regulations. The Government intended that the new powers to exempt premises should be available to fire authorities from the time the proposed Regulations came into effect to avoid creating gaps in the controls on fire safety in the affected premises. It was also intended to issue guidance to fire authorities on a revised system of risk based fire certification some time after the implementation of the proposed Fire Precautions (Workplace) Regulations which are covered in more depth in Section D, paragraphs 78 to 83 of this Report.

Firefighting and Rescue at Sea

3. In last year's Report I mentioned that while it had previously been thought that there would be no early opportunity to change the relevant primary legislation - Section 3(1)(d) of the Fire Services Act 1947 (the 1947 Act) - to allow a fire authority to employ the fire brigade beyond territorial waters, there was a good prospect of this change being made in the context of forthcoming merchant shipping legislation.

4. The change has now been made. With effect from 17 July 1997, section 4 of the Merchant Shipping and Maritime Security Act 1997 inserts into section 3(1) of the 1947 Act a new paragraph (dd) which makes it clear that the discretionary power of the fire authority to employ the fire brigade outside their area may be exercised within or beyond UK territorial waters.

5. Previous doubts about the lawfulness of brigades responding to calls for assistance emanating from beyond the 12 mile limit have accordingly been removed. Some doubt remains about the extent of sea-waters - bays, estuaries, etc - which could be considered to be within a fire authority's area and, therefore, the extent offshore of the authority's duties under section 1(1) of the 1947 Act. It is, however, likely to be some time before there will be an opportunity for further statutory change to remove that doubt.

Health and Safety

6. In order to meet the requirements of the relevant statutory legislative provisions, the Joint Committee on Fire Brigade Operations (JCFBO) commissioned CACFOA to produce national guidance on the day to day application of risk assessment in the Fire Service. They were assisted in this task by a number of brigades who had developed their own practice and procedures. The working group produced the document 'Guidance on the Application of Risk Assessment in the Fire Service' which has been circulated to all brigades inviting them to adopt the concepts and principles of the guidance the detail of which is explained at paragraph 39.1 of Section C of this Report.

7. All organisations are required to have arrangements in place to anticipate and prevent circumstances which may result in occupational injury or ill-health. The guidelines offered in British Standard 8800: 1996 provide useful advice on how the management of occupational health and safety can be integrated within an organisation's overall management system. Information on this subject was promulgated to brigades in 'Dear Firemaster' Letter 2/1997.

8. The Construction (Health, Safety and Welfare) Regulations 1996 have given fire authorities a power to enforce general fire precautions in respect of construction sites forming part of occupied premises. This now includes the part of the building where the refurbishment or renovation is taking place which was previously the responsibility of the HSE. More information on these Regulations is given at paragraphs 87 to 89 of Section D of this Report.

9. On 1 April 1996 new HSE Regulations came into force on the Reporting of Injuries, Diseases and Dangerous Occurrences (RIDDOR 1995). The new Regulations incorporate a number of changes to reporting requirements for brigades. In particular, the reporting requirement for breathing apparatus malfunction under RIDDOR 1995 has changed significantly as has the list of Reportable diseases. There is also now a requirement to Report heat induced illness.

10. Brigades were provided with supplementary guidance on Practical Precautions at Excavations (Trench/Pit Rescues) under cover of 'Dear Firemaster' Letter 2/1997. The advice was prepared to ensure firefighters are made aware of and are able to recognise and understand the inherent risks when dealing with excavation incidents and the appropriate precautionary measures that can be taken.

Firemasters and Fire Authorities

11. At the end of the reporting period the following Firemasters were in post:

Central Scotland Fire Brigade	Firemaster I S T Adam OBE QFSM GIFireE;
Dumfries and Galloway Fire Brigade	Firemaster A Russell MIFireE;
Fife Fire and Rescue Service	Firemaster N Campion MIFireE;
Grampian Fire Brigade	Firemaster A J Lobban QFSM MIFireE;
Highland and Islands Fire Brigade	Firemaster R Gordon QFSM GIFireE;
Lothian and Borders Fire Brigade	Firemaster C Cranston QFSM GIFireE;
Strathclyde Fire Brigade	Firemaster J Jameson QFSM AIFireE CIMgt; and
Tayside Fire Brigade	Firemaster D Marr QFSM FIFireE.

There have been no changes at Firemaster level during 1996-97.

I wish to record my thanks to Firemasters and their staff for the co-operation and assistance given to members of the Fire Inspectorate during their visit and for the valuable contributions to the many discussions held throughout the year.

Honours and Awards

12. The following officers have received awards in The Queen's Honours Lists in the year under review.

Officer of the Most Excellent Order of the British Empire (OBE)

I S T Adam, Firemaster, Central Scotland Fire Brigade

Member of the Most Excellent Order of the British Empire (MBE)

M I Gibb, Fire Control Officer, Tayside Fire Brigade

D Quinney, Station Officer, Central Scotland Fire Brigade

G F Blackie, lately Retained Station Officer, Lothian and Borders Fire Brigade

T MacDougall, Retained Sub-Officer, Tayside Fire Brigade

J K Stewart, lately Retained Sub-Officer, Grampian Fire Brigade

Queen's Fire Service Medal (QFSM)

C Cranston, Firemaster, Lothian and Borders Fire Brigade

A J Lobban, Firemaster, Grampian Fire Brigade

J Coyle, Deputy Firemaster, Strathclyde Fire Brigade

J Clenaghan, Divisional Officer, Strathclyde Fire Brigade

The Fire Brigade Long Service and Good Conduct Medal

This medal was awarded to 156 members of the Scottish Fire Service.

13. I offer my sincere congratulations to all those whose work within the Scottish Fire Service has been so justly recognised.

Obituary

Firefighter Thomas Lightfoot

14. It is with deep regret that I Report the death of Firefighter Thomas Lightfoot of Strathclyde Fire Brigade who died from natural causes whilst responding to an emergency call.

15. Firefighter Lightfoot was the driver of one of 2 fire appliances which had been called from the Port Glasgow area to an incident in Kilmacolm on 2 July 1996. Shortly before arriving at the incident, Firefighter Lightfoot became unwell, but succeeded in safely stopping the appliance. He was removed by his colleagues from the driver's seat and was placed in the back of the appliance cabin whilst an ambulance was summoned for assistance. Before the ambulance arrived, Firefighter Lightfoot lost consciousness and, despite strenuous efforts by his colleagues and the ambulance crew to resuscitate him, was pronounced dead on arrival at hospital.

16. Firefighter Lightfoot is survived by his wife Ailsa and sons Colin, Ross and Craig and I extend my deepest sympathy to them and the family.





SECTION B: PERSONNEL AND ADMINISTRATION

Establishments and Strengths

1. The establishments and actual strengths of Scottish fire brigades are given at Appendix 2 of this Report.

Wholetime Personnel (Operational)

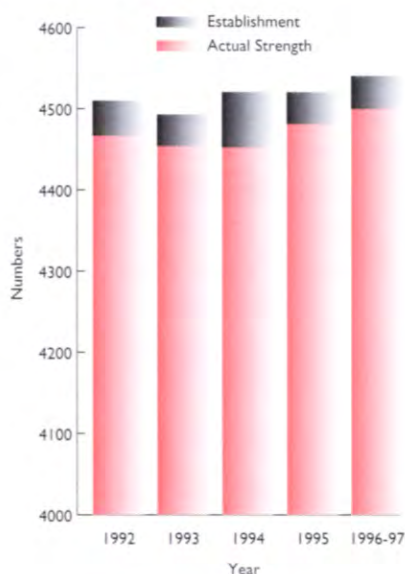
2. The total establishment of wholetime operational members of Scottish fire brigades at 31 March 1997 was 4,541, an increase of 20 on the previous year. The actual strength of Scottish brigades, as opposed to the authorised establishment, was 4,500, giving a shortfall between the establishment and the number actually employed of 41. Bearing in mind, however, that brigades normally have personnel ready to join the first recruit training course in the following year, this understaffing is not a cause for concern. All brigades have, for a number of years, been staffed at or near their wholetime establishment figure and the overall pattern for both establishment and strength figures has remained broadly constant over the years.

3. Again no problems were experienced by brigades in attracting suitable personnel to fill vacancies that arose during the year. However, as in previous years the number of applications from females and members of ethnic minority groups to join the Fire Service in Scotland was disappointingly low, in view of the continued efforts of brigades to attract such applicants. Out of a total of 6,667 applications processed by brigades in 1996-97 only 237 (3.6%) were from females or members of ethnic minority groups. Highland and Islands Fire Brigade did not hold a recruitment campaign during the year.

4. The number of female firefighters serving in brigades rose to 24, while the number of members of an ethnic minority group serving in the operational section of brigades remained at one.

5. Graph No 1 shows the authorised wholetime establishment and the actual strength of the Scottish Fire Service for the calendar years 1992 and 1993 and for the fiscal years 1994-95 to 1996-97.

6. During the year 124 wholetime operational personnel left the Fire Service for various reasons. This figure was 13 less than in the previous year. In contrast 132 firefighters joined the Fire Service in 1996-97, 4 less than in 1995-96. Details of the gains and losses of personnel in each brigade are shown in Appendix 3.



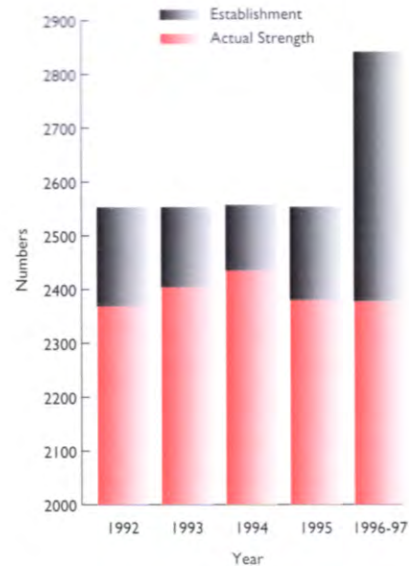
Graph 1 - Wholetime Establishment and Actual Strength 1992 to 1996-97

7. During 1996-97 there were 63 **retirals from the Fire Service** on medical grounds. This figure was 9 less than the previous year. **This level of medical retirals** represents a substantial burden on brigades' budgetary resources **due to increased pension payments**, the loss of experienced personnel and the consequent **increase in training costs**. The number of personnel who retired on ordinary pension during the year was 28.

Retained and Volunteer Personnel

8. The figures relating to the establishment and the actual strength in the retained sector of brigades at 31 December for the years 1992 and 1993 and 31 March for 1994-95 to 1996-97 are shown in Graph No 2.

9. As can be seen from Graph 2 the establishment of retained personnel had not varied greatly in recent years. However, in 1996-97 the establishment increased by 288 over the 1995-96 level to 2,841, due in the most part to the Highland and Islands Fire Brigade increasing its establishment figure from 394 in 1995-96 to 668 in 1996-97. The increase in the retained establishment of Highland and Islands Fire Brigade was for the most part matched by a commensurate reduction in its establishment of volunteers. In conveying consent to such a reduction as might be necessary in consequence of the Joint Fire Board's proposals, The Scottish Office Home Department stated its assumption that the Board had in mind a phased approach to the upgrading to retained status of 2 members of each volunteer unit. In the event I understand that the Board does not intend a phased approach. The actual number of firefighters in post throughout Scotland in 1996-97 was 2,376, a decrease of 2 when compared to the previous year.

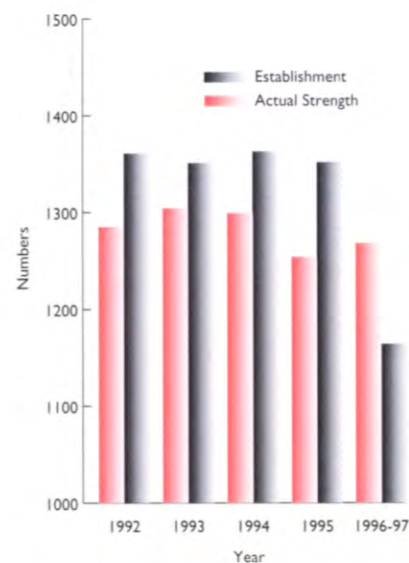


Graph 2 - Retained Establishment and Actual Strength 1992 to 1996-97

10. During the year 1,234 applications were received to join the Fire Service on a part-time basis; from this total 188 persons were subsequently recruited into the retained service as firefighters. While the number of personnel in post is satisfactory, significant problems continue to be experienced in recruiting personnel who can provide operational cover during the working day.

11. The number of female firefighters in the retained service of Scottish brigades is 49, a 25.6% increase over last year's total.

12. Details of the volunteer establishment and actual strength for the calendar years 1992 and 1993 and the financial years 1994-95 to 1996-97 are shown in Graph No 3.



Graph 3 - Volunteer Establishment and Actual Strength 1992 to 1996-97

13. The total establishment of volunteer firefighters fell by 188 to 1,164 in 1996-97, due to the reason given in paragraph 9 above. The actual number of volunteers in post in Scotland rose by 14 to 1,268.

14. At the end of 1996-97 there were 55 female volunteer firefighters serving in brigades, 10 more than the previous year.

Control Room Staff

15. In 1996-97 the number of Control Room staff in post was 210, 2 more than the authorised establishment for Scottish brigades, of whom there are 176 females and 34 males.

Absence from Duty

16. The proportion of the total number of working days lost in Scottish brigades due to sickness affecting wholetime personnel was 6.68%, as indicated below.

Year	1992	1993	1994-95	1995-96	1996-97
Percentage	5.36	5.06	4.77	6.01	6.68

17. From the returns for 1996-97 it shows that 46 wholetime, 8 retained and no volunteer operational personnel received serious injuries. The comparable figures for 1995-96 were 70, 5 and one respectively. These serious injuries were sustained in the following circumstances:

	Wholetime	Retained	Volunteer
at fire incidents	16	4	0
at special service incidents	0	0	0
during training periods	7	2	0
during other duties	23	2	0

18. It is pleasing to Report a significant decrease in the number of wholetime casualties and it is hoped that this is a reflection of the great amount of effort brigades are expending in an attempt to counteract this problem.

19. The percentage of the total number of working days lost to sickness affecting Control Room staff in 1996-97 was 9.6%, the same figure as that for 1995-96. Due to concern about the health problems of Control Room staff a study was commissioned by the Home Office to investigate ill-health among such staff. The study, undertaken by the Robens Health Institute of the University of Surrey, has been completed and is under consideration by the Home Office. Control Room staff absences are normally covered by an adjustment in shift sizes or by the employment of temporary staff on short-term contracts. The training of temporary staff continues to be of great importance in view of the complexities of the modern computer based command and control mobilising systems.

Discipline

20. During the year, 17 persons were charged with a total of 29 offences under the Fire Services (Discipline) (Scotland) Regulations 1995. The corresponding figures for the previous year were 16 and 22 respectively.

21. The punishments awarded in respect of the offences were:

dismissal	2;
stoppage of pay	9;
reprimand	10;
caution	6; and
no case to answer	2.

Pension Scheme for Firefighters

22. The Joint Pensions Committee (JPC) gave further consideration, in the context of appeals from firefighters against or about medical appeals, to the replacement of single medical referees by regional Appeal Boards. The JPC did however acknowledge that further work required to be done on matters such as the recruitment of suitable Board members and the identifying of suitable premises.

23. Amongst the other items considered by the JPC during 1996-97 were the introduction of legislation so that those who had opted out of the firefighters' pension scheme in favour of personal pensions could be reinstated, the procedures requiring to be taken by fire authorities to resolve internal disputes about the scheme, and the requirement on authorities to provide scheme members and other interested parties with information about the scheme. The possible extension of the scope of pension scheme benefits to adult partners outside formal marriage was also further considered, but it was recognised that no early movement on that front was likely.

Equal Opportunities Joint Committee

24. Over the past year, the programme of work for the Equal Opportunities Joint Committee (EOJC) has been primarily directed towards consideration of the findings of research projects commissioned by the Home Office which relate to equality of opportunity in the Fire Service. Two separate research projects have examined height restrictions and age limits for recruitment to the Fire Service. These research projects indicated that there is insufficient objective justification for the existing height restrictions or the upper age limit. Following consultation with the Central Fire Brigades Advisory Council (CFBAC), the Appointments and Promotion Regulations south of the border have been amended accordingly. With regard to the Scottish Regulations the Scottish Central Fire Brigades Advisory Council (SCFBAC) agreed that they should also be amended. However, with the dissolution of Parliament this was not achieved. Nevertheless, The Scottish Office Home Department (SOHD) informed Firemasters that cognisance of the changes to the England and Wales Regulations must be taken when applying the Scottish Regulations.

25. The EOJC gave firm support to the development and continuation of the inaugural Women Firefighters' National Conference, recognising the importance of such an event not only for women firefighters but for the Fire Service as a whole. The conference took place on 22-24 November 1996 (2½ days) and was attended by approximately 170 delegates (including 30 Control Room staff).

26. Table A shows the increases in the number of female firefighters within the Fire Service in Scotland over the past year, in wholetime, retained and volunteer sectors of brigades. It should be noted that not all of the Scottish brigades have volunteer members.

Table A - Breakdown of Gender and Ethnic Origin of Brigade Personnel in Scotland in 1996-97

	Wholetime		Retained		Volunteer		Total	
White								
Male	4,475	(4462)	2,326	(2,339)	1,213	(1,209)	8,014	(8,010)
Female	24	(18)	49	(39)	54	(45)	127	(102)
Black								
Male	1	(1)	-	(-)	-	(-)	1	(1)
Female	-	(-)	-	(-)	-	(-)	-	(-)
Asian								
Male	-	(-)	1	(-)	-	(-)	1	(-)
Female	-	(-)	-	(-)	1	(-)	1	(-)
Others								
Male	-	(-)	-	(-)	-	(-)	-	(-)
Female	-	(-)	-	(-)	-	(-)	-	(-)
Total								
Male	4,476	(4,463)	2,327	(2,339)	1,213	(1,209)	8,016	(8,011)
Female	24	(18)	49	(39)	55	(45)	128	(102)
Overall Total								
	4,500	(4481)	2,376	(2,378)	1,268	(1,254)	8,144	(8,113)

Figures in brackets relate to the year 1995-96.

27. While the number of female firefighters or members of an ethnic minority remains small in comparison with the total workforce, all brigades continue to seek to increase the number of recruitment applications from these sections of our society.





SECTION C: OPERATIONS

Fires and Other Emergencies

1. For statistical purposes, the emergency calls to which brigades mobilise appliances and crews, are divided into 3 broad categories:

- Fires;
- Special Service incidents; and
- False alarms.



Photograph courtesy of D.C. Thomson & Co Ltd

2. Fires are sub-divided into 3 main categories: Fires which affect property; Secondary Fires which are, in the main, outdoor fires; and Chimney Fires which, as the title suggests, are confined to a chimney or flue pipe.

3. Special Service incidents is the term used to cover the wide range of emergency occurrences to which brigades are called, but which do not involve an outbreak of fire. They include road traffic accidents, rail crashes, chemical spillages, flooded property, persons trapped in lifts or other situations where there is a risk to life.

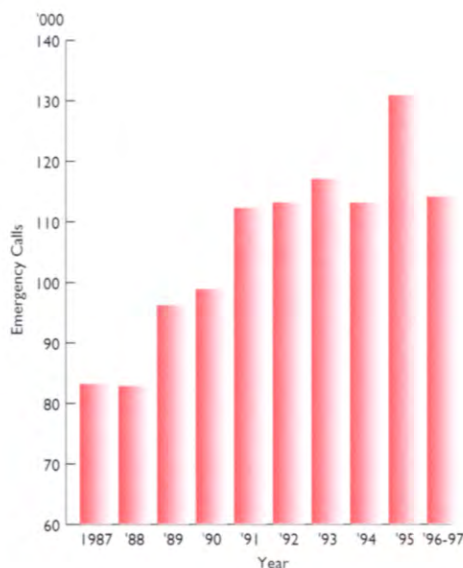
4. False Alarms are also sub-divided into 3 categories: Good Intent, where the caller genuinely thinks that a fire emergency exists; Apparatus, where the call to the brigade is mainly the result of a fault in a fire detection or warning system; and Malicious, where the call to the brigade is made by a person who knows that there is no outbreak of fire.

Total Emergency Incidents

5. During 1996-97 the total number of emergency incidents attended by Scottish fire brigades was 114,066, which represents a 12.8% decrease when compared with the previous year.

6. Graph 4 shows that the 1996-97 total is more in line with the average figure of approximately 111,000 emergency incidents in the 1990s when compared to the record level in 1995-96.

7. Of the total emergency incidents, 56,394 (49.4%) were outbreaks of Fire, 8,781 (7.7%) were Special Service incidents and 48,891 (42.9%) were False Alarm calls.



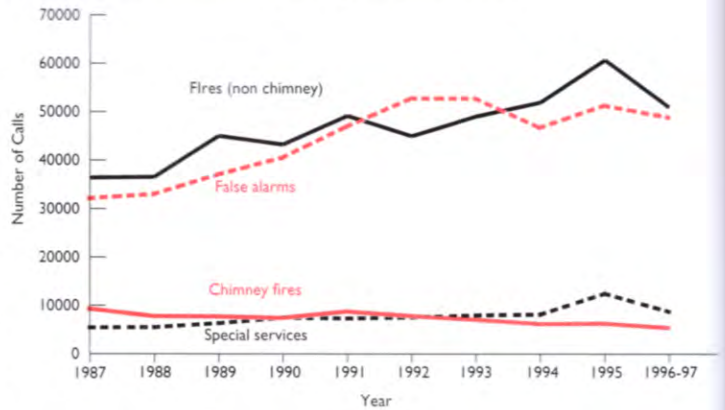
Graph 4 - Total Emergency Incidents Attended by Scottish Brigades 1987 to 1996-97

8. Appendix 4 gives details of these 3 categories within each Scottish brigade and indicates the number of incidents in which the circumstances required the attendance of one or more fire crews.

9. Appendix 5 gives information on the larger fires, that is those requiring the attendance of 6 or more pumping appliances and crews.

10. The nature and trends in the various types of emergency call received by brigades over the past 10 years is shown in Graph No 5.

11. As can be seen from Graph 5, Fires, other than Chimney Fires, while having reduced in 1996-97 are nevertheless still on an overall upward trend. Chimney Fires also reduced and now stand at the lowest figure recorded since 1978.



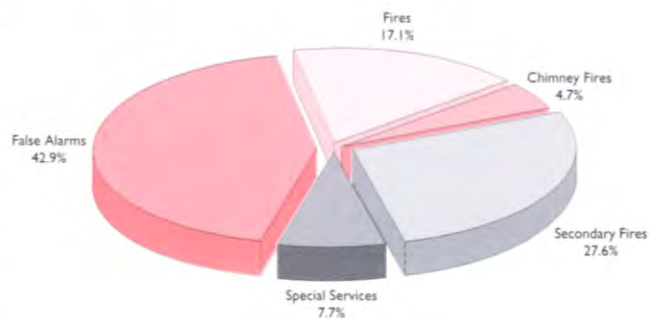
Graph 5 - Breakdown of Calls 1987 to 1996-97

12. The number of Special Service incidents, that is emergency incidents not involving an outbreak of fire, reduced by 29.7% from last year's record high figure. However, the 1996-97 figure still continued the gradual increase in such incidents over the past 10 years.

13. False alarm calls to Scottish brigades accounted for 42.9% of the total emergency incidents in 1996-97. Of the 3 types of these calls, Apparatus has more than trebled in the past 10 years. As mentioned in last year's Report, as we encourage the use of fire detection and fire warning systems this increase is hardly surprising. Good Intent calls have decreased by 38.6% from last year's peak figure and are at 16,207, the lowest figure since 1989. This decrease was due, as explained in paragraph 13 of the Introductory Remarks sub-section of this Report, to a nationally implemented change in the method of collecting statistical information for Good Intent and Faulty Apparatus false alarm calls.

14. In 1996-97, the number of Malicious false alarm calls again decreased for the fourth year in succession to 9,005. Over the past 10 years this translates into a 29.2% decrease and a 60.0% decrease from the record high figure recorded in 1992. It is always pleasing to see this criminal activity diminishing and great credit must go to each brigade for their community education programmes as well as the introduction of new technology into the telephone system which enables a more accurate and speedy identification of these illegal calls.

15. As previously mentioned, the operational activity of brigades in 1996-97 was 12.8% down on 1995-96, representing 16,797 fewer emergency incidents for the Service to deal with. Graph 6 shows the broad categories of the 114,066 incidents of that year and the percentage of each in relation to the overall total.



Graph 6 - Types of Call in 1996-97

16. While there was an increase in the proportion of Fires, that is fires affecting property, within the overall number of emergency incidents, the actual number of these Fires decreased to 19,527, 5.3% fewer than in the previous year. Only 2 brigades (Central Scotland Fire Brigade and Fife Fire and Rescue Service) experienced an increase in this type of fire, the percentage decreases ranging from 2.7% to 14.2%.

17. Out of the total number of Fires affecting property, 13,229 (67.7%) occurred within occupied buildings of which 9,157 were dwellings. The most common causes of Fire were as follows:

In dwellings

- (i) pan left unattended on cooker - contents ignited;
- (ii) wilful fire raising;
- (iii) faulty electrical appliance or the misuse of electrical apparatus;
- (iv) carelessness with smokers' materials (cigarettes/matches).

In buildings other than dwellings

- (i) wilful fire raising;
- (ii) faults in electrical wiring;
- (iii) carelessness with smokers' materials;
- (iv) electrical apparatus.

18. As has been the case over the past few years wilful fire raising is a prominent cause of fire in both dwellings and other buildings and remains a cause for concern.

19. The other major causes of fire in the home appear to be human negligence, such as leaving chip pans unattended, disposal of cigarettes and matches, or the lack of servicing of electrical appliances.



20. In buildings other than dwellings the causes of fire are very similar to those in dwellings. Information on these fires is not collected by the Inspectorate and as mentioned in last year's Report it is more appropriate for each brigade to examine its own circumstances and consider ways to reduce these often costly fires through fire safety promotions and their work on premises inspections and certification.

21. The number of Secondary Fires attended by brigades during 1996-97 was 31,519 a 21.6% decrease on the total for 1995-96. Only Grampian Fire Brigade experienced an increase in these Fires during the year. Fires of this type, being in the main outdoor fires, can be affected by the weather conditions and consequently fluctuate in frequency from year to year.

22. Chimney Fires totalled 5,348 during the year, a 13.8% decrease from 1995-96. All brigades experienced a reduction in this type of Fire. As mentioned above the number of Chimney Fires is at its lowest for 19 years. Highland and Islands Fire Brigade continues to have the highest incidence of these Fires with 1,500 or 28.0% of the Scottish total and 379 more than Strathclyde Fire Brigade which has the highest population in Scotland.

False Alarm Calls

23. During 1996-97 the total number of False Alarm calls was 48,891 a 4.8% reduction on last year's total. As previously stated these calls accounted for 42.9% of the total number of emergency attendances made by brigades in Scotland. The number of calls in relation to each of the 3 categories of False Alarm was as follows:

Good Intent	16,027	(26,092);
Apparatus	23,859	(15,603); and
Malicious	9,005	(9,637).

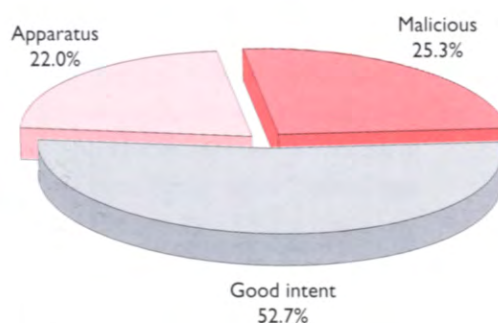
The figures in brackets refer to the totals for 1995-96.

24. It will be noted that just over half of these incidents were within the Apparatus category which shows a 52.9% increase on the level for the previous year. This can be explained, as previously mentioned, by the increase in fire protection and fire warning systems. Four of the 8 brigades experienced an increase in this category.

25. Within the Good Intent category, the total was 38.6% down on the previous year. Only one brigade recorded an increase in such calls. As previously mentioned this drop in the number of Good Intent false alarm calls was due to a change in the method of collecting statistical information for these and Faulty Apparatus false alarm calls.

26. The number of Malicious false alarm calls in 1996-97 fell by 632 from 9,637 to 9,005. This is the fourth consecutive year Scotland has experienced a reduction in the number of these calls, a most welcome feature as these calls waste brigade resources and heighten the possible danger to people in diverting appliances and crews from genuine emergency incidents.

27. Table B shows the number of Malicious false alarm calls within each brigade over the past 5 years, while Graph 7 indicates the percentage of each alarm category in the overall total.



Graph 7 - False alarm calls in 1996 - 97

Table B - Malicious False Alarm Calls 1992 to 1996-97

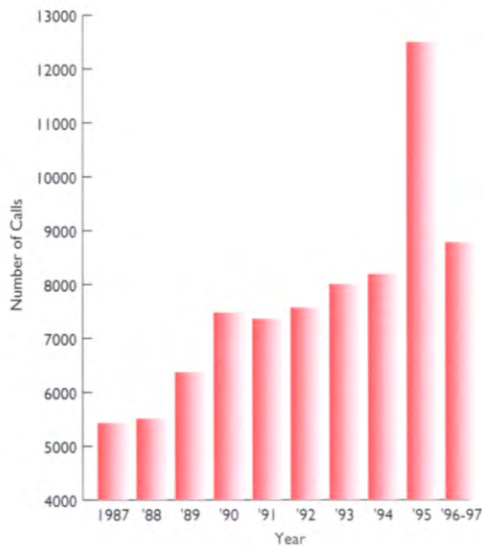
	1992	1993	1994	1995	1996-97
Central Scotland	567	694	475	431	409
Dumfries and Galloway	255	280	235	146	134
Fife	1,108	976	848	771	710
Grampian	616	628	544	415	486
Highland and Islands	347	334	387	309	280
Lothian and Borders	2,107	1,916	1,356	1,188	1,362
Strathclyde	16,349	13,970	6,926	5,681	4,998
Tayside	1,136	730	756	696	626
Total	22,485	19,528	11,527	9,637	9,005

Special Service Calls

28. The total number of Special Service calls attended by brigades in 1996-97 was 8,781, a decrease of 3,717 (29.7%) over the previous year and is more in line with the average figure of such calls in the 1990s when compared to the peak figure of 1995-96.

29. Graph 8 shows the higher incidence of Special Service calls in the 1990s quite clearly.

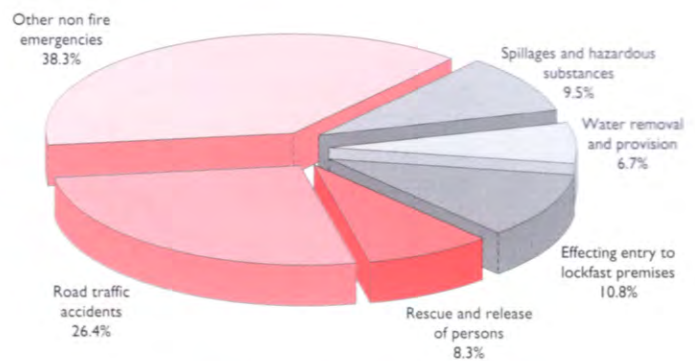
30. The most common types of Special Service call attended by brigades in the year under review were:



Graph 8 - Special Service Calls
1987 to 1996-97

◆ road traffic accidents	2,318	(26.4%);
◆ effecting entry to lockfast premises	946	(10.8%);
◆ standing by, or assisting at spillages	835	(9.5%);
◆ the rescue or release of people	728	(8.3%); and
◆ pumping water from flooded areas	588	(6.7%).

31. Graph 9 shows the activities listed under the Special Service heading, together with the proportion that each represented in relation to the total number of incidents attended.



Graph 9 - Special Service Calls in 1996-97

Road Traffic Accidents

32. During 1996-97 brigades in Scotland attended 2,322 road traffic accidents which did not involve an outbreak of fire. This was 172 more than in the previous year. Out of the 2,322 incidents, 778 (33.5%) involved the removal of persons trapped in the wreckage. On these occasions the skills of the fire crews are fully tested, in protecting the vehicle or vehicles from further damage, ensuring that fuel is not ignited by electrical or mechanical sparks resulting from the accident and, at the same time, dealing with the persons trapped and other injured people.

33. On 1,288 other occasions the RTAs did not involve the extrication of persons from vehicles but required the containment of the damage and the protection of those removing the wreckage, often in the presence of a fuel leakage. There were 256 occasions when fire crews' services were not in the event required.

34. Table C shows the number of RTAs attended by brigades over the past 5 years together with the number of deaths due to fires in vehicles over the same period.

Table C - Number of Road Traffic Accidents Attended and Resultant Fire Deaths 1992 to 1996-97

	1992	1993	1994	1995	1996-97
Number of road traffic accidents attended (no fire)	2,184	2,061	2,146	2,150	2,322
Number of deaths due to fires in road vehicles	12	8	4	4	2

Rescues

35. In 1996-97 the number of people who were rescued by fire brigades from emergency incidents totalled 2,047, an increase of 25 from that in the previous year. Table D shows the number of persons rescued by brigades from emergency incidents in the past 5 years.

Table D - Number of Persons Rescued from Emergency Incidents 1992 to 1996-97

Incident	1992	1993	1994	1995	1996-97
Fires	559	634	555	472	585
Other emergency situations without fire	706	838	978	805	745
Road traffic accidents	692	776	595	745	717
Totals	1,957	2,248	2,128	2,022	2,047

36. I would like, at this stage of the Report, to pay tribute to each of the emergency services for their co-operation in dealing with the many incidents which occur each year. Such co-operation is vitally important in safeguarding the lives of those unfortunately involved and in the containment of incidents.

37. As previously mentioned detailed information on the operational activities of each Scottish brigade is given in tabulated form at Appendices 4 and 5 of this Report.

Health and Safety

38. Accident statistics for the Fire Service in the UK as a whole continue at a worryingly high level. The incidence rate of all injuries to all operational personnel reported to the HSE in 1995-96 was 4,487.7 per 100,000 employees, a rate which is comparable with the construction industry.

39. Throughout 1996 the HSE has contributed to a range of Fire Service health and safety initiatives and activities, as well as carrying out its formal inspection role. HSE's Crown, Fire and Police National Interest Group has also provided input into a number of important documents that should help brigades begin to reduce this high incidence rate. Two of the most important were:

- i. Dear Firemaster Letter 8/1996 entitled 'Guidance on the Application of Risk Assessment in the Fire Service', which was the product of a CACFOA working group originally tasked by the CFBACs. This document was produced to enable brigades to meet the obligations of Regulation 3 of the Management of Health and Safety at Work Regulations 1992, which calls for risk

assessments of work activities to be carried out by employers and for significant findings of those assessments to be recorded. In brigades, this requirement applies equally to operational work, training and non-operational work; uniformed and non-uniformed staff; wholetime, retained and volunteer firefighters. The guidance sets out a methodology that can be followed to achieve those risk assessments, although it is important to note that brigades are not obliged to follow this methodology. Indeed, some may already have developed other equally effective means of achieving the legal requirement. The guidance is to be reviewed after 12 months to ensure it remains useful, up to date and easy to apply; the HSE will also contribute to this review process.

- ii. Scottish Fire Service Circular No 3/1996 entitled 'Principles of Operational Training' was brought about by the work of the CFBAC's Realistic Training Working Group on which the HSE was represented. The document is related to Dear Firemaster Letter 8/1996, in that a key principle it espouses is that of risk assessment for realistic/operational training. The HSE has been quite clear for years that brigades need to train under realistic conditions. The HSE has been equally clear that such training should have clear aims and objectives that relate to identified operational needs and that risks unrelated to these objectives should be properly controlled. This document provides useful information on these issues. It should be particularly useful given the current levels of interest in brigades regarding hot fire training and the use of fire behaviour and flashover simulators.

40. A third document not yet published but imminent is the revision to Technical Bulletin 1/89 on Breathing Apparatus procedures; the HSE has been consulted on the revised procedures and has contributed to their development.

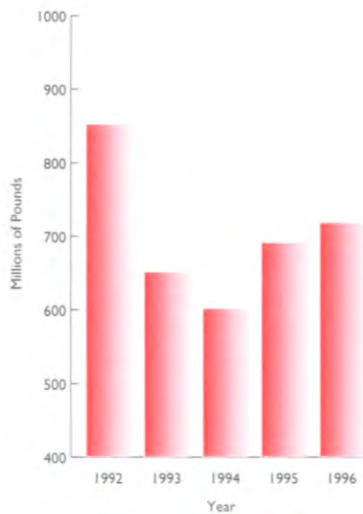
41. In addition to its advisory role the HSE has an enforcement function. In 1996-97 action included the serving of an Improvement Notice on one brigade in England and Wales to carry out a review of brigade training following a double fatality. Following a health and safety management inspection, another brigade was issued with an Improvement Notice requiring it to review its health and safety management systems and devise an implementation plan.

42. However, arguably the most significant enforcement issue for the Scottish Fire Service was the Sheriff's determination in the fatal accident enquiry into the death of Firefighter Roderick Nicholson and the decision in January 1997 by the Crown Office to prosecute Tayside Fire Brigade, Daltrade Ltd and British Fuels (trading as Calport at Perth).

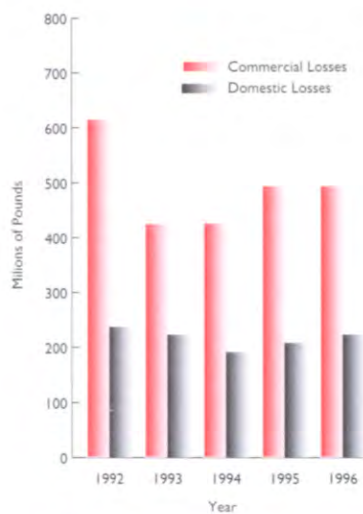
Fire Damage in the United Kingdom

43. The Association of British Insurers has estimated that the direct financial loss due to fire damage in the UK was £717m. This total is 2.4% higher than in the previous year and has continued the upward trend experienced in the fire loss figures in recent years.

44. Commercial claims once again bore the highest proportion of the fire losses in 1996, with claims totalling £494m - 0.4% more than in 1995 and representing a very marginal increase. However, the claims in respect of the domestic scene were somewhat higher totalling £223m which represents a 7.2% increase over the 1995 level. The proportion of the total fire losses borne by the respective sectors remained near the average percentage split at 69% for commercial claims and 31% for claims relating to domestic premises.



Graph 10 - Fire Damage in the United Kingdom 1992 to 1996 Annual Monetary Losses



Graph 11 - Commercial and Domestic Sectors Annual Monetary Losses to Fire Damage 1992 to 1996

45. Graph No 10 shows the total direct fire losses for the period 1992 to 1996 from which the falling trend in the first 3 years of the period can be compared with the recent increases. Graph 11 shows the totals and the trends in the commercial and domestic sectors for the past 5 years.

46. The Home Office Research and Statistics Directorate issued a Statistical Bulletin in April 1997 dealing with the Summary Fire Statistics, UK 1995 which gives the latest annual statistics (mainly based on estimates) of fires attended by brigades. They show the highest ever number of fires recorded due mainly to the large number of heath and grassland fires which occurred in the very hot summer. They also show a 16% rise in the number of fire deaths in the UK, to 808. This follows 2 years of lower figures. The increase in deaths over 1994 was fairly evenly spread among different types of location (dwellings, other buildings etc) and was not mainly the result of the increase in outdoor fires. The number of non-fatal casualties increased slightly.

47. Two-thirds of fires started in the kitchen with the next most common locations being the lounge/dining area (14%), and bedrooms (7%). About one in 10 fires started in the garage, shed, garden or other places outside the house. It continues to be of major concern that over half the fires (58%) were caused by cooking appliances or food preparation; 26% alone were due to pans of fat catching fire.

48. Scottish brigades are currently re-assessing their existing arrangements for the counselling of children referred to them by social work departments and other bodies. This is being done in an attempt to increase their efforts to combat fire losses through wilful fire raising.

To this end brigades held a one day seminar on Juvenile Firesetting, addressed by Dr Andrew Muckley, who is a recognised authority in this field, to offer research information and guidance in setting up formal Juvenile Firesetting Programmes throughout the country.

49. As juvenile firesetting is a major problem and unfortunately a growing one to society, it is imperative that every means to reduce the human and financial loss and hardship caused by fire is examined and encouraged. In endorsing this initiative I would call upon all those who are involved with fire safety education in Scotland to be aware of this project and to support brigades in this new programme.

Performance Indicators for Scottish Fire Brigades

50. Following discussions between the Department and Firemasters in October 1996, the Scottish Fire Indicators Implementation Working Group (SFIIWG) met in November 1996 and agreed a Report to the SCFBAC. This noted that, with the exception of a few Background Data items, all of the Background Data, Operational Data (OD) and Scottish Fire Indicators (SFI) for the years 1993-94, 1994-95 and 1995-96 were now provided in both brigade inspection Reports and HMCIFS' Annual Report.

51. The Report noted also that, with the exception of a proposed change for SFI/1, no further changes or additions to the scheme for 1996-97 were sought by the Department, Firemasters or the SFIIWG itself. With SFI/1, there continued to be problems of interpretation arising from the varying practices of brigades in respect of the number of appliances sent in A and B risk category areas to small fires and other incidents. These varying practices reflected varying policies of fire authorities within the recommended standards of fire cover. Without detailed information about such policies in each brigade area and about the numbers of incidents affected by them, it was difficult to interpret the SFI/1 figures supplied. Moreover, the indicator counted as a 'success' only those instances where 3 pumps in an A risk area and 2 in a B risk area arrived within the stipulated times. Many brigades considered this inappropriate. The SFIIWG considered it impracticable to change SFI/1 at that late point in 1996-97; but for 1997-98 recommended that SFI/1 be changed so that 'successes' would be counted as those instances:

- ◆ where both time and weight of response were as per recommended national standards of fire cover except;
- ◆ where there was a local mobilisation policy affecting an A or B risk category area, whereby the brigade sent less than the normal weight of response, it should be counted as a 'success' if the single pump sent arrived within the required time of 5 minutes or, where 2 pumps were sent in an A risk area, both arrived within 5 minutes.

52. The Report also recommended that, apart from the above change to SFI/1 and the possibility of including some items relating to fire prevention work should certain developments take place, the performance indicator scheme should be unchanged as from 1997-98.

53. The Report of the SFIIWG was agreed by the SCFBAC. As regards the possible addition of fire prevention work to the scope of the scheme, in the event the legislative changes earlier anticipated have not been made, and no early addition to the scheme is now proposed.

54. At Appendix 7 of this Report are data submitted under the scheme for 1996-97 and the previous 3 years. The information is divided into 2 main parts: OD and SFIs, with each part sub-divided into 5 specific headings. As mentioned in last year's Report, while the information allows a year to year comparison, it is more appropriate to use longer periods for the examination and analyses of trends, and this may perhaps best be done once there are data for a 5 year period. The information given in Appendix 7 is only part of detailed statistical and other data used by brigades and the Inspectorate to monitor performance.

55. In addition, the Accounts Commission published in Spring 1996 performance information for the Fire Service in 1994-95. The indicators used by the Commission differ from those under the SFIs scheme but as from 1997-98 SFI/1 should coincide with the Commission's Indicator 1.

The Transport of Dangerous Goods by Road and Rail

56. New national legislation governing the transport of dangerous goods by road and rail in the UK came into effect on 1 September 1996, to accord with the Framework Directives 94/55/EC and 96/49/EC affecting the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID) respectively.

57. The main thrust of both Directives is to align UK domestic arrangements for the carriage of dangerous goods with the international provisions contained in the ADR and RID Regulations. This has resulted in the issue of the undernoted regulations of which Nos 57.2 and 57.3 also strengthen control on petrol vapour emissions resulting from the distribution of petrol from terminals to service stations by the Volatile Organic Compounds Stage 1 Directive 94/63/EC.

- i. 'The Carriage of Dangerous Goods by Road Regulations 1996' (SI 1996 No 2095). This replaces 'The Road Traffic (Carriage of Dangerous Substances in Road Tankers and Tank Containers) Regulations 1992', and 'The Road Traffic (Carriage of Dangerous Substances in Packages etc) Regulations 1992'.
- ii. 'The Carriage of Dangerous Goods by Road Regulations 1996' (SI 1996 No 2089). This replaces 'The Carriage of Dangerous Goods by Rail Regulations 1994'.
- iii. 'The Carriage of Dangerous Goods (Classification, Packaging and Labelling) and Use of Transportable Pressure Receptacles Regulations 1996' (SI 1996 No 2092). This replaces 'The Carriage of Dangerous Goods by Road and Rail (Classification, Packaging and Labelling) Regulations 1994' and also substantially amends 'The Pressure Systems and Transportable Gas Containers Regulations 1989'.
- iv. 'The Carriage of Explosives by Road Regulations 1996' (SI 1996 No 2093). This replaces 'The Road Traffic (Carriage of Explosives) Regulations 1989'.
- v. 'The Carriage of Dangerous Goods by Road (Driver Training) Regulations 1996' (SI 1996 No 2094). This replaces 'The Road Traffic (Training of Drivers of Vehicles Carrying Dangerous Goods) Regulations 1992'.
- vi. 'The Packaging, Labelling and Carriage of Radioactive Material by Rail Regulations 1996' (SI 1996 No 2090).
- vii. 'The Health and Safety at Work etc Act 1974 (Application of Environmentally Hazardous Substances) Regulations 1996' (SI 1996 No 2075).

58. The Regulations are supported by 6 Approved Documents and one Approved Code of Practice.

59. While the effect on hauliers of chemicals in the UK will be extensive, the greater level of controls imposed by these Regulations will lead to a higher level of protection for fire brigade personnel attending chemical transport incidents. The Regulations do not affect the derogation held by the UK under which tankers carrying dangerous substances must display an emergency action code.





SECTION D: FIRE SAFETY

Background

1. Under the Fire Services Act 1947 the Secretary of State for Scotland has a general responsibility for the efficiency of fire brigades and is assisted by the Fire Services Branch of the Fire and Emergency Planning Division and by the Fire Inspectorate who advise on operational matters and the enforcement of fire safety legislation.

2. Although the administrative structure of the Scottish Fire Service has altered the statutory duties of the fire authorities remain extant within the 2 main statutes, namely:

- ◆ The Fire Services Act 1947 (the 1947 Act); and
- ◆ The Fire Precautions Act 1971 (the 1971 Act).

3. In addition to the primary role of safeguarding life the fire authorities utilise the brigades to carry out 4 other main functions on their behalf under the 1947 Act:

- ◆ firefighting;
- ◆ minimising damage caused by fire and firefighting operations;
- ◆ enforcing legislation on fire precautions in existing buildings, much of which is concerned with premises covered by the 1971 Act; and
- ◆ giving free goodwill advice to the general public on such matters as fire prevention, the restriction of the spread of fire and the means of escape in the event of fire (Section 1(1)(f)).

4. The 1971 Act established the present day rules for fire certification and removed most of the former anomalies relating to the powers of various statutory bodies. The 2 main points of the 1971 Act are that:

- ◆ compulsory certification by the fire authority is only required for premises put to uses which have been designated by the Secretary of State as requiring a fire certificate; and
- ◆ designated premises must be put to one of the uses listed in the Act, which are:
 - for the provision of treatment or care;
 - as sleeping accommodation;
 - for entertainment, recreation or instruction (used by clubs and associations);
 - for teaching, training or research;
 - for any purpose involving access to premises by members of the public, whether on payment or not;
 - as a place of work.

5. The 2 Designating Orders made so far are the:

- ◆ Fire Precautions (Hotels and Boarding Houses) Order 1972; and
- ◆ Fire Precautions (Factories, Offices, Shops and Railway Premises) Order 1989.

It should be noted that fire authorities are responsible for enforcing the provisions of the 1971 Act in premises other than Crown premises, which continue to be the responsibility of HM Fire Inspectorate. The 1971 Act also makes provision for the fire authorities to set aside, or grant exemption from, the requirement to have a fire certificate but only in prescribed circumstances and not in hotels and boarding houses.

6. The uses for which a fire certificate is required are hotels and boarding houses in which there is sleeping accommodation for staff or guests and factories, offices, shops and railway premises in which the number of persons in each case exceeds the figure stated in the statutory instrument, or in the case of factories, where explosive or highly flammable material is stored or used in or under the premises.

7. Until such times as the proposed Fire Precautions (Workplace) Regulations are brought into force, the smaller industrial and commercial premises falling outwith the scope of certification will continue to attract the provisions of Section 9A of the 1971 Act. These basic fire precaution measures cover the provision of means of escape, firefighting equipment and staff training. In order to assist occupiers and employers in meeting their statutory duties in both certifiable and non-certifiable premises under the 1971 Act, nationally published guidance documents are available which set out the detailed standards and procedures which if adopted would satisfy the current legislation.

8. The advice of brigades on fire safety forms an integral part of the consultation procedures contained in other primary legislation for which the fire authority is not the enforcing authority. The following list is representative of some of the legislation involved:

- ◆ The Housing (Scotland) Acts;
- ◆ The Gaming Act 1968;
- ◆ The Theatres Act 1968;
- ◆ The Safety at Sports Grounds Act 1975;
- ◆ The Licensing (Scotland) Act 1976;
- ◆ The Civic Government (Scotland) Act 1982;
- ◆ The Cinematograph (Safety) (Scotland) Regulations 1985.

9. Two other main sources where the advice of the brigade is sought in relation to fire safety is generated from:

- ◆ architects, developers and building designers on a proposed "new build" or refurbishment work in existing premises; and
- ◆ public or private organisations and members of the general public.

10. There has been a marked increase in the work involving community education projects throughout Scotland in an attempt to educate the public on fire safety matters. As has previously been reported, there is no statutory obligation on brigades to carry out this work, and until such time as the Audit Commission's recommendation that fire authorities should be given that statutory duty is brought into force, it will remain a moral issue not receiving direct funding. The SOHD do, however, assist in this work by providing publicity material and advertising the fire safety theme on radio and television throughout the year.

Fire Safety Inspections of Premises

11. During 1996-97 both operational and dedicated fire safety officers carried out a total of 76,578 fire safety inspections. This total includes work done under the 1971 Act and those inspections falling within that known as 'goodwill', as explained at paragraph 3 of this section.

12. Brigade officers also examined 8,523 plans of new or existing buildings requiring alteration and made comment on matters relating to the structural fire precautions and to the means of escape from fire and facilities for firefighting.

Certifiable Premises

13. Table E shows the total number of premises in each of the occupancy groups for which a fire certificate is required under the terms of Section 5 of the 1971 Act. This year the total number of premises has increased by 230 thereby reversing last year's trend, although not quite back to the total recorded in 1994-95.

Table E - Certification of Premises under Section 5 of the Fire Precautions Act 1971 in 1996-97

	Total Certifiable Premises	Total Certificates Issued	Total Certificates Issued in Current Year	Total Re-inspections of Certificated Premises in Current Year
Factories	4,425	3,411 (77.0%)	127	1,956
Offices	10,549	8,122 (76.9%)	347	3,961
Shops	5,825	157 (2.6%)	131	4,482
Railway Premises	7	5 (71.4%)	0	13
Hotels/Boarding Houses	4,742	4,006 (84.4%)	88	4,044
Totals	25,548	15,701 (61.4%)	693	14,456

14. There is an anticipated annual fluctuation of these totals as brigades receive new applications and also where premises close down their operation. In addition premises are often found to be outwith the scope of the certification criteria or may have been granted an exemption by the Brigade.

15. The total number of fire certificates issued by brigades is marginally down from last year by 97 and currently stands at 90.7% of all certifiable premises. This is due in part to the number of applications being submitted to brigades within the reporting period and other variable factors such as the exemption procedure mentioned previously. One other reason is that once an initial inspection is carried out by an inspecting officer, more often than not the premises require some upgrading to meet fire certification standard, resulting in a time limit being placed thereby extending the certificate's date of issue.

16. Throughout Scotland there remains a total of 2,389 fire certificates outstanding which is 327 premises more than in the past year. The nature of the various occupancies is as follows:

Hotels and Boarding Houses	147
Factories	480
Offices	1,208
Shops	553
Railway Premises	1
Total	2,389

17. Out of this total number of premises without a fire certificate brigades have inspected, within the reporting year, 1,129 (47.3%) of them in preparation for the issue of a certificate. The occupiers and owners of these premises are therefore carrying out the necessary upgrading work to meet the requisite level for fire certification purposes.

18. Fire brigades have a policy, on receipt of an application for a fire certificate, of assessing the potential life and fire risk from the information provided. The work is then prioritised with those premises presenting a high life risk, such as hotels and other sleeping accommodation along with other high fire risk premises, being inspected first.

19. The total number of certificated premises that have been re-inspected in 1996-97 is shown in Table E. These inspections are a routine method used by brigades to ensure that the standard of fire precautions laid down in the premises is being maintained. Should the inspecting officers not be satisfied with any matter affecting the fire precaution they have the power to issue a notice under Section 8 of the 1971 Act to restore the building to the minimum required by the fire certificate. As in the case of the initial application, brigades risk assess the individual buildings and thereafter carry out a programme of re-inspection based on high risk premises being visited annually, medium risk every 3 years and low risk premises once every 5 years.

20. An indication of this programme can be assessed from the following proportions of premises having received such an inspection throughout Scotland in 1996-97:

Hotels and Boarding Houses	100.5%;
Factories	41.7%;
Offices	40.8%; and
Shops	30.0%.

21. The overall target frequency is difficult to quantify from these figures as most brigades are either currently revisiting risk assessment in certificated premises or intending to do so. As a direct result of these re-inspections by fire safety staff and operational personnel, a total of 1,755 fire certificates in force were amended and re-issued to take account of change in the premises. This is an increase from last year of 110.

22. In Scotland there are currently 372 'old' fire certificates that have been carried over from The Factories Act 1961 and The Offices, Shops and Railway Premises Act 1963. These certificates are deemed to satisfy the present day fire certificate as conditions within the occupancies have not materially altered since they were issued. As time progresses this type of certificate should reduce but for the present the Scottish total has remained exactly the same as the previous year.

23. The Inspectorate has been encouraging fire brigades to not only continue to assess premises for exemption at the application stage, but also to revisit their existing premises that fall within the exemption criteria. The use of this power would release an additional resource that could be directed at higher risk premises. In Scotland there are 368 premises that have been issued with an exemption notice, although it is thought that the scope for granting these exemptions is greater than the present total would suggest.

Non-Certifiable Premises

24. Premises that do not require a fire certificate within the designated uses still require to be furnished with basic fire precautions such as the provision of means of escape and means for firefighting. The provision of these measures will be at the core of the proposed new legislation mentioned previously including the requirement for staff training. At present brigades have recorded 52,838 in Scotland falling into this category, 7,680 of which were routinely visited this year. Although this year's premises total has decreased by 4,010 (7.1%) overall, the inspection rate of this category has reduced by approximately 30% perhaps reflecting the risk assessment programmes being carried out by brigades.

Other Inspections

25. The duty placed on brigades by Section 1(1)(f) of the 1947 Act to provide advice on request had the effect of generating enquiries from commerce and industry, local authorities, architects and members of the public. The total number of "goodwill" or non-statutory inspections carried out in residential and non-residential property in Scotland was 31,081 representing an increase of 5,023 (19.3%) on the 1995-96 figure.

26. From this total there were 23,372 inspections in the non-residential category. Premises operating under the Licensing Scotland Act 1976, schools and colleges, places of public entertainment, and gaming outlets, made up the bulk of the visits carried out. Of the 7,974 inspections in residential property, hospitals, homes, residential care premises and houses in multiple occupation were most frequently visited.

27. One other source of work, particularly for fire safety officers, is the inspection of plans of new or altered buildings and the preparation of Reports on the provision of suitable fire precautions. During 1996-97, 8,523 sets of plans were examined which is a reduction of 2,716 (24.2%) from the previous year.

Offences and Prosecutions

28. A total of 3 prosecutions under the terms of the 1971 Act were actioned by brigades, 2 in hotels and 1 relating to shop premises. Again it is shown in Scotland that the very low number of cases brought to court, contradicts the suggestion made on occasion that fire authorities are heavy handed in respect of their handling of their statutory enforcement powers.

29. Under the terms of Section 10 of the 1971 Act, fire authorities are empowered to issue a notice, prohibiting or restricting the use of a building or part of a building in certain situations. The crux of the decision to use these powers is based on the authorities' opinion that the use of the premises presents a serious risk to persons in the event of fire. In 1996-97 a total of 12 prohibition notices were issued by brigades in order to deal with conditions that were considered to present an unacceptable degree of danger to people within the premises. The premises covered by these notice were:

Hotel or Boarding House	3;	
Shops	4;	
House in multiple occupation	4;	and
Cinema	1.	

Recorded Crime in Scotland

30. In 1996 the number of cases of fire raising recorded by the police fell by almost one third from the peak of 4,837 cases recorded in 1991. Over the same period, the percentage of these incidents cleared up by the police showed little change. This is not surprising given the nature of the crime, as fire raising has historically one of the lowest clear-up rates of all the crime categories. The latest figure available for the number of persons proceeded against for fire raising in Scotland (excluding controlled burning where difficulties arise) was 176. Of these cases 141 were proved and the persons were charged with the offence.

31. One other area of great concern to fire brigades in Scotland is the potentially dangerous false alarm call that may result in fire brigade resources being deployed elsewhere and not be available for a real emergency. In 1995, the latest figure available in Scotland, 55 persons had charges proceeded against them, with 46 cases being successfully prosecuted.

Fire Safety Campaigns

32. Fire safety education programmes are an essential part of brigade work which run concurrently with the fire safety inspection duties previously mentioned. These programmes are directed at the most vulnerable and also the most impressionable people in the local communities such as school children.

33. During the reporting period, brigades gave 4,413 talks on a broad spectrum of fire safety to both adults and children and held 64 quizzes to spread the fire safety message. It is estimated that 141,245 people were present at these events where it is hoped that they appreciate the importance to their safety, of sensible precautions and of action plans in case of fire.

Fire Fatalities

34. During 1996-97, 102 people were killed in fires attended by Scottish fire brigades. This is an increase of 10 over last year's total and continues the upward trend in fatalities since 1995. Five brigades had increases in the number of fire deaths, 2 experienced reductions and one remained static.

35. Table F shows the number of deaths due to fire within each of the Scottish brigades attended over the last 10 years. When the depressed totals of the last 2 years are calculated along with the other totals over a ten year period, an annual average of 123 is revealed. This is a reduction from last year's average of 129.3 and although fire deaths have actually risen this year, there is an overall reduction of such deaths in the last decade.

Table F - Number of Fire Deaths in Each Brigade Area 1987 to 1996-97

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996-97
Central Scotland	17	11	4	4	9	8	2	4	2	7
Dumfries and Galloway	4	7	1	8	3	3	6	8	1	2
Fife	12	11	6	5	7	11	14	9	4	9
Grampian	12	12	12	11	11	13	11	4	10	3
Highland and Islands	5	10	9	6	12	10	6	7	4	8
Lothian and Borders	21	26	19	22	18	13	20	8	8	7
Strathclyde	83	69	56	73	72	53	52	42	58	58
Tayside	14	4	6	4	7	8	16	5	5	8
Totals	168	150	113	133	139	119	127	87	92	102

36. Appendix 6 gives details of the fire fatalities in each brigade in terms of the age group, the location of the fire and the month of the year in which the incident occurred.

37. The location of most fatal fires has followed the same pattern as in previous years with 88 people being killed in house fires in 1996-97 which represents 86.3% of the total deaths. Four of these incidents resulted in multiple deaths with a total of 9 lives lost.

38. Outwith the domestic fire fatalities, the remaining 14 fatalities occurred as follows:

- ◆ 6 in industrial/commercial premises;
- ◆ 2 in hospitals/homes;
- ◆ 2 in motor vehicles;
- ◆ one in a caravan.

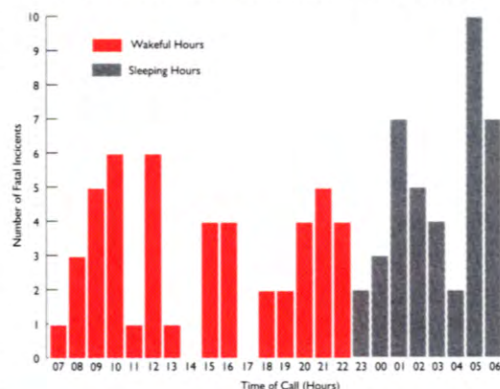
The 3 remaining cases consisted of 2 suicides using flammable liquids and one that remains under Police investigation.

Fatalities Due to Fires in Dwellings

39. During the year under review there were 84 outbreaks of fire in dwellings that resulted in one or more fatalities. This was 7 more than in the previous year. The months of the year in which most of the fires occurred were December (13), June (11), January (12), April (9) and November (9). The previous pattern of the winter months producing the higher death rate did not hold true in this reporting period with 41 incidents occurring from October to March.

40. With regard to the days of the week in which most fires occurred, there is an almost universal spread Monday to Friday where the average is 12 fatalities per day over the year. Both Friday and Wednesday exceed this average and peak at 13 each. At the weekend Saturday stands out once again as the day on which most fatalities take place with 20 and Sunday has the least of all at 10.

41. Graph 12 relates to the number of fatal fires that occurred in 1996-97 and the time that the first call was made to the fire brigade. Although it is held by some that most fatal fires occur during the “sleeping hours” of 2300



Graph 12 - Number of Fatal Incidents Relating to the Time of Call in 1996-97

hours and 0700 hours, once again this year that has not proved to be the case. Forty-eight people lost their lives within the wakeful hours as opposed to 40 during the night. The statistical information however, still shows that the most vulnerable hour of the day is 0500 hours when most people are sleeping.

42. From this information it can be readily seen that fire is no respecter of time and that constant fire safety awareness is essential for all age groups of the population.

43. One other commonly held fire statistic is that the very young and the elderly are most at risk from the outbreak of fire. This may be the case in relation to them making their own unaided escape from a fire due to physical inability, although in numerical terms this was not the case during this reporting period. During 1996-97 the number of persons in each age group who were killed by fire in the home was as follows:

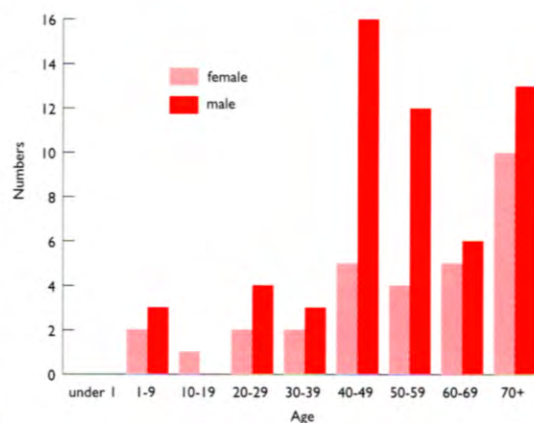
under 1 year	Nil
1-9 years	5
10-19 years	1
20-29 years	6
30-39 years	5
40-49 years	21
50-59 years	16
60-69 years	11
Over 70 years	23
Total	88

44. From these figures it is clear that the elderly are indeed only one of the vulnerable fire fatality groups and should continue to receive as much physical assistance and information to maintain their fire safety as possible. What has become evident in recent years and is borne out by this year's total is that the middle age groups have now also become as vulnerable from the outbreak of fire and are succumbing in increasing numbers. It is clear that the emphasis of fire safety education at both local and national level should now take cognisance of this trend and fire safety programmes should be altered accordingly.

45. Of the 88 people who died in fires in their homes, 57 were male and 31 were female. The prominence of male victims of fire is readily appreciated as shown in Graph 13 and it occurs particularly in the 40 to 59 age groups.

Areas in which Fatal Fires Started

46. As a result of the fatal fires mentioned previously brigades carried out detailed fire investigations that resulted in the following locations being recorded as the seat of the fire in each case:



Graph 13 - Total Number of Fire Deaths in Dwellings by Age, Group and Sex in 1996-97

	No. of Incidents	No. of Fatalities
Livingroom	33	35
Bedroom	26	29
Kitchen	21	21
Hall	3	2
Stairwell	1	1
Totals	84	88

47. Once more annual statistical evidence from all Scottish brigades shows that fires originating in living rooms pose a greater threat to life in the home than any other area. There are many reasons why this particular room in the home should be so dangerous. Amongst those is the obvious fact that the living room is used more than other rooms. There is also the presence of potential ignition sources and there is usually sufficient fuel for a fire to develop rapidly once started.

Causes of Fatal Fires in Dwellings

48. Of the fatalities that occurred in the home 54.6% had times of call to the fire brigade within "wakeful hours". The main question must be why? Why are people who are in their own home and in very familiar surroundings unable to escape from a fire in their own living room or bedroom? The average size of these rooms being in the order of 5.4 square metres should not under normal circumstances pose a great distance of travel to a place of safety. There must therefore be underlying reasons for these circumstances to occur. Were the victims in full possession of their faculties and capable of reacting to the very rapidly developing situation around them? Or were there other reasons why they could not react in an expected manner?

49. Unfortunately in answering the questions posed in the previous paragraph there is a repeat of former years' experience in why occupants were unable to leave their home before fire conditions rendered the atmosphere untenable. Investigations carried out by brigades have shown quite clearly that in the majority of cases the people who have succumbed to fire have had their normal perception or reactive responses impaired by other means. In the main this has been as a result of the misuse of alcohol and/or drugs, prescribed or otherwise!

50. The fire safety education units now operating in each brigade should be aware of the commonality of the causes of fire fatalities throughout Scotland. This information should be used to further educate the public, particularly in the knowledge that the combined misuse of smokers' materials and cooking appliances when under the influence, by the means mentioned in the previous paragraph, can and does cause death.

51. The most common causes of fatal fires in dwellings during the reporting period were:

	Number of Incidents	Percentage of Total Incidents
Carelessness in the use of smokers' materials	39	44.3%;
Unattended overheating pan left on cooker	18	20.5%;
Faulty heating appliances or the misuse of heating appliances	12	13.6%; and
Wilful fire raising	6	6.8%.

52. Despite previous reporting and strenuous efforts of Scottish brigades to warn the public of the dangers of the careless use of smokers' materials - cigarettes, matches, etc - this category remains the most common cause of fires that result in one or more deaths and injuries. Investigations have shown that all age groups are involved from a child playing with matches or a lighter, to an adult falling asleep whilst smoking.

53. Information collated in England and Wales (indicated in brackets) shows that their statistical evidence is broadly similar to the Scottish findings and figures for 1996-97. Such as more men than women died in fires; 47% (53%) of females were over 65 years of age, whilst less than 18% of the general female population is in this age group; 33% (34%) of male fatalities were over 65, compared to a general population percentage of 13%.

54. The national comparisons can be extended to other statistical evidence, ie the most common room of origin for fatal fires was the living room followed by the bedroom. The source of fatal fires again is remarkably similar with smoking materials being the single largest source of fire with 44% (41%) and the materials ignited including paper, clothing, bedding material and upholstery.

55. Cookers were the second most common source of ignition with the 2 main causes of fatalities stemming from that source, ie cooking left unattended 90% (75%) and the ignition of clothing 10% (25%). In Scotland the number of people who die as a result of leaving pans unattended has been steadily rising over many years and it is disturbing to Report this year's increase of 64% and the link with those fatalities who were in the middle to younger age brackets. It is also noticeable that the time of call to the fire brigade was spread over a much wider range than in previous years.

56. Only 2 Scottish fire fatalities in 1996-97 resulted from their clothing being ignited from a cooking source. This a welcome decrease from last year's total of 7 people who died in these most tragic circumstances, although once more these cases involved elderly people.

57. Heating appliances, whether space heaters or electric blankets, were associated with fires that caused the deaths of 12 people in this reporting period, an increase of 100% from last year. In addition to the proper servicing of these appliances, it is clear from this year's evidence that it is important to ensure that space heaters are properly used. This means that they should be sited, guarded and fixed in positions where they cannot be knocked over or where heat radiated from them will not ignite any nearby combustible material.

58. Associated with the 88 fatalities that occurred in dwelling fires, there were 1,649 non-fatal casualties caused by such outbreaks. The term non-fatal casualty is used to describe a person who is affected by smoke or heat from a fire and is sent or taken for treatment elsewhere other than the first-aid treatment provided by Fire Service personnel at the incident.

59. Often it is the experience of brigades that there is a very fine line between the people who survive an outbreak of fire and those who unfortunately succumb. Therefore, it is imperative that public awareness be concentrated on 2 main factors: how to avoid an outbreak of fire and what to do if a fire occurs or a warning of fire is given. This message is not new and represents sound sense based on hard experience, adopting its principles may mean the difference between surviving an outbreak of fire in the home or not.

Domestic Smoke Alarms

60. Recent research suggests that approximately 87% of the population has at least one smoke alarm installed in their home and that it is normally powered by a battery. Investigation of fatal fires shows that of the 84 incidents in 1996-97, 42 homes were fitted with at least one alarm and of these only 50% were in working order.

61. Of the 21 cases where the alarm did not work, 15 were due to the battery being either removed or incorrectly fitted, 4 had an unknown cause and in 2 other cases faults were found. Brigades have reported that of the fatalities that occurred, the lives of 31 people might have been saved had they had a smoke alarm in working order.

62. In Scotland there is a general awareness of the need to have some form of automatic fire detection and alarm system installed in households and also the crucial element of testing and maintaining these systems. It is less well known that it is a requirement of the Technical Standards of The Building Standards (Scotland) Regulations 1990 that all newly constructed dwellings must be provided with a suitable mains operated fire detection and alarm system. Given the information contained in the 2 preceding paragraphs, I would encourage individual members of the public, housing authorities and others involved in either the initial installation or upgrading of an existing fire warning system to consider the advantages and merits of installing a mains operated fire detection and alarm system.

Education and Publicity

63. During the year under review SOHD commissioned a new fire safety radio commercial which was launched, by the Minister of State, at Grampian Fire Brigade Headquarters. The purpose of the commercial was to make the public aware of the dangers of chip pan fires. The campaign ran on all Scottish radio stations for 3 weeks.

64. Television fire safety advertising continued with the screening of 'The Burning Christmas Tree', 'Fire Action Plan' and 'Resuscitation'. 'The Burning Christmas Tree' highlighted the need to be aware of the dangers of fire over the festive period. The 'Fire Action Plan' campaign which ran for 4 weeks was backed up by leaflets and related posters. The aim of the campaign was to make householders aware of the need to have an escape plan. The leaflets were available from all fire brigades. The aim of the 'Resuscitation' campaign was to drive home the message that failure to keep smoke alarms in good working order can cost lives.

65. The Department continued during 1996-97 to support the fire safety efforts of Scottish fire brigades in their local campaigns by the provision of half a million fire safety leaflets and posters. The Department also liaised closely with all brigades via the CACFOA (Scotland) Fire Safety (Technical) Committee in delivering its fire safety campaigns in 1996-97.

66. Throughout the year all Scottish brigades promoted and supported a very wide range of fire safety initiatives of which the following are examples:

Central Scotland Fire Brigade promoted fire safety education for primary and secondary school children including some sponsored initiatives that allowed them to distribute:

- ◆ 10,000 fire safety bookmarks and secure 20 videos on the subject of false alarm calls;
- ◆ 20 videos on 'Fire-Cause for Alarm' to extend the present youth programme;
- ◆ 1,000 fire safety pocket folders during school visits; and
- ◆ 70 single point smoke alarms on request from the public.

The Brigade also provided and fitted 56 special smoke alarms for the deaf and 25 other alarms. They also fully participated in the National Fire Safety Week by running many other events.

Dumfries and Galloway Fire Brigade hosted the Scottish final of the Fire Safety Youth Quiz in addition to continuing the training of the Social Service "Homecarers" in home fire safety. A sponsored smoke alarm jingle was promoted by ICI on West Sound Radio for 13 weeks. Local Fire Protection Association members were supported and trained where required along with a full participation in the National Fire Safety Week.

Fife Fire and Rescue Service continued to provide material for the news media serving Fife and ran a number of sponsored competitions in local newspapers. Local galas, fetes and other charitable events were supported by the use of the Service's Community Education demonstration unit and crew. An innovation was the production of a stage play to high-light the dangers of fire. This was carried out by the Fife College of Arts and sponsored by Shell and Exxon. The target age group was 5-7 and 800 children saw the play, which was well received. Again the Service participated in the National Fire Safety Week with 250 visits being made to schools throughout the year and 9,000 children receiving instruction on fire safety matters.

Grampian Fire Brigade was involved in an event to enlighten school children to the dangers and hazards of every day life, including fire, in conjunction with other agencies. The programme lasted for 2 weeks and reached 1,400 pupils at 55 primary schools. Similarly a home fire safety event was run over a 7 day period and was called the "Kaleidoscope week". The event attracted 6,000 adults and children and made them more aware of the dangers from fire. The Brigade carried out 500 visits to individual domestic properties and distributed fire safety leaflets. The National Fire Safety Week was launched by a local radio presenter who was subsequently "rescued" from a building by brigade personnel using a hydraulic platform. The whole sequence of events was broadcast live throughout the area.

Highland and Islands Fire Brigade held open days throughout its area in conjunction with the use of a mobile display unit. The thrust of the message was to promote the use of automatic smoke alarms within the home. The Brigade also arranged for personnel to staff exhibition stands at local events including the Safe Highlander Week where members of the public could discuss fire safety matters at first hand. Fire safety leaflets were also widely distributed with the emphasis again being directed at home fire safety.

Lothian and Borders Fire Brigade promulgated the safe use of fireworks for that season and led off a Christmas campaign by sending out a fire safety message to retail outlets by mail. They followed that initiative up by inspecting major stores before and during the festive season to establish that the fire precautions were adequate. This of course is the time when stock levels and combustible materials are at their highest

peak in these stores. At the same time of year the Brigade ran advertising campaigns regarding safe sleeping accommodation during the Hogmanay period. The well known multi-agency "Crucial Crew" event was again run with success in the area and continues to prove popular with the school children participating and the organising teams. The Brigade participated fully in events for the National Fire Safety Week.

Strathclyde Fire Brigade, in tandem with other brigades, has a strong commitment to fire safety and to the community in particular. During the reporting period the number of Community Firefighters increased from 6 to 18. These officers are the main thrust of the Brigade's initiatives carrying out many visits to schools and nurseries etc, and providing relevant fire safety information to all groups in the wider community. The Community Firefighters in the 4 Commands are backed up by support from the Headquarters Community Fire Safety Unit and the 4 non-uniformed Fire Safety Advisors who provide all the necessary statistics, lecture aids and co-ordinate and assist in campaigns and initiatives throughout Strathclyde. The Brigade carried out a pre 5 November campaign by taking the message of the fireworks code into schools and also ran a fireworks safety poster competition. The level of involvement in Experiential Learning events has continued to increase as Councils and other groups request assistance to organise many more events of this nature. This learning is similar to the "Crucial Crew", previously mentioned, where a number of safety scenarios are created in conjunction with other agencies such as the Social Work Consumer and Trading Standards, the SPTE and the Railway Authorities. Plans are well advanced to set up a permanent site for this type of learning in a Glasgow primary school. Local radio, press and television continued to be used particularly to reduce malicious calls to the Brigade. Educating both adults and children to the reality of moving in a smoke-laden atmosphere is dealt with on 2 fronts. Each Command utilises a mobile breathing apparatus chamber to permit people to experience their inability to judge position, direction and distance and is similar to the City of Glasgow Council's "Hazard House" that is jointly run with the Housing Department. Two important poster campaigns in Strathclyde have attacked the combination of alcohol and fatal fires, especially at festive periods, and the unacceptably easy access to cheap import cigarette lighters.

Tayside Fire Brigade trained youths who were participating in the Duke of Edinburgh Award Scheme and assisted with 10 Gold, 14 Silver and 47 Bronze applicants. As with other brigades, Tayside officers assisted with the organisation and running of the ever popular "Crucial Crew" scheme and were successful in processing 1,450 schoolchildren through the multi agency event. The Brigade again ran work experience programmes and placed some 45 teenagers on fire safety work experience in the year. In conjunction with the Social Work Department, 24 youngsters have received counselling on fire setting that will hopefully curb future cases of wilful fire raising in the community. Fire Safety officers contribute a monthly column in 3 local newspapers in addition to producing articles in a total of 9 newspapers in the Tayside area. Local radio slots by Fire Safety officers and leaflet distribution in selected housing areas are linked to fire safety displays held in Dundee, Perth and Forfar.

67. It should be stressed that the above examples are barely representative of the many and varied activities that the Scottish brigades become involved in each year and all those who took part in the organisation, production and execution of these events are to be congratulated. As previously mentioned the main thrust of all of this work is to increase the awareness of the community at large to the human suffering, personal and financial loss that results from the outbreak of fire that remains unnecessarily high in Scotland.

Joint Committee on the Audit Commission Report (JCACR)

68. A Report based on value for money in the Fire Service was published by the Audit Commission in February 1994. Although the detail of the Report centred on the Fire Service in England and Wales, there were obvious read across implications for their counterparts in Scotland and, as a result, it was determined that a joint committee of the CFBACs should be established.

69. The Report called for a number of changes, including:

- i. a review of fire cover standards;
- ii. a change in the balance between operational and fire safety work in favour of fire safety, with a statutory duty on brigades to promote fire safety;
- iii. a review of pensions;
- iv. a review of the formula for the fire Standard Spending Assessments;
- v. a review of the conditions of service of firefighters;
- vi. efficiency improvements in individual brigades.

70. At the initial meeting of the JCACR it was decided that the primary workload was to pursue a review of the standards of fire cover, bearing in mind the desirable balance to be achieved between that of operations and fire safety. It was agreed that this first task remit should encompass:

- ◆ a review of standards of fire cover which do not currently reflect relevant socio-demographic factors, time-bounded or seasonal variations in fire risk or the different fire risk factors resulting from modern building materials and methods;
- ◆ an examination of the long-term possibility of amending the national guidance to allow brigades greater local flexibility in the determination of fire risk and cover; and
- ◆ consideration of a change of emphasis from firefighting to fire prevention.



Photograph courtesy of D.C. Thomson & Co. Ltd

71. As the work of the Committee developed throughout 1996-97 a consultancy group, Entec UK Ltd, was employed to examine the risk assessment criteria and a study team of operational officers were tasked to research the response options necessary or available to tackle the anticipated range of emergency incidents.

72. In tandem with these developments a Community Fire Safety Task Force continues to examine the various initiatives undertaken by fire brigades and industry in the promotion and development of effective fire safety measures. This research will be taken into account in the final measurement of the desirable balance to be attained in terms of the prevention of, and the response to, emergency incidents.

73. It is anticipated that the work of this Committee will be drawn together, before presentation to the CFBACs, towards the end of 1997.

Joint Fire Safety Committee

74. There was an interruption to the normal frequency of the Committee meetings within the reporting year with 2 extraordinary meetings being called prior to and following the then Government's announcement in May 1996 on the outcome of the Interdepartmental Review of Fire Safety Legislation and Enforcement (the Fire Safety Scrutiny) in conjunction with one other regular meeting held in October 1996.

75. The scope and content of the first extraordinary meeting centred on the Government's proposals for the implementation of the fire safety aspects of the EC Framework and Workplace Directives (89/391/EEC and 89/654/EEC) relating to the safety and health of workers at work and the risk based criteria for exemption from fire certification.

76. At the second extraordinary meeting the Government's response to the Fire Safety Scrutiny Report and the contents of the consultative document issued in respect of the Fire Precautions (Workplace) Regulations dominated the agenda although the draft guide to compliance with and supervision of fire safety law and enforcement was also considered.

77. The final meeting dealt with a wider range of subjects including:

- i. An update on the main areas of activity following from the Fire Safety Scrutiny.
- ii. A draft Technical Memorandum on Fire Precautions in New Residential Care Premises.
- iii. The issue of a new British Standard for portable fire extinguishers BS-EN3 supplemented by a new standard BS 7863 which recommends a revised colour coding system to denote the contents of all new portable fire extinguishers (body coloured red), after 1 January 1997, with a zone of colour up to 5% of the body on the front of the extinguisher so that it is visible through 180° when the extinguisher is correctly mounted.
- iv. A draft policy statement on the control and supervision of fire safety law which is presently with the Home Office legal advisers.
- v. The Home Secretary's announcement of the launch of a Community Fire Safety Task Force (CFSTF) at the Heritage Fire Safety Forum on 6 November 1996. The terms of reference of task force are:

'To propose a Community Fire Safety Strategy and supporting action plans which will significantly reduce the numbers of fires and fire casualties in dwellings over the next 5 years. The proposals should distinguish clearly between the roles and activities of central government, of fire brigades and of others. The task force is expected to:

- ◆ review the causes of dwelling fires and the reasons for casualties;
- ◆ identify the problems and areas for improvement;
- ◆ propose a strategy to tackle the problems;
- ◆ translate the strategy into a prioritised and timetabled action plan;
- ◆ identify key performance indicators to evaluate the strategy.

The CFSTF consists of a small team of people from the private sector together with a Chief Fire Officer, is co-ordinated by the Home Office and is expected to make its findings known to the Home Secretary by the middle of 1997.

- vi. An initial review of the fire safety of large insulated sandwich panels (LISPs) has been carried out by the Fire Research Station on behalf of the Home Office and the Department of the Environment. The review sought to identify fire safety problems with LISPs by examining recent fire incidents and by visiting some selected working buildings which contain these panels. Some laboratory tests were carried out to examine ignitability and general fire behaviour of the panels with a view to possibly more detailed and extensive tests later. Much work was also undertaken in consulting brigades about their experience of fires where such panels were present. The results of the initial review supported the historical

evidence that LISPs do not prevent a particularly high risk to the lives of the general public or to workers in buildings containing LISPs. However there was a clear risk to firefighters who may have to enter such buildings, since fire can spread rapidly within some types of panel and the jointing systems will not prevent the steel sheets from falling away. The study suggested that further research, employing larger scale tests, should be undertaken. The results of the research will be published in detail as a Fire Research and Development Report.

Fire Safety in the Workplace

78. The proposed Fire Precautions (Workplace) Regulations have been referred to in previous Reports regarding the implementation of 2 EC Directives in respect of fire safety in the workplace, much of which is currently outwith statutory control. In May 1996 the then Government announced its intention to pursue various elements of a Fire Safety Scrutiny Report and to issue for consultation draft proposals to implement the fire safety aspects of the 2 EC Directives on Safety in the Workplace. Draft Regulations were issued and several hundred comments were received on them by the end of the consultation period in August 1996.

79. The Regulations were to be made under the European Communities Act 1972 and were to apply to employers in workplaces with one or more employee although with a number of exceptions where other legislation is existing and adequately deals with general fire precautions (eg premises holding a valid fire certificate issued under the Fire Precautions Act 1971, licensed premises and specialised workplaces such as mines, ships and offshore oil installations). To ensure that the Regulations and associated guidance impose minimal burdens on business, the draft Regulations used the actual text of the Directives to avoid an over-provision of the legislation. However, for a substantial number of premises the draft Regulations incorporated new statutory requirements for means of detecting and giving warning of fire and the provision of emergency lighting.

80. The enforcement of the Regulations was to lie with the fire authorities although there was to be no statutory obligation to carry out any particular frequency of inspection and the obligation to conduct a risk assessment of each workplace and to take various specific measures would rest with the employer. Where a fire authority became aware of a supposed breach of the Regulations it would be able to pursue one of 3 courses of action depending on a judgement of the imminent risk of death or serious injury ie:

- ◆ to serve a prohibition notice where there is an imminent risk to persons;
- ◆ to serve an enforcement notice where there is a risk of death or injury but not imminently so; and
- ◆ to apply to the court for an enforcement order in other cases of the Regulations being breached.

81. It was estimated by the Home Office that, assuming most employers have paid heed to the Management of Health and Safety at Work Regulations 1992 and to their common law duty of care, the cost of complying with the requirements of the Regulations in Great Britain would be in the order of £30m.

82. Two guidance documents were prepared to complement the Regulations. The first took the form of a free information card informing employers of their general duty and decisions which would have to be made in relation to fire precautions and where further free advice may be obtained. In addition, the employers' rights under the Regulations are clearly spelled out. The second was a longer document in 2 parts dealing with general and practical or technical matters was to be available for purchase from the Stationery Office

or accessed via the Internet, giving more specific advice for employers about the Fire Precautions (Workplace) Regulations and further guidance on fire precautions in workplaces.

83. Following a series of delays in actually laying the Regulations before Parliament, around the end of March 1997, the then Home Secretary decided that, despite 3 previous rounds of consultation, these proposed Regulations should not be progressed without a further wide ranging consultation exercise after the General Election.

Building Standards Advisory Committee

84. The Buildings Standards Advisory Committee (BSAC) is appointed under Section 12 of the Buildings (Scotland) Act 1959, with its main task being to advise the Secretary of State on the continuing development of the Building Standards (Scotland) Regulations. As stated in previous Reports the Committee's work has centred around a complete review of the Regulations which has resulted in substantial change in the format of the Regulations and in the content of the Technical Standards which support the Regulations in their practical application.

85. The Fire Service is particularly interested in the content and application of Parts D&E of the Technical Standards as they refer to 'Structural Fire Precautions' and 'Means of Escape from Fire, Facilities for Firefighting and Means of Warning of Fire in Dwellings'. Following the re-write of Parts D&E, taking into account the external commentary resulting from a wide consultation process, the final versions of the amended Parts D&E were brought to the Committee in June 1996 before being sent to Brussels for consideration by the Commission and other Member States in November 1996. As part of the initiatives to promote a common market in construction (and other) products, all proposals to alter technical regulations applying to such products have to be submitted for scrutiny. This process, which takes at least 3 months, applies to almost all of the building standards regulations which BSAC will be called on to consider and is proceeding towards implementation.

86. Although there has been Ministerial agreement to a review of the Building Control system some years ago staffing shortages have prevented this taking place. However, it is hoped to start a review in the next year or so which would be broadly based and would include issues such as the need for revision of the primary legislation; the position of the Scottish Regulations relative to those of England and Wales and Northern Ireland and also the Directives of the European Community; and inconsistencies in the operation of the building control system throughout Scotland.

The Construction Sites (Health, Safety and Welfare) Regulations 1996

87. The Construction Sites (Health, Safety and Welfare) Regulations were laid before Parliament on 27 June 1996 and came into force on 2 September 1996. These Regulations impose requirements with respect to the health, safety and welfare of persons at work carrying out 'construction work' and others who may be affected by that work.

88. For the first time the fire authorities are now made responsible for the enforcement of these Regulations in respect of fire, on those construction sites within or forming part of occupied buildings.

89. The HSE will enforce fire precautions on all other construction sites in the UK and in certain applications outside Great Britain. Fire brigade officers acting on behalf of the fire authority will therefore inspect construction sites described in the previous paragraph for:

- ◆ prevention of risk from fire or explosion, flooding or substances liable to cause asphyxiation;
- ◆ the provision of emergency routes and exits;
- ◆ the preparation and implementation of evacuation procedures;
- ◆ the provision of firefighting equipment, fire detectors and alarms.

National Fire Prevention Youth Quiz

90. The competition is aimed at young people aged 11-14 years. The objective of the Quiz is to increase young people's knowledge of the risk and dangers of fire in a challenging and entertaining way.

91. In 1996, a total of approximately 7,500 competitors took part in the Quiz culminating in the Final which took place at the Fire Service College. The overall winners of the Quiz were the Methlick Scout Group from Grampian.

The Fire Protection Association (FPA)

92. Formed in 1946 the FPA celebrated its Golden Jubilee in November 1996 and hosted a series of events to mark the occasion, including a major conference in London with the theme 'Lessons from the Past: Looking to the Future'. The focus of events was a meeting with the members of the Cultural Resources Committee of the National Fire Protection Association (the US equivalent of the FPA). The meeting considered and approved the new 'Standard for the Protection of Cultural Resources: NFPA 909', which will now be presented for adoption at the NFPA's May 1998 meeting.

93. As part of a commitment to improving heritage protection, the FPA and the National Library of Scotland, with the support of Historic Scotland and the Scottish Library Association, held a major 2-day conference in Edinburgh. 'Books to Burn' highlighted the need for fire safety management and the lessons learned from recent major library fires. The FPA is also part of a Steering Group assisting an Edinburgh University team undertaking a research project entitled 'Fire Protection in Scottish Historic Buildings'.

94. The FPA also kept up its tradition of campaigning for improvements in fire safety and of raising public awareness on important issues.

95. The Home Departments published the Draft Workplace (Fire Precautions) Regulations, together with a consultative document, in May 1996. Whilst welcoming the appearance of the document, the FPA expressed 'misgivings about the complex structures, technical language, unfriendly appearance, and the length and lack of clarity' of the publication.

96. In the September 1996 issue of the FPA's journal 'Fire Prevention', its then Director Mr Stewart Kidd renewed the call for improved fire protection measures in large single-storey retail units following a number of large loss fires that could have been avoided. This call generated considerable coverage in both the specialist and national press and has undoubtedly served to move the debate forward.

97. Other events hosted or organised by the FPA included the Fire Safety Week, organised in conjunction with the Home Office, the annual Fire Safety Award Scheme, the Rail Industry Fire Association launch at FPA Headquarters and the book launch of the 'Classic History of the British Fire Service' at the Imperial War Museum.

98. Plans for the FPA to continue promoting the fire safety message over the next 12 months are well underway. The Loss Prevention Council, with the support of the FPA, will be hosting 'Middle East Fire and Security' in Bahrain, and will be at important national conferences including FIREX 1997 and Fire 1997. Fire Safety Week is scheduled for the first week in October and the FPA will, of course, continue to provide advice and information to all its members, interested parties and the general public alike.





SECTION E: TRAINING

Scottish Fire Service Training School

1. The main function of the School continues to be the training of recruit firefighters for Scottish fire brigades: this is met by the provision of 3 x 16-week training courses for entrants to the Fire Service. School resources are also used to provide additional more specialised courses to meet the needs of Scottish brigades and other organisations, such as the Prison Service and Health Service Fire Safety Officers. The School is also increasingly used as a venue to Fire Service College (FSC) courses on an outreach basis.

2. During 1996-97 the number of students participating in the various courses at the School were 740, made up as follows:

Wholetime Recruits	169	(112)
Retained Recruits	32	(26)
Retained Personnel other than recruits	111	(102)
Wholetime Leading Firefighter	26	(28)
Specialist Legislation	24	(25)
Breathing Apparatus Instructors	51	(63)
Hospital Fire Prevention etc	26	(20)
Prison Officer Fire Prevention etc	31	(18)
Breathing Apparatus/Fire Prevention Recourses	0	(0)
Road Traffic Accident Instructors (wholetime)	69	(41)
Road Traffic Accident Instructors	24	(11)
NEBOSH*	20	(40)
Fire Safety*	72	(24)
Fire Service Health and Safety	52	(0)
Power Station Firefighters	33	(27)
Total	740	(537)

(The 1995-96 figures are shown in brackets)

** outreach courses from the Fire Service College.*

3. Further information about the School is available in the Commandant's Annual Report, copies of which may be obtained from the Director of Administration, Scottish Fire Service Training School, Gullane, East Lothian, EH31 2HG.

Fire Service College

4. The Fire Inspectorate, The SOHD and the FSC have worked closely together to provide opportunities for Scottish Fire Service personnel to participate in FSC courses. The range of provision of courses attended in 1996-97 were:

Central Scotland	131
Dumfries and Galloway	81
Fife	216
Grampian	129
Highland and Islands	111
Lothian and Borders	366
Strathclyde	788
Tayside	174
SFSTS (FSC outreach)	23
Total	2,019

This figure represented a significant increase of 37.4% over the training provided in 1995-96.

5. New Crew and Watch Command courses were introduced during the year. These courses provide a foundation in command and supervision for junior officers and support the achievement of occupational standards as defined by the Emergency Fire Services Lead Body (EFSLB). In further support of occupational standards, the FSC continues to provide opportunities to gain evidence leading to Assessor Awards (S/NVQ) for both students on relevant courses and for seconded staff.

6. The next stage of course development - the Command and Management Series - to replace the Junior Officers' Advancement Course through to the Divisional Command Course has now started under the leadership of a seconded officer from Scotland. A parallel review of the Brigade Command Course has also started and will include input from senior Scottish officers.

7. During the year a new joint venture in fire safety training has been piloted between the FSC and the SFSTS. The redevelopment of fire safety officer training at the FSC and the introduction of a modular format for the Fire Safety Officer Course (FSOC) offered an opportunity to test out the feasibility of some of the modules being taught at the SFSTS.

8. Modules A, B, C and D, being respectively, Places of Work, Sleeping Risks, Fire Engineering Introduction and the Building Standards were delivered by FSC staff to a group of 27 students. The validation of the D module was undertaken at the SFSTS. This version of Module D is designed specifically for the Scottish regulatory framework.

9. The E module, Fire Engineering, being the final module of the FSOC series, can only be presented at the FSC because of the dependence on the specialised demonstration facilities there. The delivery of the FSOC modules at the SFSTS is regarded as having been very successful and it is planned to run a second series during 1997. The FSOC can also be supplemented by further study and assessment to provide a Higher National Certificate in Fire Safety Studies (BTEC) validated through the University of Central Lancashire. This certification is available to students in Scotland.

10. The FSC has also responded to the needs of Scottish brigades by providing certificated Health and Safety courses at the SFSTS. These courses have included both general and Fire Service elements and will assist brigades in the discharge of their duties in this area.

11. The progression and specialist courses at the FSC have been provided with a supplementary programme of study and assessment so that they can be taken as modules towards a Certificate in Higher Education, a Diploma in Higher Education or a BSc/BSc(Hons) in Fire Safety Technology and Management (FSTM) validated by South Bank University. A small number of Scottish officers are now enrolled on this FSTM programme.

12. Associated with the Brigade and Command Courses is the opportunity for fire officers to obtain recognition for project work submitted as part of these courses. This recognition leads to the City of Guilds Senior Awards at Licentiate, Graduate and Member levels. A number of Scottish officers have benefited from these arrangements which are offered in collaboration with Coventry University.

13. The FSC has supported research in Command and Decision Making undertaken by a group led by Professor Rhona Flin, formerly of the Robert Gordon University but now at the University of Aberdeen. This group works closely with a number of Scottish brigades as well as the off-shore oil industry, the Military and other organisations engaged in critical incidents. The FSC now hosts and supports a research student registered for MPhil/PhD at Aberdeen and the results of his research will also contribute to the development of command training at the FSC.

14. The FSC, in discussion with Home Office and the Treasury, is making progress on defining a structural and financial framework which will guarantee its future as a world acknowledged centre of excellence for fire and emergency training and education. This expertise is also being made available to the wider fire and emergency community (including higher education, aviation, the oil industry and overseas clients) which benefits from association with the high standards and reputation enjoyed by the Fire Service.

Brigade Training

15. The Joint Training Committee believes that safe and effective training to meet the Fire Service's future needs should be based on the concept of the "competent person" in order to maximise the safety of firefighters in their working environment. Competence based training needs to be a continuous learning and development process which, coupled with experience, satisfies the demands of our complex and changing environment. Fire Service Circular No 5/1996 issued to brigades recommended the use of standards of competence, training for competence and a structured assessment system. Fire Service training previously has concentrated on the general inputs of learning with minimal attention being given to the actual level of performance achieved by individuals in the workplace. The training provided for the workforce requires to be focused on individual needs that relate directly to the overall organisational function. Training for competence places the emphasis on workplace performance and it is the activities carried out in the workplace that determine individual performance. The Implementation Working Group on Training Strategy (IWG) is developing a competence framework for the Service which sets out a structure of training for competence operating within a performance management culture. The EFSLB standards and the London Fire and Civil Defence Authority (LFCDA) standards have been utilised as the foundation of the competence framework. To complement the above the IWG is producing a series of documents detailing a framework with which individual brigades will be able to develop a structure for their own Training for Competence System. It is anticipated the guidance will be issued in the Autumn of 1997.



16. A seminar for the principal officers in brigades was held at the SFSTS on 2 April 1997. The purpose of the seminar was to update personnel regarding current training matters and to provide them with sufficient information to allow them to begin making progress towards changing their existing Brigade Training Systems to a system utilising a standards of competence approach.

17. As reported in previous years, very few of the brigades are complying with the recommendations of the National Joint Council for Local Authorities' Fire Brigades which advised that the weekly attendance of retained personnel for training purposes should be extended from 2 to 3 hours. The training requirement imposed on brigades is significant and, given the impending training for competence and the health and safety issues, it is essential that funding be made available to meet the training commitment.

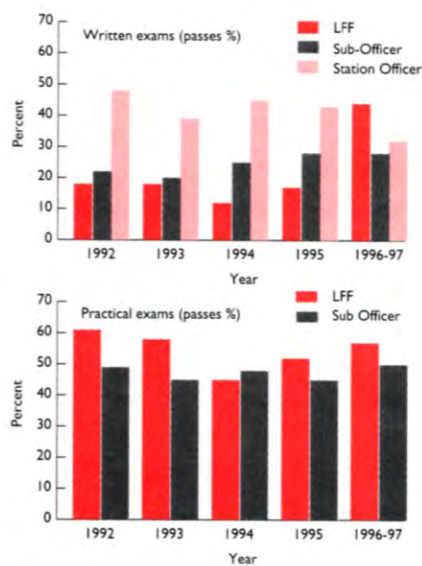
18. Brigades continue to provide a positive commitment to the continuation training of their officers and during 1996-97 a total of 242 personnel participated in progression and specialist courses at the FSC. In addition 480 personnel, comprising wholetime and retained, attended a range of courses at the SFSTS.

19. Commercial training is provided by the majority of brigades and during 1996-97 a total of 9,508 personnel were provided with instruction in Fire Safety, Marine Advanced Training, Fire Wardens, Hospital Staff Fire Code, Manual Handling, First Aid, Basic Firefighter and Extinguisher Usage etc.

Fire Services Examinations Board

20. To obtain qualifications for promotion to a higher rank, firefighters, leading firefighters and sub-officers are required to be successful in examinations set by the Fire Services Examinations Board (FSEB). Annual examinations for promotion to the ranks of leading firefighter and sub-officer have both written and practical elements, while the examination for promotion to the rank of station officer consists of written papers only.

21. In Scotland, 3 local boards administer both the written and practical examinations on behalf of the FSEB. Graph No 14 provides details of success rate of the Scottish Fire Services over the past 5 years.



Graph 14 - Fire Services Examinations Board: Percentage of Successful Scottish Candidates 1992 to 1996-97

Institution of Fire Engineers

22. During 1996-97 a total of 98 candidates of the Scottish Branch sat the Institute's examinations which were held at the 4 centres of Aberdeen, Dundee, Edinburgh and Glasgow. Of this total 25 candidates were successful in the various gradings of the examinations, as shown below:

Preliminary Certificate	7;
Graduate Examination	1;
Membership	4; and
Individual Member Paper	13.





SECTION F: SUPPLIES AND SERVICES

Transport

1. With the exception of Dumfries and Galloway Fire Brigade whose transport maintenance is carried out by the Direct Labour Organisation of the Roads and Transportation Department of the Council, the remaining brigades provide their own Transport Workshop facilities.
2. The majority of brigades are operating a Planned Preventative Maintenance Policy with the standard of maintenance being not less than that prescribed in the Vehicle Inspectorate "Heavy Goods Vehicle Inspection Manual" and the CACFOA "Recommended Best Practice for the Maintenance of Fire Service Vehicles". Three of the 8 brigades have 'Roller Brake Tester' equipment which is utilised for analysing the performance of fire appliance braking systems and brigades which do not have such a facility have made arrangements to have this function carried out by other agencies.
3. In addition to the inspection, servicing and repair of vehicles the Workshop staff also carry out 'fitting out' of pumping and special appliances to ensure that all equipment is safely stowed and secured.
4. In meeting the requirements of Technical Bulletin 1/1994, Periodic Inspection and Testing of Fire Service Equipment, most brigades have assigned the task of testing and repair of ladders, hydraulic rescue equipment and generators, etc to the Transport Workshop. In some brigades the maintenance of ladders is carried out by dedicated ladder technicians, but in the majority of instances this function is carried out by mechanics. The maintenance of operational equipment has created a significant increase in the workload for the Workshop staff which will necessitate the staff/workload ratio to be carefully monitored to ensure maintenance schedules and quality of work are not undermined by this additional burden on staff.
5. All Workshops are provided with Computerised Fleet Management Systems. These Systems provide comprehensive management information which includes fleet lists, dynamic age profiles, a record of defects and downtime, inspection and service scheduling costs, as well as a variety of Reports on compliance with schedules, accident analysis, fuel consumption and comparison of actual and budget costs, etc.
6. Throughout Scotland there are a total of 451 pumping appliances in use and 106 special appliances comprising aerials, foam tenders, water carriers, rescue vehicles, command and control units and special support units, etc. The replacement policy adopted by brigades for pumping appliances varies from 10-15 years depending on usage with special appliances being replaced at between 12-15 year intervals. Due to budgetary restrictions in recent years brigades have been unable to meet their total replacement criteria and currently there are 46 pumping appliances and 18 special appliances outwith their targeted replacement dates.

7. During the year under review a total of 30 pumping and 6 special appliances were commissioned by brigades. These included a Command and Control Unit for Central Scotland Fire Brigade, an Emergency Support Unit for Fife Fire and Rescue Service, 2 Prime Movers plus Pods for Grampian Fire Brigade, an Incident Support Unit for Lothian and Borders Fire Brigade and a Heavy Rescue Unit for Strathclyde Fire Brigade.

8. The introduction of breathing apparatus and other health and safety measures has necessitated a review of the vehicles utilised by Volunteer Units. Central Scotland, Highland and Islands and Strathclyde Fire Brigades are now providing these units with purpose built Light Fire Appliances. These vehicles are based upon a 3½- 8 ton chassis with an integral crew cabin. The vehicles can accommodate a crew of 6 with breathing apparatus and are fitted with a 450-1,000 litre water tank and a removable portable pump with an output of 1,590 litres per minute. Ladders, hose, hydraulic rescue equipment and other ancillary equipment can also be carried on the vehicle.

9. All brigades now take advantage of purchasing cars and vans via the framework agreement for the supply of vehicles and spare parts for the Police and Fire Service, negotiated by the Home Office with a number of manufacturers. This initiative has provided significant savings to brigades in their vehicle replacement programme.

Premises

10. In last year's Report I recommended that consideration be given to the installation of a custom-built Real Fire Training Facility (RFTF) at the SFSTS. Such a facility uses propane gas to create a variety of fire scenarios through its computerised control system. The scenarios can be repeated readily and can be controlled and monitored to reduce the potential risk of injury to students. I am pleased to report that the SOHD has established a project team to provide a RFTF at the School. The project has been approved and funded by Scottish Office Ministers; and contracts are currently being let for an operational facility by February 1998.

11. This will be the fourth consecutive year that the majority of brigades have suffered a further decrease in their property maintenance budget. This reduction in finance is having a significant effect on the general fabric of premises with consequential further deterioration of many. This will inevitably lead to major refurbishment requirements or indeed total replacement, placing an even greater burden on the financial allocation.

12. As a result of the reorganisation of local government it was necessary for brigades to make provision for the management of their properties. Most brigades have established a property management section which has been achieved by disaggregation of a number of staff from previous Regional Councils or by normal recruitment means.

13. In Dumfries and Galloway the replacement Langholm Fire Station has been completed at a cost of £320,000. The station which was constructed within the precincts of the previous station is of 2 storey construction with pleasant facilities for staff and a yard and drill tower for training purposes.

14. Work is continuing with the new Aberdeen Central Fire Station at Mounthooly Way, Aberdeen at a total cost of £3,444,000. The main building comprises a 4 bay appliance area with an adjoining block consisting of muster bay, offices, operational support areas and fitness rooms, etc. A training building is also provided within the complex which has been designed to simulate a range of operational scenarios with various roof pitches and window configurations, crawling galleries and stairs and ladders. Adjacent to the fire station is a 3 storey office block which is to be utilised by the Fire Safety Department.

15. In Highland and Islands Fire Brigade a replacement retained fire station is being provided at Kinlochleven at a cost of £643,000. The station replaces the inadequate facilities which were previously provided within the factory premises of British Alcan.

16. In Strathclyde, the replacement North West Fire Station which is now sited at Maryhill, has been completed at a cost of £2,250,000. The station has excellent facilities for personnel with lecture rooms, study areas, messing facilities, fitness area and equipment maintenance area, etc. A 5 storey training tower with a 2 storey interconnecting training block has also been provided within the complex. The building is provided with crawling galleries, removable partitions, sewers and balconies, etc.

17. Work continues on Forfar Fire Station in Tayside Fire Brigade at an estimated cost of £1,079,000. The station consists of a 3 bay appliance hall with communications room, laundry room, drying room, mess facilities and muster area. A training yard with a water tank and drill tower completes the facilities.

18. Approximately £1,200,000 was spent by brigades on minor works ranging over roof repairs, provision of exhaust extraction equipment, energy management initiatives, replacement central heating boilers, minor refurbishment of stations, extensions to accommodate compressors and replacement windows.

19. The provision of volunteer units continues with Strathclyde completing units at Carradale, Craighouse, Arinagour and the Bridge of Orchy and Highland and Islands providing units at Carrick, Eday, Valtos and Kilchoan. These buildings are designed to accommodate a standard fire appliance or where necessary a light fire appliance. The facilities can include office and toilet accommodation along with drying, storage, breathing apparatus compressor and changing facilities.

Equipment

20. Further progress has been made with the introduction of lightweight carbon composite breathing apparatus cylinders. The majority of brigades are phasing in these cylinders whilst one brigade has replaced their breathing apparatus equipment. The provision of these cylinders should in the longer term significantly reduce the number of firefighters suffering from back injuries.

21. The repair and maintenance of breathing apparatus sets in all brigades is now carried out by breathing apparatus technicians which ensures a constant standard of maintenance is achieved.

22. To meet the requirements of the Manual Handling Operations Regulations 1992, brigades are providing ladder beam gantries for the removal, from ground level, of the 9m/10.5m ladders and also roof ladders from the top of the appliance. In addition, the short extension ladder is being relocated to avoid the necessity to climb onto the roof of the appliance. The lockers on the vehicles are being redesigned to accommodate the heaviest equipment at the lowest level and by the use of "slide and tilt" mechanisms easier access is provided for other equipment at the upper levels. On the special support and rescue units, use is being made of hydraulic cranes or electro/hydraulic lifts for the loading and unloading of heavy equipment.

23. Brigades have a continual programme for the provision and upgrading of equipment for dealing with road accidents and other emergencies where persons are trapped. The most popular facility is the hydraulic rescue combination tool which is capable of cutting and spreading and is operated by a power pack. Many of the brigades also provide hydraulic rams and pedal cutters along with air operated lifting bags.

24. Brigades are continually carrying out research and development and ultimately purchase of equipment necessary for operational purposes which during the year has included ventilation equipment, hand controlled branches, limited life gas suits, submersible pumps, gas detectors, gloves, air shelters, torches, thermal imaging cameras, helmets, dosimeters and lifting tripods.

25. 'Dear Firemaster' Letter 1/1996 provided details to brigades of a new specification for the Control Staff uniform which was issued following the review undertaken by a Working Group of the Joint Committee on Appliances, Equipment and Uniform. Following a detailed tender procedure a framework arrangement has been provided with a manufacturer who will provide a fully managed centralised ordering and supply service to brigades.

Telecommunications

26. The Scottish Office Communications and Information Services Division (CISD) has continued in its support of the Scottish fire brigades. As well as being the regulatory body for brigade radio spectrum CISD is representing brigade interests in the Project Definition stage of the Public Safety Radio Communications Project (PSRCP). A consultancy support contract has been let to support the further development of brigade user requirements in conjunction with a parallel activity in England and Wales.





SECTION G: MISCELLANEOUS

Scottish Central Fire Brigades Advisory Council

1. Meetings of the SCFBAC were held on 11 July 1996 and 27 March 1997. These meetings were chaired by Mr J Hamill, Secretary of The SOHD. The Council considered the annual Reports from each of the Joint Committees of the CFBACs, as well as a range of issues concerning the operation of fire brigades.

The Safe Person Concept

2. 'Dear Firemaster' Letter 2/1997 provides information regarding the formation of a Safe Person Project Team, which was formed to respond quickly and to examine issues which may have an impact upon personnel engaged in Fire Service operations and how best the Service might address them. Issues may be examined by the core group, which consists of nominated representatives from the principal professional fire organisations, or by a project team appointed by the group. The work of the group does not replace the function of the Joint Committee process, but is intended to enhance it in order to simplify and expedite matters.

3. The first issue the group examined was the 'Behaviour of Fire' which resulted in the formation of a Fire Behaviour Project Team. It will examine what is known about the behaviour of fire, its growth and fire phenomena, the tactics for dealing with compartment fires and developments in the field of real fire training facilities with a view to reporting on the operational implications for firefighting and preparing guidance on training intended to prepare firefighters to deal with fires in buildings and structures confidently and safely.

4. The 'Safe Person Concept' encompasses all Joint Committees of the CFBACs and the results of any examination will be reported to the appropriate Committee.

Joint Committee on Fire Brigade Operations

5. Revised guidance on the procedures for Breathing Apparatus Command and Control has been produced, which replaces Technical Bulletin 1/1989. This document addresses the requirements of the Management of Health and Safety at Work Regulations 1992 which places greater emphasis on a risk assessment, output focused approach. More explicit procedures have been introduced to clarify the duties and responsibilities of personnel responsible for management command and control procedures whilst utilising breathing apparatus. Rapid deployment procedures for use in exceptional circumstances have also been introduced. Consideration has also been taken into account of the emerging research on the physiological effects of wearing breathing apparatus. The new guidance is expected to be circulated in the summer of 1997.

6. Field trials of guidelines utilising a revised system of 'Way Out' markers and retractable personal lines have now been completed and will be subject to further consideration by the Technical Working Group on Breathing Apparatus. The recommendations will

subsequently be submitted to the Joint Committee for endorsement prior to being issued as guidance to the Fire Service.

7. The documents required to support a Fire Service Telemetry System have now been published and incorporate a Fire Service User Document, provisionally titled JCDD/40, a Radio Performance Specification (MG41), a Common Air Interface (MG41a) and a Radio Frequency Policy Statement. Copies of the supporting documents have also been issued to industry representatives and manufacturers who had previously expressed an interest in a telemetry system for the Fire Service. Intensive operational trials have been carried out to validate the user requirement by testing the robustness and functionality of the equipment. Information on this subject was promulgated to brigades in 'Dear Firemaster' Letter 8/1996.

8. A further supplement to the Manual of Firemanship - Book 12 has been issued, entitled 'The Behaviour of Fire - Tactical Ventilation of Buildings and Structures', which in particular complements the information contained in the supplement 'The Behaviour of Fire - Compartment Fires' published in 1995. Its aim is to bring together all the advice currently available in the use of ventilation as a firefighting tactic. It also discusses the use of fans to assist ventilation as well as the more traditional techniques, together with the operational tactics and techniques applicable to most scenarios likely to be faced by firefighters today.

9. A review has been carried out of the Emergency Action Codes (commonly known as Hazchem codes) for dealing with Incidents Involving Dangerous Substances Conveyed in Bulk by Road or Rail and a new Hazchem List (No 9), including new Hazchem scale cards, has been issued.

10. A working group from CACFOA was commissioned by the Joint Committee to produce guidance on practices and procedures considered necessary for the application of risk assessment in the Fire Service. The Working Group produced the document, 'Guidance on the Application of Risk Assessment in the Fire Service' which was also issued under cover of 'Dear Firemaster' Letter 8/1996.

11. Item B 'Dear Firemaster Letter' 5/1989 advised Firemasters of safe operational practices to adopt at incidents involving silos. This guidance supplemented that contained in 'Dear Firemaster' Letter 30/1971, Technical Bulletin 2/1971 and parts 6B & 6C of the Manual of Firemanship. The guidance was reconsidered in response to a recently published Report into a fatal accident involving a firefighter at an industrial silo in 1995. The revised guidance is expected to be promulgated to brigades in the summer of 1997.

12. Other matters which were considered by the Committee during the year were:

- ◆ the Noise at Work Regulations 1989;
- ◆ the physiological effects on firefighters wearing breathing apparatus;
- ◆ the results of a survey of Fire Service ladders;
- ◆ the findings of research on pavement light trials;
- ◆ use of helicopters in the Fire Service;
- ◆ HSE legislation on confined spaces;
- ◆ use of sandwich panels;
- ◆ Health and Safety - Management Information System.

Joint Training Committee

13. The Report of the Training Strategy Group containing 78 recommendations and which was adopted by the Joint Training Committee (JTC) in 1994, has continued to test the resolve of the JTC during the year. However, agreement has now been reached on a positive way forward and guidance has been issued to brigades on planning and delivery of realistic operational training and on standards of occupational competence. The JTC believe that safe and effective training to meet the Fire Service's future needs should be based on the concept of the competent person.

14. The IWG has addressed a wide range of issues relative to the Training Strategy and in particular produced a policy statement which was subsequently adopted by the JTC. Three items of considerable significance contained in the statement were:

- i. the IWG are of the view that the National Vocational Qualification structure, as currently accredited, should not be formally adopted as a qualification structure at this time. However, as a principle, a qualification structure relevant to the needs of the local authority Fire Service should be based upon standards of occupational competence;
- ii. at this stage the IWG recommends that competency based training systems are developed using a standards framework suitably role mapped to meet the requirements of all local authority fire brigades;
- iii. the IWG consider it essential that a single system of occupational standards is developed against which competency can be assessed. In the interim, due regard should be given to potential for equivalence between the developments deriving from the EFSLB and the LCFDA standards of competence.

15. In order to progress the statements at sub-paragraphs 15.2 and 15.3 the Standards Working Group was reformulated and given the reference to:

- i. develop a structure and principles for the operation of competency based training in the Fire Service;
- ii. role map the EFSLB standards of competence to the functional roles of uniformed Fire Service personnel to assist the application of competency based training;
- iii. develop a best practice guide on assessment systems.

16. The Report prepared by the Realistic Training Group entitled 'The Principles of Operational Training' has been promulgated to brigades in Fire Service Circular No 3/1996. The document focuses on the Training Plan designed to support a brigade's Training Policy, the setting of Realistic Training Objectives and the Risk Assessment process.

17. Fire Service Circular No 5/1996 was issued to brigades which provided details on Standards of Occupational Competence. The Circular recommended to brigades the use of standards of competence, training for competence and a structured assessment system. It also encouraged brigades, as resources permit, to apply for the status of Approved Centre for the awarding of Scottish Vocational Qualifications (SVQs).

18. The EFSLB continued to make progress with a structure of qualifications for Operators, Supervisors and Managers in Control Rooms. In addition, a Fire Safety Standards Development Group has been established for the development of the fire safety qualifications. Following a recommendation from the Safe Person Concept - Fire Behaviour Project Team, the JTC was requested to prepare methodologies for training regarding incidence of fire involving backdraughts, flashovers and rapid fire growth and the need to include advanced ventilation techniques and re-affirm jet/spray firefighting tactics as part of the Fire Service tactics for dealing with such incidents.

19. Following a recommendation from the Safe Person Concept - Fire Behaviour Project Team, the JTC was requested to prepare methodologies for training regarding incidence of fire involving backdraughts, flashovers and rapid fire growth and the need to include advanced ventilation techniques and re-affirm jet/spray firefighting tactics as part of the Fire Service tactics for dealing with such incidents.

20. The working group tasked with revising the wholetime recruit training syllabus has reached agreement on the format of the syllabus and has produced some detailed work on the behaviour and extinguishment of fire, the operation and use of Fire Service appliances and equipment, Fire Service operations and practical firefighting and rescue from fires. They will also identify the core skills essential for recruit training.

Joint Committee on Appliances, Equipment and Uniform

21. The Working Group to revise BS 3367 (Fire Service Lines) has made no further progress mainly due to a lack of interest from the manufacturers. In order to try and advance this matter Home Office has written to the British Standards Institution with a request for them to undertake the review.

22. A new European Standard BS-EN3 and supporting national specification has been issued which requires a revised colour coding system to denote the contents of portable fire extinguishers.

23. The draft European Standard for firefighters' helmets (prEN 443) failed to achieve acceptance at its second enquiry. In respect of electrical properties the revised draft included 3 tests, 2 of which were optional. The Joint Committee considered this matter, and in the interim period brigades have been strongly advised to purchase helmets conforming to prEN 433 including the optional 'surface insulation test'.

24. The Home Office Fire Research and Development Group (FRDG) has completed its investigation into the possible deterioration of the chemical protective qualities of chemical protective clothing with use and a Research Report has been published. The Working Group on Chemical Protective Clothing is considering what further advice might be given to brigades in the light of the results of the research.

25. The Institute of Occupational Medicine has on behalf of the FRDG carried out research on the 'Study of the Degree of Protection Afforded by Firefighters' Clothing'. The Report has highlighted a number of issues which require clarification before further advice can be provided to brigades on physiological matters.

26. A research project has also been completed by the Institute of Occupational Medicine on 'The Effectiveness and Safety of Fire Hoods'. The Joint Committee has considered the Report and guidance is being prepared for issue to brigades.

27. The Joint Committee has continued to monitor developments on European Standards including items on firefighting suction hoses, non-percolating layflat hoses for first aid hose installations, semi-rigid reel hoses for firefighting pumps and vehicles, non-percolating layflat delivery hoses for hose assemblies for firefighting purposes and protective gloves for firefighters.

28. The Technical Sub-Committee has been requested to review existing Joint Committee on Design and Development (JCDD) vehicle specifications in the light of draft European standards and in particular to identify those aspects of the JCDD vehicle specifications which may require to be retained in the UK.

Joint Committee on Fire Brigade Communications

29. The Fire Service is continuing to take an interest in developments in the Public Safety Radio Communications Project (PSRCP) and are represented at meetings of the Major Sharers Forum which was established to keep potential sharers in the Project informed of its progress. As a result of the decision that the Fire Service would not be participating in the project definition phase of the PSRCP the Joint Committee agreed to the formation of a Radio Strategy Working Group to inform it of issues regarding the replacement of Fire Service radio communications. This approach will allow the Fire Service to explore alternative methods of meeting its needs for radio communications. A consultancy contract has been commissioned by the Home Office to investigate an alternative Fire Service contingency solution for England and Wales and in parallel the SCFBAC agreed that the Fire Service in Scotland should also participate and has agreed a contract with the consultants.

30. Information has been provided to brigades regarding a Service Level Agreement which has been negotiated with a commercial company for an Interim Mobile Data Network. This contract has been provided to simplify procurement for those brigades who wish to establish data communications with remote resources up to the time when the PSRCP or alternative solution is provided.

31. A Fire Service Control Room Staffing Model was issued to brigades to assist them with the measurement of staffing levels required. The model was designed to provide an indicator of the number of operators required to service a given workload to a given standard.

32. A small working group of the Home Office 999 Liaison Committee has produced a Strategic Framework Document to assist brigades in their efforts to combat the serious problem of malicious hoax 999 calls. The aim of the document is to increase awareness of the measures being undertaken across the country and to encourage more co-ordination at local level between the various agencies.

33. The consultancy project which was set up to investigate the applications and possible benefits of Automatic Vehicle Location Systems (AVLS) in the Fire Service has been completed. An AVLS has the capability to Report vehicle positions to a central control centre either at regular intervals or on demand, or a combination of both. Such a system could provide brigades with the capability to simplify and improve their mobilising arrangements by providing accurate data which can be utilised in selecting the nearest available appliance to an incident.

34. Volume 5 'The Control Room' of the Home Office Guidance on Fire Brigade Mobilising Systems has been revised. This volume provides brigades with guidance on the management, design and construction of control centres whilst ensuring that all brigade and user requirements are met.

35. In 1996, the Department of Transport and Industry published a consultative document that set out Government proposals to allocate 1.7/1.8 GHz radio spectrum to Cellnet and Vodafone for expansion of Personal Communications Network (PCN) cellular telephone services. This spectrum includes the existing Home Office and Scottish Office 1.8 GHz band which is used for multiplexed microwave links between Police and Fire Headquarters and hilltop sites. The Radio Communications Agency offered replacement spectrum for the re-assignment of Home Office/Scottish Office users' microwave links and following consultation the PCN operators have agreed to fully fund the re-tuning of emergency service links on the understanding that implementation will depend upon final agreement of affected brigades.

Joint Committee on Fire Research

36. The Fire Research Programme comprises 4 research areas - fire prevention and protection, Fire Service equipment, support to Fire Service operations and general support for scientific activities. The Committee met once during 1996-97, in November, and considered various fire related projects, as detailed in the Home Office Strategic Plan for Fire Research.

37. During the year the Committee considered 3 Reports from the FRDG. A brief summary of their work and conclusions reached is given below:

- i. Fire Safety Planning and Management - The Audit Commission report published in December 1992 emphasised the importance of the Fire Service's fire safety work; that is both preventing fires occurring and reducing their effect when they do. However, until recently the only guidance available to fire brigades to aid the efficient management of their fire safety work in respect of non-domestic premises was the 'Inbucon Guide' published some 20 years ago. Updated guidance in the form of a document entitled 'Guide to Fire Safety Planning and Management for Local Authority Fire Brigades' has now been produced and was distributed to fire brigades in March 1995. This Report summarises the information received from fire brigades during visits and from a questionnaire survey conducted by Home Office consultants whose findings formed the basis of the new guidance document. The report was circulated to brigades under cover of 'Dear Firemaster' Letter 4/1996.
- ii. Fire Service Ladders - The wide range of Fire Service ladders in current use has evolved over a number of years under various influences. The subject of Fire Service ladders attracted little research interest until 1993 when the Joint Committee on Fire Research asked the FRDG to carry out a brigade-based survey as part of the wider research being undertaken into fire appliance design. The study concluded that the ladder usage information is potentially of general value as part of the broader assessment of appliance design, taking into account parallel studies on stowage, water tank capacity and appliance purchasing arrangements. The summary report was circulated to brigades under cover of 'Dear Firemaster' Letter 8/1996.
- iii. Degradation of Chemical Protective Clothing - FRDG was asked to investigate the possible deterioration of the chemical protective qualities of chemical protective clothing with use. Chemical permeation tests were carried out on fabrics that are currently in chemical protection suits worn by the UK Fire Service. It was concluded that while some chemical protective clothing fabrics may sometimes suffer a deterioration in their permeation resistance that might not be detected by visual examination, the majority of the permeation tests revealed no significant differences between the performance of new fabrics and that of used fabrics. The report was circulated to brigades under cover of 'Dear Firemaster' Letter 2/1997.

38. There were 50 projects undertaken in 1996-97 and all the following examples give an indication of the range and content of the research:

- i. **Life Risk in Marquees** - the objective of this study is to establish whether the 5-6 metre distance quoted for the spacing of marquees in Home Office guidance is still applicable and adequate.
- ii. **Causes of Fire Deaths** - this project is to provide information to better target fire safety publicity in order to reduce the loss of life from fire.

- iii. **Assessment of Domestic Smoke Alarm Tests** - to assess the existing test method and, if this proves inadequate, to advise on possible alternatives.
- iv. **First-aid Firefighting** - this study is to establish the range and level of domestic first-aid firefighting which is undertaken in the UK in order that appropriate forms of guidance for the general public on how to deal with fires in the home can be considered.
- v. **Venting of Large Scale Fires** - to determine how much is known about the experimental and theoretical basis of venting as a firefighting tactic, to undertake a theoretical and practical assessment of the tactic and to develop safe working procedures, should it appear practical.
- vi. **Breathing Apparatus Guideline Procedures and Alternatives** - the object of this study is to review existing experience of the use of BA guidelines, to identify any problems, to consider alternative operational methods, and to evaluate any alternatives which appear to offer improvements.
- vii. **Development of a Compartment Fire Simulator** - to develop a backdraught simulator.
- viii. **Training Videos on the Behaviour of Fire, Flashover, Backdraught and Venting** - to produce training videos dealing with fire growth and flashover, backdraught, ventilation and firefighting that are suitable for informing firefighters at recruit, station and brigade level.

Other Joint Committees

39. For comments on the activities of the Joint Pensions Committee and the Equal Opportunities Joint Committee, see paragraphs 22 and 23, and 24 to 27 of Section B respectively and of the Joint Fire Safety Committee see paragraphs 74 to 77 of Section D.

Civil Defence and Emergency Planning

40. The concerns of the fire brigade are the saving of life in conjunction with other emergency services, the rescue of trapped casualties, tackling fire and, as necessary, released chemicals or other hazards, and assisting police and ambulance services with casualty handling and recovery of bodies. Fire brigade personnel are also best placed to advise on the safety of all agencies involved at the centre of operations in addition to gathering information on hazards via the UK databases 'Chemdata' and 'Chemnet'.

41. The Scottish Office has for some years now encouraged local authorities to devolve emergency planning on an 'Integrated Emergency Management' basis and to this end has continued to assist each brigade by providing funding sufficient to support a Brigade Emergency Planning Staff Officer. This officer is responsible to his Firemaster for the preparation and updating of the brigade's civil defence and other emergency plans. These should embody the strategic, tactical and operational functions necessary for an efficient interfaced response with other agencies.

42. In September and October of 1996 The SOHD sponsored a sixth series of general emergency planning courses for local authorities, emergency services and various other public and voluntary organisations. The venue and the format of these courses was changed to make them more student participative. Brigade personnel assisted in the preparation of the course material and also offered their assistance as course tutors. However, due to operational pressures no brigade personnel were utilised as tutors, but 9 did attend as students.

43. Joint exercising is a vital part of local disaster preparedness. Joint exercises test plans and procedures, provide practical training in the integrated response to disaster and enable working relationships to be formed between those likely to be involved in that response. Exercises may take a number of forms although currently the resource intensive 'Live' exercise along with the more cost effective 'Table-Top' exercise are the most commonly used. Computer based simulation will assist in the future as various forms of information technology become established in operations and emergency centres which will be helpful in enabling managers and operators to practice in a simulated operational environment.

44. Fire brigade personnel participated in over 100 exercises in Scotland, including a great many as the organising agency or lead authority, where the emergency response was tested in the event of:

- ◆ the release or threatened release of radioactive materials, or other hazardous substances;
- ◆ the spread of fire and explosions;
- ◆ aviation, maritime, road and rail accidents;
- ◆ environmental contamination.

The Fire InterNational Data Service (FINDS)

45. Since 1988 FINDS has provided fire brigades in the UK with electronic mail and on-line database facilities. Over the past 9 years many other fire-related organisations have also become subscribers to the system.

46. The second generation FINDS computer system has been in operation for 5½ years and is currently being replaced by FINDS III which will become operational early in 1997-98. The new system will be simpler to use, more flexible and will have greater potential for communications. It will be an intranet with secure links to and from the internet.

Fire Services National Benevolent Fund

47. The year 1996 was another successful year for the Fund, following the Recalled National Council it was resolved that the Charity Trustees of the Fund should be the National Executive Committee. An application was made to the Charity Commissioners which was ratified on 22 November 1996.

48. In excess of 6,000 persons received convalescent rest at either Littlehampton or Harcome. However, the majority attended in the summer with both centres being very quiet during the winter.

49. The decision was taken to convert a further 13 flats at Littlehampton into sheltered housing at a cost of £195,000.

50. All repairs have now been completed at Jubilee House in Penrith and the centre is working to full capacity. A considerable number of Scottish brigades' personnel have utilised the facilities to good effect.

51. The Fund had a total of 1,629 persons as beneficiaries on its register. A total of £770,112 was paid in grants to beneficiaries. In addition, £281,822 was paid in one-off hardship grants at local level. Christmas gifts to the value of £91,857 were given to those in need.

52. Income for the Scottish Group was down slightly at £174,182. This was balanced by a reduction in expenditure which was down to £59,844.

53. Nationally, income stood at £3,162,521 against expenditure of £3,369,055 giving an overall deficit for the year. Obviously this is a position the Fund cannot sustain over a prolonged period.

Competitions

54. To test firefighters' knowledge of and skills in fire technology and first aid, CACFOA organises annual competitions on these topics. Teams from throughout the UK may enter at local level, with the winners of the qualifying round progressing to District or national finals.

55. The National Firefighters' Quiz alternates between the wholetime and the retained service yearly and this year's competition was contested by retained personnel.

56. Five teams - Dumfries and Galloway, Fife, Grampian, Strathclyde and Tayside - competing in the District Final with Tayside being the eventual winners who went on to represent the Scottish District in the UK northern area semi-final to be held in Merseyside Fire Brigade Headquarters in March 1997. The winners of this event, Northumberland went forward to the National Final at the Fire Service College where Kent were eventually triumphant.

57. The First Aid Competition differs from the National Firefighters' Quiz in that it is open to wholetime, retained and control personnel.

58. Two teams from Strathclyde Fire Brigade represented the Scottish District at the National Final held at the Fire Service College on 7 June 1996. The eventual overall winners were West Yorkshire Fire Brigade.

59. During 1996-97 many youth organisations throughout Scotland competed in the National Fire Safety Youth Quiz.

60. This year the Scottish final was held in Dumfries with teams from Dumfries and Galloway, Fife, Grampian, Strathclyde and Tayside contesting a very evenly fought affair. The winners were once again the 1st Methlick Scouts - the winners the previous year - who represented the Grampian area. They then went on to represent the Scottish District in the Final at the Fire Service College on 5 October 1996. The 1st Methlick won the competition, bettering last year's performance of second place, with West Hill School of Greater Manchester coming second and South Sutton High School coming third.

Fire Services Sports and Athletics Association

61. As in the previous year the Scottish Districts Association had a change of Chairperson with Mr J McCall standing down to be replaced by Mr G Williams. I would like to take this opportunity to thank Mr McCall for his efforts over the past year.

62. The year 1996-97 saw the Association continue to grow in membership and events attended. The Association is now recognised as the strongest association of this type in Europe fielding teams in most events, which are also the best supported.

63. In the past year the athletics section attended a European Athletics competition in Aachen where they performed very strongly winning nearly all the trophies.

64. The past year also saw the first rugby competition between the strong Police Service and the Fire Service which ended with honours even.

65. In the coming year the football will be going to Hamburg to defend their European title and there will be a further rugby competition to be played in November 1997.



SECTION H: REPORT OF THE LAY INSPECTOR OF FIRE SERVICES

Introduction

1. In addition to a study of brigade activities, such as community education in fire safety matters, brigade education and training, media relations, community education, complaints and commendations to brigades from the public, etc, the Lay Inspector, during his inspection of the 8 Scottish fire brigades in 1996-97, concentrated upon 'customer relations' mainly through face-to-face interviews with members of the public who had either suffered a fire or whose premises had been inspected by fire officers for the statutory requirements of fire safety leading to the issue of or amendment to a fire certificate. In addition, he focused on brigade activities leading towards the acquisition of a Charter Mark as an indication of brigade dedication to excellence of service to the public.

Customer Relations

2. A total of 17 victims of fire including householders and large factory safety officers or managers and 36 applicants for fire certificates were interviewed in order to gain direct public opinion of the quality of service provided by each brigade in Scotland. Although the sample was relatively small a very clear indication of the high regard and high value of the Fire Service was gained.

3. In general, members of the public have a strong sense of security and confidence in their local fire station, whether it be wholetime or retained; the latter being staffed with trained part-time firefighters on call-out by means of pagers. The Lay Inspector's visits to victims of fire revealed enormous gratitude to their rescuers and in every case he was assured that no unnecessary damage had been caused during the actual extinction of fires. Answers to his questions relating to the speed of response to emergency calls indicated that the arrival of the fire appliance was amazingly quick, that firefighters were obviously well trained and knew exactly how to tackle the incident. In addition, firefighters were considered to be careful, caring and courteous.

4. Interviews with the 36 applicants for fire certificates produced only one dissatisfied customer who considered the whole exercise to be 'a waste of time'. Sadly, even after courteous and detailed explanations by the fire officer concerned, he remained unconvinced of the need for the additional fire precautions required in his hotel.

Complaints and Commendations

5. A further indication of public opinion was gained by the Lay Inspector by reading through the Complaints and Commendations fields of all the brigades. A total of 89 complaints had been received, 13 for alleged bad driving, 31 for unacceptable behaviour and 45 for perceived inefficiency. The majority of the latter referred to forced entry to turn off water supplies in private houses which had suffered burst pipes. Several of the complaints against the behaviour of firefighters were avoidable and the Lay Inspector was satisfied that adequate measures and counselling had been applied to ensure that such behaviour would

not be repeated. In every case complaints from members of the public were handled with the tact and courtesy of trained diplomats. All brigades have devised detailed complaints procedures and ensure that all complaints are answered speedily and sympathetically. In the majority of cases complainants were satisfied. Even anonymous letters of complaint were investigated and lessons learned from them.

6. Letters of commendation and gratitude far outnumber those of complaint in the ratio of approximately 10:1 and many of them were letters of thanks for roads and accident rescues, rescues from smoke-filled premises, talks to a wide variety of voluntary organisations and schools, and for visits to fire stations.

Media Relations

7. A perusal of brigade press cuttings files indicated the importance given to good relations with the media. All brigades are keen to foster these relations through their provision of Reports and photographs as well as invitations to the press to attend open days and presentations. All brigades emphasise the importance of media attention during 'Fire Safety Week' when the need to install and maintain smoke alarms is the predominant message in newspapers and television programmes.

Community Education

8. Community education in fire safety matters as well as the fatuity of making hoax fire calls are the main topics. These subjects are specially highlighted in Primary Schools where most Primary 7 children are given interaction talks and demonstrations by Fire Service officers in collaboration with school teachers. Such talks and demonstrations are specially effective when carried out with the professional assistance of a trained Primary teacher seconded to the brigade. Provision of Community Education throughout Scotland is variable and at best consists of well organised programmes specifically devised for all Primary and some Secondary Schools with activities and competitions staffed by a fire officer and a trained school teacher using a mobile classroom equipped with audio visual aids, models and interactive videos. At worst, brigades with severely diminished budgets are only able to provide occasional visits and talks to those schools which make a request. Such provision is therefore spasmodic and dependent on the awareness of and importance given to fire safety by individual schools. A highly satisfactory outcome of brigade fire safety education for schoolchildren is the obvious reduction of the frequency of hoax calls and malicious firesetting- this is particularly obvious in Lothian and Borders Fire Brigade.

9. In general, advice to the handicapped and the elderly is usually tackled by home helps and carers; the message is therefore unavoidably second-hand. One brigade has organised a system of weekly checks of smoke alarms by home helps. This elementary precaution is commendable and should be adopted by all brigades.

Statutory Examinations

10. The performance of candidates in Scotland is still capable of improvement. Scottish pass rates for 1996 were:

Leading Firefighter	43.7%;
Sub-Officer	27.6%; and
Station Officer	32.0%.

11. Candidates in most brigades study alone and rarely take notes during lectures which form part of their training sessions in fire stations. The Lay Inspector has recommended that examination candidates should be given opportunities to meet together not only for tutorial work but so that they may compare notes and share study problems. It is also essential that the extremely hard working training officers perform less of a 'spoon-feeding' role and more of an advisory and correcting role in which the written work of candidates is discussed with them.

Scottish Vocational Qualifications (SVQs)

12. No clear policy or course of action has yet been enunciated in relation to SVQs but most brigades have taken preparatory steps in the training of assessors and verifiers. Financial constraints have placed this subject low on the list of priorities but consideration is being given to the assessment of performance and therefore the competence of firefighters during their existing training programmes. Currently, training is ongoing, repetitive and very thorough, but it is not assessed. It is perfectly possible therefore to add the appropriate elements of assessment to comply with the requirements of awarding recognised vocational qualifications to firefighters thereby adding to their credibility in the eyes of the public.

Higher Education for Fire Officers

13. Some senior officers and civilian staff in brigades have completed higher degree, honours degree, diploma and certificate courses in subject areas which are helpful to their brigades as well as to their own career development. Again, finance makes provision variable. In some brigades it is possible to assist aspirants for higher qualifications both financially and with time off for attendance at courses of study, but in others, whilst encouragement is not lacking, there is no financial assistance and time off, if arranged, has to be made good.

Charter Mark

14. Any brigade which makes application for a Charter Mark opens itself to a very thorough examination of its activities insofar as they affect service to the public. This therefore is an area of immediate and acute concern to the Lay Inspector. He was disappointed that out of the 8 brigades in Scotland only one has applied for and received its Charter Mark. He has questioned senior officers in non-participating brigades about their reasons for not applying for this free audit. These include additional expenditure, lack of time to devote to the preparation required and in some cases there was a fear of failure and therefore of being seen to be inadequate in the eyes of the public. The Lay Inspector has made it his business to encourage the 7 brigades to apply and to be unconcerned about the prospect of so-called failure as this is a misconception. The purpose of the process of pursuing a Charter Mark is to obtain the free audit and thus to learn about possible improvements which can be made and which when made will lead to the award. He strongly recommends that brigades, which have not already done so, should make contact with Charter Mark officials to seek advice and reassurance about the process, following which they should make preparations to apply for their Charter Mark.

Commendable Innovations

15. Individual training records are signed by the officer-in-charge as and when training takes place and certification of satisfactory completion.

16. A programme of talks to all home helps in the brigade area, the regular checking of smoke alarms by home helps and the fitting of smoke alarms in the homes of the elderly at no charge.
17. A programme of talks to the residents of all sheltered housing complexes in the brigade area.
18. The use of statistical data to identify areas by postcode which have a high incidence of hoax calls and malicious fire-setting and the use of the data to provide a pro-active programme of fire safety education for those schools where there is greatest need.
19. The publication of easily read 'Fire Fact Sheets' for members of the public in both English and Gaelic.



APPENDICES

Scottish Fire Brigades 1996-97

Fire Brigade	Area		Population June 1994 (estimated)		Uniformed Personnel (1996-97 Establishments)				Fire Stations and Volunteer Units			Operational Fleet			
	km ²	% of Scotland	'000	%	Wholetime	Control	Retained	Volunteer	Wholetime	Retained	Volunteer	Pumping Appliances	Aerial Appliances	Rescue/ Emergency Tenders	Other Special Appliances
Central Scotland	2,652	3.4	274	5.3	243	17	170	24	4	11	3	27	1	1	4
Dumfries & Galloway	6,396	8.2	148	2.9	96	15	193	20	1	16	2	25	1	-	3
Fife	1,307	1.7	351	6.8	382	21	112	-	6	8	-	26	2	2	4
Grampian	8,702	11.1	528	10.3	336	22	466	32	*6	32	2	61	3	2	17
Highland & Islands	31,348	40.1	280	5.5	124	18	668	766	1	27	98	51	1	1	5
Lothian & Borders	6,430	8.2	859	16.8	742	30	295	-	13	24	-	53	5	3	2
Strathclyde	13,851	17.7	2,288	44.7	2,209	67	661	286	38	44	31	164	12	8	11
Tayside	7,501	9.6	393	7.7	409	18	276	36	6	15	4	44	3	6	9
SCOTLAND	78,187	100	5,121	100	4,541	208	2,841	1,164	*75	177	140	451	28	23	55

* includes 2 'day-manned' stations

Establishment and Strength of Fire Brigades as at 31 March 1997

	Central Scotland			Dumfries & Galloway			Fife			Grampian			Highland & Islands			Lothian & Borders			Strathclyde			Tayside			Scottish Total						
	Estab- lishment	Actual Strength		Estab- lishment	Actual Strength		Estab- lishment	Actual Strength		Estab- lishment	Actual Strength		Estab- lishment	Actual Strength		Estab- lishment	Actual Strength		Estab- lishment	Actual Strength		Estab- lishment	Actual Strength		Estab- lishment	Actual Strength					
		Male	Female		Male	Female		Male	Female		Male	Female		Male	Female		Male	Female		Male	Female		Male	Female		Male	Female	Male	Female	Male	Female
WHOLETIME OPERATIONAL																															
Firemasters	1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		8	8		
Assistant Firemasters	2	2		1	1		1	1		2	1		1	1		2	2		2	2		6	6		6	6		16	15		
Senior Divisional Officers																															
Divisional Officers I				1	1		1	1		3	4		1	1		4	4		4	4		6	3		6	3		17	14		
Divisional Officers II				2	2		4	4		6	6		4	4		3	3		12	12		6	7		6	7		34	33		
Divisional Officers III				2	2		2	2		6	6		3	3		7	7		14	13		14	13		8	7		35	33		
Assistant Divisional Officers	11	9		8	8		9	9		15	15		15	14		20	20		20	20		47	43		13	11		138	129		
Station Officers	23	17		9	8		37	39		36	36		12	9		54	54		54	54		192	194		37	35		400	392		
Sub-Officers	28	28		8	8		29	29		23	24		20	7		73	73		73	73		221	211		36	37		438	417		
Leading Firefighters	25	34		12	12		64	64		58	53		11	11		99	96		96	96		229	224		44	46		542	540		
Firefighters	148	145		52	47		234	229		192	194		56	57		477	468		477	468		1,478	1,483		263	260		2,900	2,883		
Totals	243	240	3	96	89	3	382	379	1	336	334	124	108	742	730	9	2,209	2,193	4	409	403	4	4,541	4,476	4	208	34	8,050	7,946		
CONTROL ROOM STAFF																															
PFC Officers																															
GFC Officers	1	1																													
FC Officers				1	1		1	1		2	1		1	1		5	5		5	5		5	4		4	1		15	2	14	
SFC Operators	4	2		1	1		4	4		5	4		4	4		4	4		4	4		8	3		4	1		3	6	27	
LFC Operators	4	1		3	4		8	2		6	4		4	4		4	4		4	4		8	2		6	4		4	7	33	
FC Operators	8	2		6	8		8	1		12	1		8	8		16	3		14	3		44	6		37	9		10	16	101	
Totals	17	6	11	15	2	14	21	4	17	22	1	22	18	17	30	4	67	13	53	18	4	27	13	67	13	53	18	4	15	176	
PART-TIME RETAINED																															
Station Officers																															
Sub-Officers	12	12		16	16		8	8		35	35		31	28		25	25		25	25		53	51		8	9		7	7	45	
Leading Firefighters	19	18		20	20		10	10		81	77		62	55		32	35		35	35		83	61		1	29		36	312	1	
Firefighters	139	118		6	157		92	73		339	289		562	283		234	219		219	219		517	471		9	221		180	8	2,261	
Totals	170	148	6	193	181	2	112	93	3	466	411	8	668	379	6	295	283	6	295	283	6	661	592	10	276	240	8	2,841	2,327	49	
PART-TIME VOLUNTEER																															
Assistant Divisional Officers																															
Station Officers																															
Sub-Officers																															
Leading Firefighters	3	2		2	2		4	4		4	4		95	91		2	2		2	2		21	15		4	4		4	4	2	
Firefighters	21	7		18	13		26	18		9	9		570	700		26	26		26	26		265	221		14	32		36	1	932	
Totals	24	9	15	20	15	1	32	25	9	766	888	30	888	888	30	286	236	14	36	40	1	1,164	1,213	55	40	1	1,164	1,213	55		
Wholtime	243	240	3	96	89	3	382	379	1	336	334	124	108	742	730	9	2,209	2,193	4	409	403	4	4,541	4,476	4	208	34	8,050	7,946		
Control Room Staff	17	6	11	15	2	14	21	4	17	22	1	22	18	17	30	4	27	13	53	18	4	67	13	53	18	4	15	208	34	176	
Part-time Retained	170	148	6	193	181	2	112	93	3	466	411	8	668	379	6	295	283	6	295	283	6	661	592	10	276	240	8	2,841	2,327	49	
Part-time Volunteer	24	9	15	20	15	1	32	25	9	766	888	30	888	888	30	286	236	14	36	40	1	1,164	1,213	55	40	1	1,164	1,213	55		
GRAND TOTALS	454	403	20	324	287	20	515	476	21	856	771	39	1,576	1,375	53	1,067	1,017	42	3,223	3,034	81	739	687	28	8,754	8,050	304	2,841	2,327	49	

Appendix 4

Summary of Fires and Special Service Incidents Which Have Occurred in 1996-97

Fire Brigade	Total Fires	Classification of fires by number of pumps used for firefighting purposes						Chimney Fires	Secondary Fires	False Alarms			Special Services	Totals
		(a) 1 Pump	(b) 2 Pumps	(c) 3/5 Pumps	(d) 6/10 Pumps	(e) 11/15 Pumps	(f) Over 15			Good Intent	Apparatus Faulty	Malicious		
Central Scotland	815	696	104	14	1			159	1,052	1,165	888	409	332	4,820
Dumfries & Galloway	416	272	126	16	2			431	270	572	194	134	257	2,274
Fife	1110*	390	585	131	2	1		323	1,762	530	1,768	710	553	6,756
Grampian	1,515	1,392	56	62	4	1		830	1,901	2,144	956	486	913	8,745
Highland & Islands	713	590	119	4				1,500	872	1,222	320	280	426	5,333
Lothian & Borders	3,578	1,358	1,460	751	8	1		586	4,947	1,397	6,481	1,362	1,488	19,839
Strathclyde	9,787	3,215	5,323	1,230	18		1	1,121	17,869	8,353	10,440	4,998	4,149	56,717
Tayside	1,593	439	970	184				398	2,846	644	2,812	626	663	9,582
Totals	19,527	8,352	8,743	2,392	35	3	1	5,348	31,519	16,027	23,859	9,005	8,781	114,066

* Includes a one officer attendance

Major Fires in 1996-97

REQUIRING AN ATTENDANCE OF 6 OR MORE PUMPING APPLIANCES

<i>DATE</i>	<i>ADDRESS</i>	<i>TYPE</i>	<i>BRIGADE</i>
1996			
April			
2	Glengyre Farm, Leswalt	Forest	Dumfries and Galloway
5	Quarters Farm, New Luce	Forest	Dumfries and Galloway
5	Netherburn Road, Larkhall	Forest	Strathclyde
5	Drumelzier Village	Heathland	Lothian and Borders
7	Rawhills Farm, Douglas, S Lanarkshire	Forest	Strathclyde
13	Jarvie Street, Bathgate	Warehouse	Lothian and Borders
May			
5	Scotseeds, Philipstoun	Warehouse	Lothian and Borders
22	Ettrick and Yarrow Mills, Dunstane Road, Selkirk	Disused Factory	Lothian and Borders
June			
16	Loch Doon, Dalmellington, E Ayrshire	Forest	Strathclyde
19	Reid Furniture, Picardy Place, Edinburgh	Offices and Shops	Lothian and Borders
25	Clashindarroch	Forest	Grampian
25	Ravenscraig Steelworks, Motherwell	Building	Strathclyde
July			
8	Randolph Industrial Estate, Kirkcaldy	Pallet Yard	Fife
30	Abbotsford School, Abbotsford Place, Glasgow	Building	Strathclyde
August			
4	Union Street, Newmilns	Disused Factory	Strathclyde
7	Fatima House, Coodham, Kilmarnock	Home unoccupied	Strathclyde
7	9/23 Farnell Street, Glasgow	Factory	Strathclyde
15	Brook Street, Glasgow	Pallet Yard	Strathclyde
17	Burnfield Place, Giffnock	Office	Strathclyde
20	Darvel Road, Newmilns	Disused Factory	Strathclyde
27	Overmills Road, Prestwick	Hotel unoccupied	Strathclyde
28	Greenykes Road, Edinburgh	Crops	Lothian and Borders

Performance Indicators Central Scotland Fire Brigade

Part 1 - Operational Data

	1993 - 1994	1994 - 1995	1995 - 1996	1996-97
OD1 - Number of emergency calls, other than false alarm calls, by type and as a percentage of the total:				
Fires	831 (36.4%)	756 (31.6%)	807 (25.6%)	815 (34.6%)
Secondary Fires	904 (39.5%)	1,013 (42.3%)	1,463 (46.4%)	1,052 (44.6%)
Chimney Fires	328 (14.3%)	289 (12.1%)	210 (6.7%)	159 (6.7%)
Special Services	223 (9.8%)	335 (14.0%)	672 (21.3%)	332 (14.1%)
Total	2,286	2,393	3,152	2,358
OD2 - Number of false alarm calls by type and as a percentage of the total:				
Good Intent	920 (40.3%)	1,187 (48.9%)	1,386 (49.9%)	1,165 (47.3%)
Apparatus	671 (29.3%)	765 (31.5%)	959 (34.6%)	888 (36.1%)
Malicious	694 (30.4%)	475 (19.6%)	431 (15.5%)	409 (16.6%)
Total	2,285	2,427	2,776	2,462
OD3 - Total number of (A) fire incidents and (B) special service incidents per 1,000 population:				
Fire Incidents	7.6	6.5	8.3	7.4
Special Service Incidents	0.8	1.2	2.5	1.2
All Incidents	8.4	7.7	10.8	8.6
OD4 - Total number of brigade recorded (A) Fatalities and (B) Non-fatal casualties per 1,000 FDR1 fires:				
Fatalities	1.2	5.3	2.5	8.6
Non-Fatal Casualties	92.7	112.4	128.9	110.4
OD5 - Number of Persons Rescued by the Service from (A) Fire and (B) Special Service Incidents per 1,000 Incidents:				
Fire Incidents	27.6	34.4	18.6	33.1
Special Service Incidents	336.3	271.6	151.8	304.2
All Incidents	93.0	107.2	79.1	111.6

Part 2 - Scottish Fire Indicators

SF1/1 The percentage of fire calls where the speed and number of pumping appliances met set criteria (ie in terms of the standards of fire cover):				
For Property Fires and Fire False Alarms	84.6%	85.8%	87.3%	87.7%
For Other Fires	85.8%	87.4%	71.8%	69.1%
SF1/2 The percentage of Shift Rider and Day Crew Rider Shifts Lost due to Sickness and Light Duties:				
Lost to all sickness	7.1%	6.0%	6.8%	5.2%
To short term sickness	4.1%	5.0%	5.2%	3.3%
To long term sickness	3.0%	1.0%	1.6%	2.0%
Lost due to service	1.7%	1.7%	1.1%	0.5%
Lost - not due to service	5.4%	4.3%	5.8%	4.8%
Lost due to light duties	*	*	*	Nil
<i>* Central Scotland Fire Brigade did not have a system of 'light duties' for these years, however, a system was introduced during 1995 - 96.</i>				
SF1/3 The percentage of rider wholetime shifts devoted to training activities while riders are off the run:				
Centralised Training	0.65%	0.67%	0.67%	1.37%
Outside Training	1.31%	0.79%	2.08%	1.94%
SF1/4 The number of wholetime uniformed personnel qualified for promotion to the next higher rank, as a percentage of actual Service strength for the rank:				
Firefighter	14.6%	18.0%	19.5%	20.3%
Leading Firefighter	56.7%	56.3%	68.8%	76.5%
Sub-Officer	36.0%	33.3%	21.4%	25.0%
SF1/5 The average time taken to handle calls to incidents and percentage handled within certain time periods:				
Average handling time*	1.04 mins	1.00 mins	1.17 mins	1.04 mins
% of calls handled in less than 1 minute	30.0%	30.0%	34.5%	50.0%
% of calls handled in between 1 and 2 minutes	59.3%	61.2%	56.1%	44.5%
% of calls handled in 2 minutes or more	10.7%	8.8%	9.4%	5.5%

* Central Scotland Fire Brigade record the time in minutes not seconds

Dumfries and Galloway Fire Brigade

Part 1 - Operational Data

	1993 - 1994	1994 - 1995	1995 - 1996	1996 - 1997
OD1 Number of emergency calls, other than false alarm calls, by type and as a percentage of the total:				
Fires	469 (31.5%)	432 (30.0%)	456 (25.8%)	416 (30.3%)
Secondary Fires	283 (19.0%)	313 (21.7%)	464 (26.3%)	270 (19.6%)
Chimney Fires	493 (33.1%)	416 (28.8%)	462 (26.2%)	431 (31.4%)
Special Services	243 (16.3%)	281 (19.5%)	384 (21.7%)	257 (18.7%)
Total	1,488	1,442	1,766	1,374

OD2 Number of false alarm calls by type and as a percentage of the total:				
Good Intent	549 (53.2%)	535 (58.2%)	583 (60.8%)	572 (63.6%)
Apparatus	180 (17.4%)	150 (16.3%)	230 (24.0%)	194 (21.5%)
Malicious	303 (29.4%)	235 (25.5%)	146 (15.2%)	134 (14.9%)
Total	1,032	920	959	900

OD3 Total number of (A) fire incidents and (B) special service incidents per 1,000 population:

Fire Incidents	8.4	7.8	9.3	7.6
Special Service Incidents	1.6	1.9	2.6	1.7
All Incidents	10.0	9.7	11.9	9.3

OD4 Total number of brigade recorded (A) Fatalities and (B) Non-fatal casualties per 1,000 FDR1 fires:

Fatalities	10.7	18.5	2.2	4.8
Non-Fatal Casualties	83.2	62.5	63.6	81.7

OD5 Number of Persons Rescued by the Service from (A) Fire and (B) Special Service Incidents per 1,000 Incidents:

Fire Incidents	27.7	16.2	8.8	16.8
Special Service Incidents	284.0	177.9	143.2	381.3
All Incidents	115.2	79.9	70.2	156.0

Part 2 - Scottish Fire Indicators

SF1/1 The percentage of fire calls where the speed and number of pumping appliances met set criteria (ie in terms of the standards of fire cover):

For Property Fires and Fire False Alarms	99.2%	99.5%	92.0%	71.7%
For Other Fires	99.8%	99.4%	97.2%	59.1%

SF1/2 The percentage of Shift Rider and Day Crew Rider Shifts Lost due to Sickness and Light Duties:

Lost to all sickness	8.7%	4.4%	4.4%	3.3%
To short term sickness	3.8%	2.1%	2.0%	3.0%
To long term sickness	4.9%	2.3%	2.3%	0.4%
Lost due to service	0.1%	0.7%	0.2%	0.1%
Lost - not due to service	8.5%	3.8%	4.2%	3.3%
Lost due to light duties	1.3%	0.1%	1.1%	Nil

SF1/3 The percentage of rider wholetime shifts devoted to training activities while riders are off the run:

Centralised Training	0.34%	0.02%	0.09%	3.12%
Outside Training	0.18%	0.04%	0.19%	2.24%

SF1/4 The number of wholetime uniformed personnel qualified for promotion to the next higher rank, as a percentage of actual Service strength for the rank:

Firefighter	70.8%	62.5%	44.2%	36.0%
Leading Firefighter	91.7%	91.7%	83.3%	33.3%
Sub-Officer	87.5%	87.5%	91.7%	100.0%

SF1/5 The average time taken to handle calls to incidents and percentage handled within certain time periods:

Average handling time*	* seconds	62 seconds	65 seconds	42 seconds
% of calls handled in less than 1 minute	*	60.6%	76.7%	78.5%
% of calls handled in between 1 and 2 minutes	*	32.5%	18.9%	17.4%
% of calls handled in 2 minutes or more	*	6.9%	4.4%	4.1%

* Figures for Dumfries and Galloway Fire Brigade were not available for this year

Fife Fire and Rescue Service

Part 1 - Operational Data

	1993 - 1994	1994 - 1995	1995 - 1996	1996-97
OD1 Number of emergency calls, other than false alarm calls, by type and as a percentage of the total:				
Fires	1,185 (34.3%)	1,032 (27.3%)	1,077 (24.7%)	1,110 (29.6%)
Secondary Fires	1,241 (35.9%)	1,861 (49.2%)	2,179 (50.1%)	1,762 (47.0%)
Chimney Fires	565 (16.4%)	439 (11.6%)	386 (8.9%)	323 (8.6%)
Special Services	462 (13.4%)	452 (11.9%)	710 (16.3%)	553 (14.8%)
Total	3,453	3,784	4,352	3,748
OD2 Number of false alarm calls by type and as a percentage of the total:				
Good Intent	1,170 (43.2%)	1,354 (48.9%)	1,732 (53.6%)	530 (17.6%)
Apparatus	559 (20.7%)	566 (20.5%)	728 (22.5%)	1,768 (58.8%)
Malicious	976 (36.1%)	848 (30.6%)	771 (23.9%)	710 (23.6%)
Total	2,705	2,768	3,231	3,008
OD3 Total number of (A) fire incidents and (B) special service incidents per 1,000 population:				
Fire Incidents	8.1	9.5	10.4	9.1
Special Service Incidents	1.1	1.3	2.0	1.6
All Incidents	9.2	10.8	12.4	10.7
OD4 Total number of brigade recorded (A) Fatalities and (B) Non-fatal casualties per 1,000 FDR1 fires:				
Fatalities	7.1	8.7	3.7	8.1
Non-Fatal Casualties	90.2	124.0	122.6	141.4
OD5 Number of Persons Rescued by the Service from (A) Fire and (B) Special Service Incidents per 1,000 Incidents:				
Fire Incidents	38.4	25.2	26.0	55.0
Special Service Incidents	371.6	238.9	238.0	170.3
All Incidents	126.2	90.3	110.2	150.3

Part 2 - Scottish Fire Indicators

SF1/1 The percentage of fire calls where the speed and number of pumping appliances met set criteria (ie in terms of the standards of fire cover):

For Property Fires and Fire False Alarms	94.7%	91.5%	92.4%	91.7%
For Other Fires	95.5%	92.7%	89.3%	90.2%

SF1/2 The percentage of Shift Rider and Day Crew Rider Shifts Lost due to Sickness and Light Duties:

Lost to all sickness	10.9%	6.9%	8.8%	10.5%
To short term sickness	3.5%	3.5%	3.7%	3.8%
To long term sickness	7.4%	3.4%	5.1%	6.7%
Lost due to service	1.6%	1.2%	1.5%	1.7%
Lost - not due to service	9.3%	5.7%	7.2%	8.8%
Lost due to light duties	*	0.2%	0.5%	0.7%

* The figure for Fife Fire and Rescue Service was not available for this year

SF1/3 The percentage of rider wholetime shifts devoted to training activities while riders are off the run:

Centralised Training	0.55%	1.92%	2.62%	4.68%
Outside Training	0.97%	1.65%	1.70%	3.48%

SF1/4 The number of wholetime uniformed personnel qualified for promotion to the next higher rank, as a percentage of actual Service strength for the rank:

Firefighter	27.7%	25.9%	31.6%	27.8%
Leading Firefighter	42.8%	37.5%	50.0%	29.7%
Sub-Officer	44.8%	34.5%	48.3%	34.5%

SF1/5 The average time taken to handle calls to incidents and percentage handled within certain time periods:

Average handling time	75 seconds	60 seconds	58 seconds	55 seconds
% of calls handled in less than 1 minute	49.5%	53.0%	62.8%	64.2%
% of calls handled in between 1 and 2 minutes	39.8%	38.7%	32.2%	31.7%
% of calls handled in 2 minutes or more	10.7%	8.3%	5.0%	4.1%

Grampian Fire Brigade

Part 1 - Operational Data

	1993 - 1994	1994 - 1995	1995 - 1996	1996-97
OD1	Number of emergency calls, other than false alarm calls, by type and as a percentage of the total:			
Fires	1,552 (33.4%)	1,503 (30.1%)	1,560 (26.2%)	1,515 (29.4%)
Secondary Fires	1,103 (23.8%)	1,884 (37.8%)	1,730 (29.0%)	1,901 (36.8%)
Chimney Fires	1,126 (24.3%)	846 (16.9%)	866 (14.5%)	830 (16.1%)
Special Services	859 (18.5%)	757 (15.2%)	1,805 (30.3%)	913 (17.7%)
Total	4,640	4,990	5,961	5,159
OD2	Number of false alarm calls by type and as a percentage of the total:			
Good Intent	1,884 (58.5%)	2,025 (60.6%)	2,262 (62.2%)	2,144 (59.8%)
Apparatus	755 (23.4%)	770 (23.1%)	961 (26.4%)	956 (26.7%)
Malicious	582 (18.1%)	544 (16.3%)	415 (11.4%)	486 (13.5%)
Total	3,221	3,339	3,638	3,586
OD3	Total number of (A) fire incidents and (B) special service incidents per 1,000 population:			
Fire Incidents	7.5	8.4	7.9	8.0
Special Service Incidents	1.9	1.5	3.4	1.7
All Incidents	9.4	9.9	11.3	9.8
OD4	Total number of brigade recorded (A) Fatalities and (B) Non-fatal casualties per 1,000 FDR1 fires:			
Fatalities	9.0	2.7	7.1	1.9
Non-Fatal Casualties	134.0	128.4	102.6	139.3
OD5	Number of Persons Rescued by the Service from (A) Fire and (B) Special Service Incidents per 1,000 Incidents:			
Fire Incidents	43.2	41.3	31.4	35.0
Special Service Incidents	311.8	453.1	123.1	168.7
All Incidents	145.8	179.2	80.6	85.3

Part 2 - Scottish Fire Indicators

SF1/1 The percentage of fire calls where the speed and number of pumping appliances met set criteria (ie in terms of the standards of fire cover):

For Property Fires and Fire False Alarms	*	91.9%	97.4%	93.4%
For Other Fires	*	92.0%	96.4%	90.5%

* Figures for Grampian Fire Brigade were not available for this year

SF1/2 The percentage of Shift Rider and Day Crew Rider Shifts Lost due to Sickness and Light Duties:

Lost to all sickness	*	*	2.2%	8.5%
To short term sickness	*	*	0.9%	4.0%
To long term sickness	*	*	1.2%	4.4%
Lost due to service	*	*	0.1%	0.6%
Lost - not due to service	*	*	2.1%	7.6%
Lost due to light duties	*	*	0.1%	1.1%

* Figures for Grampian Fire Brigade were not available for these years

SF1/3 The percentage of rider wholetime shifts devoted to training activities while riders are off the run:

Centralised Training	*	*	0.45%	0.40%
Outside Training	*	*	4.24%	3.40%

* Figures for Grampian Fire Brigade were not available for these years

SF1/4 The number of wholetime uniformed personnel qualified for promotion to the next higher rank, as a percentage of actual Service strength for the rank:

Firefighter	15.0%	15.6%	15.5%	16.5%
Leading Firefighter	20.3%	32.6%	27.8%	35.9%
Sub-Officer	12.9%	27.8%	17.9%	20.8%

SF1/5 The average time taken to handle calls to incidents and percentage handled within certain time periods:

Average handling time	47 seconds	38 seconds	47 seconds	51 seconds
% of calls handled in less than 1 minute	76.9%	75.9%	77.2%	73.4%
% of calls handled in between 1 and 2 minutes	20.8%	21.4%	20.5%	24.0%
% of calls handled in 2 minutes or more	2.3%	2.7%	2.3%	2.6%

Highland and Islands Fire Brigade

Part 1 - Operational Data

	1993 - 1994	1994 - 1995	1995 - 1996	1996-97
OD1	Number of emergency calls, other than false alarm calls, by type and as a percentage of the total:			
Fires	703 (18.6%)	710 (20.6%)	831 (19.1%)	713 (20.3%)
Secondary Fires	635 (16.8%)	673 (19.6%)	1,212 (27.8%)	872 (24.8%)
Chimney Fires	2,096 (55.4%)	1,710 (49.7%)	1,872 (42.9%)	1,500 (42.7%)
Special Services	349 (9.2%)	349 (10.1%)	446 (10.2%)	426 (12.2%)
Total	3,783	3,442	4,361	3,511
OD2	Number of false alarm calls by type and as a percentage of the total:			
Good Intent	855 (57.0%)	1,143 (62.4%)	1,330 (66.7%)	1,222 (67.1%)
Apparatus	216 (14.4%)	302 (16.5%)	354 (17.8%)	320 (17.5%)
Malicious	429 (28.6%)	387 (21.1%)	309 (15.5%)	280 (15.4%)
Total	1,500	1,832	1,993	1,822
OD3	Total number of (A) fire incidents and (B) special service incidents per 1,000 population:			
Fire Incidents	12.3	11.1	14.0	11.0
Special Service Incidents	1.3	1.3	1.6	1.5
All Incidents	13.6	12.4	15.6	12.5
OD4	Total number of brigade recorded (A) Fatalities and (B) Non-fatal casualties per 1,000 FDR1 fires:			
Fatalities	5.7	9.9	4.8	11.2
Non-Fatal Casualties	19.9	104.2 *	69.8	85.6
	<i>* increase due to a change in the Highland and Islands Fire Brigade's criteria for recording casualties</i>			
OD5	Number of Persons Rescued by the Service from (A) Fire and (B) Special Service Incidents per 1,000 Incidents:			
Fire Incidents	17.1	47.9	20.5	28.1
Special Service Incidents	204.2	123.2	217.5	291.1
All Incidents	80.8	72.7	89.3	126.4

Part 2 - Scottish Fire Indicators

SF1/1	The percentage of fire calls where the speed and number of pumping appliances met set criteria (ie in terms of the standards of fire cover):			
For Property Fires and Fire False Alarms	*	95.7%	91.0%	89.2%
For Other Fires	*	96.7%	83.8%	79.7%
	<i>* Figures for Highland and Islands Fire Brigade were not available for this year</i>			
SF1/2	The percentage of Shift Rider and Day Crew Rider Shifts Lost due to Sickness and Light Duties:			
Lost to all sickness	4.1%	5.5%	6.2%	7.3%
To short term sickness	2.5%	2.1%	2.4%	5.0%
To long term sickness	1.6%	3.4%	3.9%	2.3%
Lost due to service	1.0%	1.5%	0.8%	1.7%
Lost - not due to service	3.0%	4.0%	5.4%	5.6%
Lost due to light duties	*	*	Nil	0.4%
	<i>* Highland and Islands Fire Brigade did not have a system of light duties for these years</i>			
SF1/3	The percentage of rider wholetime shifts devoted to training activities while riders are off the run:			
Centralised Training	0.97%	0.13%	Nil*	2.17%
Outside Training	0.68%	0.63%	2.70%	2.17%
	<i>* Any centralised training was undertaken by personnel on delayed turnout, as a result no duty shifts were lost</i>			
SF1/4	The number of wholetime uniformed personnel qualified for promotion to the next higher rank, as a percentage of actual Service strength for the rank:			
Firefighter	34.6%	41.5%	39.3%	29.8%
Leading Firefighter	78.5%	72.7%	80.0%	72.7%
Sub-Officer	85.7%	57.1%	50.0%	57.1%
SF1/5	The average time taken to handle calls to incidents and percentage handled within certain time periods:			
Average handling time	72 seconds	68 seconds	63 seconds	66 seconds
% of calls handled in less than 1 minute	47.5%	52.9%	56.4%	57.8%
% of calls handled in between 1 and 2 minutes	43.0%	40.2%	38.4%	35.9%
% of calls handled in 2 minutes or more	9.5%	6.9%	5.2%	6.3%

Lothian and Borders Fire Brigade

Part 1 - Operational Data

	1993 - 1994	1994 - 1995	1995 - 1996	1996-97
OD1 Number of emergency calls, other than false alarm calls, by type and as a percentage of the total:				
Fires	3,793 (40.3%)	3,521 (34.8%)	3,730 (30.8%)	3,578 (33.8%)
Secondary Fires	3,624 (38.6%)	4,777 (47.1%)	6,113 (50.6%)	4,947 (46.7%)
Chimney Fires	868 (9.2%)	702 (6.9%)	691 (5.7%)	586 (5.5%)
Special Services	1,118 (11.9%)	1,138 (11.2%)	1,555 (12.9%)	1,488 (14.0%)
Total	9,403	10,138	12,089	10,599
OD2 Number of false alarm calls by type and as a percentage of the total:				
Good Intent	4,567 (59.4%)	5,007 (64.8%)	5,299 (57.1%)	1,397 (15.1%)
Apparatus	1,319 (17.2%)	1,360 (17.6%)	2,791 (30.1%)	6,481 (70.1%)
Malicious	1,800 (23.4%)	1,356 (17.6%)	1,188 (12.8%)	1,362 (14.8%)
Total	7,686	7,723	9,278	9,240
OD3 Total number of (A) fire incidents and (B) special service incidents per 1,000 population:				
Fire Incidents	9.7	10.5	12.3	10.6
Special Service Incidents	1.3	1.3	1.8	1.7
All Incidents	11.0	11.9	14.1	12.3
OD4 Total number of brigade recorded (A) Fatalities and (B) Non-fatal casualties per 1,000 FDR1 fires:				
Fatalities	3.7	2.3	1.9	2.0
Non-Fatal Casualties	95.4	88.6	86.3	105.4
OD5 Number of Persons Rescued by the Service from (A) Fire and (B) Special Service Incidents per 1,000 Incidents:				
Fire Incidents	39.3	37.5	23.9	41.1
Special Service Incidents	201.2	176.6	155.0	184.1
All Incidents	76.2	71.5	62.4	83.1

Part 2 - Scottish Fire Indicators

SF1/1 The percentage of fire calls where the speed and number of pumping appliances met set criteria (ie in terms of the standards of fire cover):				
For Property Fires and Fire False Alarms	91.3%	91.4%	91.8%	93.5%
For Other Fires	90.7%	89.9%	91.3%	91.3%
SF1/2 The percentage of Shift Rider and Day Crew Rider Shifts Lost due to Sickness and Light Duties:				
Lost to all sickness	5.9%	6.0%	6.8%	6.3%
To short term sickness	3.0%	2.7%	3.6%	3.1%
To long term sickness	2.8%	3.4%	3.2%	3.2%
Lost due to service	0.8%	0.6%	0.5%	0.6%
Lost - not due to service	5.1%	5.5%	6.2%	5.7%
Lost due to light duties	1.7%	0.9%	0.5%	0.6%
SF1/3 The percentage of rider wholetime shifts devoted to training activities while riders are off the run:				
Centralised Training	1.07%	1.73%	0.85%	1.59%
Outside Training	0.11%	0.87%	2.85%	1.85%
SF1/4 The number of wholetime uniformed personnel qualified for promotion to the next higher rank, as a percentage of actual Service strength for the rank:				
Firefighter	24.3%	23.1%	24.7%	20.8%
Leading Firefighter	36.8%	30.0%	35.6%	28.1%
Sub-Officer	30.0%	30.6%	35.3%	23.3%
SF1/5 The average time taken to handle calls to incidents and percentage handled within certain time periods:				
Average handling time	* seconds	* seconds	* seconds	* seconds
% of calls handled in less than 1 minute	*	*	*	*
% of calls handled in between 1 and 2 minutes	*	*	*	*
% of calls handled in 2 minutes or more	*	*	*	*

• Figures for Lothian and Borders Fire Brigade are not available

Strathclyde Fire Brigade

Part 1 - Operational Data

	1993 - 1994	1994 - 1995	1995 - 1996	1996-97
OD1	Number of emergency calls, other than false alarm calls, by type and as a percentage of the total:			
Fires	10,242 (31.0%)	9,731 (28.5%)	10,512 (25.3%)	9,787 (29.7%)
Secondary Fires	17,113 (51.8%)	18,850 (55.2%)	23,895 (57.6%)	17,869 (54.3%)
Chimney Fires	1,800 (5.5%)	1,267 (3.7%)	1,301 (3.1%)	1,121 (3.4%)
Special Services	3,854 (11.7%)	4,297 (12.6%)	5,796 (14.0%)	4,149 (12.6%)
Total	33,009	34,145	41,504	32,926
OD2	Number of false alarm calls by type and as a percentage of the total:			
Good Intent	11,632 (38.1%)	12,342 (50.7%)	12,570 (49.3%)	8,353 (35.1%)
Apparatus	4,956 (16.2%)	5,048 (20.8%)	7,228 (28.4%)	10,440 (43.9%)
Malicious	13,970 (45.7%)	6,926 (28.5%)	5,681 (22.3%)	4,998 (21.0%)
Total	30,558	24,316	25,479	23,791
OD3	Total number of (A) fire incidents and (B) special service incidents per 1,000 population:			
Fire Incidents	12.0	13.0	15.6	12.6
Special Service Incidents	1.6	1.9	2.5	1.8
All Incidents	13.6	14.9	18.2	14.4
OD4	Total number of brigade recorded (A) Fatalities and (B) Non-fatal casualties per 1,000 FDR1 fires:			
Fatalities	4.1	4.3	5.6	5.9
Non-Fatal Casualties	75.0	81.7	80.4	86.1
OD5	Number of Persons Rescued by the Service from (A) Fire and (B) Special Service Incidents per 1,000 Incidents:			
Fire Incidents	22.6	23.0	21.9	22.5
Special Service Incidents	91.3	132.9	38.5	39.3
All Incidents	40.4	56.7	38.9	43.4

Part 2 - Scottish Fire Indicators

SF1/1	The percentage of fire calls where the speed and number of pumping appliances met set criteria (ie in terms of the standards of fire cover):			
For Property Fires and Fire False Alarms	*	*	*	*
For Other Fires	*	*	*	*
• <i>Figures for Strathclyde Fire Brigade are not available</i>				
SF1/2	The percentage of Shift Rider and Day Crew Rider Shifts Lost due to Sickness and Light Duties:			
Lost to all sickness	7.9%	9.0%	8.8%	8.6%
To short term sickness	3.2%	3.3%	3.6%	3.8%
To long term sickness	4.7%	5.8%	5.3%	4.8%
Lost due to service	1.2%	1.1%	0.9%	0.8%
Lost - not due to service	6.8%	7.8%	7.8%	7.9%
Lost due to light duties	*	*	0.04%	0.1%
• <i>Strathclyde Fire Brigade did not have a system of 'light duties' for these years</i>				
SF1/3	The percentage of rider wholetime shifts devoted to training activities while riders are off the run:			
Centralised Training	1.21%	0.85%	0.85%	2.25%
Outside Training	0.75%	0.55%	0.05%	1.99%
SF1/4	The number of wholetime uniformed personnel qualified for promotion to the next higher rank, as a percentage of actual Service strength for the rank:			
Firefighter	15.0%	3.8%	6.1%	6.3%
Leading Firefighter	23.3%	7.4%	9.6%	13.0%
Sub-Officer	18.8%	16.3%	11.9%	25.6%
SF1/5	The average time taken to handle calls to incidents and percentage handled within certain time periods:			
Average handling time	* seconds	* seconds	* seconds	* seconds
% of calls handled in less than 1 minute	*	*	*	*
% of calls handled in between 1 and 2 minutes	*	*	*	*
% of calls handled in 2 minutes or more	*	*	*	*
• <i>Figures for Strathclyde Fire Brigade are not available</i>				

Tayside Fire Brigade

Part 1 - Operational Data

	1993 - 1994	1994 - 1995	1995 - 1996	1996-97
OD1 Number of emergency calls, other than false alarm calls, by type and as a percentage of the total:				
Fires	1,710 (30.6%)	1,682 (28.0%)	1,637 (25.8%)	1,593 (29.0%)
Secondary Fires	2,629 (47.1%)	3,276 (54.5%)	3,161 (49.8%)	2,846 (51.7%)
Chimney Fires	602 (10.8%)	469 (7.8%)	418 (6.6%)	398 (7.2%)
Special Services	645 (11.5%)	580 (9.7%)	1,130 (17.8%)	663 (12.1%)
Total	5,586	6,007	6,346	5,500
OD2 Number of false alarm calls by type and as a percentage of the total:				
Good Intent	1,735 (55.9%)	2,000 (58.5%)	930 (23.4%)	644 (15.8%)
Apparatus	647 (20.8%)	662 (19.4%)	2,352 (59.1%)	2,812 (68.9%)
Malicious	723 (23.3%)	756 (22.1%)	696 (17.5%)	626 (15.3%)
Total	3,105	3,418	3,978	4,082
OD3 Total number of (A) fire incidents and (B) special service incidents per 1,000 population:				
Fire Incidents	12.5	13.7	13.2	12.3
Special Service Incidents	1.6	1.5	2.9	1.7
All Incidents	14.9	15.2	16.1	14.0
OD4 Total number of brigade recorded (A) Fatalities and (B) Non-fatal casualties per 1,000 FDR1 fires:				
Fatalities	10.5	2.4	3.1	5.0
Non-Fatal Casualties	59.1	82.6	69.6	98.6
OD5 Number of Persons Rescued by the Service from (A) Fire and (B) Special Service Incidents per 1,000 Incidents:				
Fire Incidents	34.5	26.2	29.9	31.4
Special Service Incidents	221.7	277.6	126.6	206.6
All Incidents	85.5	90.6	69.4	82.9

Part 2 - Scottish Fire Indicators

SF1/1 The percentage of fire calls where the speed and number of pumping appliances met set criteria (ie in terms of the standards of fire cover):				
For Property Fires and				
Fire False Alarms	94.5%	88.6%	84.6%	85.6%
For Other Fires	94.8%	85.8%	83.2%	82.6%
SF1/2 The percentage of Shift Rider and Day Crew Rider Shifts Lost due to Sickness and Light Duties:				
Lost to all sickness	4.7%	4.3%	4.2%	3.7%
To short term sickness	2.3%	1.7%	2.0%	2.1%
To long term sickness	2.4%	2.6%	2.2%	1.7%
Lost due to service	0.4%	0.6%	0.4%	0.5%
Lost - not due to service	4.3%	3.7%	3.8%	3.3%
Lost due to light duties	0.1%	0.2%	0.8%	0.1%
SF1/3 The percentage of rider wholetime shifts devoted to training activities while riders are off the run:				
Centralised Training	0.75%	1.02%	0.45%	0.52%
Outside Training	3.02%	3.82%	3.25%	1.81%
SF1/4 The number of wholetime uniformed personnel qualified for promotion to the next higher rank, as a percentage of actual Service strength for the rank:				
Firefighter	41.0%	36.6%	39.6%	40.5%
Leading Firefighter	89.1%	48.9%	66.7%	65.2%
Sub-Officer	71.0%	74.4%	72.2%	70.3%
SF1/5 The average time taken to handle calls to incidents and percentage handled within certain time periods:				
Average handling time	* seconds	* seconds	54 seconds	56 seconds
% of calls handled in less than 1 minute	*	*	67.0%	65.7%
% of calls handled in between 1 and 2 minutes	*	*	27.6%	31.7%
% of calls handled in 2 minutes or more	*	*	5.4%	2.6%

* Figures for Tayside Fire Brigade were not available for these years

Financial Returns 1996-97

Brigade	Revenue £	Income £	Capital £
Central Scotland	9,412,000	804,000	907,600
Dumfries and Galloway	4,986,200	41,309	585,000
Fife	12,982,013	1,344,460	802,000
Grampian	15,661,000	1,240,000	2,290,000
Highland and Islands	9,096,666	69,073	1,573,968
Lothian and Borders	26,674,000*	277,314*	2,216,581*
Strathclyde	76,831,160	5,314,850	6,131,618
Tayside	16,490,000	1,100,000	1,570,000
Totals	172,133,039*	10,191,006*	16,076,767*

• *Provisional figures*

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