UNIVERSITY OF SURREY and
BRITISH GAS CORPORATION - South Eastern Region.

COLLABORATIVE
RESEARCH PROJECT

"THE VALUE OF AND THE NEEDS FOR TRAINING:
PERCEPTIONS OF TRAINEES CONCERNING THE TRAINING
PROCESS IN SEGAS"

BY

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ABSTRACT

This research project is concerned with identifying the way (attitude) a particular group of workers within "South Eastern Gas" approach their work, the overall research emphasis being placed on studying the effect of training, or lack of it, on work from an individual worker's viewpoint.

The need to investigate this area of research was identified by me from observations made during my employment within SEGAS, particularly in my role as a Training and Education Officer for the past seven years. During this period, workers have expressed opinions inferring that they are often trained to do something they already know, or do not want to know, or that they are not trained in what they feel they want to know.

A great deal of time, money and other resources are invested in training, so it is of utmost concern that the training is meeting the needs of the individual within the organisation.

This project aims to identify the extent to which training needs are met, and to provide an insight into the effectiveness and value of training provided.
The focal point of the project is the way the work is approached by some of the employees, which has been termed their "attitude", i.e. the attitude people display at work affected by the way they are trained.

People, objects and situations all have some part to play in forming an attitude.

The research has the dual purpose of looking at training in terms of its effect on people and the extent to which training satisfies the needs of individuals; and to identify factors within the work environment which have causal relationships to a person's attitude to work.

While this project is based on the findings of research within "South Eastern Gas" the implications arising from it are not, I suggest, in any way peculiar to the Gas Industry. I feel it important therefore to initially discuss the present economic climate, and the advances being made in technology, with particular reference to their effects on industry and its employees.
ACKNOWLEDGEMENTS

In depth research of a qualitative nature, as I now know it, has for me been a long and at times arduous episode in my life. Never before have I experienced such tiredness, confusion, depression, satisfaction, involvement and fulfillment. Such feelings I believe are common to all of us at times but for me new heights or depths have been realised. Some have been particularly difficult to overcome. As a result of these feelings and the pure physical and mental effort required to complete this project, and carry out my role of Training Officer at work, have led to some changes in me as a person. Particularly in terms of the time I have had available for my family, friends and work colleagues.

My wife Rosalind and children Simon and James have been very patient and forgiving during this period when I have given them far less time than they deserved.

Moral support and at times guidance is something needed during such a period. For this I must thank my tutors Maureen Pope and Ray Taylor as well as my wife, who all had a vital part to play in keeping me at it.

Thanks too to my colleagues at work who have at times carried me through, by relieving me of work so that I may concentrate on the research, and to my fellow students, particularly Dave Swift who has spent many hours listening to, and sharing my ideas and thoughts, plus Annette Stannett for her many hours proof reading, and Ruthlyn Barnes who has made the presentation of this project possible by her enthusiastic efforts on the word processor.
My thanks to SEGAS for providing the opportunity to carry out this research and course of study.

Finally my thanks to all those managers, supervisors and service engineers who participated in the collection of data, without whom this course of research would not have been possible.
COLLABORATIVE RESEARCH

At the outset of discussions regarding this research project it was identified that the outcome, in terms of data or processes, could contribute to present knowledge or understanding in two areas.

The sponsor for the project British Gas Corporation - South Eastern Region, referred to as "South Eastern Gas" or "SEGAS", would be primarily interested in the data collected and the conclusions and implications arising from them.

The Institute of Educational Technology (as it was then known) University of Surrey, would be interested in both the data and processes/methodologies employed to collect that data.

Since there was compatibility in terms of the objectives of the research between the parties it was decided that the research would be organised on a collaborative basis. This would provide supervision at both the University and within the organisation where the research was to take place (South Eastern Gas). In this way the interests of both would be under continuous review and research would be guided towards areas most likely to make some contribution to knowledge and understanding of the effect of "education in the workplace".

This form of research relies upon regular meetings taking place between supervisors and the student to discuss progress of the research, and the development of the student.
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CHAPTER 1  
1. INTRODUCTION - A CASE FOR TRAINING

The Changing Face of Industry

Today's business environment offers a great challenge to optimists and people who can project their thinking to a point in the future. For many though, current trends may induce feelings of tension, anxiety, and at times fear. The seemingly ever tightening belt created by the recent low ebb in the economy, combined with the restrictions placed upon it by government policy have led to many employees of industry having great feelings of insecurity. During the past few years some of Britain's more established companies/industries have disappeared in the economic decline. While some of these may be due to reductions in government spending, others reflect the failure of industries to be competitive on the reducing international market for goods and services. This failure is, to some extent, reflected in the present unemployment figure of around three million. To be competitive, industry must produce good quality goods and/or efficient services, at the right price and at the time that they are required. In a country where labour costs are high, investment in new technology (automation) seems a logical move wherever it is possible. This however has not been the case. The failure of industry in this country to invest in more efficient methods in Commerce and Industry has left many companies well behind in the race for product/service supremacy. Those who invested, have generally maintained their position, and in some cases gained new markets. The present state of industrial plant and systems was, I feel, summed up in a paper presented to the I.E.T. in February 1982 in which was said,
"Mechanisation was the birth of industry and yet in many areas it is still not used"

and

"Automation is still only in its infancy, yet its concepts are history"

(R. Taylor)

It is only in the last few years that industry generally could be said to have seriously contemplated some form of automation either in production or communication.

Two main factors contribute to this trend: First the impact of Japanese and later other third world countries' goods which are usually of good quality and often very competitively priced. Their supremacy in the electronics market for instance had been achieved by high investment in at least two main areas, in new plant and machinery, and research and development. This investment approach to business has without doubt been successful and when combined with very cheap labour costs (compared with the western world) has given them the lion's share of the electronics and vehicle world markets.

The second factor relates to the impact of advancement in technology in the fields of computers and robotics. Progress in these areas has not only widened the scope of automated machinery but improved production techniques, and has led to miniaturisation and reduced cost. It is particularly the reduction in costs which has put automation within the reach of many companies.
Greater efficiency can rarely be achieved merely by mechanisation alone. The first stage in the implementation of any automated system is to seek the approval of the workforce. This is always a difficult process as many workers see automation as a threat to their livelihoods. This is sometimes reflected in a rejection of the new system and subsequent strike or other worker action.

Reaction to change is caused by fear that jobs and/or earnings may be lost or skill/responsibility areas reduced. Despite this there seems little doubt that in the long term, large scale automation is inevitable in a country where labour costs are high and labour intensified processes are often slow compared with automated systems. However it is not the purpose of this thesis to discuss the morals of introducing automation and new technology, it is concerned with some of the implications arising from its introduction.

New systems and changes in working methods resulting from the introduction of new technology/automation of any kind, lead to the need for retraining of the affected personnel. Some of the training required will be for staff directly involved with the new system, but these will not be the only persons with training needs which extend to a wide range of staff associated with innovation. It is probable that automation may in fact lead to a reduction in workforce within a particular department, but it is not necessarily so that these persons will be out of work.
Some persons may be offered the opportunity to take on a new job which may necessitate some training or re-training. As well as those directly involved with change: there will be employees whose job is affected by procedural changes, here again training may be required.

At this stage, it is appropriate to refer to a case study which illustrates the introduction of a new system in SEGAS.
In order to streamline the internal communication system, improve records and retrieval systems, the Transport department made a decision to introduce a computerised system. As a direct result of this the skill requirements of some personnel would be changed. In fact a number of people and jobs were affected, other jobs were not, even so a knowledge of the new system was required. Since this was a system being introduced to the whole department, everybody would require some knowledge even though they might not be directly involved in it.

A number of staff were affected by such a change:-
System Operatives - Clerks operating V.D.U's to input/output data
Personnel required to provide information for the system:
   - Clerks
   - Transport Officers
   - Management
Persons requiring information from the system:-
   - Clerks
   - Transport officers
   - Management
Other Department staff:-
   - Finance/Audit
   - Operating Depts.
   - Training
In fact the need to either train people, or provide system information as a result of the introduction, is an area for investigation. There are a number of key questions which need to be asked in order to identify:

(i) whether any training is required and
(ii) if it is, what training.

In this case the focus of attention initially was the operative staff, those who would be involved in data input/output. Their training needs were found to be in the following areas:

1) Keyboard Skills
2) The System - what it does and how it does it
3) System Operation - input and output of data

It was recognised too that some members of Management (especially those on the administrative side) would require similar training since they could be called upon to operate the system. They would provide a reference point for staff having difficulty operating this system. For the remainder of the staff within the department, there was a need to introduce the system and explain the changes which may come about as a result. Changes of this nature usually lead to change in administration procedures and the associated paperwork.

Often more information will be required about the individual operations of the department, alternatively it may be a change in the presentation of information. Whatever it may be, some form of training will be required.
Finally there are those persons in other departments of the organisation who provide/require information to/from the Transport Department. They need to know what information will be available, how to get it, what information they should supply and in what format. These staff do not necessarily require training but demonstrate situations where staff require information, and maybe instruction on the new system.

In this example no persons were made redundant as a result of the system's introduction. Sometimes though the introduction of new systems leads to redundancy or transfer of staff to new jobs. Where this happens, some form of training may be required to enable the transferred persons to take on their new role. This example was selected to illustrate the effect of the introduction of technology and/or new systems on the employees of an organisation.

Technology is changing the face of industry today, and while change is relatively slow at present, the momentum is gathering pace. People are becoming accustomed to seeing computers in the office, manual workers expect sophisticated labour saving machinery to help them at work. Changing technology is not only effective on the things that have to be done. It sometimes necessitates the acquirement of new knowledge.

To summarise, technological advancement's impact on industry cannot be quantified solely in terms of its advantages for the organisation. The implications of introducing any new method or system will include training of one type or another.
Identifying those training needs will be an important part of the introduction of that system. Since technological advancement does not stand still, the training of individuals needs to be an ongoing affair, but, more important, their needs as individuals should be continually assessed to determine actual training requirements, if any.

The previous section has highlighted the reasons for introducing new technology and the impact on the individual. The problems facing industry today can be overcome by methods other than automation. Studies which look at the way work is done and the flow of work within groups often lead to improved methods of working, which in turn lead to improved productivity. Modern industry needs to keep working methods under scrutiny so that it may modify or update to improve productivity further. In other cases methods may be changed to make the work for employees more interesting. Any change in the way people carry out their work leads to some sort of training requirement, even though at times the requirement may be small. All the while managers seek to improve the performance of their departments there is a continuing possibility that working methods will change, resulting in changes in the training requirements of the employees.

The attitude of the workforce to change will have some effect on the way implementation and the eventual system introduction will take place and work. It is not enough to design training which only takes account of changes in skills or knowledge.
On the other hand it is difficult to change attitudes during training especially if the organisation's employees are against the changes that are taking place. These attitudes cannot be ignored, some account must be taken of them in the early stages of contemplating or planning any change. By this, conflict may be avoided due to the consideration given by management to the workforce, which may be in the form of an organised participative worker/management decision making process. (see Appendix II outlining the participation scheme operating within South Eastern Gas).

A further method of improving productivity and performance, and possibly decreasing costs, is by increasing workloads and enlarging the individual's areas of responsibility. One opportunity to achieve this is created by natural or planned wastage. Natural wastage refers to persons leaving the industry for one reason or another. The importance of this for the employees in a department is that the seeming lost labour is sometimes not replaced, their work being absorbed by those remaining. Such a situation may lead to a re-organisation of work or the introduction of new working methods. Here again this may require training of some type to ensure that people can cope with their alternative work, possibly new role or responsibilities.

Planned wastage is likely to come about as a result of some management study. Groups of workers are continually under the scrutiny of the work study department and Organisation & Methods Officers.
All work is carefully investigated and a study made to identify alternative working methods and improved organisational structures. Where such studies reveal more favourable structures a re-organisation may take place. Much negotiation will take place before a re-organisation can be implemented, as employees are often required to accept redundancy or transfer to other jobs and departments. All staff affected by the re-organisation, which necessitated changes in job roles or responsibilities, may require some form of training. This will usually be a point of discussion before and after implementation. An organisation will be continually aiming to meet its corporate objectives and may choose to change the organisation or structure, to meet the corporate objectives more efficiently, or to accommodate changes in them. Alternatively technology may be introduced to assist in the attainment of corporate goals.

On the basis that technology will continue to have an impact on industrial organisation and practices and that management will always endeavour to improve workers' productivity, in order to remain competitive and attract the capital to expand and develop, there will always be a need for training. The most important issue here is that employees' training requirements are changing continually as a result of the changes taking place.

As well as the changes initiated by the organisation, there will be those which result from changes in legislation and standards as directed by external bodies.
The impact of these changes needs to be considered and a decision made as to whether formal training is required or some form of written communication to all relevant staff will suffice. What is certain is that the employee will need some help to understand the change, be it information or practice. This may be in the form of training which must be identified and formulated to meet the needs of the employees.

Up to this point, I have considered the changes in organisation, procedure or technology which may lead to changes in the needs of individuals. As well as these the individuals themselves will undoubtedly have some self identified training needs. These may be development type needs which would in the individual's view prepare them for promotion, or training which may help them to carry out their job more efficiently. These self identified needs will change on the basis of changes in the individual's self identified aspirations and potential for promotion, and the realised skills at the tasks performed.

It is likely that the expectations of the employees will have an important part to play in relation to the changes that may take place and to any consequent training. These expectations fall into two distinct categories. In the first place there are those expectations the employee has of the employer. These will be based on the normal functioning of an organisation, they may be as basic as being rewarded for the work done and to being shown consideration.
Employees also expect the management to manage, that is organising and planning to retain or gain their share of the market, which keeps them employed. A major concern of the employee, which forms part of his expectations of the organisation/management, is that training is provided to improve or develop skills/knowledge or to take on new skills/knowledge.

The employees often have expectations of themselves, which may only be achieved through the organisation. To some extent these will be related to their own performance, others though may be more abstract. For instance the findings in this research indicate clearly that people at work expect to "get on well" with their fellow workers and management. They have their own standard of acceptability in respect to working relationships and general work environment, they come to expect something of themselves in relation to these. They also expect to develop skills, acquire knowledge and progress in the hierarchical structure of the organisation. Opportunity seemingly provides the climate for these things to happen, from the workers point of view these opportunities often need to be provided by the organisation/management. Failure on the part of the management/organisation to meet, or attempt to meet, the expectations the workforce have of them, can and does result in causing a change of attitude. For my part I prefer to consider attitude as referring to the way a person, object or situation is approached.

So in this case I am saying that the approach to work taken by the workforce is dependent on the approach taken by management.
This approach is not static and subject to omni-level status, but operating at varying levels about a central theme. The intensity of approach will vary too, based on the extent to which, if at all, management aspires to meet the expectations of the workforce, as seen by the workforce.

The approach to work taken by employees is of obvious importance to an organisation. Complete harmony may not be possible, but it is only by attempting to achieve harmony that something near may be attainable. Taking into account the feelings and expectations of the workforce will help, but will not solve the despair and frustration experienced at times of change. Industrial conflict is to be avoided. While this is probably not totally possible, a reduction in conflict can be achieved by being more aware of the feelings of those around us, and, more important, knowing what they expect of us and themselves. Thus when an investigation of training needs is carried out, it is vitally important to take time to look at this area of "Expectations", since it can provide valuable insight into the causation of "Attitudes", and clues as to how they may be influenced or changed.

The ever changing climate within industry leads to changes in an employer's expectations of his employees. For employees to meet the challenge of these expectations it will be necessary to plan and implement training. This was stated in a discussion document:-
"Whenever new technology is introduced into an office, it is necessary that training needs are identified and that the training is properly planned, implemented and reviewed. This can be done through an examination of occupational trends and job needs in terms of knowledge, skills and attitudes so that Training and Education provisions match the needs. Unless the needs of every group are identified accurately, much of the future effort which could be channelled into the provision of Training and Education for the new technology could be wasted."

(Inter-Board Admin, Commercial and Clerical Training Liaison Group 1981)

While this statement was related to the introduction of new technology I consider the points made apply also to changes in organisation or methods.
(1) The Organisational context in which the research was carried out

The British Gas Corporation (B.G.C.) is the largest single gas undertaking in the world. It is a nationalised industry comprising twelve area Regions which cover England, Scotland and Wales. Each Region is responsible to British Gas for its economic performance and the maintenance of a high standard of service to its customers.

Policy and corporate objectives are formulated and designed at British Gas level, to be implemented by each of the twelve Regions. The implementation methods employed within any one Region will depend upon the style of management and available resources. While the Regions must achieve the objectives presented to them, in accordance with the Corporation's policy, there is at times considerable variance in the methods employed. Managing is a Region's responsibility and as such there is an expectancy at B.G.C. that Regional management will employ the best methods in terms of achieving efficiency and economy.

Generally the Region's staff will be left to manage, the exception to this being items or changes within the Region involving high capital expenditure which require the approval of B.G.C. Approval will also be required for any large scale re-organisation.
SEGAS is the Region responsible for an area which includes Sussex, Surrey, Kent and South London. In manpower terms there are around ten thousand staff who collectively provide a service to over almost 2,000,000 customers. It is the Region's business to provide and maintain gas supplies and to supply, install and maintain a wide range of gas burning appliances.

The structure of the Region is organised on a functional basis about the activities of four major Directorates. These four Directorates are Marketing, Engineering, Finance and Personnel.

Marketing
There are two departments within Marketing, the Sales department which sells the gas and appliances, and the Customer Service department who are responsible for the installation and maintenance of appliances and associated equipment.

Engineering
The departments within Engineering include Distribution and Transmission, who are jointly responsible for maintaining the transmission, supply and storage of gas to the Region's customers.

Finance
Controls the income and expenditure of the Region, collecting accounts and monitoring expenditure.

Personnel
Provides a service which includes consultancy, advice and assistance in the following specialisations:

Industrial Relations
Training & Education  
Recruitment  
Pension Scheme  
Employee Welfare  
Employee Health  
Management Development  
Safety  
Job Evaluation  

The work carried out by the four Directorates is supported by a number of smaller departments. The levels of their responsibility vary considerably and the support they provide is essential for the continued successful operation of the Region's business.

The other departments include:-

Purchasing and Supplies  
Management Services  
Solicitors  
Architects  

This project is concerned with the operations of two of the departments mentioned, the Customer Service Department of Marketing, and the Training and Education Department which is part of Personnel.

For ease of understanding, it is necessary at this stage to outline briefly the general activities of the two departments directly involved in the research:
Outline Responsibilities Of Customer Service Department

These are to provide an efficient and reliable service to the Region's customers in relation to the installation, maintenance and repair of gas appliances. Along with this general aim is the need to operate in a cost effective manner in accordance with the policies and objectives of the Region and British Gas. To operate effectively the department is organised on an Area and District basis and controlled centrally at the Region's headquarters in Croydon. The Areas and Districts are based on geographical areas usually centred on the main towns within the Region. The staffing and organisation of a typical District is as follows:-

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 accord

District Service Manager

  Office Manager

  Section Supervisors

  Various clerks

  Technical Officer

District Service Officer

  District Supervisors

  Technicians

  Service Engineers

Technical Representatives

Apprentices
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The duties and responsibilities of the District Service Manager are based on the function of the department and designed to ensure that the policies and procedures laid down are adhered to.
The general operating of a department such as this, also requires each manager to take on the responsibilities which could be associated with the role of many managers in industry and are implicit in their job. These include:

- Industrial Relations
- Discipline
- Planning - Work
  - Budget
  - Expenditure
  - Staffing
- For change
- Work Standards & Safety
- Efficiency and productivity
- Training & Education

While I have not covered every aspect here I have covered the main areas.

For the purpose of this project I am going to focus my attention on the features and makeup of the responsibilities of a manager in the gas industry towards training.

It is the manager's role in the first instance to identify areas in which training is needed. This can be achieved in two ways. First, it may be that changes in the methods of working or the procedures employed have changed, or alternatively the resources in terms of equipment have been updated or changed. Changes such as these are likely to come about as a result of the manager making attempts to improve productivity and efficiency.
I should stress at this point that the changes I refer to here are those which are effective within individual units and are the response to change isolated to individual units. There are changes in the operations or methods employed which come about on a Regional basis: these will be discussed in a section on identifying training needs. So a manager may recognise the need for training as a result of changes that have taken place locally.

The second source of training needs results from shortcomings in the performance of employees at work. The person's period of employment has some significance here, but the needs I refer to could be for development or those which come about as a result of individuals or groups of employees having difficulty with some aspect of their work. The manager is responsible for identifying such needs and responding to them by organising some form of training. This may be achieved by organising training, utilising the staff at local level or by approaching the training department, who will assist the manager in one or a combination of the following:

1. Clarifying the needs and advising on the makeup of a training programme which might include a suitable 'on job' course.
2. By carrying out number 1 above and assisting in the running of the resulting course/programme.
3. By first clarifying the need and following up by investigating similar needs in other units or departments.
4. By organising, planning and implementing an appropriate course/programme in conjunction with the enquiring department.
The way in which training needs are identified is of great importance to the organisation and the employees within it. The needs identified in the first place must be clarified to ensure that it is a training need and not a management or structural problem. Only then could the area of interest be investigated, to assess the extent of the training required and a provisional training programme formulated.
The department is organised to respond to the training requirements of Regional and line management. The aims and objectives are described in:
SEGAS INSTRUCTION 3.7 see Appendix I

To cope with the demands made upon it by the Region’s ten thousand employees, the department has just under one hundred staff, including essential administrative support staff. The department provides a specialist service on all aspects of training, either by carrying out training or advising on its makeup and design.

The majority of the training carried out is 'on-job', a term which broadly describes a method of training which is carried out at a person's normal place of work and during the normal work process. Alternatively the training may be 'off-job', at a training unit, college or conference centre. Whether a training course is on-job or off-job depends upon the content and objectives of the course, and the resources available. There is considerable variance in the degree of training department involvement with functional training, but some lines can be drawn in relation to the distinction between on-job and off-job training.

On-Job Training
This type of training may take many forms. Whichever of the variety available are selected will require organisation and planning. The role of the trainer in this situation is to formulate together with the training department:-
1. A course design which meets the requirements of the operating department and the employees within it,
2. A plan for implementation and control,
3. A method (instrument) for validation of the training,
4. A plan for validation,

While the trainer may be involved in the initial training the operating department will sometimes take over after a preliminary period. An example will be useful in distinguishing this type of course, and illustrating the training department involvement in 'On-job' training.

Example Of On-Job Training
Department - Sales Department
Subject - Consumer Law
Target Population - All Showroom Staff
Considerations- Implementation to be as soon as possible
   Limited Sales staff time available.
   Training Staff time
   Available resources
   Importance of programmes related to sales persons work
   Effective training
   Availability of skills

Limitations - Time available for release from normal duties
   Implementation time
An important factor influencing decisions regarding training within the department is the standard time and facilities available for on-job training. As well as this, departmental staff have a number of regular off-job training courses to attend, which combined with sickness and holidays can at times cause staffing problems.

Available Resources - Allocated time for on-job training
- Showroom staff who have been 'trained to train'
- Showrooms available for carrying out the training
- Media resources available - Slide tape machines
  - Visual display units
  (linked to main computer, some showrooms only)

Having given consideration to the points mentioned it was decided to produce an on-job training package utilising a slide/tape programme, to be administered and run by showroom managers.

Programme Format - Slide tape programme to provide basic information.

Tutors handbook which includes:
- Training objectives
- Training session format
- Questionnaires and case studies for group discussion
- Copy of audio visual scripts
As well as these items there is a booklet for students to take away. All this material was developed and produced by Training Officers, following discussion and research with the Sales department staff. The programme is then issued via a briefing meeting, involving the sales staff who are expected to carry out the training and any other relevant personnel. The briefing is carried out by Training Officers.

The example typifies what may happen in the situation where there is a Regional requirement for training. This represents a small proportion of the on-job training that is carried out.

Much of the training that is required is isolated to individual work groups. Here again, Training Officers may be called upon to assist in the manner previously described.

Off-Job Training

I shall not discuss in detail the full implications or reasons for organising off-job courses. Briefly, though, the majority of such courses come about for the following reasons:

(i) The content is of general interest to all departments;

(ii) Resources are not available locally;
(iii) There are too few potential students at each unit, or it is impractical to release staff in large numbers;

(iv) Programme type necessitates concentrated; effort in short time periods.

(v) Programme content requires persons to be relieved completely of normal working duties or pressures;

(vi) To encourage the interchange of ideas and working methods between staff from different Areas and Districts or other functions.

The single most common factor influencing the need to develop off-job courses is the absence or inadequacy of local resources. This can apply to both premises and equipment. The second factor which has a major influence on any decision to provide 'on-job' or 'off-job' training is the number and type of staff at whom the training is aimed.

Training covered by off-job courses at the present time is broadly as follows:-

**Technical Training** - usually carried out at a craft training centre which has the necessary workshops and ancillary facilities for technical and associated training.
Some Clerical, Administrative, Technical, Management & Supervisory Training - carried out at a venue having Conference or Seminar facilities (including residential).

Unlike on-job training where local management may take over the responsibility of actually running the course, off-job training generally requires the training staff to carry out a major part of the training. This happens where the necessary expertise is not available within any of the departments that require the training to take place. So in this situation training department personnel have the responsibility to go through the stages 1 - 4 indicated in the section on on-job training and carry out the training as well, and as a result of doing this carry out a post course evaluation.

In this section of the thesis, the responsibilities of the departments involved in the research have been described together with the relationship between them. Two aspects are particularly important for both organisation and employees: the ways and methods which at the present time are utilised to identify training needs, and the validation of the training that has taken place. Both aspects will be discussed fully in Chapter 3.
CHAPTER 3: THE RESEARCH QUESTION

Preface:

Of fundamental importance to any piece of research is to agree the purpose of that research. As a consequence, the research questions are of great significance to the outcome in terms of the data collected and the consequent analysis, and as such set yardsticks by which judgement may be made. Chapter 3 raises the research questions by which this piece of work in terms of its outcome may be so judged.

Summary

A: Identifying Training Needs

Addresses the problems associated with the traditional forms or methods by which training needs are identified and proposes an alternative method. By considering the person's anticipations of events (constructs) it may be possible to derive greater understanding of the problems employees encounter during their work, and respond by providing appropriate training.

I feel the organisation and its employees would derive greater benefit from training if it could be designed, as far as possible, to meet their individual needs.

Present training needs analysis takes little account of the individual and the way he/she sees the role they have within the organisation.
Will conducting a series of individual discussions with persons about their work, with a view to gaining insight into the way they construct their environment, be a more meaningful and effective methodology for identifying training needs for a group of employees within Sega?

B: The Effectiveness of Training

Traditionally a validation study attempts to discover whether the objectives of a training programme have been achieved. Whilst in the industry there has been a movement towards consideration of the students/learners objectives, they can only be considered if validation is carried out. In my view it seems more important to find out how people perform at work following training (which may be termed 'on-job assessment'). In light of the neglect shown to this important aspect of the training system it is probable that discussions, related to training needs, will to some extent reveal information about previous training experiences, and in so doing provide valuable data which will assist both managers and trainers in the planning of more meaningful and effective training.

C: The Role of Attitudes at Work (Causation)

This section looks at the alternative views relating to the nature of attitudes, followed by my own perception/understanding of an attitude.
While the attitude of the employees in an industry is of interest to management, more important is the causation, for it is by studying these and perhaps making changes in them that attitudes, where deemed desirable, may be modified or changed.
So, these are two questions raised here:

1) What are present attitudes to work?
2) What caused them?

(see Chapters 9 and 10)
A: Identifying Training Needs

Historically it has been the needs of the organisation which were considered in the formulation of training programmes. While these needs are of fundamental importance they cannot be divorced from the needs of the individuals within the organisation. It is only when the two are considered simultaneously that the resultant training could be considered to be at the very least appropriate, and ultimately effective. At this time training needs are identified by the following methods:

1. By considering the changes in job role which may come about as a result of changes in working methods, practices or procedures.

2. By considering changes in job role which may come about as a result of the introduction of new technology, and the use of it.

3. By considering a person's work and identifying areas for improvement in efficiency of performance.

4. By carrying out an 'Incident Analysis', as and when required.
Note:

"Incident Analysis" in this context refers to a procedure used to investigate what may appear to be isolated situations which have led to an incident or similar event (an incident could be a fire, explosion or some other potentially dangerous situation). The purpose of the investigation being to determine causation, with a view to future prevention.

In the past, training or retraining of staff has been a method used for the prevention of errors at work. For South Eastern Gas it has led to the total workforce of a department being re-trained. As is perhaps inevitable, many employees feel the training to be superfluous to their individual requirements and as such find this training boring and ineffective. For South Eastern Gas this training can be seen as a form of "Extra Cover Insurance" which seemingly provides the management with the confidence of knowing that their staff have been trained and the insurance of being able to demonstrate this through the training records.

At Regional level, training requirements will be discussed within a functional training committee. (e.g. Sales Training Group - representing all staff within the Sales Department) Discussion topics originate from at least two sources. In the first place items may be tabled from Regional management. These items are likely to be of significance to all parties within the department, and will form the basis of what may become a training programme, or may be information to be disseminated.
In the sales environment items likely to fall into this category are:

1. Training associated with national advertising campaigns
2. Changes in the law affecting sales
3. Changes in selling methods
4. Improving sales performance.
5. Training for changes in (a) technology
   (b) job role

As well as this, seminars or meetings will be organised to provide information.

The type of programmes which arise from a training committee can be demonstrated by the results of a decision made during 1981:
Nationally a new scheme was introduced which included a showroom promotion on energy conservation. Each Region of British Gas was allowed to implement the new system in their own way and by their own identified methods.

In the South Eastern Region, the Sales Training Group not only agreed an implementation plan (to be introduced to all selling staff), but decided to utilise the already existing interactive computer assisted learning system, thus testing the technique so that it may be considered for other forms of training should it prove acceptable to the users, and effective as a training medium. (The system in use within the Region is the I.B.M. Interactive Instructional System)
Discussion topics are also brought to the meeting by the committee delegates who are working managers. Many of the issues raised will be of concern to a single manager, as they arise from what may be termed local situations. Often the raising of these issues presents areas of common problem areas which previously perhaps were seen in isolation. So the committee serves to identify areas of common interest. The issues raised by managers at these meetings can become the subjects of Regional training programmes if they are approved.

Unfortunately, a manager is not always the best person to know what a job is and what it entails, since their time is spent managing, and since they are not the individual performing the task associated with the job.

"Opinions of individual managers about what a job entails often differ and this may eventually lead to unnecessary or insufficient training in certain areas".

(Training & Development Dept. BGC 1981, p2)

Whether the training provided is unnecessary or insufficient is largely a question of instinct, in some areas training becomes the answer to all problems for all people, or alternatively serves as an insurance premium (metaphorically speaking) as discussed within the paragraph on 'Incident Analysis'.

It is likely that incidents will be discussed at 'training group meetings'.

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A good example for the sales department is where a sales person has misrepresented the Region. This could be making false claims about the performance of an appliance for instance which led to some legal action. Arising from this will not only be compensation but a lost customer and, worst of all, bad publicity. The circumstances leading to the situation would be discussed and an investigation launched. An investigation of this nature is likely to lead to some important legal points regarding the selling of goods and services. In the past such investigations have led to a specific training programme being held, exclusively on 'law', or the inclusion of 'law' in an ongoing course aimed at all sales staff.

While training that responds to an incident would appear to be appropriate it is often too late. It is possible that the study of individuals' needs in a systematic way carried out on a routine basis may have revealed the need to train in this area. Another question arising from the incident training needs identification method is: would, as normally happens, everyone in the department need the training? The ways that training needs are identified is important for both the organisation and employee alike. At present only a small percentage of the training that is carried out is organised to respond to the needs of individuals.

It would of course be naive to believe that an organisation employing around ten thousand staff could respond to the needs of each and every one, but that is not to say that no attempt should be made. At the very least it should be possible to assess the needs of individual groups.
I have argued on a number of occasions that it is important to identify the training needs of individuals, but why is this so? The individuals within a working environment will perform in relation to their duties and responsibilities in a manner which is individual unto themselves.

In reality, I see that their response to change for instance, will be based on their prior notions of what it will be like. The individual will consider the effect of a change taking place, say, in two weeks' time and then at the time of change consider or compare his prior notions with the actual event.

For an employee, work can be a question of coping with his responsibilities. 'Coping' in this case is being able to successfully anticipate a situation and predict its outcome. The extent to which people in a work environment can do this depends on a number of variables, some of which are:-

a) Knowledge of the duty or responsibility
b) How similar the required performance is to previously enacted performances
c) Level of confidence related to the situation (to some extent a combination of a) and b) which provides the means to predict and anticipate successfully).
A simple example will illustrate the situation. Consider a Service Engineer is requested to attend to a central heating system which is inoperative. Before inspecting the faulty appliance the engineer will consider what the problem may be and what can be done to overcome it. It is unlikely that consideration, or anticipation will favour a single problem, and the same will apply to the remedy: it is more likely to be an 'if' or 'but' situation. The engineer in this case has anticipated what he may find wrong and how it may be overcome.

The next stage is to test any prior notions of the problem. Should the diagnosis have been correct, the engineer will have increased confidence, and will as a result probably be at least as successful on future similar occasions.

Alternatively the actual event may turn out to be somewhat different to that anticipated and as a result future situations will take account of this as the engineer attempts to anticipate a similar situation then.

Unless we have some awareness of the way employees (in this case) view their working environment (and at this time I consider we do not) the likelihood of trainers being able to plan meaningful learning experiences is minimal. The purpose of the learning will differ according to your role (i.e. manager, trainer, learner/employee) and the individual self.
While in an industrial environment it is likely to be a manager who provides the purpose for which training will be planned, it is the trainee who will take on this purpose.

The consequence of this is likely to be some form of internal conflict for the learners, for they too are likely to have an individual purpose for attending a course or training session.

This situation is not peculiar to industrial training. In teaching too there has been debate and discussion on the issue of the purpose of (in their case) teaching.

As well as this there is the area of control exercised by individual managers and the way things are constructed by individuals. Often it would seem a teacher/trainer will present students/learners with a personally constructed view of an object, person or situation. As a result of this the student/learner is left failing to understand; it is only in retrospect that learning may be identified by the individuals as having taken place, if at all.
These issues are discussed at length in P.C. Candy's book "Mirrors of the Mind" (1981) and are illustrated by the following two-category system and associated text: -

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<td>TEACHER ORIGINAL</td>
<td>(TO)</td>
<td>TEACHER RETROSPECTIVE</td>
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<tr>
<td>LEARNERS VIEW</td>
<td>LEARNER ORIGINAL</td>
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"Most learning in education falls into the TO-category. The teacher sets the purpose of the exercise and the learning is measured by reference to what he set out to teach.

Most personally valued learning falls into category LR. The learner recognises after the event that something significant has happened. Then and only then does the learner set about evaluating what has happened.

Within a learners-centred personal construct approach, learning type TO becomes irrelevant, except as a short term exercise. Effective long-term learning is not achieved if the learner indiscriminately takes on someone else's meaning............."

(Thomas and Harri-Augstein 1977, pp(92-6)
Support for this approach (TD) is provided by this statement from the Training Officer (Jan) 1981):-

"......I determined that the trainers approach should be based firmly on the needs of the group members by allowing them to decide during the first session, what is to be presented during the rest of the programme".

(Goodman 1981, p.4)

It is all too easy for a trainer/teacher to impose personally held beliefs, feelings and views (based on the self construct of subject material) on the student/learner, especially when that trainer/teacher has a limited awareness of the view of the student/learner.

It is perhaps obvious to say that increased awareness will only come about as the result of effort and time, but that is not enough. The methodology employed is of fundamental importance to the outcome of time and effort. Too often, too little time is spent assessing and considering alternative approaches, and too often awareness exercises as studies become something that is seen to be done, but not done.

The methodology employed for this study is based on Kelly's 'Personal Construct Theory', an approach which if utilised as originally intended can be effective in increasing a person's awareness of those around him/her.
(The theory of, and methodology arising from Kelly's work will be discussed within Chapters 5 and 6 of this thesis).

It is not conducive to effective learning for student/learner, trainer/learner to meet for the first time at a training/learning session. Learning is a joint venture between teacher and learner, and as such needs to be discussed before formal learning takes place. This in itself becomes a learning experience for both parties.

It is for this reason that I feel training should be designed and implemented in a manner which will assist people to anticipate and predict the outcome of events. To be able to do this the employee (in this case) should be able to see from the description of the course (the objectives) what will be achieved by attending.

This can only really be obtained by involving the future course members in the identification of needs. This I feel applies when changes in working methods and practices are to take place, or the introduction of new technology, particularly as such changes are inclined to make people feel somewhat threatened. It is, for the reasons stated, important to consult the persons who will be affected by any changes that are planned, for it is these persons who are likely to require some form of training. By discovering what the change will mean to them in their terms expectations it may be like, it may be possible to identify appropriate training.
The fears and thoughts they anticipate will perhaps indicate the subjects or content of a course or programme, and as such are likely to be successful in meeting the needs of the organisation and the individual within it.

While such changes provide a necessity to train, they are in most cases not by any means the only reason why training may be necessary. Since it has become normal to consider training as a necessity at times of change, albeit from the organisation point of view, it seems that much of the training that takes place is in response to some form of change.

Most people find their duties and responsibilities a problem at times. It may be that problems are difficult to overcome or difficult to cope with. There are many questions asked of us by ourselves and others during a day at work. While some of these can be answered quite easily others are more difficult, sometimes almost impossible.

In fact we are often attempting to negotiate situations that have been difficult to anticipate and as a result are difficult to overcome.

Given the required knowledge or experience would without doubt be of assistance when attempting to anticipate the outcome of events or situations, although not being able to anticipate will not always lead to failure in the prediction of outcome, for failure in this situation can be predicted.
Learning will still be derived from the experience. This failure would probably be seen by the manager as an area of weakness. I see such areas as possible training needs which should be the subjects of discussion to substantiate the need if any. Study of these areas would assist both management and trainers alike to identify training needs from the individuals viewpoint. This process would assist the identification, formulation and implementation of appropriate training.

The on-going training needs of people at work have particular importance for organisations. For it is the satisfaction or fulfilment of these needs that will assist the organisation in achieving its corporate objectives. From the individual's point of view it would provide greater confidence by providing the knowledge and experience that the individual requires in order to successfully anticipate and predict events or situations in their working environment.

To summarise then, I feel the organisation and the employees within it would derive greater benefit from training if it is designed to meet, as far as possible, their individual needs. Present training needs analysis takes little account of the individual and the way he/she sees the role they have within the organisation. Will conducting a series of individual discussions with persons about their work, with a view to gaining insight into the way they construct their work environment, be a more meaningful and effective methodology for identifying training needs for a group of employees within South Eastern Gas?
"... in the past, the span of important change was considerably longer than that of a single human life. Thus mankind was trained to adapt itself to fixed conditions.

Today this time span is considerably shorter than that of human life and accordingly our training must prepare individuals to face a novelty of conditions"

(Whitehead 1929, p.118)

While this statement by Whitehead was made so long ago, its message is probably truer today than it was in 1929. It is interesting that for my part it was recognised so long ago that people at work need to be trained on a continuous basis. That is what I read into the statement, yet today we are still not taking full account of the on-going training requirements of individuals, despite the new rapid changes in technology and working methods.

B: The Effectiveness Of Training

An essential part of planned training experiences for others is subsequent testing or discussion. There are a number of terms which are used to describe this post training stage. For instance a general term is validation. In a technical sense validation is seen by many as a process which attempts to assess to what extent the training objectives of the course or programme have been met. Alternatively an evaluation seeks to clarify the worth of training, that being its contribution to an organisation in terms of improved productivity, efficiency, or maybe sales.
An assessment, on the other hand, generally is an attempt to identify how well or not classroom skills are transferred to the place of work. All in their own way are attempting to discover how well the training has achieved what it was intended to do. For the employees of industry training is usually designed and organised in a manner which initially assists them in the acquisition of new skills or knowledge areas, or helps them do their present job better. As well as this there will be those training programmes which have been designed to develop persons for job positions they may hold in the future.

Whatever the function of the training there should be some form of follow up to establish whether the course has been effective. Effectiveness in this sense refers to the following:

1. The extent to which course objectives have been achieved;
2. How well the course has prepared people to carry out their work;
3. The extent to which course members objectives have been achieved;
4. An assessment of what improvements could be made in the course so as to make learning more effective;
5. The identification of areas of difficulty in the learning process.
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3. The extent to which course members objectives have been achieved;
4. An assessment of what improvements could be made in the course so as to make learning more effective;
5. The identification of areas of difficulty in the learning process.

These five areas can be separated, based on the types of information provided. In the first place there are those aspects of validation that inform the teacher/trainer how well the teaching/learning has progressed in relation to their self identified goals/objectives (summative feedback). This usually relates to the course/session in total rather than the individual parts of it, and would be considerable within assessment items '1' and '2' (see above page). Items '3', '4' and '5' on the other hand provide, in my opinion, more valuable information about the course/session. What did the students/learners gain from the experience, and at what stages did they have difficulties or find the experience less meaningful. This formative feedback is the basis on which future courses/sessions may be modelled. It provides much information and insight on the way students/learners see those skills/knowledge to which they are being introduced.
If positive formative feedback is received in relation to items '3', '4' and '5' then likewise should be the case with '1' and '2', but not vice-versa. The outcome of any validation study will depend on many variables. For the purpose of this thesis I should like to focus attention on the "two category system" outlined in section 3A.

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<td>LEARNER ORIGINAL (LO)</td>
<td>LEARNER RETROSPECTIVE (LR)</td>
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Items '1' and '2' denote an interest in the 'TO' area. Has the original purpose of the teacher/trainer been achieved? Items '3', '4' and '5' are inclined towards 'LO' and to some extent 'LR' which may reflect in 'TR': Theoretically the failure of a teacher/trainer to involve eventual students at the planning stage of a learning experience may result in negative feedback in relation to items '3', '4' and '5', but this is not necessarily so, for it is likely that the original purpose of the parties (teacher/trainer and student/learner) will at times coincide.

Validation is designed to assist the trainer/teacher by providing valuable feedback on how successful or not the training/learning has been. Success in this case depends on the concerns or approach of individual teachers/trainers. Validation can be aimed at measuring the extent to which the trainer achieved the training objectives, finding out whether the student/learners achieved their objectives, or maybe looking at both aspects simultaneously.
In my view the information provided through validation will be considered in the formulation of any future similar courses/sessions, and in some cases will lead to modifications and improvements in the content and presentation of course/session material.

"Post-training evaluation is intimately connected with the pre-training investigation of training needs and the establishment of training objectives"

(Hamblin 1970)

In reality, time is a great limitation. While it is relatively easy to carry out a validation at the end of a course it is more difficult to evaluate or assess when the course members have dispersed. This is particularly true in industry as course members are likely to be spread over a wide geographical area, which makes evaluation or assessment very time consuming. This one reason alone is the causation of no post-course investigation taking place in most cases, although it could be agreed that it is more important, or of more value, than any validation that immediately follows a course/session. It is only when a student/learner returns to their place of work that the true effect of attending a course/session may be realised. From the individual's point of view this may reflect itself by demonstrating an increase/improvement in knowledge/skill, or the ability to cope with problems encountered at work. It is as important for the trainer to know if the training has assisted a person in coping, carrying out or performing their job in an improved manner.
This research programme will not be attempting to evaluate or assess a particular course or session. It will be studying, by way of discussion with individuals, the extent to which past training has met their needs.

Such a study will I believe assist both managers and trainers alike to design more meaningful and maybe effective training sessions/programmes. This will be achieved by a study of the associated implications (Chapter 10) which summarizes both the actual needs for training, and to some extent the method employed in training.

C: The Role Of Attitudes At Work

While the primary concern of the proposed research is related to training needs and training effectiveness, it is inconceivable (especially in light of the approach taken to data collection) to carry out such a study without touching on some other aspects of a person's working life.

Like many other researches, I find that the more I think of attitudes the more difficult it becomes to clarify what they are. What an attitude may be in terms of its role as an integral part of a person is as difficult to describe or analyse as perhaps the analysis or definition of the soul. Being abstract areas, attitudes or soul cannot be removed from the body after death and studied in the same way a heart may be studied.
Even if it could there is no guarantee that such a study would assist an understanding of its workings.

Attitudes would seem to be important to all of us for they seem to affect all the things we do ourselves, or the way we relate to others in our life. Whatever we are or whatever we see ourselves as being is interrelated to the way we view our world. The way we relate to this world is related to our beliefs, experiences, environment, mood and people etc. In short all these things and others contribute to the way a person may deal with everyday experiences in life itself. It is said that however a situation is approached it will differ, depending on the aforementioned variables.

This approach so called is dependent on the person’s attitude to the particular situation, and is very much related to feelings.

The nature of attitudes has for some time been the subject for debate and indeed extensive research. To date, though, there seems to be no generally accepted understanding of the nature of attitudes. There have been many attempts to define attitudes.

With few exceptions the majority (in my opinion) are represented by the following quote from Sherif and Sherif (1967).
"Operationally an attitude may be defined as the individual's set of categories for evaluating a stimulus domain, which he has established as he learns about the domain in interaction with other persons and which relate him to various subjects within the domain with varying degrees of positive or negative effect".

Alternatively Warren in his 'Dictionary of Psychology' (1934) defined an attitude as:

"the specific mental disposition toward an incoming or arising) experience, whereby the experience is modified; or, condition of readiness for a certain types of activity".

Similar contributions to this aspect of psychological understanding have been made by Allport (1954) Adorno, et al.(1950), Insko and Schopler (1976) Hovland, et al. (1953), and Hilgard and Atkinson who combine the definitions of Allport, and Hovland et al.

An important contribution to the understanding of attitudes was made by Katz (1960). He said that there is a motivational factor contributing to the formation of an attitude.
His thoughts and ideas are based on Maslow's hierarchy of motivation. He recognised four levels of attitude formations:

1. Utilitarian - Survival
   Value (those attitudes necessary for survival)
   - Safety and Security
   (relative to oneself and close family)
   - Social attitudes
   (from actual contact)

2. Value Expressive - Self esteem
   - Self actualization
   - Ego ideal (good impression of oneself)
   and parental identification.

3. Ego Defensive - Self esteem
   (defence mechanisms, the protection
   from one's real self related to
   experience with others).

4. Knowledge - Competence, this assists the building
   of a stable world view
   the fitting together of parts which may
   require attitude changes related to
   particular things in order to be
   accepted into our own world view.
Much of the detail included in Katz's model has been left out, but the outline should provide a useful appreciation for the reader.

There are a further two views on attitudes I feel it important to mention, firstly that stated by McKeachie (1966):

"An attitude is an organisation of concepts, beliefs, habits and motives associated with a particular object. The configuration of all of a person's expectancies about an object, make up his attitude toward that object."

Finally the behaviourist view which according to Skinner dissolves the dispositional concept of an attitude into overt verbal behaviour, attitude change being affected by the reshaping of verbal behaviour.

For my part I find it as difficult to identify the nature of an attitude as most other people, although at one time I thought I knew exactly what an attitude was. In fact all I had to go on in most cases was an observed behavioural activity. As was stated earlier most definitions tend to agree in many respects. In this light I take the viewpoint of Oppenheim (1966) that an attitude is a state or readiness, a tendency to act or react in a certain manner when confronted with certain stimuli. Thus, the individual's attitudes are present but dormant most of the time; they become expressed in speech or other behaviour only when the object of the attitude is perceived.
It is interesting that a number of the stated definitions, or those quoted, relate more to what attitudes do, rather than clarify what they are. This being true then it would seem that McKeachie (1966) took quite a step forward in stating what he thinks an attitude is.

An attitude may be no more than a 'gut feeling' towards an object, person, environment etc. But that 'gut feeling' can be investigated in terms of how the person feels and thinks about the object, topic, person etc. While at first light such a statement seems rather simplistic it has much to recommend it in my opinion. I find it more acceptable to consider a persons behaviour in relation to a particular stimulus to be the consequence of inner feeling, rather than explain them away as being a positive or negative attitude.

Personally I see an attitude as having at least four dimensions:

1. **Covert Attitude**
   Those which are held privately but in general will not be displayed due to, for example, their controversial or non-conformist nature, therefore displaying behaviours which will not render the individual vulnerable or exposed, but those which are right or normal at that time with that group of people (social attitudes). These may, incidentally, not be conformist outside the group, social context etc.

2. **Behaviourally non-supported attitude**
   An attitude verbally displayed as being held but not supported in generally observable behaviour. (see La Piere 1934, pp,230-237).
3. **Held-Behaviourally Supported Attitude**

Those which are felt or held within the self and are displayed openly; where thinking, saying and doing generally combine; where change or modification of the attitudes in question is always a possibility given the right set of circumstances (open mindedness).

4. **Fixed - Behaviourally Supported Attitudes**

Possibly based on a person's philosophy of life, his/her core beliefs (religious maybe) which would not generally be open to change, but may be open only to minor modification; where thinking, saying and doing combine, and reactive spontaneous attitude display contrary to the position held is suppressed or dismissed. Modification takes place only through some traumatic or other major event or experience.

The dimensions however in no way explain (or attempt to) the nature of an attitude.

Since general consensus would consider attitudes as being derogative of an approach to life, or those objects, people or situations within it, it seems appropriate to me to be considerate of the way people deal with the encounters within their life by thinking of them as "an approach" rather than classifying them as an undefinable "attitude".
The implications arising from the varying approaches which may be taken to a task or responsibility, are of interest to management, in a work environment. More important than the approach itself is causation. In a practical sense it is not possible to change a person's approach to anything, it is possible however that changes may take place, but only as a result of identifying the influencing factors, and then changing or modifying them.

This research will seek to uncover those factors which seemingly affect a person's approach to work, from their (the individuals') point of view.
A: Identifying Training Needs

"A training need is a gap between the knowledge, skills and attitudes that the job demands and the knowledge, skill and attitudes already possessed by the trainee". (Jinks 1979)

The above statement clearly states, in my view, what a training need is, and as such typifies the generally acceptable definition of a training need. It is fundamental to the question of what training needs are to consider why training should take place, from an organisation's point of view. Each organisation has its own ideas about their exact needs for training in all though the need for training of individuals is of course closely related to the needs of the organisation.

"The success of a training system design is measured by its ability to fulfill its mission. The mission has generally been defined as the development and maintenance of the human behaviours or performances required by an organisation to meet its objectives"

(Warren 1972)

Further thoughts and theories have been applied to the reasons for training by Kenner, M.W. Warren (1972), Hamblin (1970), British Gas (1981), Davies (1973).
Whether or not training actually satisfies the corporate or organisational needs is always difficult to prove, but this is where we start, and they are not as such the only factors which lead to the need to train.

Legislation has its part to play in training, in particular the Health and Safety at Work Act (1974) which in many instances obligates an organisation to organise some form of training. This and other sources which lead to the requirement to train are discussed fully in Chapter 3A.

When it comes to actually identifying training needs there are a variety of inherent problems. The difficulties that can be experienced prior to carrying out any form of analysis to a greater extent relate to expectancies, that is how the analysis will be carried out, and what action will be necessary as a result of the findings. To some extent the value or authenticity of the data will be determined by the approach taken to data collection.

There appears to be a wide variance in views concerning the degree of difficulty, and the role of the actual employees in determining training needs.

There are seemingly two alternative approaches to collecting data related to training needs, those that will involve the eventual trainee and those that will not. According to Boydell (1975) there are three levels of training needs:
1. Needs at organisational level
2. Needs at occupational level
3. Needs at individual level

Having determined the organisational and occupational needs, we are now trying to determine who needs training in what; that is, we are discovering deficiencies in particular skills, knowledge and attitudes on the part of the individuals.

(Boydell 1975)

As I see it one approach seeks to identify needs at levels one and two, and is therefore considerate of the organisation and/or task. The alternative approach, related to level three, is considerate of the individual and is seemingly in keeping with the current trend. This is to involve the would-be trainees in the identification of their needs, but this has not always been so. For instance at one time observation of people at work was extensively used as a method but the reliability of this form of data collection is questionable. Still happening today is the practice of identifying needs from the office, which is not always the fault of trainers. The isolation or security offered to managers for instance, who base their needs for their employees on observation, of one sort or another, leads to unwanted or inappropriate training programmes. People are now starting to come out of the office but it has taken a long time.
"Learners are encouraged to identify and highlight their own needs" (Boydell 1975)

"There are many techniques that can be used by training staff to conduct an analysis of training needs -"

"However, some form of specialised interview is usually employed" (British Gas 1981)

The view that needs should be identified mutually, that is by discussion with the eventual trainee is supported by many educationalists and trainers alike, a few of whom are:- Flegg and Waldman (1982) Hamblin (1970), Laird (1978), Boydell (1975), Newby (1982), Davies et al. 1973), Goodman (1981,) and Gane (1972).

The degree of involvement at this stage will vary according to the approach taken. In light of the variety of methods available and the researcher's viewpoint, this involvement by the eventual trainee may not be much better, in terms of the data collected, than not involving them at all.

Once the data has been collected an analysis must be carried out, not just to clarify needs, but to differentiate between what is an actual training need and what may be a structural problem. It is common for managers to see training as a method of overcoming structural managerial or procedural problems.
"T & D Officers must know a training need when they see one - and they must be able to discriminate between performance problems which are training needs as opposed to those which are not training needs"

Knowing a training needs when you see one, as Laird puts it, is looking or studying the requirements of the job in terms of the skill and knowledge required to do the job; and then studying the present skills and knowledge of the job holder, the gap or shortcomings of the individuals being the training needs. This leads back to the opening quote to this section by Jinks. It seems that a true identification of training needs on an individual basis is at present something of a rarity. Whilst a number of people have given time to study this area it seems that the majority consider the needs of organisations. While these are of course important the needs of individuals are equally so, for it is only by meeting these that organisational needs will be effectively met.

Alternatively concentration on organisational needs without consideration for the job-holder's needs may lead to over training, inappropriate or inadequate training which could be said to be a waste of valuable resources in terms of trainers and training time.

B. To Assess the Value/Effectiveness of Prior Training

Traditionally any attempt to assess the effectiveness of training is considered to be a validation or evaluation.
There is no attempt in this research to do either for the traditional purposes for which these approaches are known. Hence the available literature is sparse since reasons for investigating the value/effectiveness of training are focused upon the views of individuals, ie is the individuals who have received training, with a view to assessing the extent to which training has prepared individuals for their work.

It is my view that any post review of training is generally attempting to prove either one or two things. Firstly an attempt is made to prove that the training was successful in that the training objectives have been achieved (validation). Secondly the net worth in financial terms to an organisation is being assessed (evaluation). There is some literature concerning the methods which may be employed to carry out such studies, as well as the reasons for carrying them out; the latter I would not generally question. There is an obvious need to ensure that it is worth training, and that the training is having the desired effect, from the organisation's point of view.

Based on the assumption that training that effectively prepares individuals for the duties and responsibilities of their job will contribute to the well being of an organisation, it seems logical to me to take into account the views of these individuals.

That is at the outset of an investigation of the effect of training. While the trainees will obviously be involved in any post training investigation the methodology involved will effect the outcome.
The methodology may be related to the objectives of an investigation, and in other cases the ease or time the investigation may involve.

"All evaluation techniques are variations on the two themes of watching and asking (observation and questionnaire/interview)"

(Hamblin 1970)

If realism or authenticity is sought in the findings maybe there is a less formal approach, for as Hamblin went on to say........

For example if we ask trainees for information about their reactions to training, we change the nature of their reactions".

(Hamblin 1970)

Progress in the methods of reviewing training activities have changed little in a general sense since 1970, although there seems to be much more activity shown in the degree of concern and consequent research which follows training activities. Much of this is due to the economic climate though, where resources are expensive or sparse and efficiency or effect have to be proven. This I believe has led to many investigations having an unwritten objective, to prove that training was worthwhile, whether it was or not.
In these cases questionnaires are useful for asking the right questions and will probably give the right answers, or those wanted. Areas of doubt may be ignored in their formulation. There is no doubt though that the questionnaire is one of the most popular forms of post training data collection.

"The best method of conducting training reviews is to formulate a questionnaire covering the main areas of training activity", (Jinks 1979)

While they can be difficult to formulate they are simple to administer and little time is required in actual data collection. The disadvantages are in the fact that the information is in my view superficial in that you get only answers to the questions asked, there is no meaning or explanation, and no depths. An alternative to the questionnaire is observation, that is of the trainees during the course or at work following the training. This is not perhaps too difficult in practical situations, but where judgements are being made about behaviour or attitude it is a different story.

"It is extremely difficult to isolate the desired behaviours to be evaluated" (Warren 1972)

Observation in the sense discussed here does not involve the trainee.
For this reason its value as a technique is limited. It is my view that any method that does not ultimately involve the trainee in the collection of data, through conversation or discussion, is biased towards the view of the data collector, and his personal interpretations of what is happening.


The current trend however is somewhat different to the techniques previously mentioned. The importance of allowing trainees to discuss their views and feelings about training experiences has come to be seen as a more realistic approach. Over the past ten years or so the technique known as 'Repertory Grid' has been recognised as a more effective vehicle for collecting data.

While the technique was originally introduced by Kelly (1955) in relation to psychiatry, the conversational nature of grids, and the underlying theory of personality as presented by Kelly, have proved useful as a methodology for validating/evaluating training. This only applies where the technique is utilised in the spirit of Kelly's theory. (Theory and methodology fully described in Chapter 6).
In attempting to assess the value/effectiveness of training I am actually trying to identify the extent to which training has prepared individuals to carry out their work. Data relating to this aspect is collected by conversation and discussion with individuals about their work, using repertory grid technique. No direct attempt is made to validate or evaluate training. This is where this research differs from conventional projects set up to judge the success or not of training.

C. Research Question

To Identify the variations in approach to work (attitude) from individuals, focusing on causation.

Historically the attitude of individuals has a somewhat shorter life than that of psychology itself. Originally derived from a physical context denoting posture the term attitude is now more commonly known to denote something sociological as well as psychological. We commonly use the term when speaking of individuals or groups, in saying a person or group has an attitude towards an object or being. What an attitude actually is however is something that has been the subject of a great deal of thought, and consequent theories, as discussed within Chapter 3C. While the nature of attitudes remains in the realms of theory, the study of attitudes towards people, objects and situations, and of attitude change continue to be given a great deal of thought and attention.
Principal contributors to the theory of attitudes, attitude change and the effect of attitudes up to and including the nineteen sixties have included the following:


One of the difficulties associated with the identification of attitudes and any changes that may take place in them is in the first place recognising what the attitude of an individual or group may be, and then how you identify any changes in that attitude. This area too has been one which has received a great deal of attention. The most prominent developments arising from associated research and theory are the following methodologies:–

- Guttman's Scalogram
- Thurstone Scales
- Likert Scales
- Osgood Semantic Differentials (see Bibliography)

and more recently Kelly's Repertory Grid technique. Repertory technique is described within Chapter 7. The purpose of this project is to identify attitudes to work with the focus of attention on causation. As I see it, past and current trends in research into attitudes has either one of two purposes. Many research project surveys are carried out to establish general feelings or attitudes towards a particular person, subject, object or event.
Such an exercise may be carried out for information purposes only, or alternatively with a view to doing something about the identified attitudes. Most if not all the papers I have studied talk of changing attitudes, or modifying them.

Many, too, seem to think that training provides an opportunity to do something about the attitude of individuals or groups. Indeed attitude training has, at least for the last decade, been something that many industries have attempted.

"Effective training programmes can provide an opportunity to develop these attitudes" (said in relation to attitudes to work)

(Iron and Steel Industry Training Board 1972)

A recent paper looking at apprentice training in SEGAS stated the following:

"The main problem with the majority of our Service Engineers has always been their attitude and frame of mind towards the position they play inside SEGAS. It is imperative that we do our utmost to alter this situation", (Brookwell 1984)

and in relation to part training he says:

"we produce service engineers with the wrong attitude".

Take the issue on both points raised here, firstly that service engineers have totally the wrong attitude to their work, as is implied, and secondly that training is the source of the attitude presently observed.
It is very easy to blame attitudes for shortcomings in performance, efficiency or indeed bad workmanship. In fact workers' attitude would seem to be the root cause of a great deal of industrial unrest. There is, indeed, a great deal of data relating to attitudes generally available. One can think of almost anything in life, and someone has done an attitude survey to find out how people feel about it. There is, of course nothing wrong with finding out how people feel about matters in their life. What happens next, that is with the data and with the people, is something else.


In my view it is not enough to find out how people feel about some aspect of their life, or what their attitudes is, which is all that many surveys do. Nor do I believe it possible to effectively change attitudes through training. Training will undoubtedly contribute something towards the attitude an individual may have toward their job, but such contributions are not necessarily planned.

It seems to me that if attitudes changes or modifications in individuals or groups are possible, this cannot be reliably achieved by training or development. Marginal changes may take place as a result of awareness raising, the effect of which I believe is difficult to determine. To attempt attitude changes by training is in my view inappropriate.
My approach in this research is not just to find out the attitude of individuals to their work, but to uncover data regarding the causes of attitudes. I believe by this method attitude changes may occur as a result of changing the factors which cause or influence attitudes. I am of course speaking here of attitudes which may at this time be detrimental to the satisfactory completion of an individual's duties and responsibilities.

While there is a great deal of data relating to the attitudes of people at work, and information and material on courses which change people's attitudes, supposedly, I could find no material or information, in an industrial context, which looks to the source or cause of attitudes, with a view to making changes or modifications.

That is not to say it does not exist, merely that I did not find it. In the media, however, there is a recent example of the way in which changing the factors which cause unfavourable attitudes can lead to attitude and behaviour changes. I speak here of the Notting Hill Carnival, an annual West Indian event in London which attracts large crowds of mainly black West Indians, as well as, more recently, thousands of whites. A few years ago the event usually ended in violence and hostility. Research revealed that the celebrations were over-policing and that the police were unfriendly. As well as this, community relations with the authorities prior to the event led to much unrest. Here is a situation where there has been a study of the attitude of individuals to the police, and why. Over the past few years a great deal of effort has been made to bridge the gap between groups, that is the police and the West Indian community.
The result speaks for itself: less police, less obvious policing, a more friendly approach have led to the present more clement atmosphere of the carnival. There apparently is still much to do with the community during the remainder of the calendar year, but progress is being made, by changing or modifying the factors which cause detrimental attitudes and behaviour. In industry it may be difficult or impossible to change or modify the causes of attitudes as identified by the target population. This however may only be judged at the completion of the research study of the data, and then by negotiation with management if and where applicable.
CHAPTER 5 PHILosophical Base for ReSeARCH

Preface

Where I am today, in terms of my thoughts and feelings towards life itself and the people within it, is the result or consequence of thirty-five years of living. What at times have been calm and peaceful, and at other troubled waters have encouraged me to change direction or seek new waters. What at times have seemed like oceans and at other times like ponds have eventually induced me to value the experience of life. Life as I see it is about people, its beauty lying in the fact that each one of us is different, not just in looks but in the way we view things. Similarities in views and feelings about someone or something sometimes occur, often in relation to particular things. The interesting thing for me is that while the behaviour (in whatever mode) may be similar to another, or my own, the likelihood is that the observed behaviour may for each individual be the result or consequence of entirely different sets of evaluative considerations. In other words, the basis or criteria for judgement about something will differ according to the individuals.

My feelings towards people have not always been so. A person's behaviour (demonstrated by action/non-action/dress) will for many people act as a banner or sign which signifies membership of a group, which can often be to their detriment. This is particularly true in social contexts. In the part I, too, have been the silent observer and categoriser of people. For me, though, (and for many others) I constantly find myself being allocated by others to groups which I do not consider myself to be allied to, or part of.
Maslow in his 'Hierarchy of Motivation' proposed a level of motivations which sought group membership or 'belonging' (the third level). I see it important in life that as individuals we need some group identity.

The aspirations or motivation of becoming part of a group I do not wish to discuss here, for I believe it an accepted part of life that we all belong to some group or other, be it social, family, work etc. The question is not about whether a person is part of a particular group but why?. At work people tend to be classified on the basis of their performance. They become simply good workers or bad workers, or alternatively they may become militant, obstructive, constructive. My concern in this study is to discover some of the factors which contribute to a person's behaviour whatever it may be, with my focus of attention being within the training sphere. That being so the way I approach data collection, and analysis of data will be based on the way I view or feel about people.

This chapter provides the background and thoughts which contributed to my present view, and as such demonstrates the base philosophy from which I view the world.
"Students should not overlook what their subjects have to contribute, for psychological research as I see it, is a co-operative enterprise in which the subject joins the psychologist in making an enquiry. I am very sceptical of any piece of human research in which the subject's questions and contribution have not been elicited or have been ignored in the final analysis of results." (Kelly 1969)

The above statement taken from Kelly's work in my opinion exemplifies a total approach to research. Implicit within this statement are indicators which assume an approach which determines a methodology - a methodology based on a philosophy which considers people as individuals and as such makes no attempt to classify, rank or group; a philosophy that recognises that people see things in different ways. Research along these lines is an attempt to see how others see their world unlike conventional research which has often been an analysis of a person's reactions to his environment, followed by some form of labelling. Kelly recognised that people are individuals and as a result are ultimately unique in the way in which they place meaning on behaviour in accordance with their construction of their own unique environment. Educationalists have taken up this theme of uniqueness eg.

"We know now that each man creates his own unique world, that he, and he alone generates whatever reality he can ever know."
But this is not exactly a course for unqualified celebration. It turns out, for example, that John Donne was wrong. Each man is an island entire in itself. The purpose and assumptions and, therefore, the perceptions of each man are uniquely his, and there is no-one else in the vast sea of universe who shares them in every detail. Among other things, this means that no man can be certain of anything. The best anyone can ever do is to say how something appears to him." (Postman & Weingartner 1971)

I have focused my attention to this point on the concern shown for the individual by Kelly which led to the publication of his book 'A Theory of Personality' in 1955. The book elaborated his theory of personality and underlying philosophy, which is commonly known now as 'Constructive Alternativism'. This underlying philosophy and the associated theory will be discussed fully later in this chapter.

In life we seldom make the opportunity to look back on our life and really think about how our position today came about. Certainly we do look to the past. For comfort when we are sad or depressed (the good times) or reassurance/realisation when we are fit, healthy, and maybe financially secure/stable (the bad times). Past experiences with some impact seemingly become prolific in our memory and are almost recountable at will. Often the real lessons to be learnt from life are less traumatic and as such are less noticeable, and consequently easily forgotten. To look back in this way on the past seeks to identify only the 'peaks' and 'troughs' of which life seems to be formed (the good or bad times).
In reality of course life consists of an entanglement of inter-related experiences which link each passing moment.

There are times in life when a person takes the opportunity to look more closely at the past, in order to try and understand the patterns the self has created by living, and in so doing attempt to unravel the seeming mystery of 'why am I as I am today'?

I took time to think of such things long before I even contemplated becoming a research student. I would think of the way things happened, and why things happened, and most important to me why I saw and interpreted things in the way I did. This was long before I knew this was called 'introspective analysis', and in another sense I would look at those around me and try to understand why they thought about things in the way they did, and why things were like as they were (which I now interpret as 'metaphysical thought'). In my early days of involvement in training I realised through 'introspective analysis' that to be a learner it is necessary to try and see things as the learner does. In this way it is more likely that the learner will gain something as a result of training/instruction. It was pleasing and in some ways gratifying for me to read the work of Kelly (A Theory of Personality 1955) and a few years later Candy (Mirrors of the Mind 1981) which elaborated my own self theory and philosophy of life and people. In contemplating research of a humanistic nature there is an implicit requirement to refine one's own thoughts about life.
This in my opinion cannot be approached in a light-hearted or casual manner. For myself it required much thought, which necessitated looking back at my past in an attempt to identify clues that contributed to my present view of life and people.

The following paragraphs are a brief account of those things I consider, on reflection, to be the major influences which led ultimately to my present position and which are based on the Kellian philosophy - Constructive Alternativism. It is only on reflection that I am able to assess the consequences of being considered a part of a particular group, or classified as a type, during schooling. During my early days of growing up I was anything but an individual in the eyes of others. My schooling culminated for me in the third form at secondary school:

"Do you intend sitting for G.C.E.'s?" said the teacher. No, I don't think so," said I. - "O.K., we'll be putting you down a stream or two so that you don't interfere with those that are".

I then became one of the leavers group and was put down to the fourth level for my final year at school. I see now that it would have been easy to have been carried along by the gentle somewhat whimsical breeze created by the other pupils, and a group of masters who had seemingly given up really trying to educate us. After all, we would all be gone in a few months, better perhaps to concentrate on the people who were staying on.
For some reason, though I know not what, I was not lured by the opportunity to engross myself in non-academic activity, although at times I did and it was enjoyable. I had the ability to do better but I was leaving at the end of the Easter term.

I continued to be just a 'leaver' until the end of the Autumn term, then it was time for the traditional end of term examinations. As with all classroom examinations and tests someone has to come top of the class in terms of the achieved results: in this case it was myself. I see that this demonstrated that I had ability and signified that I was not like the others in the class, for within a few days my form-master informed me that I was to be moved to a higher stream for what was my final term at the school. While I became part of another group I consider on reflection that for a short time I was considered as an individual.

This, as may be imagined, has become an important experience for me. While I cannot really say that whenever I wanted to be treated as an individual I would do something that aroused notice, in this case doing something well, I feel that it may have assisted me in the development of my view of the world and the people within it. I can only say this on the basis of the way I have gone about my work in the years following. While we are seemingly able to affect other people by the way we go about our lives there are times when the effect is direct. Most of the time we are either unable or unaware of our influence. At work I see that some people by their role or responsibilities are in a position to influence or affect others.
Having been employed in industry for over nineteen years I have many times been exposed to a variety of different management styles. In the same way that at school I was identified as a group member rather than an individual, at work I became part of the workforce.

I recall going to a manager once in my early days at work to explain to him why I had carried out a job in a particular way. The result of the meeting showed that the method I used was not in keeping with normal practices. That is not to say that the method I had employed was contrary to some regulation or other, simply that it was different from the way others in the workforce went about the task.

Despite my complaints that I preferred the method that I used, since I found it easier, I was made to change my approach in line with the approach of others. I see now that I was not allowed to be different, even though my approach may have ultimately been more efficient. This is but a simple example which typifies some of my experiences at work. It is a common problem in organisations which is generally attributed to the management's inability to consider the needs of people whether in groups or as individuals.

The failure of management to consider me or my colleagues led to feelings of frustration, depression and annoyance. These feelings and the situations or incidents that caused them proved useful to me when I was promoted to a position of control with twenty-six staff: useful in the sense that I would think of the way I had felt or tried to imagine how I would feel if I were being asked to do what I was to ask them to do.
As well as this I would often consider the capabilities of individuals when allocating work, not only from the identified abilities of the person but based as well on whether I considered the experience would be useful. This was combined with an approach to work which was one of participation in planning and problem sharing.

This approach is to some extent typified by the following example.

The main task for the staff was the inspection of the work of contractors, which amounted on average to over twelve hundred inspections per week. Each week's work would be concentrated within one area, for example within a square mile. Thus each batch of work represented one week's work carried out by a contractor and would be in a different area each week. The nature and volume in general caused some difficulties, for it never seemed possible to clear the inspection work within a week.

Not that it was possible anyway since access to consumers' property was often a problem, and the contractor's work itself was not completed in some cases until Friday afternoon. Clearing the work within the week that it arose was not the problem. The problem was created by twelve hundred jobs arising every week and a work force which only cleared or completed a total of something like nine hundred. This of course led to a growing backlog of work which theoretically would never be cleared. Fortunately in some weeks the incoming workload was less than average and consequently this provided an opportunity to clear some backlog.
For most of the time, though, there was a considerable backlog of work which caused many problems. I considered that the problem was to some extent created by the method of allocation of work to the workforce. All the work completed by the contractors was passed to me in the form of a completed work document. This then became the inspection document for my staff.

A part of my job was to allocate and issue the work to the individuals in the workforce, and at times this led to difficulties since I did not always know the work areas or the full nature of the work. Difficulties also sometimes arose from my failure to recognise the abilities of the individual within the workforce. The work could also be repetitive and boring which, it seems, often led to a reduction in the number of inspections carried out.

There were other problems in the structure and makeup of the department which had led to the workforce feeling unsettled and sometimes frustrated during their work. Some of this frustration as I recall was centred on individuals having the feeling that they were performing in a robotic manner, because of the sometimes repetitive nature of the job, which had not been the case when the job was initially defined. Changes in policy and practices had reduced or removed some of the more interesting aspects of the work. So the problem was at least twofold. From my point of view I needed to clear work more quickly and in greater volume, the workforce were concerned with the lack of management interest and their own consequent satisfaction with the work that they performed.
At the time their feelings were not unknown to me since my previous role in the industry had been the same as theirs.

Following a great deal of thought and discussions with colleagues in other departments in the organisation I eventually came up with a plan of working which I considered would assist in resolving these problems to some extent. After long negotiations with management I was given the go-ahead to implement the scheme.

Part of my plan was to present my ideas to the workforce with the view to getting their approval to acceptance. I could of course have implemented the scheme anyway and sorted out the problem afterwards, but since it was a method I had often been the recipient of, I was well aware of the effect it might have on other individuals. Following a discussion the necessary approval was given and a date agreed for its implementation.

The scheme, in short, passed the responsibility for the planning and allocation of work to the workforce. This was achieved by dividing the workforce into small groups who were then expected to organise themselves into an effective team. I spoke earlier of the work that arose in a particular week and that it would always be within a specific area. A group would take on the responsibility for clearing the work in one of these areas and would not take any of the work from others. The way the group was organised and the allocation of work was their responsibility.
The scheme in my view gave the workforce the opportunity to use their abilities and express them at their work, also the responsibility of clearing the work and being left alone to do it in whichever way the group felt. At the time this seemed to provide them with some motivation, if not only because of the competitive element created between groups, but hopefully the confidence shown in them by myself had contributed to the more positive approach displayed by them. This did incidentally increase the volume of work completed by ten to fifteen percent.

On reflection it could be said that I may have demonstrated sound management in what I had done in this situation. The reason for using this example from my past work is to demonstrate the view I then had of man. Its importance is that at that time I had experienced little in the way of management training.

My choice to pursue the path I did in relation to the problem was based on my own feelings and thoughts when I performed a similar function, and on my concern for the individuals who in total made up the team for which I was responsible. I prefer people that work with me to be happy at their work for obvious reasons. It is only by considering them as individuals that they may be so, and as a result they may be more inclined to work with me. That means considering them at times of change and consulting where possible about routine or abnormal situations. Socially and at work I approached the views of others around me by accepting theirs even though at times they may have opposed mine.
This was not a sudden change taking place over a day; I now see the change as having been very gradual. At the time I believe my thoughts considered this gradual change to be a part of growing up mentally, which of course it was, but not everyone around me had the same approach, although they were often much older.

The more people around me disagreed with me the more inclined I became to try and appreciate the views and feelings of others, without necessarily agreeing with them. The change in my approach to life has really come about through the attempts I made to be different from those people in my environment who failed to appreciate the way I felt about the things around me.

I clearly remember saying to myself, following an encounter with a member of my management, if I became a manager I would never do that or be like that. Thus on becoming a manager my attempts to avoid being like those in my experience led me to think in a different way about the relationship between manager and staff. While I have spoken in the main about the things I considered I learnt from what I often see as their mistakes, other managers did things in ways that I found to be more in line with my thoughts.

Consequently my own eventual approach was made up of approaches of others that I found met my feelings about how to work with people, or opposition to them where I had experienced them and found them unsatisfactory.
Later when I became involved in training my approach again centred on the individual. My first experience in training did not necessitate direct involvement with students, since it was my role to design and produce training media. It was necessary however to consider people in order to design training media which would be effective. At this time it was necessary to rely on the skill of others when formulating the approach to media design, which would be appropriate to a training methodology. Through experience and study I gradually acquired the skill and confidence to go about designing the material on my own. I now consider that this was only possible by putting myself in the position of the persons to whom the package would be directed.

While this approach was in itself very subjective it was as I see it a realistic way to approach the problem since I had often been one of the target population for such programmes. I recall clearly the first time I was involved in the learning of students on a face to face basis. I was requested to provide a session during a residential course which was designed to assist people to be more effective when giving presentations, and since I had not been a student on the course myself I saw this task initially as quite frightening. My fears at this time were not based on a lack of knowledge, for I knew the subject very well, but were based on my anticipation of actually standing up in front of a group of people and telling them of my expertise area. I was very conscious of my own experience as a student and it was by considering some of these that I eventually overcame the problem with which I had been presented.
During my own learning I had experienced a variety of different teachers, lecturers and presenters. By considering those things that my fellow students and myself found attractive or distracting in particular teachers I was able in my own way to prepare and eventually run an hour's learning session.

I feel that my consideration of the individuals that made up the group assisted me in helping them to learn something of the subject matter. This situation however was not achieved at the first attempt.

My nervousness at the time of presentation led to some rigidity; fortunately the consultation sessions with individuals that followed overcame this to some extent. I felt at the time that it would be of more value to the group if some of these problems were discussed during the formal input.

My desire to be more effective as a trainer prompted me to go about future sessions in a different way. The problems in my view were based on my limited knowledge of the learning group. Previously I had often felt that if the teacher/trainer knew more about me and my problems he could more effectively do his job, that is if he chose to take notice of my needs. As I was a visiting trainer to what was a three-day course my relating to the group within one hour was difficult. While I could not hope to overcome this completely I felt that if I could meet the group before the session it might help. As experience proved this was helpful for both them and myself.
I became acquainted with them and some of their problems, and more important they knew a little about me. This somewhat brief introductory period assisted in the breaking down of barriers at the session time, and led to what I feel was a more meaningful experience for the group. As well as developing this prior relationship over a period of time I produced a variety of visual aids. Following this pre-session meeting with the group I selected my media and session content on the basis of their identified needs, as I interpreted them. This became the foundation of my present approach to training, which is to provide individuals with what they need to effectively do their job. This can only be achieved in my view by being considerate of people's needs in their working environment, and accepting their alternative views of any given situation. This view is equally applicable to my home and social environment.

My first real insight to the understanding of a model of man in a formal sense began with a course on 'Transactional Analysis'. This model of man sees man, in a metaphorical sense, as a tape recorder, reacting to his environment on the basis of pre-recorded tapes which are stimulated by situation or circumstance. These tapes are replayed either consciously or subconsciously dependent upon the stimulus provided. Transactional Analysis is the development of Dr. Eric Berne who first presented his ideas in 1957. (see Harris 1979)

At the time some parts of Berne's work seemed quite logical to me although I soon began to wonder what part my past played in what I am today.
Did my experience as a child for instance cause me to react to my environment in a particular way today? This could mean that in particular situations I will probably react in a predetermined way, which may denote my type within the psychologist's personally oriented framework of understanding. Or is the way I see things today based on the way I perceive them as being today? Is every woman of five feet six with large breasts attractive to me because that's how I remember my mother, especially because she was warm and cuddly? Is every woman like that going to be warm and cuddly, anyway? That of course I could learn from experience, so would I still see such women as being like my mother, or would it be that I just preferred that sort of build anyway?

If I did not like my mother would I seek the opposite to how I saw her when I look for a partner? Is the whole of my life based on memories and experiences or is it more truly based on the way I see things today? What part has the past in forming my views today? I see the analogy used by Berne as being similar to that of Freud whereby one becomes a victim of one's past, what we do today being related to what we did or saw at an earlier stage in our life, although transactional analysis in itself is about what happens today. At the time of seeing this I was unable to see a clear alternative, my views became rather jumbled and undifferentiated. All the time, though, my feelings for individuals had not changed. I could not see why my past or that of others made them do things today in a particular way.
I could see the significance of experience, not as an inhibitor but useful as an aid which assists in the preparation of future known experiences, and making those which are unknown more acceptable. A further cause of thought was related to the notion - as man is a reactive being, do I react to things or am I actually doing something different?

As I interpret the work of these psychologists, man reacts to stimuli (situations or circumstances in his environment) which trigger our subconscious and results in us doing something unexpected, but related to something in our near or distant past. In Freudian terms our behaviour may not be unexpected to ourselves, but may at times be surprising, shocking or dazzling to those around us. Such a situation may lead to some self-questioning such as why did I do that? Others, on the other hand, may say, why does he behave like that?

These questions in themselves would be seen as reactions by some theorists/psychologists. The theories that I have mentioned here are based on the notion that man is a reactive being; the resultant psychological theories relate to the way man reacts to his environment and seek to explore the individual's past in order to understand how and why he is as he is today. So traditional psychology sees man as reactive and responds to this notion with a theory which is passive in nature. I remained somewhat confused by such theories for some time, for I saw myself in a very different way.
In the first place I do not consider myself to be a victim of my past, in fact while life has not been a bed of roses the experiences that I have had have prepared me well. I shall explain this in more detail later in this chapter.

All experiences whether pleasant or not have some value in preparing for future similar events or situations. Experience has without doubt assisted the resolution of problems rather than created them during the encounters I have had with my environment. If I am a victim at any time it is because I do not have the experience. Since it is experiences that make up my life and as such have contributed to my present life position I can hardly feel that I am a victim of them, otherwise I may choose to deny myself those experiences which may be meaningful, which may result in my becoming a recluse.

Secondly I do not consider myself to be reactive, for I feel this term refers more closely to science and chemistry, where the effects of one thing on another are known or can be predetermined by modelling, when the combination or processing of substances or materials leads to some form of reaction. If I were to adapt this model of chemistry or science to man he himself would become one of these substances or materials who would react dependent upon the type of environment. In some ways this fits rather nicely into the traditional approach of psychonalysis, for in the same way that a scientist or chemist may classify the reaction in terms of its type, the psychologist would attempt a similar form of classifying, labelling or pigeon holing with people which would vary according to the psychologist's own framework of reference.
I can only present consider the way I have approached my life which causes me to reject the notion that man is as such reactive. Having been exposed to the basic rudiments of management fairly early in my career I was made very aware of the importance of forward planning. Planning in this sense was related to manpower, production and control. In fact I was being introduced to what I now consider to be a form of anticipation, an attempt to predetermine what will happen in the future. This approach to work and its organisation somehow attracted me to the extent that I consciously at times formalised my anticipations of situations and events in my life. I somehow feel that this was not purely a result of being introduced to the technique, I now consider that its attractiveness was based on the fact that it in some way resembled an approach that I used anyway. The formalisation of the approach merely acted as support for my own taken approach to my encounters in life, whether social or professional.

It was some time later when I joined the University of Surrey as a research student that I was introduced to a theory of personality which for the first time seemed to favour my own approach. The theory as such has been around since 1955, but the business environment that I was used to had not provided me with opportunity for discovery, which might have brought it to my attention earlier in my attempts to come to terms with people and the environment. I speak here of the theory of personality I mentioned earlier, presented by Kelly in 1955. The parts within the theory which first attracted me were as follows:
1. That man is anticipatory, not reactive;
2. That man is active not passive in nature;
3. That each man is an individual unto himself and as such no attempt is made to categorise or pigeon-hole people.

I have previously in this chapter outlined the reasons why I consider man to be something other than a reactive being. While I newly considered to some extent that this thought was my own, it was pleasing to discover that there is a group of people with the same or similar held view. In fact much of my reading within the first year at University has led to a formalisation and reinforcement of my thoughts and feelings, and has contributed to a clearer view of the way I see man.

This reinforcement and formalisation was assisted by a study of 'Personal Construct Theory' (Kelly 1955).

The theory and its associated methodology (Repertory Grid Technique) has been reinterpreted, modified or extended to suit differing circumstances. These changes, modifications or extensions of the basic theory were foreseen by Kelly, for the theory as such was viewed as a basis from which to work and as a result would not suffer from the seeming inflexibility of most theories, which ultimately led to their limited or restricted use providing the basis for their repudiation, and the subsequent establishment of a range of alternative theories such as Kelly's.
The position taken by Kelly in relation to his theory very much supports the aspects of individualism which is predominant within the theory.

"For Kelly, man's behaviour is not driven by instincts (as in psycho-analytical theory) nor is it determined by the schedules of reinforcement and associations between stimulus and response (as in Skinnerian and Behaviourist Theories)"

(Pope 1979)

Consider the situation I proposed earlier related to my working like. I spoke here of the areas or factors which I regard as important to me in relation to this preconceived situation. My thoughts at this time may be based on personal experience, the expressed views of others or some form of media. As a result of conscious or unconscious thought, which may be to some extent introspective analysis, I will begin to form a picture or in a Kellian sense a framework from which to compare the event with anticipation of it. These prior notions will in the first place generate an overall view which will inspire me to look forward to the event, or alternatively they may cause me to have reservations or suspicions.

Whatever the outcome, the individual will as a result of his experiences analyse his results in terms of the extent to which he/she was successful at predicting the event. The learning that has taken place will contribute to the individual's experience and in so doing provide information which will be useful in any future attempts to anticipate events which are in any way similar.

As a person places his constructions on the events in his life they become working hypotheses which are continually tested. Changes or modifications will take place dependent on how well he anticipated the event. This is an on-going situation which provides the experience which ultimately leads to greater success in the anticipation of events.

This part of the theory stimulated to some extent my own informal thoughts and idiosyncratic view of life. I suggest most of us consider situations before we experience them. For my own part I can only look back on those situations which I gave conscious thought.
The kind of business and social life I have had has presented me with a variety of situations which were strange or unusual to me. In these cases and sometimes in more regular circumstances my methods of approaching them would be based on my prior notions of what I thought they would be like. In this sense my constructs about an event in my working life may have been related to anticipations of people, the environment, the journey, what lunch would be like and what problems might arise. Considerations of these areas would, in the way I saw them, attempt to anticipate what each one of these things may be like and to some extent predetermine my behaviour in relation to them.

Our expectations are based largely on the way we anticipate an event.

Kelly's theory comprises the fundamental postulate, (see Appendix III), which is elaborated by eleven corollaries.

While I do not propose to discuss each of them in detail it seems necessary to extract or quote sections at particular points in this chapter and in the analysis. I have spoken of the constructing and replication during the past few paragraphs. These terms originate within the first of the Corollaries within the theory, Construction Corollary: - A Person Anticipates Events by Constructing Their Replications.

Constructing

"By constructing we mean 'placing an interpretation', a person places an interpretation upon what is constructed. He erects a structure, within the framework of which the substance takes shape or assumes meaning. The substance which he constructs does not produce the structure; the person does". (Kelly 1955)

These constructs as such are finite, in that a construct will only be useful or convenient in the anticipation of a finite range of events (range of convenience). Variations in a person's construct system will occur as a result of a person successfully constructing the replication of events. This is the experience aspect of 'Personal Construct Theory'.
By considering the characteristic features of a group of elements, (see example within Chapter 6) we would attempt to identify how the elements are similar, or contrast with each other, i.e.: if we say what something or someone is, we are saying that it or they are not something else.

For instance if we say someone is honest we are saying he is not a thief thus, a construct is essentially bi-polar in nature. In a practical sense a construct is the way some things are alike yet different from others, and it is by considering these likenesses or differences that we can identify constructs pertaining to an object or event.

Replication in relationship to the theory refers to the extent to which an event or object replicates another. In prediction the more successful we are at recognising the similarities the more chance there is of succeeding in our prediction.

The eleven corollaries and their definitions are contained in Appendix III

I have elaborated at length on the lure of Kelly's theory for me, and it is interesting that the more I think about it as an overall theory the more acceptable I find it. I believe I am continually testing this theory against everyday situations and people (not in a formal way), which to date has well proven its seeming flexibility and broad application. I wonder now if the professional punters of horse racing are all really Kellian psychologists. For their life is made up, in a practical way, of attempts to predict outcomes and so control their financial status.
Their selections are made as a result of considering the runners (elements) and the variables, which in this case will be things like the sire, the state of the tract, the jockey, the distance and previous form (the constructs).

It is possible that this form of existence in terms of the process of prediction and control may be transferred to other aspects of their life in a conscious and formal way. To summarise the discussion during this chapter relating to the underlying theory of Kelly's work we must return to the basic notion of Kelly, which was based on the notion of man the scientist.

"When we speak of man the scientist we are speaking of all mankind and not merely a particular class of men who have publicly attained the status of 'scientists'. We are speaking of all mankind in its scientist like aspects, rather than all mankind in its biological aspects or all making in its appetitive aspects. Moreover, we are speaking of mankind rather than collections of men. Thus the notion of man the scientist is a particular abstraction of all mankind and not a concrete classification of particular men." (Kelly 1955)

Is the motivation of men really based on appetites, cravings, tissue needs and sexual impulses as some might have suggested? I think not, for my own past does not deem it so nor does so, although these areas are of course open to experimentation in a Kellian sense.
"Might not the individual man, each in his own personal way, assume more the stature of a scientist, ever seeking to predict and control the course of events with which he is involved? Would he not have his theories, test his hypotheses, and weigh his experimental evidence? And, if so, might not the differences between the personal viewpoints of different men correspond to the differences between the theoretical points of view of different scientists?"

(Kelly (1955)

Men's motivation is more clearly related in my view to his ambition to become a better scientist, in its metaphoric sense. His motivation is formed of his continuous attempts to predict and control the events in his life more successfully. Man does this by placing personal constructions upon the events in his life and then testing them to see how good a fit was achieved.

"Constructive alternativism holds that man understands himself, his surroundings and his potentialities by devising constructions to place upon them testing the tentative utility of these constructions against such ad interim criteria as the successful prediction and control of events".  (Kelly 1966)

The construct notion of Kelly provides the basis for investigation which assists in the understanding of man and himself.
It is by study of the constructs of ourselves and others that we may better come to terms with ourselves and others in our own individual environment. The fact that the theory allows for each and every person to be himself, not essentially part of a group of classified persons with a group identity, has great appeal for mankind. Too often we have heard the cries of individuals or in some cases minority groups who have considered themselves different to the classification grouping to which they have been allocated. At least there is a theory which takes account of such people, in fact all people. In psycho-analysis there was expectancy that the patient who visited the Freudian or Jungian psychologist would leave the consulting room with a Freudian or Jungian problem, since the psychologist had his own personally oriented framework of reference which would be inflicted upon the patient. In a Kellian sense the patient will go away with his own problem, but hopefully may have a better understanding of it.

In this chapter I have alluded to my own construct system in relation to the way I interpret man and his environment. Anyone who holds to the substantiated Kelly notion and particularly values 'Constructive Alternativism' is in my view an example of his individuality corollary.

To investigate or study the feelings and opinions individuals have towards their employer and employment is in my view pointless if their individuality is ignored. This research is not seeking to prove in any way that my (as the researcher) assumptions were right or wrong, which is the objective of many research projects.
There are no hypotheses to be proved. It is, though, seeking to recognise that the employees are individuals and as such have differing views, aspirations, feelings and approaches to their work; and to collect data which may have implications for the context, methodologies employed and the direction of future training, as outlined within my research questions (Chapter 3), summarised as follows:-

a) To identify training needs from an individual viewpoint;

b) To assess the value/effectiveness of prior training;

c) To identify the variations in approach to work (attitude) from individuals, focusing on causation.

Such a study would not be possible if my methodology did not take account of the individuality of people, and their active nature, so that any consequent training is a more meaningful experience for individuals, by providing and structuring training programmes/methods which they themselves recognise is needed or desirable.

While such a philosophy (that of Personal Construct theory) is sympathetic to individuals and their world, it is by no means necessary or implied that a researcher cannot by the methodology employed choose to ignore some fundamental aspects of the theory. The conventional approach to research within education has historically been based on analogy drawn from the natural sciences, whereas the current trend is to employ a more naturalistic approach.
I have chosen to use the terms scientific and naturalistic to label those two distinct paradigms, but they may be referred to by one or other of the following:

<table>
<thead>
<tr>
<th>Paradigm 1</th>
<th>Paradigm 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional</td>
<td>Non-traditional</td>
</tr>
<tr>
<td>Scientific</td>
<td>Artistic</td>
</tr>
<tr>
<td>Experimental</td>
<td>Naturalistic</td>
</tr>
<tr>
<td>Reductionist</td>
<td>Holistic</td>
</tr>
<tr>
<td>Prescriptive</td>
<td>Descriptive</td>
</tr>
</tbody>
</table>

While the above labels within each paradigm in themselves may be descriptive of a part or section of a theoretical approach they are not attempting definitions.

In short paradigm 1 is considerate of the aspiration of the natural sciences, i.e., to predict the outcome of situations subject to certain variables (usually controlled or manipulated) within a defined context. The result of research within paradigm 1 are usually quantitative in nature and maybe used to make general statements about why things are. Paradigm 2 alternatively is more akin to social sciences and/or anthropological research which studies individuals in a natural state, where there is no attempt usually to control or manipulate the variables, and where results will be qualitative, seeking to answer questions on the way things are. The distinction between the two paradigms is in my view quite clear. Operating conclusively within paradigm 2, for instance, may be difficult. There is much more to be said in support of each paradigm, for each must be appraised on its merits. All important is the researcher's objectives for going about research.
The researcher always has a wide choice of variables which may be studied or not, or maybe isolated or controlled.

For my part the objective of this research is to discover the way a group of people are within Segas. To isolate or control the variables would inhibit and contaminate the findings, which by their nature should be qualitative. It seems inconceivable to carry out such a study within the confines of the "scientific method". The operating paradigm for the researcher is in my view determined by consideration of the following areas:

1) Objectives of the research (Research question);
2) Context of subject of research;
3) Research philosophy;
4) Type of data sought (quantitative or qualitative)

Having considered these areas the alternatives in methodologies may be reviewed and assessed. The paradigm investigation will usually involve the researcher in observation or interviews, which is the subject of chapter 7.

N.B. Further reading regarding paradigms 1 and 2 may be found in, University of Surrey, I.E.D., DPHE Module J, 1984 (see Bibliography).
There were several stages in the development of my research methodology namely:

1. Learning & Development Field Study
2. Analysis
3. Modification to Approach
4. Pilot Study
5. Analysis
6. Modification
7. Field Study
8. Analysis

These will be discussed in this and subsequent chapters.
The methodology selected will reflect the researcher's philosophy of 'man' and 'man's' assumptions about the way people see 'man' coming to terms with the environment. Further to this the questions raised will have a bearing on the approach, for instance, is the research to be an in-depth study or a form of survey?

In Chapter 5, I referred to my philosophical stance and related methodology, which I propose to use within this study, ie Kelly's Repertory Grid Technique'.

The basic theory offers 'Repertory Grid Technique' as a tool for focusing on a person's view of a particular aspect of his world, but it is by no means the only way a person's constructs may be elicited. My interpretation of Kelly's philosophy is that we can come to some understanding of the way others see their world by studying the constructions they place upon the events and people in their life.
Kelly's methodology allows the freedom (for the participant or subject for research) to explore their world without the fears and apprehensions caused by the likelihood of being categorised or pigeonholed as can occur with psychometric studies.

"Traditionally, a psychologist test is based on dimensions proposed by the psychologist, in terms of which the subject will be allotted a position. Thus, whether it be a questionnaire, a laboratory measure or a projective test, the subject's contributions are compounded into categories and scale positions, the subject cannot do what we allow him to do in conversation, propose his own terms".

(Fransella and Bannister 1977 p.111)

In psychological terms 'Repertory Grid Technique' can be a powerful tool for gaining some insight into the ways others see their world.

"The main strength of the technique is its ability to indicate how people see the world around themselves in their own terms, rather than in the terms of the psychologist who may be testing them".

(Easterby-Smith 1977)

So the 'Repertory Grid' in its finished form is representative of the way an individual construes an aspect of his/her world, and is based on the philosophy described in the previous chapter which considers man to be an anticipatory being.
Kelly's fundamental postulate is

"A person processes are psychologically channelised by the way in which they anticipate events". (Kelly 1955)

The emphasis of Kelly's work is clearly about individuals and the way they view their world. This view is in the form of constructions of objects, events or people, and are formed of individual "constructs". It is by studying a person's "constructs" that we may gain some insight into that person's view or interpretation of their world.

'Repertory Grid' technique is one way of looking at a person's constructs about a particular object, person or event. It is formed of two parts, elements (which form the focus of attention) and the constructs. To illustrate this:

Imagine the individual who is contemplating buying a new car. In the first place the cars which are available to the person in monetary terms may form the basis for consideration. (In Kellian terms these will be the 'elements' - the focus of attention) eg.

Ford Cortina
B.L. Marina
Talbot Solara
Vauxhall Cavalier
Datsun 180B
Colt Pony
Fiat Strada
On the basis of knowledge gained through advertising campaigns, brochures or asking around the individual will begin to consider which will best suit or come near to the individual's ideal car. While some of these may be considerations such as whether the car has two or four doors, others become more abstract but each denotes the individual's view of the vehicles in the list.

eg. Adequate doors
    Enough seats
    Size of boot
    Economy statistic
    Comfort
    Status of vehicle
    Performance
    Instrument layout
These areas of consideration (in Kellian terms the 'constructs') assist the individual to form a predetermined image/picture of view of what any one of the cars may be like. A grid/matrix formed of these 'constructs' would be as follows:

<table>
<thead>
<tr>
<th></th>
<th>Adequate Doors</th>
<th>Enough Seats</th>
<th>Large enough Boot</th>
<th>Economical</th>
<th>Comfortable</th>
<th>Good Performer</th>
<th>Well Constructed</th>
<th>Prestigious</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>5 5 5</td>
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<td>O2</td>
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<td>4 3 3 3</td>
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<td>N3</td>
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<td>G7</td>
<td>5 3 3 3 3</td>
<td>4 3 5 5 5</td>
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<td>S9</td>
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A grid of this nature can provide a great deal of information which may eventually assist the making of a decision (in this case which car to purchase). The interesting parts of this grid are those constructs which are indicative of personal or individual aspects of a car. In this case '5' (whether the car is comfortable or not) '8' (whether the car is prestigious) and so on. More interesting though are the person's reasons or thoughts which lead him to identifying particular constructs, and the ratings accorded to them. The grid is a 'snap-shot' of the way a person views some aspect of their life; however, it becomes more comprehensive if one has access to the person's discussion about constructs or elements. E.g. it is important to view grid elicitation as a conversational process.

The methods of eliciting grids varies according to the purpose for which the grid is being completed. In the first place there was a need to develop my own skill and further my knowledge of grid elicitation and the associated theory. Secondly an approach to data collection, based on 'personal construct theory', which would be effective in obtaining data (see Research Questions).

In the first stage of my research there was a clear need to develop self skill and the approach, considering all variables.

Familiarisation with the makeup of grids and particularly the bi-polar nature of constructs was acquired by utilising the 'Pegasus' computer programme.
This is a conversational type programme developed by Shaw and Thomas (1978) which could be seen as a guide to grid elicitation, in that it continually prompts and questions the inputs being made. In my view it is an ideal practice 'tool' which, where appropriate, may be used for actual data collection.

However the impersonal nature of the computer and the limitations in terms of the variation in response which may be desirable could, I believe, inhibit data. This I feel is particularly so when dealing with sensitive subjects, where any degree of depth is desirable.

The development of the approach taken for the main study came about as a result of the following sequence of events/stages:

Stage 1
Learning and Development Stage - Field Study

There is an obvious limit to the experience and skill that can be gained via a computer terminal in relation to grid elicitation. Real experience and skill will only be acquired by actually attempting grid elicitation (data collection) with a sample of the eventual target population for the study.

I decided to tentatively test myself and the approach by initially talking to ten people about their work. It was necessary to make or formalise a number of decisions or proposals at this stage, one of the most important being, to whom I was going to talk.
In my mind I always had an idea which group of workers would become the subjects of the research, but now was the time for action and the presentation of facts or associated information which would allow me to proceed. It is enough to say at this point that the target population would be "Service Engineers". (Reasons for selection etc are discussed in Chapter 8). A necessary part of any research is the negotiation of a research contract. This is also discussed within Chapter 8. In order to formulate the approach to each research interview it was necessary to refer back to my research question: what was I to attempt to find out? In short these are:

1) What are the training needs of the individual?
2) How effective has past training been in preparing people to carry out or meet their responsibilities?
3) What factors affect the approach taken by varying individuals?

Clearly the focus of attention for these interviews was the person's work/job. With this thought in mind I considered that the most beneficial approach would be to encourage participants to identify their responsibilities at work (which would become the elements). So following initial discussion regarding the research contract with individuals they were introduced to the procedure for eliciting a grid.

109
Procedure

(i) To elicit both elements and constructs;
(ii) to rate constructs on a 1-5 scale following individual construct elicitation;
(iii) to tape record the interview on the basis of approval being given.

Elicitation of Elements

Participants were requested to think about and identify their responsibilities as service engineers. What appeared at first sight to be a simple task was not so in practice. It seemed difficult to differentiate between actual tasks and the overall responsibilities of their job. To induce people to think in a manner for cordial appropriate to 'repertory grid technique' was not particularly easy at that time. Consequently the elicitation of elements was often a long and arduous (but beneficial) stage in the grid elicitation. I wondered at the time whether some of the indicated elements were elements and not constructs: at that time I lacked the experience to be sure. What was certain to me at that time was that the elicitation of elements was anything but simple.

Elicitation of Constructs

There are a number of ways that constructs may be elicited. For this stage of the research I decided to use what I thought to be the most popular method, 'triadic elicitation.' The participants are asked to consider elements in groups of three, selected by myself, and to think of ways that two of the elements are alike but different from the third.
For instance consider three elements within the car selection example shown earlier, Ford Escort, Talbot Samba and BL Allegro.

The participant may say the Ford and the Talbot are similar in that they both have a good reputation, the Allegro is said to be a very poor vehicle. Further discussion will either clarify the original differentiation or take it further, in this case being more specific about what a good reputation means to the individual. The construct arising from this 'triadic method' known as the emergent pole would be GOOD REPUTATION on the basis that a construct is essentially bi-polar, based on the premise that if we say what something is we are implying that it is not something else, eg. If we say a person is honest we are saying he is not a thief or crook.

Having identified the 'emergent' pole of the construct it is necessary for the participant to identify and label the 'implicit' pole. In this example the natural opposite is 'POOR REPUTATION', but it is not always as logical or straightforward to identify and label the 'implicit pole' of a construct.

Indeed the elicitation of constructs turned out to be difficult if not impossible with some participants. The whole process was extremely perplexing to some people, and as a result it was necessary for me to give far more help and guidance than I originally intended. Where the triadic method proved difficult I attempted the 'Full Context' technique. Here participants are asked to look at all the elements. I would ask them to think about things like 'which one of these responsibilities do you enjoy doing or carrying out?'
This worked a little better but still fell well short of my expectation in terms of the quality and quantity (number of constructs/elements) forming the resultant grids. There were of course exceptions but the majority sadly were very disappointing.

The experience of this state was invaluable. The personal experience I had gained of the technique, and its associated difficulties, gave me much food for thought. On reflection, and sometimes during discussion, it was blatantly obvious that some participants were intentionally obstructive. This probably arose from natural suspicion of myself and my intentions.

While I went to great lengths to explain the project, the procedure and the confidentiality of the data, this was not enough in some cases. Alternatively other people seemed at ease. To some extent this is indicated by the grids and in others by that inexplicable sense of another person feeling at ease.

It was obvious to me that before I could progress to a further stage within the research I should look closely at two areas:

1) The methodology and general approach.

2) Which, how and why participants were selected, volunteered or instructed to see me for the collection of data.

The which, how and why are of great significance to the outcome of a research project. For this reason alone it was necessary to look at the process or selection criteria being utilized by management.
It turned out that a number of persons selected for this first stage were either shop stewards or pro-industry. In the former case a protected inhibited view was put forward, and in the latter case a rosy/shining picture of the industry and the particular office to which these persons were attached at least these were my impressions.

I could modify or change the approach to data collection, but it was difficult to change the selection process used by management. Originally Regional Management had given instructions that all participants in the research should be volunteers, and I understand from the participants themselves that this was not always the case. Alternatively I believe the shop stewards volunteered themselves with a view to speaking for the workforce that they represented.

With experience of this stage behind me I went about planning the next stage of the project, the piloting stage.

**Pilot Study**

1. To further test the approach and modification I may make.

2. To provisionally look at the area of interest, to provide data which proved a full scale research was necessary, plausible, and would prove beneficial to the person and organisation that would contribute to it.

3. To further develop my own skill and knowledge.
Procedure

I decided to see ten service engineers, which would be two at each of five different locations. The problems experienced at the testing stage prompted me to try grid elicitation with supplied elements. From the elements elicited at the testing stage I identified the most common and used these as the basis of a grid in five of the ten cases. I considered at the time that this would assist participants in their thinking and so contribute to what may become more meaningful grids.

In the remaining five cases a full grid elicitation was carried out. Following each grid elicitation a discussion about the grid took place with each participant, and they were then asked to keep a diary for one week. In this they were requested to record over the following week any incident or event which made them feel good or bad, and then return them to me (anonymously). A stamped and addressed envelope was supplied. (NB All discussions to be recorded with permission).

Grid Ellicitation (Supplied Elements)

Having negotiated with each participant the research and data collection technique I presented them with seven elements. After explaining the meaning of these (as explained to myself by previous subjects) each participant was given the opportunity to add to, change, modify, or delete any elements.

Constructs were then elicited utilizing both the 'triadic' and 'full context methods'.
While in the initial stage of the grid the supplying of elements seemed beneficial (especially in the time saved) the eventual outcome in terms of the quality of data was again disappointing. Fewer constructs were elicited and generally there seemed to be a lack of depth in the related discussion and consequent grid.

This I feel is due to the loss of an important part of the discussion. While the elicitation of elements can cause some difficulty, on reflection it serves not only to focus attention, but to assist participants in thinking in a manner congruous with repertory grid technique. For the service engineers the elicitation of elements may be difficult, but they are at the time thinking of something they theoretically know very well, their job, since the elements comprise their self perceived responsibilities. The elicitation of elements undoubtedly assists the elicitation of constructs, as the participants are encouraged to think about their job (in this case), in terms of what it is. This stage is also a form of clarification for individuals since they are thinking about what it is they actually do, not what they or others in their work environment think they do.

Some participants seemed to accept the supplied elements too easily, with few questions about meanings, and because only seven were supplied it seemed that they were readily accepted as being representative of their job, whether they were or not. The elicitation of constructs was, to say the least, difficult. A great deal of effort on my part was necessary to explain what constructs are in relation to the elements.
Despite my efforts and a great deal of patience, in all but a few cases the resultant grids, while not wasted, do not in my opinion represent or elaborate on those underlying issues which the research in total was attempting to uncover.

Full Grid Elicitation (Constructs and Elements)

The methods of elicitation in relation to both elements and constructs was the same as that described earlier in this chapter, any differences being only the relative level of skill and knowledge demonstrated by myself. It is difficult to see what difference this made to the grids at this stage since my development takes place as each grid is elicited. If anything, the presentation of the methodology and subsequent discussion was without doubt more focused and consequently clearer than at the 'Testing/Development' phase. This in itself I consider marginally improved the element elicitation stage. Full grid elicitation is tiring and exhausting in comparison with data collection involving supplied elements. In the former case the average time per discussion was two to three hours, whereas in the latter case one to two hours. It was therefore possible that the failure of some grids to represent an individual's view of their job in a meaningful sense may in part be due to my tiredness due to fatigue, but I worked hard to overcome this. Extreme concentration for two to three hours is difficult, but it was expected of me since it was I who was collecting the data. Persons that had volunteered to see me did so because they wanted to, so they obviously had something to say, a view or feeling they wanted to contribute.
My problem was to get them to say it, not what it was essentially, but what it was in their view. It was causation I was attempting to uncover not effect, although that is important. Consequently construct elicitation was again arduous, particularly at the early stages. In some cases participants soon saw the relationship between constructs and elements, in others, it was not until the grid was seemingly finished that they knew what they had been attempting to do, or had done. This came about as a result of a discussion about the grid on its completion. This particular aspect concerned me, for I considered that the participants should understand what they were doing. The last thing a researcher wants is people to be suspicious of their intentions.

Since the final or main research work would involve many more persons than had been at this stage some serious thought on the approach to be taken was required. I like the methodology because of its potential as a meaningful approach to data collection, and because as it enables the researcher (in this case myself) to uncover facts or feeling in relation to particular objects, persons or situations without prejudice or coercion, or the fears that people may have of being pigeon-holed or categorized. This of course only applies when the methodology is used in the spirit of Kelly's original work, for methodologies can be misused or mis-appropriated. As well as this, much skill and endeavour is required of the researcher if the results of a research study are to be authentic and meaningful.
The approach taken for the main study is obviously of great importance. In my case I had at least two major decisions to make:

1) How was element elicitation to be approached?
2) How would construct elicitation be approached?

1) How was Element Elicitation to be Approached?

This was for me the easier of the two decisions to make, for I had tried two realistic alternatives, both of which presented me with some problems. On the assumption that I would be speaking to persons with similar ideas within the organisation, I considered that I would adopt a flexible approach at this stage, meaning that I would neither supply elements nor not supply them, in a black or white sense. I had gained a great deal of knowledge about the individually perceived responsibilities of a service engineer and as such had in mind and in the data collected a fairly conclusive view of what these were. I considered that it would not be detrimental to the overall results to supply elements on those occasions when individuals required me to, or when it was necessary. My experience by this time gave me the conceptual skill to know when the time was appropriate.

2) How Would Construct Elicitation be Approached?

The problem related to construct elicitation could not in my view be easily overcome.
To date I had attempted only the basic methods, triadic and full context elicitations there are a variety of other methods including the use of photos, illustrations, statements, or situations. But none of these in my view were appropriate to this research or the subject of it. While studying the transcripts from the discussions at the pilot stage research a predominant method of describing or elaborating feelings was used by a number of the participants. In order to illustrate a particular feeling or view of something in their work the participants described a situation, event, or predominant incident. This worked very well in giving me insight into their world, and at the same time assisted in the identification of constructs. These incidents or events sometimes related to good and bad experiences, but whichever they were they were vividly remembered. It was by my focusing on these events etc, that constructs were elicited by the participants. It seemed that in most if not all cases the underlying themes related to these instances were contributory to the way each individual service engineer approached the responsibilities that they had identified.

On the basis of this information, which was evident to some extent in all transcripts, I considered it worthwhile to pursue an approach to construct elicitation which at its outset took into account these situations, instances or events. The familiarity of these would I feel make construct elicitation easier for them (the participants) and for me as the researcher, since they would always be discussing or elaborating something they know very well, as it would be a personal experience.
To take account of their lifelong experience within the industry would not be practical, since some of them may have been service engineers for thirty or forty years.

As well as this, concern was for what was happening now, or at least in very recent times. For this reason I decided to limit the range of these instances to those which happened within the four to six weeks prior to our discussion.

On completion of the grid by participants each would be asked to study their grid and attempt an interpretation. Following this, questions regarding training needs would be asked as a verification of the data contained within the grid. These questions would be general in content and not as such directed towards any particular construct or element.

Stages in approach for main study.

1) Flexible approach to element elicitation;
2) Construct elicitation by focusing on events, incidents etc.;
3) Individuals' interpretation of grid.
4) Verification of data by questioning.

To summarise, the approach to the main study would be to elicit elements on a flexible basis - supply them only when required, or alternatively indicate areas of possible responsibility. To elicit constructs by focusing on the experience of individuals by requesting them to think of situations, events or instances which were significant enough for them at the time to remember them clearly.
This is followed by a verification and interpretation stage.

Discussions would be recorded where permission to do so was forthcoming.

The development of a methodology suitable for this research was for me the final stage in a long process. It was necessary in order to carry out a field study from which to draw conclusions, and consequently to judge to what extent the research questions have been answered. This stage within overall research plan is described and placed within the next chapter, 'Research design'.
CHAPTER 7 RESEARCH DESIGN.

Preface

Contents/Research plan

1. Formulation of Research proposal/questions

2. Establishment of philosophical foundation (personal)

3. Comparison and evaluation of alternative.

4. Selections of target population.

5. Negotiation of research contract

6. Testing and learning phase
   Self learning utilising selected approach to research.
   Initial testing of proposed research area.

7. Study and analysis of initial data (5 above)
   Assessment of self performance, and methodology.

8. Pilot Study

   In depth field study of proposed research.


Initially a research proposal is necessary to present to the would be sponsors, and the relevant academic authorities. At this time the prepared paper "appendix" is a representation of my feelings and concerns in relation to my work as a Training Officer. This paper also assisted in focusing/clarifying my thoughts about the proposed area of study.

At a later stage the formulation of the research questions further assists the clarification of the researcher's intentions, and provides a yardstick. Formulation of these research questions (Chapter 3) took place over that time period when I personally identified and clarified my philosophical position. Further to this was the need to extend and improve my knowledge of people and the way they view their world. As well as this was a need to survey and assess the work done, or not done, in relation to the areas of concern, that is within the organisation where the research was to take place, and in the general literature.

2. Establishment of Philosophical Foundation

It is seldom in life that we as individuals stop and think about ourselves in relation to our environment, that is our perception of life and the way we relate to people in our life. If research of a humanistic nature is anticipated it is essential to review the self and the world around in order to establish an approach.
In this case it is an approach which takes account of people and their environment. The need to do this in relation to the research is not totally personal. For the benefit of those who read this thesis it is of fundamental importance to have knowledge of that part of me which interprets my world, and the people in it. This is necessarily so if the analysis and associated conclusions drawn from the data are to make sense or at the very least have some meaning. By elaborating my philosophical position I am attempting to provide insight into my world and the way I view things, and to some extent why. By this the reader may, if not understand, at least be appreciative of the interpretations and assumptions made within the thesis.

3. Comparison and Evaluation of Alternative Methodologies

There are a number of ways or approaches which may be taken to data collection. Selection can only result from consideration of the alternative techniques available, having given due regard to the judgement criteria as determined by the individual, in this case myself. These criteria were formed of the following.

(a) The desire for the data to be as far as possible objective.

(b) Researcher bias/influence should be minimal.

(c) Data so collected should be qualitative in preference to quantitative.

(d) The data collected should reflect the view of individuals.

(e) Data collection reflects/relates to my own personally perceived philosophy. (chosen approach Kelly Repertory Grid techniques as outlined in (Chapter 6).
The information which assisted me in forming my criteria and eventual selection was assembled by the following techniques/methods:

(a) Literature surveying

(b) Seminar attendance

(c) Discussion with fellow students and tutors

(d) Personal experience, testing alternative field trials

4. Selection of Target Population for Data Collection

In contemplating a research study of this nature, it is necessary at an early stage in the planning to consider the group of persons, in this case within the organisation, who could most benefit from the research. Doubtless the corporate needs and objectives of the organisation will have a bearing on the selection made. As like most organisations Sega comprises many different groups of persons within the Departmental structure. In order to make such a decision it was necessary to formulate the criteria on which to base my considerations. It was obvious to me that any research that was to be carried out should seek to benefit not just the organisation by the persons within it. This statement however has implicit within it factors which are not quite so obvious.
These relate to the needs of individuals within small groups compared with those in large groups. It is probable that the needs of persons in small groups are more likely to be met than those in the large groups.

The number of persons in any working group has a direct effect on the communication within the group. While communication is ideally two-way for many persons employed in a large working group it may often be seen as a one-way system, from management down. This situation is not usually intentional: the number of persons at times creates a difficult, sometimes impossible, task for a manager. An essential ingredient for meeting the needs of individuals (which may not be just training needs) is contact and communication. Providing that the leader/manager of a small group is approachable, attentive and considerate, it is possible that individuals within the group will be capable and happy persons. However this may not be the case for larger groups. Communication will without doubt be difficult, it will not be possible to have the two-way communication system often available in small groups and it is likely that some members of staff may rarely see their manager or leader. This has its own problems. What effectively happens is that the individuals have needs of various types, not just training needs, and are unable to express these needs except to other employees. In smaller groups however management can be far more attentive, and far more sympathetic to the needs of individuals within their working environment.
In the bigger organisation, however, where larger groups of persons will be employed, what communication does take place is often very slow because of the structure of the Industry. In the same way as it may be seen as reaching down, it may be seen to be going up but never reaching anywhere meaning that suggestions or ideas may be passed up the line towards management but no answer is received, or if it is, it takes a long time. Consideration of these issues indicated that the results of such research would be more beneficial if data collection took place in one of the larger working groups in the organisation. Secondly, in line with the research questions that I had raised concerning the validation of training, I next had to consider for whom the majority of our training takes place, or if there is no majority, where much of our training is aimed, at what group of persons. This was a difficult area, for while one aim of the research was to establish to what extent training has been successful in assisting people in the day to day experience of work, this could be viewed in another way. In seeking to identify training needs, it would be possible perhaps to identify situations where the training has fallen short of the requirements or expectancies of the individuals within the organisation. What this would mean in fact is that we may identify areas where there has been too little training. It was this point that prompted me to put forward another consideration in selecting the target audience. It is of course important for everyone within the organisation to be regularly trained, where the need arises. However for some groups of persons training and being kept up to date is more important than for others.
Some groups of workers could be seriously affected by a failure to keep them up to date in practices and procedures and so on.

Finally, being a Public Organisation it is vitally important at all times that we portray a good image of our industry, therefore my final consideration would be to assess which group of workers could affect the image of the industry more than the others. So my criteria, to summarise, considered the following points:

1. Which was the largest group of persons;
2. Where had more training been done than anywhere else;
3. Where had less training been done but more was required than in other areas;
4. Whose training needs would be most important to investigate considering changes in the working environment;
5. Who during their daily work represented the image of the Industry more than any one else.

What seemed like a difficult task at first turned out to be relatively easy, in my opinion. Of the 10,000 employees with our South Eastern Gas, over 1600 are Service Engineers. In their early days within the Industry, they go through an apprenticeship scheme and various other training modules.
5. Negotiation of Research Contract

Negotiating a research contract is a particularly important stage within the research plan/design. This is so since it is by negotiation that access will be approved or not, to allow the research data collection to take place.

Within Segas I saw it necessary to give consideration to a number of areas before attempting this negotiation. Thinking about what management would need to know in order to make a decision led to the following list, which was preceded by considering who within the organisation would be appropriate for initial negotiations.

(1) Whom to negotiate with;
(2) Clear idea of research area - what you are looking for or at;
(3) Target population - what department/group/individual;
(4) Method of data collection - approach;
(5) Resources required - equipment or personnel;
(6) Expectancies/projected outcome - your view;
(7) Use of findings/analysis - who will have them, and - what will be done with them;
(8) Value of organisation/individual;
(9) Disclosure of information.

Since access to the organisation involves so many persons, (eg status of management) negotiation took place in stages, which were as follows:
1st Stage - Negotiation with higher management, their concern being:
- effect on productivity
- effect on service
- implications/repercussions
- benefits
- (2) - (8) above.

2nd Stage - Negotiations with Trade Union to seek approval

3rd Stage - Negotiations with local management:
Their concerns are items (2) - (8) above;
They also require information to brief interviewees, how
to select interviewees;
Organise interview facilities.

4th Stage - Negotiation with individual to be interviewed.
Concerns (2), (4), (6), (8), (9) from above list;
Negotiate use of tape recorder.
Decide what you will tell the interviewee about
yourself, how you will dress. Be mindful of language
(related to target population).

In some cases a future stage was introduced. This fits into the
plan between stages 3 and 4 and was necessary as a result of the
need to meet local employee representatives. These were either
Trade Union or worker participation committees or individuals (the
need incidentally came about as a result of local managers'
requests, or alternatively that of the workforce representatives).
6. **Testing and Learning Phase**

Having spent well over a year studying and practising alternative methodologies for data collection, and clarifying my research questions, it became imperative that some form of field study be attempted. The aims of this stage were as follows:

(a) To test my ability in using 'repertory grid techniques' as a data collection method;

(b) To test the suitability of 'repertory grid technique' considering the research area, target population etc.;

(c) To initially consider the validity of data as a source for what would become the main theme of the research project.

7. **Study and Analysis of Initial Data - Assessment of Self Performance and Methodology.**

In relation to my skill and the suitability of the methodology, a number of problems were experienced. The quality of the target population too presented me with some problems, basically because at this stage the majority of persons I spoke to were shop stewards (or other Trade Union Representatives). The information and experience gained at this stage were invaluable as considerations when planning the next phase within the research design, the Pilot Study.
Full details of the problems experienced, and the changes which took place as a result are contained in Chapter 6

8. Pilot Study

This stage forms the basis of an in-depth study which seeks to establish the following:

(a) My level of skill in utilising 'Repertory Grid Techniques';

(b) The suitability of 'Repertory Grid Techniques' to collect the required data;

(c) To further assess the extent to which the research areas (research questions) are answerable by this method, and whether the subject warrants a major study;

(d) To further my experience with the technique;

(e) To further my analytical skill with the data;

(f) To assist in the formulation of a full study, if appropriate, by considering and assessing the data, and the problems experienced during its collection.
The problems associated with this stage are discussed within part Chapter 6.

9. Field Study - Final Stage Data Collection

The outcome of a full study is to some extent determined by the effort put into the previously described eight stages within the overall design. It is also dependent on the planning and consideration of what the full study actually involved, which was as follows:

(a) Size of Target Population

The final figure was determined by considering the structure of South Eastern Gas. Bearing in mind that it is qualitative data being sought, the actual number finally decided upon could not in any case truly represent everyone, as there are over fifteen hundred service engineers employed within the Region. Because of this it seemed realistic to attempt to speak to service engineers at every individual district unit.

Considering that I had already spoken to engineers within some districts at the testing and piloting stages, it was necessary to visit a further fourteen locations, to cover each unit. I decided to interview two engineers at each location, so my field study would involve interviewing twenty eight persons.
(b) Approach to Data Collection

The final approach to data collection is fully discussed within Chapter 6. This approach was developed from the experiences gained during the previous stages. In short it was as follows:

Data Collection Procedure

Detail of discussion format taken with each subject:

1. Introduce background to research and reasons for carrying it out.

2. Discuss possible outcome of research from my point of view.

3. Inform participant of research progress to date.

4. Notify participant of method employed to gain access, e.g. negotiations with a) Management at all levels b) Trade Unions

5. Discuss confidentiality, seek permission to use tape recorder.

7. Notify participant of questions after interview concerning specific training needs.

8. Request participant to consider their responsibilities as a Service Engineer. I decided to adopt a flexible approach, that is only supplying elements when required, in most cases however I was able to elicit elements.

9. Having elicited the elements, clarified meanings and established that the elements in total are representative of the person's job the next stage is to elicit the constructs, utilising the "Analysis of Incidents Method" as described within Chapter 6.

(c) Time Span

In light of the time required to carry out each research interview, and the necessary pre-interview discussions (with management), the time objective to complete the field work was three months. Previous experience indicated that each interview was likely to take two to three hours, which when coupled with the necessary travelling time required an allowance in time of one day.
Negotiating with each individual manager too required a half to one day's time depending on the geographical location.

(d) Negotiating Research Contract

Being a full study it was necessary to negotiate a form of contract relating to this particular stage in the project.

The stages in this process were as follows:

(i) Negotiating access at Regional level with:
   Regional Service Manager
   Regional Union Representatives.

(ii) Negotiation with the managers of each individual to take part in the study.

(iii) Negotiate with each individual.

NB In some cases, related to local staff etc, it was necessary to carry out a presentation to local staff representatives. Where this happened considerable time was required, and often much negotiation. As a result of such discussions access was made available at all locations.

Detail referring to the negotiation of a research contract is contained within section 5 of this chapter.
(a) Analysis and Write up of Thesis

Due to the many stages within the write up of this thesis I initially found it rather difficult to time plan this stage realistically. It was more a question of sequentially covering each part and then moving on to the next. By far the most difficult section was the analysis, which required many hours of work. Some form of time planning was always negotiated between my supervisors and myself, but, alas, I found this difficult to keep to, although the objective they presented has assisted in the completion of this project, albeit a little later than anticipated.
In formally analysing repertory grids there are at least two stages. Firstly the ratings accorded to elements/constructs can be mathematically analysed. This having been done the relationships and meanings of statements or labels within the grid may be analysed on the basis of that first stage. This is necessary since a mathematical analysis of a grid adds nothing to a grid, nor does it provide any meanings.

In relation to computer analysis, Easterby Smith (1981) said

"This analysis does not add anything to a grid, nor does it provide any indication of meaning of a grid; it simply reduces the amount of work required for interpretation by summarising and condensing the data available".

At the first stage it is possible to manually calculate a mathematical analysis. This can be time consuming and complex where large grids have been elicited. Alternatively where there are no computers or associated software available this may be the only method.

It is possible to understand something from a grid without going through a formal analysis. Any form of number sorting, can assist understanding and make a grid more comprehensible. Computer analysis in this context re-orders and summarises the data.
There are two alternative types of computerised repertory grid analysis programmes generally available.

These are:

- **INGRID** packages devised by Slater and based on principle component analysis (Slater 1977).
- **FOCUS** program based on cluster analysis designed by Shaw and Thomas (1978).

The INGRID programme searches out the greatest variation within a grid and imposes mathematical axes on these, whereas FOCUS builds up a series of hierarchical groups based on the strongest associations within the group. The analogy used by Easterby-Smith (1981) simplifies the differences well.

"Imagine the stars of the sky spread out above one. These stars represent the elements in an individual's mental map - whether they be people, situations or objects. The purpose of the computer programme is to find some way of describing all these points. The "Cluster Analysis" approach looks for the patterns in the different parts of the sky and identifies the major groupings, like the constellations. Thus the structure of the map is built up gradually from various small groupings. The "Principal Component Analysis" approach contrasts with this by looking at the sky to identify the main overall dimensions. Thus it might note that the plane of the Milky Way is the most dominant dimension in the sky as viewed from the earth, and it would then describe all other objects in terms of co-ordinates from this plane".
The choice as to whether INGRID or FOCUS should be used in analysis in my view depends upon the researcher's objectives in carrying out the research. The results and findings associated with this research will be subject to a scrutiny of management and associated personnel in industry. I see FOCUS as being an easier analytical tool to understand and comprehend for those persons who lack knowledge of 'Repertory Grid' technique, and its underlying theory.

The clustering technique of FOCUS identifies possible or likely relationships between groups of elements and constructs and as such is more suitable for this research; since it is these relationships which seemingly form the basis of the way persons view their role at work, and signify cause and effect. In simpler terms the findings have indicated how groups of constructs or elements are effective upon or related to each other, that is construct to construct or element to element. It is these relationships that are of significance to this research.

"The idea of revealing the meanings in a Grid by resorting it so as to place like elements together and like constructs together".

(Stewart & Stewart 1981)

Following the computer analysis the resultant focused grid is utilised to form the basis of a written commentary which is cross-referenced with the actual transcript from the research interview.
This is a necessary stage since the verbal labels as applied by each individual vary in meaning, as does the significance or importance of constructs and elements in relation to one another.

Important too are the factors which influence a construct or element to belong to a particular cluster; it is only by careful study of the associated transcript that such underlying themes may be uncovered.

The following pages contain ten analyses. Each of these comprises:

(a) A raw grid
(b) A focused grid
(c) A commentary of the focused grid
(d) Summary

A further sixteen analyses are contained within Appendix IV.
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4 Lack of confidence 4 4 4 4 4 4 4 4 Confidence
5 Frustrated 5 4 4 4 3 3 3 3 Supportive Supervisor
6 Inadequate Information 5 3 3 5 2 3 3 3 Adequate Information
7 Neglect 4 3 3 5 4 4 3 2 Attention
8 Ignores 5 2 4 3 4 2 2 Notice
9 Time 4 3 3 3 3 3 1 4 Time available
10 No consideration 5 2 3 3 4 3 2 2 Consideration

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FS 2

ELEMENT MATCHING SCORES — GRID 1

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FOCUSSED GRID 1

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142a
SUBJECT FS.2

ANALYSIS OF DISCUSSION

ELEMENTS

The first section of the tape recording was unfortunately damaged sometime after the recording - consequently the discussion prior to element '5' is missing.

1. SAFETY
2. PUBLIC RELATIONS
3. STANDARD OF WORK
4. PRODUCTIVITY

5. WRITTEN COMMUNICATION Completing work books - time sheets, and reports to the supervisor.

6. VERBAL COMMUNICATION Between workmates - sometimes with supervisor.

7. APPRENTICE TRAINING Responsible for training apprentices on the job.

8. PERSONAL DEVELOPMENT Keeping oneself up-to-date with changing technology and appliances.

The element tree is formed of one main cluster comprising six elements, and the remaining two matched at 80%. General observation of the grid shows that the subject has no extreme views about any aspect of his work.
The majority of the ratings within the grid are '5a'. This, if for no other reason, has influenced the clustering of the main body of elements within the grid.

The exceptions are SAFETY (E1) and PRODUCTIVITY (E4) which are seen as the most important by the subject in relation to most constructs.

"One of the biggest things for the Gas Board is safety, you know".

and

"they always take notice of your safety".

There are few references to PRODUCTIVITY (E4) within the transcript but the rating in my view signifies its priority in relation to the other elements within the grid.

Within the main cluster are two matched elements both of which relate to communication. WRITTEN COMMUNICATION (E5) refers to that which takes place between the subject and his supervisor.

"Paperwork's got to be right. Got to fill in your workbook and timesheet".

and
"You have got to be specific of what you done on there. You have got to write down, otherwise a customer could get charged for something that you have not really done".

"Yeah, well, you get it down on paper then. I'd rather get it down written than verbal if it's important because then other people can read it".

The subject appears to attach some importance to his communication and seemingly derives some pleasure from doing it well, despite the fact that in relation to construct '2' ANNOYED - HAPPY/CONTENDED it is rated only '2'. VERBAL COMMUNICATION (E6) is applicable to the communication that takes place between himself and the supervisor, and more important himself and workmates. As well as helping each other with problems he implies that some information, applicable to an individual's workmanship would be discussed amongst themselves. Such information or communication is likely to refer to the standard of work of individuals, and does in itself imply a great deal of loyalty.

This leads to the third element within the cluster STANDARD OR WORK (E3). This element is clearly recognised as an important responsibility by the subject and demonstrated as an important area by the subject's supervisor.

"When you've got someone like ----------------------(subject's supervisor) with you he always takes notice of your standard of work".
Although the subject said this, he also spoke of the influence the customer may have on his performance, as well as his mood.

"Public Relations always goes on what the customer is like. You go on your initial reaction to them".

and

"A lot of people, they are all right to you but as soon as you go they stab you in the back for no reason."

"Standard of work that can vary from day to day really. All depends what sort of mood you are in".

These statements illustrate the link between STANDARD OF WORK (E3) and CUSTOMER RELATIONS (E2). The subject spoke of a few cases where the customer had "stabbed him in the back" after he had completed what he thought was a satisfactory job.

Matched at the same level as CUSTOMER RELATIONS (E2) are APPRENTICE TRAINING (E7) and PERSONAL DEVELOPMENT (E8). Both E7 and E8 refer to training, and both imply some effectiveness on CUSTOMER RELATIONS (E2) and STANDARD OF WORK. The subject clearly recognized his responsibility to train apprentices.

"Your apprentice you know, when he does work you are responsible for his safety and - like - public relations".
What the apprentice does will, in his view, reflect on his own standard of work and customer relations.

PERSONAL DEVELOPMENT (E8) is seen by the subject to cover two areas. The responsibility of keeping himself technically up to date, by reading issued technical data/information, which I see as further development of himself to cope better with his present job.

Although not stated, implication would suggest that if the subject does not update himself, his STANDARD OF WORK (E3), PUBLIC RELATIONS (E2) and maybe SAFETY (E1) would be affected.

The other area is the development of himself for promotion.

"You want to start climbing the ladder".

The subject spoke very briefly of his desire to gain promotion, and recognised that this would perhaps only come about through his own effort. In relation to this element the subject considered that management both NEGLECTED (C7) and IGNORED (C8) this aspect of his job, both rated at '2'.

CONSTRUCTS
There are ten constructs within the grid which form three clusters of three and one isolated construct. Cluster one is formed of ANNOYED - HAPPY/CONTENTED (C2), NO KNOWLEDGE - KNOWLEDGE (C3) and INADEQUATE INFORMATION - ADEQUATE INFORMATION (C6). The construct ANNOYED - HAPPY/CONTENTED (C2) was elicited from the following:
"I fitted a water heater not so long ago, done a good job round there and left it working OK - I have been back there twice because they say there is not enough heat and it is not through my work, it is through the actual appliance not being up to standard really and that was annoying me you know, it seems to reflect on your work".

(the emergent pole being ANNOYED).

He stated that he felt HAPPY/CONTENTED when told that he had done a good job, usually by a customer. He said that training gave him the ability to do a good job because, -

"It gives you the actual knowledge of the job".

This led to the construct NO KNOWLEDGE - KNOWLEDGE (C3). The subject does not seem too happy or contented with his job, ( as 6 of the 8 elements are rated at 3 or below) this may however be a reflection of his lack of knowledge, which he rated at '3' or below, in relation to seven elements.

The remaining construct in this cluster provides a further link, since it pertains to INFORMATION (C6). The subject stated that in the main the technical information he required to carry out his job was normally available either through his supervisor or a technician. This is one form of information, the other reference here is to information about the particular, which may be an instruction, or agreed way of doing a particular job. The following statement refers to the instruction contained on a typical job card.
"I mean, half the jobs you go round to, you’ve sort of got from meter to appliance. (refers to the job of running a gas supply). It don’t say whether you are going under the floorboards, along the skirting etc…etc. You can run it one way, the person turns round and says, well the rep said you could run it this way.”

It is the subject’s view that except for SAFETY (E1) and PRODUCTIVITY (E4) there is a problem with information, that it is generally inadequate for him to effectively carry out some aspects of his work. Alternatively as illustrated above, his interpretation of the information conflicts with others. In the instance quoted, it is the Segas Representative who has informed a customer of a work plan, but failed to notify the service engineer (in this case the subject).

Cluster two within the grid is formed of DISAPPOINTMENT - SATISFACTION (C1), FRUSTRATED - SUPPORTIVE SUPERVISORS (C5) and LACK OF CONFIDENCE - CONFIDENCE (C4). In relation to SATISFACTION the subject said………,

"I like it. I like going in there and fitting the appliance you know, and seeing it work and making people happy - you know”.

The subject likes to do a good job and is pleased when he does so. How well he can do a job is in his view related to his CONFIDENCE (C4).
"That is really mainly what this job for a service engineer is about, is confidence. If you lose your confidence I mean - you know - your safety aspects goes down quite a lot".

Implicit within this statement is the link between satisfaction and confidence. As he says if you lose your confidence you may not be able to do the job so well, which presumably would affect his level of SATISFACTION (C1).

It is not enough it would seem to feel confident in himself. It is important for the subject's supervisor/management to demonstrate their confidence in him. The subject considered that such confidence would be demonstrated by the amount of SUPPORT (C5) given to him,

"If you go to a job and you want backing up sort of thing, over an incident or something - you know - he's got to be behind you".

and in another way:

"It's nice to have someone you can turn to if you have any problems or a situation where you need it (support)".

"They give you moral support. Congratulate you on your work and everything like that, that's always nice to hear".

The subject is clearly quite satisfied with his work, basically because he has the confidence in himself, and confidence shown in him by his supervisors.
This is illustrated by his comments and views, and the ratings given to these three constructs within the grid.

The three constructs within cluster three all relate to the subject's view of the management style at his workplace. They focus on whether management give him enough ATTENTION (C7), whether they take any NOTICE (C8) of him, and whether or not they show him CONSIDERATION (C10). When discussing the attention given he said:

"I prefer if I could get a supervisor or technician out to actually see the job".

and

"You do (get attention) not as much as really you would like. Then again if you're going through a difficult period you don't want too much attention".

'Attention' to the subject is responding to his needs for help and assistance with work associated problems. It also encapsulates within it the question of listening. That is whether management listen to his views and ideas about his work. This led to the elicitation of C8 IGNORED - NOTICE. This refers to whether to take notice of or ignore the views and ideas the subject presents to them.

"On the safety aspect of it, if you report something and they act on it, basically because they have to you know. Some stupid little thing they probably won't, it all depends on the person you're reporting it to".
The subject did not feel he was taken much notice of in relation to PUBLIC RELATIONS (E2), APPRENTICE TRAINING (E7) and PERSONAL DEVELOPMENT (E8), all of which are rated '2'.

The question of whether the subject is shown consideration or not, arose from his opinion that he was shown little consideration towards his responsibility for APPRENTICE TRAINING (E7).

"You're not shown consideration because you should have checked up on it (refers to apprentice work). You shouldn't have a leak because you should test up".

The rating for this construct is very similar to that of construct eight, which rated PUBLIC RELATIONS (E2) APPRENTICE TRAINING (E7) and PERSONAL DEVELOPMENT (E8) at '2'. It could be assumed that certainly things like TIME (C9) is one of them. According to the rating accorded to APPRENTICE TRAINING he is given no time consideration, rated at '1' to effectively train an apprentice.

Time (C9) is an issue for the subject especially as it could be effective on some aspects of his work. Since the subject operates within a bonus scheme time available has an important part to play in his daily work. He recognised though that it is a 'swings and roundabouts game'. What you lose in time on one job you may gain on another and vice-versa.
"That comes down into time again - you know. Unless you're a bonus thing, you just want to get in there and get out. There are days which you say to hell with it, or something like that - you know".

and

"It is always down to the person, I mean if he wants to make time and lose out, I mean who wants to lose out? - these days, when you're talking about the crux of the matter which is money".

From these statements it is fairly clear that despite the fact the subject likes to feel satisfied at having done a good job at times, the bonus payment may lead him to taking short cuts in his work. Or alternatively he may not do something he normally would do given time, which as he indicated could be not working to the safety practices laid down, although he would always leave the job itself safe.

**SUMMARISED DISCUSSION**

Individual Expectations

- To derive satisfaction from his work

- To feel happy and content with the job

- To feel confident about doing his job
- To be promoted - for which he is studying

- To be knowledgeable of the technical aspects of his job.

**Expectations of Management**

- To show confidence in him

- To support him when he has problems

- To give recognition when appropriate

- To provide him with accurate and adequate information, for doing his job and for personal development

- To provide him with the attention he needs, listening to his problems

- To take notice of what he says where appropriate, and take action, or be seen to

- To be considerate of his responsibilities, by being more thoughtful, maybe understanding of his job and what it entails, and the time required for some aspects of it.
Expectations of Others

- That job estimates (Reps/showroom staff) provide accurate details of the work to be carried out.

- That he is given the opportunity to speak with Training and Education staff about his education.

TRAINING NEEDS/COMMENTS

The main concern for the individual is keeping up to date with changes in technology, and the introduction to new appliances. He says that often the first time you see a new appliance is when you go into a customer's house, and that can present you with problems.

An interesting training need identified by the subject is the desire to know and learn about the relationships between management and the workforce. That is how it works and what communicative methods are employed? (e.g. committees etc.)

There is also a desire to know more about the administrative side of customer service.
FS.8

1 Dissatisfaction

Satisfying

2 Mundane

Challenging

3 Not Confident

Confident

4 Dis-interest

Interest

5 No Pressure

Pressure

6 No Assistance

Others available

7 Bad Relationship

Good Relationship

8 Bad Equipment

Good Equipment

9 Bad Communication

Good Communication
effective

10 Bad

Reliability of
ot h e r s , good

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This subject has, it would seem, reached a stage in life/work where he is able to cope with all normalities with which he associates. Nothing at work is a major problem to him. He is confident and in the main finds his work satisfying. As well as this he seems to see the better side of those objects and people he encounters at work. His overall view of his job is very positive. At times this caused minor problems during the discussion, especially when eliciting the implicit poles of constructs.

The resultant grid is interesting, as is the computer analysis.

**ELEMENTS**

1. **SAFETY**
   Making sure things are safe, especially those fitted or worked on by the subject.

2. **STANDARD OF WORK**
   Doing a good job. Includes reporting back to supervisors and general communication about individual jobs.

3. **PRODUCTIVITY**
   Doing an expected amount of work.
   (Management's expectations)

4. **APPRENTICE TRAINING**
   Giving instruction as and when required.

5. **IMAGE**
   Upholding the industry's reputation, communicating with the customer.
6. **SELF TRAINING** Finding things out for yourself.

7. **KNOWLEDGE OF THE JOB** To know all that is required to do the job.

According to the element tree contained within the computer analysis each of the seven elements is matched at 90%. Two pairs of elements are matched together, but I do not consider there to be any significance in this due to the uniformity within the element tree. To me this signifies that the subject considers all his perceived responsibilities to be equally important. The elements therefore are totally inter-related and together form, or make up his job. This is to provide a service to the customer.

SAFETY (E1) was recognised as the first area of responsibility, in terms of priority.

"Safety-well I could say I am very interested in keeping it safe. Always that has got to be prime concern hasn't it".

As important it seems, is the subject's view of himself as the Gas Board. What he means is that the customers for whom, he carries out work see him as the Gas Board. He therefore sees that he has a responsibility to maintain the IMAGE (E5) they have of him.

"Well when I go into a house, they are not looking at me they are looking at the gas board, so whatever I do is going to be a reflection on the Gas Board".
and

"That is all part of the image, isn't it?"

For the subject IMAGE (E5) is very closely related to STANDARD OF WORK (E2). If the subject does not work to a good standard it reflects on the IMAGE a customer may have of the industry.

"I feel that if I do a bad job, then it will get back eventually to me. She will say that the Gas Board has done a bad job".

The STANDARD OF WORK (E2) is important to the individual not only from the IMAGE point of view. At one point the subject said that doing a good job keeps management "off my back". The STANDARD OF WORK for this subject is not just completing the practical side of the job, for him it is completing accurately and correctly all associated documentation.

"The thing is if you neglect to do something on the job, that is not doing your job is it? And if you forget to order something, then you have not done your job well. Until you have written on your card, job completed, that is only when the whole job is done, the fittings, the writing out of the report, that is the whole thing, and that comes under standard of work I would have thought".

The STANDARD OF WORK (E2) takes precedence over PRODUCTIVITY (E3), although as a result of doing a good job he may lose money,
"Productivity, well I would sooner do a bit less and go home happy".

and

"I don't feel responsible for doing a certain amount of work, the fact is if I don't do it, I don't get paid for it, so I would say that I am not responsible to anyone except myself".

Despite the above statement PRODUCTIVITY (E3) was included as an element and considered in relation to all ten constructs.

For the subject to maintain the STANDARD OF WORK (E2) and SAFETY (E1) he saw it necessary to keep up to date. Although he did recognise the fact that as he was employed on appliance installation most of the time, changes in procedures and practices were less frequent. This is compared with those responsibilities which would apply to a maintenance or service engineer. He did however see the need to keep himself up to date in relation to new appliances, since he installs them.

"I do installation work, I wouldn't say there is a great need to find out more about it, but let's say if I was doing servicing work, then I would feel that I would have to know a bit more about the job because fitting wise it does not alter much".

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Very closely related to element '6' SELF TRAINING is KNOWLEDGE OF THE JOB (E7). This element was elicited during discussion about constructs. The subject considered it to be his responsibility to have the appropriate knowledge of the job. This would contribute to him being able to carry out a good safe job, in the same way that self training would contribute. I personally see these as being the same thing, but they remain.

The last element in the tree is APPRENTICE TRAINING (E4). The subject had little to say about this aspect of his work except that he recognised it as a responsibility.

"There is a certain amount of responsibility to him, to give him instructions"

This instruction would be on-the-job training to supplement the apprentices college studies.

CONSTRUCTS

There are ten constructs to this grid which, according to the computer analysis form a main cluster of five constructs with the remainder loosely spread. As the subject had no extreme views in relation to any of the elements, many of the constructs are closely matched. This configuration is the result of the elicitation method used. Using the incident analysis method does not always provide contrasting views about the way a subject may view a particular object or person.
No real attempt is made to compare one element with another, except sometimes during laddering. The consequent result/ratings figure heavily towards what may be termed the positive end of a bi-polar construct (usually the '5' rating).

Construct '5' NO PRESSURE - PRESSURE differs from the others in the grid since it is rated on the basis of effect. So that a rating of '1' represents the view that pressure will not be affected on a particular aspect of the subject's job, and '5' indicates that PRESSURE definitely would.

"I suppose pressure can affect you, that can come in various ways, it depends what pressurises it, whether time bothers you, or whether safety bothers you."

According to the ratings PRESSURE (C5) affects very little. The major influences on the individual caused by PRESSURE are related to PRODUCTIVITY (E3) and acquisition of KNOWLEDGE OF THE JOB (E7) both rated '3'.

I see the cluster of five constructs in the grid as being linked by, and stemming from CONFIDENCE (C3). The subject considers himself to be very confident in the work he is normally associated with, installation work, but recognises that he could not too easily change to doing other work.

"It is the old story of jack of all trades, master of none. I think that by doing one job you become efficient at it and you do a far better job".
"I would like to know more about the job, but it's whether you put the cart before the horse, because you see I would not like to do the other side of the work until I know all about it."

In the subject's view his confidence and ability stem from knowledge. If he lacks confidence it is because he lacks knowledge. Having recognised that it is his responsibility to find out, SELF TRAINING (E6), he considers it takes INTEREST (C4) to go and get the required information.

"Apart from being a necessity it has got to be interest, whether you are interested enough to find out".

Having recognised that he himself needed to be interested enough in his job to want to find out more, he sees that he cannot do this alone. From this discussion came construct '6' ASSISTANCE. This assistance is in the form of information giving, which he expects from his management as well as his fellow workers.

"We are answerable for a lot of things, but if we are not sure, then we have got to be able to get in touch with somebody, you can't expect the service engineer to know absolutely everything".

and

"I would expect anyone, District Service Officer or anybody, if I didn't know something, if they didn't know, to be sufficiently interested in what I was doing, to find out".
Whether or not information is forthcoming, especially from workmates, is to some extent based on whether or not the subject has GOOD RELATIONSHIP (C7) with everyone. This is important for the subject since much of the information he acquires comes from workmates.

"There is always someone in the depots who knows about it, or has done it, or there is somebody who has access to find out about it".

and further related to information,

"I think more often than not you will get it from other fitters".
"If you ask generally, then it normally finishes up in a discussion and at the end of it you will come up with the right answer".

If working relationships were bad, this flow of required information may stop or be reduced to a point where the individual sees his ability affected. This would have a knock-on effect in relation to his CONFIDENCE (C3).

The last construct within this cluster refers to the reliability of persons in the subject's work environment.
"I think you rely on other people, we are all doing the same job, and if one person comes in to buy something, from the time she comes in, it relies on everybody working together really".

Specifically mentioned at this point are office staff, and sales representatives. Implied within the above statement is the subject's reliance on everyone in the organisation that can affect the job he eventually must do. His own CONFIDENCE (C3) could seemingly be affected by the confidence he has in others to be reliable. This construct in my view encompasses the other constructs within the cluster. Are the people around interested, helpful, knowledgeable and how good are the relationship between them? The total of these things may denote their RELIABILITY (C10) in his view.

The remaining four constructs within the construct tree could be seen as a cluster, although they do not show from the ratings to be particularly closely matched. The discussion in fact links them together far closer than they appear via the computer analysis. SATISFYING (C1) comes from being happy and pleased with each individual job.

"I personally get a lot of satisfaction out of completing a job and doing it well. When I know that a consumer is happy with the job, when they tell me they are happy with the job, I forget that I am working for the Gas Board, that is me that has done that and I am pleased with it".
Much of the SATISFACTION derived from a job relates to the CHALLENGE (C2) it provides. This according to the subject is not related directly to the degree of difficulty of a job.

"The challenge is doing a neat job, I am happier doing a neat job than a difficult job. I mean it can be a really easy job, but if it is done well, then I am always more satisfied than if I had done a difficult job".

So the subject sees that he himself creates the challenges by setting himself a high standard to work to, in terms of the neatness of the finished job.

The "neatness" achievable can be affected by the tools and equipment he is provided with. At times the equipment is modified or changed, or, more important to him, materials are changed. In relation to the type of fittings used for jointing copper pipe he said:

"It shouldn't make the job look any worse, it shouldn't do, but it does, because these new things do not look as neat".

Alternatively he claims to be issued with tools he never uses. Since the subject aims to provide customers with a neat job, anything that affects his ability to do that affects his SATISFACTION (C1).
The discussion concerning equipment led to the elicitation of the GOOD COMMUNICATION (C8). This COMMUNICATION is not applicable generally. It is related to the 'Tool Committee', which he would like to know the operation of, and the fact his complaints about tools and equipment are, as far as he knows, ignored.

"We just moan and gripe about it, but we do not know what happens"

and

"it makes you wonder if it is worth complaining about it. It would be nice if you were to see something happen from something that you said."

So the issue here is related to the COMMUNICATION about tools and equipment, which by implication is effective upon CHALLENGING (C2) and SATISFYING (C1).

SUMMARISED DISCUSSION

Expectations of Individual

- To derive satisfaction from doing a good job.

- To keep the customer happy.

- To maintain a good standard of work.
- To be confident to do the job

- To have good relationship with fellow workers.

- Not to be affected by the pressures of time etc.

Expectations of Management

That they:

- show interest in him and his job.

- provide him with the information/assistance he needs to do his job.

- supply him with good quality and adequate tools and equipment.

- take notice of his comments/ideas.

- provide information about the working of communication systems, committees etc.

- provide feedback/information on issues that affect him.

- encourage good working relationships.

Expectations of Others

- That Administrative and Sales staff provide him with accurate information about the work he must do.
That those about him are reliable - do what they say they will do, provide him with what they should provide etc.

TRAINING NEEDS/COMMENTS

At the subject’s place of work, local training is carried out by technicians; apart from Regionally instigated training (e.g. changes in regulations), service engineers are asked if they have any needs. The subject seemed quite satisfied with this method of resolving training needs. His real concern or desires for more training are in the field of electrics. He would like further basic electrical training, and an update in the following areas.

- Rules and Regulations
- Practices and Procedures
- New appliances.
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<th>3 Unreliable</th>
<th>4 Mundane</th>
<th>5 Poor working conditions</th>
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Having outlined "Repertory Grid Technique" to the subject I requested that he considered his responsibilities as a service engineer, in order to elicit elements. In common with most of my research discussions this initially presented the subject with some difficulty. This was overcome by my directing the thinking of the subject so that he could more easily consider his job in relation to its responsibilities rather than his duties. In the first place six elements were elicited and a further one added following the elicitation of these constructs.

ELEMENTS

1. **SAFETY** Relating to working safely and leaving work safe

2. **STANDARD OF WORK** Relating to the way work is done, governed by various regulations.

3. **APPRENTICE TRAINING** On-job training of Apprentices

4. **CUSTOMER RELATIONS** The maintenance of good Customer relationship while working in peoples homes.

5. **TECHNICAL DEVELOPMENT** Need to learn from everyday experiences and changing technical standards.
6. COMMUNICATION Descriptive of the relationship between the subject and his supervisor.

7. COMRADESHIP The need to work with others, a responsibility that needs to be maintained.

Cluster one comprises STANDARD OF WORK (E2), CUSTOMER RELATIONS (E4), COMRADESHIP (E7) and TECHNICAL DEVELOPMENT (E5). In essence these four elements are representative of the subject's outlook to his job. Together they are the most important aspects of his work, and are those which seemingly require continuous effort.

"Standard of Work - that's important to me - perfection is the only thing passable". (E2).

"If you can tell her and make her see Regional policy - because I suppose of the future - we have got to safeguard our own work haven't we?" (E4).

"It was such a lousy, rotten job he did not want to get involved in it - I have always cleared my own work, I never leave myself open - Well I suppose its another area in that top section COMRADESHIP" (E7).

"The electrical stage, sometimes I find that very hard, sometimes I find it the greatest achievement in my work" (E5).
The second cluster is formed of only two elements APPRENTICE
TRAINING (E3) and COMMUNICATIONS (E6). It is difficult to see a
real link here although both elements refer to people. In the first
place the subjects make reference to apprentices.

" - Some of them have got a will to learn, and some of them I
find you are dragging along - if their parents have made them
see responsibility, then they will have a better outlook on
training".

Since COMMUNICATION (E6) referred to communications with the
subject's supervisor, it is possible to see the subject's view. The
references to the supervisor throughout the discussion suggests that
the subject sees himself in a position whereby influencing or
getting the attention of these people is only possible with great
difficulty, if at all. He seems to feel that this derives from
influences outside his domain.
Safety (E1) has a place on its own within the grid. Of all the
elements this seems, from the subject's point of view, to be the
most routine of all his responsibilities.

"We have been trained that way and it is routine, it's got to
be, I'm afraid, because if is not, then you are going to be in
trouble".

The importance of this aspect of the subject's work is represented
by the above statement, but this does make it one of the more
tedious parts of the job, as may be seen in the grid.
CONSTRUCTS

The constructs form three distinct clusters (see grid analysis).
The first of these I consider to be formed of personal attributes seen in the self, but not so much in others. This is not surprising since they were elicited by the subject’s thoughts considering himself in relation to others. The three constructs are UNRELIABLE - RELIABLE (C3), SOCIAL PRESSURES - whether effective on the subject work (C9) and IRRESPONSIBLE - CONSCIENTIOUS (C10).

Reliability relates to that of others in the work environment, he spoke of an instance with another service engineer:

"He said we won't be able to do that, - and Joe Soap here gets lumbered with it, - when I found out who it was, he probably had the fittings on his van - but it was such a lousy, rotten job that he did not want to get involved in it..... - I have always cleared my own work".

While the construct was rated on the basis of others' reliability, it does I feel reflect very well its subject's position which I interpreted as being totally reliable. In the same way the subject recognised that social pressures can affect people at work (C9), he said:

"I know it affects some fitters and it has this past few months - in two cases - but myself, I don't let it happen, not that I get many personal problems because I iron them out quickly."
Despite this statement he rated three elements at '3', meaning that social pressure could affect APPRENTICE TRAINING (E3), TECHNICAL DEVELOPMENT (E5) and COMMUNICATION (E6).

In C10, CONSCIENTIOUS, he rated himself very highly, stating that he felt those that were not conscientious would show it in their work attitude, standard of work, and customer relations.

Cluster two comprises FRUSTRATION - SATISFACTION (C2), MUNDANE, VARIETY (C4) and CONTROLLED BY OTHERS, IN CONTROL (C6). Here the subject is expressing his feelings about his job.

The common thread between all three, apart from the fact that they are feelings, is that they are rated similarly in relation to three elements. The subject seems to be influenced by people in this respect, although it may not be direct influence. For instance the subject's rating suggests that his SATISFACTION (C2) the degree of VARIETY perceived (C4) and amount of CONTROL (C6) he has over his working day, is affected by COMMUNICATION (E6) with his supervisor, whether he has an APPRENTICE with him (E3) and the SAFETY (E1) standards. In relation to SAFETY he said: -

"I suppose on the side of gas leaks, I find frustrating the safety side of that, because it is very much black and white what we must do".
This I consider the subject finds boring because he seemingly has no discretionary powers, as he would say it is out of his control. As was discussed within the element analysis he considers that people are what they are through something outside, that he cannot influence, they consequently in some ways tend to inhibit him, and the way he works.

Cluster three comprises three elements, WORKING CONDITIONS (C5), related to the effect of the physical conditions under which it is expected to be carried out, MISTRUST - TRUST (C8) as shown or demonstrated by management, and LACK OF CONFIDENCE - SUPPORTIVE (C7) as shown by management.

Here the subject is, in the sense of working conditions, talking of the effect that differing consumers' property has on his work. For instance he is inclined to do a good job in a clean and tidy property, but may, dependent on the degree of filth and untidiness, lower his standards to being acceptable. This can be classified as a physical environmental factor, whereas the other two constructs (C7 and C8) pertain to the working climate, since both of them relate to the working relationship between himself and management.

For instance the subject considered that management were not supportive, because they lacked confidence in the workforce. This however was only the case in relation to CUSTOMER RELATIONS (E4) and COMRADESHP (E7), he said:-

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"I think basically a supervisor feels there should be comradeship and I think we feel the same really, you rely on your supervisor backing you up, but with this particular guy we couldn't."

"-there was a problem as regards safety and there was disciplinary action, he wouldn't actually back his men".

With regards to MISTRUST - TRUST (C8) the subject said:-

"he wouldn't believe me even though I explained exactly what I had said, I felt there was mistrust there."

The ratings on this construct are '3' as allocated to CUSTOMER RELATIONS (E3) and COMMUNICATION (E6) and '2' on TECHNICAL DEVELOPMENT (E5).

The effect on the inter-personal climate as generated by these management traits is, I consider, summarised by the following:

"I can maintain not sending him to Coventry, but being very disagreeable if I am in the office or in the depot, but that ends when I go out in the van to do a day's work, because that is my being in control."
Elements '7' and '8' are closely linked I feel, in that management could be more supportive in their approach to service engineers (E7) if they were more trusting (E8) and as such demonstrated confidence in their workforce, and consequently provided the necessary back up where appropriate and required.

The last of the constructs within the grid, ROUTINE - ACHIEVEMENT (C1) is closely related to FRUSTRATION-SATISFACTION (C2), in that the subject stated that it is only when something is achieved during a working day that a feeling of satisfaction may be experienced. In this instance rating has taken place on the basis of whether a responsibility was seen as routine or not. It is not surprising the ratings for 'C1 and C2' are similar.

**SUMMARY OF DISCUSSION**

**Individual Expectations**
- To feel he has achieved something
- To get satisfaction from the work carried out
- To have variety in the types of work
- To be able to control himself - make decisions etc.

**Expectations of Management**
- that they are supportive of him, and demonstrate confidence in him
- that they demonstrate trust in him
Expectations of others
- that they are reliable in doing a good job
- that they are conscientious like himself
  that they do not let social pressures affect their work, as he
does not

TRAINING NEEDS/COMMENTS

"I feel that training in some cases has been inadequate, they
have experimented here as regards improving aptitude I suppose,
some of the things that I would like to see are, if there are
courses they are made more personal, lower the numbers that are
involved. Other cases as regards what we are in it for. It
could be on cookers or central heating, seeing the appliances
that we are going to work on".

With regard to the style of training:

"they belittle you as regards their own standard of knowledge,
they tend to look down at you".

and in relation to local training:

"The 3m's and that sort of things is a waste of time".
"the remainder of it has been, if you don't know that don't worry
about it we will sort it out".

Specifically the subject stressed a desire for electrical fault
finding, and emergency procedure training.
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ELEMENT MATCHING SCORES — GRID 1

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The subject in this case very quickly grasped the principles of repertory grid technique, from its elicitation point of view. On reflection I consider this may be a result of his experience as a shop steward, whereby he is required to be articulate and thoughtful about his own job, and that of the persons he represents. This ability was not a common feature however in all discussions involving shop stewards, as will be seen in other sections of the analysis.

ELEMENTS

The finished grid is composed of seven elements.

1. **SAFETY**  Doing work safely and leaving it safe.

2. **STANDARD OF WORK**  To complete work to a satisfactory standard

3. **EFFICIENCY**  Doing what is expected of you (not essentially just productivity).

4. **COMMUNICATION**  Documentation, and Customer communication.

5. **APPRENTICE TRAINING**  Passing knowledge, and demonstrating the correct way to do things.

6. **SELF TRAINING**  Keeping oneself up to date with changes in methods and technology.
7. **IMAGE**

The way the Industry's customers see or view the industry through a service engineer.

The element tree is formed of one main cluster comprising five elements. Elements IMAGE (E7) and APPRENTICE TRAINING (E5) are matched at 97.2% and the remainder STANDARD OF WORK (E2) EFFICIENCY (E3) and SAFETY (E6) are matched at 88.8%.

There is no prominent statement within the transcript to tie APPRENTICE TRAINING (E5) and IMAGE (E7). The subject does however stress his concern about the present apprenticeship scheme in the latter stages of the discussion. Implicit within the discussion at this stage is a concern for the image of industry as perpetrated by newly qualified apprentices:

"You get cases where some apprentices aren't particularly capable of covering particular aspects of the job".

This could of course affect customer relations and in so doing reflect upon the industry's IMAGE (E7). As well as this, it is apparent from the grid ratings that the subject has similar feelings about the two responsibilities in all but one construct - IGNORED - ACKNOWLEDGEMENTS (C5).

The three remaining elements within the cluster are STANDARD OF WORK (E2), EFFICIENCY (E3) and SELF TRAINING (E6).
To maintain a good standard of work, and do it efficiently the subject considers it necessary to self-train.

"If you don't keep up with things as they are moving, as methods change, components change, I think you would obviously be a fool to yourself because you would get into serious problems when you tackle problems on the district".

Implicit within this view is that self-training will maintain the standard of work, which will in turn maintain or improve efficiency.

Since there are no other clusters within the element tree the remaining two elements are seemingly isolated, that is from each other and from the main cluster of elements within the grid.

COMMUNICATION (E4) is in the subject's view descriptive of the communication that takes place between the customer and himself.

"We don't really know that it might be a fault until we get there, so we have to discuss what has gone on with the consumer to sort out what the problem is".

While the subject recognised that it is a major responsibility of his to communicate with the customer, he does not consider it difficult. He consequently does not gain a great deal of SATISFACTION (C1) from this aspect of his work (rated at 3) nor does he see it as a CHALLENGE (C8) or providing great VARIETY (C6). In considering C5 (IGNORED - ACKNOWLEDGEMENT) the subject said about complimentary letters being sent to management,
"There used to be a time where if somebody did send a letter in, 
a photostat was made of it and sent down and your supervisor 
gave it to you - but unfortunately, now I don't think this is 
done."

This feeling is also reflected in C3 (FAILURE OF ACKNOWLEDGEMENT - 
CONCERN) which denoted the view that management were not concerned 

Safety (E1) is a responsibility that the subject and his management 
recognise must be upheld, in relation to the way work is carried 
out, and the way a job is left. This aspect of the work is routine 
to the subject and is reflected in a rating of '3' given in relation 
to SATISFACTION (C1) and CHALLENGING (C8).

CONSTRUCTS

This comprised nine constructs formed of two distinct clusters. The 
first of these comprised five constructs, three of which relate to 
the management's approach to this service engineer's job. The 
subject considers that management do not give his problems the 
recognition that they sometimes deserve - NOT RECOGNISING PROBLEMS - 
RECOGNITION (C2). He illustrated this by talking of a transport 
problem and summarised : 184
"I think a certain amount of it is failure on management part to look at what is quite a serious problem".

"The further removed you get from the work that we do the less is known about the problems".

The general view is substantiated by a study of the grid ratings. There are two areas however where management seemingly do recognise problems, SAFETY (E1) and EFFICIENCY (E3).

Closely related to C2 is C3 (FAILURE of ACKNOWLEDGEMENT - CONCERN). The subject accepts that management may at times recognise problems but choose to ignore them, or in his words: "they do not seem concerned about them".

"They have got an 'us and them' situation".

"They seem to say as long as the work gets done, they are not particularly concerned about how, why or where, as long as they don't get problems themselves".

Contrary to this statement are the ratings given to SAFETY (E1) and STANDARD OF WORK (E2), both rated at five. The least concern is shown towards COMMUNICATION (E4) and SELF TRAINING (E6) both rated at three.
Construct 4 (MISINFORMATION - INFORMATION), while the subject did not elaborate too clearly on this construct he seemed to be saying that management could provide him with information that he later found out was not correct, or not totally accurate. This seemed particularly so in relation to APPRENTICE TRAINING (E5), SELF TRAINING (E6) and IMAGE (E7). It seems that the subject thought that at times his management were themselves misinformed, which of course was not then reflective of a style of management, he said.

"They are probably misinformed".

So these three constructs are reflective of the way the subject feels about management, the remaining two constructs within the cluster are more to do with the subject and his feelings towards the job. These feelings though are again reflective of the management style in my view. Construct 6 (FED UP- VARIETY) refers to the repetitious aspects of work. At one time the subject seemingly found his job lacked a great deal of variety.

"This is perhaps another reason why I went as shop steward, I got fed up being a service engineer".

The move to being shop steward, as it would seem, made a considerable difference to the subject, in relation to the variety he now sees in his work. The degree of variety seen in a job can be related to the individuals confidence to deal with a range of situations.
It seems likely that the subject's confidence to deal with anything may have contributed to his original feelings at the job lacking variety.

His confidence is illustrated in construct 9, (PERTURBED - CONFIDENT), which is highly rated by the subject.

"A certain amount of confidence you will lose if you come across something you have not yet before".

"Obviously you are a little bit put off, you think - what is this? - but then your knowledge comes out and you think - well it can only be one thing or another - and then you apply basics and then you sort out the problem".

Cluster two within the grid comprises four constructs. Three of these are closely linked, DISSATISFACTION - SATISFACTION (C22), UNHAPPY - CONTENT (C7) and MUNDANE - PROBLEMS/CHALLENGE (C8). Having a problem or challenging situation leads to satisfaction according to the subject.

"The job you are doing is a problem, you are approaching a problem to start with, the customer has got a problem, so she gets on the phone, otherwise you would not be there. It's that aspect of it probably that you get your satisfaction from, because your work entails sorting out a problem".
The grid ratings show this well in that where C8 (PROBLEMS) is rated low, C1 (SATISFACTION) is rated low, and vice-versa. One rating here does not follow the general trend. In relation to APPRENTICE TRAINING (E5) the subject clearly does not see this as a major problem but nevertheless finds it very satisfying.

This probably reflects his desire to help people, and in the same way that he may train an apprentice he can help his workmates, and does so by being shop steward.

"It's nice to sort out a problem, because you can go back to a friend and say its alright mate, don't worry about it, it's all sorted out".

The degree of CONTENTMENT (C7) results from many things, the subject talks of contentment in relation to the total job.

"I feel that everyone likes to feel contented, if they are not contented then it is time to give it up and call it a day".

"I don't think I am particularly ambitious. - This is why I have never, at the moment, pushed myself in other directions, I am quite content".

It is difficult to relate C7 (UNHAPPY - CONTENT) to any one or number of other constructs.
While I would guess that some constructs could be more effective on contentment than others, what these may be was not categorically stated. One could surmise that a lack of job satisfaction (C1) would affect the degree of contentment derived from the job, as would those constructs that reflect management style.

The subject talked at some length about C5 (IGNORED - ACKNOWLEDGEMENT). This construct pertains to management and the degree to which they inform the individual of how he is doing at his work, and to some extent whether they see him as a person or a work unit.

"Well I think you are probably taken for granted. Not specifically, it is a question of that you do work in a big industry and you tend to end up as a pay number, and I think that after you have lived with that for a little while you have to learn to put up with it. But I think there is a lack of acknowledgement that way".

"I think it is nice to be acknowledged. If you have done something well and have done it properly, then a word in the right place doesn't go amiss."

This is the lowest rated construct within the grid, with '2s' against EFFICIENCY (E3) and COMMUNICATION (E4) and '3s' against STANDARD OF WORK (E2) and APPRENTICE TRAINING (E5).
While this would appear to be effective over a wide section of the subject's work, it seemingly is not as important as it may first seem. As he says, it's nice to be told you have done a good job, but if he can satisfy himself he appears to be happy.

"So long as I can complete a particular job and it is satisfactory and there are no problems, no call backs, then I am happy about it".

"I have a complete range of work to cover, so I have to complete them all, and if I have done that and there are no problems afterwards, no comebacks, then as far as I am concerned that is a feather in my cap."

SUMMARY OF DISCUSSION
Individual Expectations

- To get satisfaction from the work carried out
- To feel confident to cope with the work required of him
- To have variety in the types of work carried out
- To be happy and content with the work and work environment
Expectations of Management

- They should more effectively identify work problems

- They should show more concern for those problems that are recognised

- They should provide him with accurate information, and be more effective communicators

- They should acknowledge the work he does, not treat him as a number

- They should provide work which is challenging to maintain interest (could be related to structure or type of work).

TRAINING NEEDS/COMMENTS.

"is to go back a little bit more to basics, and obviously not to spend too much time on it, but just to see how they perform doing simple tasks, obviously cover as full a range as possible of things they are going to meet on the district, you know all aspects of work, such as servicing, type of appliances that they will be installing, things like that".

The remainder of the conversation referred to the subject's view of apprentice service engineers training needs. He considers that the apprenticeship training programme should include Social Studies. He also considered that the present scheme was not long enough.
"Because of the broad aspect of things that we cover, don't think they are given time to absorb as they go along".

"I think the three year training that they do at the moment is a bit of a treadmill and I think that they are missing a lot as they are going along because they tend to be pushed through it a little bit quick".
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## FS 11

**Element Matching Scores — Grid 1**

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**Rigged Grid 1**

![Graph](image)
The subject was for most of the discussion clear and concise about his job and his feelings towards it. He seemingly has come to terms with his job and the duties and responsibilities related to it. I feel it important to mention this at this stage, as the subject is younger than most of the subjects for this research have been. At twenty-four he displayed a very mature and responsible approach to his work. This will be substantiated within the analysis proper.

**ELEMENTS**

1. **SAFETY**
   Working in a safe manner, leaving a job safe.

2. **CUSTOMER RELATIONS**
   Turning up at the job, being polite, clean and efficient, and doing the job.

3. **APPRENTICE TRAINING**
   On-job training of apprentices.

4. **PRODUCTIVITY**
   How well you do the job, how many jobs you do in a day-related to efficiency.

5. **STANDARD OF WORK**
   Doing a good job - a job that lasts - reliable workmanship.

6. **SELF DEVELOPMENT**
   Keeping up-to-date technically.
7. **EQUIPMENT**

Looking after tools, equipment and van, ensuring security and safety standards are upheld.

8. **OTHERS**

Responsibility to others for communication, letting them know what I have done.

9. **COMMUNICATION**

Report back to supervisor, documentation and associated verbal reports.

The element tree in this case is formed of one main cluster, comprising five elements. Constructs '8' and '9' OTHERS and COMMUNICATION respectively are very closely linked since they both refer to communication, but in differing forms. The element COMMUNICATION (E9) refers to written communication, principally associated with documentation, which would be to the subject's supervisor or middle management.

"Communication perhaps, you know letting people know what you have done and what is going on".

"I always make sure that I make my reports, the report on the back of the job card as clear as possible as to what has happened".

So the subject clearly recognises the importance of this aspect of his work in relation to his supervisor's needs.
As well as this he recognised that there are others in his working environment with whom he must reliably communicate, hence the element OTHERS (E8). Here the subject is to some extent referring to written communication, for he says that the report he makes may assist engineers who follow up on jobs completed by himself.

"If somebody else has to go round to the job to do something, they know what they have to do before they go".

Implicit within the discussion is the aspect of problem sharing, which may take place between himself and his fellow service engineers, and the sharing of information. The difference between the two elements then is that one refers to communication with the supervisor, and the other to his fellow engineers. The similarity of these elements has resulted in the ratings against each of the constructs being the same or similar.

The three remaining elements within the cluster are inter-related to each other by the way they are effective upon each other. In fact SELF TRAINING (E6) and EQUIPMENT (E7) are both effective upon the subject’s STANDARD OF WORK (E5). SELF TRAINING is in the subject’s view keeping technically up to date by reading the information that is passed to him.

"If you read something on it, or an aspect of it and you go round to something and see it, you say yes I know about that, you have read it or you have seen it, so it does affect you, because although you don’t actually physically look out for it, but when you come across it you say oh yes I know".
SELF DEVELOPMENT (E6) is seen as a difficult thing to achieve at times, reading does help but he sees that learning takes place from practical experience.

The implication here is that failure to read the information supplied can affect the standard of work, since it may not be possible to carry out a job without some additional, specialist, or up-to-date knowledge. In relation to EQUIPMENT (E7) the subject said:

"Making sure you have the right tools is quite important"

He infers by this statement that to do a good job he must have the appropriate equipment/tools. In addition they should be in good condition, for safety reasons, and for him to be able to do a good job. He saw this as an on-going responsibility which included the Sega Van he uses regularly. The subject considered that the lack of appropriate tools is effective upon his STANDARD OF WORK (E5).

"If you have to start using a hammer and chisel on it, when all you need is a big drill or something, I mean that ruins your job then".

"you can't develop yourself until you have done two or three jobs and seen what mistakes you have made".

The ratings accorded to these three elements (E5, E6 and E7) stand out as being particularly low in relation to five of the nine constructs, being '1' or '2'. The subject indicates by these that:
1. he is not given recognition by management for these aspects of his work (C5).

2. he is not given access to talk about these things with management (C6).

3. management do not show interest in these areas (C7).

4. he (the subject) lacks self confidence in these areas (C8).

5. materials are not always available for him to do what the responsibilities (elements) imply (C9).

Elements '2' and '3' CUSTOMER RELATIONS and APPRENTICE TRAINING respectively, are matched within the element tree. There is no clear statement within the transcript to link these two together. The ratings however are similar and as such denote that the subject views them in similar ways in relation to particular constructs. In respect to CUSTOMER RELATIONS (E2) the subject talking of job SATISFACTION (C3) said:-

"It's when you are pleased with it, you know, you can walk away from it and feel happy, because the customer is happy".

and

"I hopefully have pleased the customer, and so long as they are reasonably pleased with what you have done, you can walk out with a clear conscience".
The subject expressed personal concern about CUSTOMER RELATIONS a number of times throughout the discussion. The indication is, by the rating of those constructs that refer to the self, that he is capable and confident to deal with this aspect of his job.

APPRENTICE TRAINING (E3) is rated the same as CUSTOMER RELATIONS against three constructs. Against all others it is rated slightly lower. The subject recognised his responsibilities for the on-job training of apprentices, but at the same time recognised that it was often not practical. He implies in one statement that apprentices become a second pair of hands to assist on-the-job, and as such are misused. They are accompanying engineers who have routine 'double-handed' work to do, rather than accompanying engineers with specialist knowledge or work to do from which they will learn. They would learn from any on-job experience, but the amount of learning is minimised by the manner in which they are appropriated. SAFETY (E1) and PRODUCTIVITY (E4) are shown separately on the element tree, although in many ways they are similar. The subjects describe PRODUCTIVITY as:-

"Doing a good job and efficiently. But the efficiency may be a way to describe it, there are probably two ways that you can do this, the efficiency in terms of how well you do it, and how many jobs you do in a day".

Doing a job well also means doing it safely, with safety in mind. The first priority for the subject is SAFETY (E1). Having asked what he considers his responsibility to be, he said:

"The first thing is safety".
The ratings accorded to these two elements signify the importance of these responsibilities for both himself and management. Although PRODUCTIVITY (E4) is rated slightly lower it is the second most highly rated, next to safety, within the grid.

CONSTRUCTS

The construct tree is loosely constructed, there being only one real cluster, comprising four constructs. The remaining five constructs are formed of two pairs and one on its own which is LACK OF CONFIDENCE (C8). This is the only construct within the grid which considers the ability of the self (the subject) in relation to the elements.

He considers himself to be lacking in confidence to some extent in relation to all elements with the exception of SAFETY (E1) and COMMUNICATION (E9).

This may well be reflective of his apprehensive nature towards the remainder of his responsibilities. He says:-

"You have got to sort of psyche yourself up and prepare yourself for the onslaught and think well, and think perhaps the knowledge that I have already got can help me to do this one".

This seeming lack of confidence possibly results from the fact he only finished his apprenticeship four years ago.
He therefore has limited experience, as well as this he identified a fairly long and comprehensive list of training needs at the end of the discussion; this list is contained later in this analysis.

The subject stated that one of his aims is to get JOB SATISFACTION (C3), the alternative to being satisfied being FED-UP (IMPLICIT POLE C3).

"It's when you are pleased with it, you know you can walk away from it and feel happy, because the customer is happy, you know that the job you have done is good, and if it was really awkward and you have got round a really awkward situation, then you can feel satisfied with that".

The subject seems, by the ratings, to derive some satisfaction from most aspects of his job, but is a little fed up with his responsibilities towards EQUIPMENT (E7), OTHERS (E8) and COMMUNICATION (E9).

The subject mentioned 'awkward jobs', during the discussion on SATISFACTION:

"It could be said in relation to the two constructs that the more awkward (taxing) a job is, the greater the satisfaction will be derived from it. This is implied by the subject within the discussion".

"It would be nice, say 15 minutes once a year, for the manager to see you and say - how are you getting on, any problems?"
"I think the business as a whole is 'built on', in general terms, it is like, shop floor, middle management, and to management on top, and all we ever seem to do is communicate with middle management. Nobody means anything to you that is above you, because you never see them".

The subject also thought that should he be able to see and talk to those he termed as top management, they would be understanding of his problems. Since it was not in his view the practice of management to spend time with him and his fellow workers, he considered this represented a lack of interest on their part. To illustrate this he spoke of the time when he was an apprentice and wished to speak to someone about his college work.

"There seems to be a genuine lack of interest".

Judging by the ratings given to this construct the subject considers that (they) are really only interested in SAFETY (E1), PRODUCTIVITY (E4) and COMMUNICATION (E9), rated at '4' or '5'.

The construct NO CONSIDERATION - CONSIDERATION SHOWN (C1) was elicited from a discussion about a particular job.

In that case, a SEGAS representative planned a job without giving consideration to the way it could be practically carried out by himself. He spoke of a further situation involving administrative staff, where again he considered he was not shown consideration.
The construct C1 represents those in his environment who he feels should show him some consideration, including management.

The remainder of the constructs represent the subject's feelings about management. Constructs '2' and '5' INFORMATION and RECOGNITION respectively reflect the subject's feelings about management communication. NO INFORMATION - INFORMATION refers to technical or procedural information as supplied by management.

Generally the subject considers he is supplied with the information required except in relation to APPRENTICE TRAINING (E3) rated '1'. This form of communication could be classified as routine for management, whereas NO RECOGNITION - RECOGNITION (C5) refers to verbal communication as given by management.

The form of verbal communication to which this construct refers is whether management give recognition for the work done by the subject.

"I don't really mind if no one says anything unless it is a really difficult job, and if I have got someone off my supervisor's back, or my D.S.O's back (District Service Officers) - and if I have got them out of trouble".

So the subject is not too bothered about whether he gets recognition or not, except in particular instances as indicated above. The construct was rated low against all but two elements, CUSTOMER RELATIONS (E2) and PRODUCTIVITY (E4).
The cluster within the construct tree comprises four constructs. Each of these reflect generally the subject's feelings about his management. Matched together are the constructs NO ACCESS - ACCESS TO MANAGEMENT (C6), and NO INTEREST SHOWN - INTEREST SHOWN BY MANAGEMENT (C7).

The subject stated that he had no opportunity to speak to management, and management did not speak to him. This view is encapsulated within the construct ACCESS (C6).

The only responsibility he really feels people are considerate towards is SAFETY (C1). Matched with this construct (C1) is construct NON-AVAILABLE MATERIAL - MATERIAL AVAILABLE (C9).

"I suppose one of the things that gets you going is when you get to the stores. Say you came back here for a bit, and it is not here, and you have just told the woman, I am ever so sorry your 'solenoid operator' has gone, I will just pop back and get one..............
- and they haven't got one, that really annoys".

Such comments relate to the 'local store', spare parts stock level. The subject considers that the materials generally available to him are inadequate in relation to the majority of his responsibilities, in fact all of them except SAFETY (E1). The effect on the individual of the two constructs is that both in their own way create some difficult situations, between the subject and the customer he visits during his work. In relation to construct '1', the subject given inadequate materials may lead to the subject leaving customers appliances not working.
SUMMARY OF DISCUSSION

Individual's Expectations

- To derive satisfaction from his work
- To be confident to carry out his responsibilities
- To have the knowledge to efficiently carry out his work
- That he finds challenges in his job to maintain interest

Expectations of Management

- That they show consideration towards his responsibilities and requirements.
- That they provide the information he needs to carry out his job.
- That they give recognition for his efforts where appropriate.
- That they give the opportunity to talk and discuss particular issue.
- That they show more interest in him and his role within the organisation.
- That management should provide adequate stock materials to satisfy demand.
- That they provide modern tools to make his job easier (eg power tools).
Expectations of Others

- That administrative staff provide information about work.
  This is important where the job is a call back to a recently completed job.

- That Segas representatives provide adequate job instruction on job cards etc.

TRAINING NEEDS/COMMENT

- Installation of kitchen units and associated equipment.
- Installation of shower heaters and units.
- Fault finding on advanced electrical equipment.
- Refresher training and the use of the BGC meter.
- Refresher training on the Gasco seeker.
- Refresher on safety aspects of using power tools.

The subject considers that he requires the above training. Some of this refresher training he feels necessary because of his infrequent use of the equipment mentioned thereof. A way of satisfying their needs, he suggests, is for trainers to travel around the depot. While he recognises that it would cost money to set up, it could save money:

"It would clear a job quicker, perhaps in one call".

Of the situation now he says:
"You book up a technician when it does'nt need one" (To solve a simple problem - implied here).
Since the perceived training needs of the individual cover so many areas, I consider this may reflect his lack of confidence, as discussed within the analysis of constructs.
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Others available
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Correct Information
Planning not effective
Enough equipment
### FS 15

**Element Matching Scores — Grid 1**

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**Construct Matching Scores — Grid 1**

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**ROSED Grid 1**

![Graph of ROSED Grid 1]
This was an interesting discussion with a subject who expressed himself well. The interesting views that this person has are perhaps a result of him having previously experienced employment outside the Region in recent years. This is different from the general trend, which is for a service engineer to join the industry as an apprentice, and stay with the Region, until retirement. This person has rejoined the Region within the last four years.

ELEMENTS

1. **SAFETY**
   Learning how to work safely

2. **CUSTOMER RELATIONS**
   Being diplomatic, communicating with the customer and being polite.

3. **IMAGE**
   Looking clean and tidy - the image of the industry is projected by - the service engineer.

4. **STANDARD OF WORK**
   Keeping the customer happy, carrying out repair work which is reliable, working efficiently, completing a job in one visit.

5. **APPRENTICE TRAINING**
   Showing apprentices how to apply what they have learnt at college in a practical environment.
6. **SELF TRAINING**  Keeping oneself up-to-date with changes in technology.

7. **COMMUNICATION**  Having to communicate effectively and accurately with supervisors and fellow workers.

8. **WORKING WITH COLLEAGUES**  Having an understanding, being helpful to each other in problem solving and general working.

9. **EQUIPMENT**  Responsible for looking after a van, appliance spare parts and tool kit. Being mindful of the danger of poor maintenance.

10. **PRODUCTIVITY**  Maintaining a work rate (trend) in terms of the number of jobs completed.

(NB. This element was added following the elicitation of construct 7 - INFLEXIBLE - ADAPTIVE).

The element tree is formed of two main clusters each comprising of three elements. Two further elements are matched at 70%, with others closely clustered at 62.5% and 60%.

Cluster one comprises CUSTOMER RELATIONS (E2), PRODUCTIVITY (E10) and EQUIPMENT (E9). The ratings given to the subject in each of the ten constructs is very similar.
From the individual's point of view he is, for instance, fairly satisfied with these aspects of his work. At the same time he finds none of these responsibilities particularly challenging. These issues will be discussed further within the analysis of constructs. What is important here is the links between the three elements as the subject sees them. In fact there are no clear explicit statements to link these elements.

Implicit within the transcript though are a number of described instances which bring them together. Since EQUIPMENT (E9) is descriptive of tools, transport and materials it seems that this one element at least has an effect upon PRODUCTIVITY (E10) and CUSTOMER RELATIONS (E2). Low stocking levels both on the van and at the local store, directly affect productivity. Examples are quoted throughout the text.

"The fact that the van stocks have altered now, the parts are alright for the fittings side of it to do a job are a bit sparse now, one job is enough to use your small amount of fittings and then you have got to return back to the stores for more".

This is especially so if the subject has travelled from a job to depot to discover a particular part is out of stock. In this situation there are repercussions for the consumer, in that an expected immediate repair/replacement will probably be five days away, or until a part arrives at the local store. Time wasting of this nature is obviously effective upon productivity, and upsetting for the customer.
At times there would also seem to have been a shortage of specialist tools and equipment. Since these may be labour saving their shortage will again affect productivity and maybe customer relations, as the job takes longer and may well create for the customer more domestic upsets and inconvenience.

Cluster two is formed of STANDARD OF WORK (E4), APPRENTICE TRAINING (E5), and SELF TRAINING (E6). In this case the STANDARD OF WORK is related to "E5" and "E6" from the viewpoint that lack of, or poor, training may affect the standard of work. The subject has rated these elements high at '4's or '5's so he considers that management are concerned about these aspects, and they are given a fair amount of consideration.

"Satisfactory workmanship is the worst part, because you are getting new appliances, bits and pieces fitted on appliances".

The subject considers himself responsible for some training and feels, as indicated above, that self training is necessary to maintain a satisfactory level of workmanship. This for the subject is understood to be clearing a job on a single visit without callbacks. (a term describing the need for further visits)

In relation to APPRENTICE TRAINING (E5) he said,

"you have got to show the apprentice how to get over difficulties that the college don't show them".

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The subject has made little reference to apprentices, but implicit within the transcripts are indicators which tie these together. To further develop the self training issue: if the subject is not up-dating himself, how can he effectively train an apprentice? This is an important issue since the training carried out by the subject may ultimately contribute to the work standard of the apprentice. This may show itself by the general approach taken, or the lack of skill and knowledge displayed by the apprentice.

The subject recognises the importance of COMMUNICATION (E7) as part of the job with regard to his relationship with his supervisors. This operates at least at two levels, reporting the outcome of work, and interpreting instructions. It implies that providing this particular responsibility is recognised and carried out effectively, the supervisor/subject relationship will be satisfactory. In the same vein WORKING WITH COLLEAGUES (E8), is seen to be an essential part of the job and about working relationships.

"If somebody comes in with a problem and they want help, you discuss it with two or three of your mates and that, and you try and get some solution to it".

At the same time it relates to communication, which it would appear is a major part of what working with colleagues is. It seems from the subject's point of view that the most effective factor influencing these two areas is the availability of information as supplied by management (C5), rated '2' in both cases.
Two elements remain which are isolated from each other and the other elements in the grid. IMAGE (E3) at one end of the scale is rated very low, at '3' or below in all but one case. It seems there is little regard for this aspect of the subject's work demonstrated by management. To put this into perspective, IMAGE as seen by the subject is the way the customer sees him, and based on the way he looks (appropriate) when visiting customer's premises to carry out his work.

"but you can get a sooty boiler in the morning and you don't get time to change at dinner time, so therefore you have got to go into someone else's house looking like a bag of coal".

"another thing is the issue of boiler suits is insufficient, we get two sets so in one week you can use both of them. If you turn up in a pair of jeans because they are the most sensible thing to use when you haven't got a boiler suit, the governor goes mad."

So image is important to the subject but in some was not so important to those around him.

The second which is seemingly on its own is SAFETY (E1). Along with most service engineers this is seen as the most important responsibility.
"That is always the biggest criteria. It doesn't matter if the appliance is old, or if it is a new appliance, the thing is to leave it working to your best ability and working safely".

In this context management too are concerned about safety to supply anything or do anything to uphold safety standards, in the subject's view. This can be recognised by the high rating accorded to this element in all but two cases. Against construct '3' (rated 1) he is saying that working conditions can affect his safety standard, and against construct '1' BEATEN - SATISFIED, rated '3', that he is neither beaten nor satisfied by the safety responsibility. This is often the case, safety is a routine task related to each and every job.

CONSTRUCTS

Ten constructs were elicited during the discussion which form two clusters within the construct tree. Cluster one comprises three constructs, all of these relate to information or those who supply it. Two constructs are very closely related since they are about technical information and its availability. INFORMATION NOT AVAILABLE - INFORMATION AVAILABLE (C5) refers to technical information which is available from both technicians and supervisors. The subject implies that the technicians usually have the required information, but of the supervisor he said,
"some of the supervisors aren't that co-operative, either they are not available, or when you get in contact with them they turn round and say, 'well you are on site you solve the problem yourself'"

While the technicians are usually capable of supplying information or solving problems it seems they are rarely available.

"Usually you want information there and then, it is not a case of that you can go back in a couple of hours' time, or that afternoon or the next day, you want information there and then, so it used to be before. I mean now we have got four technicians, so shall we say we have got plenty, but nine times out of ten they are out on the district doing their own work."

This statement refers to construct '6', OTHERS NOT AVAILABLE - OTHERS AVAILABLE, which refer to those people who are in a position to provide information for the subject. The information theme seems of some concern to the subject as discussion at this point was long and enthusiastic. Of particular concern to the subject was the effect of these people not being available to advise him. As well as affecting CUSTOMER RELATIONS (E2) and IMAGE (E3), PRODUCTIVITY (E10) is reduced, but these were not the major concern of individual. He said at times he needed advice on safety issues. Where no staff were available it was necessary to make the decision himself, which was always difficult because of the various interpretations of regulations, and the inflexible attitude of his supervisors.
The third construct within the cluster INCORRECT INFORMATION - CORRECT INFORMATION (C8) refers to the information supplied on job cards (his work instruction sheet). This is a particularly important issue for the subject, in that incorrect information often indicates that the job to be carried out is a call-back. This can imply that the subject's work is poor and not of the required standard. This often leads to confrontations between his supervisor and himself.

The source of this problem, in his view, is the office staff who answer customer enquiries. In short the subject is saying that frequently different jobs of work may be required in a house that has had work done within the preceding four week period. Unless the enquiring clerks ask the right questions of the customer and then record it correctly, the new job will show up as a call-back. Such a situation always leads to the supervisor questioning the quality of the work carried out, and leads to an inaccurate call-back record for the district.

"- If the customer says there was an engineer here only a fortnight ago, they don't look into it far enough to see whether that call-back was on a gas fire, gas fridge, gas cooker, central heating boiler, or what, as long as you have been in the house 28 days ago, that is a call-back".

Cluster two is formed of four constructs. Of the four, the closest links are between BEATEN - SATISFIED (C1) and GUTTY - CHALLENGING (C2).
Being satisfied is feeling good at having done a good job, and the extent to which the subject feels good is related to how challenging any part of the job may be. Generally the subject is satisfied with this type of job which may be a result of the work he is usually employed on. He says that there is great variety in the work that he does, and he likes a challenge. He is, it seems, dissatisfied with IMAGE (E3) which relates to the view earlier discussed concerning boiler suits.

It would appear that the supervisor/subject relationship is not altogether a happy one. There are a number of instances described in the transcript which are summarised by the following:

"Well they always listen, but whether they take anything over is another thing"

and

"there is arguments both sides, but nine times out of ten because he is the supervisor he doesn't care what you say, he is 99% right."

Such a discussion eventually went on to the elicitation of TAKEN NO NOTICE OF - LISTENED TO (E4). This construct is rated particularly low in relation to IMAGE (E3), APPRENTICE TRAINING (E5), PRODUCTIVITY (E10) and EQUIPMENT (E9), all rated '2'. Equipment, which is descriptive of van, tools, materials and clothing as supplied, seems to be a constant source of aggravation.
Originally identified as an element (E9) and as such a responsibility, the subject considered that there are inadequacies in some reports. I have discussed the boiler suit problem, but there is also the protective shoes incident which was used to describe the manager/supervisor's listening/action ability.

"We have a participation committee down home which is there to thrash out any local irregularities in working ways and things that come up, on this committee one thing we brought up was protective clothing and footwear -

- It is a long winded process to get anything sorted out by this participation committee, at one time it completely broke apart, there were no meetings at all".

NOT ENOUGH EQUIPMENT - ENOUGH EQUIPMENT (C10) also pertains to specialist or motorised tools. The subject said they were much better off than they used to be, but the specialist tools etc that are seen in the technical booklet "ASPECTS" tend to be lacking in some respects.

The subject believes that supervisors take little action as a result of his requests even though they may listen attentively. This view is to some extent supported by construct '7' INFLEXIBLE - ADAPTABLE.

"They can be adaptable, but only in certain areas, in some areas they stick rigidly by the rules, but in other areas they are flexible".
The subject feels that they are particularly inflexible in relation to EQUIPMENT (E9), PRODUCTIVITY (E10) and CUSTOMER RELATIONS (E2), all rated at '3'. The subject recognised that there are rules and regulations, but at times they are too rigidly adhered to, and as such could cause him some problems in relation to the afore-mentioned three elements.

Constructs '3' EFFECTIVE WORKING CONDITIONS - NON-EFFECTIVE WORKING CONDITIONS (C3) and PLANNING EFFECTIVE ON-PLANNING NOT EFFECTIVE (C9) are outside the previously discussed duties. These constructs are rather different in nature as they are descriptive of affect on the identified responsibilities rather than the individual feelings about them. The subject says in this context that the environment can affect the way he does his work. His safety standard (in relation to practices, not the finished job) may be affected, as will customer relationship, image and productivity. By changing or differing environments he is differentiating between clean work and premises, and dirty work and premises.

On the question of PLANNING (C9) this too can be effective on CUSTOMER relations, image, self training, working with colleagues, equipment and productivity. A shortage of work or too much work, caused by bad planning, appears to be high. While the subject recognised that much of the planning was done by computer, he considered much of it was due to human error, and described an incident to illustrate.
SUMMARISED DISCUSSION

Individual Expectations

- To be satisfied with the work performed.

Expectations of Management

- That they should listen to his views/ideas, and take notice of them.

- That technical and procedural information is always available to him.

- That technical and supervisory support is available when required.

- That management are more flexible and adaptive in meeting the subject's needs.

- That the work provides variety and challenge.

- That they provide appropriate equipment for his work in terms of tools, materials and protective clothing.
General Expectations

- That information supplied through the administrative section is more detailed and accurate.

- That more thought and care is given to work planning.

TRAINING NEEDS/COMMENTS

As an individual the subject was concerned with his knowledge of electrics. He felt that often the training carried out off the job did not assist him in overcoming the problem he had to resolve on the district. Much of this was due to the ideal conditions of a purpose built training centre compared with the on-job impracticalities. This was especially so when related to central heating electrics.

The remainder of the discussion focused on the need to be refreshed on the use of specialist equipment. This is felt necessary as the equipment was used so little by some staff that they tended to forget associated practices and procedures.

Equipment mentioned

Freezer Equipment
Scaffolding/Staging
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- Cheesed off: Satisfied
- Ignored: Listened to by Management
- Dissatisfied: Satisfied
- Lack of Comments: Communication
- Not Effective Pressure: Effective Pressure
- Boring: Interesting
- Non Supportive Management: Supportive Management
- Non confident Suppliers: Confident Supplier
- Non Confident: Confident
- Not enough Knowledge: Enough Knowledge
SUBJECT FS.19

ANALYSIS OF DISCUSSION

Much of this discussion concerned the subject's view of his management. As a result of change in management and the present economic climate many things were happening that he seemingly does not like. These will be discussed within the analysis. It is interesting though that only three of the ten constructs which were elicited refer to his feelings about himself, all others refer to his view of management.

ELEMENTS

1. SAFETY
   To the consumer - working safely - leaving work safe.

2. STANDARD OF WORK
   Doing a satisfactory job, the self and customer.

3. APPRENTICE TRAINING
   Training on-job - to include customer relations - upholding image of the industry.

4. CUSTOMER RELATIONS
   Dealing with the customer.

5. IMAGE
   Keeping up good appearance

6. SELF TRAINING
   Technical updating

7. COMMUNICATION
   Correct completion of work documents and associated paperwork. General communication with the supervisor.
Two clusters are formed within the element tree. Cluster one comprises three elements, CUSTOMER RELATIONS (E4), IMAGE (E5) and SELF TRAINING (E6). Customer Relations refers to the dealings the subject has with customers during his work, since almost all the work carried out by a service engineer is in a customer's premises, this is a particularly important part of his job. While not clearly stated, 'dealing with the customer' is communicating, sorting out their problems to their satisfaction. Closely related to this is the responsibility for the industry's IMAGE (E5).

(NB 'Board' in the following statement refers to SEGAS, it is taken from the old name of the industry before being made a Corporation).

"because the customer see the Board through you. What you are like to a customer is how most people associate the Gas Board".

In the above statement, the two characteristics or elements are presented together. "What you are like to a customer" reflects the subject's view of his responsibility. The remainder of the quote is about image.

"I think they are two separate things, customer relations and image, I mean people who have never even dealt with the Board do have an image of the Board. I mean what people have heard of or have seen in the papers."
I think you can't put image and the other thing together, I would see them as two different things”.

The subject saw a clear relationship between these two elements and the third element in the cluster, SELF TRAINING (E6).

"It is in your interest as much as the consumer's and as much that it is the Board's, to find out about these problems”.

and

"It is to your benefit if you have got a problem to try and find out what it is, because the chances are that the problem will arise again, and if you don't have a clue the first time, you are not going to have a clue the second time".....

"Yes, I do feel that you have got a responsibility to self train yourself".

Self training is one of the means by which the subject can maintain good CUSTOMER RELATIONS (E4) and IMAGE (E5). This view is to some extent influenced by the subject's desire to maintain his bonus payments, for he says that if he cannot overcome problems he spends too much time on jobs and consequently loses bonus. This aspect seemed particularly important as it was mentioned on a number of occasions throughout the discussion.
While I have considered the element tree as comprising two clusters, it is possible to see one large cluster formed of six elements. In some ways this may be more logical since one element seems to influence all five others within the cluster. As discussed in the previous paragraph, the subject sees a direct relationship between SELF TRAINING (E6) and IMAGE (E5) and CUSTOMER RELATIONS (E4), in that if he does not SELF TRAIN he may not be able to uphold good CUSTOMER RELATIONS and IMAGE. A further statement during elicitation of SAFETY (E1) and STANDARD OF WORK (E2) established a closeness.

"-You have got a standard, your safety to the consumer, job satisfaction for the consumer".

and

"- You know in your own mind, or you should know in your own mind, whether the job that you are doing is as satisfactory to yourself, as it is to the consumer".

Implicit in these statements is a need to keep up to date in order to do a satisfactory job for the customer. There is a continual need to SELF TRAIN (E6) in order to overcome the technical problems associated with the subject's work, and maintenance of safety standards. This view can be extended to include APPRENTICE TRAINING (E3), which would require the subject to be up to date in technology. Also as the subject recognised, there is a direct link here with both CUSTOMER RELATIONS (E4) and IMAGE (E5).
"-Apprentices will try to keep the name of the Board, because if the apprentice do get the Board a bad name it does reflect badly on you anyway, by public opinion, so I suppose to a certain extent you must be reliable and responsible, yes!".

Construct '7' COMMUNICATION is very much on its own within the grid. During elicitation of the elements the subject recognised this as his responsibility for the correct completion of documents. At this stage the emphasis was on the ordering of correct replacement parts for appliances, and the possible loss of wages if his work documents are incorrectly completed.

"If you are ordering wrong parts up all the time and it is all costing money, indirectly, sooner or later the Board is going to say right, we are going to have to do something about this".

and

"The documentation, if it is wrong. For instance, if it is wrong on Monday and it doesn't get through until the Tuesday, there is a chance that you could lose that day's money".

During elicitation of constructs, the subject also included communication with his supervisor under the element title COMMUNICATION (E9).
This change in emphasis for the element has made a considerable
difference to the picture created by the subject's rating, in
relation to COMMUNICATION. The subject views communication between
himself and supervisor/management to be very poor. This is
reflected in the rating accorded to each construct, which are either
'1' or '2'. This will be discussed further within the analysis of
constructs.

CONSTRUCTS
The construct tree is formed of ten constructs. Two clusters are
evident within this tree which account for nine of the constructs.
Seemingly on its own, is the construct NOT AFFECTIVE PRESSURE -
AFFECTIVE (C5). This construct differs from the others in the grid
in that it refers to effect on the elements, rather than feelings
about them. The subject sees pressure as descriptive of time.

"Before bonus came in you could go into a job, and if you had
a problem you stayed there and you looked for it, and you
really didn't worry. After being on bonus for a period of
time you got to a job and you tend to start thinking, I am
running out of time, and you start thinking I have got to get
a move on here".

(Bonus in this instance refers to a productivity scheme).

Pressure seems to be effective on most aspects of the subject's work
which is indicated by the ratings of the '5' given to SAFETY (E1),
STANDARD OF WORK (E2), CUSTOMER RELATIONS (E4), IMAGE (E5), and SELF
TRAINING (E6).
It is initially surprising, in light of the subject's view of communication, that this is not rated a '5'. Since it is the subject's view that there is little communication taking place, the pressures created by time cannot affect something that in his view does not exist.

"I think there is a total lack of communication between us and line management".

The majority of constructs within the grid resulted from the subject's portrayal of incidents/events involving management. As a result most constructs are descriptive, in one way or another, of the subject's feelings about his management. The computerised analysis, which provides the element and construct trees, has not in my opinion taken a realistic account of the differences between those constructs which denote feelings about the self and those which are feelings about management. This is not surprising since the computerised analysis, although often accurate, is a 'number crunching' process and as such cannot always be totally accurate in its analysis of grids. This is important to note, since some constructs are formed into clusters which clearly mix the two types of constructs, in a somewhat illogical manner, in my view.

The first cluster to be analysed is formed of five constructs. Construct '1' CHEESED OFF - SATISFIED is descriptive of the subject's general feelings about the job. These feelings are derived from the description of an incident/confrontation with management which to the time of the discussion was unsolved.
"One instance which made me feel I would like to jack the job in, is we had a bit of a two and eight about a technician in the depot or technicians in general".

"We had a meeting with management and they have more or less told us that technicians are used to the way they want to be used".

"Since we had this two and eight, management have got petty - I think it is affecting a lot of blokes, they are getting cheesed off and not enjoying what they are doing".

While the subject stressed during the course of the discussion that he was very 'cheesed off', he does reflect this view in his overall rating of the construct. As is not really surprising the subject rated COMMUNICATION (E7) at '1', which is very 'cheesed off', which demonstrates the subject's general feeling towards management at this time. Further discussion about the confrontation led to construct '2' IGNORED - LISTENED TO BY MANAGEMENT. Ignored in this context means that no notice/action results from his dealings with management.

"and when we sat in the meeting he did admit that there was trouble, that there was a difference of opinion, but nothing was done about it, there was a lot of promises made, but really all that has come out of it is that the service engineers are being penalised."
So basically I don't think that management have really listened, they have listened but they haven't taken any action on it.

There are a number of issues under discussion here, the most important seemingly for the subject is whether management listen or not.

"We are expected to listen to management when they tell us something, so I think they should have the common courtesy, I think it is very important that they should listen to service engineers".

"When I say listen, I don't mean just listen, I mean I can listen to something which goes in here and come out here".

Implicit within the subject's views is a feeling of MISTRUST which is amplified by the following statement:

"They listen and while you are there they say yes, yes, yes, then once you have gone out of the room and they have got away from you they do something entirely different, they do just try and keep you happy while you are there".

Such expressed feelings are typical of the way the subject views his management, although his ratings indicate that this cannot be said in all situations, or related to all aspects/responsibilities of his job.
Management are seemingly more responsive to matters relating to SAFETY (E1), STANDARD OF WORK (E2), CUSTOMER RELATIONS (E4) and APPRENTICE TRAINING (E3).

The subject's view of his management is further strengthened by reference to the lack of support demonstrated in relation to some of the subject's responsibilities.

"They are not supportive, they will not back you up. Even if we know in our own mind that we are in the right, they will not back you up they would rather swing it to the consumer's way, you know we are only service engineers that work for the Gas Board and their attitude is, if you don't like it then leave".

It seems possible that the subject feels himself to be a victim of management. In some ways he is since they control him. Throughout the discussion though, the subject implies that he is being penalised or victimised for things which in his view he is not guilty of, or responsible for. In other ways his self-perceived responsibilities are being undermined, or his decisions over-ruled. It is for this reason I feel the subject sees management as being NON SUPPORTIVE (C7) in some respects. This construct is very closely related to the degree of CONFIDENCE (C8) the subject has in management/supervision.

"But you must have confidence in management. Then you know if you take a decision they are going to back you up".
At an earlier point in the discussion the subject said of his District Service Officer:-

"He is a right proper worry guts. He is the one who won't make a decision. I was on call one night, and fair enough Distribution (SEGAS Engineering Department) knew I was there, but he got into a panic, and he goes in like a bull in a china shop you know, you have got no confidence in the man you know, he will not find out just what has gone wrong or what the situation is, it seems that automatically the Gas Board is in the wrong".

It could be said that the subject's view is related to his perceived way of carrying out a management task. Because the management does not do things in a way he thinks they should be done, he is not too confident of their abilities. In relation to how supportive management are of him, it seems that this feeling arises when there are differences of opinion about jobs or decisions. The subject would appear too assumptive, in assuming that he is right and management are wrong. I cannot of course question this since I am not that subject, the question of who is right does have some relationship to constructs, SUPPORTIVE MANAGEMENT (C7) and CONFIDENT SUPERIORS (C8).

The last construct to be considered within this cluster is NON-CONFIDENT - CONFIDENT (C9) which refers to the self (the subject).
"I think you need confidence, you must have confidence, because on this job you must feel confident in your own mind that you can do a job, and also you must be a person that can go into a home and give the consumer the feeling that you know what you are doing".

The subject considered himself to be confident with most responsibilities related to his job. It is however interesting that the subject rated himself only '1' in relation to COMMUNICATION (E7). I personally cannot comprehend the reason why this is rated so low, except that the subject feels non-confident in this area. This however is not the feeling I got from talking and listening to the subject. It may be that the subject feels his communication with management is not effective, which is only one aspect of COMMUNICATION (E7), the other being the completion of job cards and associated documentation.

Since this affects his bonus payments, it seems unlikely that the subject lacks the confidence to do this correctly or confidently, since it is important, otherwise he will not get bonus payments. The question of bonus payments is important to the subject, on a number of occasions he spoke of the effect of incorrectly completed documentation and stressed the importance of the bonus payment to him.

"The documentation if it is wrong, for instance if it is wrong on a Monday and it doesn't get through to the Tuesday there is a chance that you could lose that day's money".

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The second cluster within the construct tree is formed of four constructs. Three of these are closely linked in that they further reflect the subject's feelings about management. SATISFACTION (C3) is something the subject feels he should get from the job he does. While he did not state clearly what factors would prevent him getting satisfaction from the job, he did talk of the effect.

"I feel you need satisfaction, I think if you are not getting satisfaction then things gradually fall about your ears. You have got to have some sort of satisfaction, if you don't have satisfaction then I think you tend to lose interest, petty little things start getting on your nerves, things don't always go as smooth as one would like".

The subject considered himself to be very dissatisfied with SELF TRAINING (E6) and COMMUNICATION (E7), both rated '1'. As COMMUNICATION had been rated low in relation to all previously elicited constructs I asked the subject why he is so dissatisfied with this aspect of his work. He said:-

"I don't really think that we communicate properly. I think there is a total lack of communication between us and management."

This view is substantiated from the many changes in working practices that are put into being, without consultation taking place between management and himself.
In relation to this the subject said:

"There is rarely enough exchange of ideas between us".

"I think the only way we ever find out about something is when they want us to know, they specifically go out of their way to tell us. They never think of coming over and saying well we are going to do this or we are going to do that, and I think it does cheese blokes off when something is changed."

This part of the discussion led to the construct LACK OF COMMUNICATION - COMMUNICATION (C4), which refers to management. This is rated '3' or below against five elements and '4s' against SAFETY (E1) and IMAGE (E5). Communication is discussed again in relation to the construct BORING - INTERESTING (C6).

"Communication, there is a distinct lack of it, and because there is a lack of it, I find it very boring, because you can't have something interesting if there is a lack of it".

While the subject refers to the lack of communication on a number of occasions throughout the discussion, he is not I believe really meaning that there is no communication. He implies that the communication is one way, which is down from management to him.

There is seemingly little or no opportunity for effective communication to take place from him to management.
He says at one point that his problems may move up two management levels, at this point the problem is left in the air until he gets fed up or tired of asking about it, then it is forgotten.

Construct 6: BORING - INTERESTING is descriptive of the subject's feelings about the total job, as created or effected by management. Management pettiness can, he claims, make his job boring, and as such diminish the amount of interest derived from his work.

"It makes you really lose interest in a lot of things. You know when you get your work in the morning you look at it and say this is a good one or that is a bad one, you look at your job and you are not interested anymore, you know the pettiness gets to you, you maybe go on a job and all you want to do is to get it done and get out".

I consider the term INTEREST here to be descriptive of the endeavour shown by the subject towards his job. This would be demonstrated by willingness, efficiency, and thoughtfulness towards his responsibilities. In effect he approaches his work in a very positive manner, and is not inconvenienced or put out by problems or difficulties such as have been titled PETTINESS.

Construct 10: NOT ENOUGH KNOWLEDGE - ENOUGH KNOWLEDGE, is the last to be considered within the construct tree, and in fact is the last in the grid. It is a straightforward consideration of the subject in terms of knowledge levels in relation to each of the elements.
The rating of this construct is interesting since it does relate directly to training. The subject considers he has a good knowledge of SAFETY (E1) and STANDARD OF WORK (E2), average knowledge related to APPRENTICE TRAINING (E3), CUSTOMER RELATIONS (E4), IMAGE (E5) and SELF TRAINING (E6) all rated a '3'.

As with all constructs rated against COMMUNICATION (E7) he considers he does not have enough knowledge, rated '2'.

SUMMARY OF DISCUSSION

Individual's Expectations

- To be satisfied with the job
- To get satisfaction from doing the job.
- To be interested, to want to do it well.
- To be confident enough to deal with the problems that arise, in the day to day work.
- To have enough knowledge to effectively carry out the duties and responsibilities associated with his job.

Expectations of Management

- That management will listen to what he says and be seen to take appropriate action.
- That management will do what they say they are going to do and not the opposite - being reliable.
- That management are more considerate and effective at communication.
- That communication be two-way and not one-way as it appears to be.
- That management are supportive of him in his decision making.
- That management display confidence in the job that they themselves do.
- That decision making be more participative, especially related to changes which affect service engineers.

**TRAINING NEEDS/COMMENTS**

The emphasis for training in the subjects should be towards electrics.

"With all the new electrical stuff coming onto the market now, we just don't know enough about them".

and

"There just isn't enough electrical training".

Also of concern to the individual, is the use of new tools and equipment. The subject stated that some new equipment has been issued without training or instruction in its use, which he feels could be dangerous. This is so since the use of such equipment is learnt by trial and error.

Updating of technical knowledge related to new appliances is seen as an on-going requirement. The training which should accompany the issue of tools, equipment and appliances is thought to be best carried out at the Old Kent Road Training Centre. The subject said of the trainers,
"You are supposed to be experts so you should be trained by experts as far as I'm concerned".

As well as this, the subject recognized the value of meeting other service engineers, which would happen if training is carried out at a central venue. Meeting other service engineers can provide the opportunity for group problem solving and exchanging viewpoints.
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<th>8 Not seeing</th>
<th>9 Lack of Information</th>
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<th>14 Opportunity to see Management</th>
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The subject is a very easy talker who seems to derive some pleasure from speaking about his work, and those people he works with. This was a long discussion which resulted in a grid comprising seven elements and eleven constructs.

**ELEMENTS**

1. **SAFETY**  
   Upholding levels of safety

2. **PROPER JOB**  
   Refers to the standard of work

3. **CUSTOMER RELATIONS**  
   To have good relationship with the consumer

4. **PRODUCTIVITY**  
   Completing a specific number of jobs

5. **SELF TRAINING**  
   Keeping oneself up-to-date with information and technology etc.

6. **COMMUNICATION**  
   With the customer and supervisor

7. **WORKING RELATIONSHIPS**  
   Getting on with the people the subject works with.
There is only one loosely formed cluster within the grid made up of five of the seven elements. There are only two elements which match, these are CUSTOMER RELATIONS (E3) and WORKING RELATIONSHIPS (E7). The subject says little of these two elements directly, although during element elicitation he said:

"I think you have got to have a good relationship with the consumer" (E3)

and

"You are involved with your workmates and I think it is quite a bit of it. If you don't get on with them it can make your life very difficult."

The elements are rated equally in eight of the eleven constructs, which signifies that the subject feels similarly towards both these elements. They are both directly related to people, which to me emphasises the importance the subject places on this aspect of the work. If the subject does not get on with people his job may indeed be more difficult, and consequently less enjoyable. It is one area where the subject feels management is considerate, and as such demonstrates some interest in, since they are both rated at '4'.

The remaining three elements in the cluster seem to be effective upon each other on the basis of how they might affect the outcome of a particular job. In the first place, it is necessary to interpret instructions in order to carry out the job satisfactory. These may be from the customer, supervisor, radio operator, or written on a job card.
On completion of the job a report is made out. The term used to describe these operations/responsibilities is COMMUNICATION (E6).

The job itself must be carried out to a good standard. The subject stated that he always did a reasonable job but knew sometimes that he could do better.

"If I think I could have done better and they say that I have done a good job I sort of feel a bit guilty, you think, I wish I had done that little bit extra you know".

This statement refers to what the subject calls a PROPER JOB (E2) or in other words the standard of work (Doing the job properly).

To maintain standards, the subject implied that he should keep himself up-to-date in terms of technology and appliances. To do this the subject saw that he should read the various forms of information that are sent to him.

"I think if they send things round for you to read and things like that, I think that it is your responsibility to read them".

and

"I don't think my job finishes at 5 o'clock or 4.30 or whatever, I think you have got to have a certain amount of self training".

The element elicited being SELF TRAINING (E5)
In my view the relationship here is clear and implicit within the discussion and grid. In the beginning instructions must be interpreted and as a result the job may be completed.

The standard of the completed job however may vary dependent on the knowledge/ability of the subject. The level of knowledge it seems may well be affected by the subject's own efforts to SELF TRAIN (E5). Finally the subject reports back on the job, which is the second part of his COMMUNICATIONS (E6) responsibility.

The final two elements are somewhat isolated from the rest of the grid and from each other, SAFETY (E1) is seen as an important part of the job by the subject.

"Everything you do is built 'round safety, that is your ultimate aim really".

While the subject recognised the importance of upholding safety standards he does not consider that management are particularly concerned. All but one of the seven constructs which relate to management within the grid are rated at '3' or less in relation to safety. Further discussion on the safety aspect will take place in the analysis of constructs.

An area that the management are concerned about in the subject's view is PRODUCTIVITY (E4). This element is highly rated against all but one of the eleven constructs.
The subject too felt it important,

"I think I have got to get so much done like, you know".
"The more work you have done the more happier you are".
"I can appreciate that they have got to push the work out, but
it is their attitude towards you. I mean it is the way they
tell you to do things, they do not ask you".

and

"They don't seem pleased when you go out and do it, it is just
get round these and do it".

These statements seem to imply that management see the subject as a
sort of feelingless workhorse. The overall approach is one of
getting work done, so management generally seem to show a great deal
of interest in this aspect of the subject's work. In relation to
those constructs which are descriptive of the self (the subject) he
FEELS GOOD (C1) about completing a good day's work (in terms of
number), and is quite CONFIDENT (C11) to do so.

CONSTRUCTS
There are eleven constructs which form four small clusters.
Cluster one comprises just two constructs, NOT FEELING GOOD -
FEELING GOOD (C1) and NON-CONFIDENT - CONFIDENT (C11). Both these
constructs are descriptive of feelings about the self in relation to
each of the elements (the subject's self perceived responsibilities).
Subject  "I had one job yesterday morning, they had had about five visits from service engineers, it was just a gas leak on a fire, most of them said it is leaking and you will have to put up with it, a couple said you are imagining it, but I found it and fixed it and that was it - like".

MJP  "What did you feel at the end of that"

Subject  "Well you sort of feel good, when the consumer says to you, you did alright and the other five did nothing",

"I like to feel good, well not that I am the best, but that I have done a good job".

The subject generally feels good at carrying out most aspects of his job. This is reflected in the ratings which are high in all but two. Those on the other hand are not really low, both rated at '3' SAFETY (E1) and COMMUNICATIONS (E6). These are probably because the subject feels management are generally not supportive on these issues, which contribute to his feeling less-good about these things than the others.

"- You don't get a lot of support if you jump the wrong way" (related to decision making).

The subject feels very CONFIDENT (C11) to carry out the duties which he at present performs, but he stressed that changing him to a different job (since he tends to specialise) would make him feel quite different.
In relation to installation work he said:

"I would probably try and work it really. I don't like the fact that I am not good at it, I don't feel confident enough" and

"I am confident in the work that I do, as I say radio work and that, I would not be so confident on installation work".

The confidence that the subject displays in his present job does to some extent come about from his endeavours at SELF TRAINING (E5), an aspect of his work to which he clearly relates. The necessity for this may have resulted from his experiences as an apprentice.

"Going back to when I was an apprentice some years ago, I never learnt that much off fitters anyway".

The subject seems to see a general lack of everything in his work environment. The lack of learning that he perceived took place when out with fitters is but one example. The second cluster refers to three areas where the subject feels things are lacking or alternatively not available. NOT ENOUGH TIME - ENOUGH TIME (E5) is quite straightforward in that the subject feels that often there is just not enough time, apart from that required to carry out a safe job. There is always enough time for safety, as it is rated at '5'. All other elements are rated at '2' or '3'. Lacking too is the information available LACK OF INFORMATION - INFORMATION PROVIDED (C9) and AVAILABLE (C10).
To put these two constructs into perspective, the subject works from what may be called a sub-depot which is six to seven miles from the main depot.

"I know it is only 7 miles down the road, you miss out on a lot of things, simple things, which are important sometimes, things like tools and that. There are tools that we have not even seen".

and referring to information:

"It is partly down to our supervisor, he could find some things out".

As with time, all ratings are at '2' or '3' in relation to constructs '9' and '10'. Although the lack of SPECIALIST EQUIPMENT (C10) has little effect on safety, the LACK OF INFORMATION (C9) does, given a rating of '3'.

Cluster three comprises two elements which are reflective of management. They are general in that they probably apply to all service engineers on this particular district. These constructs are however about this individual and his encounters with management.

The conversation about the construct TAKING NOTICE OF - BEING TOLD WHAT YOU HAVE DONE (C2) began with recognition for good work. Since the subject considered this something of a rarity he felt the emergent pole BEING TOLD WHAT YOU HAVE DONE to be more appropriate. He stated in relation to being told how badly you have done,

"- I suppose you get more of them than anything".
He went on to say

"I suppose you go on to think, is anyone taking any notice of you at all? whether they would miss you if you were gone - like".

This seems to indicate that management, from the subjects point of view, are more interested in what he does badly.

"- it is like saying if they take notice of whether you do a proper job, I don't think they are interested in whether you do a proper job, a safe job maybe, but not a proper one. As long as the consumer does not complain they don't really care how you go about it, unless something happens and then they will jump on you, and say you should have done whatever. And that is how it goes on. All the time nothing happens they are quite happy, but it's us that takes the can - in the end like - ".

From this statement came the emergent pole DOESN'T CARE LESS and the implicit pole CONCERN, relating to the subject as an individual, and become (C4). The subject considers management to be productivity orientated.

"the more work you have done the more happier they are. How you do it is your concern - like."
"As long as you are getting the work done they are not really concerned. They like to see on their papers so many jobs completed and that is that".

PRODUCTIVITY (E4) has accordingly been rated at '5' in relation to C2 and C4.

Cluster four is formed of three constructs. These again form part of the individual's view of management. This time though they are seemingly more general, in that they apply equally to his fellow workers and not solely to himself as C2 and C4 seemed to. In essence they refer to the support given, which applies to individuals and their work, with the emphasis on decision making - NON SUPPORTIVE - SUPPORTIVE (C6),

"So much is left to you - like - I suppose it is part of the job, but you don't get a lot of support"

"People higher up are not supportive".

and in a more practical sense -

"If you get a sticky job, I don't mean one you can't do, but a job where you are going to get the consumer on to you about it, they won't come out like, they would rather - stay in the office".
In relation to TAKEN NO NOTICE OF - LISTENED TO (C7) the subject said:

"You do talk to them, but you know they are not listening generally, they are all for the quiet life".

Of some concern to the subject was the fact that he saw little of his management (not supervisor). This view has consequences in terms of C7, for if you do not see them, they can hardly listen. They could perhaps still be supportive though.

Subject  "- We are on our fourth manager and we see less of him than we see of any of the other ones - like".

MJP "Do you think that you should see them more often?"

Subject  "Yes I do, more contact with him".

"They would take a couple of months holiday and you would not know".

All these constructs in this fourth cluster are rated very low, except in relation to one element which is PRODUCTIVITY (E4). This seems to be very much a concern of the subject, he seems to view the whole operation as being productivity, with little thought for anything else, including himself.
Much of the discussion within clusters three and four is derived from the subject's consideration of how management see him, and treat him as an individual. Construct '3' NO INTEREST SHOWN - CONSIDERATE, which is on its own within the construct tree, I see as being an overall view of the current situation for this individual.

This is so, since some laddering took place from this construct, which led to a number of those constructs related to the management style.

"at the end of the day if there is a lot of work, they want you to sort of go out and do it, and if you say no I have got to go somewhere, they don't like it at all".

"I think they should put themselves in our position - like. I can appreciate that they have got to push the work out, but it is their attitude towards you. I mean it is the way they tell you to do things, they do not ask you".

So the subject is clear about what his responsibilities are, and is clear of what his expectancies are in relation to his management.
SUMMARY OF DISCUSSION

Individual Expectations

- To feel good by completing a job to a good standard.

- To complete a fair day's work.

- To be confident in the job that he is doing.

Management Expectations

- That management should give recognition where due.

- That they show more interest in him as an individual: they are more concerned with productivity.

- That they be more caring for his needs and be more interested in training.

- That they be supportive of the decision and things that he does at work.

- That they at least listen to him when he needs assistance or advice.

- That they make themselves more available, and be seen around the depots.

Environmental Expectations

- That more time be allowed for some aspects of the job.

- That information is accurate, up-to-date, and free flowing.
- That specialist tools and equipment be available to all engineers
- That service engineers should be specialists in particular aspects of the job.

**TRAINING NEEDS/COMMENTS**

The subject did not explicitly define any personal training needs. He did however say that he found manufacturers' visits (with new equipment) very useful. He also spoke of the complexity of new appliances and specifically mentioned cookers.

As was discussed in the analysis it is the subject's view that management are not particularly interested in training, and, as he said, they are not bothered/interested in whether he trains himself or not.

The subject spoke at length of his desires to see service engineers as specialists in particular appliances or types of work. This personal feeling may come about as a result of his proclaimed competence at some work (installations), as well as a preference for that type of work. The reasons for this preference, I consider, are related to the knowledge and experience he has which contribute to a high level of confidence in those duties with which he is normally associated.
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1 Job Satisfaction
2 Pissed off effective to Job
3 High of S/E expectancy
4 Approachable
5 Results
6 Helpful
7 Tools & Equip. - OK
8 Knowledge
9 Bad relationships effective
## FS 23

**Element Matching Scores — Grid 6**

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**Construct Matching Scores — Grid 6**

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**Focused Grid 6**

![Focused Grid 6 Diagram]

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257a
This discussion and the consequent grid differs from many of the others in a number of ways. The most important difference is the view of Management held by the subject, which for this individual is very supportive. As will be seen the discussion areas, resultant elements and constructs are similar, but the accorded ratings are very different.

ELEMENTS

1. KEEPING THE CUSTOMER HAPPY
   Not upsetting the customer, doing what they expect of you.

2. STANDARD OF WORK
   Leaving them with a job they are pleased they have had done

3. SAFETY
   Doing the job safely for yourself and other people

4. APPRENTICE TRAINING
   Showing apprentices how to do the job.

5. KEEPING THE SUPERVISOR HAPPY
   Not upsetting him, retaining a happy working relationship

6. COMMUNICATION
   Includes documentation and talking to fellow workers and managements etc.
7. KEEPING UP TO DATE

Reading the literature as supplied, taking note of changes in technology and methodology.

The main body of the element tree is a cluster formed of five elements. Two of these elements form a foundation and consequent link between all five elements within the cluster. Element '1' KEEPING THE CUSTOMER HAPPY seems to be the subject's perceived role at work, and effectively his key responsibility. At the same time he would seem to have a desire to look after people, in his terms, keeping them happy.

"I prefer to do my job and know that I am doing it well, keeping people happy, rather than upsetting people or being upset myself".

Matched with Element '1' is APPRENTICE TRAINING (E4); he said in relation to apprentices:

"I think as I say feel responsible towards them, sort of look after them a bit".

As well as looking after them the subject said that "you've got to be careful what you do" which relates to the working practices he employs when accompanied by an apprentice. This care he talks of, and the desire to make people happy, result from his doing a good job.
It is important for him to do a good job when training an apprentice, but it is equally important that the customer sees that he has done a good job.

"I feel when I have gone into someone's home they've invited me in to do something, and I like to feel as if I have given them something. When I walk out of that house I like to think that they are glad that they have had me there".

This statement led to the element STANDARD OF WORK (E2) which is closely related to KEEPING THE CUSTOMER HAPPY (E1) and to a lesser extent APPRENTICE TRAINING (E4). An additional responsibility SAFETY (E3) is also linked to 'E1 and 'E2'.

"There is more than that, more than getting the job completed, I like to think that I do the job safely, for yourself and for other people".

It could be said here that work is not of a good standard unless it is safe, and vice-versa. This last statement again includes the care for others, the subject seems to see this as a major part of his responsibility, especially the customer.

"I think that number one, keeping the customer happy is probably ninety percent of what the job is basically".

The elements within this cluster are generally KEEPING UP TO DATE (E7).
This refers to the subject's responsibility to keep himself up-to-date with technology, procedures and practices.

"I think that all comes in with keeping the customer happy".

The ratings given to these five elements against the nine constructs in the grid are very high. A first glance at the grid however, shows two ratings against construct '2' and construct '9'. These constructs are reflective of effect and not feelings or views: when the subject rated these both at '1', he is saying that these responsibilities (elements) are not affected by his feeling PISSED OFF (C2), or by BAD RELATIONSHIPS AT WORK (C9).

Element '6' COMMUNICATION differs from those within the clusters, in that it refers to a responsibility that the subject feels is natural, and therefore requires less effort. While the subject recognises that communication refers to both written and verbal communication, his primary concern is with the verbal aspects.

"What I feel is that to me it comes naturally, I don't have to put myself out to be like that".

This feeling is no doubt related to the type of management style demonstrated at his place of work. This is especially so since the subject considers his management to be both APPROACHABLE (C4) and HELPFUL (C6).
Interestingly enough, the subject recognises that getting on with his superiors requires some effort on his part, and is not essentially something that just happens. Hence the element KEEPING THE SUPERVISOR HAPPY (E5).

"Well I like to keep my supervisor happy, I don't want to upset him, I feel this is part of my responsibility".

Since the subject seemingly works to a good standard, and generally satisfies customers with the work that he does, it is likely that he pleases the supervisor most of the time. It is questionable what effect productivity has on the relationship here - for the subject does not consider himself responsible for productivity.

"I think what you do is more important than how much you do. If you do, say, ten services and you are satisfied with doing ten, I think it is more important than say somebody else saying well you have got to do fifteen services a day".

In relation to poor productivity he said,

"Maybe you feel as if you have let people down, you think about it later".

So, the subject does think about his productivity but is more concerned with those responsibilities (elements) written, the cluster of five previously discussed.
The construct tree is formed of nine constructs. There are three fairly distinct groups within the tree which in total make up the subject's views or feelings towards his job. Three constructs reflect the subject's view of the general work environment. As the majority of his time is spent with customers he stated that at times they generate within him a feeling of being:

PISSED OFF

"Elderly people are very difficult to communicate with"

"They upset you as soon as you walk in the door".

The subject considered that for these reasons the feelings that arise sometimes affect the way he may do his job. The construct arising from this part of the discussion differs from most others within the grid since it is rated on the basis of effect on the job. Three elements are severely affected by this feeling PISSED OFF (C2), which are KEEPING THE CUSTOMER HAPPY (E1), APPRENTICE TRAINING (E4), and COMMUNICATIONS (E6), communications in this context being with the customer.

One other construct is considerable in terms of its effect, that being BAD RELATIONSHIPS (C9). Here the subject has recognised the effect bad relationships may have on the way he carries out his work. To put this in perspective, there are times when he works with other engineers on particular jobs, it is these times that are considered here.
"When you are working with a chap on a job for possibly a week maybe, it is very important to get on with other chaps".

According to the ratings, BAD RELATIONSHIPS (C9) can have a fairly dramatic effect on the way a job is carried out, affecting all elements, except KEEPING THE SUPERVISOR HAPPY (E5), to some extent.

One further construct represents a general view of the work environment, ADEQUATE TOOLS AND EQUIPMENT (G7) is seen as an important contributor to the standard, or success, the subject may have in relation to carrying out his responsibilities.

Generally there seem to be adequate tools and equipment but he said,

"There is certain things on certain jobs, where extra little bits, would be helpful and make the job easier".

The remaining six constructs within the grid form a cluster within the construct tree. Constructs '1' and '8' JOB SATISFACTION AND KNOWLEDGE (C8) reflect the subject's feelings about himself in relation to his job.

"Well to me I think the first thing is personal job satisfaction, I prefer to do my job and know I am doing it well".

The subject stresses on a number of occasions throughout the discussion that he likes to keep people happy, seemingly it is from the satisfactory achievement of this that he derives satisfaction.
"I prefer to do my job well and know that I am doing it well, keeping people happy, rather than upsetting people or being upset personally".

From the ratings accorded to JOB SATISFACTION (C2) it is obvious that the subject derives a great deal of satisfaction from his work. On recognising this I asked how it was possible for him as an individual to be satisfied with any aspect of his work?

"I think it is having the right frame of mind as well. When you get there (to a job) knowing exactly what it is that you have to do".

"The only thing that stops you sometimes is the lack of training, basically, if you come up against something new, you have not seen before".

This was recognised as a lack of knowledge and led to the construct:
LACK OF KNOWLEDGE - KNOWLEDGE (C8)

The remaining four constructs reflect the subject's view of Management. The subject spoke at length on the theme of management's expectancy of him. This discussion was financially based and considered the income which service engineers had to generate to support the non-productive personnel within the departments.
"A thing that annoys me is the impression the Service Engineer is given by Management when they say that it costs £24 an hour for a Service Engineer".

"Too much onus is put on the Service Engineer, on what he has to do, what it costs for him".

The subject considered the expectations of him to be high in relation to all his responsibilities.

While Management expect a lot of the subject in other ways they provide him with what he needs, and seemingly provide him with what he expects. The Management he considers to be very human and approachable.

"If you feel that your Management is approachable, you can talk to them, you feel that if you have got work problems, you can approach them with those problems, and you do get response and a lot of them assist us in trying to solve these problems".

So the subject considers his Management to be very approachable, and signified this in his rating of the construct IGNORANCE - APPROACHABLE MANAGEMENT (C4)

Closely related to construct '4' is the construct NO RESPONSE - RESULTS (C5). What is being said here is that Management may be approachable, but if nothing happens as a result of that approach, its value is diminished.
"If you approach Management once and get no response, you will be put off from ever approaching them again".

The subject considers his own Management to be very good in this respect.

"If you approach once and get some type of result, I am not saying that you always get the result you want, but if you realise that your points have been acknowledged things will possibly be looked into".

It is important from the subject's point of view that Management are approachable, and there is some consequent result.

Further to these two constructs referring to Management in the construct UNHELPFUL-HELPFUL (C6)

"It is their job to be helpful towards you rather than you get the impression of 'them and us', you feel that it should be that we are as one, rather than two separate sides".

The three constructs APPROACHABLE (C4), RESULTS (C5) and HELPFUL (C6) are very closely related. In the first place, Management being approachable provides the opportunity to resolve problems by Management taking some action. Alternatively Management provide help and assistance for the subject to overcome his own problems.
SUMMARY OF DISCUSSION

Individual Expectations

- To get job satisfaction by keeping people happy
- To have good working relationships.
- To have the knowledge to satisfactorily carry out his work.

Expectations of Management

- That they are approachable
- That they listen and take action where appropriate.
- That they are helpful and provide assistance to him where necessary
- That they provide the necessary tools and equipment for him to effectively do his job.
- That they consider more carefully the effects of putting the "income" on the Service Engineer.
- That they consider the value of providing more customer education, about the Gas Act and general operations.
TRAINING NEEDS/COMMENTS

- Updating on new appliances

- Revision/Refresher training in the following areas

Safety Procedures
Fault finding procedures
Rules and Regulations
Electrics
Use of Specialist Tools

The subject considered that the training methodology employed is important. He also implied that training should be carried out by trainers. In short he would like the training to be more practical, and if possible use case studies for incident/procedural training. He said that poor training methods, and 'trainers' who cannot present the topic with interest, make training very boring. (He is I believe, referring here to the training which has been taking place within the local depot by unqualified staff)
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**Notes:**
- The table indicates different factors affecting job satisfaction and recognition.
- The numbers in the table represent the level of satisfaction or recognition ranging from 1 (low) to 5 (high).
- The factors include recognition, depression, boredom, mundaneness, depression, independence, given recognition, assistance, and lack of assistance.
FS 27

ELEMENT MATCHING SCORES — GRID 9

CONSTRUCT MATCHING SCORES — GRID 9

FOCUSED GRID 9

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At the outset some difficulties were experienced gaining access to carry out research at this location. In part these were due to an industrial dispute. Access was eventually given following discussions with management and shop stewards.

The subject for this discussion is a willing and able communicator. He has a clear view of his responsibilities and his expectancies of himself and those around him. It was unfortunate in some respect that the discussion was cut short due to the venue we were using being required by other staff. The discussion had however lasted some two and a half hours and has I considered covered the range of issues and views which are most important to the individual. The discussion ended by my supplying the subject with a stamped addressed envelope, which he could use to inform me of any issues he had forgotten or come to light as a result of thinking about our meeting. No further communication was received from the subject.

ELEMENTS

1. CUSTOMER RELATIONS The right frame of mind to inspire a good relationship with the customer.

2. PLEASING THE CUSTOMER

   STANDARD OF WORK Giving them the satisfaction of doing a good job.
3. SAFETY Working safely and leaving work safe.

4. PRODUCTIVITY Doing a reasonable amount of work, as expected by supervisors/management.

5. TRAINING APPRENTICES Helping them to cope with the job, introducing them to working in customers' homes.

6. IMAGE OF INDUSTRY Upholding the image by demonstrating confidence, politeness, and a good presentation of the self/the industry to the customer.

7. SELF TRAINING Keeping oneself up-to-date technically.

8. RESPONSIBILITY TO SUPERVISORS AND OTHERS Keeping them in a job by doing good work, and enough of it to secure future income for the industry, and jobs for the people in it.
9. COMMUNICATION

Report writing and general work-related communication with the supervisor.

The element tree is formed of two clusters. One of these clusters comprises four elements, all of which in a way relate to the subject's approach to work. It seems that the subject is motivated by his perceived notions of the industry in the future.

This could be classified as self preservation, but the subject does not overlook his responsibility to those he works with. Element '8' RESPONSIBILITY TO SUPERVISORS AND OTHERS demonstrates the subject's overall view.

"If you do a job, whatever job you do, my doing that job for the Gas Board, they are sending me out as an ambassador, the supervisor sends me out in the morning, virtually I am paying his wages, because if all the gas fitters did a lousy job and they all went to Fred Bloggs down the road, he wouldn't have a job, because there would be no service engineers to give work to, so he wouldn't be needed. So really and truly, my responsibility to them, is such that I have got to try and keep them in a job".

and

"I mean obviously you are responsible to a lot of people, like your supervisors, technicians and everybody above you".

The subject talks on a number of occasions about keeping people happy. In relation to PRODUCTIVITY (E4) he said,
"Yes, a responsibility, to the firm and to myself, I like to go out of the yard in the morning and do my work, and try to make everybody happy, in which case I am making myself happy".

Two factors come to light here, keeping people happy seems to be an objective for the subject.

Such statements imply that people will be happy when you aspire to their expectations of you. Secondly the PRODUCTIVITY (E4) is related to the future of the industry, since productivity is effective upon costs, as applied to the customers.

This leads to IMAGE OF INDUSTRY (E6)

"You have got to give the image of the Gas Board, the Gas Board is good. Come to the Gas Board".

PRODUCTIVITY (E4) can affect IMAGE (E6) in other ways. The greater the PRODUCTIVITY the less waiting time there is between the customer ordering appliances, or requesting service, and the fitting or repair of appliances. Although not included in the main body of this cluster SELF TRAINING (E7) is related here. The subject recognised that by keeping up to date he could uphold the customer's expectations of him, which would have some bearing on the IMAGE (E6) they have of the industry.
"I think obviously with the number of new appliances and things coming on to the market and changes to older products, obviously you have got to build confidence again into the consumer".

and

"The customer always tends to believe that you know what you are talking about, because you are a qualified engineer".

This element further demonstrates how the subject perceives the expectation people have of him, in this case the customer.

The final element forming part of this main cluster is COMMUNICATION (E9). This relates to the subject's responsibility to report the outcome of his work to the supervisor. This can be verbal but in the main is written on work documents. The subject sees this aspect of his work as being effective on IMAGE (E6) and RESPONSIBILITY TO THE SUPERVISOR AND OTHERS (E8). The supervisor needs to know what he has done to a particular job, as do a number of others, so that eventually the customer will be charged correctly. Inaccurate reporting can lead to the customer being incorrectly charged and result in an account dispute. Or alternatively in the event of someone being undercharged the industry may lose money. On the one hand it may affect IMAGE, and on the other the profitability of the industry.
"So to make life easier for everyone, office staff, finance people and everybody, the responsibility is there for you to make it easier for you to sort out what you have done and what they have got to pay for".

The main body of the second cluster in the element tree is formed of three elements. In the subject's view these all relate to needs or expectation of the customer. At the outset the subject considers that he must approach the customer in such a way as to promote good relations. Being happy himself was the way he described this, which he felt depended on his frame of mind. This part of his job he recognised as CUSTOMER RELATIONS (E1).

Doing a good job he recognised as an important responsibility. At the elicitation stage he labelled this PLEASING THE CUSTOMER (E2).

He later changed this to his STANDARD OF WORK.

"Customer relations is probably number one I should think. Then you have got to please the customer in the job that you are actually doing, it is no good being cheerful and happy and get them in a nice mood by chatting to them if you don't do the job, you have got to give them a job satisfaction. When you have done the job they are going to be happy with what you have done".

A further responsibility related to both customer and himself is SAFETY (E3).
"There is no point in pleasing the customer and making her pleased that you have done a good job, and then burning the house down".

Outside this cluster is TRAINING APPRENTICES (E5). The subject expressed some strong views in relation to this element. It seems that his own experiences as an apprentice have led him to be very positive in his approach to apprentice training. The subject is enthusiastic, and seemingly derives a great deal of pleasure and satisfaction from this aspect of his work.

"I enjoy having an apprentice"

and

"There are two fitters that have just come through, and I like to feel, I do feel confident in myself that they are coping a little better after working with myself".

CONSTRUCTS

The construct tree is formed of eight constructs. Five of these form a loose cluster, the remainder could be said to form a cluster, but since they don't seem to directly or otherwise relate to each other they can hardly be so.

Construct '2' and '3' DEPRESSED-SATISFACTION and BOREDOM-CHALLENGING respectively, denote the feelings the subject has about his job.
"To me, job satisfaction is very important. I suppose it is the way that you are built really, some people can work and really not be too bothered about it so long as they are getting a wage packet at the end. I like to do a job and feel as though when I have finished the job I am satisfied with it".

and

"to me - I mean - I quite often go home really depressed about not satisfying people".

So the subject is very concerned about the degree of JOB SATISFACTION (C2) he derives from his job. This he achieves by satisfying those people around, customers, supervisors etc. He talks of them being happy as he did during the elicitation of elements.

"I am satisfied if first of all I can make the customer happy with me."

While making people happy seems to be the basis for the acquirement of job satisfaction, the subject recognised that there were degrees of satisfaction. To some extent it related to the degree of complexity of a job.

"I mean - if you get a right stinker, and it is a right brain buster and then you crack it and you solve it, there is nothing more satisfying than that. The consumer is impressed and you might even impress yourself, which is quite often the case, and that is really satisfying".
SATISFACTION (C2) was seen to arrive in varying degrees from the CHALLENGE (C3) presented by different jobs. Therefore the less challenging he found a job the less satisfying it would turn out to be. Although the other aspect of personal satisfaction, which is keeping people happy, may still be maintained.

"Well! something challenging, is something you can never be bored with".

Closely related to these two constructs is MUNDANE - VARIETY (C4). It seems that over one half of the subject's responsibilities are seen as being mundane, since they are rated at '2' or below. These are PRODUCTIVITY (E4), IMAGE (E6), SELF TRAINING (E7), RESPONSIBILITY TO SUPERVISORS/OTHERS (E8) and COMMUNICATION (E9). Those aspects (responsibilities) which seemingly provide him with variety, are those which relate to the more practical elements of the job, like SAFETY (E3), STANDARD OF WORK (E2) CUSTOMER RELATIONS (E1) and APPRENTICE TRAINING. The remaining two constructs within the cluster reflect the subject's view of the way those in his immediate work environment help or assist him in his work.

Sometimes the subject requires help, guidance or advice on a particular job. He said that dependent on the sort of information he required he would approach different people, although in the main he refers here to his supervisor or technician. He said that some people are quite helpful, although according to his ratings they are UNHELPFUL (C7) in relation to CUSTOMER RELATION (E1), STANDARD OF WORK (E2), TRAINING APPRENTICES (E5), IMAGE (E6) and RESPONSIBILITY TO SUPERVISORS/OTHERS (E7).
Further to this he said of technicians:

"If you do have a problem job, and you need assistance, it can be very hard. Let's say you need somebody to come round, like a technician, to sort of pop in, you have to be very persuasive to get a technician involved. He will help you out verbally, the supervisor will help you out verbally, but to come out and get involved in the job itself, is a bit of a drag, it is - do it yourself - we will tell you what to do".

So LACK OF ASSISTANCE - ASSISTANCE (C8) relates to the amount of physical/practical assistance given by supervisors and technicians. Enough assistance is given in only two areas according to the subject, in respect of SAFETY (R9) and SELF TRAINING (E7). Although not seemingly within the cluster, according to the computer analysis, CLOSELY SUPERVISED - INDEPENDENCE (C6) reflects the subject's view of those around. Although it refers to a management style, being independent is an important feature of the job, for the subject recognised that some employees were very closely supervised.

"I don't like having someone standing over my shoulder all the time".

and

"most of the time I like to be independent, not only with the work that I am doing, but the way that I do it. I don't want to be told the way to do it, I have got my own independent way of doing it".
The subject considers he has independence in relation to all aspects of his job except PRODUCTIVITY (E4), RESPONSIBILITY TO SUPERVISOR/OTHERS (E8) and COMMUNICATION (E9).

The two remaining constructs in my view illustrate further some of the expectations the subject has of management and those expectations of others about him. The subject considered that confidence provided him with the ability to do his job well.

"Confidence is a thing you have either got or haven't got, it does take a long time to get confidence".

Confidence was considered to require experience, that is why the subject believes it takes a long time to become confident. A further contribution to confidence was considered to be related to training, in this case GOOD TRAINING - BAD TRAINING (C5).

"You see a lot of these really, and truthfully you are not trained in them, are you? they are just taken for granted".

According to the ratings, the subject considers the training to be in relation to PRODUCTIVITY (E4) TRAINING APPRENTICES (E5), RESPONSIBILITY TO SUPERVISOR/OTHERS (E8) and COMMUNICATIONS (E9). The subject's comments imply an expectancy to be trained in all aspects of his job. The subject also expects to be praised and given recognition for good work.
"If you are recognised for doing something, people are basically appreciating what you are doing, they say, yes I recognise that you have done a good job, and I will say thank you for doing that job".

and

"the best motive to do your work, to make you feel happy is to be praised".

Praise, or recognition, in the way described may come from the management or the customer. The most important thing about NO RECOGNITION - GIVEN RECOGNITION (C1) is an expectation. It provides him with some feedback on how well he is doing. Sometimes he identified that he could be given recognition for doing bad work. Sometimes though such feedback is better than none at all, which seems to be the case at the moment. All elements are rated at '2' or below except CUSTOMER RELATIONS (E1) and WORK STANDARD (C2), indicating that there is little or no recognition given at the present time.

SUMMARY OF DISCUSSION

Individual Expectations

- To be confident to carry out his job.
- To derive satisfaction from making people happy (doing his job well).
- To self train given the appropriate information/opportunity.
- To confidently prepare apprentices for their future role in the industry.
- To uphold the industry's image.
Expectations of Management

That they:
- give recognition where appropriate.
- as far as is possible present him with work which is challenging, and as such not boring.
- provide him with a variety of jobs, in terms of type.
- provide him with the training he needs.
- allow him to be independent, so he may plan and carry out his work in a manner he considers appropriate.
- provide the help he needs to effectively carry out the responsibilities of his job.
- physically/practically assist him where required or appropriate.

TRAINING NEEDS/COMMENTS

As explained in the introduction this discussion was cut short. Unfortunately there was no time to discuss this aspect, nor did any communication take place after the discussion, either written or verbal. Within the transcript and consequent grid are a small number of implied areas where training may be required. It is indeed fortunate in some respects that within the grid is the construct BAD TRAINING - GOOD TRAINING (C5).
In fact the construct actually applies to whether training has taken place, or not, in relation to the subject's perceived responsibilities; and not, as the labels suggest, whether the training that was provided was good or bad.

As I interpret the transcript and related 'repertory grid', the training needs of the individual would seem to be:-

1. How to achieve greater productivity.

2. How to train apprentices on-the-job - practical applications of college training.

3. How to interpret the expectations of others in the work environment so that the subject may work towards meeting them.

4. To be trained in communication methods - report writing, document completion etc.

These aspects were in one way or another directly implied. Others however were not in themselves as clear, and maybe at this time not required. The subject stated that CUSTOMER RELATIONS (E1) was taught to him by the engineer during his apprenticeship. The outcome of this is questionable since the subject himself recognises the need to be trained himself in TRAINING APPRENTICES.

He also said that many engineers did little to train him, he was there to carry the tool bag, and pass the spanners. This in some respects highlights the need to carry out training in TRAINING APPRENTICES. There also seems to be a need to carry out training in customer relations.
CHAPTER 9  CONCLUSIONS DRAWN FROM DATA ANALYSIS

Preface

In order to draw meaningful conclusions from this research project it is necessary to return to the research questions raised in Chapter '3'. In short these are:-

A) To identify training needs from an individual viewpoint.

B) To assess the value/effectiveness of prior training.

C) To identify the variations in approach to work (attitude) from individuals, focusing on causation.

In light of the varying nature of these three questions the conclusions will be discussed in three parts accordingly, although to some extent 'B' and 'C' can at times be considered simultaneously.

In addition to the data relating to the research questions, there are also indicators of the way individuals see their role within the organisation. This too will be discussed within the conclusions.
A. Identification of Training Needs

Training needs have been identified as a direct result of grid elicitation, and verified by discussion on completion of the grid. As well as this are comments related to the approach to training, ie, the methodology. These are listed after the actual training needs.

Subject Areas where training is seen by individuals as being required:-

NOTE: Examples of transcripts - not one-offs

1. Use of Specialist equipment (on a refresher basis)

   FS14 Jet Freezer equipment
   FS24 Hilti gun
   FS14 Scaffolding/Staging
   FS11 Safety related to using power tools
   FS11 Using the gasco seeker
   FS11 Using the BGC meter

2. Electrics

   FS19 General electrical training related to all new appliances
   FS11 Fault finding on advanced electrical equipment
   FS16 Diagnostic
   FS6 Diagnostic associated with central heating.
3. **New Appliances**

FS19 General updating on all new appliances as and when required.

FS21 The complexity of new cookers leads to specific training requirements.

4. **Other Areas**

FS17 Update on emergency and standby procedures.

FS2 Knowledge of relationships between management and work, with emphasis on the communication methodologies, like committees.

FS13 Refresher training on the Gas Act.

FS2 Knowledge of the administrative side of customer service.

FS23 How to achieve greater productivity.

FS23 How to train apprentices.

FS23 How to interpret the expectations of others.

FS23 Communication methods - reporting, writing etc.

FS23 Refresher on the Health and Safety at Work Act.

FS13 Refresher training on technical and administrative procedures.

5. **Installation**

FS11 Kitchen Units and associated equipment.

FS11 Shower heaters and units.

6. **Industrial**

FS11 Fault finding and repair of industrial equipment.
7. **Customer Relations**

Dealing with difficult or irate customers.

8. **Central Heating**

FS6 Problem solving on central heating appliances and systems.
FS20 Central heating installation.

9. **First Aid**

FS24 All service engineers should have basic training in first aid.

**COMMENTS RELATED TO TRAINING**

**METHODOLOGIES/FACILITIES**

1. 

FS14 "The ideal conditions available at the training centre do not compare with working in customers' homes. The impracticalities experienced sometimes lead to difficulties which cannot be overcome by the training provided". This comment on the subject was particularly true in relation to central heating electrics.
2. FS15 Training is best carried out at the Regional Training Centre.

"You are supposed to be experts so you should be trained by experts as far as I'm concerned".

3. FS15 Centralised training provides the opportunity to meet other service engineers and discuss problems, and exchange viewpoints.

4. FS15 Training should always accompany the issue of new tools, equipment and appliances.

5. FS9 Go back to the basis of the job, as a refresher, to check performance.

6. FS21 Manufacturers' visits with new equipment and appliances are very useful.

7. FS11 Update and refresher training could be carried out by a group of mobile trainers, who would carry out training at individual depots.
8. FS5 "New appliances you've got to see them, it's no good these films that they show you".

9. FS5 "We used to get bored going to Old Kent Road, (Regional Training Centre) you know, training, but at least you did learn something".

10. FS13 Present training involves too much talking and not enough doing.

11. FS13 The video programmes that are seen are impractical.

12. FS18 Local training is preferable to travelling to the Old Kent Road training centre.

13. FS24 As far as possible all training should be practical.

14. FS4 Fault finding and electrical courses held at the Training Centre were good, the one day refresher courses however were not good.
Value Effectiveness of Prior Training

In order to consider this aspect of the research it is necessary to study two sections of the data.

As a general approach, consideration of the perceived responsibilities of individuals will reflect to what extent training has been effective. This is so, since training should provide information and knowledge pertaining to an individual's role within the organisation.

Overall there would seem to be a core of elements which are common to each individual. Additional to these are those elements (responsibilities) which arise from each individual's particular role at work, or alternatively reflect an individual's idiosyncratic view of his job. Core elements are as follows:

<table>
<thead>
<tr>
<th>Element Name/Frequency</th>
<th>Generalised Interpreted Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Leaving jobs in a safe condition for oneself and others.</td>
</tr>
<tr>
<td>2. Customer Relations</td>
<td>-(20) Being diplomatic</td>
</tr>
<tr>
<td></td>
<td>Communicating with customers</td>
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<tr>
<td></td>
<td>Being polite</td>
</tr>
<tr>
<td></td>
<td>Dealing with the customer.</td>
</tr>
<tr>
<td>Element Name/Frequency</td>
<td>Generalised Interpreted Meaning</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>To inspire a good relationship with the customer.</td>
<td></td>
</tr>
<tr>
<td>Looking after customer's property when you are there.</td>
<td></td>
</tr>
<tr>
<td>3. Standard of Work</td>
<td>Carrying out work which is reliable.</td>
</tr>
<tr>
<td>- (24)</td>
<td>Completing a job in one visit.</td>
</tr>
<tr>
<td></td>
<td>Completing work according to regulations etc.</td>
</tr>
<tr>
<td></td>
<td>Working to a satisfactory standard.</td>
</tr>
<tr>
<td></td>
<td>Reliable workmanship.</td>
</tr>
<tr>
<td></td>
<td>Leaving the customer with a job they are pleased with.</td>
</tr>
<tr>
<td></td>
<td>Making sure everyone gets the best use of their appliances.</td>
</tr>
<tr>
<td></td>
<td>Doing the best you can.</td>
</tr>
<tr>
<td></td>
<td>Making sure I have done a good job.</td>
</tr>
<tr>
<td>4. Apprentice Training - (21)</td>
<td>Showing apprentices how to apply what they have learnt at college in a practical environment.</td>
</tr>
<tr>
<td></td>
<td>To include Customer Relations, upholding image.</td>
</tr>
<tr>
<td></td>
<td>Passing knowledge, demonstrating the correct way to do things.</td>
</tr>
<tr>
<td>Element Name/Frequency</td>
<td>Generalised Interpreted Meaning</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Helping them to cope with the job, and working in customers' homes.</td>
<td></td>
</tr>
<tr>
<td><strong>5. Self Training -(20)</strong></td>
<td>Keeping oneself up-to-date with changes in technology. Learning from everyday experiences Keeping up-to-date in changes in working methods. Reading literature as supplied. Finding things out for yourself. Keeping up-to-date with what happens on your district. The initial step to doing a good job. Solving own problems is a form of self development.</td>
</tr>
<tr>
<td><strong>6. Communication -(22)</strong></td>
<td>Communicating effectively and accurately with supervisors and fellow workers. Correct completion of documentation and associated paperwork. Letting people know what you are doing or what you have done.</td>
</tr>
</tbody>
</table>
7. Productivity -(17) Maintaining a work trend in terms of the number of jobs completed.

(Management expectations)
Putting in a full day's work
Doing a fair day's work
Producing as much as possible.

Elements (responsibilities) outside the general trend/core as identified by individuals.

<table>
<thead>
<tr>
<th>Element Name</th>
<th>Generalised Interpreted Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Image -(8)</td>
<td>- Looking clean and tidy, the image of the industry.</td>
</tr>
<tr>
<td></td>
<td>Upholding the way the customer sees us as an industry.</td>
</tr>
<tr>
<td></td>
<td>Demonstrating confidence and politeness.</td>
</tr>
<tr>
<td>b) Working with colleagues -(2)</td>
<td>Having an understanding, being helpful</td>
</tr>
<tr>
<td></td>
<td>Doing a good job, so that whoever follows on will not be doing what you should have done.</td>
</tr>
<tr>
<td>Element Name</td>
<td>Generalised Interpreted Meaning</td>
</tr>
<tr>
<td>------------------------------</td>
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</tr>
<tr>
<td>c) Equipment</td>
<td>-(3) Being responsible for a van, appliance spare parts, and tool kit, being mindful of the danger of poor maintenance. Ensuring security and safety standards are upheld. Not losing tools or equipment.</td>
</tr>
<tr>
<td>d) Comradeship</td>
<td>-(1) Relationship between oneself and others, something that must be maintained.</td>
</tr>
<tr>
<td>e) Efficiency</td>
<td>-(1) Doing what is expected of you (not essentially productivity).</td>
</tr>
<tr>
<td>f) Working Relationships</td>
<td>-(1) Getting on with people. Sharing information</td>
</tr>
<tr>
<td>g) Keeping the customer</td>
<td>-(1) Not upsetting the customer, doing what they expect of you.</td>
</tr>
<tr>
<td>h) Keeping the Supervisor</td>
<td>-(1) Not upsetting him, retaining a happy working relationship.</td>
</tr>
<tr>
<td>Element Name</td>
<td>Generalised Interpreted Meaning</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>i) Knowledge of the job</td>
<td>To know all that is required to do the job (similar to self training core element '5').</td>
</tr>
<tr>
<td>j) Responsibility to Supervisor and others</td>
<td>Keeping them in a job by doing good work, and enough of it to secure future income for the industry, and jobs for the people in it.</td>
</tr>
<tr>
<td>k) Representation</td>
<td>Derived from an individual's responsibility as a Shop Steward.</td>
</tr>
<tr>
<td>l) Resourceful</td>
<td>Making the best use of equipment and materials, to get over problems.</td>
</tr>
<tr>
<td>m) Work Conscientiousness</td>
<td>Having pride in the work done.</td>
</tr>
</tbody>
</table>
A further indication of the effect of training is contained within the constructs.

The constructs as such can be divided into at least three categories. Only one of these in my view directly relates to training, those which reflect the individual's view of himself at work. Some of these are in the form of expectations about the self. While it would be presumptuous to assume that these are derived directly from training, it is I believe reasonable to say that there is some relationship. In another sense some constructs may be viewed as being natural motivational aspirations (in accordance with Maslow's theory). Training of the right type however can assist an individual to form a positive approach to his work, and consequently lead him into having expectations of himself. The following generalised constructs do I feel represent this view.

- To derive satisfaction from the work performed
- To be satisfied with the job in total
- To maintain an active interest in the job, and to do it well.
- To be confident to deal with the everyday problems associated with the work.
- To have enough knowledge to competently deal with the everyday duties and responsibilities of the job.
- To feel a sense of achievement.
- To have a variety of problems/types of work to deal with.
- To be able to be self managing to some extent.
- To be able to make decisions
- To be happy and content with the work and work environment.
-To complete a fair day's work.

-To have reasonable opportunity for promotion.

-To find work challenging in order to maintain interest.

-To have good working relationships with colleagues

-To keep the customer happy.

-Not to be affected by the pressures of time etc.

-To self train as necessary to keep up-to-date.

-To uphold the industry's image

-To be proud of the work personally performed.

-To get enjoyment from the job.

-To continually recognise the responsibility to the organisation.

-To maintain good communication with all staff.

-To be self motivating.

-To be responsible and reliable to those in the work environment.

-To be content with what is achieved during each working day.

-To do what is expected by management.

It is my view that in the first instance the success of past training, in terms of its effectiveness, is demonstrated by the fact that all those service engineers I spoke to recognise their responsibilities in relation to areas previously promoted by training at work. This in itself is little evidence on which to base a positive statement concerning the effect of training. More vital, in terms of data, are the expressed feelings or approaches taken by service engineers as stated by them during the research interviews, in relation to their self perceived responsibilities.
For it is one thing to recognise responsibilities, but quite another to consider importance, priority, and relationship to one another. The data is clearly indicative of this most important aspect.

For instance, in a general sense all subjects recognised not just their responsibilities towards safety, but further identified it as a priority, and as such sought to maintain a high standard of workmanship in relation to it. In the main, engineers displayed a very positive approach towards this aspect of their work, as they did to most others. Typical statements to this effect are as follows:

"the thing is to leave it working (an appliance) to your best ability and working safely". (FS15)

"you have got a standard, your safety to the customer, job satisfaction for the customer". (FS19)

"so long as I complete a particular job it is satisfaction and there are no problems, no call backs, then I am happy about it". (FS10)

"everything you do is built round safety, this is your ultimate aim really". (FS21)

"the more work you have done the happier you are". (FS21)

"I hopefully have pleased the customer". (FS11)
"The first thing is safety". (FS11)

"I prefer to do my job and know that I am doing it well. (FS23)

"when I walk out of that home I like to think that they are glad to have had me there". (FS23)

"I like to think that I do the job safely, for yourself and for other people. (FS23)

"I am very interested in keeping safe. Always that has got to be the prime concern really". (FS8)

"you are responsible to a lot of people, like your supervisors, technicians and everybody above you". (FS27)

"we have to produce as much as possible ". (FS14)

"at the end of the day you dislike yourself if you feel you have not (done a fair day's work)". (FS3).

"well you know if I can't complete a job on my own I will go home quite miserable - sort of thing". (FS7)

"to do a good job safely, that has got to be priority one". (FS20)

"you've got responsibility to customers and the Gas Board to get your work done". (FS1)
As was stated earlier in this chapter, the training provided in the past undoubtedly contributes to the views held by the subjects of this research. While I have not considered here the extent to which the subjects are content, confident or satisfied with their ratings within the individual repertory grids, it indicates their self perceived position in relation to above constructs.

In simple terms the level of confidence could be said to be formed from the individual's ability, combined with training and experience. It is, in my view, more likely that individuals will and do recognise when they are not confident or not content with their work environment. It is for this reason that they can not be practically considered in isolation from the other constructs within the grids. Particularly where the subjects see that some situations, people or objects can affect their levels of contentment, for instance.

In diagrammatic terms it looks like this.

**EXAMPLE - CONTENTMENT**

| VARIABLES CONSIDERABLE AGAINST EACH WORKING DAY, JOB ETC. |
| NATURE OF JOB |
| PEOPLE AT WORK (management etc) |
| ENVIRONMENTAL CONDITIONS (time/facilities) |
| AVAILABLE RESOURCES |
| INDIVIDUALS IDEAL LEVEL OF CONTENTMENT |
| CONSTRUCTS CONSIDERABLE TO DETERMINE STANDARD LEVEL OF CONTENTMENT |
| TRAINING - Knowledge/skill |
| Experience |
| Individuals view of job generally |
As may be seen from this simple diagram, a person's feelings about the job are not formed solely by the individual, from his training, experience etc. Where they are though, they have been stated within part 'A' of this Chapter.

Since management has a major part to play in forming the working environment for this group of workers, it is not surprising that they had much to say in relation to their feelings about management. In the same way that the individuals have personal expectations to fulfil, the ability to achieve them often, if not always, is affected by what management do, or do not do.

The effect of management actions upon individuals obviously varies according to how each individual perceives or interprets the situation, and according to what has actually been done. Such factors though, whatever they are, can and do ultimately affect the approach to work taken by the affected individuals, although for some the effect may be minimal, (commonly known as their attitude to their work) which leads to those constructs which relate to Research Question (C).

C. To identify the variations in approach to work from individuals, focusing on causation.

Factors which can influence people by changing their approach are important to an industry wishing to retain an image, and consequent share of a limited market.
The following constructs, in the main, signify the areas which affect their approach to work. There are two forms of construct to be considered here. In the first place there are those which refer to Management themselves, and to some extent their management style. Those are seemingly the most significant factors affecting service engineers at work. They are in the form of expectations, i.e. what individuals expect of their management. Shortcomings in these expectations can seemingly have an effect on the way service engineers approach their work.

Such expectations are that:

- they should listen to service engineers' views/ideas and take notice of them.

- technical and procedural information is made readily available.

- technical and supervisory staff are available when required.

- they be more adaptive/flexible and in so doing come closer to meeting the needs of service engineers.

- the work provided has some variety.

- the work is challenging (in a technical sense)

- they provide appropriate equipment for the work: tools, materials and protective clothing.
- management do what they say they are going to do (be reliable)

- they be more considerate and effective at communication.

- communication be two-way and not one-way as it often appears to be.

- they are supportive of the decisions made by service engineers.

- they display confidence in the job they themselves do.

- decision making be more participative.

- they demonstrate confidence in the service engineer and what work is done.

- they demonstrate trust.

- they should more effectively identify work problems.

- they show more concern for those problems which are recognised.

- they provide accurate information.

- they acknowledge the service engineer's work and treat the service engineer as a person and not as a 'number'.

- they give recognition where due.
- they show more interest in individuals, rather than be solely interested in productivity.

- they are caring towards the needs of the service engineer.

- they be more interested in training.

- they listen when assistance or advice is required.

- they make themselves more available.

- they be seen more around the depot.

- they provide more opportunity to talk and discuss the issues that arise.

- they are approachable.

- they provide more effective customer education (e.g. Gas Act and general operations).

- they provide information on the communication systems and committees in operation.

- they provide feedback/information on issues that affect the service engineer.

- they encourage good working relationships.
- They provide the training that is required

- They allow engineers to be more independent.

- They provide opportunities to work within other sections of customer service i.e., administration.

- They work towards breaking down hierarchical barriers.

- They provide the opportunity for self development.

- They allow adequate time for a service engineer's work to be effectively carried out.

- They identify individuals' abilities and issue work accordingly.

- They make allowance for those times when service engineers have problems.

- They give more consideration to the standard of work, in preference to productivity.

- That they treat service engineers as people rather than manual workers.

- That they provide effective training as an alternative to expecting service engineers to learn from pieces of paper.
Further to these are those factors which can affect the approach to work of the service engineers. They are as follows:

- That information supplied by the administration section is more detailed, and more accurate.

- That more care be given to work planning.

- That other employees are reliable, in that they do a good job.

- That Sega representatives provide accurate and adequate instruction.

- That those around should be reliable, do what they say they are going to do.

- That there be more sharing of information between colleagues etc. to assist in the resolution of problems.

- That office staff be more honest in what they say (They say what the facts are).

The data to support these views is contained within the analysis chapter, typical statements referring to these issues are as follows:

"Some of the supervisors aren't that co-operative". (FS15)
"Nine time out of ten because he is the supervisor he doesn't care what you say, he is 99% right". (FS15)

"I think there is a total lack of communication between us and line management". (FS19)

"We are expected to listen to management - I think it very important that they should listen to service engineers". (FS19)

"But you must have confidence in management. Then you know if you take a decision they are going to back you up". (FS19).

"Communication - there is a distinct lack of it". (FS19)

"He wouldn't believe me even though I explained exactly what I had said, I felt there was mistrust there". (FS9).

"I think it is nice to be acknowledged, if you have done something well and done it properly". (FS10)

"I can appreciate that they have got to push the work out, but it is their attitude towards you, I mean it is the way they tell you to do things". (FS21)

"People higher up are not supportive". (FS21)

"They give you moral support. Congratulate you on your work and everything like that. That is always nice to hear". (FS2)
"If you approach management once and get no response, you will be put off from ever approaching them again". (FS23)

"I don't like having someone standing over my shoulder all the time". (FS27)

"The best motive to do your work, to make you feel happy is to be praised". (FS27)

"Probably when you ask for assistance it's not easily given". (FS3).
Summary

i) Researcher Viewpoint

At the outset the objectives of this research project outlined the three distinct areas for investigation, the first of these being the training needs of service engineers. The consequent data related to this area is not in any way startling. In fact much of the information pertaining to this aspect formed the basis of imaginative or speculative thought, not just for myself but for my fellow trainers and management alike.

The research having been done these training needs are now substantiated. There is now data and supporting commentary to support any thoughts that personally I once had. This research in my view has identified training needs from an individual's viewpoint, and at the same time has proved that many of the Region's service engineers see that they need training in similar areas. As well as this it has demonstrated that each service engineer is an individual and has differing views, aspirations and needs when it comes to training.

The approach or methodology employed in past and present training too has been the subject of some criticism. Some engineers had much to say about the way we train, and in some cases offered alternatives. So the research from this point of view has been successful in doing what it set out to do.
Inter-related to this identification of needs is the effect or value of past training. I judge the effect of past training by the way the service engineer approaches and feels about the work to be performed.

My conversations and supporting data support the view that service engineers have a very positive approach to their work. They are confident about most aspects of the work, they recognise priorities, they accept the responsibilities they have and recognise them. They seemingly know or see the importance of keeping the customer happy, as well as fellow workers, supervisors and managers alike. That is not to say of course that at times this enthusiasm or endeavour does not waiver, which leads to the objective for carrying out this research: what factors influence the way service engineers approach their work?

It is in relation to this question that the research has been most revealing, for the one most common factor affecting the service engineer is people, in this case management or supervisory staff. The methods they employ, or the approach taken to their role at work can and does seemingly have a great deal of effect on the way the service engineer approaches his work. It is true to say that much of this effect is due to the interpretation put upon their actions by service engineers. These actions can simply be seen as motivating or non-motivating dependent upon the action. Views about these actions are in the form of expectation, as the findings and consequent conclusions proper really demonstrate. Some of these are demonstrative of management style.
Whatever or however they are named matters not. The fact is the research has revealed a considerable number of areas to look at and consider in the future training of management and supervisory staff. This I believe raises a question about the extent to which the training for such staff meets their needs, and also questions the method employed historically to identify such needs.

The methodology used for this research (Repertory Grid technique) has potentially narrowed the gap between shop floor and management, that is, providing some action is forthcoming. This has only been achieved by utilising a research tool which fully involves the participants in the collection of data. By including service engineers in conversations about their work a great deal of valuable information has been collected. For the first time in many cases people have been asked what they think they need, they have been asked how they feel about their job and the people they work with, albeit not directly, but through conversation, and focused upon the elicitation of a matrix (grid).

The result from the research point of view are plain to see. Many of the facts here, as has been said, were for a long time thoughts in someone's mind, they are no longer. We now have information with which to work, some which can be discussed and worked on straightaway, some which raises more questions which requires further research. This is particularly so in relation to the future training of management and supervision.
The identification of training needs and the review of factors affecting people at work should not be a one-off thing. There is a continuous need to look at these areas, especially in the present climate of industrial, economic, political and structural change. This can only effectively be done by talking to the employees within the industry, involving them in change and preparing them for it by firstly talking to them about their fears, aspirations, reservations etc. All of this can be done by talking to them about their work; and where the skill and experience exists to use it, 'Repertory Grid' technique can be employed as the focal point or a conversational tool.

The technique, as shown in this case, has assisted in the uncovering of issues and real factors which relate to causation, and if training in the future is to be effective it is causation we should be looking at and working on instead of attempting to treat effect. People do things in a manner consistent with the way they feel about them. Sometimes people cause others to feel the way they do, sometimes a person's feeling cause them to act in a manner which is undesirable. This may be from an industry's point of view, or an individual's. These feelings are often caused by people, in this case management, doing something contrary to our expectations of them: but then - how do management know what their workforce expect of them?

This research in terms of the data collected will assist in the bridging of this gap in knowledge, and hopefully persuade people to keep a watchful eye on this area, in light of the changes in expectations which may take place in the future.
(ii) Trainer Viewpoint

From the trainer's viewpoint I consider this research has much to offer in terms of the data collected and the approach employed. The data as such has much to say in relation to the past training of the service engineer, in terms of how good or bad it was. There are some lessons to be learnt too in the methodologies employed within the actual training itself. The real lesson though is in the way needs have been identified in the past, and the way course validation and evaluation have been carried out.

In the past the people who are to become the trainees have to some extent been involved in the identification of needs, but at a very superficial level.

Often such needs have been identified via a questionnaire. But how realistically are needs identified in this way? As has been said earlier such an approach will uncover some needs but it is likely that some of these reflect or are in response to some other aspect of the work environment. By involving staff in in-depth conversations about their job it is far more likely that such issues may be uncovered. After all, training is an expensive and time consuming operation so the training given should be what is actually not seems to be, required.

This research has to some extent 'turned the tables', for in the past to identify the training of service engineers we spoke to managers, and to identify the needs of managers we spoke to managers.
In this case the service engineers have been spoken to about their own needs, and at the same time have uncovered factors which are indicative of training needs of managers. It seems to me that this approach is much more realistic on both counts. This is especially so when it sometimes appears that management identify that their staff need training in an aspect of their work, (this is especially in consideration of attitude training), but they fail to, or cannot come to terms with the fact they themselves may be the causation.

The approach taken to this research clearly demonstrates a possible way ahead. That is to involve not just the subjects of training programmes, but the people who work with them and for them at the identification of needs stage. As well as this too little emphasis is put upon the way needs are identified and the time given to this aspect, which I believe is much too little the present. Time at this stage will lead to more effective use being made of trainers' time, by the resultant training will be more effective by meeting the needs of individuals, and in so doing contribute to the future well being of the organisation (SEGAS).
The implications are considered in three sections, as related to the research questions.

(1) Training Needs
(2) Effect of Previous Training
(3) Factors Affecting the Approach to Work

1. Related to Training Needs
   Two Areas - (a) type of training
   - (b) method of training

(a) Type of Training
   Much of the training required stems from the changes taking place in procedures and technology. The service engineer involved with varying forms of gas appliances requires continual update on these appliances and their associated intricacies. Together with this is the need to be updated in the changes in policy and procedures associated with the supply, maintenance, repair and installation of such appliances.

Due to infrequent use there is a need to provide regular update/refresher training in the use of specialist tools and equipment.

Such findings and conclusions, as detailed within Chapters 8 and 9, indicate that there is a need to constantly monitor the changes taking place, so that suitable training may be planned.
This would ensure that as far as possible staff had the necessary knowledge and skill to take on the changes that are continually taking place.

In addition guidance and instruction in the methods of apprentice training, document completion and report writing are needed. Such areas of training should now be studied to clarify the exact nature of the required training, so that a suitable course or training session may be planned and implemented.

(b) Methods of Training

Various comments and criticisms were made with regard to the present methods of training being employed. Generally these were aimed at three areas: Trainers

Venue

Methodologies.

The detail related to these areas is contained within Chapter 9. In short, some service engineers consider that line management, who have been carrying out localised training, lack the professionalism and skill of 'Training and Education' department personnel. This can in their opinion considerably reduce the effect of any training that takes place.

Criticism regarding the venues were related to firstly, that the localised training venues lacked the resources of a training unit, and secondly, that catering facilities, too, were less than
desirable, and that the accommodation was sometimes inadequate for the purpose, or uncomfortable. As a general comment a number of engineers stated that they missed the opportunity to meet and discuss work related issues with personnel from other districts within the Region. Obviously localised training prevented such meetings taking place.

Comments relating to the methodologies employed for training were directed towards both trainers and media. It seems that much of the time during training is spent sitting down listening to a trainer talking or explaining practical situations. Not only can this be boring, it is not particularly effective from the service engineer's point of view. Generally they would like to be more participative, actually do the things that are being talked about, or work on the issues that are being explained. This in their view would not only be more interesting, but also more effective from a learning point of view.

In relation to the media being employed for training, particular mention was made of video. It is felt that some of the video programmes are a poor substitute for 'hands on' experience relating to technical and practical information. The degree of learning which takes place via a video is in their view less than desirable. Practical subjects should be introduced and learnt in a practical way if they are to be effectively carried out following any form of training.
The above comments signify that those persons carrying out local training (line management) could benefit from a course on presentation and training techniques. This will provide them with knowledge of alternative training/learning techniques, and introduce them to participative learning methodologies. In addition it may be useful for Training and Education personnel to assist in the preparation of training packages for district personnel to use at on-job training sessions. These packages I envisage would take account of the desired participation in learning, as indicated by service engineers. (Which, incidentally, is in line with the current thinking within 'Training and Education, that participative learning methodologies are the most effective).

In consideration of the use of video, the subjects chosen for video programmes need to be selected more carefully, or produced in a different manner. Video has many advantages as a training medium, but only when the material or subjects covered within a programme are not seen as having been learnt following the viewing: it is essential that such material is supplemented by some form of learning session, which should ideally be participative in nature. Here again 'Training the Trainers' would contribute to more effective learning taking place.

The resources and facilities available at district locations are limited when considering the alternative venue for training, the Regional Training Centre at Old Kent Road, which until a few years ago was used for all update and refresher training.
In light of the comments and seeming shortcomings in the training carried out it may be worth considering carrying out all such training in future back at the centre. This is plausible since the resources, facilities, skill and expertise are already there, whereas the present set-up at district level would seem to require extensive development, for personnel and facilities, to bring it up to an acceptable standard. A further alternative, suggested by some service engineers, is to have a mobile training unit, which travels about from district to district, which would be manned by Training and Education personnel.

2. Related to the Effect of Previous Training
The general indications are that past training, including the apprenticeship period where applicable, has to a large extent been successful in providing a sound basis of knowledge and skill from which to carry out the duties and responsibilities of a service engineer. This is clearly indicated in the findings (Chapter 9) which are indicative of a very positive approach to the job, together with a sound knowledge of needs, in terms of the priorities associated with the work, that is the need to work safely, efficiently, to do a good job and look after the customer. While this cannot be totally attributed to training, this I feel it is where such an approach to work is initiated. The above paragraph seemingly illustrates a 'rosy' picture of the training provided. This is not totally the case since many engineers recognise areas of training needs, or had comments to make about training methods.
The previous section covering 'Training Needs' encompassed the factors which in the past have proved to inhibit training, or in some other way interfere with the learning process. Such factors are the venue, the resources and the methodologies employed. As indicated these areas now become subjects for further research and consequent training or changes as applicable.

These views and ideas, as expressed, again reinforce the notion that training in its widest sense needs to be reviewed and monitored on a continuous basis. That is to say, not only must training needs be continuously monitored, the resource media and methodology must also be continuously scrutinised.

My own experience is sufficient for me to realise that it is easy to keep the same lecture notes for years, or maintain the same approach. In the same way that technology changes require people to be updated, the way updating takes place may also need to be updated. The comfort and self-confidence given by the use of familiar subjects, approaches and instruments can eventually lead to less effective learning. This applies equally to the resources and media that are utilised.

3. Factors Affecting the Approach taken to Work (attitude)
Not surprisingly the factor that most influences the approach taken to work by service engineers is people. In the main these people are in the role of manager or supervisor.
As indicated in Chapters 8 and 9, 'Findings' and 'Conclusions' respectively, there is a great deal of information pertaining to this research question. It should be made clear at this point that the statements made are not necessarily detrimental. Since I have discussed this issue at length within Chapter 9, I will confine discussion to the issue here being the implications arising from the findings and conclusions.

Since it is now clear that service engineers have ideas and thoughts about their expectations of management, the next move is to introduce those thoughts to line management. My views are that the information collected should be integrated into the present scheme of management/supervisory courses, initially to introduce the idea as a group discussion topic like "What do you think your staff expect of you". Following this, comparison can be made with actual expectations as indicated within the data. I do not see this as a subject in which people may be trained.

The objective of the exercise is to raise awareness, as well as enlightenment of the facts, and also to signify that for management and supervisory staff alike, there is a need to be aware and take account of the expectations people have of themselves. At the same time there is the need to discuss the possible consequences of ignoring such data, in terms of the effect it may have on the way staff carry out their work.


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SEGAS TRAINING AND EDUCATION POLICY

The objectives of Segas on the policy for training and education of employees are as follows:-

(a) Every employee shall receive such training as is deemed necessary for him to perform the work for which he is employed.

(b) Every employee shall receive such training as is deemed necessary for him to develop his career within the industry and Region.

(c) Any employee who wishes to undertake further education shall, within limits specified, receive support for his activities, subject to the following broad requirements:-

(i) that such further education forms an integral part of his professional or job requirements;

or

(ii) that such further education has direct relevance to his present work or career development within the industry.

To give effect to this policy:-

(a) Directors, Chief Officers and Officers with delegated authority are responsible for the training and education of employees within their organisational structure.

(b) The Manager, Training and Education is responsible for the provision of training and educational resources within and outside the Region. Where additional resources are required, costs or other factors affecting the provision are to be established and presented for decision.

(c) The Manager, Training and Education is responsible for the standards of training provided within the Region in terms of buildings, material and equipment, and of the professional standards of staff employed in the Training Department. He is also responsible for the standard of training within Departments and will provide guidance and advise in this connection to Directors and Chief Officers and act in a consultancy role regarding the training given.

(d) Directors and Chief Officers will establish the training needs for all their employees, consulting with the Manager, Training and Education (or Officer delegated by him). Training needs may arise, for example, as a result of the work an employee carries out, management development activities, or changes in practices or organisation within the Region or Industry. The training needs will be audited by them annually, using such means as the Annual Appraisal where applicable, taking into account manpower plans, and priorities to be agreed with the Manager, Training and Education for the forthcoming training year.

/Cont'd ...
The Manager, Training and Education will prepare an annual budget of training costs, based on the needs identified by Directors and Chief Officers, in line with budgeting arrangements of the Region and in accordance with cost and budgeting procedures laid down by the Corporation. The Manager, Training and Education will prepare annual departmental training costs figures for Directors and Chief Officers.

The Manager, Training and Education will prepare, at least quarterly, an activity report for the Chairman, Deputy Chairman, Directors and Chief Officers, showing activities over previous quarter and activities planned over the remaining training year (September to August). This report will be considered at a meeting of the Executive Committee when the Chief Officers are present.

The Manager, Training and Education will carry out an annual survey of the Training Department which is to include a statement of:

(a) Training activities current and planned.
(b) Staff employed.
(c) Training needs of staff.
(d) Staff requirement/surplus.
(e) Buildings.
(f) Equipment requirements/surplus.
(g) Present Regional Agreements concerning employees training.
(h) Recommendations for improvement.

Four small Functional Training Committees will be set up covering separately Marketing, Engineering, Finance, and other Departments. Membership will be chosen by Directors, and the Manager, Training and Education, (or Officer delegated by him) will be invited to attend. Functional Training Committees will meet at least once per year.

In addition, the Manager, Training and Education, or Officer delegated by him, will be invited to attend departmental meetings for consultation and advice on training and education matters.

The Manager, Training and Education will ensure that all training provided is validated on completion. He will agree with Directors and Chief Officers measures to be taken to evaluate the training provided in qualitative or quantitative terms.

Directors, Chief Officers and the Manager, Training and Education are to take whatever action is necessary to ensure that all employees are aware of the training and educational opportunities open to them.

Secretary
OBJECTIVES

The Objectives of Staff Participation Committees are:

1. To provide representatives of Staff and Senior Officers with the opportunity to participate in the decision making process at local level.

2. To provide a regular forum for the exchange of ideas thereby providing a basis for the future efficiency of the Region and the general well-being of the Gas Industry and its employees.

3. To improve and maximise the channels of communication between Regional and local level and between management, staff representatives and employees.

NOTE:

It is not intended that the establishment of these committees should supersede the normal day to day relationships between the Staff Representative and appropriate management and the resolution of problems at this level.
OPERATION

1. The sphere of operation of the Committees shall be defined by the Regional Joint Council for Gas Staffs and Senior Officers (hereinafter referred to as the Regional Council). Any change in the Constitution and Terms of Reference of Committees shall be dealt with by the Regional Council.

COMPOSITION

2. The Committees shall consist of the following members:
   (a) Representatives appointed by the South Eastern Region of the British Gas Corporation, and
   (b) Staff and Senior Officer representatives within the sphere of operation of the Committees nominated or replaced by the Trade Unions.
   (c) The number of members to be appointed by the Region and the number of members to be nominated by the Trade Unions shall be agreed by the Regional Council provided that the Staff and Senior Officer representatives shall be nominated in such a manner as to secure that so far as practicable the interests of all branches of departments within the sphere of operation of the Committees are represented.
SPHERE OF OPERATION

1. The sphere of operation or the area of responsibility for each Committee will be determined by the Regional Joint Council in order to ensure that Committees are able to function effectively both in terms of membership and responsibilities.

COMPOSITION

2. Each Committee consists of Regional and Staff Representatives. Regional Representatives are nominated by each department with the intention that wherever possible this will be Higher Management staff within the sphere of operation of the Committee. Trade Union Representatives are Staff Representatives also from within the sphere of operation of the Committee. Membership of the Committee is by nomination by the Region and the Trade Unions. It is not however necessary for management and Trade Union Sides to be equally represented. Paragraph (c) of this clause is intended to ensure that as far as practicable all branches of departments are represented on the Committee but this will be applied on a reasonable basis i.e., where there are only a few staff at a location within the sphere of operation of a Committee it is not necessary for there to be a representative from that particular location.
CONSITUITION AND TERMS OF REFERENCE - (CONTINUED)

CASUAL VACANCIES

3. In the event of a vacancy arising, the Region shall appoint or the Trade Union nominate as appropriate another member to fill the casual vacancy.

SUB COMMITTEES

4. The Committee may appoint Sub-Committees to consider any of their functions. The minutes and recommendations, if any, of any such Sub-Committee shall be submitted to the Committee for approval or reference back, unless specific authority is otherwise delegated by the Committee.

POWER TO CO-OPT

5. The Committee may co-opt or authorise any Sub-Committee to co-opt any person or persons with special knowledge for that meeting only. Such co-opted persons shall serve only in a consultative capacity and shall not have power to vote.

ANNUAL AND ORDINARY MEETINGS

6. The annual meeting of the Committee shall be held in the month of February each year and the ordinary meetings shall be held as and when determined by the Chairman and vice-chairman, but not less than once every month, except as otherwise agreed by the Chairman and vice-chairman. Where monthly meetings are not held, the interval between meetings should not be more than two months.
CASUAL VACANCIES

3. This clause provides for the filling of a vacancy on the Committee in the event of the resignation of a permanent member. If a member is away on long term sickness it will be for the Region or the Trade Union to decide whether he or she should be permanent replaced.

SUB COMMITTEES

4. The main purpose of a Sub-Committee is to undertake a specific activity which if considered by the main Committee could involve a great deal of detailed discussion and divert the attention of the Committee from its total purpose. Where however a Sub-Committee is established it is essential that the Terms of Reference are clearly defined.

POWER TO CO-OPT

5. If it is considered that either the committee or Sub-Committee require the assistance of any one with specialist knowledge such persons may be co-opted to the Committee. It is important to recognise however that the power to co-opt is a responsibility of the full Committee and if it is intended to co-opt a person to the Committee this should not be done without prior consultation between both sides of the Committee. It is not the intention that this clause be used to authorise the regular attendance of co-opted members.

ANNUAL AND ORDINARY MEETINGS

6. Annual meetings will be held in February each year. At these meetings the officials for the year will be elected and any standing Sub-Committee re-appointed.

It is suggested that ordinary meetings should be held on a specified day during the first week of the month to aid the flow of information to and from Regional level.
SPECIAL MEETINGS

7. Either the chairman or vice-chairman of the Committee may make a requisition for a special meeting of the Committee in which case the joint secretaries shall call a special meeting to be held within two working days from the receipt of such requisitions.

FACILITIES FOR MEETINGS OF COMMITTEES OR SUB-COMMITTEES

8. The Region shall provide facilities for holding meetings of the Committee or any Sub-Committee referred to in Clauses (6), (8) and (9) including the necessary accommodation. The meetings shall be held during normal day working hours and the representatives shall be paid for the time spent at such meetings in accordance with Regional Agreements.

STAFF AND SENIOR OFFICERS' REPRESENTATIVES' PRIOR MEETINGS

9. The Region shall provide facilities for meetings of the Staff and Senior Officers' representatives to be held during normal day working hours and immediately prior to each meeting of the Committee or of any Sub-Committee thereof. No business other than that appearing on the agenda of the Committee or Sub-Committee shall be transacted at such meeting, and the Staff and Senior Officers' Representatives shall be paid for time spent at such meetings in accordance with Regional Agreements.

OTHER MEETINGS OF STAFF AND SENIOR OFFICERS' REPRESENTATIVES

10. Meetings of representatives other than those provided for in Clause (11) may, with the permission of the chairman and vice-chairman of the Committee, be held during normal day working hours in which case the representatives shall be paid for time spent at such meetings.
SPECIAL MEETINGS

7. Since the Chairman and Vice-Chairman will be from either side this provides for special meetings to be called by either Regions or Trade Union representatives.

FACILITIES FOR MEETINGS OF COMMITTEES OR SUB-COMMITTEES

8. The appropriate Regional Agreement for payment is currently as follows:

"Employees covered by W.S.I.P. and other Productivity schemes attending Participation Committee meetings will be paid average bonus earnings to be calculated on the same basis as the National Agreement for the supplementary payment in respect of Sickness absence except that the limitation of 25% of basic wage will not apply."

STAFF AND SENIOR OFFICERS' REPRESENTATIVES' PRIOR MEETINGS

9. Trade Union Representatives should meet immediately prior to each meeting of the Joint Staff Committee.

OTHER MEETINGS OF STAFF AND SENIOR OFFICERS' REPRESENTATIVES

10. Such meetings may be necessary where a specific problem requires to be studied by the staff representatives e.g. introduction of new procedures.
NOTICES AND AGENDAS

11. The joint secretaries are responsible for giving notice to all members of, and preparing the agenda for, every meeting of the Committee and of any Sub-Committee. Notice and agenda shall (except in the case of a special meeting) be circulated not later than three working days before the date of the meeting.

BUSINESS LIMITED TO AGENDA

12. No business shall be transacted at any meeting of the Committee or any Sub-Committee unless notice hereof has been given on the agenda provided that the chairman may allow the consideration of any item of business which in his opinion is of sufficient importance or urgency to justify consideration at that meeting.

CHAIRMAN AND VICE-CHAIRMAN

13. At each annual meeting the Committee shall appoint from their members a chairman and a vice-chairman and may at any meeting fill any vacancy which shall have occurred in either of these offices. The chairman shall be elected alternately from the Region’s representatives, and Staff and Senior Officers’ representatives, and when the chairman is a Region representative, the vice-chairman shall be a Staff and Senior Officers’ representative and vice-versa.

JOINT SECRETARIES

14. The Committee shall appoint joint secretaries from the membership of the Committee one to be nominated by the Region and one to be nominated by the Staff and Senior Officers’ representatives.

FINANCE

15. All administrative expenses of the Committee shall be met by the Region.
NOTICES AND AGENDAS

11. It is the responsibility of the Joint Secretaries to discuss and prepare the Agenda for each meeting from items submitted by either side. Any secretarial assistance required will be supplied by the Region. It is emphasised that items should only be placed on the Agenda if it is not possible to resolve the problem directly between Manager and Staff Representatives or there are wider implications which can be dealt with more effectively by the Committee.

BUSINESS LIMITED TO AGENDA

12. Both this clause and the previous one are intended to avoid items being raised at the main meeting (unless of extreme importance or urgency) for which either side are unprepared.

CHAIRMAN AND VICE-CHAIRMAN

13. In the event of a casual vacancy arising for Chairman or Vice-Chairman it should be filled by either a Region's Representative or a Trade Union Representative, according to which side holds office. Short term absences of the Chairman will be covered by the Vice Chairman.

JOINT SECRETARIES

14. In addition to the Joint Secretaries a minute Secretary may be appointed from outside the Committee but he/she will not participate in discussions or voting. As already indicated with regard to Notices and Agenda, any secretarial work will be carried out by the Joint Secretary for the Region's representatives.

FINANCE

15. Any claims for expenses incurred by members should be dealt with through the normal departmental arrangements.
QUORUM

16. A quorum shall in the case of the Committee and of any sub-committee consist of one third of the Regions representatives and one third of the staff and senior officers' representatives.

VOTING

17. The voting at all meetings shall be by show of hands. No resolution shall be regarded as carried unless it has been approved by a majority of the representatives present on each side of the Committee.

SETTLEMENT OF DIFFERENCES

18. In case the Committee are unable to agree upon any matter falling within the scope of their functions they shall at the request of a majority of either the Region's Representatives or the Staff Representatives refer the difference in writing to the General Purposes Committee, to be received within five working days.

MINUTES OF MEETINGS

19. Copies of the minutes of the proceedings of all meetings of the Committee or of any Sub-Committee shall be forwarded to the Joint Secretaries of the Regional Council within seven working days of the meeting for consideration, approval or reference back and a copy thereof shall be posted on notice boards. Items for the specific attention of the General Purposes Committee should also be notified separately to the Joint Secretaries of the Region Council.

PRESS NOTICE

20. No information regarding the business of the Committee or of any Sub-Committee shall be given to the Press.
EXPLANATORY NOTES - (CONTINUED)

QUORUM

16. Since it is not necessary for the Trade Union and Region's Representatives to be equally represented on the Committee it is necessary for a quorum of at least one third of each side to be present. Co-opted members are not included for the purpose of deciding whether a quorum is present.

VOTING

17. Since it is not necessary for management and Trade Unions to be equally represented, this clause protects either side from being out-voted on a purely numerical count.

SETTLEMENT OF DIFFERENCES

18. At the request of a majority of either side of the Committee, a failure to agree must be referred within five working days, in writing, separately from the minutes of the meeting, to the Joint Secretaries of the Regional Joint Council who will arrange for the matter to be urgently investigated. Only if it is not possible for the matter to be resolved by this means will the matter be referred to the General Purposes Committee. Where no agreement can be reached the matter would be referred to the Regional Joint Council.

MINUTES OF MEETINGS

19. Minutes of meetings should be agreed by the Joint Secretaries and confirmed by the Committee at their next meeting.

The General Purposes Committee of the Regional Council has been established with specific responsibility for the monitoring of the activities of joint staff committees. In addition the accumulation of information from all parts of the Region on a variety of issues enables the General Purposes Committee to be used as a reference point for information and possible resolution of local problems where these may have already occurred elsewhere in the Region.
FUNCTIONS OF STAFF PARTICIPATION COMMITTEES

FUNCTIONS

1. To secure that the employees shall be given an interest in and responsibility for the conditions under which their work is performed.

2. To secure the greatest possible measure of joint action between the Regions and the Staff Representatives in order to ensure that terms and conditions of employment settled from time to time through the machinery of the National and/or Regional Councils are implemented.

3. To deal with matters arising out of the application of the terms and conditions of employment referred to, within the sphere of operation of the Committee, such as:
   (a) Working hours, breaks, overtime recording, flex-time, duty schedules including standby and shift rotas.
   (b) Settlement of internal differences (excluding those dealt with under the Individual Grievance Procedure) provided that the Committee shall not have power to negotiate terms and conditions of employment.
   (c) To consider methods of achieving a high level of productivity through the adoption of the best available working methods and practices.
   (d) To consider the application of training schemes.

4. To inquire into any difference which may be referred to the Committee by the management representatives or the staff and senior officers' representatives in relation to the application of terms and conditions of employment referred to in Clause 2 by the most effective means including a full investigation of the facts by reference to all parties concerned. Provided that any recommendation made following such inquiry shall be in conformity with the terms and conditions of employment settled from time to time through the machinery of the National and/or Regional Council, and it shall be competent for the Regional Council to veto any recommendation which is not in such conformity.
5. To consider such rules and regulations as may be issued from time to time by Regional Management so far as they affect those employees represented by the Committee.

6. To consider the relevance of current Safety legislation to the work environment including the appointment of Safety Representatives and the consideration of their reports.

7. To consider any other business which may be referred to the Committee by the Regional Council.

INTERPRETATIVE NOTES ON FUNCTIONS

GENERAL

No limitations are placed upon those subjects which can be discussed by Committees, the functions merely refer to particular areas where it is considered Committees can be most effective. It must be recognised that there will be occasions when for a variety of reasons it is not possible for either Management or Trade Union to reach agreement without reference to higher authority. In this event it will be necessary for either Regional or Trade Union Representatives to refer the matter to the appropriate authority and report back.

It is important that Committees should not only concern themselves with matters of complaint or controversy, but be prepared to discuss issues where joint action could improve local and possibly Regional operations.

The following guidelines are set out regarding possible items for discussion at Committees. It is emphasised that these should in no way preclude discussion of any other subjects, but it should be recognised that in this event it is unlikely that a decision can be reached or acted upon.
1. REGIONAL/NATIONAL AGREEMENTS AND MANAGEMENT INSTRUCTIONS

Specific reference is made in the Committee functions to the implementation of Regional and National Agreements and Management instructions. The purpose of this function is to ensure that Agreements and instructions are properly understood and acted upon, but it is not within the competence of Committees to reject any such agreement or instruction. Where a Committee wishes to recommend an amendment to an Agreement of Instruction this should be referred, via the Joint Secretaries of the Regional Council to the General Purposes Committee who will decide whether the amendment should be referred to the Regional Council or dealt with through Management or Trade Union channels.

2. CONDITIONS OF EMPLOYMENT (OTHER THAN REGIONAL AGREEMENTS)

Discussion of Conditions of Employment other than National/Regional Agreements, is limited to recommendations which can be forwarded to the appropriate body. Where a Committee wishes to recommend new conditions of employment, these should be forwarded as a recommendation to the Joint Secretaries in order that separate consideration can be given by Management and the Trade Union Side before a decision is reached regarding possible action. This also includes subjects which are considered by either Management or Trade Union Representatives to have possible applications outside the sphere of influence of the Committee.

3. CONSULTATION ITEMS

The Participation, machinery is also to be used as a communications system to inform employees of Region's policies, particularly in respect of appropriate elements of the Regional Operating Plan, and it is the intention that the operating departments will involve employees in the forward planning and decision making process of the Region. Participation Committees do not, however, have the authority to reject, amend or initiate Regional Policy, but are encouraged to make constructive comment.
4. **WORKING CONDITIONS**

It is hoped that such domestic items, unless of major concern, will be kept to a minimum and wherever possible resolved by direct contact between Management and Staff Representatives.

5. **SAFETY**

It has been agreed by the Regional Joint Council that the Participation machinery will incorporate safety items and safety organisations required under the Health and Safety at Work Act or any subsequent Safety legislation. In this connection Safety Representatives will be appointed and will report direct to the Participation Committees. It will not be necessary for Standing Safety Sub-Committees consisting of Management and Safety Representatives to be established but any decisions agreed between Management and Safety Representatives must be properly recorded and reported formally to the Participation Committee.

6. **ROLE OF THE REGIONAL JOINT COUNCIL**

Items such as management proposals concerning restructuring exercises and introduction of new systems which have a regional connotation are discussed within the Regional Joint Council Machinery and for their part the Trade Union Side undertakes consultation with members through their Branch machinery. The flow of information is through the separate Trade Union and Management channels and is collated by the Regional Joint Council Joint Secretaries. Although questions may be raised at Committees on these subjects, no Committee views should be expressed or decisions reached which could have a bearing on the Regional Joint Council discussions.
APPENDIX III

FORMAL CONTENT OF PERSONAL CONSTRUCT THEORY

Fundamental postulate: A person's processes are psychologically channelled by the way in which they anticipate events.

Construction corollary: A person anticipates events by construction of their replications.

Individuality corollary: Persons differ from each other in their construction of events.

Organisation corollary: Each person characteristically evolves, for their convenience in anticipating events, a construction system embracing ordinal relationships between constructs.

Dichotomy corollary: A person's construction system is composed of a finite number of dichotomous constructs.

Choice corollary: A person chooses for themselves that alternative in a dichotomised construct through which they anticipate the greatest possibility for the elaboration of their system.

Range corollary: A construct is convenient for the anticipation of a finite range of events only.

Experience corollary: A person's construction system varies as they successively construe the replication of events.
Modulation corollary: The variation in a person's construction system is limited by the permeability of the constructs within whose range of convenience the variants lie.

Fragmentation corollary: A person may successively employ a variety of construction systems which are inferentially incompatible with each other.

Commonality corollary: To the extent that one person employs a construction of experience which is similar to that employed by another, his or her processes are psychologically similar to those of the other person.

Sociality corollary: To the extent that one person construes the construction process of another they may play a role in a social process involving the other person.
## FS 1

### APPENDIX IV

#### SERVICE TO CUSTOMER

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**Satisfaction**

**Motivation**

**Interesting**

**Confidence**

**Time Available**

**Contented**

**Responsible**
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**ELEMENf MATCHING SCORES — GRID 1**

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**CONSTRUCT MATCHING SCORES — GRID 1**

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347a
1. **SAFETY**

   "Safety is the first aspect of my job".

2. **COMMUNICATION WITH THE CUSTOMER**

   "You've got to ask leading questions that you can get information out all the time".
   "You've got to be able to communicate".

3. **SELF TRAINING**

   "You've got to have the knowledge to do the work. Well obviously training is the initial step".

   The subject considers he has a responsibility to keep himself up to date by reading the information that is passed to him.

4. **PRODUCTIVITY**

   "You've got responsibility to customers and the Gas Board to get your work done".

5. **WORK STANDARD**

   "You've got to keep up to a standard"
   "You've got your personal standards".
6. RESOURCEFUL

"You get a job to do and you do the job and you find a person with it and you could sort of say, I can't do that or I haven't got the materials, or that's the end of it and you go back and order the parts, or you can try and solve it somehow by getting round it to keep them going before you get the parts".

"If you can do a job with the resources you've got - you know - things that you can get hold of instantly, it saves all aggro for everybody".

7. ADMINISTRATION

"You've got to make sure you don't give anyone else any work. To work you've got to fill in your work correctly. If you're ordering parts up especially in these days - you know, when economics - money, you've got to make sure you're ordering the right stuff".

This element covers the subject's responsibility for paperwork generally, time sheets, job cards etc.

8. WORKING RELATIONS

"You've got to get on with everybody. It's a close-knit thing. Everybody drains each other for information and this sort of thing, especially in my level at the moment while I'm finding my feet. If I didn't get on with the blokes at the depot, I'd have to say, what the hell's this - you know."
So if you get on with a lot of the blokes then they don't mind telling you or showing you.

9. CUSTOMER RELATIONS

"The customer's got to be satisfied with the work".
"You've got to have customer relations, it's easier to get on with them. Once you get on bad terms you're fighting a losing battle".

10. APPRENTICE TRAINING

This element was elicited near to the end of the discussion.

"You've got to keep your eye on them".
"I try to give them tips".

CONSTRUCTS

1. DIS-SATISFACTION - SATISFACTION

Doing something that is interesting, seeing the completion of a job, and by overcoming difficult problems.

2. FED UP - MOTIVATION

"Any horrible job. You're the only one that is going to do it no matter how long you sit there it's going to stay there, so you've got to get yourself together and do it. You've got to motivate yourself".
"I've still got to motivate myself, although even when I'm fed up or the job won't get done, but they get done slower".

3. BORING/TEDIOUS - INTERESTING

"I think servicing is boring. If you do seven a day, by the time I am on the sixth or seventh one I am really fed up, and yeah! that's what is repetitive".

The subject recognises the importance of his job being interesting and compares his job with that of a factory worker.

"Boring I suppose the other end of interest is. Well boring/tedious I'd put on that".

4. LACK OF CONFIDENCE - CONFIDENCE

Confidence is related to SATISFACTION (C1) in that you need to be confident to solve problems, which leads to a feeling of satisfaction at completing a job.

"You know, I go in there and I am the Gas Board and the whole thing, I should know everything about that".

"You mustn't lose confidence in front of them (the customer) that is the most important thing".

5. LACK OF TIME - TIME AVAILABLE

"So you don't get enough time".

"I think most blokes could find the faults given the time to find them".
Time restrictions created by the bonus/productivity scheme make it difficult to do a job thoroughly, although it will always be safe it may not always be the best job that could be done. In order to maintain reasonable standards he considers that he needs to be more RESOURCEFUL (E6).

6. FRUSTRATING - CONTENTED

Frustration is the feeling the subject gets when he is delayed, that is he is prevented from working by the customer, a problem or something else. When things go well he feels content. There is a relationship to TIME (C5) here, as it is seen as such a limiting factor.

Customers seem to be a great source of aggravation, which leads to frustration. In that sometimes you cannot do enough for some customers.

7. IRRESPONSIBLE/UNRELIABLE - RESPONSIBLE

"You've got to be responsible for your actions and to other people".

"Sales representatives, delivery people, planning people and so on. I think they are not very responsible really. Should be, but I don't think a lot of them are".

Generally the persons mentioned above are not seen as being reliable and responsible. They often create difficulties for the subject by not giving information, giving wrong information, or not supplying the materials he needs.
SUMMARY OF DISCUSSION

Individual Expectations
- To derive satisfaction from doing a good job.
- To be self motivating
- To retain/maintain interest in the work.
- To be confident to carry out the duties and responsibilities related to the job.
- To be content, not be interfered with by others.
- To be responsible and reliable to others.

Expectations of Management
- That they allow more time for him to do his job.
- That consider more the standard of work rather than productivity.

TRAINING NEEDS/COMMENTS
- Training on the electrical parts/components of appliances
- Use of the multi-meter (circuit tester).
- Electrical diagnostics
- Update courses for new appliances.
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FOSSED GRID 1
1. **STANDARD OF WORK**

The subject has pride in upholding a good standard of work. He is also concerned not to have any comebacks from management as a result of bad workmanship.

"Well, you don’t want any comebacks do you on your work, that is one of the main things".

He also considered that it is the industry’s responsibility to train him to be able to uphold a good standard of work.

2. **CUSTOMER RELATIONS**

In order to uphold the Industry’s image he sees his responsibility to promote good relations with the customer. This is related to standard of work, as well as his conduct.

"Customer Relations and the way I work myself. I think what a lot of guys do is, what would I like working in my home".

3. **SELF TRAINING**

Intentionally going out to find information which will assist the subject in his work. The subject sees the overall responsibility for training to be that of the Region.
"You've got to have the training and be equipped to go into a person's house and do the job and show a good image".

"They've got to give you the knowledge".

4. **SAFETY**

The subject sees this as the number one priority, and consequently will uphold safety standards in all circumstances.

5. **APPRENTICE TRAINING**

The subject says little in relation to this element. He accepts that it is a responsibility, and also states that he gets some enjoyment from having an apprentice with him.

6. **PRODUCTIVITY**

Doing the expected amount/quantity of work. This is seen as a two-fold element. The Region expects an amount of work, as does the individual. This is especially so from the individual's point of view since the productivity will be reflected in his weekly earnings,

"At the end of the day you dislike yourself if you feel you haven't" (done a fair days' work).

7. **COMMUNICATION**

Recognised as being a necessary part of working life. Communication in this context applies to that which takes place between workmates, supervisors and management.
As the subject is a shop steward, communication between himself and other groups at work is both necessary and important, and to a great extent his responsibility to maintain.

CONSTRUCTS

1. NO ASSISTANCE - ASSISTANCE

This construct relates to the degree of help/assistance the subject can expect to get from his supervisors.

"Probably when you ask for assistance it's not easily given".

"It could be a difficult job, as an engineer I'm expected to have all the knowledge we're talking about, training, and you're in a tight corner, and you know someone's got the expertise to resolve that job and it doesn't happen."

According to the ratings given by the subject, little or no assistance is given in relation to: CUSTOMER RELATIONS (E2) 

APPRENTICE TRAINING (E5) 

PRODUCTIVITY (E6) 

COMMUNICATION (E7) 

2. BORING - ENJOYABLE

The subject sees that his work should be enjoyable, and for him it is enjoyable at the present time.
The type of job on which he is employed at any particular time can seemingly affect his level of enjoyment.

"Now the job, as I see, it can't be enjoyable if it is repetitive".

Enjoyment I consider is similar to job satisfaction for this subject. Although not clearly stated, there are implications within the transcript, and as such would be related to PRIDE (C4).

3. NOT ENOUGH TIME - ADEQUATE TIME

Time is singularly the most inhibitive factor for the subject. Although he considers there to be always enough time for SAFETY (E4) and COMMUNICATION (E7), it seems he would prefer to have more time to satisfactorily carry out all other responsibilities.

4. DISSATISFACTION - PRIDE

For the subject, this means being able to stand back from a job and feeling proud at having done it well. I see this as being very closely related to job satisfaction, especially as the implicit pole is seen as being DISSATISFACTION. This would I see affect the degree of ENJOYMENT (C2) derived from the job.

Feeling dis-satisfied is,

"Well when you felt that you could have done it better and you probably haven't got the resources to go back to square one".
5. NON-MOTIVATING - MOTIVATING

Motivation is something the subject relates to the job as a whole. It is to some extent related to his social and family life. He recognises that he requires an amount of money to live, he also requires permanent employment. These considerations, as well as personal desires for upholding pride and getting enjoyment from the job, provide his motivation.

Personally, I see his role as shop steward being contributive to this, for this seemingly motivates him, since it satisfies some inner desires which may not otherwise be satisfied.

6. NO FAMILY PRESSURE - FAMILY PRESSURE

The subject spoke at length of the effect of family pressure on his work. He seemed concerned about this, he considered that above all else this could most affect his ability or desire to work, despite the motivations provided by his family responsibilities.

NB. The subject spoke briefly of the effect of differing personalities at work. As it seemed to be a sensitive area for the subject, I did not pursue it in further detail.
SUMMARY OF DISCUSSION

Individual Expectations

- To get enjoyment from the job.
- To be proud of the company and to retain that pride.
- To continually recognise the responsibility to the organisation and family (motivation)
- To contribute to good communication with all staff.

Expectations of Management

- That they provide adequate training
- That they provide the assistance he needs to overcome problems.
- That they allow adequate time for him to perform his job, carry out his responsibilities effectively and to a good standard.

Expectation of Others

- That they share information which may help the subject resolve problems.
Unfortunately due to a faulty tape, the questions referring to training needs are not available. The only recorded comments available are as follows:-

"Going to the Old Kent Road which I enjoyed".

"the updating on the equipment, appliances, tools".

Study of the transcript and related grid, I believe, provides a number of clues to the subject’s needs in a general sense. I believe he demonstrates confidence and as such can cope with most of the situations he encounters. Like the majority of service engineers he probably requires regular updating on appliances, tools, procedures etc. The extent to which he requires these I cannot judge. I do know that the subject works on a district where management are concerned about training, and are active in carrying it out.
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FS 4

ELEMENT MATCHING SCORES — GRID 1

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CONSTRUCT MATCHING SCORES — GRID 1

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362a
SUBJECT FS. 4  ANALYSIS OF DISCUSSION

ELEMENTS

1. SAFETY

"The first thing that comes into your mind is safety, isn't it with gas".

2. STANDARD OF WORK

"I like to take pride in my work. I think that comes into it".

The pride the subject has in his work always it seems ensures that he works to a good standard.

3. PRODUCTIVITY

"You usually try and do as much as you can".

While the subject recognises the responsibility to do a fair day's work he says categorically that he would rather maintain a good standard of work and forget his productivity.

4. APPRENTICE TRAINING

While the subject accepts responsibility for this aspect of his job he said:

"I don't think the bonus scheme helps the apprentices at all because with the bonus scheme the fitter doesn't show the apprentice what the work entails".

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5. COMMUNICATION

"It's a responsibility, yes! just to keep people informed what has been done or if there is a problem somewhere".

6. CUSTOMER RELATIONS

"The customer relations, yes, that is quite high. We are right in the firing line".

"Much of maintaining good customer relations is communicating with the customer to establish the exact nature of the problem, or their installation requirements. And only then doing a good job".

7. SELF DEVELOPMENT

The subject seems to see the Region as responsible for training, but recognises that some self training is necessary. He sees solving his own problems as a form of self development.

8. WORKING IN A TEAM

"Part of the job is being able to work with a group of men".

This seems to mean doing what is expected of each other, being reliable etc.

CONSTRUCTS

1. NON-SATISFYING - SATISFYING

"Job satisfaction, where a number of fitters are called, unable to sort something out, and you go there and find the fault and rectify it."
2. **UNIFORMITY - VARIETY**

The subject sees that he has great variety in his work. Variety for him is meeting different people and although at times he may be doing similar types of jobs, the problems are always different.

"The job's never boring because you meet so many different people and have so many different problems".

"You've got variety in the work you do and also variety in the people you meet".

3. **LACK OF KNOWLEDGE - ADEQUATE KNOWLEDGE**

"Knowledge of the job, what you've been trained".

Knowledge is seen to combine with experience and be complementary to the STANDARD OF WORK (E2), and by implication SAFETY (E1) and CUSTOMER RELATIONS (E6)

4. **NOT ENOUGH TIME - ADEQUATE TIME**

"With a bonus scheme in operation, time is always at the back of your mind. It does affect your performance".

The subject demonstrated some concern, since productivity leads to time constraints and by implication affects performance.

"often standards will fall because of it".

"That is why I am against productivity because of the standard of work".
5. **FRUSTRATED - SATISFIED**

Differs from construct 1 - SATISFYING, which concerned the subject in his own environment doing a job he basically controls. This construct is about the general work climate created by people at work. Whether or not it is a nice place to work, are the people nice to work with and for? The degree to which the subject can carry out work in the way he wants to, is relevant. Sometimes he cannot, it would seem, due to structural or procedural issues. This he claims can be very frustrating.

**SUMMARY OF DISCUSSION**

**Expectations of Individual**

- To derive satisfaction from the job, having pride in the finished job.

- To have the knowledge to effectively do his job.

- To do a fair day's work.

**Expectations of Management**

- To provide him with the time he needs to effectively do his job.

- To make allowance for the everyday problems he encounters.

- To let him solve his own problems, where possible, for self development.
TRAINING NEEDS/COMMENTS

New appliance updating, but would not like to sit down all day, he prefers to be involved in the training.

He considered that the fault finding and electrical courses he had attended at the Regional Training Centre were good, but he did not like the one day refresher courses.
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ELEMENT MATCHING SCORES — GRID 1

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SUBJECT FS.5

ANALYSIS OF DISCUSSION

ELEMENTS

1. SAFETY

Carrying out safe work, leaving the job safe.

2. CUSTOMER RELATIONS

"I think you have got a responsibility to them in general in so much as they depend on you or your knowledge and they know nothing about the job".

Good customer relations is upheld by doing a good job.

3. RESPONSIBILITY TO FELLOW WORKERS

This refers to the responsibility the subject sees he has to fellow workers. By this he means that he will do jobs properly, he will not leave a job in such a condition that his fellow workers will have to call after him and put the job right.

"You can go into a job and if you go in with the feeling, I can't get it right, just get it going quick enough to get out - that can be done and then somebody else who, I say, is a fellow worker, has got to go round and sort out what you've left".

4. STANDARD OF WORK

This element is related to both CUSTOMER RELATIONS (E2) and FELLOW WORKERS (E3). By upholding the STANDARD OF WORK these two elements will seemingly be upheld.
As well as this the subject works to a good standard for his own personal satisfaction.

5. **COMPANY IMAGE**

The subject sees himself responsible to the region to uphold the image.

"You've got a certain responsibility I should say to the firm itself".

"Because you represent them, don't you? You go in there as a worker, a member of Segas or whatever".

"Because as I say you are really Mr. Segas, to a customer".

6. **APPRENTICE TRAINING**

"They do come with me and I suppose at the time when they are with you, you are responsible for them, for you are training aren't you?".

7. **COMMUNICATIONS**

The responsibility for letting people know what you are doing is specifically applicable to communications with the supervisor.

CONSTRUCTS

1. **MUNDANE - VARIETY**

"I don't like servicing boilers day after day".

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"If they put me on it for a certain length of time I'd start to have a kick about it".

2. **DIS-SATISFACTION - SATISFACTION**

What the subject gets or derives from doing a job well.

"On fault finding which I think there is an amount of satisfaction, knowing that you have actually put something right that was not working previously".

"Well! installation like, when you have finished you can stand back and look at it".

3. **LACK OF SELF DEVELOPMENT OPPORTUNITIES - SELF DEVELOPMENT OPPORTUNITIES**

There was some discussion as to whether this should be a construct in the above form or an element of self training. While he considered it to be partly his responsibility, it was only possible where there was an opportunity. Some things are learnt from doing the job itself.

"A lot of it is what you pick up yourself".

"I mean that goes a bit with variety as well, because I mean if you don't have a bit of variety, then you don't learn anything new anyway".

The subject said that information relating to the job is passed to him. There seemingly is so much of it that there is not enough time to digest it. Usually it is read but not remembered.
4. LACK OF ASSISTANCE - ASSISTANCE

Reference here is to the assistance available to the subject to overcome problems. He says sometimes it is not available, or not available when you need it. Another factor related to training, when there is a problem on a job the assistance to overcome this would be useful at the time. Often a technician calls after the subject has left the job, he consequently learns little which may help to overcome future similar problems.

5. NOT ENOUGH TIME - ADEQUATE TIME

The subject made reference to time on a number of occasions throughout the discussion. It is his view that generally he has insufficient time to carry out the duties and responsibilities of his job. Often it leads to him having to rush work.

6. POOR EQUIPMENT - GOOD EQUIPMENT

Generally he feels he has the right tools and equipment, since in relation to most elements it is rated at '4'. As the subject did not elaborate on his thoughts at this stage no further detail was forthcoming.
SUMMARY OF DISCUSSION

Individual Expectations

- To derive satisfaction from the job, from doing it well.

Expectations of Management

- To be given variety in the type of work to be carried out.
- To be provided with the opportunity for self development.
- To be given assistance in problem solving where required.
- To be allowed adequate time to realistically carry out his duties and responsibilities.
- To be provided with good quality tools and equipment.

TRAINING NEEDS /COMMENTS

- Updating on new appliances

The subject considers that past training has in many respect been inadequate. This was particularly so in relation to the new work areas that had been introduced, i.e. Central heating, Kitchen units.
He also considered it not enough to just keep giving out technical/procedural updates. He believes they should be issued on a more formal basis, with accompanying talks or discussions. This would ensure that the important parts or sections of information were not overlooked, which they often were at present.
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SUBJECT FS. 6  

ANALYSIS OF DISCUSSION

ELEMENTS

1. SAFETY

The main responsibility in the subject's view is for all jobs to be left safe.

2. STANDARD OF WORK

"Over the years you set yourself a standard, you try and keep it up to a point. Obviously it's not always possible, but as near as, you try and carry on the way you started".

3. PRODUCTIVITY

The subject accepted that he had to do a fair day's work, but more important to him are his responsibilities to SAFETY (E1) and STANDARD OF WORK (E2).

4. CUSTOMER RELATIONS

Promoting good relations by having the right attitude to the job, which is doing a good job, leaving the customer happy. This is sometimes difficult due to changes in safety standards which affect customers.

5. APPRENTICE TRAINING

The degree to which the subject feels responsible for apprentice training is variable.

"Yes, well yes and no. If the kid's willing, fair enough, yes. But if not you know it's............"
Some, they are gormless. You'd think with all the unemployment they'd be glad to have a job, but some of them come with a funny sort of attitude".

Although the subject said he would sacrifice his productivity to train an interested apprentice.

6. COMMUNICATION
This is seen by the subject as the written communication of which in his view he does little, except in special circumstances.

"You don't write as many reports as we used to. You just write a code and that's it unless you've got any problems on the job".

7. IMAGE
Maintaining a good image by upholding appearances.

"As you walk in the door they tend to look at you and think, oh, my God, or whatever".

8. SELF DEVELOPMENT
Reading the information as supplied, generally finding out about new appliances/equipment etc., although he considers there to be too much to read, and too many changes taking place.
CONSTRUCTS

1. FRUSTRATION - SATISFACTION

"You can do ten jobs, whatever, but you can get more satisfaction out of doing two you know. It all depends really".

The subject derives satisfaction from doing a good job, which is what he likes to do. But he also said:

"I think you could become frustrated, you know if you were doing them badly".

"The thing is if I didn't get satisfaction from working I'd pack up and go somewhere else".

2. ANXIOUS - CONFIDENT

The ability to do a good job to solve problems is based on the subject's high level of confidence. Sometimes he is unable to overcome problems, for reasons he considers to be outside his control. These situations cause him to feel anxious.

"You haven't done a good job, you know, within the realms of that appliance that you can't do any more to it. It's just a bad design or - you know - bad manufacture, whatever the case might be and that's it".

3. IGNORED - RECEIVING PRAISE

Praise in this context may be from a customer, or supervisor, and results from his doing a good job. The subject considers that he always does a good job, but sometimes its nice to be told so.
"It gives you a bit of a buzz yeah! It's good because people tend not to. I mean you always get letters of complaint, whereas people who've had a good job done never tend to bother". "I think it's nice to be appreciated."

4. **DEAF EARS - MANAGEMENT COMMUNICATION**

From a discussion concerning lack of tools and related equipment, the subject considered management seem to take little notice of his needs. The subject saw some issues could be effective on the way he did his job. His concern at the time was lack of power tools, and a request for protective clothing has, as far as he knew, been ignored.

"All these meter boxes that are going and now you work outside while you are using them. We've been having a go about some wet weather gear but you know, its been going on all through the winter".

The construct has been rated low in relation to all elements.

5. **INHIBITIVE PROCEDURE - AVAILABILITY MANAGEMENT**

This construct refers to the communication system utilised by management, which is hierarchically based.

"Everything you do has to go through the supervisor, that's full stop".
Referring to management he said,

"When you are in trouble that is the only time you get a ride upstairs".

The subject considers the system to be poor, and in many ways ineffective, it is also long-winded.

6. REPETITION - VARIETY
The subject likes to do a job which provides variety. After discussing one of his previous tasks as an engineer - boiler servicing, he said:

"It used to drive me bananas".

7. RUN OF THE MILL - CHALLENGING
Without challenge, the job becomes boring according to the subject. Having problems at times provides a challenge which stimulates interest.

"I think it needs to be challenging to make it interesting".
"If you just go along that same straight road with no variety it just becomes a total bore".

VARIETY (C6) and CHALLENGE are to some extent related, for the subject VARIETY is sometimes provided by a challenge.
8. LACK OF TRAINING - ADEQUATE TRAINING

In relation to training, the subject said:

"Well, I say we don't get any, it's virtually nil".

The subject considers himself to be adequately trained to uphold his responsibilities to SAFETY (E1) and IMAGE (E7), all others are rated at '3' or below. The detail referring to actual training needs will be with the training needs/comments section of this analysis.

SUMMARY OF DISCUSSION

Individual Expectations

- To derive satisfaction from doing a good job
- To be confident to carry out the duties and responsibilities associated with the job.
- To see the job as a challenge and not as a problem, so as to maintain interest, and provide variety.

Expectations of Management

- To be given praise where appropriate.
- To take notice of the requirements of engineers and provide feedback where required on issues relating to their requests.
- To be considerate of the problems experienced by engineers.
- To be available for discussion, break down hierarchical barriers.

- To provide variety in the work issued to the engineer.

- To be given adequate training.

**TRAINING NEEDS/COMMENTS**

The subject considers that there is enough information around, in fact too much, you cannot read it all, and effectively remember it. Despite the fact that the subject considered there was little training actually taking place for himself, his main need is central heating training. That is diagnostics and problem solving. Updating on new appliances would be useful, before they are on the market.

"It's nice to see appliances when they first bring out this sort of things, but you can fiddle your way through most times".

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**ELEMENT MATCHING SCORES — GRID 1**

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**FOCUSED GRID 1**

![Focused Grid 1 Diagram](image-url)
SUBJECT FS.7 ANALYSIS OF DISCUSSION

The subject of this discussion was not too forthcoming. He required a great deal of assistance at both the construct and element elicitation stages, in fact far more than I ideally like to provide. The resultant grid, to a great extent, represents my view of the service engineer's role at work. My suggestions and ideas about a service engineer's work were, in relation to both elements and constructs, readily accepted by the subject in most cases.

The resultant grid is not without value, whatever labels were eventually used to identify parts of the grid, they were in the main mine. The meanings put upon these labels was something the subject did, as well as rating constructs. Also the labels were found it necessary to provide, were collectively those that had been elicited at earlier research discussions. The twenty or so discussions previous to this one had provided me with a repertoire of commonly perceived responsibilities (elements) and feelings/views about a service engineer's job (constructs).

ELEMENTS

1. SAFETY

Working safely, leaving work safe. The first priority.

2. STANDARD OF WORK

Doing a good job

"You do the best you can". 

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3. APPRENTICE TRAINING
On-job training of apprentices

"You've got to sort of you know - explain - things how they work as you go along".

4. CUSTOMER RELATIONS
Getting on with customers

"It is one of the most important things - you know".

5. SELF TRAINING
Keeping oneself up to date with technology.

"Well - you know - you get the magazine 'Aspect' and you read through that and anything new - you know - I always look thought, you see, if there is anything new - you know - ".

6. COMMUNICATION
With the supervisor, and fellow workers.

"My supervisor, if you don't sort of explain things to him, you're not communicating are you? So you've got to".

"That is how you learn even more by talking about problem jobs amongst yourselves and supervisors. You pick little hints up, here and there".
CONSTRUCTS

1. MISERABLE - SATISFACTION

The subject said he likes the job and finds it very satisfying.

"You know - if you didn't like the job, you couldn't do it".

SATISFACTION for the subject is completing a job.

"Well! you know - if I can't complete a job on my own, I will go home quite miserable - sort of thing".

2. BORING - CHALLENGING

The subject would not like to do installation work, especially as he has not done any of this type of work since he was an apprentice. He prefers the CHALLENGE provided by diagnostic work, other work like regular servicing he finds boring.

"It can get boring if you have a week of servicing".
3. **INADEQUATE TRAINING - ADEQUATE TRAINING**

The subject considered that past training had been good but it was not so good now.

"Well some of the new appliances you never seen anything until you meet it on the District."

4. **COULDN'T CARE LESS - HELPFUL STAFF**

With regard to help and advice the subject said,

"Usually there's someone around, you know, they can usually rustle up somewhere, they try anyway".

5. **INSUFFICIENT TIME - ADEQUATE TIME**

The subject considers that usually there is enough time to do a good job. Sometimes jobs do not go well, difficult problems arise.

"If a job goes wrong and you're struggling and you're building up time and you've got another eight jobs to go to."

Ideally he would prefer to have more time on each job. This would guarantee a constant STANDARD OF WORK which at times is affected by lack of time, as is APPRENTICE TRAINING.

6. **UNCERTAIN - CONFIDENT**

Confidence is described by the subject as

"You can go straight out and get on with that."
Here he is talking of the job. Being confident is coping with the problems with which he is presented. The degree of confidence is related to experience, TRAINING (C3) and KNOWLEDGE (C7).

7. LACK OF KNOWLEDGE - KNOWLEDGE
This construct is closely related to both CONFIDENCE (C6) and TRAINING (C3). Knowledge is acquired partly through training and experience, and by discussions with people at work. In total these contribute to the individual's confidence to effectively carry out his job.

SUMMARY OF DISCUSSION

Expectations of Individual

- To derive satisfaction from his work. He likes the work he does, making the customer happy provides satisfaction.

- Prefers to be confident to carry out his job, which he feels he is.

- Likes to be knowledgeable, so recognises the need to self train.

Expectations of Management

- That they give work which varies in content.

- That they give him the work that he is best at.
- That they do not give him repetitive work to do.

- That they provide adequate training.

- That staff are helpful in assisting to overcome the problems related to his work.

- That they give him adequate time to carry out safe work, which is to a good standard.

- That they make allowance for those times when he has problems.

TRAINING NEEDS / COMMENTS

Where update training is given, the subject would prefer to see an appliance physically rather than a film.

"New appliances - you know - you've got to see them, it's no good these films that they show you."

He further states that he would like to see appliances taken to pieces, and maybe work on them himself.

FURTHER TRAINING AREAS

- Basic knowledge of non-domestic appliances

- Refresher training on electrics

- Refresher training on central heating
In relation to past and present training he said:

"We used to get bored going to Old Kent Road (Regional Training Centre) - you know - training; but at least you did learn something".

He said that the last training that took place locally was quite good, but it was some time in the past.
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Prior to this discussion I was informed that the subject, a shop steward, was a particularly difficult person to deal with. I was therefore very cautious in my approach to the subject. Following some discussion seven elements were elicited. When it came to the constructs the subject did not seem to want to continue in a manner congruous with repertory grid. As a result no constructs were elicited directly, but it is possible to identify some by studying the transcript. It seems that the subject opposes those things which are formal, he said at one point "I like to have a bad boy image" an image he felt he had to maintain. In fact I found him a pleasant person and really had no difficulty conversing. I did feel, and do now, that had I pressured the subject into construct elicitation my view now may be very different.

ELEMENTS

1. SAFETY
"That has got to be the first one safety".

2. STANDARD OF WORK
"To make sure I have done a good job".

3. CUSTOMER RELATIONS
"Well you have got standard to the consumer, looking after her property while you are working there".
4. **APPRENTICE TRAINING**

This responsibility differs from those of normal service engineers. As the subject said he does not have apprentices with him, but as the shop steward he has to 'nurse' them along.

"As shop steward I have to look after them".

5. **REPRESENTATION**

As the shop steward, the subject represents his fellow workers and sees this as an on-going responsibility.

6. **SELF TRAINING**

Initially the subject did not claim that he self trained at all. After some discussion he changed his mind and recognised it as a responsibility.

"I am not afraid to ask somebody if I am not sure, I suppose it could be a bit of self training to ask, or come in in the morning and ask".

7. **COMMUNICATION**

Responsibility for completing work documents.

"It is for your own interest to do it properly, it is nobody elses".

**CONSTRUCTS**

As implied by the discussion and associated transcript.
SATISFACTION

"Satisfaction to me is going out, and if something is not working, getting it to work".

CHALLENGING

"If you have been to a house and the woman says I have had five or six blokes and you get it what I call near perfect".

APPROACHABLE MANAGEMENT

"If you have got a manager that you can go to and say I have got a problem".

Adequate Training

"Practical training in new appliances".

SUMMARY OF DISCUSSION

Individual Expectations

- To derive satisfaction from the job, by doing it well.
- To see challenge in the work done, which contributes to satisfaction.
- To be confident in the work done.

Expectations of Management

- That they provide adequate training for him to do his job.
- That they are approachable
- That they may assist in problem solving.
TRAINING NEEDS/COMMENTS

The subject had a great deal to say about training, most of which was in the form of criticism of the methodology. He considers present training to be fairly poor, in that it is too much talking and not enough doing.

"I like practical training, where I can get my fingers involved and my tools you know, take something to bits, I know I might do it today and next week I might meet it on the district".

The subject is not impressed by the video programmes that are produced and issued to the districts, basically because they are not practical.

The subject considers training would be useful for him in the following areas:

- New appliance updating
- Refresher on the Gas Act
- Refresher on the Health and Safety at Work Act
- Procedure Training
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Pleased
Variety
Capable
Information Available
Confident
Enough Knowledge
Good Working Environment
Good Communication
Good Planning
SUBJECT F8.14

Due to problems with the tape recording only a small part of the discussion was recorded. This covers the element elicitation to SELF TRAINING (E5).

ELEMENTS

1. SAFETY

"Making sure that everyone is safe".

2. STANDARD OF WORK

"Everyone gets the best use of all their appliances, I suppose, make sure that they all work".

"You have to maintain high standards".

3. PRODUCTIVITY

"You are not paid for sitting around doing nothing, you have got to get out and work".

"We have to produce as much as possible".

4. CUSTOMER RELATIONS

5. SELF TRAINING

"The only way you find out when something is new is when you meet it for the first time, cookers and that - there always seems to be a new one every day - and that, but they are all basically the same, you talk amongst yourselves about it".

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6. **COMMUNICATION**

**CONSTRUCTS**

1. WORRIED - PLEASED

2. BOREDOM - VARIETY

3. IMCOMPETENT - CAPABLE

4. NO INFORMATION - INFORMATION AVAILABLE

5. NERVOUS - CONFIDENT

6. UNAWARE - ENOUGH KNOWLEDGE

7. BAD WORK ENVIRONMENT - GOOD WORK ENVIRONMENT

8. BAD COMMUNICATION - GOOD COMMUNICATION

9. BAD PLANNING - GOOD PLANNING
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**SERVICE TO CUSTOMER**

FS.16
**FS 16**

**ELEMENT MATCHING SCORES — GRID 1**

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**ROUSED GRID 1**

**CONSTRUCT MATCHING SCORES — GRID 1**

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SUBJECT FS.16

ANALYSIS OF DISCUSSION

It was difficult at times to encourage the subject to think. It was necessary for me to provide too many prompts, in my view. While this was acceptable at the element elicitation stage, it was not acceptable at the construct elicitation stage. As well as this, the subject did not seem at ease with me. I consequently did not pressure the subject and decided, having elicited four constructs to go no further with the grid. He spoke of the effect of his own 'mental attitude' but he seemed reluctant to extend the discussion on this point.

ELEMENTS

1. SAFETY
Leaving work safe, working safely.

2. CUSTOMER RELATIONS
Looking after the customer interests, completing a job on the day of calling.

3. STANDARD OF WORK
Completing a job to the customer's satisfaction.

4. PRODUCTIVITY
"Your supervisor gives you your work, so you are being measured for time".
"You have got to put in your full days work".
5. APPRENTICE TRAINING
While the subject said that generally he does not take apprentices out, he recognised when he does he is responsible.

6. SELF TRAINING
"You have got to keep yourself in line with what is happening, what is going on in your own district".

"If you come across a certain piece of equipment that you are not sure of, you have got to find out for yourself".

7. COMMUNICATION
Responsibility to the supervisor for reporting on job, completing documents, using the radio - telephone.

CONSTRUCTS

1. BORING - SATISFYING
The subject derives satisfaction from overcoming difficult problems, especially where others have failed.

"It gave me a bit of satisfaction because I found it".

"In your own mind you know you are doing someone a bit of good".

SATISFYING is related to CHALLENGING (C2). It is the challenge of say a problem which is likely to lead to him feeling satisfied.
2. NOT ENJOYABLE - CHALLENGING

"Anything that is straightforward, is to me - there is nothing enjoyable in it".

"You have got to enjoy your work, otherwise you might just as well pack up and go on the dole".

The challenge of the job leads to SATISFACTION, which in the subject's terms is enjoyable.

3. PARTS NOT AVAILABLE - PARTS AVAILABLE.

"You always expect to finish a job the same day that you call there, the consumer expects you to be able to do that, and it can get very frustrating when you have not got the materials or the parts to be able to complete".

4. NOT HELPFUL - HELPFUL STAFF

The subject spoke of the importance of the supervisors being helpful, especially when he has problems.

"The three supervisors that we have got here, if we need a certain thing, they would go out of their way to get it".
SUMMARY OF DISCUSSION

Individual Expectations
- To enjoy his work
- To derive satisfaction from completing work
- To be able to complete a job in one call.
- To be able to solve problems.

Expectations of Management
- That they provide the parts and materials necessary for him to carry out his job.
- To be helpful, giving assistance and advice where required.
- That they provide the opportunity to work in the administrative office for a short period, so he may appreciate what happens in there, and what problems they have.

TRAINING NEEDS/COMMENTS
- Updating on new appliances
- Updating/refresher on electrics - diagnostics
- Training in electronics, to assist in the resolution of technical problems on today's advanced appliances.
- Report writing, to assist in the completion of documents.
**Protected Viewpoint**: no recording of some sections, particularly related to views of management.

Re:- Backing support given by information

- Decision making process
- Treated like manual workers rather than people
- Productivity unit.
FS 17

ELEMENT MATCHING SCORES — GRID 1

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CONSTRUCT MATCHING SCORES — GRID 1

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FOCUSED GRID 1

\[ \text{Diagram of focused grid 1} \]
The subject is a shop steward at his district, representing the interests of a group of service engineers. As well as requiring more help than I was initially intending to give at these discussions, the subject was I feel intentionally protective about what he said. Some parts of the discussion he did not want recorded, particularly those parts which were criticism of management. Study of the transcript reveals that the subject, in the main, accepted any suggestions I offered without really thinking about what I said.

ELEMENTS

1. SAFETY

"Well public safety as well as the safety of my job".

2. CUSTOMER RELATIONS

Negotiating with the customer, doing a good job.

3. WORK CONSCIENTIOUSNESS

Doing a good job, having pride in the work done.

4. PRODUCTIVITY

"Well you have got pressures on you to complete your work load".

"Well you opt to accept a given amount of work and that's what you are contracted to do".
5. **TRAINING APPRENTICES**

"So you have a responsibility for the training of apprentices".

6. **TOOLS AND EQUIPMENT**

Originally seen as a responsibility by the subject, but as he was unable to relate it easily to the elicited constructs it was crossed off the grid.

7. **COMMUNICATION**

Keeping documentation up-to-date and correctly completed, for the supervisor.

After some discussion about staff training, the subject decided that he was not responsible for doing any himself. He considered all training to be the Region's responsibility.

**CONSTRUCTS**

1. **TWO FACED - HONEST**

"I mean if someone is not happy with something, I would much rather that they say, I am not pleased with that".

"There is nothing worse than someone saying to you, yes! I am pleased with that, and you go in the next morning and there is a complaint".

While this construct originally applied to customers, he later said that the officer staff were not always honest when giving information about jobs.
2. DIS-SATISFACTION - SATISFACTION

"It was quite a good job and they were pleased with it, and that made me feel quite good you know".

"I get a lot of job satisfaction, and I mean I must be honest I am not a scholar, as they say, but I feel that I can use my hands".

In relation to dis-satisfaction he said,

"I didn't used to mind what I did and then they bring in these twopenny halfpenny work schemes and you get these little men in offices and that dictate what are your estimates and that".

3. UNCONFIDENT - CONFIDENT

The subject is employed on the installation of appliances, a fact with which he is happy. He said that complaint work (rectifying faults on customers' appliances) gave him a headache. This it seems reflects the confidence he has in the work he normally does, and the likely alternatives. He is confident to do what he normally does which is the installation work. The subject definitely does not like having problems.

4. FED UP - CONTENT

Some of the discussion relating to this construct is unrecorded. It seems that the subject feels bitter and unhappy about the general work environment. He is, it would seem, only happy with those things that he is able to control, i.e. SAFETY (E1), CUSTOMER RELATIONS (E2) and WORK CONSCIENTIOUSNESS (E3).
5. INADEQUATE EQUIPMENT - ADEQUATE EQUIPMENT

All of the discussion related to this construct is off the record, it seems though, according to the ratings that in general the equipment with which he is provided is adequate.

6. LACK OF TRAINING FACILITY - TRAINING FACILITY

The subject considers that to some extent CONFIDENT (C3) comes about as a result of training. At the present time he does not consider the training to be adequate. What training is carried out is he feels time wasting since it involves travelling to another depot.

During the conversation/discussion a number of other areas were mentioned. These the subject preferred not to have recorded. These areas concerned:-

- the backing support given by management
- management decision making process
- management treat him like a manual worker rather than a person,
  leading to the feeling that he is no more than a work unit.

SUMMARY OF DISCUSSION

Individual Expectations
- To derive satisfaction from the job.
- To be confident to carry out his work.
- To feel content with the general work environment.
Expectations of Management
- That they provide him with the equipment he needs to do his job effectively.
- That they provide adequate training, at a local level.
- That management back him, and provide support for his decisions and his responsibilities.
- That they treat him as a person rather than a work unit.
- That they are more understanding of his problems.

Expectations of Others
- That customers and office staff are honest, that they say what they mean. That they say what the facts are.

TRAINING NEEDS/COMMENTS
- Updating on standby safety and emergency procedures.
- Updating on new appliances. The subject considers this would be best done by having a mobile training unit. This he feels could travel around the districts, by this means most people would have the advantage of seeing new appliances before they are encountered in a customer's home.
- Central heating system diagnostic training.

- The subject considers it would be more logical to employ diagnostic electricians, rather than train engineers to cope with electronics etc.
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Seemed unable to admit to anything (real feelings not articulated).
FS 18

ELEMENT MATCHING SCORES — GRID 2

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CONSTRUCT MATCHING SCORES — GRID 2

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7 0 12 50 75 62 37
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FOCUSED GRID 2
The subject found it quite difficult to come to terms with repertory grid technique. In the beginning the subject seemed unable to identify his responsibilities, when he did he found it difficult to come to terms with them. As a result there are only four elements in the grid. It was again difficult at the construct elicitation stage. It was necessary for me to work very hard to encourage the subject to think, and at times necessary for me to provide too much information, in my opinion. Later in the discussion the subject seemed to relax more. This led to some very interesting remarks although these did not necessarily become constructs or lead to them.

ELEMENTS

1. **SAFETY**
   
   "Safety is the prime item".

2. **STANDARD OF WORK**
   
   "You want to keep a certain standard, your own standard".

3. **APPRENTICE TRAINING**
   
   Responsibility for training apprentices on the job.

4. **CUSTOMER RELATIONS**
   
   Dealing with customers, what the job is all about.
CONSTRUCTS

1. PRODUCTIVITY NOT EFFECTIVE - PRODUCTIVITY EFFECTIVE ON THE JOB

"You are put under pressure to do that amount with the systems that we work".
"I am not too worried that I get all completed, but I do worry that they are done to a good standard".

2. INADEQUATE INFORMATION - TOO MUCH INFORMATION

The subject shows as much concern for there being too much information as he does for there not being enough. Having been in the employment of the industry for some thirty years, he said he has seen much change. For him the change seems all too much.

"It is such a vast job now for the information that we are supposed to store, it is a practical job, for people with practical aptitude generally".

"Do they want practical people or theoretical people".

"I mean information, you only have to look round our workshop there is information posted on every wall, I give up with it all, I mean everyday you would be checking every wall for new notices".
3. MISERY - ENJOYMENT

"I enjoy doing the job".

The subject feels some misery at times, meaning he is not getting enjoyment from the job. This misery for him is the result of having to do paperwork.

"It is tied up with all this aggravation on the clerical side".

"Nowadays all this paperwork which is said to be necessary, instead of having a job to do with one sheet for it, you now have six sheets of paper".

4. DISCONTENT - CONTENTED

This construct is directly related to ENJOYMENT (C3) since according to the subject, if he has had an enjoyable day he feels contented.

5. NON-CONFIDENT - CONFIDENT

Related to both ENJOYMENT (C3) and CONTENTED (C4). The subject feels that being confident, contributes to him enjoying his work, and so leads to him feeling content.

"Looking at the job as a whole, I now know sufficient so that I can tick along quite nicely".

"What I can do is what I know, and I think that is as good if not, in my opinion, better than a lot of people do here".
The last two statements here are supportive of the subject's view that he does not need to self train, a responsibility (element) he did not see as his.

6. **LOW EXPECTATION - GREAT EXPECTATIONS**

   *(of the subject by management)*

This construct refers specifically to information.

"They want me to take in all this other information, otherwise they wouldn't give it to me unless they are bloody fools".

7. **NO TRAINING - TRAINING**

"There is not enough, there is not enough at the moment".

The subject considered that local training is a good thing although he was displeased with the venue, the catering facilities, and the ability/skill of the tutors. These things to him seriously affect the outcome of training sessions.

During the elicitation of constructs the subject spoke of the method of introduction of the stand-by-rota *(the emergency cover)*. He stated that no one was a choice, everyone had to go on it something that he very much resented, management given him no choice. No construct was elicited as a result of this discussion although it could be said that the subject sees his management as inconsiderate and dictatorial. This is especially so since the standby rota necessitates him working on weekends, and during the evenings.
SUMMARY OF DISCUSSION

Individual Expectations
- To derive enjoyment from doing a good job, to a good standard.
- To be confident to carry out the duties and responsibilities of his job.
- To be content with what he achieves in each working day.

Expectations of Management
- That they provide adequate information to his job.
- That they do not expect him to learn of everything new by issuing pieces of paper.
- That they provide effective and meaningful training.
- That they treat him as a person not as a manual worker.
- That they be more considerate of his needs as an individual.
- That they think a little more of the job he has to do rather than productivity.

TRAINING NEEDS/COMMENTS

The subject has no specific training needs in his view. The idea of local training is to him preferable to travelling to Old Kent Road, Regional Training Centre, an experience he apparently has never enjoyed, or derived benefit from. Of local training he said,

"So long as you get the main things to do it locally, in reasonable comfort, there are the facilities there and training is given on the information that is relevant at the time, by people who are capable of doing it".
Grid not pursued as subject could either not see the point or the interview was not what he expected, although at an earlier stage he said he did not know what he expected. Possibly he displayed reluctance to participate as it was beyond him to do so.
This was a difficult discussion. The subject said at one point that it was not what he had volunteered for. He found it difficult to come to terms with the process. He seemed to be suspicious of me, and gave me the impression that he thought I was 'snooping'. Because of this I did not pressure the subject into construct elicitation.

Following the elicitation of elements I asked the subject if he had any training needs, a question I usually ask following the completion of the grid.

ELEMENTS

1. **SAFETY**
   
   "To do a good job safely"
   
   "that has got to be priority one".

2. **STANDARD OF WORK**
   
   "An effective job, one that does the job it is supposed to do sort of thing".
   
   "There is your own standard, isn't there".

3. **PRODUCTIVITY**
   
   "Well are given x amount of jobs to do, and you do them. They know how much work you are going to do in the first place".

4. **CUSTOMER RELATIONS**

Dealing with the customer
5. SELF TRAINING
Keeping up to date with new information. Reading that which is given to the subject.

6. COMMUNICATIONS
Completing documents, communicating with the supervisor, and fellow workers.

TRAINING NEEDS
The subject says that at the present time there is no training taking place.

Training areas - New appliances
   - Electrics
   - Central heating installation.
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**FS 22**

**ELEMENT MATCHING SCORES — GRID 5**

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**FOCUSED GRID 5**

![Focused Grid 5 Diagram]
Unfortunately the tape recording associated with this subject will not run. I therefore am unable to analyse the grid, except from a totally subjective viewpoint. (which I am not prepared to do since it is contrary to the research methodology). As the elements in the grid show commonality with most other grids, some assumptions may be made. These relate only to the way the subject sees his job in terms of its responsibilities.

ELEMENTS

1. SAFETY
2. STANDARD OF WORK
3. PRODUCTIVITY
4. APPRENTICE TRAINING
5. SELF TRAINING
6. CUSTOMER RELATIONS
7. COMMUNICATION

CONSTRUCTS

1. NOT ENOUGH TIME - ENOUGH TIME
2. NOT HAPPY - HAPPY
3. NOT SATISFIED - SATISFACTION
4. NON-CONFIDENT - CONFIDENT
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422
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422a
1. **SAFETY**

"When you are working with gas, to me the first thing you must regard is safety".

2. **SATISFIED CUSTOMERS**

"Nowadays an awful lot of customers have to pay to have work done, it is costing them a lot of money and if they don't get job satisfaction they will never come back again".

"They are your bread and butter really".

3. **IMAGE**

"The way I approach myself to the customer, you know looking after the customer's interests, their property and that".

4. **STANDARD OF WORK**

Doing a good job, which will satisfy the customer's expectations.

Related to **IMAGE** (E3) and **SATISFIED CUSTOMERS** (E2) as it will be effective of both.

5. **PRODUCTIVITY**

"Its up to me really, to do a fair day's work for a fair day's pay, at the moment we do a bonus scheme, and we have to reach a certain target".
6. TRAINING APPRENTICES

"Although apprentices, their training is quite involved nowadays, at the same time they need a lot of practical experience, and the only way they get it really is by us showing them".

7. EQUIPMENT

"You are responsible for transport"

"You are responsible for equipment"

Equipment in this context is tools. The responsibility is to keep them in good order, and not to lose them.

8. SELF TRAINING

In relation to problem solving and the use of technicians to assist him or resolve problems he said,

"Personally I like to do it myself really, because if you are going to call upon someone else all the time, you will never learn your job".

"The 'Aspect' magazine, that is one of the biggest steps forward in the Gas industry since I have been in it, the information which we receive in there".

9. COMMUNICATION

The subject sees that he has a responsibility to communicate with his supervisors and fellow workers. He sees this especially necessary for the sharing of technical information and experience.

"It is best to pass on any information you have got that you don't think anyone else has got".
10. MANAGEMENT

The overall responsibility to both management and supervisors to do a good job and at the same time maintain good customer relations etc.

CONSTRUCTS

1. NOT SATISFIED - SATISFIED

"If I have got job satisfaction, then I know in my own mind that I have gone through the job stage by stage, and I have done the job to the best of my ability".

2. NOT ENOUGH TIME - ENOUGH TIME

"We are given a certain time to do a job, and straight away we are given the impression that we are working under a handicap, and it doesn't seem to be fair really, because you get a lot of problems".

"Everyday of the week you get a problem that you are not allowed for. This always puts you behind".

3. NOT ENOUGH EQUIPMENT - ENOUGH EQUIPMENT

The subject did not say in what way he felt the equipment was not enough. However there are implications that his feelings about this construct are that he has not got the equipment he feels he should or could have. He did say that it was not about the condition of the equipment he currently has.
4. **LOW EXPECTATIONS - TOO HIGH EXPECTATIONS**

Due to the tape recorder problems some of the transcript is missing here. I summarise from what little discussion is evident at this stage, that the construct was elicited from a statement made by the subject that management expected too much of him at times.

5. **INADEQUATE INFORMATION - ADEQUATE INFORMATION**

During the discussion the subject stated that often available information is inadequate. This is well supported by the ratings, which are low in relation to all but two elements, SAFETY (E1) and STANDARD OF WORK (E4). In the main this referred to the job instructions as given by Segas Representatives who plan and price a job.

6. **BAD MANAGEMENT - GOOD MANAGEMENT**

"I think you feel far happier and you are more at ease in your place of work if you know you have got a good management, and that they will listen to any problems and that they will treat you as equal".

7. **IGNORED - RECOGNITION**

The subject recognised the importance of knowing how well or not he is doing, particularly from his supervisor's point of view. While he liked to be praised he saw that at times he may be 'told off'.

"The supervisor will sometimes tell you whether you have done a reasonable job or whether the job wasn't up to standard".
"You do respect a person, if he tells you to your face, now
look you have made a mess of this".

8. WRONG MATERIALS - CORRECT MATERIALS

"Materials because we have too much or too little, if we had
the proper reps, in the first place things could be far better".
"You waste of lot of time running about getting other bits and
pieces that should have been issued in the first place".

According to the ratings, wrong materials affect all elements except
SAFETY (E1) and STANDARD OF WORK (E4).

SUMMARY OF DISCUSSION

Individual Expectations
- To derive satisfaction from the job, by satisfying the customer.
- To do what is expected of him by management.

Expectations of Management
- To allow him more time to carry out his work.
- To consider more the problems he has during each normal day's
work.
- To provide him with the tools and equipment he needs to do a
good/better job.
- To be considerate of his problems, to listen to him and treat him as equal

- To give him the recognition related to his work, whether good or bad.

- To provided him with the appropriate materials to do his job in an effective and efficient manner.

TRAINING NEEDS/COMMENTS

- New appliance updating
- Refresher training on electrical controls/system
- Specialist tools, use of and safety: Hilti gun
  Jet freezer equipment
  Power tools.

The subject considers that everyone should have basic first aid training.

As far as possible all training should be practical.
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429a
Due to a faulty tape there is no transcript after the elicitation of construct '1' SATISFACTION. This is unfortunate, for this was, as far as I remember, a good discussion with a great deal of interesting data within it. Without the transcript the meaning behind the labels given to the constructs is lost.

ELEMENTS

1. **SAFETY**

   "Safety is the main factor we have to deal with".

2. **GOOD WORKMANSHIP**

   Upholding a high standard of work.

3. **FAIR DAY'S WORK**

   Relating to productivity.

   "I think you have to do a fair day's work, that is every day".

4. **TEACHING APPRENTICES**

   "You have got a responsibility to teaching the apprentices".

5. **SELF TRAINING**

   "Everyday that you go out you are always learning something new".
6. COMMUNICATION

"I feel that you are the only people that are in contact with the customer, so to get the customer's view back to the Gas Board you have got to fill in the job card properly".

CONSTRUCTS

1. DOWN FEELING - SATISFACTION

"Things that make you feel good are when you see a finished job and you see how it looks when it is completed".

"I could describe it really as a sense of pride in what you have done".

"It is sort of satisfaction".

2. CLOSELY SUPERVISED - BEING IN CHARGE (SELF)

3. UNHELPFUL - GIVEN ASSISTANCE

4. NO TIME - ENOUGH TIME

5. LACK OF CONFIDENCE - CONFIDENCE

6. CARELESS - BEING CAREFUL

7. UNCERTAINTY - KNOWING WHAT TO EXPECT

8. UN-KNOWLEDGABLE - KNOWLEDGEABLE

9. UN-FRIENDLY ENVIRONMENT - GOOD WORKING RELATIONS

10. POOR MANAGEMENT RELATIONS (IGNORED) - GOOD MANAGER/WORKER RELATIONS (TAKEN NOTICE OF)

11. UN-INTERESTED - APPROACHABLE MANAGEMENT