

TITLE PAGE

**Women Firefighters:
Comparing and contrasting recent employment experiences
in the U.K. and the U.S.A.**

Submitted by

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to the University of Exeter as a dissertation towards the degree of Master of Arts by advanced study in Professional Development in Management, March 2003.

I certify that all material in this dissertation which is not my own work has been identified, and that no material is included for which a degree has previously been conferred upon me.

..... (signature of candidate).

ABSTRACT

This study compared how the United States of America (in particular, initially, the State of Mississippi) attracts and retains women Firefighters and what lessons could be learnt from their experiences that would enable the United Kingdom to increase the number of women Firefighters currently employed. The various problems encountered by currently employed women Firefighters both in the United States of America and United Kingdom would be sought and analysed.

The United States of America has employed women Firefighters for over a hundred years. By comparison, the United Kingdom employed its first woman Firefighter in 1982.

Firefighting in the United Kingdom is still considered to be primarily a white, male-dominated career.

Coded postal and email questionnaires were distributed to the voluntary respondents of an email message sent to women Firefighters within Devon Fire & Rescue Service and the United States of America (initially in the State of Mississippi).

From a total of 15 questionnaires distributed in the United Kingdom, 13 (87%) were returned. The total number of questionnaires circulated in the United States of America was 32, and 19 (59%) were returned. This provided a mixture of quantitative, and to a lesser extent, qualitative data.

Subsequently, semi-structured interviews were held with four United Kingdom women Firefighters to enable further qualitative data to be obtained.

A further reply was received via email from a woman Firefighter who preferred to respond in this way rather than be interviewed.

The main results identified: -

- ? that much could still be done to encourage more women in the United Kingdom to consider a career as a Firefighter.
- ? that the majority of the United Kingdom equal opportunities guidance aimed at Fire Services over the past 10 years has been largely ignored.
- ? station facilities for women were not necessarily considered.
- ? more work was needed at school level to encourage girls and boys to consider non stereo- typical careers, including that of Firefighter.

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TABLE OF CONTENTS

	Title page	1
	Acknowledgement	2
	Abstract	3
	Table Of Contents	5
1.	Introductory Rationale	8
1.1	Introduction	8
1.2	United Kingdom	10
1.2.1	Background	14
1.3	United States of America	16
1.3.1	Background	17
2.	Literature Review	20
2.1	Introduction	20
2.2	United Kingdom Literature	22
2.3	United States of America Literature	39
3.	Quantitative and Qualitative Study Design	44
3.1	Aim	44
3.2	Background	46
3.3	Validity and Reliability	48
3.4	Respondent/Researcher Bias	50
3.5	Confidentiality and Anonymity	51
4.	Research Methodology	52
4.1	<u>Study Design – Questionnaire</u>	52
4.2	Pilot Study - Questionnaire	54
4.3	Questionnaire Design	55
4.4	United Kingdom Questionnaires	59
4.5	United States of America Questionnaires	61
4.6	Questionnaire Analysis	63
4.7	<u>Study Design – United Kingdom Interviews</u>	64
4.8	Pilot Study – United Kingdom Interviews	68
4.9	United Kingdom Interview Design	69
4.10	United Kingdom Interviews	70
4.11	United Kingdom Interview Analysis	71

5.	Data Results	72
5.1	Questionnaire Data	72
5.2	Questionnaire Results	73
5.2.1	Physical Ability	87
5.2.2	Need to Keep Proving Oneself	88
5.3	United Kingdom Interview Data	89
5.3.1	Training Course	93
5.3.2	Isolation and Segregation	94
5.3.3	Physical Ability	95
6.	Discussion	96
6.1	<u>Analysis of Questionnaire Results</u>	96
6.1.1	Physical Ability	111
6.1.2	Need to Keep Proving Oneself	112
6.1.3	Home Office Targets	113
6.1.4	The Changing Role and Techniques	115
6.1.5	Equal Opportunities Training	116
6.2	<u>Analysis of United Kingdom Interview Results</u>	117
6.2.1	Training Course	126
6.2.2	Isolation and Segregation	127
6.2.3	Physical Ability	128
6.2.4	Bullying	129
6.2.5	Femininity	130
6.2.6	Initiation Ceremonies	132
6.3	<u>Other Considerations</u>	134
6.3.1	Carry Over From The War?	134
6.3.2	Facilities	137
6.3.3	Equal Opportunities	139
6.3.4	Former and Future Recruitment Requirements	141
6.3.5	Pension Scheme	143
6.3.6	Historical Terms	144
7.	Limitations of Study	145
7.1	Limitations of the Questionnaire	145
7.2	Limitations of the Interview	147
7.3	Other Limitations	148
8.	Conclusions and Recommendations	150
8.1	Aim of Study	150
8.2	Conclusions	151
8.3	Recommendations	155
9.	Appendices	
A	Number of Men and Women Ff's employed in the U.K.	156
B	Organisation Structure of the Fire Service in England & Wales	157
C	Recruitment Advertising 2000 - Kent Fire Brigade	158
D	Recruitment Advertising 2000 – London Fire & Civil Defence Auth.	159
E	Retention and Career Targets for Women Ff's Nationwide	160
F	Internet Notice Board Message - Mississippi Ff's Assoc., U.S.A.	161
G	Internet Notice Board Message – sent to Fire Departments in U.S.A.	162
H	Ethical Approval from the Chief Fire Officer of Devon	163
I	Questionnaire Design Checklist	164
J	Women Ff's Questionnaire	167
K	Email sent to women Ff's in Devon regarding research project	174
L	Email sent to Divisional Commanders regarding Ff interviews	175
M	Interview Questions and Checklist	176
N	Email sent to women Ff's in Devon regarding interviews	178

O	Additional Qualitative Data from Questionnaires	179
P	Additional Qualitative Data from Interviews	184
10.	Glossary	186
11.	List of References	188
12.	Bibliography	197

1. INTRODUCTORY RATIONALE

1.1 Introduction

“...it should be realised that just as with men, there are some women who are capable of being firefighters and some who are not.” (Bucke 1994:ix)

This research study was undertaken to compare and contrast how American and British women Firefighters (Ff's) were initially attracted and then retained in employment. With approximately 200 years experience of employing women in the role of Ff's, it was hoped that such research would enable the United Kingdom (U.K.) Fire Services, and the Devon Fire & Rescue Service (D.F.R.S.) in particular, to learn from the United States (U.S.) mistakes and take on, wherever feasible and relevant to the U.K., the many good points and policies learnt in the U.S.

The Devon Fire & Rescue Service sponsored the researcher of this document and a uniformed colleague to visit the United States for a two week duration during June 2002. The uniformed colleague carried out his own research into hazardous substances and materials, with particular emphasis on possible terrorist threats.

The State of Mississippi was chosen due to the links between the Chief Fire Officer of D.F.R.S. and the County Fire Services Coordinator of Oktibbeha County, Mississippi.

It should also be noted that the gender neutral term 'Firefighter' is used throughout this document. Although where it is necessary to state the gender of a Ff, this term is preceded by 'woman' or 'female' and 'man' or 'male'.

However on advice from equality organisations, the term 'female firefighter' should, wherever possible be replaced with 'woman firefighter'. Nonetheless, this can sometimes result in a somewhat cumbersome and grammatically incorrect opposing title of 'man firefighter'. Leniency in this regard is therefore requested.

1.2 United Kingdom

The Devon Fire Brigade was formed in 1973 by the amalgamation of Exeter City, Plymouth City and Devon County Brigades. It changed its name to Devon Fire & Rescue Service in 1987 to reflect the widening role of the Firefighter. In 1998 it became a Unitary Fire Authority when control of the Fire Service moved from Devon County Council to a Combined Fire Authority, formed by representatives of two Unitary Authorities, namely Plymouth and Torbay, and the remaining Devon County Council.

The Service establishment is 557 wholetime, 744 retained, and 12 volunteer Firefighters. In addition, the Service employs 26 fire control personnel and 127 non-uniformed staff. The establishment is the number of personnel that can be employed by the D.F.R.S. Any reduction in staff numbers, fire appliances or stations cannot be made without the prior authority from the Office of the Deputy Prime Minister (O.D.P.M.). The actual number of staff employed by D.F.R.S. and the rest of the U.K. is shown, split into gender, in Appendix A.

Of the 58 fire stations across the county, 10 are wholetime (covered 24 hours per day), 46 are retained (only crewed when called to an incident, or when attending the weekly drill (exercise) night), 1 is day crewed (covered for nine hours per day, with retained at night) and 1 is a volunteer station (crewed in the same way as a retained station). Five of the busier wholetime stations additionally have a retained personnel element.

Fire control personnel answer all '999' calls, and then mobilise fire appliances and officers to the incident. In addition, they contact other emergency services such as the police, ambulance or coastguard, as necessary. This may be due to the fact that a road traffic accident necessitates the closure of the road by the police, or ambulance personnel are needed.

Retained Ff's receive an annual retaining fee of £1881 (£1410 for part cover i.e. part-time commitment), a weekly drill fee of £12.22 and an attendance fee of £7.56 or turnout fee of £13.93 for each fire call. The 'retaining fee' is as the name suggests, an amount paid to personnel who make themselves available to attend emergency calls. In addition, the drill fee is paid to staff who attend the weekly exercise or drill night. An attendance fee is paid to personnel who react to their alerter and present themselves at the station. However, as soon as sufficient personnel have arrived at the station to crew the fire appliance, they 'turn out' (make their way to the emergency scene). Those Ff's who arrive after the appliance has left the station, and therefore do not attend the emergency, receive an attendance fee. They are then free to return to what they were doing prior to the alerter sounding. Personnel receive a turnout fee when they reach the station in time to crew the appliance and attend the incident. (Figures correct at time of writing).

As the third largest of the non-metropolitan counties in the country, only exceeded in administrative area by North Yorkshire and Cumbria, Devon Fire & Rescue Service provides protection for an area of over 2591 square miles, and a population of more than one million. Devon Firefighters attend an average of over 16,000 incidents each year.

In addition to the Service Headquarters site at Clyst St George, Exeter, each of the four Divisional Headquarters, managed by a Divisional Commander, has its own non-uniformed support staff and is responsible for Operational service delivery and Fire Safety activities.

Two workshops maintain the fleet of 81 front-line fire appliances and other associated ancillary vehicles.

The Fire Service, nationwide, is largely a white, male-dominated organisation (Baigent 2001) that is named as institutionally racist and sexist (Baigent 1996, Her Majesty's Chief Inspector of Fire Services (H.M.C.I.F.S.) 1999) – this image (and reality) was something the Department for Transport, Local Government and Regions* (D.T.L.R.), was keenly trying to change (H.M.C.I.F.S. 1999). It is Government's belief that the Service should reflect the community it is serving and as such, should actively encourage female and ethnic minority members to join. As Homer (1992:40) pointed out, an increase in the number of women Ff's employed, would enhance the culture of the Service, which in turn would "...broaden the generic skills level..." and make the "...service more effective."

However, in 2002, 98.3% of U.K. Ff's were still male and 98.5% were still white (Bain *et al.*, 2002).

The employers organisation, the National Joint Council (N.J.C.) for Local Authorities' Fire Brigades, produces the terms and conditions of employment for all Uniformed staff within the 'Scheme of Conditions of Service'. These conditions of employment are contained within what is more commonly known as the 'Grey Book'.

*The Home Office (H.O.) was the over-seeing government department for all U.K. Fire Services for a number of years. This was then superseded, firstly by the Department for Transport, Local Government and Regions and more recently (2002) by the Office of the Deputy Prime Minister.

The organisational structure of the Fire Service in England and Wales, (Bain *et al* 2002:27) is shown as Appendix B. This provides details of the complicated inter-woven roles and responsibilities of the organisations involved with the Fire Service, including those of Her Majesty's Fire Service Inspectorate and the N.J.C.

By 2001, the former title Fire 'Brigade' had almost entirely been replaced by Fire 'Service' when 70% of organisations had adopted the new term. Both terms are used in this document and refer equally to publicly funded organisations that provide fire protection and associated duties to the general public and private organisations. No difference should therefore be assumed when the term 'Brigade' is used rather than 'Service' or vice versa.

1.2.1 U.K. Background

In 1937, with the threat of war looming, the Home Office issued the first Circular where the enrolment of women into the Fire Service was mentioned (Demarne 1995:1). In February 1938 this was followed by a second Circular where the recruitment of women on a voluntary unpaid basis was made. It referred to the fact that should war break out, the women would be expected to take on the role in a full-time capacity. This resulted in the National Fire Service (N.F.S.) enrolling 80,000 women at its busiest time, on a part and full-time basis. (Demarne 1995: xiv)

As one might expect, this caused a certain amount of outrage amongst the Firemen who had only known the Service as a totally male domain.

While women were employed as 'Firewomen' by the Service, they were not allowed to carry out the role of firefighter as we know it today. Instead, they were involved in taking fire calls and mobilising fire appliances, as well as providing "...mobile kitchens; dispatch riders, canteen vans, field telephone units, hose laying vans and ancillary vehicles...." (Demarne 1995:74). However, it was recognised that a rudimentary knowledge of firefighting techniques might be useful when the women were left on their own at the fire station, while the Firemen were out on the appliance.

However the first woman Ff was not officially appointed on an equal footing to the men and carrying out the same role, until 1982. This was to the London Fire Brigade, now the London Fire & Emergency Planning Authority. This was as a result of equality issues being

pursued by a labour authority and additionally by the efforts of the then Greater London Council leader, Mr. Ken Livingstone.

1.3 United States

In the U.S., Firefighters are employed in one of three categories – that of career (our wholetime equivalent); volunteer (retained) and paid on call (volunteer).

Career Ff's are paid* a very similar starting salary to our wholetime Ff's (£17208* at age 19 years or over), while paid on call Ff's receive a figure somewhere in the region of £3.50 to £6.50 per call and volunteer Ff's receive no payment at all.

In the U.S., neither paid on call nor volunteer Ff's receive any retaining fee for making themselves available to attend any fire calls. While paid on call Ff's do at least receive some kind of small re-imbusement for their time and trouble, volunteer Ff's do not receive any assistance with their fuel or general car expenses (bearing in mind that the majority attend incidents in their own vehicle rather than delaying their attendance by returning to their fire department first). However, they are covered by insurance while they are on duty and provided with equipment.

*The U.S. salaries and rates quoted are examples, as they alter from Fire Department to Fire Department and State to State.

1.3.1 U.S. Background

Women have been involved in volunteer Fire Departments for almost two centuries, with the first woman volunteer Ff being appointed in the early 1800's. The outskirts of, for example, Los Angeles had companies (fire stations) of solely women Ff's to protect the area from fire from the early 20th century.

Currently, volunteer Fire Departments provide cover for rural areas covering thousands of square miles, with career Ff's being out-numbered by volunteer Ff's on a scale of one to three (Federal Emergency Management Agency (F.E.M.A.)/United States Fire Administration (U.S.F.A.) 1999)).

There are approximately 6,200 women employed in the U.S. as career Ff's and an estimated further 30,000 to 40,000 women volunteer Ff's (www.wfsi.org).

However, volunteer Fire Departments have not been without their share of problems, and some continue to face challenges in the areas of recruitment, particularly with the emphasis on women and ethnic minorities.

To better understand the U.S. Fire Departments, whether career, volunteer or paid on call, a number of facts need to be realised.

Firstly, there is not an overseeing body to supervise or co-ordinate activities across the wide expanse of the U.S. Whereas all the U.K. Fire Services currently report to the Office of the Deputy Prime Minister, the Fire Departments of the U.S. do not have such a governing body. This means that each Department, whether career or volunteer, is run uniquely by the Fire Chief for that particular area.

Secondly, the stringent guidelines and reporting mechanisms of the Health and Safety Executive (H.S.E.) in the U.K. are unknown in the U.S. The U.S. Fire Service culture (particularly with volunteer and paid on call Ff's) appears to be one where taking what we in the U.K. might consider 'avoidable risks', is all part of the job. As we have already seen, some Ff's can purchase their own uniforms if they so wish. In the majority of cases however, volunteer and paid on call Ff's will attend an emergency call still wearing whatever they happened to be wearing immediately before the call. On the few occasions witnessed while in the U.S., this 'uniform' was often shorts or jeans and a t-shirt.

Thirdly, the 'hero' status of Ff's in the U.S. far surpasses anything seen in the U.K., and this could be part of the reason why Ff's in the U.S. are willing to take extra risks. For example, the number of women Ff's killed in the line of duty in the U.S. between 1998 – 2002 equates to 13 (www.wfsi.org). None were killed in the U.K. in this time period - in fact only one woman Ff has ever died in the U.K. (O.D.P.M.). For the same period of time, only two male Ff's had been killed in the U.K. while at operational incidents.

Additionally, whereas all Ff's in the U.K. carry out multiple roles, depending on what is required of them, U.S. (career) Ff's usually specialise in one particular area. paid-on-call and volunteer Ff's in the U.S. however, multi-task at an incident, depending on how many and which individuals arrive. One paid-on-call woman Ff interviewed had been known to drive the appliance, put on breathing apparatus on arrival at the scene, and enter a burning building – all without the back-up of her colleagues who had been unable to attend the incident. This would be unheard of in the U.K. where stringent rules are applied to the minimum number of Ff's who must attend an incident and, furthermore, be available as back-up before any

Ff's are allowed to enter a dangerous situation wearing breathing apparatus.

What is believed to be the first woman paid to carry out a joint role of Ff and Police Officer was employed in the U.S. in 1973. The post title was that of Public Safety Officer. The first woman employed in a career Ff role, followed the next year (1974) and only came about when she was helping her Ff husband study for a fire science class and decided to join herself (www.wfsi.org).

2. LITERATURE REVIEW

2.1 Introduction

The Literature Review commenced in June 2001 before the dissertation was embarked upon. It was envisaged that by starting the review in advance of the actual research project, a good overview of current findings and views would be gained. This in turn would assist in the writing of the rationale. A further review then took place after commencement of the dissertation to ensure that more recent literature was not overlooked.

All searches were carried out using the English language and were conducted either by hand (i.e. library searches) or electronically (i.e. search engines and web sites).

Publishers in both the U.K. and U.S. were used. It was felt that an overview of work written on women Firefighters from both countries would provide the required insight to enable comparisons and contrasts to be made. To a lesser extent, equality issues and working in a male-dominated environment in the U.K. were also viewed.

Hand library searches took place at two Exeter University sites – Main Library, Stocker Road; Exeter, and St Lukes Library, Heavitree Road, Exeter. In addition, the Devon County Council's Central Library, Castle Street, Exeter, and The Fire Service College library, Moreton-in-Marsh, Gloucestershire were used.

Computer searches were carried out on a stand-alone personal computer, Exeter University library computer and Devon Fire and Rescue Service's networked computer. Key search words included 'women firefighters'; 'female firefighters'; 'male-dominated environment'; 'firefighters'; and 'fire service'. Extensive use was made of the University of Exeter's journal search facilities via the library website (www.ex.ac.uk/library) such as the International Bibliography of the Social Sciences (I.B.S.S.) and Emerald, although disappointingly few useful data resulted.

2.2 United Kingdom Literature

In March 1990, the first Fire Service Circular (F.S.C.) on Equal Opportunities was issued by the Home Office (F.S.C. 5/1990), to all Brigades. This Circular encouraged Brigades to look at and possibly review their equal opportunity policies in line with guidance available from the Race Relations Employment Advisory Service, Equal Opportunities Commission, Commission for Racial Equality and the National Joint Council for Local Authorities Fire Brigades Advisory Booklet. Brigades were to promote equality by producing a policy statement confirming their awareness of and adherence to, equal opportunity for all regardless of sex, marital status or disability. This was to be circulated to all personnel and distributed with contracts of employment for new staff.

The issue of positive action (where help is given to people in under-represented groups to assist in redressing previous imbalance, due to past discrimination or disadvantage) was highlighted. This could take the form of actively encouraging those under-represented to apply for jobs, for example, by advertising vacancies through local communities, or by providing training or taster sessions to assist those under-represented to compete on equal terms when actually applying for posts. However, it also pointed out that when recruitment took place, all applicants should be considered on their individual skills/experience/qualifications and post criteria. Those from an under-represented group would not be employed just because they were from such a group. This positive discrimination was clearly stated as being unlawful.

By what can only be classed as a sign of entrenched institutional sexism and racism (Baigent 1996), this advice was not taken at face value and resulted in (male) firefighters thinking it meant that standards would be lowered to allow the under-represented (women for example,) to join. Additional concerns (which are still very much apparent today when fairness at work is discussed) were that the lighter side of fire station life – joking and leg-pulling, would no longer be allowed. Furthermore, a certain amount of heavy-handedness used by Officers stressing equality, made male staff feel that they had to constantly watch what they said and did, to avoid being placed on a disciplinary charge. With the added 'insult' of additional facilities having to be made available for women (often at the expense of the men's facilities – reduced number of male showers for example, to allow for a separate shower cubicle for women), the introduction of positive actions to encourage more women was probably not welcomed by the majority of their male counterparts.

"It must be recognised that within the Fire Service there are forces at work which are far stronger than legislative ones, there are the forces of tradition, habit and culture which need to be addressed". (Penton 1998:2)

Interestingly, Cockburn (1983, 1985) found similar examples of resistance to women employees entering male-dominated organisations (for example, print works where hot metal composition was carried out) that did not want to change. Baigent (2001) sees such actions as a sign of institutional racism, sexism and also conservatism.

Men see women joining them in the workplace as a threat, and therefore increase their masculinity to enable them to cope with the threat (Cockburn 1985).

In 1991 Brigades were advised to write their own equal opportunity and fairness policies, irrespective of the fact that many were still under the remit of the local County Council. This was due to the County Council policies being aimed at a largely office-based, fairly mixed gender workforce and not the white, male-dominated workforce of the Fire Service. Regardless of this and subsequent Home Office instruction (F.S.C. 6/1993; F.S.C. 4/1994), many Brigades continued to use the existing County Council policies until at least 1999.

In the U.K. in 1992 there were still only 117 (0.3%) (H.M.C.I.F.S. 1992) wholetime staff who were women. As Ken Cameron, General Secretary of the Fire Brigades Union (F.B.U.) later stated: -

“This does not reflect the communities we seek to serve, (51% of the population are women,...). It is legitimate to ask why not.” (F.B.U. 1995:2)

A 1994 Research Report entitled “Equal Opportunities and The Fire Service” (Bucke 1994), continued with the theme of the first Circular and also brought some new factors to the fore. The sentiments and views contained within this report were felt to be of great significance to the Fire Service. This research was carried out by the Research and Planning Unit (for the Home Office Fire Department) during June and July 1993 and comprised of discussion groups and surveys.

The report became commonly known as the “Bucke Report” and has been referred to in this way throughout this document.

The stated objectives of the Bucke Report were to “assess the degree to which the issue of equal opportunities has been addressed by fire Brigades and secondly, to examine the public image of the Fire Service with a focus on potential women and ethnic minority applications.”

Some of the important issues worthy of note are covered below.

The numbered paragraphs (text shown in italics) generally summarise sections of the Bucke Report, while the text that follows each section relates to the researcher’s views.

- 1. The fact that some of the Brigades that had written their own equal opportunities policy had only circulated it to new staff or placed it in Brigade Orders, thereby bypassing the current employees, was highlighted. Some Brigades passed the ‘new’ equal opportunities workload (monitoring, advising, training etc) to a member of staff as a task to be taken on in addition to their usual workload. This resulted in the minimum of time being spent in this important area, and gave the rest of the workforce the clear indication that the subject was not being taken too seriously by senior managers.*

Thus, current staff were not made aware of their Brigade’s commitment to equal opportunities or how it affected them or their actions. It could be suggested that current employees should have been the prime target for such literature, thereby attempting to break the mould and culture of years of white, male-domination. (Baigent, 2001).

- 2. While knowing someone already employed by a Brigade seemed to have a promotional [enhancing] element for white men, advertising campaigns or seeing firefighters at work appeared to have brought the job to the attention of women.*

As Webb (1991) found, jobs can be seen to be gendered – the sex of the current postholder(s) defines to a large extent, the gender of the future postholder. Therefore male FF’s would promote their role to their own gender, whereas women would only consider the job of firefighting when they saw recruitment advertising campaigns or witnessed the Brigade in action.

- 3. Previous employment areas [skilled manual jobs for men, non-skilled work for women] and fitness levels [men having been previously involved in sport, whereas women would have to obtain a level of fitness to enable them to apply] were highlighted.*

The differences in previous employment opportunities and fitness levels could be seen as being areas where a woman could be disadvantaged through culture and social norms (Webb 1991; Bartels 1982). Even women who did persevere and join the Fire Service, then found the team-working and physical elements of the job to be very different to their previous employments. This in turn brought about concerns about their own ability to do the job and an immediate lack of self confidence (Osborne 1991).

4. *Just under 50% of the women Firefighters interviewed for the Bucke Report had been subjected to verbal hostility and he stated "It was clear that prolonged harassment, especially when aimed at a woman's ability to do her job had led to severe demoralisation in a small number of cases."*

The former Chief Inspector for the Scottish Fire Service, Neil Morrison, was reported to have made scathing comments (as recently as 2001) about women firefighters. These were that:-

"the lack of female fire-fighters could be blamed on women's inability to park fire engines" and "that women's brains made them better suited to jobs such as answering telephones, community education or media relations" (Hilpern 2001: 9).

Such views, given by a Senior Officer, clearly did not promote the equality awareness that the Home Office was pushing so hard for Fire Services to adopt. It possibly could be classed as just the type of "verbal hostility" referred to in the above paragraph.

5. *The public's regard for the Fire Service and firefighters in particular, has always been high. The Report however, showed that this high regard was seen as a deterrent to white women who did not think they were able to carry out this high profile, public role.*
6. *It was identified that women/ethnic minority role models used in career advertising would help the public revise their image of firefighters being white and male.*

An example of such advertising (created by Deansmith Limited, Kent) is attached as Appendix C. This has clearly been designed so that the gender of the firefighter featured, is not immediately apparent. It was used by Kent Fire Brigade in its retained recruitment campaign in 2000. A further enhancement to this advertisement would have been a gloved hand, so that any indication of gender or race was concealed.

Appendix D from a women's magazine (Company 2000:48) shows London Fire & Civil Defence Authority's interesting and eye-catching attempt to encourage more women to apply to the Service.

7. *Four of the Brigades quoted in the Report had written their own equal opportunities policy and training packages.*

However, the Home Office apparently had not taken the opportunity of sharing this best practice approach with all Fire Services nationwide.

It also questions why, if these initiatives were so good, are there still so few women and members of ethnic minorities employed in the U.K. today?

While suggestions were made of involving external equal opportunity agencies to aid the policy writing and training of staff, no additional funding was allocated. This meant that in the majority of cases under-funded Brigades just did not have the money to spend on such initiatives.

8. *Recruitment methods differed widely amongst the Brigades quoted. Some Brigades did not advertise firefighter vacancies, relying solely on word of mouth because in their opinion the unemployment situation and number of interested applicants who did apply, made advertising unnecessary.*

This of course meant that firstly their equal opportunities policies were not working, otherwise they would have realised that this was not a fair and equitable way of attracting a wide range of applicants from the community. Secondly, it meant that the white, male ethos continued, due to job gendering (Webb 1991) and male FF's promoting their jobs to other men.

"It is practically not possible to make an absolute distinction between the job and the job occupant: job requirements are defined in terms of current jobholders, including their gender." (Webb 1991:22)

".... occupations are gendered too. By long association with the sex that is found in them and which has developed them, jobs are, with few exceptions, either masculine or feminine". (Cockburn 1985:230)

One Service had introduced targeted recruitment advertising amongst communities and sports centres which women and ethnic minorities were known to frequent. This idea was stopped because it was deemed to be "unfair on the wider applicant group" by some within the Brigade. (Bucke 1994:21) Whether this "wider applicant group" consisted of the white males who dominate Brigades nationally, is unfortunately unclear.

An interesting point in the Report concerned ethnic minority firefighters being drawn to the job through living close to a fire

station or by the firefighting image. Additional research beyond the scope of this document is therefore needed, to question why women living near a fire station are not similarly motivated into joining the Service.

In D.F.R.S. there is a relatively high number (approximately 7%) (Cited by Devon County Council 2002) of ex-armed forces employees, probably due to the existence of both the Naval Dockyard in Plymouth, and the Commando Training Centre Royal Marines site at Lymington, near Exeter. Both services employ exclusively or predominantly, men, who are possibly then drawn to the Fire Service as a result of their firefighting experience in the Armed Forces. The disciplined culture of the Fire Service could also attract ex-armed forces applicants.

9. One firefighter interviewed, contacted a previous college friend whom he knew had joined the Service, to enquire about the job.

In 1995 the main Trades Union for uniformed personnel, the Fire Brigades Union issued an equal opportunities information pack "Fighting For Fairness". (F.B.U., 1995). This covered discrimination (including sexual and racial) and harassment (including sexual and racial) issues and how to deal with them informally and formally.

The N.J.C. distributed a Circular (NJC/3/97) confirming their commitment and agreement with the concepts of equality. The "Grey Book" had a new section on Fairness at Work added and this included maternity provisions and career break schemes.

Amending regulations came into force on the 14.4.97 removing the upper age limit of 30 years of age and the upper and lower height limits. It was considered that there was no compelling reason for lowering or raising the minimum age of 18 years at that time (Central Fire Brigades Advisory Council 1996/7:2) (Cited in H.O. - F.S.C. 12/1997).

In June 1999, the Local Government Association (L.G.A.), in a joint event with the Chief and Assistant Chief Fire Officers Association (C.A.C.F.O.A.) held possibly the first conference to address the issues surrounding the small numbers of black and other ethnic minorities in the Fire Service. Called "No More Excuses", speakers from a wide range of backgrounds converged to share their experiences. The Stephen Lawrence Inquiry Report had recently been published, and a number of factors highlighted in the Report were also felt to be of possible significance to the Fire Service. Mr Graham Meldrum, Her Majesty's Chief Inspector of Fire Services for England and Wales asked:-

"Most people would by now have been made aware that the Fire Service wishes to recruit more people from the ethnic communities and women into the fire Service, and have failed to do so in significant numbers. Have we asked and answered the fundamental question "Why?"" (Meldrum 1999).

On the 28 July 1999 recruitment, retention and progression targets were set by the Home Secretary for ethnic minority staff. It was also agreed as essential that similar targets be set for women (Home Office, 1999).

A Thematic Review by H.M. Fire Service Inspectorate "Equality and Fairness in The Fire Service: Founding a Cultural Equality" (1999) reported to all Fire Services in September, 1999. This Review was carried out by a team of Her Majesty's Fire Service Inspectors (H.M.I.s) and three field specialists – an Employment Policy Manager (Equal Opportunities Commission), a Management Consultant (Ionann) and the Fairness and Equality Manager (West Midlands Fire Service). Their remit was to study data currently available to them – this was in the form of statistics held by the Home Office Fire Policy Unit and a number of other reports. However, it was decided that further information was needed and therefore three questionnaires were issued. These were distributed to all Chief Fire Officers (C.F.O.'s), Fire Authority Chairs and all the Racial Equality Councils.

On receipt of the completed questionnaires, ten Brigades were identified to be inspected. This was based on the type of geographic and population area served and constitutional make-up. This meant that an overview would be obtained from the various Brigades across the country and thereby negating the need to inspect every one of the 50 Brigades in England and Wales. The inspections were designed to investigate the many important issues highlighted in the completed questionnaires.

Many of the negative issues identified in one Brigade were apparent in each of the ten Brigades involved in the inspection:-

"The findings of the review are critical of many aspects of the management of equality and fairness in the fire service. They also point to the contribution to the unsatisfactory situation made by the overriding culture within the service, including relationships and leadership style. The criticisms apply across all the organisations responsible for the fire service." (Home Office 1999: 7).

There were a number of recommendations cited in the Thematic Review of 1999 that were not actioned by D.F.R.S. until some years later. These included the appointment of an Equality and Fairness Specialist Advisor (Fairness at Work Adviser appointed in 2001); having a centrally based retained recruitment procedure (still to be finalised in D.F.R.S. in 2003); and the inclusion of more flexible working practices (D.F.R.S. is currently reviewing the cover provided by retained personnel with a view to allowing a more flexible part-time, part cover working basis). It should be noted that some, if not all of these initiatives, involved a requirement for increased funding.

By its very nature, the funding of the U.K. Fire Service is a complicated and drawn-out process involving capital and revenue budgets. No carry-over of underspent funding has ever been allowed from one financial year to the next, so forward planning has always been imperative. This of course made the allocation of new budget lines (such as those required by the Thematic Review summary) almost impossible in the current, and still very difficult in the next, financial year. It was shortly followed by F.B.U. Circular 99HOC656AG 'Strategy For Implementation Of Change In the Fire Service On The Issue Of Equality Following The 1999 Thematic Inspection'. Published in late September 1999, Mr. Andy Gilchrist, the National Officer, referred to:-

“..’institutional’ racism and sexism..” [being] “...clouded by comments based on an under developed knowledge or worse, judgements which are made without even having read the report!” (F.B.U. 1999:1)

However, later in the circular he agreed that while it was not being said that everyone in the Service and/or F.B.U. was racist or sexist, he did accept that there was institutional racism and sexism. He felt that Service equality had been “one of missed opportunities...” and referred to the Fire Service Circular, produced in March 1990 concerning equal opportunities which had been “...largely if not totally ignored.” (F.B.U. 1999:1).

He attached a discussion paper on the subject of culture, and concluded that although there were “...major industrial relations problem(s) between management and union...” (F.B.U. 1999:16,17), the F.B.U. would co-operate on equality issues as long as it could, although co-operation was needed on both sides.

Having stated the Union’s long-standing commitment to equal opportunities, the first Women’s Liaison Officer (F.B.U. 2002) was not appointed by the F.B.U. within Devon Fire & Rescue Service until August, 2002. This role was introduced to provide support, guidance and mentoring for new and currently-employed women FF’s by an experienced woman FF. The Fire Service Circular 1/2000 (Home Office 2000) was issued in February 2000, stating the targets set for the recruitment and retention of women firefighters over the following nine years.

This constituted the following lead-in periods for the recruitment of women (excluding Control Staff):-

- ? 4% by 1 April 2002;
- ? 9% by 1 April 2004
- ? 15% by 1 April 2009.

Devon Fire & Rescue Service employed 4.6% women FF’s at December 2002.

While the Fire Service Circular stated that there was no evidence to show how many men and women could meet the current fitness requirements, a striking paragraph of the document stated that:-

“it is generally accepted that fewer women than men can achieve the levels of fitness (including aerobic capacity) and strength, to meet the requirements of the job”(Home Office F.S.C. 1/2000: 2).

No indication was given whether it was intended to review or amend these tests to enable equality. It can only be suggested that the many previous years work on equality issues would not have been strengthened by this statement. However, one must consider whether the tests should have been altered to allow more women to join? This issue is reviewed later in the Discussion section.

The Circular went even further with its target-setting and included three ‘duration of employment’ targets. These covered resignations received and dismissals issued with regard to both men and women, and the career progression of women over the next seven years, which should reflect those of the men. See Appendix E.

July 2000 saw the publication of the first equal opportunities action plan entitled “Toward Diversity –Promoting Cultural Change” (D.T.L.R. 2000). This included a set of targets in the areas of culture, leadership, policy, diversity training and recruitment and retention.

In November 2000, Mr. Malcolm Eastwood, the President of C.A.C.F.O.A. addressed the Fire 2000 Conference. In doing so, he mentioned how women and ethnic minority groups were being precluded from joining the wholetime and retained Service by the entry standard tests. He urged the Minister responsible for Fire Services to "progress ... as a matter of urgency" the newly written job-related standards which were "waiting to be adopted" (Eastwood 2000).

Six years after the Bucke Report (1994) had suggested involving the expertise of external equal opportunity agencies, with no additional funding being provided, Home Office Ministers made an announcement. In November 2000, the capital provision for 2001/02 would be increased by £10 million to further equality and diversity projects (O'Brien 2000).

At the annual Fire Conference, held in Swansea on the 28.3.01 the Fire Minister, Mr Mike O'Brien referred to modernising the Service and confirmed that "equal opportunities" remained among the "dominant themes". He felt that "In ten years' time, the fire service workforce [would] also look different...", and made references to the increase of ethnic minorities and "women firefighters at all levels." (O'Brien 2001). This he concluded, was Government's goal.

In December 2001 the second Fire Service Equal Opportunities Action Plan "Toward Diversity II : Commitment to Cultural Change" (D.T.L.R. 2001) was issued by the Department for Transport, Local Government and the Regions. This publication followed a two-day workshop at which the reactions to the first Action Plan "Toward Diversity - Promoting Cultural Change" (D.T.L.R. 2000), launched in July 2000, were discussed. The workshop, designed by the Equal Opportunities Task Group (E.O.T.G.) of the Central Fire Brigades Advisory Council for England and Wales, agreed that the second document should follow the guidelines set down in the first. It was hoped that the progress achieved by the former document, along with the policy guidelines previously referred to, would continue with the latter. Reference was made to the targets set for the number of women and ethnic minorities employed by each Service. It was accepted that targets alone would not increase the numbers of women or ethnic minorities, and that staff at all levels of the organisation would need to take on this ownership before results would become achievable.

In July 2002, C.F.O. Steve McGuirk had an article published in Fire magazine (2002:20) on "Diversity : the Core of Community Safety". While asking whether Fire Services were ready to face the Race Relations Amendment Act 2000 (enacted on the 31.5.02), he also mentioned gender. C.F.O. McGuirk suggested that in relation to equal opportunities in the Fire Service, the issue of gender had received "greater emphasis", than the employment of ethnic minorities over the years. He confirmed that performance appraisals were "essential" if the Fire Service was going to be able to "demonstrate" that it was "... a fair and non-discriminatory employer."

While C.F.O. McGuirk attempted to explain that gender had taken precedence over ethnic minority issues, it is relative that such 'emphasis' had drawn a mere 1.7% (Bain *et al* 2002) of women to the Service. It could therefore be suggested that a great deal of work is still needed to prove that the U.K. Fire Service is fair and non discriminatory to women and ethnic minorities.

In September 2002 partly as a result of Firefighters threatening to take industrial strike action in the latter part of 2002, an independent review panel was formed. While the panels' immediate task was to look into the request (and at the time of writing, refusal) for a pay award of 40%, it was also to review the Fire Service and gauge what changes were necessary to carry it into the twenty-first century. The Independent Review of the Fire Service entitled "The Future of the Fire Service: reducing risk, saving lives" (Bain, Lyons & Young 2002) was published on 16th December 2002 with an interim Position Paper published on 11th November 2002. This followed two periods of industrial action (13th to 15th and 22nd to 29th November 2002), and was in advance of two further sets of strike action (28th to 29th January and 1st to 2nd February 2003). At the time of writing, this dispute was still unresolved.

The Review covered a wide range of areas where the Service needed to change "...from top to bottom and every aspect of its work reformed ...". It referred to "Human resource problems" where diversity issues only received "...lip service...." (Bain *et al* 2002).

The range of the document encompassed many important issues, including the trends in fire risk; the role of the Service currently and in the future; the statutory role of the Service; pay levels; pensions; and conditions of service.

On the subject of diversity, it stated: -

"We have been, frankly, appalled at some of the stories we have heard of bullying and harassment. The harassment has been both racial and sexual, even given the very small numbers of non-white and female personnel in the service." (Bain *et al* 2002:65).

It recommended that Services were monitored on a quarterly basis to ensure their action plans were working to increase the number of women (15% by 2009) and ethnic minorities (7% by 2009).

The Integrated Personal Development System (I.P.D.S.) was also recommended by the Review as being an important issue in the modernising of the Fire Service. I.P.D.S. is shortly to be introduced for the Fire Service nationally, and is closely linked to the skills and competencies required to carry out the role. This will extend from recruitment to retirement and ensure national training standards are met. Rather than previous training methods that looked at the skills of the individual, it will additionally measure how an "...individual applies their skills in the context of their work." (Bain *et al* 2002:70)

Retained and non-uniformed personnel will also be included in the I.P.D.S. scheme

2.3 United States of America Literature

Following the first seminar held in 1979 by the United States Fire Administration (U.S.F.A.) entitled "Women in the Fire Service", a document called "The Role of Women in the Fire Service" (U.S.F.A. 1980) was published. This document covered the many issues discussed at the seminar and included recommendations and the then current initiatives in the areas of women in the Fire Service.

Two additional publications were also released in the same year. One, a Resource Directory (U.S.F.A./International Association of Firefighters 1980) listed Fire Departments who either had experience of recruiting, testing and training women firefighters, or were currently employing women Ff's. The second document entitled "Personnel Management Handbook : Managing the Entry of Women and Minorities" (Federal Emergency Management Agency (F.E.M.A. 1980)) covered legal, recruitment, and physical testing issues.

These three earlier publications were updated in January 1993 by the document "A Handbook on Women In Firefighting: The Changing Face of the Fire Service". (F.E.M.A. (U.S.F.A. 1993)). It was this later publication that enlightened the researcher on the problems, issues and similarities that women in both the Fire Departments of the U.S. and Fire Services in the U.K. experience. Aimed at Fire Service managers, this excellent handbook provided answers to a whole range of questions and problems that managers employing women for the first time or indeed, continuing to employ women in the Fire Service, could come across. It was wide-ranging and provided a common-sense approach to just about every issue that could be faced – from hair length to maternity provisions to protective uniforms and equipment designed specifically with a woman in mind.

While the Handbook did not state how many women had been involved in the research, or how the data had been gained, it stated that it had only been possible with the help of "...dozens of individuals from fire departments and other agencies throughout the country who provided information and shared their valuable insights." (F.E.M.A./U.S.F.A. 1993:5).

In June 1996, a publication "Health & Safety Issues of the Female Emergency Responder" (F.E.M.A./U.S.F.A.) was produced. This document covered female staff carrying out roles in fire, rescue and emergency medical services departments and focused on the areas of special concern for women. These were identified as being procedures, protocols, and equipment; organisational health and mental health; and reproductive and toxicological concerns.

"Many Faces, One Purpose : A Manager's Handbook on Women in Firefighting" (F.E.M.A./U.S.F.A. 1999) was published to supersede the 1993 publication, and contained summary checklists to aid the manager. Similar issues to those discussed in the former publication such as protective equipment, hair and grooming standards, reproductive safety, recruitment and testing etc, were again covered. However, the issue of sexual harassment made up around 20% of the Handbook's contents compared to 12% of the earlier edition. This seemed to rather over-emphasise the subject, until continued reading confirmed that around "85% of women firefighters [had] experienced some form of sexual harassment at work...". (Women in the Fire Service, Inc., 1995) (Cited by F.E.M.A./U.S.F.A. 1999:37).

The inclusion of policy writing, procedures to follow, suggestions of what to do if being sexually harassed and the legal background, were therefore important subjects to cover in the revised book.

The organisation "Women in the Fire Service" (W.F.S.) magazine "WFS Quarterly", provided an interesting insight into the lives and thoughts of the U.S. women Ff's that the researcher would not necessarily otherwise have had the opportunity to obtain (info@wfsi.org).

Other journals and magazines were also located either via individual web site searches or through the very helpful National Emergency Training Center, Learning Resource Center based in Maryland (www.lrc.fema.gov).

Two such magazine articles supplied by the Learning Resource Center (www.lrc.fema.gov) were entitled "Climbing The Glass Ladder" (Hirschman 1993:62) and "Recruiting women firefighters" (Hammond 1987:40).

The former article, written for the Firefighter's News, was a two-part series looking at the various barriers, both "tangible and intangible" (Hirschman 1993:62) faced by women FF's trying to succeed in their role. The article looked at various issues affecting women FF's including being taken seriously rather than being classed as doing the job just to "husband shop..." (Hirschman 1993:62) and always having to prove they can do the job. Additionally, it was reported that some fire officers wouldn't allow a woman to use slightly different techniques (such as using both hands and foot leverage when handling heavy equipment) but they would accept a left-handed male Ff adapting the procedure to assist his needs. A woman Ff quoted in the summary paragraph of the article referred to the fact that "Men are not necessarily better firefighters because they're men despite traditional stereotypes." (Cited by Hirschman 1993:62).

The second article of note (Hammond 1987) published in Fire Chief magazine was written by the then Fire Chief of a Californian Fire Department. Due to the apprehension he knew was felt by the Department personnel at the thought of a woman Ff joining the team, he commenced a research study. This study incorporated collecting as much available data as possible on the issues surrounding employing women FF's and finding solutions wherever possible.

As each Fire Department was different to the next one, he felt he had to review the local environment and write a program that would cover the possible problems his Department might face. He decided to carry out a survey, not only of the Department personnel but their wives as well, to find out what the actual and perceived problems would be.

While carrying out the research Chief Hammond was surprised at the amount of time and energy that was being used in attempting to prevent women FF's from joining the Department. When the survey results were analysed, it appeared that a great deal of the male FF's were concerned whether a woman could successfully be a Ff. However, the wives answers were different in that they did not want women to be excluded from the job just because of their gender.

Chief Hammond then arranged a conference to enable the experts to explain the whole range of equal opportunity policies that applied. This covered a wide area of issues from recruitment practices to maternity leave and also the change process the Department would need to embark upon.

He finished the article by stating that it was "one of the few times when the firefighters and their spouses [had had] the opportunity to be part of the solution, not just the problem." (Hammond 1987:41)

Additional literature was supplied by the various Fire Departments visited during the research visit in June 2002.

3. QUANTITATIVE AND QUALITATIVE STUDY DESIGN

3.1 Aim

This research document was aimed at assisting Fire Services nationwide overcome their presumed difficulties in attracting and retaining women Firefighters, given the unequal number of women versus men employed in the U.K. shown in Appendix A. Due to the time constraints involved however, it was intended to look specifically at the Devon Fire & Rescue Service in the U.K. and initially some of the Fire Departments in the State of Mississippi, U.S.

The Fire Departments in the State of Mississippi were chosen for comparison reasons for the purpose of this research due to previous links with personnel at the Mississippi Fire Academy and in particular with Mr Kirk Rosenhan, PE, CEng, MIFireE, the Oktibbeha County Fire Services Coordinator.

While it was impossible to locate all the women Ff's in the State of Mississippi due to there being no governing body to provide this information, a number of different measures were taken to try to contact as many women Ff's as possible. These included joining the Yahoo! group of the Mississippi Firefighters' Association on the internet (www.groups.yahoo.com/group/mffa) on the 29.4.02 and placing a message on their notice board asking for women Ff's to contact the researcher (see Appendix F); sending email messages direct to five Fire Departments on the 30.4.02 (having obtained their addresses from the Mississippi Fire Listings website (www.fireemsrescue.com/mississippifire.html) asking that the email be passed to all their women Ff's (see Appendix G); emailing the Mississippi Fire Academy requesting their assistance in tracing women Ff's in the State.

An overview of the small number of women Firefighters employed at 31.3.01 in Fire Services throughout England and Wales is supplied (H.M.C.I.F.S. 2000/01). See Appendix A. It should be noted that this Appendix refers to the actual number of men and women Ff's employed, while the figures quoted for Devon Fire & Rescue Service in the Introduction chapter were the establishment figures.

This equates to 1.05% Wholetime and 2.19% Retained personnel being women. Another way of viewing this would be to say that of the 48,186 Wholetime and Retained Ff's employed in England and Wales, 1.40% of them are women (H.M.C.I.F.S. 2000/01).

3.2 Background

Due to the D.F.R.S. sponsoring two employees to carry out research on very different topics during the same two-week period, flexibility was required by both individuals. This resulted in the schedule of the visit being arranged to accommodate both people as much as possible, but occasionally a compromise 'best fit' approach was required.

On commencing the study, it was discovered that primarily, only the larger Fire Departments of the U.S. had a number of women Ff's employed. Given the research design of sending questionnaires to the women (prior to meeting them), and subsequently interviewing as many as possible, the research area was widened. It was also felt that by surveying women over a larger area of the U.S., some findings could be generalised to the U.K. and in particular, Devon.

The county of Devon is demographically split into 93% rural and 7% urban regions. Therefore Fire Departments in a few large cities (including Chicago and Jackson,) as well as the more rural areas (Columbus, Birmingham, Oktibbeha etc) of the U.S. were incorporated into the study.

As a result, five Fire Departments in three States were visited. These were Chicago, Illinois; Birmingham, Alabama; and Jackson, Columbus, and Tupelo, Mississippi. This enabled the research to be more widely spread across the U.S., and enabled comparison between Fire Departments in different States also to take place.

In February 2002, the D.F.R.S. employed ten (1.8%) Wholetime and sixteen (2.1%) Retained Women Firefighters out of a total of 557 Wholetime and 756 Retained (and Volunteer) Firefighters.

The sample size in Devon was therefore considered to be rather small, but the accuracy of the data returned was hoped to compensate for this (Oppenheim 1992). Additionally, as both quantitative and qualitative research was to be used, it was hoped that the small sample size would be "...in keeping with the nature of qualitative data." and benefits from both would

be seen (Denscombe 1998:25).

By comparison, the Fire Departments visited in the U.S. had percentages of women FF's totalling 2.4% in Chicago, Illinois; 5% in Jackson, Mississippi; 2.8% in Columbus, Mississippi; 1.5% in Tupelo, Mississippi; and 6.5% in Birmingham, Alabama.

The study would be a combination of both qualitative and quantitative data analysis, taken from information obtained initially from questionnaires distributed amongst women FF's in the U.K. and U.S. and then from follow-up semi-structured interviews with women FF's in the U.K. Involvement in the study would be solely on a voluntary basis with the emphasis being made that anyone requesting and receiving the questionnaire and then deciding they did not wish to complete it, would not be harassed in any way to take part (Coolican 1999)

From an ethical and courtesy viewpoint, the C.F.O. of the Devon Fire & Rescue Service was asked to give his written approval for the women FF's within Devon to be asked to participate in the research study. It was stated that this would be by way of completing a questionnaire and holding confidential interviews. His approval is shown as Appendix H.

3.3 Validity and Reliability

While quantitative data relates to numbers used in for example, a spreadsheet, qualitative data refers to the feelings and perceptions of individuals.

The questionnaire results of this research were primarily quantitative data and therefore were best suited to use with a spreadsheet where the numbers could be manipulated and clearly presented.

Qualitative data however that explores perceptions of the respondents is less easily defined and can be prone to validity questioning. However, by ensuring a number of validity checks were used during the research project, these problems can be greatly reduced.

The checks used included:-

Being aware of the researcher's possible bias in the area of her professional work (Herbert 1993);

The respondents who were known to the researcher 'trying to please' and possibly emphasising points they thought the researcher was wishing to prove (Hycner 1985);

Field notes taken at the time of the interviews to ensure non-verbal reactions were recorded;

Examining to what extent the data results match information already known by the researcher and other researchers who have carried out similar studies (Denscombe 1998).

Reliability relates to the adequacy of the results gained and the likelihood that the same results would be obtained, and the same conclusions drawn, if the research study was repeated by another person.

Therefore an accurate account needed to record all aspects of the research study (Denscombe 1998). For the purposes of this document, these details have been split into two separate sections of questionnaire and interview methods, and are contained within the Research Methodology chapter.

While it was hoped that information obtained during the course of this research would be valuable to Fire Services nationwide, the issue of validation could not be ignored. Factors that were relevant to Devon in particular, would not necessarily be pertinent to a Service for instance, in a highly populated area. Similarly, a suburban Service would face different recruitment and retention problems from those found in very rural Devon. Similar problems were also pertinent to the generalisation of information obtained within the various States of the U.S., with the information gained not being relevant to all States. Therefore, these were seen as possible validity threats by the researcher.

3.4 Respondent/Researcher Bias

As the researcher was an employee of the Devon Fire & Rescue Service, it was felt that any information would be more easily obtained by using her own organisation rather than contacting another Fire Service.

As stated in the last section in relation to validity checks, the issue of respondent and/or researcher bias (Herbert 1993) could not be overlooked. It could be supposed that due the researcher knowing a number of the women FF's involved in the research, a willingness to 'try to please' could be incorporated (Hycner 1985) and bias the results. Often known as the 'Hawthorne Effect', (downloaded from www.accel-team.com on 16.10.02), this term was introduced after Professor Elton Mayo found that the performance of people was affected when they knew that interest was being taken in them or where interest not normally shown in them, was introduced. The women FF's therefore could have falsely over- (or under-) emphasised the problems between themselves and the male FF's, thinking that was what the researcher was hoping to prove. Similarly, as the researcher would be gaining information from her own area of work, her own bias could affect the reliability of the research (Herbert 1993).

However, these views were considered in line with the rationale that women FF's from another Service may not be so trusting of an unknown person (with particular regard to confidentiality and anonymity) and response numbers could therefore fall dramatically.

Having given both elements due consideration, the former was considered to be the most workable.

3.5 Confidentiality and Anonymity

To ensure confidentiality and anonymity, each questionnaire was given a code number (Lewis-Beck 1994, Denscombe 1998), with the researcher being the only person who knew which code was linked to which person. It was felt that this was important to enable reminder emails to be sent to individuals who had not completed and returned their forms, rather than having to chase up all respondents. The initial form was numbered '1450', and was purposely done to hide the number of FF's who had taken part in the research or where the individual respondent appeared on the list. It was considered that if a respondent knew they were, say number 28 of a total of 30, they may be less inclined to complete the form. This may be because they supposed that sufficient respondents had already replied, or indeed, had made the same qualitative comments as themselves and therefore their form was unnecessary.

For confidentiality and anonymity purposes, the completed questionnaires and cassette tapes of subsequent interviews, along with the names and codes used, were kept in a locked cabinet. Assurances were given that the questionnaires and coding information would be destroyed within two years of the study ending and steps would be taken to ensure that all tape cassettes were wiped clean at that time also. The anonymous data results would be kept for possible future usage (Coolican 1999).

4. RESEARCH METHODOLOGY

4.1 Study Design - Questionnaires

When starting to design and write the Women Firefighter's Questionnaire for this research, the Equal Opportunities Commission (www.eoc.org.uk) and Equality Direct (www.equalitydirect.org.uk) organisations were contacted to enquire whether a model questionnaire on equality issues existed.

Having received negative responses from both organisations, a decision was made to follow the general layout and design of the Department of Trade and Industry's "1997 Workplace Employee Relations Survey". This questionnaire was chosen primarily for its presentation style, introduction and structure, which could relatively easily be adapted (Lewis-Beck 1994) to suit the requirements of this particular research project.

The many useful points made by Oppenheim (1992) in his book on the subject further enhanced the questionnaire design. These included leaving the more personal/less anonymous questions until later on when some trust had built up; funnelling (where broader issues are looked at initially, then the questions are narrowed down to the specifics) and filtering questions (where a respondent answers Question 'A' in a certain way that then means they are not required to answer Question 'B'). This could possibly be because the second question has become irrelevant – if Question 'A' for example, asked if the respondent had dependant children and they answered 'No', there would be no point in them being asked the age of the children, so the second question would be bypassed).

When the survey questions were devised, they were written in a way that would provide the answers required for the research. Secondly, it was felt that a specific checklist of the main recruitment and retention issues that were covered by each question, would further concentrate the mind of the researcher. See Appendix I.

The questionnaire was written in Microsoft Word format with the various fields 'protected'. This meant that respondents were not able to alter the wording of the questions or supply additional comments. The only exception to this was where qualitative questions had been asked and an open field was available for free text to be entered. The 'protection' of the majority of fields ensured that comparison and analysis of the data supplied could be carried out. If each question had been free text fields, problems could have occurred where many different sets of information were obtained without the capability of comparing and analysing the information supplied (Coolican 1999).

At an early stage of the questionnaire design, respondents had been asked (in the introduction of the form) to tick (/) the relevant answer. On subsequently reviewing the questionnaire, it was discovered that marking the answer field with an 'X' was a much easier and more user-friendly way of doing this, therefore the introduction wording was changed to reflect this. Additionally, this meant that firefighters completing the questionnaire on-line or via a hard copy, would show their chosen answer in exactly the same way.

4.2 Pilot Study - Questionnaires

As the same questionnaire was written to be used in both the U.K. and U.S., an initial pilot study was carried out with both British and American women Firefighters. An additional factor that required consideration prior to the main research study was that of American culture and language. It was important that the questionnaire wording was interpreted and understood in the same way in both the U.K. and U.S. This factor was therefore mentioned to the American Firefighter when the pilot questionnaire was issued, asking for any points or questions that were misleading or needed further clarification or re-wording, to be clearly highlighted to the researcher.

Additionally, those taking part in the pilot study were requested to record how long it took them to complete the questionnaire. It was felt that a five to (maximum) ten-minute form would be more easily 'sold' to respondents than one of an unknown time element (Denscombe 1998). The time factor of 'no longer than five minutes to complete' was therefore incorporated into the introduction page of the form once the pilot had been completed.

The views of those conducting the pilot were considered. One of the suggested amendments was incorporated into the questionnaire, this having regard to whether the Ff had met her current partner before or after joining the Fire Service.

4.3 Questionnaire Design

The questionnaire as shown in Appendix J, sought to obtain a variety of information, with particular emphasis on recruitment and retention issues.

The first, second and third questions were designed to gauge whether the correct age group was being targeted with career

information; whether current career/advertising methods reached the target audience (and in particular – women); and how influential family and friends were when deciding on a career in the Fire Service.

Questions four and five could have a bearing on each other and in particular, are relevant with Age Discrimination law imminent. A Firefighter joining at the minimum age of 18, may for example, feel that having now done the job, they could have carried out the role at a younger age or similarly, that the minimum age should be increased to say, 21. A Ff joining at an older age, may feel that, (while the set upper age limit was abolished in 1997), it is unlikely that someone aged over 50 for example, would have the necessary fitness levels to carry out the role competently.

As previously mentioned, question 6 was written to clarify whether college and university students had already a firm career in mind, or whether further advertising of the Service as a career option was needed. Similarly, the seventh question was intended to confirm (or otherwise) the previously held view that a number of women Ff's took a reduction in salary to join the Service.

Questions eight, nine and ten were designed to ensure that any initiatives aimed at women which are shown to be working, are continued, and whether Brigades should introduce pre-recruitment Women Ff Fitness Sessions to ensure they can compete at the recruitment stage at the same level as the men (given that men are more likely to be involved in sporting activities than women of a similar age (Webb, 1991; Bartel, 1982)).

Previous limited knowledge held by the researcher in her professional personnel management role, indicated that when a woman became a Ff, the relationship with her partner/husband was affected. Questions eleven, twelve and thirteen sought to enquire whether the same applied to women in the U.S. and provide further proof from women in the U.K. If this hypothesis was proven, then this could have an effect on recruitment and retention issues.

Questions fourteen and fifteen were used to gauge how the women Ff's felt about actually working with the men. If the majority of those who completed the questionnaire felt their relationships with their male counterparts was 'poor' or 'very poor', additional research via informal interviews would be needed. In addition, if the women were found not to feel accepted by the group, they would be unlikely to stay in the job. If the reasons for the men not accepting women Ff's could be highlighted, then additional equal opportunities training could be provided.

Whether sufficient information was provided to the public about the role of Ff, to enable possible interested applicants to consider a career and apply, were the reasons for questions sixteen and seventeen. It was felt that there should be no surprises to the role when someone had joined – career information should be as accurate and clear as possible to enable recruits to understand (in advance) what the job was really about. This in turn would hopefully mean that trained Ff's stayed with the Service for their working lives.

Question eighteen was devised to enquire how currently employed women Ff's felt about recruitment initiatives. By asking present staff, this could be more revealing than non-uniformed personnel trying to invent new initiatives to capture the female audience.

Child care responsibilities generally fall to the woman in a relationship (Cockburn 1991; Richards 1996). Whether these responsibilities prevented women from considering a career with the Fire Service could be a possible recruitment/retention issue, and was the reason for question nineteen. Depending on the data collected, it might be the case that child-care facilities could be made available at reduced costs to allow more women to consider a Service career.

Questions twenty a), b) and c) were grouping questions designed to obtain reactions to the various statements. Twenty a) was written to enquire whether a women Ff felt more confident/less unique/had proved her worth, and gained acceptance from the male Ff's, when the time employed in the Service lengthened

Question twenty b) could be a revealing stance on how the women Ff's thought the initiatives on equal opportunities were being viewed and/or felt.

Question twenty c) was written to gauge how much the women Ff's enjoyed their job and whether they felt sufficiently valued by the organisation to encourage other women to join.

The retention issue of whether women faced different obstacles, depending on the type of role they provided, was contained in question twenty-one.

Question twenty-two could be linked to question 20 to see if the views of longer serving women Ff's were different to those of shorter serving ones.

Question twenty-three would enable a view of the career progression made, when compared to the length of employment. This could be a useful tool to enable comparisons to be made between women and men FF's rank and length of service.

The final question, number 25, meant the researcher would not have to contact the respondents again at some point in the future to ask for their willingness to take part in the semi-structured interviews.

While it was hoped that face-to-face interviews could be held with the U.K FF's, the option of a confidential phone call was specifically included with the U.S. women in mind.

4.4 U.K. Questionnaires

Given the small number of women FF's employed in Devon at the time of writing (10 Wholetime and 16 Retained), it was decided to approach them all (the target population) to ask for their assistance in completing the questionnaire. This was done via an individual email message to each station/department where they were currently based, explaining the reason behind the survey, that it would be confidential and anonymous, and while it had the approval of the Chief Fire Officer to carry out the research, he would not see the individual results. Personnel interested in taking part in the research were asked to contact the researcher by email or telephone, and state whether they preferred to receive the questionnaire in hard copy format to their home address or provide a personal email address. It was stated in the initial email communication that it was preferable that the questionnaire was not completed at their place of work, so that their views were not influenced by their male colleagues.

By contacting the target population, further bias could not be ruled out. As Ora (1965) (cited in Coolican 1999) found, the fact that only volunteers were used could in itself result in a bias.

By inviting staff to take part in the survey in this way, it was felt that no-one would feel intimidated or obliged to take part if they preferred not to. Given this voluntary status, and the fact that the researcher knew some of the women FF's personally, it was hoped that a 75% return would be obtained.

This email was sent on the 12th May, 2002. Appendix K.

Eleven of the possible twenty-six FF's (42%) responded over the next week or so, and questionnaires were either despatched as an attachment via email with a covering note thanking them for their interest and requesting forms be returned in two weeks if possible, or in hard copy format (hand-addressed envelopes) with a freepost envelope and covering "With Compliments" slip thanking them for their interest and asking for completed forms to be returned if at all possible within a two week period.

Consideration was given to the general research suggestion that hand-addressed white envelopes, stamped and not franked, be used. However, as contact had been made in advance of sending out the questionnaires, this was not felt to be of such importance.

Eight completed forms were subsequently returned. Two FF's had resigned and therefore were not reminded to complete the questionnaire while a follow up email was sent on the 11.7.02, to the remaining Ff who had not returned her questionnaire. It was made clear that, having received the questionnaire, if she no longer wished to take part in the research, then this was acceptable.

In the meantime, four more FF's had agreed to complete the survey. These questionnaires were sent on the 18th July, 2002 and subsequently returned, making the overall reply total of thirteen (87%) out of the fifteen who had originally agreed to take part. Of the number of Devon women FF's available to take part, disappointingly this was only a 50% take up rate, (taking the two resignations into account). However, according to McNeill (1990:p40), the figure of 50% was higher than the generally expected return of 30% to 40%.

4.5 U.S. Questionnaires

As a result of the different methods already stated to contact women FF's in the U.S., nine email replies requesting questionnaires were received. These were sent by email on the 17.5.02 with an accompanying note thanking them for their interest and asking for completed forms to be returned if at all possible within a two-week period.

The initial response rate was disappointing. Due to receiving only two of the nine (22%) requested completed questionnaires from American FF's before commencing the research in the U.S., it was decided that interviews would not be appropriate after all. It had been envisaged that certain issues would be highlighted by the questionnaire answers that would

in turn lead to further investigation and clarification being required, via the format of a semi-structured interview.

Instead, a quantity of blank questionnaires was taken to the U.S. and wherever possible, women FF's were asked to complete them either on the spot, or return them at their earliest convenience, either via the postal system or email. Other alternative methods used for circulating the questionnaires to as many women as possible included requesting the women FF's circulate additional forms to their colleagues when a suitable occasion was to arise in the next week or two. Another avenue that was available and used, was leaving the questionnaires with the Fire Chief or his staff, and asking them to circulate the form to as many women FF's as possible. In these circumstances, it was stressed to the Fire Department staff that the women should be given the option of returning the questionnaire direct to the researcher in the U.K. (and not via the Department Headquarters), thereby guaranteeing the individual's confidentiality and anonymity.

In the same manner as the U.K., seven follow up emails were sent on the 11.7.02 to the FF's who had not returned their questionnaires. It was made clear that, having received the questionnaire, if they no longer wished to take part in the research, then this was acceptable (Coolican 1999).

A further quantity of seventeen completed questionnaires were received from the U.S. in the following weeks – some as a result of the email reminder and others from FF's who had been left questionnaires as a result of the researcher's visit to their Fire Department. This brought the total replies to nineteen out of the thirty-two questionnaires originally issued (59%).

On the 30th October 2002, a further email message was sent to six of the non-responders whose email addresses were known, requesting they provide reasons for not returning the form. It was felt that this information might highlight as many issues as those who had completed the questionnaire. Examples of reasons for not returning the form were given – lack of time; didn't think anything would change to improve the women FF's situation; not anonymous enough or another reason.

Two emails were immediately returned as 'undeliverable' so one can only assume that the recipients email addresses had changed in the interim. No further action could therefore be taken.

No replies were ever received from the non-respondents. A decision was therefore made that, unfortunately, it would not be feasible to continue this line of enquiry.

4.6 Questionnaire Analysis

The coded questionnaire data was transferred to an Excel spreadsheet to enable the quantitative and to a lesser extent qualitative, information to be collated.

It was important to enter the questionnaire results under two separate headings of U.K. and U.S. to enable comparisons to be later made.

Once all the data had been entered onto the spreadsheet, the total number of replies from each country could be clearly seen. Where some respondents had not answered a question, this was stated on the spreadsheet.

Tables were then compiled from the raw data to enable comparisons between the U.K. and U.S. to be more clearly seen. The original data initially entered on to the spreadsheet, was then deleted as it was an exact replica of the information now shown in the tables.

Reply percentages for each question were then calculated and recorded below the table.

Consideration was given to using the Excel facility of pie and/or column charts, but given the relatively small amount of data being handled, it was felt to be unnecessary.

4.7 Study Design - U.K. Interviews

As already stated, due to the relatively short time spent in the U.S., interviews were not feasible, however interviews in the U.K. were vital to obtain further information to that already obtained via the questionnaires.

It was planned to conduct semi-structured interviews with a selection of women FF's in Devon, to pursue some of the issues mentioned in the questionnaire findings. It would allow a more natural, in-depth conversation to be held (Oppenheim 1992), whereby any relevant comments made could be picked up and questioned by the interviewer. It can often be the case that the 'throw away' comments made in an interview setting, prove to be the most revealing when carefully followed up (Lewis-Beck 1994). By carrying out interviews in this way, additional insights could be gained and other lines of interest

may come to the fore for further investigation.

While the C.F.O. had given his approval for the questionnaire and interview research to be carried out, his memo (Appendix H) had requested that Divisional Commanders/Line Managers be contacted prior to interviews being held. In view of the guaranteed confidential and anonymous status of the research, this was not feasible. However, an email was sent to the four Divisional Commanders (Appendix L) advising them of the research and its confidential and anonymous nature. Furthermore it requested their support in allowing the researcher access to the women Ff's within their Division. Their interest and approval of the research area was subsequently received.

Semi-structured interviews were therefore planned, with open-style questions designed around the data findings of the questionnaire. Therefore, more details could be obtained from the respondent than was possible with a further questionnaire.

Consideration was given to the number of questions to be asked and the likely time element involved. In a similar vein to the questionnaire completion, the minimum amount of time needed by the interviewee could influence their willingness (or not) to participate. Therefore, a few carefully constructed questions it was hoped, would glean as much from the respondent in the shortest amount of time possible. Of course, this did not mean that an interviewee who was willing to discuss matters further, was prevented from doing so, but the average interview was designed to take a maximum of one hour. This time element appeared to be acceptable to the women taking part, whereas a longer commitment (of say, two hours) may not have been, and therefore refusals to take part may have resulted.

It would have been useful to select randomly those that were to be interviewed, but due to accessibility problems, this was not feasible. However, it was decided to interview Ff's from both wholetime and retained personnel who had completed similar lengths of service, wherever possible. This would enable comparisons to be made not only between the two categories of staff, but also to see any similarities/differences found by women who had served a similar length of time.

Due to the larger proportion of women Ff's being in the retained service, it was decided to carry out the majority of interviews with them. Therefore four interviews (25%) with retained Ff's and two (20%) with wholetime staff were planned.

When carrying out the interviews, which were conducted at a venue of the Ff's choice (Kirk and Miller 1986), a number of points were clarified before commencement of the interview. These included thanking the Ff for initially completing the questionnaire and agreeing to be interviewed. It was also stated that if they did not want to answer a question or wanted to stop the interview at any time, they were free to do so (Coolican 1999). Confidentiality and anonymity were again confirmed. The request to tape record the conversation was made, with the explanation given of needing to record word-for-word the replies (Denscombe 1998). Additional reassurances were given that anything quoted would not be attributable to them. It was stated that the tape recording ensured the important points were picked up, rather having to rely on hastily scribbled notes.

In carrying out the interviews, it was important that the researcher was aware of the possible bias she may bring to the interview (Hycner 1985). As previously stated, some of the Ff's already knew the researcher, while others had never met or spoken to her before.

Consideration was also given to the clothing worn by the interviewer. A suit could have appeared too formal and therefore the respondent may not have been confident taking part in the interview (likening it to a job interview). Similarly, clothes of a very casual nature might have given a rather unprofessional impression, giving the respondent concerns about confidentiality and anonymity issues. A 'smart casual' approach was therefore taken.

Additionally, allowances had to be made where interviews were carried out at a fire station (at the Ff's request) (Kirk and Miller 1986). These included the possible noise element and/or interruptions, knowledge that the Ff may be called out to an emergency incident at any time, and also that the woman Ff may not feel completely at ease due to her male counterparts sharing the building (but not the same room) as the interview was held in.

While asking the various questions, it was important to ask the same questions in the same way of each respondent. Where any explanation was required, this would be volunteered. However, where the question was one of attitude rather than a factual question, it was not felt appropriate to supply helpful prompts that may have influenced the respondent's answer.

All the questions were of an open style to obtain free-responses, and enabled the researcher to probe deeper into areas that were mentioned when answering the open questions. The interviews concluded with the respondents being asked if they had

any further comments to make about their role of Ff or the Fire Service in general.

On occasions where it was felt necessary, hand-written field notes would also be taken to ensure any non-verbal reactions were recorded (Denscombe 1998). These notes would be kept in the same confidential manner as the interview tapes and questionnaires.

4.8 Pilot Study – U.K. Interviews

The first follow-up pilot interview, (Herbert 1993), with a woman Ff took place on the 11th November, 2002, following a telephone conversation the previous week.

While usual research convention would not agree (Coolican 1999), due to the small numbers of women Ff's in Devon, this pilot could not be separated from the rest of the interviews and therefore the comments made in the meeting were recorded and analysed in the same way as all the other interview data. However, the respondent was informed in advance and again on the day, of the pilot status, and asked to point out any questions that were misleading or any items that needed revision. None were deemed to be necessary.

4.9 U.K. Interview Design

While the information gained from the questionnaires was of great interest, it was felt that additional insights could be obtained from further questioning of the respondents.

One of the latter questions of the survey asked whether respondents would be willing to be contacted to take part in an interview as a follow-up to the questionnaire. Where a respondent was willing to do this, their email address, and/or home or work telephone numbers were requested to enable arrangements to be made. This proved to be worthwhile and time-saving when contacting respondents again for the interview stage. It also prevented the researcher from wasting valuable time contacting Ff's who were not willing to take further part in the research.

Once the questionnaire data had been analysed, it became apparent that further information could be usefully obtained by interview questioning. This covered issues such as the reasons for joining the Service and the best things about the job; why they felt their job had weakened their relationship with their partner, to whether the job had lived up to their expectations. The full list of questions with the researcher's interview checklist is shown as Appendix M.

4.10 U.K. Interviews

Following the pilot interview, emails were sent on the 12th November, 2002 (Appendix N) to three other respondents who had indicated that they would not mind being contacted to arrange a meeting. Subsequent phone calls were made to a further two respondents for the same reason.

Unfortunately, only three retained and one wholetime Ff agreed to take part in the subsequent interviews. It was generally viewed that this could be due, to a greater or lesser extent, to the effect of the national Firefighters strike in November, 2002 (still unresolved at the time of writing). These effects possibly included Ff's being generally lethargic and annoyed at not receiving the 40% pay award requested, plus the pay deductions due to personnel going on strike, being made just prior to Christmas. Further issues may have been the length of time between the questionnaires being completed and the respondents being contacted to be interviewed. Additionally, being relatively close to the Christmas period, people were very busy preparing for the holiday and socialising generally.

On the 19.12.02 a final measure was taken whereby an email was sent to the outstanding respondents, attaching the set questions, to encourage them to complete the answers. By doing this, it was hoped that any reservations about the questions or the time involved in taking part in the interview would be alleviated. One reply was received to this request on the 22.1.03 and was therefore included in the findings of this document. However, by the 30.1.03, it could only be assumed that no further replies would be received. The research findings therefore had to continue with the four interview and one written reply data results obtained. This altered the return percentage of interviews to 10% wholetime and 25% retained personnel, giving a total of 35% - around the average expected by McNeill (1990).

4.11 U.K. Interview Analysis

To aid the researcher with the analysis of the qualitative interviews, the free-to-download program 'Opencode' was

obtained. (www.umu.se/phmed/epidemi/forskning/open_code)

This particular program was chosen over others available because it was freely available from the internet, and had been recommended by another M.A. student. It proved to be a useful and user-friendly program to understand, requiring no specific training.

The 'Opencode' program was designed to code qualitative data obtained via interview or observation. It enables the user to decide on specific codes (words) that are considered important to the interviewer. Once these have been chosen, each document or in this case, interview, is converted to a text only document and the codes added to each line where the word appears. This then enables the researcher to search on a word or words with the added benefit of introducing logical operators (AND, NOT, OR, for example) and/or brackets for more complicated searches.

With the aid of this program and the taped and hand-written details, recurring themes could be identified for further analysis.

5. DATA RESULTS

5.1 Questionnaire Data

The U.K. and U.S. questionnaire data have been collated and reported below.

For ease of clarification, and additionally to highlight the various issues that were repeated by the respondents, tables have been provided.

The tables have been produced using the Microsoft Excel program These provide an 'at a glance' insight into the questions and answers given.

To enable comparisons and contrasts to take place, data results from the U.K and U.S. are shown separately.

5.2 Questionnaire Results

U.S./U.K. WOMEN FIREFIGHTER QUESTIONNAIRE RESULTS

Note: Percentages have been rounded up where the figure is .5 or more, down where the figure is .4 or less. Wherever feasible, total percentages have been adjusted to equal 100% - where this is not possible, the total percentage has been left 'as is'.

1. At what age did you start to consider becoming a Firefighter?

	U.S.	U.K.
under 10 years	1	0
11-15 years	3	1
16-21 years	6	2
22-26 years	3	5
27-31 years	3	3
32-37 years	1	1
38-42 years	1	0
43-47 years	1	0
48 or over	0	0
Total replies	19	12

One (U.K.) respondent did not answer this question.

The data from Question 1 appears to show that more women in the U.S. consider the Service in the age range 16-21 years (32%), whereas more women in the U.K. consider it at the slightly older range of 22-26 years (42%).

2. What brought the Fire Service to your attention as a possible career?

	U.S.	U.K.
Advertisement	4	5
TV Programme	1	0
Fire Station Open Day	0	0
Member of Family/friend	10	7
School/college career advice	0	0
Other (Please state):	4	1
Total replies	19	13

Answers from Question 2 indicate that knowing someone in the Fire Service is still the main contributor to 'advertising' the job (53% U.S. and 54% U.K.).

The four U.S. respondents who chose 'other' gave their reasons as being 'job security'; 'ride along programme' (similar to work experience); 'Ff test listing at City Hall' and 'working on women Ff statistics and recruitment initiatives'. The U.K. Ff stated she had

been 'previously employed in a different role within the Service'.

3. Were your family and friends supportive of your decision to join the Fire Service?

FAMILY	U.S.	U.K.
Yes	14	12
No	2	0
Neither	2	0
Total replies	18	12

Two answers not completed (1 from U.S. and 1 from U. K.). In the U.S. 78% had the support of their family, and 100% of respondents were supported in the U.K.

FRIENDS	U.S.	U.K.
Yes	15	12
No	1	0
Neither	1	0
Total replies	17	12

Three answers not completed (2 from U.S. and 1 from U.K.)

The findings in Question 3 appear to confirm that in the vast majority of cases, both family and friends are supportive of a woman's decision to join the Fire Service (Friends: 88% U.S.A and 100% U.K.).

4. At what age did you join the Fire Service?

AGE	U.S.	U.K.
18	2	0
20	0	1
21	1	0
23	1	1
24	1	0
26	2	1
27	1	2
28	1	1
29	1	0

AGE	U.S.	U.K.
30	0	1
31	1	2
32	1	0
35	1	2
37	1	0
39	2	1
40	1	1
48	1	0
Total replies	18	13

One respondent (U.S.) did not complete this question.

5. What do you consider the minimum and maximum ages for joining the Fire Service?

Minimum: -

AGE	U.S.	U.K.
18	5	8
20	1	1
21	9	2
23	1	0
25	0	1
Total replies	16	12

Answers were 18 years (31% for U.S. and 67% U.K.); 20 years (6% U.S., 8% U.K.); 21 years (57% U.S., 17% U.K.); 23 years (6% U.S., none U.K.); and 25 years (None U.S., 8% U.K.)

Three U.S. and one U.K. answers missed out

Maximum: -

AGE	U.S.	U.K.
30	3	0

31	1	0
35	2	0
40	1	3
45	3	3
50	2	3
55	2	0
Replies	14	9

Answers ranged from 30 years (22% U.S., none U.K.); 31 years (7% U.S., none U.K.); 35 years (14% U.S., none U.K.); 40 years (7% U.S., 33% U.K.); 45 years (22% U.S., 33%U.K.); 50 years (14% U.S., 33% U.K.); and 55 years (14% U.S., none U.K.).

Nine answers not completed (5 from U.S. and 4 from U.K.)

6. If you didn't join the Fire Service at the minimum age (18 in the U.K.), what were your reasons?

			U.S.	U.K.
Still in education			1	2
In Armed Forces			0	1
Already in another job			1	3
Didn't consider it			8	5
Didn't realise women could join			2	2
Fire Service image			0	0
Other			2	0
Total replies			14	13

57% (U.S.) and 38% (U.K.) didn't consider a career in the Fire Service at the minimum age.

7. Regardless of your age on joining, did you experience a reduction in pay to join?

	U.S.	U.K.
Yes	7	3
No	10	7
Not applicable	2	3
Total replies	19	13

Question 7 considers whether the current salary for a Ff is a deterrent to women from joining.

8. Did you attend any positive action initiatives aimed specifically at women, before joining the Service?

(X' all that apply)

			U.S.	U.K.
Orientation/Pre-entry training			3	1
Practice Test/Women Ff Open Days			5	2
Other			3	1
No, didn't attend any such initiatives			11	10
Total replies			22	14

50% (U.S.) and 71% (U.K.) of women Ffs did not attend any positive action initiatives.

9. Have you always enjoyed sports/keeping fit?

	U.S.	U.K.
Yes	16	12

No	3	1
Total replies	19	13

10. Did you undertake a fitness regime purely to help with your Fire Service application?

	U.S.	U.K.
Yes	3	1
No	0	0
Total replies	3	1

11. Did you meet your current partner before or after joining the Fire Service?

	U.S.	U.K.
Before	12	4
After	3	6
Not applicable	4	3
Total replies	19	13

Question 11. Of the respondents who stated they had a partner at the time of completing the questionnaire findings, show that 80% (U.S.) and 40% (U.K.) women had met their current partners before joining the Service. 20% (U.S.) and 60% (U.K.) had met after joining.

12. Has your job as a Firefighter in a male-dominated environment had an effect on your relationship with your partner?

	U.S.	U.K.
Yes	4	6
No	11	4
Total replies	15	10

Question 12. Results indicate that 27% (U.S.) and 60% (U.K.) women felt their job of Ff had had an effect on their relationship. 73% (U.S.) and (U.K.) felt it had not.

13. Which of the following would you say most accurately describes the effect your job has had on your relationship?

	U.S.	U.K.
Strengthened it?	0	1
Weakened it?	3	4
Destroyed it?	0	1
Total replies	3	6

One respondent (U.S.) failed to provide an answer.

For those women who felt that their job as a Ff had had an effect on their relationship in Question 12, all three (U.S.) respondents and four out of c (U.K.) felt it had weakened it. Only one woman in the U.K. felt her job had strengthened the relationship and a further one felt it had destroyed

14. In general, how would you describe relations between male Firefighters and yourself at your place of work?

	U.S.	U.K.
Very good	5	7
Good	10	5
Neither good/poor	3	1
Poor	1	0
Very poor	0	0
Don't know	0	0

Total replies	19	13
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79% of women FFs in the U.S. feel that the relationship with their male colleagues, are either very good' or 'good', while only 21% feel that it is 'neither good or poor'. In the U.K. 92% feel that their relationship is either 'very good' or 'good' and only 8% feel it is 'neither good nor poor'.

15. If 'Poor' or 'Very Poor' is this, in your opinion, because they: -

	U.S.	U.K.
Not as strong?	1	0
Standards lowered?	1	0
See job as male?	1	0
Partners resentful?	1	0
Other	1	0
Total replies	5	0

The one respondent (U.S.) that felt the relationship with her male colleagues was 'poor' in Question 14. indicated that this was due to all the reasons stated, as well as others.

16. Is the job as you imagined it would be before you joined?

	U.S.	U.K.
Yes	13	11
No	6	2
Total replies	19	13

Replies to Question 16. suggest that 32% of the U.S. women were surprised by the role of aFF, while only 15% of U.K. women felt that the job different to that imagined.

17. If no, why is that?

The eight qualitative replies could be grouped into three categories: - 'Male Ff's'; 'the Job' and 'Other'.

The three comments about Male Ff's ranged from them being not as challenging and intimidating as expected, colleagues being more welcoming and supportive than expected, to the length of time taken to be accepted (as a woman Ff) on station.

The five comments (one respondent's answer was split into two categories) concerning the Job covered "the sights you see"; being "more challenge worries about own knowledge; "didn't know what to expect"; "more varied" and "more training" than expected; to "different duties" and "more fires".

The one 'Other' comment related to the fact that a lot of the time, the public didn't know women FFs existed.

One respondent (U.S.) did not supply an answer.

18. How can more women be encouraged to join the Fire Service in your opinion?

(X' all that apply)

	U.S.	U.K.
More Women Ff Open Days	9	7
Advertising more in magazines aimed at women	11	9

Advertising in gyms/sports centres popular with women	11	8
Make salary and conditions of emp' more readily available	9	3
Make fitness standards known without being 'superfit'	9	10
Further promotion of Svc. no longer being male-dominated	13	9
Make info' about the job of Ff more readily available	12	8
Other (Please state):	6	3
Total replies	80	57

Every respondent (U.S. and U.K.) indicated that they felt more could be done to attract women to the job of Firefighter. Thirteen of the nineteen U.S. Ff's (68%) felt more promotion of the fact that the Service was no longer a male-dominated environment might help. Ten of the thirteen U.K. women (77%) felt that additional advertising of the fitness standards being attainable without being 'superfit' could assist.

28% of respondents gave examples of 'Other' ways to attract more women.

These ranged from providing more detail of what Retained cover involved - the flexibility of hours to promoting job sharing/part-time working. 38% of replies felt more promotion of the Service in schools, and to a lesser extent colleges and at career days, fitness centres, hair salons and shopping centres.

Other comments referred to positive press about women Ff's needed to counteract the recent negative articles in the U.K.; showing women Ff's more in their job settings, to promotion of technique required more than strength.

One woman Ff felt that women shouldn't be positively recruited.

19. If you have any dependant children, what child care arrangements do you have when you are working...

...during the day?

	U.S.	U.K.
Partner/family	6	2
Childminder	1	0
Friend	0	0
Nursery/school	3	2
Other	1	0
Total replies	11	4

....at night?

	U.S.	U.K.
Partner/family	8	3
Childminder	1	0
Friend	0	0
Other	2	1
Total replies	11	4

Question 19. Results shows that more women Ff's in the U.S. have dependant children compared to women in the U.K. Partners and family me an important role in enabling a woman Ff to pursue her career with the Fire Service by baby-sitting and/or child-minding.

20. Please give your reaction to the following statements:-

I am accepted more as a woman Ff as the time employed by the Fire Service lengthens.

	U.S.	U.K.
Strongly agree	4	3
Agree	10	9

Neither agree/ disagree	2	1
Disagree	2	0
Strongly disagree	0	0
Don't know	0	0
Total replies	18	13

One respondent (U.S.) did not complete this question.

My Fire Service/Department has taken on the equal opportunities initiative.

	U.S.	U.K.
Strongly agree	3	4
Agree	10	7
Neither agree/disagree	2	1
Disagree	3	1
Strongly disagree	1	0
Don't know	0	0
Total replies	19	13

68% of women FFs in the U.S. feel their Departments have taken on the equal opportunities initiatives ('strongly agree', 'agree') compared to 85% of U.K. women.

I would recommend the Fire Service as a career to other women.

	U.S.	U.K.
Strongly agree	10	4
Agree	5	7
Neither agree/disagree	2	2
Disagree	1	0
Strongly disagree	1	0
Don't know	0	0
Total replies	19	13

79% (U.S.) and 85% (U.K.) women FFs would recommend ('agree' or 'strongly agree') the job of Ff to other women.

21. Are you employed as a...

U.S./U.K.	U.S.	U.K.
Career/Wholetime	16	6
Volunteer/Retained	2	7
Paid on call/Volunteer	1	0
/WholetimeRetained	N/A	0
Other	0	0
Total replies	19	13

84% of respondents from the U.S. were Career FFs, while 10% were Volunteer and 5% were Paid on Call, 46% of U.K. respondents were Wholetime FFs and 54% were Retained FFs.

22. How many years have you been a Firefighter?

	U.S.	U.K.
< one year	0	1
1 to < 2 years	1	6
2 to < 5 years	4	3
5 to < 10 years	7	3
10 to < 15 years	6	0
15 to < 20 years	1	0

20 years >	0	0
Total replies	19	13

Of the U.S. respondents, 68% had been in the Service for between 5 and less than 15 years. Whereas 23% of U.K. respondents had been in the 1 similar length of time.

The majority of the U.K. respondents were in the 1 to less than 2 year category (46%).
No U.K. respondents had served in the role for 10 years or more.

23. What is your current rank/role?

	U.S.	U.K.
Firefighter	10	13
Driver engineer/Lff	1	0
Lieutenant/Sub O	3	0
Captain/Stn O	4	0
Battalion Chief/ADO	0	0
Inspector/DO	1	0
Public education/	0	N/A
Total replies	19	13

The findings of Question 23. show that of the respondents from the U.S., women Ff's in six of the seven listed rank/roles were questioned. In the only one Ff in Devon is of Lff rank, all respondents were Ff's.

24. Do you have any further comments you would like to make about your employment as a Firefighter or this questionnaire?

These replies could be split, initially, into two categories of 'Physical Ability' and 'Need To Keep Proving Oneself' and are recorded in the next

5.2.1 Physical ability -

.... "much damage can be done to 'our cause' if a female is recruited who is not physically or mentally suited to the job" (U.K.)

.... " the job is still largely about strength (physical) and aggression ... it will do further damage to recruit women who are not equal in physical strength and strength of character to the men - it will just give them a poor reputation." (U.K.)

...."most women are not physically suited for this job. If a woman gets hired, it should be because she's exceptional, not because she was given a break or concessions." (U.S.)

.... "who just get by or 'are carried' by their crew make the rest of us look bad and make it harder for us to get along - No Slackers Please!" (U.S.)

"Let them know that firefighter-related tasks takes more usage of techniques than strength." (U.S.)

.... " if their husbands could pass the Academy, they could too." (U.S.)

5.2.2 Need to keep proving oneself –

.... " I thoroughly enjoyed my time as a recruit and felt like a valuable member of a team, it's very hard after this to have to go on to station and have to prove so much all over again just to be accepted." (U.K.)

"As the only female on station I do find that I have to work harder to prove myself and my ability. Sexist

attitudes appear to improve when given the opportunity to show that you can actually do the job. Time served also appears to improve the situation.” (U.K.)

.... "Ff's transferring to my Department make me feel that I have to prove myself all over again..." (U.S.)

.... "you prove yourself and then you're accepted by them." (U.S.)

[Women Ff's have to] "work harder than others just to be considered equal." (U.S.)

...."any woman is going to encounter hostility, and no matter how well she does the job, she's going to have men watching her constantly, always looking for mistakes....". (U.S.)

[A woman Ff is] "always going to have to work twice as hard to be thought half as good".(U.S.)

.... "I feel I have to constantly prove myself when I am working on another shift or with other companies." (U.S.)

The qualitative data were sub-divided further for the purposes of the Discussion chapter, while other broad-ranging questionnaire data are shown as Appendix O.

5.3 U.K. Interview Data

For the purpose of this research, the first interview dialogue was entered into the 'Opencode' program. As this interview happened to be of the longest duration of the four held, it was felt that it would be the ideal one to use in deciding on the necessary codes.

These codes included: - 'helping people'; 'exciting'; 'challenge'/'challenging'; 'family/social life'; 'variety'; 'intimidated'; 'emotion'; 'physical'; 'swearing'; 'uncomfortable'.

Once the text of all four interviews had been added to the program, a search was carried out on the various codes, to see the amount of times the specific words had been mentioned. Some words or phrases of similar meaning were grouped together by the researcher to reduce the overall number of codes used. Words or phrases that were used more than once by just one interviewee were ignored

1. What were the reasons that made you decide to join the Fire Service?

The main reasons given by the interviewees for joining the Fire Service were given as "helping people" (4); that they considered the job would be "exciting"(2); "financially rewarding" (2); "challenging"(3); and that the role would be "different" or involve "variety"(3).

2. What would you say were the best things about your job of Ff?

When asked what were the best things about being a Ff, they repeated the majority of reasons given for deciding to join the Service. These were: - "exciting" (2); "helping people" (2); "variety" (2); "camaraderie/team" (3) and "making a difference to peoples lives"(1).

3. If applicable – you did not attend any Women Ff Initiative Days, can you tell me why not?

None of the Ff's interviewed had attended a Women Ff Initiative Day before joining the Service. When questioned on the reasons they had not, the main reason given was that they had not known about the days (3); that they were not being run at the time of considering joining (1) or they considered them aimed at Wholetime personnel rather than Retained. (1).

4. You have said that your job of Ff has weakened the relationship with your partner. Can you give me any reasons why you think this is?

and

5. How has this affected you?

Where the interviewee had indicated on her questionnaire that her job of Ff had weakened the relationship with her partner, the possible reasons behind this were requested. One respondent pointed to the fact that it was such a "male-orientated job", that her partner "could not accept her carrying out the role" and that the partner felt she was "doing a man's job". Another interviewee said that the role "limits the time spent together" and was therefore resented by her partner at times. A further

reply was that the Ff's partner found it difficult knowing she was working "so closely" [with] "a group of men", but she stated that she worked harder at the relationship with her partner because of this.

6. If applicable – you said that you didn't consider a career with the Fire Service initially, can you explain why you didn't?

Regardless of whether the interviewee was employed in a Wholetime or Retained role, they were asked why they had not considered a career with the Fire Service initially. Four stated that they had not been aware at the age of 18 years, that women could be Ff's. Additionally, one replied that the height restrictions at that time would have prevented her from joining even if she had been aware that women were employed as Ff's. Another stated that she had not received any career advice at school concerning the Service. A further commented that she had "never thought she would enjoy such a challenge."

7. Going from the date of joining the Service as a recruit Ff up until the present day, is the job what you expected it to be?

When asked whether the job had proven to be what they had originally expected, the following replies had been given: - "more variety" to the role (2); "colleagues more welcoming" than expected (1); "more training" involved than envisaged (1). Two interviewees replied that the job was "more than expected" and one said "yes – I love it!".

8. What aspects, if any, of your Fire Service career stand out for you?

If any aspects of their Fire Service career had stood out for them, they were asked for examples. The "larger fires/incidents" (1) was quoted, along with the "humour" (1); "training school" (1); "proving women can do the job" (1) and "what I have achieved...(1)".

9. Have you made any changes in your life as a result of joining the Fire Service?

Where Ff's had made any changes to their lives due to joining the Service, they were asked to quote them. These were found to be: "see family less/have reduced social life" (2); find themselves (slightly in one case) "financially better off" (2); making a commitment to "get fitter/stronger" (1) and "where and what I do ..."[down to] "what I wear." (1).

10. Are there any other points you would like to mention?

Additional information mentioned during the course of the interview or when asked if the respondent had any further comments to make about the Fire Service or their role, could be split, initially, into three headings. These were 'Training Course', 'Isolation and Segregation', and 'Physical Ability', and are shown in the next sections.

5.3.1 Training Course

Two of the five interviewees mentioned their experiences during the initial training course, and are quoted here: -

".... a bit scary and intimidating, and I thought after a couple of days with men shouting at me...."

"... to be stood in front of the Officer crying your heart out and being made to feel like you're a small child, that's not the way to teach people....you don't get any more out of people doing that at all. It destroys what they have got...."

5.3.2 Isolation and Segregation

The words 'isolated' and 'segregated' were mentioned by two individuals.

The first had experienced being bullied by her male colleagues and this had resulted in her feeling isolated when at work. However, at her request, no formal action had been taken over the bullying allegation.

The second Ff felt that by emphasising the 'difference' between women and men Ff's could lead to the woman feeling segregated. This could be a result of the male Ff's feeling resentful that the women were given "special treatment". When prompted, it was explained to mean that standards were allegedly lowered to allow more women to pass the physical entry tests, or that initiative days were held for women but not men.

5.3.3 Physical Ability

Three interviewees referred to the physical and mental side of the job: -

..” it's not just about being strong and huge and muscular...” [anymore].

“... it's more about technique than strength...” [with the equipment getting lighter all the time].

[Colleagues needing to] “...trust each other physically....”.... [with] “women proving that they can be tough, both mentally and physically.”

~~The qualitative data were sub-divided further for the purposes of the Discussion chapter, while other broad-ranging questionnaire data are shown as Appendix P.~~

DISCUSSION

6.1 Analysis of Questionnaire Results

Question 1. At what age did you start to consider becoming a Firefighter?

This could be due to the fact that equality has been more prominent as an issue in the U.S. for longer than it has in the U.K. and therefore women in the U.S. consider previously male-dominated roles at an earlier age. Not surprisingly, given the current U.K. mandatory retirement age of 55 years (for ranks up to/including Station Officer), no-one considered joining the Service at age 48 or more. The 'under 10 years' and '11-15 years' bands could indicate that schools are not promoting the Service as a possible career. This could be a result of schools not suggesting the Service to both boys and girls or limiting their advice to just boys. The '16-21 years' and '22-26 years' bands could suggest that University students still need to be targeted by Service recruitment, as they may still be deciding on their career option, as previously stated.

Question 2. What brought the Fire Service to your attention as a possible career?

It is not immediately apparent why recruitment advertising appears to be a poor second compared to contact with someone already in the Service. Suggestions as to how more contact with Ff's could be encouraged are discussed further under Question 16.

Of concern is the fact that none of the women who completed the questionnaire had received career advice about the Fire Service.

As recently as 2001, it was discovered that some schools in Devon were still using old career information packs. These referred to “firemen” and quoted that you needed to be “big, strong and brave” to join the Fire Service. It is therefore unlikely that if this information had been shown to the female pupils, they would have considered it as a career.

In the E.O.C.'s survey (2001), the suitability of certain jobs for women, men or both sexes were asked of young people aged between 11 and 16 years of age. When asked specifically about the role of firefighter, approximately 2% of the boys and none of the girls felt it was suitable for women; 33% of the boys and 42% of the girls felt it was suitable for both sexes while 65% of the boys and 58% of the girls felt it suitable for men. The E.O.C. concluded that schools should be “proactive in encouraging boys and girls to take non-stereotypical options in subject choice and work experience” and careers advisers to “present positive role models in a wide range of jobs and careers” and additionally “support those who step beyond traditional roles.”

Question 3 Were your family and friends supportive of your decision to join the Fire Service?

As we have seen, friends and family who are/were employed by the Fire Service are very influential in recommending it as a career. Friends and family who have no connections to the Service are still very supportive when the decision to join is being made. From an equality viewpoint it is noteworthy that parents do not consider the Service a male-dominated career not suitable for their daughters.

Question 4. At what age did you join the Fire Service?

The ages of the U.S. respondents were widely spaced with the highest percentages being: 11% joining the Service at age 18, 11% at age 26 and 11% at age 39. The highest percentages from the U.K. respondents were 15% at age 27, 15% at age 31 and 15% at age 35.

Question 5. What do you consider the minimum and maximum ages for joining the Fire Service?

57% of U.S. women FF's felt the minimum age for joining the Service should be 21, followed by 31% feeling that the age of 18 should be the minimum.

In the U.K. 67% felt that the minimum age should be 18, with 17% feeling that 21 should be the minimum.

22% of the U.S. FF's agreed that the maximum age for joining should be 30, whereas a further 22% felt that the age of 45 should be the maximum.

U.K. FF's felt the maximum age should be 40 (33%), 45 (33%) and 50 (33%).

Question 6. If you didn't join the Fire Service at the minimum age (18 in the U.K.), what were your reasons?

Of the 89% (U.S.) and 100% (U.K.) FF's who did not join at the age of 18 years, 57% (U.S.) and 38% (U.K.) "didn't consider it". More information was therefore required from respondents, and this subsequently formed one of the interview questions.

11% of respondents had still be en "in education" at the age of 18 years, therefore future recruitment advertising should bear this in mind, and not presume that they had already made their career choice.

Question 7. Regardless of your age on joining, did you experience a reduction in pay to join?

Positive replies were received from 37% of the U.S. and 23% of U.K. respondents. This could indicate that it is a factor when choosing a career with the Fire Service. It also could be seen to indicate how strongly people feel about pursuing their chosen career, regardless of the fact that they may receive an initial pay reduction to join.

Question 8. Did you attend any positive action initiatives aimed specifically at women before joining the Service?

Further research was needed to find out why respondents did not attend any positive action initiatives, and whether alternative initiatives were needed to attract women instead. This question was asked at the interviews subsequently held.

Question 9. Have you always enjoyed sports/keeping fit?

The replies to this question seem to suggest that women who generally like to keep fit are ideal applicants for the Service.

The high percentage of women, who already enjoyed participating in exercise prior to joining the Service, would suggest that fitness sessions aimed specifically at women considering applying would not be worthwhile. Future advertising in sports halls/fitness centres, and gyms where physical exercise classes are held, and Colleges/Universities where future fitness teachers are trained however, seem to be ideal ways of attracting women who already have an interest in their fitness levels.

Question 10. Did you undertake a fitness regime purely to help with your Fire Service application?

The findings of this question could indicate that a fitness course run by the Service specifically to encourage more women to join, would in fact be of very little benefit.

Most women who subsequently joined the Service had a previous interest in their general level of fitness before considering joining. The few who did not, felt the need to obtain a level of fitness prior to applying.

Question 11. Did you meet your current partner before or after joining the Fire Service?

80% of U.S. and 40% of U.K. women had met their current partners before joining the Service. 20% (U.S.) and 60% (U.K.) had met their partners after joining.

Question 12. Has your job as a Firefighter in a male-dominated environment had an effect on your relationship?

A much smaller percentage of U.S. women (27%) felt their job of Ff had had an effect on their relationship with their partner, compared to the 60% of U.K. women.

This could be possibly due to the earlier comment made that the population of the U.S. is more aware of equality issues. Therefore partners do not feel so threatened by their relationship with a woman who happens to be a Ff.

Question 13. Which of the following would you say most accurately describes the effect your job has had on your relationship?

Of the 27% of U.S. women who felt their job had had an effect on their relationship, all of them (100%) felt this effect was that it had weakened it. With the 60% of U.K. women stating their job had had an effect, the majority (83%) felt it had weakened or destroyed it. As 60% of the U.K. women Ff's had met their partners after joining the Service, it was surprising that such a high percentage felt that their job had weakened their relationship. Additional research was needed to find out why they felt like this and this was therefore incorporated, where relevant, into the interviews that followed.

However, it can only be assumed that the (male) partners' opinions of the woman's career as a Ff had changed during the course of the relationship. This is suggested because otherwise the relationship would not have continued after the partner discovered what the woman's job was.

As one woman Ff explained, perhaps her partner decided not to mention his concerns about her job early in their relationship because he "didn't want to rock the boat". Now some time into the relationship however, he feels he can make those comments, which causes friction between them.

These views seem confirmed by Richards (1996:69) when he found that only 31% of the male partners were "positive" or "very positive" about their female partners being Ff's.

Question 14. In general, how would you describe relations between male Firefighters and yourself at your place of work?

Having questioned earlier in this section whether the U.S. recognising equality as an issue sooner than the U.K., has had an effect on the acceptance of women in formerly "male jobs", makes the findings of this particular question interesting. While 92% of U.K. women Ff's felt that their relationship with their male counterparts were "very good or good", only 70% of U.S. women felt the same.

Question 15. If "poor" or "very poor", is this, in your opinion, because...?

Only one respondent (U.S.) felt the relationship with her male colleagues was "poor" or "very poor". While this view represents 3% of the total U.S. and U.K. sample, it was not felt of sufficient significance to pursue further given the other high percentages.

Question 16. Is the job as you imagined it would be before you joined?

and

Question 17. If no, why is that?

25% of the total respondents felt the job was different to what they had imagined. Making more information readily available about the role, in the recruitment advertising stage, could have possibly prevented some of the surprises later on in the Ff's employment. Qualitative comments made included the different and varied duties required of a Ff, along with the job being more challenging than expected. Due to the variety of duties, the training involved was greater than assumed. Other comments made ranged from the negative aspects of seeing "dead people"; "more fires" than imagined, to just not knowing what to expect.

In 1994, the Bucke Report also found that the Fire Service was the career that respondents knew least about, compared to other occupations. Even with limited information about the Fire Service, it was still considered as being a job where sexism was apparent, and equality for women was considered low on its agenda.

Having already stated that a high proportion of Firefighters considered joining the Service because they had a family member or friend already in the job, gives rise to the idea that more work should be done in informing groups about the role. Regular visits by Firefighters to youth groups, Brownies, and Girl Guides clubs for example, or station open evenings would allow a larger audience to have such contacts to tell them about the recruitment process, the work it entails, fitness requirements etc.

The findings of this question suggest that the women expected Service life to be "more challenging and intimidating", with the men being "more trying and disrespectful" than they actually were. However, one respondent was surprised by the length of time it took to be accepted as a woman probationer on station.

Question 18. How can more women be encouraged to join the Fire Service in your opinion?

Each of the respondents who found the job to be different to what they had imagined, stated that more women could be encouraged to join the Service if additional "information about the job of Ff was more readily available".

The highest percentage of views on ways to encourage more women to join the Service were: -

- ? **68% (U.S.) - promoting the Service no longer being a male-dominated environment;**
- ? **77% (U.K.) advertising the fitness standards as being attainable without being "superfit".**

This view is borne out by informal discussions the researcher held with women attending a charity event in Devon in October 2001. The Women's Driving Challenge day was designed to raise money for the Marie Curie charity and involved women driving a wide variety of vehicles (police cars to snow ploughs, for instance). During the course of the day, women who were in the queue to drive a fire appliance were asked if they had considered/were considering a career with the Service. 80% felt they were not fit or strong enough, while 20% said they weren't tall enough or were too old. When it was pointed out that there were no longer height or age restrictions on entry, the majority were surprised and had not been aware of this.

Given that 91% (Bucke 1994) of the population of women are under the former requirement of 5ft 6inches (1.68 metres) in height, (one of the reasons for abolishing it) and that this restriction was lifted in April 1997, it was of concern that the message had obviously not reached the public (particularly women) it was designed to encourage.

It is worthy to note that only 24% of the male population had been excluded from applying to the Service by the former height restriction (Bolland 1997:21).

The Bucke Report (1994) also highlighted the physical requirements of the role of a Firefighter were a further barrier to women, although with relevant training, most of the women questioned thought they could overcome this.

Women Ff's in Baigent (1996) report also referred to the need to be physically and mentally strong, but pointed out that the equipment was getting lighter, so one didn't "have to be muscle bound....". Another interesting comment made in the report referred to the fact "...that other qualities are needed, other than brute force....".

Question 19. If you have any dependant children, what child care arrangements do you have when you are working during the day/at night?

Whether this was due to the U.S. employing women in the role of Ff for a much longer time period than the U.K. and therefore it being more "acceptable", or just the equality culture being more advanced, could be questioned.

While the Bucke Report (1994) focused on the issues that affected women (previous employment and fitness levels) when joining the Service, it also touched on the effects that having children had had on the individual. The reliance on family and friends to provide childcare arrangements, particularly at night – or incur considerable cost, was not overlooked. The Wholetime duty system (two days working 9am to 6pm, then two nights working 6pm to 9am, followed by four days off) and holiday entitlement (in the region of 28 days per year dependent on length of service) were listed as benefits to be promoted to women with children.

However, the shift system was subsequently reported as being "... potentially disadvantageous to those with caring responsibilities...." by the Equal Opportunities Commission in the Bain *et al* (2002) report

As Cockburn (1991:12) and Richards (1996:19) stated, childcare responsibilities usually fall to the woman in a relationship. In offering day/night childcare facilities at reduced costs could enable more women to pursue their chosen career in the Service without being beholden to the partner/family and friends. This could be especially true of one-parent families.

Please give your reaction to the following statements: -

Question 20 (a). I am accepted more as a woman Ff as the time employed by the Fire Service lengthens

Data results obtained for this question would suggest that women Ff's felt they are more accepted when their employment time had lengthened. Whether this was because they have had a chance to prove themselves over a period of time or were less a "novelty" as more and more women were appointed, remains unclear.

Question 20 (b). My Fire Service/Department has taken on the equal opportunities initiative.

Interestingly, given the U.S. has employed women Ff's for well over a century, only 68% of respondents felt their Departments had taken on the equal opportunities initiative, compared to 85% of U.K. women.

Question 20 (c). I would recommend the Fire Service as a career to other women

11% of women Ff's in the U.S. and 15% of U.K. Ff's would not recommend ('disagree'/'strongly disagree') the Service as a career to other women.

Baigent (1996) found that the majority of women involved in his research felt that a degree of warning would need to be given to ensure any interested friends knew what they were taking on. Examples of this were quoted as being "...tell them what it's really like" and "ensure they know the negative side and difficulties." The right sense of humour and personality were also quoted as being important.

Question 21. Are you employed as a ...?

The questionnaire received the greatest response from career Ff's in the U.S. (84%), whereas, more retained Ff's (54%) in the U.K. replied compared to their wholetime equivalents (46%).

It was not apparent from the data, that women Ff's in different types of employment (wholetime, retained, career, volunteer etc) were treated dissimilarly to the next.

Question 22. How many years have you been a Firefighter?

A significantly higher number of women Ff's in the U.S. had been employed for between five and fifteen years, compared to the U.K. This could be a result of the U.S.'s earlier acceptance of women in the Fire Service, along with their leadership on equal opportunities awareness.

There did not appear to be any major differences in the views of women Ff's who had been employed for a longer length of time compared with those recently employed.

Question 23. What is your current rank/role?

A wide range of ranks in the U.S. were involved in this research study whereas only one rank was involved from the U.K. D.F.R.S. only employs one woman Ff above the rank of Ff – a Lff who was on maternity leave at the time of this research project. Due to this, comparison between men and women Ff's and the lengths of service versus the rank attained, was not possible.

Apart from the previously mentioned fact that women Ff's found they were accepted more as their time in the job lengthened, no other significant differences were found between Ff's employed for a relatively short time compared to longer serving ones.

As has already been stated, the U.S. has been employing women Ff's for a much longer period of time than in the U.K. This could be the reason why 68% of the U.S. women completing the questionnaire had been employed for a length of between 5 to less than 15 years, whereas only 23% of women in the U.K. had completed a similar employment period. However, somewhat reassuring was the fact that 46% of the U.K. women had been employed for 1 to less than 2 years duration. This could be seen to indicate that the number of women Ff's employed in the U.K. was on the increase.

This factor was proven when comparison of the number of women Ff's employed at the beginning of this research project (ten wholetime (1.8%) and sixteen retained (2.1%)) was made with the number employed at the end of it, (eleven wholetime (2.0%) and 20 retained (2.6%)). This showed the slight increase of 0.2% for wholetime and 0.5% for retained women Ff's.

The increase in the number of retained women Ff's may be due to a concerted effort, over a five month period by the Devon Fire & Rescue Service, to hold retained recruitment events. Initially, letters were sent to all householders; advertisements were placed in the local supermarkets/papers/church newsletters; and advertising boards (2ft x 3ft) were placed in shop windows, or hoardings etc, in the village or town highlighted as being low on retained Ff numbers. These advertising attempts were particularly designed to encourage women to apply. Local knowledge was used to ensure that holiday accommodation was not targeted by such attempts.

A recruitment telephone number was provided and applicants were asked to state whether they preferred to receive an information pack via the post, or actually be telephoned by local fire station personnel to discuss the role of a Ff.

When a list of interested people had been obtained, a recruitment day or evening was arranged. This meant those members of the public who had shown an interest in the role could meet the station personnel and find out more about the job. Additionally, various strength tests and exercises were available at the same time for them to try out. There would also be the opportunity to view the equipment carried on the appliance and ask any further questions.

While it was reassuring to see the number of interested candidates, disappointingly only 30 to 40% could be available for the required number of contracted hours. The full cover employment hours means giving a commitment to attend a

minimum of 75% of all calls received in a week spanning 168 hours. The part cover hours require a commitment of 75% of calls received in a 126 hour week. When this is considered in the light of the fact that when a Ff is on duty, he or she must be within one mile or 4 minutes travelling time of the station at all times, the commitment expected of the individual is very high.

Recently, the South Wales Fire Brigade recognised these factors when having problems in recruiting retained Ff's, and as a six months trial project, re-vamped their employment contracts to offer contracts of just 84 hours per week for seven of their retained stations. In addition, the hourly rate was increased to reflect that paid to wholetime personnel. Retained Ff's now receive a monthly salary for their commitment while the attendance fee has been dropped. As *The Future of the Fire Service Review* (Bain *et al* 2002:108) stated: -

"South Wales intend their Scheme will provide a fast track for entry into the wholetime service, which will be attractive to many retained personnel, and will aid retained recruitment."

It is still too soon to gauge what impact this will have on their retained personnel numbers, but if it is proven to attract more retained Ff's to join and stay with Fire Services, then it may be adopted across the country.

Question 24. Do you have any further comments you would like to make about your employment as a Firefighter or this questionnaire?

The qualitative replies were split, initially, into two categories of "Physical Ability" and "Need to Keep Proving Oneself". However, for the purposes of this chapter, the data have been further sub-divided into "Home Office Targets", "The Changing Role and Techniques" and "Equal Opportunities Training".

6.1.1 Physical Ability

It would appear that the presently employed women Ff's both in the U.S. and U.K. do not want more women employed just to 'make up the numbers'. They apparently feel quite strongly that for a woman to be employed in the role, she has to be physically and mentally suitable and should have to face the same testing procedures as the men. If this is not followed, then the male Ff's may sometimes have to resort to helping the woman Ff, and in turn this makes it more difficult to change the culture to one that shows women can do the job as well as men (Baigent 1996).

6.1.2 Need To Keep Proving Oneself

Seven of the women who completed the questionnaire made a reference to the need to keep proving themselves. One quote was from a Ff who had been employed in the role for twelve years. Bucke (1994) also found that some women felt that they were being critically watched all the time by their male counterparts. Both U.S. and U.K. Firefighters echoed this feeling. Another comment made on the questionnaire was: - "I have to keep proving myself - not only to my own crew, but to other males [with less experience] who then join the station".

The only exceptions to this rule appear to be where men and women Ff's had been recruited and tested in exactly the same way. Experienced (male) Ff's were then less openly hostile to probationers with their "lowering the standards" quotes when new Ff's of both sexes had gone through the same recruitment process (even when it was different to that undertaken by themselves). As Myrdal & Klein (1968:155) pointed out: - "... women must be able to compete with men on equal terms." It is the researcher's view that this is the only way that discrimination against women will truly end.

It would appear that until the Fire Service culture changes and women are shown as being capable of carrying out the role of Ff, the male Ff's will be watching them. This situation does seem to improve over a period of time, presumably once the woman has had chance to prove she can carry out the role.

This is a situation which will hopefully change as the numbers of women Ff's employed increase, and the overall length of time women have been Ff's lengthens. Equal opportunity training can only assist in the meantime.

6.1.3 Home Office Targets

One Ff referred to the Home Office targets and the concern that women could be appointed "at the expense of good male candidates" to meet such targets. She felt it important that any women recruited should be physically and mentally suited to the role, a view voiced by many of the women involved in this and the Baigent (1996) research.

The "...pressure to fill Home Office sex quotas..." (Wingett 2002:22) has not been missed by the press either. In a Mail on Sunday newspaper article, the question of whether Brigades were being 'forced' to employ women Ff's to enable them to reach the equality targets set, was questioned. The article referred to a male instructor who had allegedly been told that the "...young [female] trainee would pass the course at whatever cost." (Wingett 2002:22).

While such targets have a place in today's world of equality, they should be linked to the location and available population. An increase in the number of women FF's in the London Fire Brigade for instance, where the overall population is higher, should be easier to achieve than in Devon. This is bearing in mind that a high percentage of the population of certain parts of Devon is in the retirement category - Devon's over 65 year olds make up over 20% (D.C.C. 1998) of the total population.

These factors were not taken into consideration when the 15% targets for women were introduced. Factors such as this should be taken into account when employment targets are set. Equally important is the possibility of reaching the set target. If the target is seen to be too high, then complacency and a negative effect produced - "We'll never reach that target anyway, so why try?". Similarly, recent press coverage has shown how statistics can be manipulated to help reach the possibly unattainable targets - the "alternative recording systems" of the Police (Davies 1999); the questioned accuracy of the National Health Service Trusts data (Brindle 1999).

Another example of how organisations try to cope with/overcome targets set for them was when the Citizens Charter was introduced. County Councils were instructed to reply to letters of complaint within ten working days. This was overcome by Councils sending out 'acknowledgement' postcards stating that the matter was receiving their attention and would be dealt with in due course. From the Councils' point of view, complainants had been replied to within the set number of days. The fact that this did not really achieve what the Citizens Charter was hoping (a full reply following an investigation into the allegation), seemed pretty irrelevant.

6.1.4 The Changing Role and Techniques

The role of the Ff has changed a great deal over the years. No longer are the duties of fighting fires the main responsibility of the Ff. They now include tackling chemical spillage incidents, road traffic accidents - to flush away spilt fuel and/or use cutting equipment to release the occupant(s) from the vehicle(s), assist with rope rescues where a member of the public has fallen over a cliff, provide fire safety advice, rescue animals in distress, assist in areas that have been flooded, and release people stuck in lifts.

The job has and still is, changing quite considerably, and whether it is now more a question of technique required rather than strength, as suggested by respondents to the questionnaire needs further examination outside the remit of this particular study. However, this view is not accepted by Homer (1992:40), who was keen to point out that "physical strength" could be one of a number of reasons why women would probably not reach beyond the ten percent employment barrier within Fire Services.

Whether the job has changed and therefore the recruitment entry tests also need to change needs considering. It is envisaged that the introduction of the Integrated Personal Development Scheme already discussed, will commence this process.

6.1.5 Equal Opportunities Training

Equal opportunities training was highlighted by three of the qualitative responses.

One with regard to how male Ff's should "conduct themselves" while at work; a second referring to the male Ff's taking the equal opportunities training as being a reason for taking the "teasing and banter" out of the job. Thirdly, from a woman Ff who felt that unless women were "open-minded" and did not object to hearing "rude jokes or swearing", then the job was not for them. All three replies show that further equalities training was required.

The second response proved that the idea and ethos of equality had been missed. It was not to stop the fun of station life, but to be aware that what was a joke to one person may offend another. Similarly, the third reply was of concern that a woman (or indeed a man) had to fit in with the usual way of working life, or else the job was not for them!

The remaining qualitative replies were very varied and therefore could not be grouped in any way. These are shown in Appendix O.

6.2 Analysis Of The U.K. Interviews Results

Having analysed the interview data, the following conclusions and/or suggestions were made. However, due regard needs to be taken that even when all five interviewees agreed on an issue, the findings cannot be generalised due to the very low numbers involved in the research.

Each question is shown again for clarity of the reader.

What were the reasons that made you decide to join the Fire Service?

Future recruitment advertisements could use the key words quoted by the Ff's that attracted them to the job – "helping people", "exciting", "financial rewards", "challenging", "doing something different" and "variety". All positive words that could attract the interest of other women Ff recruits.

What would you say were the best things about your job of Ff?

More promotion of the views of the currently employed women Ff's concerning their role is needed – "exciting", "helping people", "variety", "make a difference to people's lives" and "team-working". This could be in recruitment advertising and/or at future career fairs, initiative days etc.

These views appear to support the findings of a report detailed in "Fire" magazine (Shuttleworth 2001:82) where "serving the community" and the "excitement of attending emergency incidents" were quoted as being some of the primary reasons why the women Ff's questioned had decided to join the Service.

If applicable – you did not attend any Women Ff Initiative Days, can you tell me why not?

Four of the interviewees had not been aware of the initiative days for women. This could be due to D.F.R.S. only holding these days in the last few years. However, one Ff said she would not have attended the initiative days even if she had heard of them, because she just wanted to fit in and not be different to the men who had not had such events run for them. Another Ff said she felt it was more aimed at Wholetime personnel. A further Ff did not want any emphasis made on the 'difference' between women and men as she felt the male Ff's could feel resentful that the women were given 'special treatment' i.e. initiative days were held for women but not men. This factor was also contained within Baigent (1996) where a woman Ff stated:-

"I think there is sometimes too much fuss over equal opportunities and it can make the males feel left out and it points the finger at women too much and can make things harder for us."

This brings into question Cockburn's (1991:10) view that women need to point out when being different is relevant to them. The Ff's in question seem to want to be classed as 'one of the boys' and not have a different uniform or station facilities, let alone the women themselves pointing out any differences. This could also account for the reason why the woman Ff already mentioned, is happy being known by a man's name when on duty, rather than her own – to avoid being 'different'.

One Ff stated: -

"I would prefer to be treated exactly the same as the men, but I am often made to feel different because of my gender – different uniform, different facilities, lectures on equality, etc etc!"

This could be due to her need to be accepted by the group (Cockburn 1985:206; Baigent 2001:79) and not 'rock the boat'.

Similarly, this view of avoiding being different, could explain why the wives/partners of male Ff's at one station were pleased to learn that the new woman Ff was not particularly "girly" or "feminine". By not being classed in these stereotypical terms, the partners perhaps felt that she was less of a threat to their relationships.

Interestingly, some women Firefighters interviewed in 1994 for the Bucke Report, wanted more female role models, while others felt that this put them in the spotlight even more, making them 'different' from the other firefighters. Generally it appeared in the Report that the women felt they were constantly under the spotlight – whether in a role model situation or by being singled out by the press. This point is supported by Stevens (1997) who stated that by "making a big issue about their presence to the press for instance, can do immense harm to their position on the watch."

As we have already seen from the data gathered, some of the women Ff's do not want to be seen as different to their male colleagues and feel this can actually cause the woman to feel segregated.

As argued by Cockburn (1985), "...a lone woman entering a man's world immediately feels out of place, odd and isolated." To avoid this, the women blend in as much as possible, making a point of not taking offence at swearing or rude jokes etc to ensure they become one of the team.

The press and other media are always interested in the number of women Ff's that are recruited in Devon each year, and similarly, the press in general appear to relish the idea of a woman Ff failing in the role (Daily Mail 2002:5).

As quoted in Baigent (1996) and echoed by a current woman Ff, positive press reports are needed to counteract the negative articles printed regarding women Ff's. The damage done to the Service's equality initiatives by such articles can only be guessed at. As Bucke (1994) discovered, the public's regard for the Fire Service and Firefighters in particular, has always

been high. The Report however, showed that this high regard was seen as a deterrent to white women who did not think they were able to carry out this high profile, public role.

If women felt they were not good enough to perform the public role of a Ff in 1994, scathing newspaper articles since then can only be suggested to have (incorrectly) confirmed this view to them.

You have said that your job of Ff has weakened the relationship with your partner. Can you give me any reasons why you think this is?

How has this affected you?

One of the respondents stated that her former relationship had been badly affected by her time away from home while on the wholetime recruits course. This was thought to have been due to her partners resentment at her not being at home and also the close proximity of such a large number of male recruit Ff's and Instructors.

As Bucke (1994) identified the length and demands of the recruitment course (16 weeks duration in Devon) was highlighted as being another way of inadvertently dissuading women from joining the Service, unless they already knew someone within the job and had their support.

It also points to the fact that anyone considering undertaking such a long training course would need to be focused and committed to the role of firefighter. It would be agreed that this dedication would not a bad thing, except for the fact that (as the Bucke Report of 1994 has shown), the majority of men joining the Brigade had contacts already in the job, whereas the majority of women did not. Therefore women joining without some kind of inside knowledge, could be considered as being at a disadvantage of not knowing what was required and what to expect.

Until very recently, the Devon training course had been a residential one. As such, this could have largely precluded women with young children, for example from attending. In the last couple of years however, it has been offered as being either a residential or non-residential course (primarily due to limited accommodation being available, rather than from an equality point of view).

These research findings have suggested that resentment by one Ff's former partner and obvious antagonism by another's current partner, are problems often faced by women Ff's. This is further confirmed by the researcher's own knowledge and experience in her Personnel role within the Service.

Another Ff felt it was difficult for her partner to accept her working "so closely" with a team of men, especially when the partner felt he could not fit into the group.

However, she stated that she worked harder at the relationship with her partner because of this.

It is fair to assume that while jobs continue to be considered suitable for one gender or the other (Colwill and Roos 1978) (Cited by Colwill & Vinnicombe 1991:44) some partners will also have these views.

The Bucke Report (1994) also found that the Service was seen as being a less suitable occupation for a woman than the armed forces, the police or nursing and the one they were least likely to pursue."

If these findings made some women dismiss the Service completely as a career, when a woman did persevere and enrol, her partner could experience even more difficulty in accepting her career choice.

As identified by Murdock (1937) (cited by Tiger 1969:83), "while a number of occupations are universally masculine, none is everywhere feminine". Interestingly, when what were originally thought of as 'men's work', were undertaken also by women, the role began to be viewed as more of a female one, and therefore the men moved away from it whenever possible (Cockburn 1985).

While this is not thought to be happening in the Fire Service, the police force (amongst others) appears to have adopted this general view. As Tiger (1969) stated:-

"..... in police forces, females typically 'specialize . . . in work for which they, as women, are best suited; that is work with women and in particular with children and young persons".

The role of a Ff is still seen by many as being 'men's work' mainly because it was assumed by men that women couldn't (rather than wouldn't) do it (Jean & Ceridwen 1984). It is probably due to this cultural bias that the Ff's partners refer to, when they talk about the woman doing a "man's job" or within a "male-dominated job". It is considered that this view will take many years to alter. As we have already stated, men feel threatened when faced by women carrying out the same role as them in the workplace (Cockburn 1985) and therefore resist their entrance to it wherever possible.

The media continue the myth of Ff's only being male (Exeter Citizen 2000:front page); (Ford 2000:2); (Greaves 2000:6); (Croner "Discrimination Law Briefing" 2002).

Unfortunately, school children still continue to take the usual male or female type jobs. A survey carried out in 2001 by the Equal Opportunities Commission (E.O.C.) found that pupils in the 11-16 age range still trained for the stereotypical jobs. Boys chose computer courses, while the girls trained in hair styling, health and social care. "Only 1% of construction course students are girls..."

If applicable – you said that you didn't consider a career with the Fire Service initially, can you explain why you didn't?

Four of the five women Ff's interviewed stated that they had not known until relatively recently that women could be Ff's. They had not been aware of this fact when they were aged 18 years. This could be suggested to be borne out by the fact that of the 6.1% of Wholetime personnel employed by the Service at age 18, none were women. Of the 7.5% of Retained staff who were employed by the Service at the age of 18, only one was a woman.

These findings contrasts sharply with that of Homer (1992:40) who stated that it would be unlikely that the number of women employed by Brigades would rise above ten percent of the workforce due to "...personal choice of employment...". However, it should be questioned whether that number would dramatically rise if more women knew they could become Ff's.

One Ff said that she "never thought" [she would] "enjoy such a challenge" and therefore did not consider a career with the Service sooner.

Going from the date of joining the Service as a recruit Ff up until the present day, is the job what you expected it to be?

Some of the replies indicated that further information needed to be made available to possible recruits. As we have already seen, Ff's have stated that there was "more variety" and "more training" to the role than they had expected. This information needs to be made available to prospective candidates before they commit themselves to the role. These important factors may make the job more appealing to some, while others may decide it was not for them. Either way, it would be better for prospective recruits to be as fully informed as possible, to save both the Service and the individual, time and money, embarking on a role that they knew would not suit them.

The more positive reactions of "colleagues more welcoming" and the job was "more than expected" could be incorporated into future advertising campaigns, as previously suggested.

What aspects, if any, of your Fire Service career stand out for you?

The main issue brought out by this particular question was the treatment of women, and probably recruits in general, while at the Service Training Centre. The subject is discussed under '6.2.1 Training Course'

Have you made any changes in your life as a result of joining the Fire Service?

The changes quoted were far-ranging, from seeing less of their family and being financially better off, to being more aware of the clothing they wore, in case they were called to an incident. The former reply might be eased somewhat if more Retained personnel were available to cover for the occasional night or weekend off.

Are there any other points you would like to mention?

The findings were initially split into three headings of "Training Course", "Isolation and Segregation" and "Physical Ability". However, for the purposes of this chapter, the data have been further sub-divided into "Bullying", "Femininity" and "Initiation Ceremonies".

6.2.1 Training Course

The days of training methods that incorporated shouting and swearing at the students or reducing them to tears are long gone. The researcher is confident that this culture and teaching style was removed some years ago. While this does not lessen the difficult experiences the two* women (who had both been employed for between 5 – 10 years) in question went through, it could indicate that the newer Ff's interviewed may not have faced similar problems.

The fact "that women do not enjoy equal participation with men in any type of mixed-sex training"(Colwill and Vinnicombe 1991) may also have added to the stresses felt by the women Ff's facing such hostile training. Of course, other male recruits may have felt similarly, but may have been in a better position to cope, given that their gender was in the majority. (Colwill and Vinnicombe 1991).

*One Ff expressed her concern about the training methods under this question, while another one included it in the last qualitative open question. It was felt relevant however, to include them both here

6.2.2 Isolation and Segregation

As we have heard from a number of the women involved in this research, they just want to be left alone to get on with the job. In some cases this means allowing them to prove to their male colleagues that they can do the job in the first place.

When the differences between the sexes are highlighted, whether this is through Women Ff Open Days or equal opportunities training, it can sometimes lead to the woman Ff being isolated from the male group – possibly as punishment for being 'different'.

6.2.3 Physical Ability

While male Ff's often question whether women are strong enough to carry out the role of Ff, the women interviewed appeared to suggest that there is more required by the job than just strength. With the equipment getting lighter and women finding their own techniques to handle the equipment (using both hands for instance), strength does not appear to be such an essential requirement for the role.

6.2.4 Bullying

One of the women Ff's interviewed had experienced bullying by her colleagues, but had not wanted to take any formal action.

As Stevens (1997:73) stated:- "... women are not minded to communicate their problems unless things are going seriously wrong. They simply want to keep their heads down and hope that attention is not drawn to them in any way."

6.2.5 Femininity

The views of Bucke (1994) and Osborne (1991:44) are interesting, when we have already heard how wives/partners of male Ff's were relieved when they learnt the new woman Ff was not "girly" or "feminine". Whether the woman Ff in question purposefully played down her female characteristics to enable her to fit in with the rest of her colleagues is unknown.

A woman Ff in Baigent (1996) referred to the staff at a Brigade training school who encouraged a "bad attitude to women", allowing "no femininity". She suggested the situation be addressed. Another Ff quoted from the same report said "...stop training school from trying to turn you into a man." Therefore, the issue of allowing women to be Ff's and be feminine, does not seem to be one that is being reduced.

The Bucke Report (1994) showed how women firefighters felt they lost some of their femininity while at work. They felt that to do the job, they had to be seen as "one of the boys" and an "honorary man".

"Many women react to this [working in an environment of mainly masculine values] by experiencing anxieties about their abilities, showing a lack of confidence, and having a sense of emotional splitting where they are unable to be their real selves at work". (Osborne 1991: 44).

This could also be suggested to be the case for the woman Ff who did not want a different uniform or facilities to those of the men. It is difficult to gauge how much of the woman's reactions were due to needing to fit in with the group. Part of this requirement to be accepted by the group could be where the much-publicised initiation ceremonies began and this subject is further covered in the next section.

6.2.6 Initiation Ceremonies

Initiation ceremonies were infamous in the history of the Fire Service and are hopefully now a thing of the past. Allowing a woman Firefighter to become "one of the boys" was seen as accepting her into the group. It was the Brigade's way of allowing someone new to join the team, reassuring the current members of the group that the newcomer wouldn't be a threat to their usual working life/routines.

As we have already heard, on the arrival of the first woman Ff at a station, the rude jokes and swearing were profusely apologised for. These can be seen to be part of the 'usual working life' that the men had taken for granted as being acceptable. The reaction of the woman to these 'routines' could aid or prevent her inclusion in the team.

The majority of the women contacted for this research appeared to want to blend in as quickly as possible and not be seen as 'different'. Therefore they made it obvious to the male Ff's that the bad language and jokes were acceptable to them.

Tiger (1969:144) stated that –

“One of the functions of initiation ceremonies is, in these terms, the insurance of ‘fit’ or consonance between the males already in a group and the newcomers to it”.

The Bucke Report (1994) went on to say that even the Brigade with the largest number of women Firefighters, still saw women in the role as being a “contentious issue”.

Additional wide-ranging qualitative data obtained from the interviews are shown as Appendix P.

6.3 Other Considerations

6.3.1 Carry over from the war?

As discussed in the Introduction chapter, Firewomen were first employed by the National Fire Service in 1938 when the threat of war loomed.

How much of the ‘war days’ ethos and mentality was taken forward and is present in today’s Service is difficult to gauge. However, it would be difficult to ignore some of the similarities, even if it only gives an insight into how the customs and culture came into being.

A number of the women Ff’s involved in this research project referred to the swearing and rude jokes that were a part of station life. It could be questioned whether this became the norm because a number of Service instructors employed by the N.F.S. were ex-Merchant Navy employees whose language “...was distinctly ‘naval’ at the time.” (Demarne 1995:42).

In 1941, on nationalisation from the Auxiliary Fire Service to the National Fire Service, the decision was made that operational firefighting was not a suitable job for a woman (Demarne 1995). This was because women were not considered strong enough, physically. However Myrdal and Klein (1968:51) found that in the years preceding this “Sex discrimination in matters of employment almost disappeared.”

After the war, it was envisaged that women would return to their pre-war roles. This was in fact incorrect, with a large number of older women wanting to continue in their war-time jobs. However, when the men returned from war, it was felt that the jobs should be “...kept for the boys...” (Myrdal and Klein 1968:53; Allen *et al* 1983). Additionally, employers were less willing to allow the part-time and/or shift working to continue. Nurseries that had been opened prior to the war to allow women to assist in the war effort and work outside the home, were also closed.

While women were confirming they wanted to continue in their new roles, organisations that had carried out such research continued to state that women “...saw marriage and the family as their post-war destinations.” and would return to jobs that were “...usually considered suitable for women before the war, while awaiting marriage.” (Summerfield 1984:190)

This all pointed to the fact that a woman’s first responsibility was to the home (Summerfield 1984; Allen *et al* 1983). The idea of women carrying out part-time or shift work showed that they were somehow inferior to the men whose role it really was to be the ‘breadwinner’. In this way, with only women carrying out part-time roles, the stereotypical gender divide of women’s (or men’s work) possibly came into existence.

Where women had earlier “...won the War...” (Allen *et al* 1983:46) by taking jobs during the war, those that would not immediately leave them were then classed as “...bread snatchers?” (Allen *et al* 1983:46)

What percentage of this thinking has continued into today’s Fire Service is difficult to quantify, but as we heard from various women Ff’s during the course of this research, firefighting is still seen today as primarily being a ‘man’s job’. Until this view has changed - and this will not be overnight - those women wishing to enter into the male-dominated world of a Ff, need to be prepared for the swearing, rude jokes and questions over a woman’s physical capabilities to carry out the role. As Allen *et al* (1983:46) pointed out “...women workers were supposed to get back to their ‘proper place’ after the War”. On occasions, it could be suggested that this continues to be the view of some male Ff’s in today’s world.

6.3.2 Facilities

While carrying out this research, it was of concern that the on-going struggle to obtain basic facilities for women (separate lavatories, showers) was still not being fully considered. Evidence suggested that, even when situations arose to incorporate such facilities, they were being ignored. This appeared to be true of not only the uniformed staff who Baigent (1996) quotes as being “institutionally sexist”, but also the non-uniformed personnel who considered that as there was “only one female” on a station, it did not require consideration. Discussions between the staff and budget holders about user requirements appear to have been non-existent.

As Homer (1992:40) stated: - “... the impression is created that they [the women] are less worth to the service and not wanted in it” because of the lack of facilities provided for them.

Whether this was due to the embedded Service culture being passed on to non-uniformed personnel is difficult to gauge, but at a time when concerted efforts are being made to attract more women to the job, it is surprising. A question worthy of asking is how many (minority) women Ff's it takes to ensure they and their basic facilities needs are considered in the future....

This brings into stark contrast a speech made by the Parliamentary Under-Secretary of State at the Fire 2000 Conference. Mr O'Brien referred to the additional funding being given to Fire Services in 2001/02 to help them with their equality performance and targets. He stated that in addition to the “...women's changing rooms and so on...”, Brigades should be considering “...toilet facilities, perhaps prayer rooms and those sort of things.” (O'Brien 2000).

However, as one Ff stated in her interview, while she resented not having private lavatory and shower facilities, she felt uneasy at having been provided with separate sleeping accommodation. This makes the point that Richards (1996:104) made, still seem relevant. He said that Fire Services should seek “... to determine the value of providing privacy arrangements for sleeping.” Furthermore, it should be “... irrespective of sex, and should extend to include washing and toilet facilities.”

It was interesting therefore to learn that when separate bedrooms had been provided for all staff, (something the women did not appreciate), they were still expected to use shared shower facilities. The alternative was to use facilities on a floor different to that of their locker room (where clothing and personal effects were kept) or take their clothing into the shower room with them and risk them getting damp.

A Firewoman quoted in Demarne (1995:116) experienced similar difficulties in obtaining lavatory facilities some sixty years earlier:-

“It took nearly a Act of Parliament to get decent toilet facilities ... The leading firemen nearly rioted when [the women] were allocated their toilets and they had to share with the firemen.”

6.3.3 Equal Opportunitites

As has already been stated, Brigades were advised to write their own equal opportunity policies in 1991 (Bucke 1994) and move away from the former County Council policy. Many Brigades nonetheless ignored this suggestion until 1999. However one could of course question why a basic standard document was not introduced by the Home Office for use by all Brigades in those early years. This would have ensured that a relevant document was in existence, and could have been localised by each different Brigade as its own.

As we have already seen in the Literature Review chapter and confirmed by Bain *et al* (2002), the majority of the earlier equal opportunities and diversity work, while very worthwhile, was not actioned by the Fire Services nationwide and therefore no tangible results were forthcoming.

With the more recent Sex Discrimination legislation (1975, amended 1986), the Fire Service abolished what could be classed as the more sexist requirements – height limits and chest expansion targets to encourage more women to apply. Surely the job of Ff should have been analysed to see if the former requirements were still required at that time.

Abolished in 1997, the minimum 5ft 6” height restriction was primarily removed for equality reasons, with the ensuing problems in later years of the “5ft 1” woman Ff” (Daily Mail, 30.01.02:5). This Ff was dismissed from operational firefighting duties because of the risk of further alleged back injuries occurring to taller (male) Ff's. This was due to her being unable to share the weight load of a ladder and other operational equipment. East Sussex Fire Brigade was not willing to make £140,000 adjustments to each appliance to enable the ladder to be mounted underneath to accommodate the woman Ff.

However, the relatively new Integrated Personal Development Scheme should ensure that future recruitment and training is closely matched to the requirements of the job

6.3.4 Former and Future Recruitment Requirements

It can only be assumed that the early job requirements of minimum height, chest expansion and minimum/maximum age limits were designed to ensure that young, strong, tall male applicants were encouraged to join the Fire Service. This assumption is made because it is generally found that men are on average taller than women of the same race, society and class (Tanner 1978) (cited by Bartels 1982). Additionally, Bartels refers to women having smaller lungs than men, so the chest expansion requirement would also deter women from considering a job with the Fire Service. That is if a woman would not already think of herself as being de-selected with such a requirement in the first place!

Another reminder of the small number of women joining the Service in former years, was through a form still in existence and usage in the mid-1980's. This was the D.F.R.S. "Female Measurement Form". Questions such as "Are you deformed – if so, state circumstances" and "State if prominent bust or hips", along with references to "with girl seated, measure from top of waist band" are unimaginable today.

However, one should possibly ask how far the Service should go with these amended recruitment requirements, when the adjustments being made are primarily to allow more women to be successful with their applications.

Is it acceptable to alter the physical (aerobic) tests to allow more women to apply and succeed in becoming a Ff, when thousands of previous (primarily male) recruits have not had a problem with the tests? This of course then results in the (male) Ff's quoting that "standards have been lowered" to allow women to join and in turn, causes more problems for the women who do join, as they are not seen as being on an equal footing with the men. This then takes the form of the women Ff's having to keep on proving themselves of being capable of carrying out the job – a comment regularly made by the women involved in this research project.

While on the subject of fitness, it would be relevant to state that there are indeed differences in the muscle mass found in men and women (Bartels 1982). It is thought to be primarily due to males (age 18-25 years) being more involved in sporting activities, while women of the same age are generally more sedentary. (These findings are a result of research carried out on college students of this age group). However, while women have smaller lungs, they reach their maximum muscle strength at the age of 25 and keep it until they are 40 when it starts to decline. Men on the other hand reach their maximum strength at 30 and it then decreases after this. Much can be done to improve the muscle mass in a woman given the correct training, and often this can match the strength of a comparable man. Bartels argues that the female sex cannot therefore be classed as the weaker sex.

In a survey (E.O.C. 2001) of 11 to 16 year old young people, the findings were that "Outside of school, boys were more likely than girls to take part in sport." It would therefore suggest that over twenty years later, with an even younger age group being studied, the same appeared to be true of Bartels (1982:259) original views. For women to be on the same level as men when applying for the Fire Service (or any career where fitness is of high importance), the issues covering involvement in sport in their younger years appear to be very important and need promoting.

6.3.5 Pension Scheme

The nationwide pension scheme for Ff's, while usually referred to as the 'Firefighters Pension Scheme' is officially still entitled "The Fireman's Pension Scheme 1992". Until a basic revision of the Scheme was required, it was felt unnecessary to alter the title, regardless of any equality issues it may bring into question.

As Bain *et al* (2002) recently discovered, the Scheme is not one suited to a diverse workforce nor work patterns that were different from the usual. Therefore this may enable the long-awaited change of title to be incorporated into the other required amendments.

6.3.6 Historical Terms

Should we be asking ourselves whether we are getting caught up in the title of a persons job? Women Ff's in the U.S. frequently used the term "Fireman" when referring to themselves, as though this were a gender neutral term (which it clearly is not).

In everyday conversation in the U.K., the term "Milkman", "Postman", and "Dustman" are used, when we know that there are women also carrying out these roles. Does this mean the general public are being sexist or just using the historical job title? Does it just not matter?

The press and media regularly quote and refer to “Fireman” rather than “Firefighter”, and even a Discrimination Law Briefing (Croner 2001) quoted “Firemen” in their article on the Disability Discrimination Act.

7. LIMITATIONS OF STUDY

7.1 Limitations of Questionnaire

The multi-coloured D.F.R.S. crest appeared on the front page of the questionnaire. While looking smart and professional, it caused occasional problems in the time it took to download from email. Additionally, the researcher's own computer mailbox size limit had to be increased to allow for the many forms being returned, with the crest taking up valuable hard drive space. A monochrome crest included on the questionnaire would have had a similar presentational image, without the associated problems of space needed for colour downloading. Hard copy forms (circulated via the postal system) which were sent out with a monochrome crest provided further evidence that a coloured crest was unnecessary in catching the attention of the respondents.

While the majority of the questions were closed single reply, with the occasional closed multiple reply type, it should also be noted that the closed questions were based on the researcher's presumption of what the reply would be, and this possibly limited the respondents' answers.

Similarly, where optional open text boxes followed closed multiple reply questions, fewer comments/varieties of replies were made. This could have been the result of not asking specific questions to prompt an opinion.

However, a 'catch-all' open text field was the last question on the form, enabling respondents to add any views or comments about the questionnaire or their role in general, that they had not previously been able to state. A response of 63% was received for this field.

Some of the questions asked the respondent to recall things from the past (i.e. what first brought the Fire Service to their attention as a career) and this could be seen to be subjective rather than objective, and may not therefore provide accurate data.

Software that only allowed one question to be answered on the form, (in the way of an 'X' box) would have been useful to prevent the respondent from replying with more than one answer when clearly asked to mark just one box.

As already stated, on occasions when women Firefighters were not on duty on the day of visiting the Fire Departments in the U.S., blank questionnaires were left for forwarding to the Ff's. While it was suggested that the women returned the questionnaires direct to the researcher (and not via the Fire Department, therefore assuring confidentiality and anonymity), it cannot be guaranteed firstly that this suggestion was followed and secondly, that other staff did not complete the forms (to promote a good equal opportunities 'image'). If the former did not take place, the women Ff's may have felt uncomfortable in stating problems between themselves and their male counterparts for instance, and therefore the data obtained could be questioned.

7.2 Limitations of the Interview

The first restriction to the research methods was the inadequate time available between sending out the questionnaires and the planned U.S. trip where interviews were planned to be held. This resulted in a very small number of replies being received before the U.S. visit and therefore this meant that relevant issues (highlighted by the questionnaire results) were not known and so could not be introduced into the planned interview.

The second limitation was the length of time allowed to pass between the completion of the questionnaire, and the request to carry out interviews with a number of the participants. This resulted in fewer than anticipated women volunteering to be interviewed. Suggested reasons for this are discussed in the Research Methodology chapter.

7.3 Other Limitations

The limitations of this study have included the maximum twelve month duration for completion, and the available time constraint of studying while being in full-time employment.

However, in preparation for the research, literature reviews were started in advance of the official commencement date. This was possible due to the personnel role carried out by the researcher, who had regular access to relevant journals and magazines, some with particular emphasis on the Fire Service.

Other limitations to this work have included the necessary exclusion of male FF's from the research data. This was deliberately done to enable the researcher to concentrate on the issues of initial attraction and retention of women within the Fire Service. It was felt that a male control group for comparison of the research findings was not required, as the data supplied in Appendix A. clearly showed that the gender predominantly employed in the Fire Service was male. This research was therefore undertaken to attempt to suggest ways to help increase the number of women employed. However, it was taken into account that one should be wary of the findings gained without the comparison available via a control group. If undertaking this research project again, a control group of male FF's would be included for comparison purposes.

Additionally, the decision to restrict the study to the county of Devon within the U.K. and five Fire Departments in the U.S. could be classed as a limitation.

Consideration was given to contacting previously employed women FF's to obtain their views of Service life and reasons for leaving. However, as it proved to be quite difficult to involve FF's currently employed by the Service, and it was considered that the success rate of obtaining information from ex-employees would be small, this line of research was not pursued.

While our host in the U.S., Kirk Rosenhan - a County Fire Co-ordinator, was invaluable by arranging meetings with the various Fire Chiefs, and the driving of over a thousand miles from the North to the South U.S., the schedule was primarily out of the researcher's hands. This unfortunately, on occasions, meant that additional time needed to investigate deeper into an issue that had arisen or further questioning required to clarify a point, was often not possible due to the very tight time schedule. Two examples of this situation arose. Firstly while visiting the Fire Department where email contact and help had been given by a woman Captain prior to the U.S. visit. Having spent the afternoon with her and her colleagues, it was suggested that a social engagement in the evening would enable our interesting comparison conversations to continue. However, this was not possible due to other pre-arranged commitments that evening.

Secondly, while visiting the Mississippi Fire Academy, where contact had been made previously between the researcher and a member of Academy staff (in fact, the woman in question had been the person who piloted the initial questionnaire). Unfortunately, this person was on holiday on the day we visited, and while plans were made to return the following week so that face-to-face contact and an interview could occur, schedule time did not actually allow for this.

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Aim Of Study

As we saw in Appendix A, the number of women FF's in the U.K. is significantly smaller than those of the male FF's. This research document was intended to assist the national Fire Service, and Devon Fire & Rescue Service in particular, by suggesting methods of initially attracting and keeping women FF's.

It also looked at the possible reasons for the small number of women who consider a career with the Service and some of the problems they may face when they do join. By comparing the experiences of the U.K. Fire Service with Services in the U.S. have shown that there is no quick solution. While the U.S. has employed women for a much longer time period than the U.K., problems still exist.

Constructive suggestions and solutions, wherever possible, have been included within this document and are summarised below.

8.2 Conclusions

Competing With Other Organisations

A high proportion of the Firefighters interviewed for the Bucke Report (1994) stated that they had also considered careers with the prison service, police and armed forces. However, the Fire Service was seen by respondents as being the "most dangerous occupation"; with "little equality"; "least suitable for women" and with "a fair degree of sexism" (Bucke 1994), when compared to the police, armed forces and nursing. It might be reasonable therefore to ensure future career fairs etc were run jointly with these other organisations whenever possible, and concentrate on re-educating the public on these specific issues. Alternatively, carrying out further research into how these 'competition' organisations attract the women who join them, could also help Fire Services focus their attention in those particular areas.

College and University Students

For many years it had been thought that by the time a student was at college/university, it was too late to 'sell' them a Fire Service career. This was based on the old assumption that students attending further education establishments knew what their chosen careers were. However, it is more and more apparent that a large number of students attend college/university to obtain A-levels or degrees before deciding on their career path. Thought should therefore be given to the inclusion of these students when recruitment advertising takes place (i.e. advertising on the college notice board/web site).

Women Workers

As we have already discussed, child-care responsibilities often fall to the woman in a relationship. This could account for why 43% of women workers carry out part-time roles, whereas only 9% of men have part-time employment (E.O.C. 2003). As discussed earlier, the requirement for retained FF's to provide either 168 or 126 hours per week of cover for their village or town is largely precluding many otherwise interested individuals. It is imperative for Services to be more flexible in their requirements if they wish to recruit more retained male and female FF's.

As we have seen, South Wales Fire Brigade is currently carrying out a trial of the 84-hour week, and Devon Fire & Rescue Service is looking at allowing a reduction in the contractual hours required for part cover FF's. Hopefully, these initiatives will increase the number of retained FF's, both male and female. They would additionally assist the Service to retain their current personnel in two ways. One being that as more and more retained employees need to travel into larger towns or cities for their full-time employment, they cannot provide the current full or part cover weekly hours required. However, they may be able to provide fewer hours if the Service allowed that. It may also be the case that women with children stay within the village or town area to enable them to take the children to and from nursery/school etc, and therefore would be available during the day when the majority of men have possibly travelled outside their usual community area for employment purposes.

Therefore, more work needs to be done to encourage women with childcare responsibilities to consider the role of a retained FF – one that can be fitted around family commitments and nursery/school times.

The second being that current staff would be able to take days, evenings or weekends off when they wished, without feeling that the fire appliance would be short of crew. This then would relieve the pressure currently felt by some FF's who cannot leave their village or town 'at will', without feeling they are letting their community down by depriving it of fire cover.

More publicity is also needed on what part cover retained duties involve, along with advertising the fact that currently employed women Ff's can and do manage child-care responsibilities around the requirements of the job.

Equal Numbers of Population Gender

According to the Office for National Statistics (Mid-2001 Population Estimates) (Cited by E.O.C. 2001), 32% of women and 32% of men within the resident population are aged between 16 – 64 years. It could therefore be suggested that equal numbers of men and women could be employed in all occupations – including firefighting. However, as Cockburn (1985) stated, it has often been the case that only outstanding and determined women have entered previously male-dominated work environments in recent years. Nonetheless, the population statistics suggest that this situation could change if the real equality message of the Fire Service (and other organisations) reached the more 'average' woman. In turn, she might feel more encouraged and able to take on such roles.

Education of Schools and Colleges

While young people seek careers advice details primarily from Career Teachers and Advisers (being second only in percentage terms, to the number seeking advice from the Mother) (E.O.C. 2001), there is still a difference between the career they pick, which often follows traditional sex stereotypes, and what young people think are suitable jobs for men and women. Until this divide of what they think and what they actually do, can be narrowed, previously male-dominated roles will continue to be so.

As Julie Mellor, the chairman of the E.O.C. explained:-

“We won't get true equality in the workplace unless measures are taken at school to encourage people to pick from all the options available”. (E.O.C. 2003)

Integrated Personal Development System

With the forthcoming introduction of the Integrated Personal Development System (I.P.D.S.), it is hoped that future entry level tests will be job related, not only from a physical, but also mental, viewpoint.

I.P.D.S. should ensure that future recruitment drives and subsequent training are carried out in the same way, nationwide. The days of entry tests being done just because 'they have always been done like that' are very limited. However, a trial of the new entry tests should be carried out by a wide range of currently serving Ff's of both genders and across all age groups. This would confirm that the entry requirements being tested were relevant to the job and could be reached by current staff. It would also show that the different physiologies of the two genders had been taken into account.

The involvement of a wide range of presently employed Ff's would ensure the message was circulated that the tests were fair and the standards had not been lowered to allow women to join.

With the introduction of I.P.D.S., in the future all Brigades should recruit and then train staff in exactly the same way. This in turn would ensure continuity and fairness across the U.K.

8.3 Recommendations

Station facilities for both men and women, need further consideration by uniformed and non-uniformed personnel. However, the involvement and opinions of users need to be sought and taken into account, to avoid the situation of the separate sleeping accommodation issue already discussed.

A female contact is needed at the Service Training Centre when Recruits Courses are being held. This is particularly relevant when there are women on the course, but should be considered regardless of this as some male recruits may wish to confide in someone of the opposite sex about the effect the course is having on their relationship or other family-related problems.

More contact is required with Personnel Officers - particularly when a woman is posted to station. This needs to be handled sensitively so that the male Ff's do not see the involvement of a Personnel Officer as an intrusion, or something that only happened because a woman was working at the station.

More work needs to be done to encourage women with child-care responsibilities to consider the role of a retained Ff – one that can be fitted around family commitments and nursery/school times.

School and college visits by male and female FF's need to be introduced at an early stage in the education process. New career literature needs to be developed and circulated to schools and colleges, along with a generic Fire Service interactive web site to match those of, say, the armed forces.

9. APPENDICES

Appendices

Appendix A	Number of Men and Women FF's employed in the U.K.	156	
Appendix B	Organisation Structure of the Fire Service in England & Wales	157	
Appendix C	Recruitment Advertising 2000 - Kent Fire Brigade	158	
Appendix D	Recruitment Advertising 2000 – London Fire & Civil Defence Auth.	159	
Appendix E	Retention and Career Targets for Women FF's Nationwide	160	
Appendix F	Internet Notice Board Message - Mississippi FF's Assoc., U.S.A.	161	
Appendix G	Internet Notice Board Message – sent to Fire Departments in U.S.A.	162	
Appendix H	Ethical Approval from the Chief Fire Officer of Devon	163	
Appendix I	Questionnaire Design Checklist	164	
Appendix J	Women FF's Questionnaire		167
Appendix K	Email sent to women FF's in Devon regarding research project	174	
Appendix L	Email sent to Divisional Commanders regarding Ff interviews	175	
Appendix M	Interview Questions and Checklist	176	
Appendix N	Email sent to women FF's in Devon regarding interviews	178	
Appendix O	Additional Qualitative Data from Questionnaires	179	
Appendix P	Additional Qualitative Data from Interviews	184	

10. GLOSSARY

Glossary of Terms and Abbreviations

Brigade/Service	Originally called Fire Brigades, this name changed over the years until 2001 by when 70% no longer referred to them selves as 'Brigade', preferring the title of 'Service'. Some Brigades however, are still called this, while the majority have adopted the term 'Service'.
C.A.C.F.O.A.	Chief and Assistant Chief Fire Officers Association.
C.F.O.	Chief Fire Officer (U.K.).
D.F.R.S.	Devon Fire & Rescue Service.
D.T.L.R.	Department for Transport, Local Government and the Regions.
E.O.C.	Equal Opportunities Commission.
F.B.U.	Fire Brigades Union.
F.E.M.A.	Federal Emergency Management Agency.
Ff(s)	Firefighter(s).
Fire Chief	The equivalent of the Chief Fire Officer in the U.K.
Fire Company	The Watch/Crew within a Fire House.
Fire Departments	Fire Brigades/Services in the U.S.A.
Fire House	The equivalent of the Fire Station in the U.K.
F.S.C.	Fire Service Circular published by the Home Office.
'Grey Book'	Scheme of Conditions Of Service for Uniformed staff, produced by the National Joint Council (N.J.C.).
H.M.C.I.F.S.	Her Majesty's Chief Inspector of Fire Services.
H.O.	Home Office
I.P.D.S.	Integrated Personal Development System
L.G.A.	Local Government Association.
N.J.C.	National Joint Council for Local Authority Fire Brigades.
O.D.P.M	Office of the Deputy Prime Minister.
U.S.F.A.	United States Fire Administration

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Appendix E

TARGETS SET FOR THE RETENTION AND CAREER PROGRESSION OF WOMEN FIREFIGHTERS AND CONTROL ROOM OPERATORS

Taken From Fire Service Circular 1/2000

Retention of women (whole-time, retained and control room)

7. Every brigade should introduce a target by 1 April 2002 for an equal rate of resignations and dismissals for men and women within three established bands:

- ? 6 months - 2 years service
- ? 2 – 5 years service
- ? 5 – 10 years service.

Every brigade should also be monitoring by 1 April 2002 through exit polls.

Career progression of women (wholetime, retained and control room)

8. At present there is no centrally held data on which to base any conclusions about the rate at which men and women progress through the uniformed service. It is doubtful that all brigades have the apparatus in place at present to monitor such progression. But brigades are expected to introduce steps to rectify the position.

9. Each brigade should set the following targets:

From 1 April 2001

- ? The % of women with 5-10 years service at leading firefighter and above is equal to the % of men with 5-10 years service at leading firefighter and above.

From 1 April 2003

- ? The % of women with 5-15 years service at sub officer and above is equal to the % of men with 5-15 years service at sub officer and above.

From 1 April 2005

- ? The % of women with 10-15 years service at station officer and above is equal to the % of men with 10-15 years service at station officer and above.

From 1 April 2007

- ? The % of women with 10-20 years service at divisional officer and above is equal to the % of men with 10-20 years service at divisional officer and above.

10. Before the first milestone review at 2002, research will have been commissioned by the Home Office to confirm that the national selection tests, which are expected to be in place later this year, properly reflect the requirements needed of a firefighter. If they do not, amendments will be made. The research will also establish what proportion of women (and men) can achieve those requirements. The targets will be amended accordingly in the light of any research findings.

Appendix I

QUESTIONNAIRE DESIGN CHECKLIST

1. Are we targeting the correct age group (Recruitment issue).
2. Are we 'advertising' the jobs in the best possible way to attract all people, especially women (Recruitment issue).
3. How influential are family/friends when making the decision to join the Fire Service? Is their image of the job different to the applicant? (Recruitment issue)
4. The age of the employee on joining the Service may have a bearing on Q5 – the younger the individual was when employed may influence them in their beliefs over the lower age limit. (Recruitment issue – Age Discrimination laws coming in)
5. Having done the job, they may be better placed to say if they feel they could have done the job at a younger age. (Recruitment issue - Age Discrimination laws coming in)
6. It was previously assumed that College/University students and those already in other employment, had already made their career choice, so there was little point trying to recruit them – this may be less true today? (Recruitment issue)
7. Is the salary appropriate for the role - the Researcher's limited knowledge indicates that a number of women Ff's took a reduction in salary to join the Service. (Recruitment issue)
8. If the initiatives to encourage more women are working, more events could be held. (Recruitment issue)
- 9 & 10. Should the Fire Service introduce pre-recruitment "Women Firefighter Fitness Sessions" to enable women to improve their fitness levels, so they are on the same footing as the men when recruiting takes place? (Recruitment issue)
- 11,12 & 13. The experience of the Researcher appears to suggest that a number of relationships break-up due to women becoming firefighter's – is this also true of the U.S.? (Recruitment and retention issues)
- 14 & 15. If the women don't feel accepted by the group they are unlikely to stay in job. Useful for feedback from the 'inside'. Possible reasons for male Ff's unacceptance of women could lead to on-going 'education' of the men/culture required. (Recruitment and retention issues)
- 16 & 17. Do we inform the public sufficiently about the role of being a Firefighter before they join, so there are no surprises on entry to the Service? (Retention issues)
18. As people doing the job, women Ff's could have a better idea of recruitment initiatives than 'external' non-uniformed Personnel staff. (Recruitment issue)
19. Should child-care facilities be offered, at reduced costs to 'free up' more women? (Recruitment and retention issues)
- 20a), b),c) Does the length of time in the role of Ff mean women gain confidence/see other women joining so they are less unique/gain acceptance from male firefighters/prove their worth etc? How do current women Ff's view the Equal Opp's initiatives? Do they enjoy the role/feel valued enough to encourage more women to join? (Recruitment and retention issues)

21. Do women Firefighters face different obstacles depending on the type of role they provide? (Retention issues)
22. When linked to Q20 - are the views of longer serving women Firefighter's different to that of shorter serving ones? (Recruitment and retention issues).
23. This would enable a view of the career progression made (compared to the length of employment), and would be a useful tool when compared against the male Ff's rank and length of service. (Retention issue)

Appendix L

EXAMPLE OF EMAIL SENT TO DIVISIONAL COMMANDERS

REGARDING FIREFIGHTER INTERVIEWS

As you may already know, I am currently working on a M.A. dissertation concerning Women FF's.

Some time ago, the CFO gave me permission to distribute questionnaires and interview FF's within Devon.

I am now at the stage of starting to carry out a small number of interviews across the county and out of courtesy, thought I should mention this to you.

As the interviews (and questionnaires) are guaranteed to be anonymous and confidential, you will appreciate that I cannot inform you of when, where and whom I will be interviewing, but trust I have your support for my research.

Please contact me if you wish to discuss any points concerning my dissertation.

Thank you,

Kim.

<i>Fire & Civil Defence</i>	2,081	5	2,090	51	0	39
<i>Authorities</i>	5,625	70	5,695	0	0	0
Greater Manchester	1,364	5	1,369	0	0	0
London	907	13	920	63	2	65
Merseyside	1,005	7	1,012	23	0	23
South Yorkshire	2,007	24	2,031	10	0	10
Tyne & Wear	1,677	6	1,683	167	2	169
West Midlands						
West Yorkshire						
	Wholetime			Retained		
TOTAL	14,672	128	14,800	300	4	306
	Men	Women	Total	Men	Women	Total
England	659	8	667	213	5	215
Avon	316	10	326	133	5	138
Bedfordshire & Luton	288	4	292	196	4	200
Buckinghamshire	272	4	276	364	7	371
Cambridgeshire	612	0	612	185	5	190
Cheshire	601	0	601	80	0	80
Cleveland	184	1	185	425	4	429
Cornwall	401	4	405	149	2	151
County Durham & Darlington	270	4	274	429	6	435
Cumbria	452	13	465	365	4	369
Derbyshire	552	7	559	701	15	716
	298	2	300	319	9	328
DEVON	416	9	425	243	7	250
Dorset	930	7	937	460	4	464
East Sussex	223	9	232	272	11	283
Essex	776	8	784	647	15	662
Gloucestershire	349	6	355	347	10	357
Hampshire	558	7	565	258	7	265
Hereford & Worcester	720	5	725	329	6	335
Hertfordshire	60	1	61	152	3	155
Humbeside	18	0	18	34	0	34
Isle of Wight	940	4	944	749	22	771
Isles of Scilly	1,002	8	1,010	361	10	371
Kent	490	4	494	231	5	236
Lancashire	187	2	189	472	13	485
Leicestershire	306	4	310	436	7	443
Lincolnshire	345	7	352	365	12	377
Norfolk	293	3	296	216	5	221
North Yorkshire	203	3	206	182	6	188
Northamptonshire	576	5	581	341	8	349
Northumberland	228	2	230	308	20	328
Nottinghamshire	406	0	406	158	5	163
Oxfordshire	197	3	200	292	3	295
Royal Berkshire	179	0	179	373	7	380
Shropshire	462	11	473	366	10	376
Somerset	244	4	248	395	9	404
Staffordshire	698	13	711	125	5	130
Suffolk	280	6	286	176	7	183
Surrey	380	16	396	322	6	328
Warwickshire	219	3	222	329	7	336
West Sussex						
Wiltshire						
TOTAL	16,590	207	16,797	12,498	293	12,791
Wales	496	6	502	677	15	692
Mid & West Wales	283	4	287	579	10	589
North Wales	961	7	968	451	3	454
South Wales						
TOTAL	1,740	17	1,757	1,707	28	1,735
GRAND TOTAL	33,002	352	33,354	14,505	325	14,832

INTERVIEW QUESTIONS FOR WOMEN FF'S

Firstly, I would just like to clarify a few points with you before we start.

Like the questionnaire, your responses will remain confidential and anonymous.

I would like to tape our meeting if that's OK with you – it's only so that I don't miss any important points. It also means I can type up the information word-for-word if I need to, at a later date and this is important for my research work. I may wish to quote something you have said, but as I said before, you will not be identifiable from anything I write.

Are you happy for me to record our conversation?

If you prefer not to answer a question, or wish to stop the meeting for any reason, please let me know – you are doing this voluntarily, and can change your mind about taking part at any time.

What were the reasons that made you decide to join the Fire Service?

What would you say were the best things about your job of Ff?

If applicable – you did not attend any Women Ff Initiative Days, can you tell me why not?

You have said that your job of Ff has weakened the relationship with your partner. Can you give me any reasons why you think this is?

How has this affected you?

If applicable – you said that you didn't consider a career with the Fire Service initially, can you explain why you didn't?

Going from the date of joining the Service as a recruit Ff up until the present day, is the job what you expected it to be?

What aspects, if any, of your Fire Service career stand out for you?

Have you made any changes in your life as a result of joining the Fire Service?

Are there any other points you would like to mention?

Appendix O

ADDITIONAL QUALITATIVE DATA OBTAINED FROM QUESTIONNAIRES

"I think the Fire Service is a wonderful field and I'm very lucky to have met such nice guys, but at times it can be awkward - the sleeping arrangements and that time of the month." (U.S.)

"Once you're in the job you are very much on your own – no female contact from anyone to see how things are going. I feel strongly about retaining females and giving them full support. Family Friendly policies need to be pushed more – the maternity policy needs to be talked about when recruiting so that females know exactly what to expect and know the support is there if required ... or is it?! A female point of contact is needed whilst at training school and should be a must. I could go on and on – contact me Kim if you want more ideas." (U.K.)

"In the County where I live, there are more and more women becoming Certified Volunteers. Some are spouses of current Certified Volunteers that realised that if their husbands could pass the [Fire] Academy, they could too. After Saturday, May 18, we will have 22 Certified Females in our county. We have 8 that will go to the Academy Saturday. We still have Females in our departments that are not Certified, these numbers do not count them. We only have 5 that were Certified but are not currently members of one of our 10 departments in County. They have either moved away or just got out altogether. I am the Deputy Fire Coordinator for County so if you need any additional information please feel free to contact me at any time." (U.S.)

"I don't think women should be targeted for a fireman's position." (U.S.)

"I love my job and I'm good at it....". (U.S.)

"I work on a busy station with 15 men. Quite a few of which have been in the Service for a long time and are not used to working with women. Because of this, sometimes they do not know how to handle certain situations. From time to time comments are made which some females would find offensive and unacceptable. I am NOT one of these women!

However, as more and more women come to work on station, not all will have the same attitude and complaints may be made. Some of my colleagues could find themselves in avoidable situations. Through discussion/talks/lectures, I feel they could benefit from a bit of direction on how to conduct themselves in front of female colleagues.

These comments are not vicious, but they should be aware of what is acceptable and what is not, for their own sake as much as anything else." (U.K.)

"Whilst I welcome wholeheartedly the Equal Opportunities Policy employed within the Fire Service, I would reiterate that brigades ensure they recruit the 'right' type of female who would be suited to the role of firefighter in a male-dominated world. The role does not suit everyone, and brigades must be careful in positively recruiting women at the expense of good male candidates, in order to meet Home Office targets. This is a national issue, and much damage can be done to 'our cause' if a female is recruited who is not physically or mentally suited to the job." (U.K.)

"I feel that the fear of the equal opportunities initiative may actually make it harder to be accepted, as the

teasing and banter that you expect in this job is avoided for fear of hurting my feelings and action being taken. After a year, I feel I'm starting to be accepted and the I think time can only help." (U.K.)

"I would like to point out that I know of many (single) mothers who would consider joining the Fire Service if there was a more flexible attitude in the Service towards job share. Not only would this help recruit, but also would keep us.

e.g. Retained station -

A mother could work from 8.30 to 1800, a man (who probably works during the day somewhere else) could start his cover at 1800 to the morning.

Wholetime station:-

Shared shifts e.g.,

Ff 1 - first day

Ff 2 - second day

Ff 1 - first night

Ff 2 - second night

Ff 1 and 2 - four days off!

Just an idea!" (U.K.)

"As the job changes (and it is changing rapidly), the emphasis is more on technique than strength, and in future I believe women will be as effective firefighters as men, but it should not be rushed or forced. I also feel that DFR Service is sometimes over-sensitive to the gender issue - making a fuss about making a fuss about recruiting and supporting women firefighters is a form of discrimination. I would prefer to be treated exactly the same as the men, but I am often made to feel different because of my gender - different uniform, different station facilities, lectures on equality, etc etc!" (U.K.)

"I think being a Ff is great!" (U.K.)

"The new physical tests will be very against women. Not expected to carry out the test 'skills' on your own in a real fire situation so why in the entry test? Older male Firefighters feel that they have been doing the job on their own (without women), so why have women around now? My husband is a Lieutenant and although we've never worked together, as he's respected I'm more accepted. Younger male FFs joining now have a better attitude as the women FFs are already in the job and are therefore accepted by the men. Men don't like taking orders from women – they feel intimidated by the women senior to them and as a Captain, I've learnt that." (U.S.)

"Although I'm short, as I sat the same tests as the men, they feel that I'm on an equal footing to them." (U.S.)

"I've been in the Fire Service for 14 years and still some guys ignore me, but others are OK". (U.S.)

"Not just any woman belongs on this job. It's tough, dirty and a lot of pressure is put on the women by male peers." (U.S.)

"There were 5 female to 1700 male Firefighters when I joined. Difficult not having another female Firefighter to talk to. You want to fit in, but also get female support. Felt I couldn't join a women's support group as this would get back to the male Firefighters and would be resented by them." (U.S.)

"I have been very fortunate to have worked with a good group of guys who accepted me as equal. I know this is not true for all females on the job." (U.S.)

"I enjoy being a Firefighter. We not only compete with the men but we have to also compete with the other females for any promotion." (U.S.)

"This has been the most challenging and rewarding career choice I have made in life and would not trade it for the world." (U.S.)

"I am president and founder of the Women Firefighters Network. We are dedicated to providing a supportive environment for women firefighters. Our membership includes women of all ranks, recruits, drivers, lieutenants, captains and now a chief. We are not a union or a collective bargaining agency. Our goals are to support and mentor women firefighters and women seeking careers in the fire service. Good luck on your Masters Degree, I am very interested in finding out what the similarities and differences between the UK and USA women firefighters' experiences will be. Please contact me if I can be of any further assistance". (U.S.)

"I would like to say that being a female Ff is very rewarding. However you must be open-minded and take the rough with the smooth. If you take offence from rude jokes or swearing, it is not for you. I get on very well with my fellow crew members. All firefighters like to take the mickey, whether male or female.

Ps. I give as good as I get!!" (U.K.)

Appendix P

ADDITIONAL QUALITATIVE DATA OBTAINED FROM INTERVIEWS

That D.F.R.S. shouldn't emphasise the difference between men and women Ff's;

More contact between the women Ff's and Service Personnel Officers was felt to be a strong requirement;

That D.F.R.S. still had "a long way to go" on the equality front;

"No – I just love the job!".

On hearing that a woman was to join the station, one male Ff was allegedly told by his wife that he would "have to leave that watch" (i.e. transfer to another all-male watch).

At another station, the wives and partners were "relieved" when the new woman Ff was found not to be 'girly or feminine'.

Three interviewees said that they loved their jobs and would not contemplate leaving it.

When using 'Opencode' to search on codes of 'woman'; 'woman's job'; and 'women', the following comments were found:

-

[There had been a] "previous woman Ff here..... but I didn't know" [that women could join].

"....at first [having a woman around], they were painfully aware of swearing, rude jokes etc!"

When questioned whether in her opinion, as a woman Ff, she was usually chosen to act as the medic at a road traffic accident because she was female, she replied that it was primarily due to her smaller size. In such situations, it is usual for the Service to remove the door to reach the trapped occupant(s) of a vehicle, but if a Ff of smaller body proportions could access the vehicle by the window, this could save valuable minutes in attending to the casualty. She therefore replied that it was due to her "size, rather than taking the whole door off...".

[She is] .. "going to do a woman's job" [and not that of a Ff] - said by partner of a woman Ff when referring to a female relation.

The code 'working with men' was mentioned by two Ff's - one where the partner/husband "doesn't have a problem with me working with men ...". The other saying her partner/husband initially worried "about me being in close proximity to [a number of].... men...".

Other points raised during the interviews were: -

A woman Ff referring to her 'station name' – that being a man's name rather than her own. This she found to be totally acceptable.

That while the Service was trying to change the culture and have station facilities for women (i.e. separate bedrooms/showers etc), the women felt less safe with individual bedrooms, than they had when they shared one large room with all the watch. As one woman Ff put it ".... I was a bit nervous about it" [separate bedrooms] "because there was a case" [in another Service] ".... where a girl got attacked in her bedroomthere's safety in numbers,". [While] "... sharing a room with 15 other firefighters I never felt at all uncomfortable."