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A COMPREHENSIVE GUIDE TO CONDUCTING COMPENSATION SURVEYS
TO DETERMINE COMPETITIVE ADJUSTMENTS TO BASE SALARY RANGES.

THESIS

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PART I

INTRODUCTION

CHAPTER I

THE NEED FOR COMPENSATION SURVEYS

The compensation process is a complex network of sub-processes directed toward compensating people for services performed, and motivating them to obtain desired levels of performance. Among the intermediate components of this process are wage and salary¹ payments, the awarding of other cost items such as insurance, vacations, sick leave, etc. (fringe benefits), and the provision of essentially non-cost rewards such as recognition, privileges and symbols of status.

However, the broad subject of compensation in terms of cost to the organisation may be examined in two sections, namely, wage and salary administration, and fringe benefit administration. The compensation survey forms an integral part of both administration processes, and thus becomes a necessary and essential device in the determination of the final compensation package to the employee.

WAGE AND SALARY ADMINISTRATION

Wage and Salary Administration is concerned with the determination of within the organisation wage payments, in other words, how much specific employees are paid. This apparently simple matter thus forms one of the most complex aspects of the employment

¹Although the words "wage" and "salary" are used interchangeably, these terms have slightly different meanings in popular usage. "Wages" usually refers to an hourly rate; "Salaries" normally refers to weekly or monthly rates.

²David W. Belcher, Wage and Salary Administration (New York: Prentice-Hall, Inc., 1955), pp.3-14.

relationship.²

Good management in all forms of endeavour requires that employees be fairly paid for their efforts, and although this statement would be readily accepted by managers of all sizes and types of organisations, about the manner of accomplishing such a goal there is less agreement.

The establishment of "fair pay" involves the consideration of many factors such as productivity, relative values of jobs in the organisation and in the community or industry, what the individual employee or group of employees can command in other employment, and many others. These factors merely emphasise the different parts of one broad problem for wage and salary administration becomes concerned with all these problems and their solutions.

However, the most important problem areas facing the employer in the determination of within organisation wage payments are as follows:

1. The problem of wage and salary structures.
2. The problem of wage and salary levels.
3. The problem of individual wage determination.
4. The problem of control.

First, some plan must be set up such that more difficult and more responsible jobs are paid more than less difficult and less responsible jobs. This is the problem of wage and salary structures. In providing a solution to this problem attempts are made to set up a hierarchy of jobs on some logical basis such that pay for these jobs is relative to job status within this hierarchy.

Second, average wages or salaries must be set that will help the employer obtain and keep a productive work force. This is the problem of wage and salary levels. In solving this problem major considerations are: (1) legislation, (2) wages and salaries paid for comparable work in the community or industry, (3) the

cost of living index.

Third, attention must be given to the problem of individual wage determination. This, basically, involves a decision as to whether or not all employees on the same job will receive the same wage or salary, and, if the decision is negative, a decision on how the compensation of different employees shall be determined, i.e., how an individual employee obtains a rise in pay.

The final problem in wage and salary administration is the problem of control. This essentially is a matter of controlling payroll costs in such a way that these costs are kept in line, and that an efficient work force is rewarded for its efforts and kept with the organisation.

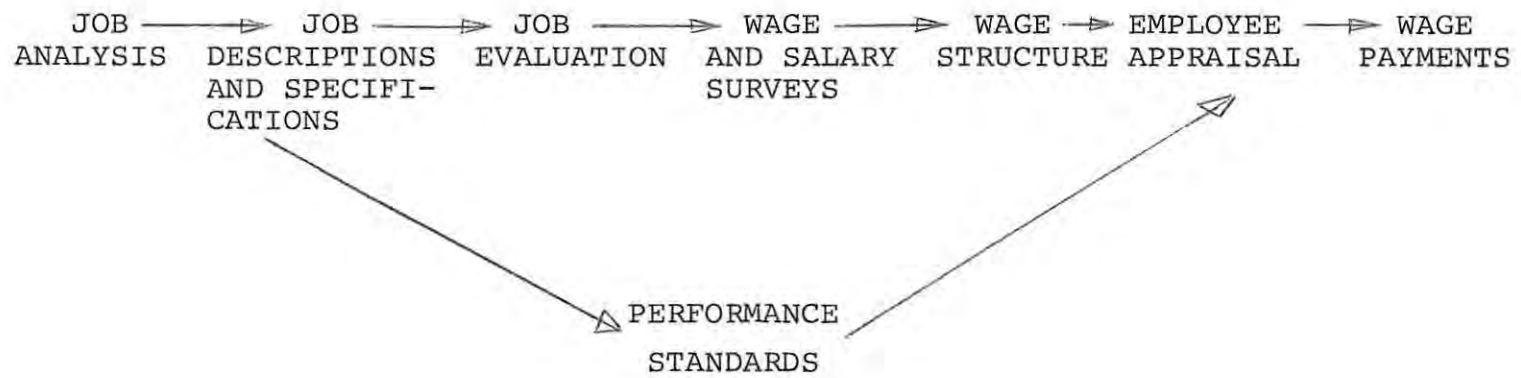
In general then, the process of determining within organisation wage payments involves providing solutions to all of these problems. A wide variety of devices, systems and policies is typically used to facilitate the provision of such solutions. These devices, systems and policies form a flow of events, with wage determination forming the final goal. This flow of events is diagrammatically illustrated in Figure 1.

In this process Job analysis, which is the systematic investigation of a job in order to reduce its essential characteristics to writing in the form of a job description³, serves to provide the essential data for job evaluation. In other words job analysis provides the data for writing job descriptions, which, in turn, are used as reference documents in job evaluation. It is then this process of job evaluation

³Wendell French, The Personnel Management Process: Human Resources Administration (Boston: Houghton Mifflin Company, 1964), p.238. The job description may be defined as an organised, factual statement of the duties, responsibilities and working conditions of a specific job. See E.B. Flippo, Principles of Personnel Management (Tokyo: McGraw-Hill, 1971), p.26. For a discussion of the job

FIGURE I

THE WAGE DETERMINATION PROCESS



which determines the relative worth of the various jobs within the organisation, so that differential wages can be paid to jobs of different worth. Job evaluation thus provides the solution to the problem of wage and salary structures within the organisation.⁴

Once the relative worth of jobs has been determined by job evaluation, the actual amounts to be paid must be determined. In other words certain criteria must be used to determine wage and salary levels to be set such that a productive work force will be attracted and maintained. The major factor involved in this determination is the wage and salary survey. Since wage and salary practices of other firms have an effect on the selection, morale, and retention of employees, attention is ordinarily given to prevailing community or industry wage levels.

For the vast majority of employers, a first approximation to a workable wage and salary is obtained by discovering "going rates" in the community or industry. The particular "going rate" used may refer to that rate which is regarded as being competitive to all organisations operating in the local labour market, to organisations in the same industry in the local labour market, to organisations in the same industry without regard to location, or some combination of these.

In short, the greatest influence on wage and salary levels is probably the level of wages and salaries paid in the area or industry for comparable work, and this "going rate" information is obtained by using some form of wage and salary survey. The survey method thus becomes a device utilised to solve the problem of wage and salary level setting within the organisation.

description as a component of job analysis, see Norman Malcolm, "Job Analysis: Description and Specifications" (unpublished honours dissertation, Dept. of Business Science, University of Cape Town, May 1975).

⁴The concept of Job Evaluation and its importance to the compensation survey is discussed in Chapter II of this text.

This device is further utilised in keeping the general levels of wages and salaries in tune with the labour market "going rates" and other competitive gauges.

Thus, the importance of the wage and salary survey in the wage and salary administration process is twofold: (1) in the gathering of necessary information from the community or industry for the initial setting of wage and salary levels, and, (2) in the gathering of necessary information from the community or industry such that these levels remain competitive and in tune with labour market "going rates."

The next step in the determination process is the consideration of information made available as regards the relative worth of jobs (job evaluation), and prevailing wage and salary practices within the community (wage and salary surveys), such that specific monetary rates may be applied to the hierarchy of jobs within the organisation. Obviously this is an involved process and concerns several decisions, including (1) whether the organisation wishes (or is able) to pay above, below, or at the community or industry averages, (2) whether there should be wage ranges providing for merit increases, or whether there should be single rates, (3) the number and width of pay grades and extent of overlap, (4) which jobs are to be placed in each of the pay grades, (5) the actual rand amounts to be assigned to various pay grades, (6) differentials between pay plans, (7) what to do with salaries of individuals who are out of line once these decisions have been made.⁵

Thus a wage and salary structure may be established

⁵For a detailed analysis of the establishment of wage and salary structures, and factors involved in determining both relative and monetary worth of positions, see J. Walker Morris, Principles and Practice of Job Evaluation (London: William Heineman Ltd, 1973).

which attributes specific minimum and maximum pay rates to each and every position within the organisation. A most important point at this stage is the realisation that the employer will be paying individuals rather than positions, although a minimum and maximum rate is set for each position, a decision must be made as to what rate is to be paid to each individual within these given limits.

The device utilised to provide a solution to this particular problem is the individual performance appraisal. The term "appraisal" as used in this context, denotes the evaluation of the performance and/or of the potential of employees as individuals. These appraisals are made against standards set in job descriptions and job specifications. Thus an individual is appraised when considered for employment, during the first few days on the job for the purpose of correction, and at regular intervals for the purpose of deciding on pay increases. Thus this process provides a means for the solution to the problem of individual wage determination.

FRINGE-BENEFIT ADMINISTRATION

Compensation of employees is not accounted for when the wage or salary rate is determined. It is necessary to consider the so-called fringe items - the added compensation employees receive that is not called wages. Employees receive, for example, rest periods, paid vacation, paid sick leave, shift premiums, and various bonuses.

To the employee, most of these items may not be wages in that they do not appear in wage rates, but to the employer they are part of the wage bill. The problem of fringe is the problem of determining which of these items shall be provided for employees.

The process of the supplementary fringe-benefit determination usually involves fewer devices and

systems than the determination of the basic wage structure. The approximate flow of events which normally determines the fringe-benefit "package" includes basic wage determination, fringe-benefit surveys and the analysis of relevant organisational problems. This flow of events is diagrammatically illustrated in Figure 2.

Many fringe benefit payments stem indirectly from the process of basic wage determination. For example, once time-off-with-pay benefits such as vacation, sick leave and holidays are awarded, the cost will partly be determined by basic wages as derived from job evaluation, wage and salary surveys, etc., since the basic wages are carried over into the non-working hours.

However, fringe-benefit compensation is also directly affected by numerous environmental factors such as practices of competitors, legislation, collective bargaining, management attitudes, and labour market conditions. Further, the importance of such environmental factors on the determination of the supplementary compensation, is reflected by the impact that these fringe benefits have on the staffing process, on the company's ability to recruit, and the bearing on whether employees remain with the firm.⁶

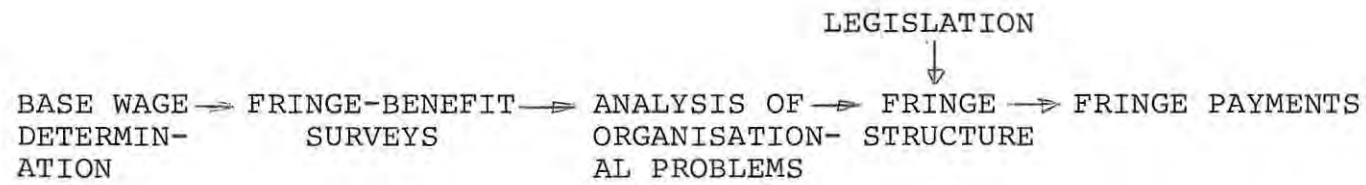
Thus, in order to maximise the validity of the fringe-benefit "package", careful study must be made of the probable consequences of each fringe benefit item.⁷ In order to obtain relevant information as regards practices of competitors and labour market

⁶Andrew F. Sikula, Personnel: Administration and Human Resources Management (New York: John Wiley and Sons, Inc., 1976), pp.315-317.

⁷Wendell French, The Personnel Management Process: Human Resources Administration. pp.270-272.

FIGURE 2

THE FRINGE-BENEFIT DETERMINATION PROCESS



conditions, the fringe benefit survey has been utilised and proven invaluable in the determination process. Once again, the benefit survey is not only utilised to establish a competitive fringe-benefit package, but it is further utilised at regular intervals to ensure the competitive nature of such a package.

Once relevant information has been collected by utilisation of such surveys, relevant organisational problems must be studied in conjunction with such data in the determination process. For example, ability to finance fringe-benefit programmes will be a factor in their adoption.

Finally, it should be mentioned that the adoption of such a programme will certainly be affected by legislation. For example, laws require most employers to provide fringe-benefits in the form of Social Security, unemployment compensation, and workmen's compensation.

To the employer, then, the problem of fringe involves the decision as to which fringe items to provide his employees and the extent to which each benefit is to be provided, and the solution to this problem is provided by surveying industry and area practice in order to establish the extent to which these benefits are offered by other employers in the market.

THE COMPENSATION SURVEY

As we have examined, both the wage and salary survey as well as the benefit survey are valuable devices in the determination of labour costs in the compensation process. The wage and salary survey is a valuable device in the determination of wage and salary levels, and the benefit survey is equally valuable in the determination of the fringe-benefit structure.

In many ways the problem of fringe is similar to

the problem of wage and salary levels. In both cases, the basic issue to the employer is one of labour costs. In the problem of levels, he is dealing with wage and salary rates. In the problem of fringe, he is dealing with matters less tangible and more difficult to quantify, but just as real as wage rates in effects upon total costs.

Many employers recognise the similarity of the two problems and attempt to solve them at the same time by deciding how much of wage costs will be paid out as wage rates and how much as fringe-benefits.

It thus becomes apparent that fringe-benefit surveys should be made simultaneously with wage surveys if wage and salary data is to be really meaningful, since both are part of the total compensation package. To make external wage surveys and establish the level of wages and salaries within an organisation without considering both external and internal fringe benefits practices is to ignore an important and costly compensation area.

Thus, in this way fringe-benefit surveys are just as essential as wage and salary surveys, and the combination of the two forms the compensation survey.

The compensation survey as such becomes a necessary data gathering system for those organisations regarding themselves as being competitive in the labour market. As most organisations today operate in a highly competitive market (both labour and product), there is a necessity to attract and maintain a workforce ranging from labourers to highly qualified specialists. In order to become and remain competitive, compensation survey data is utilised to:

1. Establish wage and salary levels, and develop monetary limits for base salary groups.
2. Establish fringe-benefit structures.

3. Audit the external competitiveness of the compensation package.
4. Audit the external competitiveness of the job evaluation programme.

The importance of the compensation survey with regard to the compensation process has already been mentioned in the preceding sections. However, once the organisation has established a hierarchical structure of positions, monetary levels for base salary groups have been developed, and a fringe-benefit package programmed, the compensation survey must be utilised at regular intervals in order to audit the competitiveness of the compensation package as a whole.

In other words, the compensation survey must be utilised on, for example, a four yearly basis in order to establish whether or not wage and salary levels need to be altered, and whether or not fringe-benefit packages need to be broadened, and if so, to what extent.

A further area in which the compensation survey proves useful is in the audit of the external competitiveness of the job evaluation programme. Bearing in mind that administratively, job evaluation accomplishes a control of the wage and salary structure by keeping rates in line and relationships between jobs intact, the compensation survey data provides a basis for the comparison of the effectiveness of such a programme in terms of external competitiveness.

In this way frequent use of the compensation survey serves to validate the wage and salary structure of the organisation. Although wage and salary structures are developed within the organisation, it is desirable to check the slope of the structure against the market. In this way, for example, it may be discovered that certain jobs within the company structure are paid at

much different rates than the community average. In such cases, though the community practice may not be controlling, the organisation must establish why such differences exist.

Thus compensation surveys, although mainly a tool to aid in establishing and updating wage and salary levels, have other equally important uses in the compensation process, and in this way, it is important that constant effort be made to improve survey procedures. The compensation survey in the process of wage determination is one of the most significant aspects of personnel management, since it has a profound effect on the recruitment, retention, and motivation of employees. Systematic and thorough attention must be given to the process of wage determination and the many variables which influence it if serious mistakes are to be avoided and the organisation is to prosper.

PART TWO

THE COMPENSATION PROCESS AND THE
DEVELOPMENT OF SURVEY PROCEDURES

CHAPTER II

JOB EVALUATION AND THE SALARY SURVEY

The importance of the job evaluation system and the wage and salary survey system in the flow of events determining within the organisation wage payments has been stressed in the introduction to this text. However, not only are these two systems invaluable in the setting of wage and salary structures (job evaluation), and wage and salary levels (wage and salary survey), but, as the remainder of this text attempts to emphasize, each such system relies, in turn, on the functioning of the other for its own efficient functioning.

The job evaluation system is the process of determining the relative worth of the various jobs within the organisation, so that differential wages can be paid to jobs of different worth. Job evaluation thus assumes that there is a high degree of consistency between the resulting rate structure and the rate structure in the broader community. It is this assumption which enforces the reliance of such a system on the wage and salary survey system. Without this method of determining the community structure, the internal organisational rate structure could not possibly relate to the external community rate structure.

Once the relative worth of jobs has been determined by job evaluation, actual amounts to be paid must be determined. A major factor in making such decisions is the wage and salary survey. The survey system should rely on the job evaluation system for the establishment of comparability between

organisational wage and salary structures.¹

Bearing the above concepts in mind it is necessary to analyse the importance and interdependence of the job evaluation and wage and salary survey systems in the determination of wage and salary structures and levels. From this analysis, the necessity of job evaluation in the establishment of a compensation survey system, will be emphasised.

DETERMINING THE POSITION HIERARCHY

For an organisation to be reasonably in line with the labour market and its wage rates, it should preferably approach the process of establishing wage rates in a systematic manner, such as by the use of a job evaluation system.

Job evaluation becomes the process of deriving indices of relative job values within an organisation on the basis of judgments about the jobs. In turn the indices of relative job values are utilised as the basis for determining wage rates of the jobs that are covered by the system. In simple terms then, job evaluation is the systematic method of appraising the relative worth of each job in relation to other jobs within the organisation.² Such a system cannot be completely accurate, since it depends on the judgment of the evaluator, but there are informed judgments based on detailed studies of the jobs and comparisons of their contents, and for this reason relative evaluations are likely to be more reliable and acceptable to employees than are haphazard determinations.

¹The survey system proposed by this text relies heavily on this concept. See p. 77.

²J. Walker-Morris, Principles and Practice of Job Evaluation.

Presumably, "relative worth" of jobs means relative value produced, but since the contributions of a specific job to the goals of the organisation are difficult to measure, other variables are examined which are assumed to be related to value produced. Such factors as "responsibility", "skill", "effort", and "working conditions" are typical factors considered in formal job-evaluation systems,³ and presumably the higher the degree of such performance characteristics required by the job, the greater the contribution to the goals of the enterprise.

Most formal job evaluation plans use the job data which are recorded in job descriptions. Job evaluation, of course, can be based on an understanding of various jobs without reducing this information to writing, but in organisations with a large number of positions the job description serves as a helpful reminder of differences in jobs and brings managers up to date on job changes.

There are four general types of formal job evaluation methods or devices in wide usage. In order of popularity, they are: (1) the point method (which is by far the most widely used method), (2) the factor-comparison method, (3) the classification method, and (4) the ranking method.⁴ Each method features the application of a certain type of device or yardstick to various jobs in order to determine relative worth.

It is this method of applying a yardstick in the determination of relative worth which is most important in the establishment of survey position comparability

³See M. Joseph Doohar and Vivienne Marquis, eds., The AMA Handbook of Wage and Salary Administration (New York: American Management Association, 1950).

⁴See Elizabeth Lanham, Administration of Wages and Salaries (New York: Harper and Row, 1962), pp. 165, 189.

in the conducting of a compensation survey. These methods may be briefly discussed in the process of establishing what is regarded as being the most suitable method to be utilised in the proposed compensation survey system.

I. The Point Method.

This method features the examination of several factors common to the jobs to be evaluated, and then a rating of each job along a scale of each of these factors. These scales are divided into point distances. For example, if it is determined that "responsibility", "skill", "effort", and working conditions are four important factors in determining relative job worth, a scale is devised which assigns different numbers of points to different degrees of these factors. In applying these scales to different jobs, the points are tallied up for each job to determine relative worth.⁵ A wide variety of additional factors is found in common usage in this method as well as in others. As few as three factors and as many as twenty-four or more are found in use, but one author cites more than twenty studies indicating that two to four factors will determine the relative worth of jobs just as well as a large number of factors.⁶

II. The Factor-Comparison Method.

The essential features of this method involve ranking "key jobs"⁷ in relation to other "key jobs" on the basis of each of several factors, determining

⁵For a detailed description of this and other methods of job evaluation, see Elizabeth Lanham, Job Evaluation (New York: McGraw-Hill Book Company, 1955), pp.126-169.

⁶Wendell French, The Personnel Management Process, 243.

⁷The concept of key jobs will be discussed in greater detail at a later stage.

what part of the present rate of pay for the specific job would be allocated to each factor, and then assigning the remainder of the jobs to be evaluated in their proper places in the framework thus established. In this method, the points which are tallied up to determine relative worth emerge as cents per hour. The major problems with the factor-comparison method stem from its complexity, which requires a good deal of training of raters, and time spent in rating.

III. The Classification Method.

This method starts with one paragraph descriptions of a number of levels, grades, or classes of jobs. These descriptions feature verbal gradations of job responsibility, skill required, etc. Job descriptions are then examined, and jobs are classified into the grades or levels which seem to be most appropriate. In contrast to the Point and Factor-Comparison methods, this method decides at the outset as to the number of pay grades to be included in the wage and salary plan.

IV. The Ranking Method.

A single ranking is made of the relative worth of the various jobs examined. No attempt is made to determine the critical factors of the Jobs; only an overall judgment of the relative worth of the job is made. The major disadvantage of this method is that there are usually no agreed-upon guides as to what elements or aspects of jobs the organisation considers to be of value, and this leads to the danger that ranking will be done in a very subjective fashion on the basis of impressions rather than fact.

A great deal of criticism has been levelled at these four conventional methods of job evaluation, and has led to the establishment of a number of methods which are either a combination of basic techniques and assumptions of these methods, or are completely new approaches.

With respect to the importance of such methods as basic aids to the compensation survey, criticism must be aimed at the lack of attention such systems pay to external labour market factors. For example, some jobs are highly specialised in particular organisations, whereas others develop skills which are marketable in other organisations and industries. Despite similarity in job content, it may be necessary to pay more for the former type of job than for the latter in order to attract and hold capable workers. Thus, unless the results of job evaluation approximate in practice the relative social evaluations that the external community places on the jobs, anomalies are likely to occur.

In this way inflexibility and too great a reliance on internal standards of job comparison are limitations of the methods already described. In some markets the supply and demand for a particular type of job or occupation have an important bearing on the rates paid, and a job evaluation programme that seeks to determine wage differentials largely on the basis of factors and points, without reference to market rates, is likely to create difficulties. This difficulty may be minimised if the method utilises a relatively large number of key jobs which are related to the market rates, and if changes are made in job rates on these key jobs as market rates change, regardless of changes in job content. It is at this stage that the compensation survey assists in the effectiveness of the job evaluation programme by auditing its external competitiveness.

It is this sort of misgiving about these older systems that prompted people like Paterson⁸ to question the techniques and assumptions on which they are based. According to Paterson, these four conventional methods

⁸T.T. Paterson, Job Evaluation - A New Method (London, Pitman Press, 1972), Vol. I.

fail to satisfy these basic demands, in one degree or another:

1. Setting equitable wage differentials within a company's own wage structure.
2. Setting equitable wage differentials between its own wage structure and those of other companies within the community.
3. Setting equitable wage rates for new jobs in the community.
4. Responding rapidly in pay practices to technological change.

These methods thus tend to rely for their evaluation to a great extent on purely subjective measures of essentially personal factors (eg. education, experience, initiative) and ignore real assessment of the characteristics of the job itself.

In order to overcome these basic failings Paterson developed a completely different approach to job evaluation⁹ which is not concerned with "rating", but only with the relative importance of specific jobs in terms of importance of decision making. Similarly, other methods of job evaluation were developed in order to satisfy the needs of particular organisations, and overcome basic failings of the conventional methods. However, these methods have provided basic concepts and techniques which have been combined and utilised to some extent in the development of newer and more reliable methods such as the Aspect Grading System¹⁰ of job evaluation, and the CastleLion System¹¹ of job evaluation, which have both been tried in industry with considerable success.

⁹T.T. Paterson, Job Evaluation - A New Method, I and II.

¹⁰J. Walker-Morris, Principles and Practice of Job Evaluation.

¹¹This system has been developed, and is utilised by the South African Breweries.

However, for the purposes of this text, it is necessary to discuss only one of these newly developed job evaluation systems, namely the Peromnes Job Evaluation Rating Scale,¹² as this is regarded as being the most effective in establishing position comparability in the proposed compensation survey system.

V. The Peromnes Job Evaluation Rating Scale.

The Peromnes method of job evaluation basically relies on a combination of the point method and the factor comparison method in the rating of individual jobs. Utilising the basic concept of a scale developed to evaluate positions rather than incumbents, positions are rated against a scale of eight factors against which each position is evaluated:

1. Problem solving (decisions). A decision can be interpreted as the solving of a problem where alternative actions are possible. The incumbent must identify the alternatives and decide which is best. The process varies from a simple decision with only a few easily identifiable alternatives within the framework of specified work procedures, to decisions which become more difficult where clues are unlimited. At the higher levels the incumbent must initiate alternatives, the effectiveness of which may be in doubt.

2. Consequence of errors of judgment. This factor measures the consequence of wrong decisions as reflected in losses and their extent, for example, financial losses related to material or manpower, or loss of prestige, internal and external.

3. Pressure of work. This factor measures the amount of stress inherent in the job as reflected in

¹²Copyright reserved. The Peromnes organisation does not allow publishing of the Peromnes job evaluation method.

the volume and type of work, as well as available time.

4. Knowledge. This factor measured the level of knowledge which is necessary in order to fill the position adequately.

5. Job impact. This factor measures the scope or area in which the activities of a job have an influence.

6. Comprehension. This factor assesses the requirements of the post in understanding communications, both spoken and written.

7. Equivalent educational qualifications (or intelligence level required in the post).

8. Training/experience (necessary to perform job competently). This factor measures the period normally required on other jobs, and on this job, before becoming fully proficient.

Each of the above factors is divided into nine progressive definitions, such that in any one definition all lower definitions are understood to apply. In order to evaluate a position each definition is read progressively and accumulatively until the first definition which is just too high for the position being evaluated has been reached; then the previous apt definition should be returned to. A particular score will be applicable to such definition which will then form the point allocation for that particular job as evaluated against that particular factor.

The total of the individual point scores for each factor may then be related to a particular salary grade in the point/salary grade structure applicable to Peromnes. In this way, it is possible to rate each position within an organisation such that a position structure of relative worth may be established. This structure thus represents the hierarchy of positions, in terms of relative worth, of a particular organisation, to which relative monetary values may be applied in order

to establish the wage and salary structure.

Although several basic systems of job evaluation exist, as well as a number of modifications of these systems, the essential components are similar. The selection by an organisation of a system should involve a decision as to what factors place one job at a higher level in the job hierarchy than another, as these compensable factors are the yardstick used to determine the relative value of jobs. It is thus for this reason that it is suggested that selection of a job evaluation system depend on these compensable factors.

Often, however, a ready made job evaluation system is adopted in toto, and it is assumed that the factors incorporated in the system are applicable to the organisation and its job. If the factors in the system chosen are not applicable, and there is evidence that they often are not,¹³ the results may be unfortunate. Those responsible for job analysis are asked to assess the amounts of inapplicable factors existing in jobs, and even more serious, these are the only factors used, for no attempt may be made to substitute more applicable factors. Ideally, the system chosen, or modified, should permit jobs involving more of a factor to be consistently placed at a higher level in the job hierarchy than those involving lesser amounts. If a ready-made system is found that makes use of factors similar to those applicable to the organisation, it may be used, but a custom made system based on the compensable factors existing in the organisation is advisable.¹⁴

It is due to these requirements that the Peromnes

¹³J.S. Gray, "Custom Made Systems of Job Evaluation", Journal of Applied Psychology, XXXIV, No. 6 (December, 1950), 378-380.

¹⁴Jay L. Otis and Richard H. Leukart, Job Evaluation (New York: Prentice-Hall, Inc., 1948), p. 200.

system of job evaluation is regarded as the modified system which is most appropriate for use by Mobil Oil, not only in maintenance of the position hierarchy, but as a technique of establishing job comparability in the compensation survey.

The major advantage of the Peromnes method of job evaluation is that it allows for a reliable evaluation of positions according to scope and magnitude of responsibility, reporting relationships, and functional responsibilities, all of which provide the basis of comparability of positions being surveyed by the system proposed in this text.¹⁵

There has, however, been considerable research on the reliability of job evaluation systems as such. The overwhelming evidence as shown by research studies indicates a very high degree of consistency among trained evaluators in the application of job-evaluation systems. Correlations between raters averaged between 0,91 in one study,¹⁶ and about 0,90 in another,¹⁷ and 0,97 in still a third study¹⁸. Such facts serve to underline the usefulness of the job evaluation system in the objective determination of the relative worth of positions.

DETERMINING THE WAGE STRUCTURE

Once the relative worth of jobs has been determined by job evaluation, the actual amounts to be paid must be determined. A major factor in making such decisions is the wage and salary survey.

Job evaluation does not determine the wage rate but only the basis for its determination. The evaluated

¹⁵Supra, p. 77.

¹⁶C.H. Lawshe and Patrick C. Farbro, "Studies in Job Evaluation: VIII. The Reliability of an Abbreviated Job Evaluation System," Journal of Applied Psychology, XXXIII (April, 1949), 158-166.

¹⁷Philip Ash, "The Reliability of Job Evaluation Rankings," Journal of Applied Psychology, XXXII (June, 1948), 313-320.

¹⁸David J. Chesler, "Reliability and Comparability of Different Job Evaluation Systems," Journal of Applied Psychology, XXXII (October, 1948), 465-475.

worth of each job in terms of rank, class, points, or monetary worth must be converted into an hourly, daily, weekly, or monthly wage rate. The wage rate that is established for a particular job also must give recognition to such external factors as labour market conditions, prevailing wage rates, living costs, and legal minimums.

The relationship between the relative worth of the jobs and their wage rates can be represented by means of a wage curve, which may indicate rates currently paid for jobs within the organisation, or the new rates resulting from job evaluation, or the rates for similar jobs currently being paid by other organisations within the community as revealed by a wage and salary survey. At some stage of developing a wage administration programme, it is necessary to determine the relationship between internal evaluations (usually of a sample of key jobs¹⁹) and rates of pay of corresponding jobs in other organisations in the labour market. It is at this stage that the organisation would usually utilise a wage and salary survey system in order to establish labour market rates of pay in the community concerned. In conjunction with such a survey, the organisation may utilise a job evaluation system to establish which positions are comparable in terms of evaluation factors and points. In this way intra-organisational position comparability may be established in terms of pay rates as well as evaluation rates, although such pay rates may not necessarily be equal. The analysis of these pay rates will, however, set community wage levels, within which the organisation may set its own wage and salary structural rates.

To illustrate the conversion of evaluation into rates of pay, the job evaluation points of such jobs

¹⁹Jobs regarded as being representative of the range of jobs falling within a specific salary group, and about which there is little disagreement as to the appropriateness of the current rate of pay.

(as obtained from a wage and salary survey) may be plotted on a graph in relation to their median salary values; the median is frequently used for this purpose as the "best estimate"²⁰ of the going rate for each job. The relationship between these two sets of values is then depicted by a going rate curve, or wage curve, as illustrated in FIGURE 3. Such a curve forms the line-of-best-fit, or trend line for the scattergram indicated. This wage curve will then determine the relationship between the value of a job and its wage rate at any given point on the line.

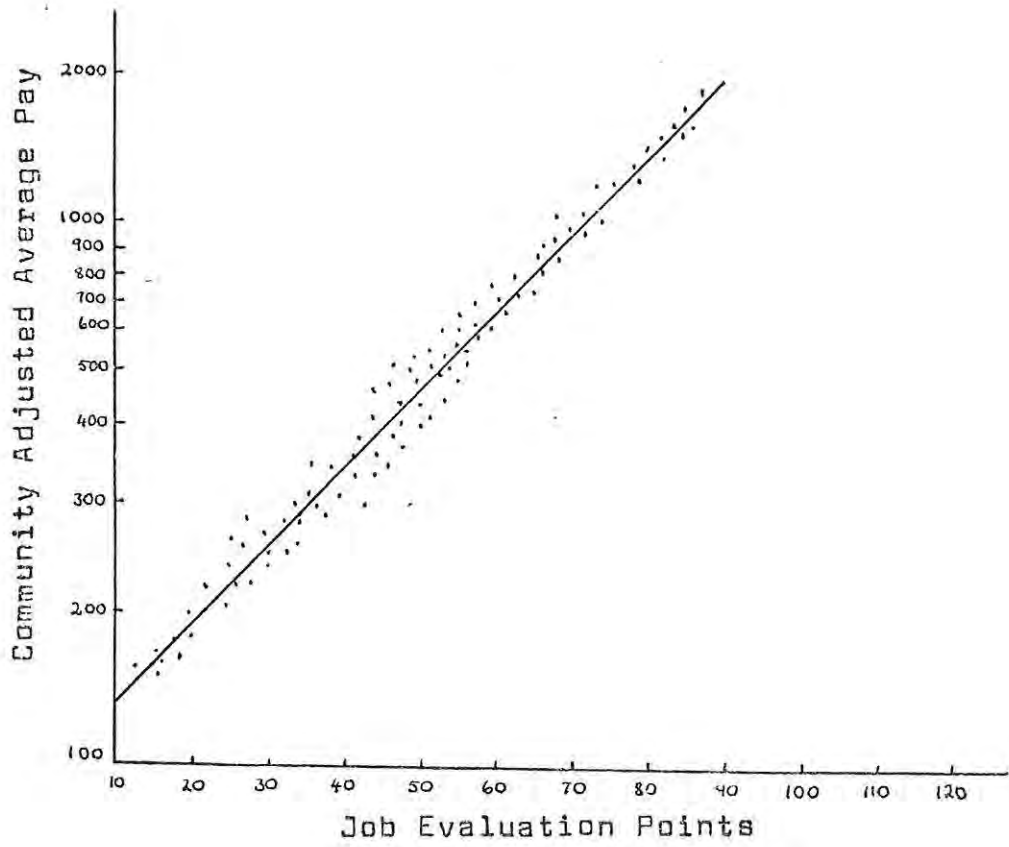
The community going rate curve, as illustrated in FIGURE 3 sets levels of wage rates within which the organisation may choose to place the hierarchical structure of positions.

The next stage is that of establishing an organisational wage curve. Typically this has some considered relationships to the going rate curve of the labour market; it may be set at the same, higher, or lower level, depending on such considerations as fringe-benefits, contract negotiations, etc. This organisational wage curve sets the general pattern of rates for all the positions covered by the job evaluation system, and ensures that all jobs in the company, whether unique to the company or not, will have their rates established on the same basis.

In order to convert job evaluation points to actual rates of pay, it would be possible to take the evaluation points of a given job, and derive the exact corresponding rate that would be applicable, as derived from the

²⁰Referred to as the "Community Average" in the proposed Midpoint System. See Chapter IV. This estimate, or going rate, represents the average of all the rates for a particular job, as supplied by the participating organisations of a wage and salary survey.

FIGURE 3
The Going Rate Curve



organisational wage curve, bearing in mind that the rates of such curve will be set according to levels already set by the community going rate curve, which in turn, has been established by surveying corresponding key jobs within the community.

In this way, every slight difference in job evaluation points will result in some difference in wage rates. In practice, because of the lack of perfect accuracy in the judgments that underlie a set of job evaluations, organisations find it desirable to bracket together jobs of approximately the same point value, and to consider these jobs as equal in setting up the wage structure. This bracketing results in wage grades,²¹ and provision is made for wage increases within each grade.

The number of wage grades utilised depends on such factors as the slope of the wage curve, the number and distribution of the jobs within the structure, and the organisation administration and promotion policies. The number utilised should be sufficient to permit difficulty levels to be distinguished, but not so great as to make the distinction between two adjoining classes insignificant.²² There is no standardisation in width of wage grades. In the case of hourly paid jobs, the maxima of individual pay grades may vary from 10% to 20% above the minimum rates of the wage grades, while in the case of salaried employees the maxima of wage grades may vary from 15% to 75% above the minima.²³

Although a single rate may be created for each

²¹ Referred to as "Salary Groups" in the proposed Mid-point System. See Chapter IV.

²² For a description of the method involved in establishing wage grades, see David W. Belcher, Wage and Salary Administration, 240-255. There is no standardisation of the number of wage grades found in industry; the number in any one structure may vary from as few as five to as high as thirty.

²³ Wendell French, The Personnel Management Process: Human Resources Administration, 247.

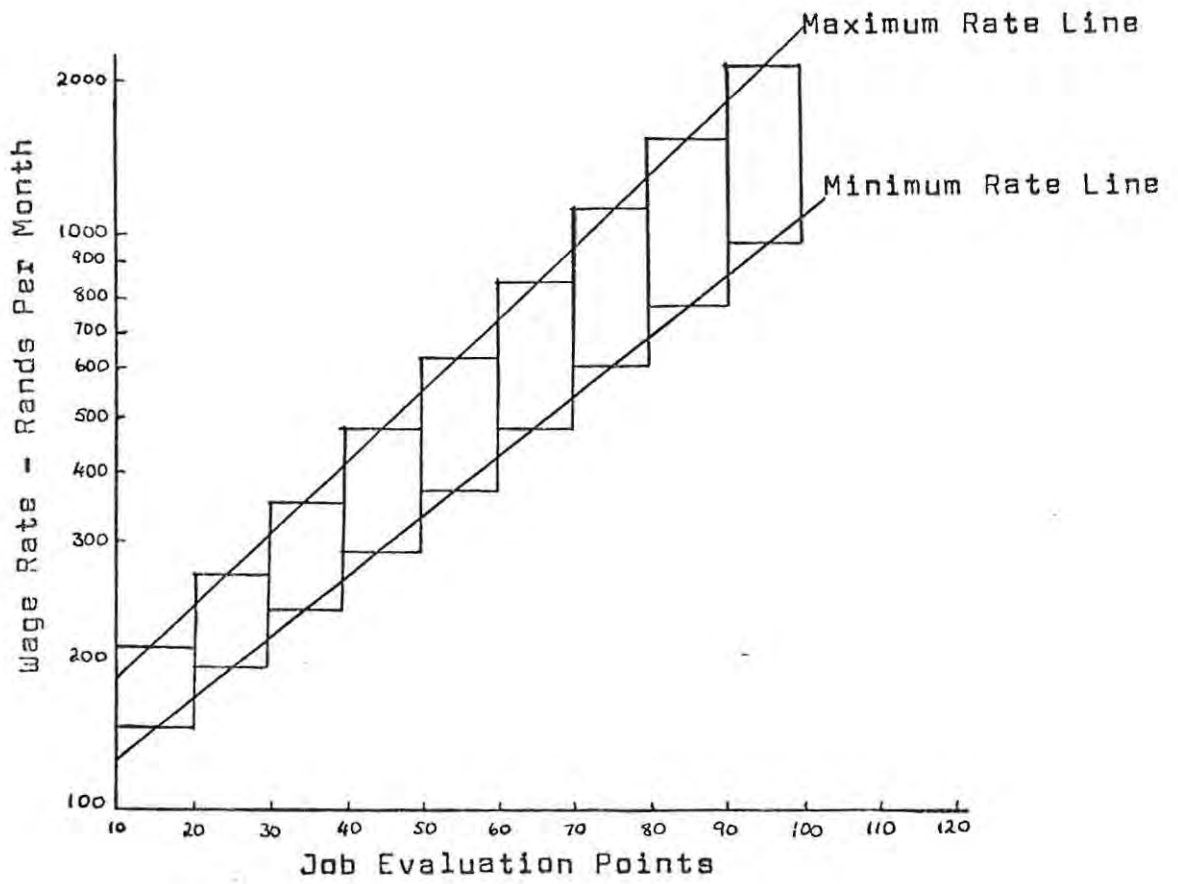
wage grade, it is more common to provide a rate range for each of them. The rate ranges may be the same for each class, or proportionately greater for each successive wage grade. FIGURE 4 illustrates the wage grade concept as established by utilising the wage curve derived from the community going rate curve.

Most salary structures provide for the ranges of adjoining wage grades to overlap somewhat. The reason for this overlap is to permit an employee with considerable experience to earn as much or more than an inexperienced or unproved person in a slightly more important job and thus in a higher wage grade.

The final phase in the job evaluation process is that of determining the proper wage grade into which each job should be placed on the basis of the evaluated worth. For example, the Perommes method of job evaluation determines which wage grade is applicable to specific positions according to pre-determined point ranges which apply to specific wage grades. However, although the job evaluation rating is the prime factor in the determination of placement within the wage grade structure, actual rate ranges of such grades are also important factors to be taken into consideration. As jobs become more complex and involve more responsibility, a wider rate range is justified - there is more leeway for individual contribution to the job. The minimum differential between minimum and maximum grade rates (this varies from 20% - 60%)²⁴ may afford little room for long range incentive. However, a useful guide to utilising actual grade rates in the job placement determination process, is the concept that the midpoint of a wage grade is considered "par for the course."

²⁴See Richard C. Smyth, Financial Incentives for Management (McGraw-Hill, 1960), p.68.

FIGURE 4
Wage Grade Structure
With Increasing Rate Ranges



PRESENT RATES VERSUS MARKET RATES

Throughout the discussion of pricing the job hierarchical structure to arrive at the wage and salary structure, emphasis has been placed on the use of current labour market rates in order to price the internal structure. However, it is important at this stage to separate the use of present rates versus the use of market rates.

As mentioned, some organisations rely entirely on the use of market rates (as obtained from a wage and salary survey) in order to price the internal structure. Although there is nothing incorrect about such a practice, the disadvantage is that a simultaneous solution to both the problem of levels and the problem of structures is provided. The danger is that these problems may not be regarded as being separate. Rather, as Childs²⁵ points out, present wage rates should be used as points of reference in the pricing of the structure such that the solution to the problem of structure and the solution to the problem of levels are separated. Solving these two problems separately emphasises the fact that the wage structure (if properly maintained) is a relatively permanent solution, whereas the wage level may change frequently. Thus, a wage structure developed from present wage rates may be raised or lowered in accordance with changes in the wage level.

If an organisation becomes aware that there is much to be gained by (1) arriving at a relatively permanent wage structure by utilising the job evaluation concept, and (2) altering wage levels by shifting the entire structure in accordance with results obtained from a compensation survey, wages and salaries will perform their many functions in a much more efficient manner.

²⁵David C. Childs, "A Salary Grade for Each Point Value" Personnel Journal, XXXI, No. 5 (October, 1952), 173-175.

Alternatively, where the two problems are not recognised as separate and distinct, any change in wage rates requires a new solution to both problems. The wage structure, though never a permanent solution, can, if properly maintained, be useful for years, whereas the wage level changes frequently - once a year or even more often in periods of expanding business activity.

Thus, although these problems should be regarded as separate and distinct, emphasis is once again placed on the inter-reliance of the methods used in solving the two problems, namely the job evaluation and compensation survey methods. Solution to the problem of wage and salary structures requires that rates of pay be assigned to the organisation's jobs. Job evaluation has become accepted as the useful solution to the problem of structures. This technique divides the solution into two parts: (1) constructing a job structure, and (2) pricing the job structure to arrive at a wage and salary structure. The resulting job hierarchy or job structure when priced becomes the wage and salary structure. When the average wage in the wage and salary structure is made to correspond to the wage level selected, by utilising the compensation survey technique to establish community levels, solutions have been obtained to both the problems of levels and the problem of structures.

CONCLUSION : THE IMPORTANCE OF JOB EVALUATION

As wages serve to determine their relative worth within the organisation as well as their standard of living in society, employees tend to be sensitive about the amount they are being paid for their work. It is essential, therefore, that the wages of employees be determined on an objective basis that will ensure them equitable treatment and enable them to recognise this fact.

Several systems have been developed by which the

relative worth of jobs may be measured objectively for purposes of wage determination. Data pertaining to the evaluated worth of each job, when combined with that obtained from wage and salary surveys provide the basis for a wage structure into which these jobs may be classified. This structure may establish a rate range for each of the job classes in order to provide rate increases for employees. Employers must take cognisance of such factors as the prevailing wage laws, conditions of the labour market, trends in living costs, and economic conditions when determining the amount to be paid for each job.

Thus, the important concept introduced by the job evaluation system is one of control. Such a system enables the control of the internal organisational structure of relative worth of jobs on an objective basis as possible. However, the control of labour costs covers the operation and maintenance of various programmes and plans in effect. The job evaluation system as such becomes an integral concept in this process of control by assisting in all of the following areas: (1) keeping the total wage bill as a specific proportion of sales and operations, (2) seeing that pay for jobs stays within the established rate ranges, (3) keeping efficient employees on the payroll by rewarding the efficient and not the less competent, (4) keeping the general level of wages and salaries in tune with the labour market and other competitive gauges, (5) seeing that the adjustment of individual wages and salaries takes place on a consistent and regular basis.²⁶

Point (4) above indicates the importance of job

²⁶See also David W. Belcher, Wage and Salary Administration, (2nd ed.; New York: Prentice-Hall Inc., 1962), pp. 569-586.

evaluation in assisting the salary survey in the maintenance and control of competitive wage and salary levels. In general, because of the continuous rise in wage and salary levels experienced in this country, resulting from a variety of environmental pressures, considerable thought must be given to handling the upward changes in the wage and salary structure. Some organisations meet the problem by making general percentage or "across the board" pay increases in accordance with the rise in the Consumer Price Index. Other organisations include a general adjustment factor in merit or length of service increases although the organisation may not label it as such.

According to one study, a high percentage of personnel directors prefer to do away with general wage adjustments.²⁷ However, it is generally considered that general adjustments are inevitable in an inflationary period, although methods of adjustment tend to differ greatly. Smaller organisations may tend to rely on surveys and statistics obtained from larger organisations which are able to afford the expense of conducting comprehensive studies. Some organisations may rely also exclusively on the Consumer Price Index as an indicator of necessary adjustments.

Alternatively, the method most commonly adopted for reliable adjustment to the wage and salary structure is that of the wage and salary survey. This method is not only useful in determining the effects of inflation on the labour market rates, but further provides a general overview of all practices affecting compensation practices. One study found that 95% of all responding

²⁷"Mobil Oil: 1974 Salary Survey" (Cape Town: Mobil Oil Southern Africa, (Pty.) Ltd., 1974).

organisations utilised the wage and salary survey in their wage and salary administration programmes.²⁸ It is in conjunction with this important system of wage and salary control that the job evaluation system plays a major role, as we have already discussed in this text. We have discussed in this chapter how job evaluation sets about establishing specific salary grades or groups such that the same pay range can be used for a whole gamut of positions instead of just one. This keeps the number of specific pay ranges down to a manageable order, but most significant to the subject of wage and salary surveys, it makes it possible to extend to a broad spectrum of jobs the pay findings fitting a few that are representative of that level. Obviously then, this indicates a reliance on the elementary principles of position evaluation and classification.

In conducting a survey, separate pay scales for each separate occupation would require prevailing pay information on each occupation. The gathering of such quantity of data would be wholly impracticable. Surveys can be made ordinarily only for selected classes of jobs that typify the organisation being surveyed, and it is thus the abovementioned method of obtaining salary grades, or groups, through job evaluation that this may be achieved.

We have thus been able to establish that the job evaluation system not only provides a basis for establishing a wage and salary structure, but in doing so provides the basis for establishing survey position comparability in the actual survey procedure, and further provides a method for objective adjustment of data once such comparability has been estimated.

The compensation survey, in turn, may not only rely on the job evaluation system for a degree of objective functioning, but provides the data necessary

²⁸Richard A. Lester, Company Wage Policies (Princeton, New Jersey: Princeton University, 1948), p.10.

to audit the effectiveness of the internal job evaluation programme in maintaining an effective position hierarchy. In short then, the compensation survey relies on the job evaluation system in order to provide a structure of comparable survey positions, while the job evaluation system relies on the compensation survey in order to maintain an effective internal position hierarchy.

CHAPTER III

THE WAGE AND SALARY SURVEY

Decisions as regards the actual wage and salary structure cannot not be made after the relative worth of jobs has been decided by job evaluation alone. Rather, the further step of ascertaining prevailing wage and salary practices must be taken before reliable policy decisions can be made.

Although legislation may aid the organisation in the solution to the problem of wage levels by defining outside limits, a wide range of choice normally still exists. Other criteria must be used to determine where within this range wage levels should be. For the vast majority of employers, a first approximation to a workable wage and salary level is obtained by discovering "going rates" in the industry or area concerned. Although no definite pattern is applicable to all organisations, majority practice appears to be reliance on going wages in the local labour market on the assumption that it is from this market that employees must be obtained.¹ Going wage information is usually obtained by utilising the wage and salary survey.²

DETERMINING PREVAILING WAGE AND SALARY PRACTICES

Wage and salary surveys provide assurances about comparative rates, freeing one from uncertainties

¹Paul Pigors and Charles A. Meyers, Personnel Administration (New York: McGraw-Hill Book Company, 1951), p.269

²Although the wage and salary survey forms part of the compensation survey as such, it is data obtained from this major section which forms the basis for adjustments to the actual wage and salary structure; it is the wage and salary survey, therefore, that demands attention and research.

caused by rumour or isolated citation of reputed rates. They also keep the organisation's rate structure in line with wages internally and externally; revision in internal relationship accompany change made to keep comparable with rates of pay on the outside.

A further factor which emphasises the necessity for wage and salary surveys is that it seems fair and equitable to both employers and employees to have wages related in some fashion to wage rates for comparable work in the labour market or industry of which an organisation is a part. Further, the required information is usually not made available in a manner which is acceptable to many organisations. Although many series of wage data are available,³ very little information on occupational wage rates has been available from published sources.

What the employer wishes to know in order to aid him in setting wage levels are the "going wages" for specific occupations in his labour market (and/or perhaps in the industry of which his organisation is a part). This information to be useful must be complete, up-to-date, and comparable. Collecting this comparable wage data is a difficult task, with many pitfalls, and it is for this reason that such careful appraisal of survey results by the consumers of wage and salary survey data may seem overdrawn.

As an example of difficulties involved, the use of job titles as a method of collecting comparable data and determining job comparability, is almost worthless.⁴ Different job titles may be attached to the same set of

³From organisations such as Urwick-UAL, and Peromnes Salary Surveys (Pty.) Ltd. However, data from such organisations is only available to participating client organisations.

⁴Belcher, Wage and Salary Administration, 43.

duties and responsibilities even within the same organisation. Thus it is impossible to assume that the titles attached to jobs in one organisation refer to the same jobs in other organisations, even in the same industry. Thus, it becomes futile to collect wage and salary data by job title. Only when jobs are properly defined by describing duties and responsibilities (and perhaps worker requirements) is it possible to obtain sufficient job identity so that wage information may be sought. It is in order to satisfy this necessity that the job analysis process and more specifically, the job description, become basic methods of ensuring job comparability. It is further necessary that precautions be taken to assure that the job descriptions are used in comparing jobs rather than job titles.

A further pitfall is the manner in which compensation methods vary from one organisation to another. Overtime provisions, shift differentials, nonproductive bonuses, differ greatly from one organisation to another. To ensure comparability, these items must be excluded and some type of "base rate" sought.

Another difficulty concerns the number of jobs on which information will be sought. To seek comparable wages on all jobs in an organisation would be an impossible task, while obtaining information on only a relatively few positions is almost worthless because an untrue picture of the wage level (or structure) of another organisation is probable. The solution may be to utilise the "key job concept",⁵ and use enough jobs to be representative of the range of jobs in the participating organisations.

Further, equal rates of pay may not mean that two comparable jobs have equal compensation. Working conditions, personnel policies, employee benefits, etc.,

⁵This concept is discussed at a later stage of this chapter.

may offset differences in pay. It thus becomes necessary to secure information on these matters in order to compare compensation.⁶

WAGE AND SALARY SURVEY METHODS

With difficulties such as these, it is apparent that existing methods of determining the monetary value for the job values obtained by job evaluation may present certain problems. A new organisation coming into an industrial area must key its rates into the community rates. An older organisation in a community wishing to add a new production unit has the problem of setting rates for the new jobs which are in line with both the community rates and rates within the organisation.

At present many different methods are used to conduct wage and salary surveys, and since these surveys are used by many organisations, it is desirable to look at the advantages and disadvantages of the methods now in use. In general, there are three methods of conducting wage and salary surveys: (1) job title, (2) job description, (3) job evaluation.

I. Job-Title Survey.

The most common and simplest method is the telephone call or a letter from one organisation to another asking for wage information about specific jobs. An executive of Organisation A might call one at a comparable level in Organisation B, to ask what Organisation B pays for keypunch operators, or labourers, or purchasers, and in this way much wage comparison is carried out purely on a job title basis. The method is quite informal, but because it is used widely, it is necessary to examine it critically for

⁶By utilising the fringe-benefit survey as an integral part of the compensation survey.

possible inaccuracies.

Belcher and Heneman⁷ point out that different duties may be performed by individuals on the job being surveyed in both organisations, so the wages are not directly comparable. Further, a wage rate may be reported including or excluding overtime, shift differentials, and the like. It is thus obvious that wage information resulting from this type of survey may not be adequate.

To develop this point further, information obtained in this way will almost certainly reveal nothing about the wage levels or wage and salary structures of the reporting organisations. Thus, it is because of the general inadequacy of this method that surveys based on proper comparison of duties of job determined from well-constructed job descriptions are required.

II. Job Description Survey.

A common type of wage survey is to mail job descriptions or job definitions for selected jobs to cooperating organisations. These organisations are asked the wage rates for jobs in their organisations which can be matched with the job descriptions. The rates requested may be rates now paid to each employee, the average rates, the established base rates, the minimum and maximum rates, or base rates plus bonus. Rarely is an attempt made to verify the accuracy of "matching" jobs with the job descriptions.

⁷David W. Belcher and Herbert G. Heneman, Jr., "How To Make a Wage Survey," Technical Report Series, No. 2, Industrial Relations Centre, University of Minnesota (Dubuque, Iowa: Wm. C. Brown Company, July, 1948). For further critical-analysis of survey methods, see David W. Belcher, "Planning a Wage Survey," Conducting Wage Surveys, Research and Technical Report IV, Industrial Relations Centre, University of Minnesota (Dubuque, Iowa: Wm. C. Brown Company, 1949).

Utilisation of a job evaluation system to assist in establishing this comparability is impossible, as there is no meeting of survey staff on a personal interview basis. Thus, the results probably depend upon (1) the respondent's knowledge and understanding of job analysis, (2) the importance attached to the survey results by the respondent, and (3) the general press of business.⁸ If any of these conditions is unfavourable, the information will probably be furnished by job title, thus subjecting the survey to the inaccuracies previously described. However, the job-description approach is a definite improvement over the job-title approach if care is taken in the selection of "key jobs", in the preparation of good job descriptions, in making sure that all ranges of skill are represented, and in matching jobs so that all collected wage data can be safely referred to job descriptions without distorting final figures.

III. Job Evaluation Survey.

In certain cases several organisations use the same job evaluation system. It is possible for these organisations to survey on the basis of job evaluation points. Since the point values are the same, the companies have merely to call and ask what an organisation is paying employees on jobs at a given point level. This puts an accuracy in wage surveys that is far superior to the job-description method mentioned above. Organisations will further be able to compare wage and salary structures in this manner.

However, in spite of the fact that some organisations do utilise the same job evaluation system, the majority of organisations are likely to use different systems. This fact tends to limit the

⁸Belcher and Heneman, Technical Report Series, No. 2,4.

number of organisations able to participate in such a survey. Further, such organisations may not be within the same industry or community, or even compete for labour within the same labour market, which more than likely will be unacceptable to the organisation conducting the survey.

A method to overcome these limitations, for an organisation conducting a wage survey and wishes to use job evaluation as a method of determining job comparability, is to select a number of "key jobs" ranging from those in the lowest labour grade to those in the highest labour grade. Once such "key jobs" are selected, trained job analysts visit the participating organisations, select those jobs in the organisations which match the key jobs most closely on the basis of the job descriptions, and evaluate such selected jobs by utilising the survey organisation's job evaluation system. This method thus utilises one job evaluation method in order to establish comparability with all participating organisations.

The major disadvantage of this method is the cost. The major advantage is accuracy. Relying on this idea of accuracy obtained from job evaluation, some organisations utilise the "key jobs" concept alone as a method of surveying. Once the job-evaluation system has established these "key jobs", these jobs are then utilised as a method of comparability in themselves. This concept is based on the idea that certain positions within every organisation are representative of a cross section of all positions in the wage and salary structure under consideration, i.e., they represent various occupational families, functions and organisation levels. These positions are then utilised as survey positions under the assumption that the nature of the duties of these positions are easy to define and readily found in other companies in the survey community. This eradicates the

necessity to utilise weighting factors, such as job evaluation, to a large degree. This system reduces the cost involved in evaluation every position of participating organisations.

However, the utilisation of this method may only prove successful when used in conjunction with other methods,⁹ the major disadvantage being the fact that what is regarded as a key position by one organisation may not be regarded as a key position by a participating organisation. In this way the number of positions surveyed may once again be reduced by incomparability, thus introducing the necessity for a weighting factor.

Thus, an organisation requiring wage and salary survey data in attempting to solve the problem of wage levels has available several choices. (1) A survey organisation may be used. (2) An informal group of employers may be formed to conduct a survey. (3) Survey results of other organisations within the same labour market/community may be used. (4) An organisation can conduct its own comprehensive survey.

Should the organisation decide to conduct its own surveys, a reliable compensation survey method must be developed, and continually improved upon. Thus, an organisation requiring wage data must be in a position to evaluate and improve upon procedure used in wage and salary surveys.

WAGE AND SALARY SURVEY PROCEDURES

The steps involved in wage and salary survey procedure may be outlined as follows:¹⁰

⁹Belcher, *Wage and Salary Administration*, 44.
¹⁰As adapted from Belcher and Heneman, "How to Make a Wage Survey," and Jay L. Otis and Richard H. Leukart, *Job Evaluation: A Basis for Sound Wage Administration*. (2nd ed.; Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1954), pp. 395-418.

I. Planning the Survey.

1. Determining the Purpose of the Survey.
2. Determining the Area to be Surveyed.
3. Determining the Organisations to be Included in the Survey.
4. Determining the jobs to be Included in the Survey.
5. Developing a Method of Insuring Job Comparability.
6. Determining Information to be obtained.
7. Making the Schedule.
8. Determining the Survey Method.
9. Selecting Survey Staff.

II. Conducting the Survey.

1. Insuring Job Comparability.
2. Collecting Information.

III. Analysing and Presenting Results.

I. Planning a Wage and Salary Survey.

The planning of a wage and salary survey is vitally important to the success of accurate collation of data. It thus may be necessary for a panel of survey staff to re-evaluate existing methods of gathering and analysing information after each comprehensive survey conducted by the organisation.¹¹

Determining the Purpose of the Survey. -- Planning begins with delineation of the purpose or purposes of the survey. Definition of purpose in the major step in solidifying judgment on the area to be covered, the organisations and jobs to be included, and the type of information required.

One author has suggested that wage and salary survey procedures should be a judicious compromise;

¹¹Wilbur R. Hanawalt, "So You're Making a Wage Survey?" Personnel, XXIV, No. 3 (November, 1947), 179-185.

that is, they should be as simple as it is possible to make them and still achieve reasonably accurate and useful data.¹² If compromises are to be made, they should be made in the planning stage rather than being forced while the survey is in progress.

Determining the Area to be Surveyed. -- This is essentially a matter of finding the boundaries of the labour market. For the typical organisation this is defined as the geographical district providing the market from which the majority of its employees are drawn. In most cases the labour market will be defined as the local community, although larger organisations usually choose wider definitions, even on a national community basis, depending on the type of organisation undertaking the survey.

Determining the Organisations to be Included in the Survey. -- Organisations from which information will be requested should be carefully selected. The objective in selecting cooperating organisations should be that of securing a representative and balanced sample. As stipulated by French,¹³ this ideally requires a census of establishments in the universe to be sampled. Then a sample should be drawn such that (1) the establishments selected for study are representative of the universe, (2) sufficient coverage is assured that the average wages for each job are reliable, (3) the figures of one or a few very large firms do not unduly influence the total.

Thus, in surveys made by organisations, the following criteria is applicable when determining the participating organisations: (1) industry, (2) comparable work, (3) competition for workers, and (4) size.

¹²Ernest Dale, Source of Economic Information for Collective Bargaining, (New York: American Management Association, 1951), pp. 84-87.

¹³French, The Personnel Management Process, 244.

Determining the Jobs to be Included in the Survey. -- An important requirement in the planning of a survey is determining which positions or jobs are to be compared. Obviously, all of the jobs forming the organisational structure cannot be surveyed, as this presents a monumental task. It is therefore necessary to establish some form of standard or criteria in selecting a sample of positions to be surveyed. As has been suggested by Tiffin and McCormick¹⁴ in their analysis of job evaluation methods, the concept of "key jobs" as a method of evaluating jobs¹⁵ may prove just as useful in the selection of survey positions.

The reasoning behind such an idea is that typical wage administration practices are based on a limited number of key jobs, which are classified because of (1) their position in an organisation's job structure, and (2) the importance placed on these jobs by certain groups, causing them to become benchmarks or points of reference. More specifically, key jobs may be regarded as ideal survey positions as they (1) represent a complete range of jobs, (2) are numerically important in terms of organisations having the jobs, and in terms of employees, (3) are used in collective bargaining, (4) are relatively stable in terms of job content, (5) are good reference points in job structures as to level of difficulty and responsibility, (6) are susceptible to clear, concise description.

However, although Belcher¹⁶ supports this idea, there are those authors who are not in agreement. For example, it has been pointed out by Benge, Burk and

¹⁴See J. Tiffin and E.J. McCormick, Industrial Psychology (London: George Allen and Unwin, 1965), p.442.

¹⁵As utilised in the Factor Comparison Method of Job Evaluation.

¹⁶Belcher, Wage and Salary Administration. 48.

Hay¹⁷ that, by definition, those positions as regarded as being key jobs by one particular organisation, may not be regarded as key jobs by other organisations.

Although such a criticism may be correct to a certain degree, a basic criterion for the selection of such key jobs is the requirement that they have become bench-marks or points of reference in the industry concerned, and this in itself will ensure inter-organisational comparability.

The number of jobs surveyed should be large enough to ensure that each participant will have many points of reference for reviewing the wage and salary structure. The industries represented in the survey will influence the number of jobs selected, as will the purpose of the study.

Twenty to thirty jobs have been suggested as an optimum number,¹⁸ but, as mentioned, various factors influence such a decision whenever a new survey is to be undertaken. These factors vary from organisation to organisation, as indicated in a study completed by Mobil Oil¹⁹ which indicates that the ideal number of positions to be included in a survey conducted by such an organisation would be a selection of four positions from each salary group included in the survey.

Determining a Method for Ensuring Job Comparability --

The usual method for ensuring comparability is the development of job descriptions through job analysis. Job descriptions, sufficiently detailed to permit comparison of job difficulty and responsibility, are prepared or adapted from existing job descriptions for use by the survey staff.

¹⁷Eugene J. Benge, Samuel L.H. Burk, and Edward N. Hay, Manual of Job Evaluation. (New York: Harper and Brothers, 1941), p.442.

¹⁸Richard D. Smyth and Mathew J. Murphy, Job Evaluation and Employee Rating (New York: McGraw-Hill Book Co., 1946), pp. 98-99.

¹⁹"Management Report: Survey of the Necessity for Conducting a Comprehensive Compensation Survey on a National Basis" (Mobil Oil Southern Africa (Pty.) Ltd., August, 1976), p. 6 (Employee Relations Department Files).

The necessity for accurate preparation of job descriptions for survey positions is emphasised by Harker's ²⁰ study on the reliability of wage and salary surveys, in which he found that generalised, ambiguous job descriptions led participating organisations to report widely diverse salary ranges for these jobs in contrast to the "spread" of salaries reported for jobs more clearly and specifically described.

In an effort to reduce the amount of subjective judgment that must be used along with job descriptions in comparing jobs, refinements have been attempted. One author, for example reported good results from a job content scale developed to pinpoint the level of a job encountered in a participating organisation.²¹ Several factors were formulated for each type of job as well as several degrees of each factor, such that a field man making the survey could obtain a point value for a job and thus compare jobs in terms of point values.

However, the job content scale appears to be very similar to job evaluation. It thus seems more appropriate to utilise the job evaluation method in order to establish comparability, as such systems are readily available to all organisations. Under such circumstances, employment of a common system of job evaluation would permit development and comparison of job-level values. This could be accomplished either by installing identical job evaluation systems in participating organisations, or by providing field men with such a system and instructing them to use it when comparing jobs.

Although Belcher²² suggests that utilisation of

²⁰John B. Harker, "Making Sense out of Salary Surveys", Personnel Journal, XXXI (September, 1952), 131-134. See also Tolles and Raimon, *op cit.*, pp. 290-291, for a discussion of factors which could affect survey reliability.

²¹Wilbur R. Hanawalt, "Job Content Measurement in Wage Surveys," Personnel, XXIV, No. 5 (March, 1948), pp. 350-359.

²²Belcher, Wage and Salary Administration, 49.

the job evaluation system may prove impractical on economic grounds, should the organisation make frequent use of an established system, this system could then be used as a practical method of establishing comparability in surveys, with a minimum cost factor involved.

It has even been suggested by Stahl²³ that the job evaluation system is invaluable to the compensation survey process, as indicated by the quote below:

"One point is especially clear: it would be next to impossible to carry on anything like the sophisticated survey process set forth if it were not for the existence of position classification [job evaluation]. Valid comparisons are feasible only through job analysis and description, and,, the finding of prevailing pay data for selected job classes can be extended to all other classes only by use of this well established procedure."

However, although the job evaluation system as a method of establishing comparability is becoming more and more useful, it is the individual organisational characteristics which will define the method most useful to any particular organisation.

Determining Information to be Obtained. -- Such determination is usually made in broad outline when the purposes of the survey have been defined. Although each organisation conducting such a survey will have its own specific purposes, it can basically be assumed that the survey is undertaken to adjust wage and salary structures such that compensation rates remain competitive. Thus, the range of information sought may include (1) wage rates, (2) hiring rates, (3) structure rates, (4) earnings, (5) wage changes, (6) wage policies and practices.

Structure rates are usually those developed through job evaluation although they may be simply range minima and maxima set up informally. An

²³O. Glen Stahl, Public Personnel Administration (7th ed; New York: Harper and Row, 1976), p. 102.

organisation with a formal wage structure may have a single rate for each job or group of jobs, or a rate range²⁴ for each job or group of jobs.

When an organisation has structure rates, they should be requested, because a valuable comparison can be made between actual rates and structure rates. The distribution of actual rates may change quite rapidly with changing business conditions. Structure rates, however, tend to be constant except for changes in wage level.

It is this concept of rate ranges and the idea that the midpoint of such ranges represents that rate which is usually considered as that salary which is representative of the competitive rate of pay for all positions falling within that range, that emphasises the importance of the analysis of these rates as supplied by participating organisations, rather than individual rates of pay.²⁵ As emphasised by Calhoon,²⁶ most employers, in collecting survey data, prefer to use wage rate data rather than earnings data. One of the major reasons for this is the multiplicity of difficulties involved in comparing actual earnings. Earnings may vary not only with hours worked, but with payment methods, and policies regarding wage supplements such as overtime, shift differentials, and so on.

Further, current wage and salary policies and practices in the market are sought in many wage and salary surveys. These are usually determined by utilisation of the fringe-benefits survey²⁷ as an integral part of the compensation survey.

²⁴A rate range refers to a range of wage rates that may be paid to individual workers on a job; thus a wage and salary structure consists of a number of rate ranges, or salary groups. For a concise explanation of rate ranges, see Richard P. Calhoon, Personnel Management and Supervision (New York: Appleton-Century-Crofts, Educational Division, Meredith Corporation, 1967), pp. 297-300.

²⁵See The Midpoint System, Chapter V, Section VII.

²⁶Calhoon, Personnel Management and Supervision, 297.

²⁷As discussed in Chapter I.

Determining the Schedules. -- Schedules should be constructed so as to permit collecting of required information as conveniently as possible, and to permit tabulation and analysis as quickly as possible. The construction of such schedules is dependent on individual organisational preferences.²⁸

Determining the Survey Method. -- Three different ways of obtaining wage and salary information exist: (1) the telephone enquiry, (2) the mailed survey, and (3) the interview or organisation visit. Which of the three is applicable in a given wage study depends principally upon the purpose the survey is to serve.

However, disadvantages of methods (1) and (2) listed above have been discussed earlier in this chapter. It is commonly agreed that most productive of accurate wage data is the interview method, and because this method is the most reliable and accurate,²⁹ emphasis has been placed on this type of method in the remaining chapters of this text.

The most productive of accurate wage data may be considered to be the interview method, which involves sending out survey staff in order to gather the necessary information from participating organisations. The important point to make is that these field men collect wage and salary information only after personally verifying job comparability by interviewing the necessary representatives of the organisations concerned.

Thus, although this method is costly and time-consuming, it is perhaps the most useful in that it is most productive of reliable wage and salary data.

²⁸For example of schedules see Appendix I to the proposed Midpoint Compensation System. Also Belcher and Heneman, Technical Report Series, II.

²⁹Belcher, Wage and Salary Administration, 64.

Selecting the Survey Staff. -- Typical tasks of the survey staff consists of collecting the data, and tabulating, analysing and summarising the results. Thus, it is necessary that this work be headed by someone familiar with wage and salary administration, and policies and procedures of the surveying organisation.

However, the most important task to be completed is that of actually collecting the information required, and this emphasises the responsibility for the accuracy of such information. It is this survey staff who must compare jobs, and must thus be fluent with the method developed to obtain comparability. It thus becomes necessary for the survey staff to possess a broad knowledge of the jobs in his organisation, and the wage and salary practices, policies and procedures of their organisation.

Conducting the Survey. -- The actual conducting of the survey may follow certain well defined steps:

1. Making the Initial Contact with Participating Organisations. Once plans for conducting a survey have been completed, those participating organisations should be contacted and supplied with necessary information as regards requirements and personal interviews, etc.

2. Determining Job Comparability. Before the collection of wage data it is necessary to ensure comparability of jobs in the participating organisations with those selected by the survey organisation. In many ways this is the core of wage and salary survey procedure, and the step on which the accuracy of the final results depend. The task of the survey staff depends on the device or method selected to ensure objective comparability between survey positions, i.e., whether they are to make use of (1) job descriptions, (2) job content scales, (3) job evaluation, or (4) any combination of (1), (2) and (3).

The approach should be one of emphasising job content and/or job requirements and de-emphasising job titles, as previously discussed. It is in this area that the job evaluation method has an additional application in the hands of the survey staff. Where they find it impossible to find a job in the participating organisation to correspond with the submitted job description, they may search for a job that, although it may involve different duties, has a comparable level of difficulty, or responsibility. When such a job is found, a job evaluation scale may be applied to determine whether the two are comparable in terms of job-level-value.

Some authors have recommended use of job evaluation methods entirely, to establish job comparability. Kress,³⁰ for example, suggests the use of a uniform job rating plan in all participating organisations to attain comparability. However, it is not always practical for different organisations to adapt the same job evaluation method to suit differing administration policies, merely for the sake of ensuring survey job comparability. Further, it is not always the case that the same organisations will participate in the same surveys on a regular basis. Survey organisations tend to form a core of regular participants within the same industry, but include different organisations from other industries or labour markets, for each survey, such that as competitive a base as possible is maintained.

However, the idea of a uniform job rating plan, or job evaluation system, is unnecessary according to Chesler³¹ whose research suggests that the particular job evaluation system used makes little difference to

³⁰A.L. Kress, "How to Rate Jobs and Men," Factory Management and Maintenance, LXCVII, No. 10 (October, 1939), 59-65.

³¹David J. Chesler, Journal of Applied Psychology, XXXII, 465-475.

the evaluated results. The research undertaken by such author established that rates in six different organisations using a variety of job evaluation systems, but the same job descriptions and specifications, obtained essentially the same results. The different systems used were the factor-comparison method, the point-rating method, and a combination of the ranking and the grade-classification methods, none of which was identical to the other. The inter-correlation between the use of different systems varied from 0,89 to 9,97, with an average of 9,94. These results then serve to emphasise the idea that it is not necessary for participating organisations to use a uniform evaluation system. Each organisation may have their own system and sufficiently reliable survey comparability is likely to be obtained.

These facts, however, do not alter the fact that job evaluation is a reliable method of ensuring job comparability. The method of use may differ from organisation to organisation.³²

3. Obtaining Wage Data. Once it has been decided that similarity between positions is sufficient to warrant inclusion, actual wage data should be obtained from the participating organisation. This data is usually obtained from payroll records of such organisations, and the importance of obtaining reliable data rather than estimates is a factor which may affect final results. The concept of the midpoint as the recognised "going rate" is introduced at this stage.

Tabulating, Analysing and Presenting Results.-- This process is undertaken according to systems and schedules drawn up by individual organisations. Should a comprehensive compensation survey be conducted, data

³²For use of job evaluation in this context in the proposed Midpoint System, see Chapter V, Section VIII.

may be divided into two tabulations, namely, one for wage data, and another for wage policies and practices.

A method of presenting wage data while at the same time retaining individual organisation confidentiality, is the identification of data by organisation code, i.e. each organisation is given a code which applies in survey reports, such that an organisation may compare its wage data to that of other organisations individually or collectively.

Mention may be made, once again, of the midpoint concept³³ at this stage. Although it is useful to have wage information applicable to specific jobs, what is needed most often are wage data applicable to wage and salary structures. If an organisation is to use going wage data in determining whether the level of its structure is in need of adjustment, it is this latter information which is needed. In this way midpoints of each salary groups are obtained, and thus the actual "going rate" structure of each organisation may be compared.

This type of analysis is thus facilitated by the use of job evaluation method. In this case the method is not utilised to determine job comparability, but rather to ensure a standardisation of each organisation's wage data by permitting use of a point scale in graphical plotting of wage data for comparison purposes.

It has even been suggested by Stahl³⁴ that such a method of analysis would be greatly facilitated by participants making use of a similar job evaluation method, such that the completed analysis could be

³³As discussed earlier in this chapter. See proposed Midpoint System Chapter V, Section VII.

³⁴O. Glenn Stahl, Public Personnel Administration, 100-102.

submitted to all participants for adjustment purposes. However, the disadvantages of a uniform job evaluation method have already been mentioned, while common practice is to submit a summary report of collected information to all participants such that they may apply their own methods of analysis.

This approach is very similar to one suggested by Bass,³⁵ whose plan calls for wage lines calculated and plotted for each participating organisation, as obtained from survey midpoint rates for each individual organisation. Wage lines for each organisation and the community average wage line are then plotted on graphs.

Although these methods are based on the assumption that the participating organisations use an identical job evaluation system, this is not a requirement for utilising such methods. As mentioned earlier, all that is necessary is for the organisation conducting the survey to have a job evaluation plan that has numerical values which may be applied for graphical comparison purposes.

As far as presentation of wage policy and practice data presentation are concerned, variations depend on the organisations conducting the surveys. Data may be presented in narrative form, or tabulated in a question-by-question form, or combined into a single table for easy comparison.

SCOPE OF SURVEYS

Depending on factors such as size of organisation, type of operation, number of subsidiaries, placement of subsidiaries, diversification, numbers of employees, etc., the organisation conducting a comprehensive survey must decide on whether to align wage levels

³⁵A.W. Bass, Jr., "How do Your Rates Compare With Those of Your Community?" Iron Age, CXL, No. 25 (December, 1937), 36-39.

(1) with the local labour market, (2) with the industry of which they are a part, or (3) with industry on a national basis.

Obviously, the smaller companies and firms need only adjust according to the local labour market, but some organisations need to align wage levels according to the industry of which they are a part. This is due to the fact that competition for experienced and qualified personnel in such an industry will be greater, the larger the number of organisations within that industry.

However, an additional set of problems is faced by organisations with numerous installations in different sections of the country. These organisations may either (1) adopt the level of the industry of which it is a part, on a national basis, or (2) adjust levels according to community levels in the various areas where installations are located. This practice can be logically justified in terms of the trend towards decentralisation.

In cases where the organisation is made up of numerous small installations, Dean³⁶ suggests a thorough study of (1) the effect of city size, (2) regional influences, and (3) skill differentials, in order to decide whether such local installation should be authorised to set their own wage and salary structures and levels.

It is thus a wide range of factors which influence the organisation's decision as to the scope of the compensation survey, and thus the importance of adequate methods of obtaining reliable information.

³⁶Joel Dean, "Geographical Salary Administration," The AMA Handbook of Wage and Salary Administration (New York: American Management Association, 1950), pp. 277-294.

EXECUTIVE COMPENSATION SURVEYS

The majority of wage and salary surveys are aimed at all positions up to top management level, excluding positions which fall at a higher level in the structure. Alternatively, comprehensive survey staff may collect and analyse data for these higher positions on a separate schedule basis. The reasoning behind this is that the difficulties and pitfalls inherent in obtaining job comparability at executive levels are far greater than those for lower levels, and thus involve a more involved process of establishing job comparability. This difficulty in obtaining job comparability at executive levels highlights a major limitation of the job evaluation system, which is not well suited to determining relative worth of such professional jobs as those held by engineers, scientists and top management. The reason behind this is that these jobs are far more difficult to describe and analyse in terms of the usual job content and job factors. Job assignments to many professional people are given on the basis of their individual professional qualifications, and only in the very large organisations is it possible to describe broad categories of engineering or scientific jobs. Similarly, executive level positions are also difficult to describe for evaluation purposes. Pigors and Myers³⁷ go so far as to state that it is pointless to talk about evaluating an executive job, when the real evaluation relates to what an individual has made of his job, compared to what others have made of their jobs; thus, in the final analysis the executive is worth what his superiors believe he is worth.

However, bearing in mind that the basic objective of the job evaluation system is to evaluate the job and not the man, it is still possible to conduct

³⁷P. Pigors and C.A. Myers, Personnel Administration, p. 242

executive surveys by utilising the same principles applicable to all other positions, with one major proviso, namely, that all executive positions be surveyed by a staff member who is involved with executive remuneration, in conjunction with the executives concerned.

Usually such executive compensation data will be collected by a member of the survey staff who is intimately involved with the remuneration of the executives within his organisation, and job comparability is established by him and similar counterparts from participating organisations. The nature of such compensation practices is thus kept on a confidential basis for each participating organisation.

Originally, the problem of executive compensation surveys was studied by the American Management Association³⁸ who found that if organisations were classified by (1) industry, and (2) profit positions, reasonable figures could be obtained for executive positions. However, more recently, comprehensive compensation surveys include executive surveys under the same methods and conditions as those applicable to all other positions, the only difference being that such surveys are undertaken on a far more confidential basis as mentioned above.³⁹ This is the case because the general approach when undertaking such surveys is to (1) describe clearly the functions of each job, (2) establish status, (3) allow each organisation to establish which jobs are likely to be comparable, irrespective of job title, and (4) rely on an objective method of establishing job comparability. These factors apply to all positions, including executive levels.

³⁸See Arch Patton, "How Much Should An Executive Be Paid?", Executive Compensation: Company Policies and Practices, Financial Management Series, No. 97 (New York" American Management Association, 1951), pp. 16-22.

³⁹See Peromnes and Urwick - UAL compensation survey reports.

USES OF COMPENSATION SURVEY DATA

Although the role of the wage and salary survey has been emphasised as being one of aiding the organisation in setting wage and salary levels, further purposes may be defined in the fulfilling of the organisational objectives.

A most important and frequent use of the wage and salary survey is to validate and update the wage and salary structure of the organisation, such that rates of compensation remain competitive in the labour market applicable to the particular organisation concerned. Although these structures are developed within the organisation, it is necessary to continually check the slope and setting of the structure against the market. In this way it may be discovered that certain jobs within the organisation structure are paid at much different rates than the community average, and if this is the case, the reasons for such discrepancies can be uncovered by survey procedures.

The compensation survey as such may further aid the organisation in solving problems of individual wage determination by establishing community practices with regard to starting rates, progression rates, merit and length of service increases, etc., through utilisation of the benefits survey questionnaire. Although fringe-benefits as such do not have an overall effect on the wage and salary structure, there are certain fringe elements which are taken into account in terms of monetary values when calculating organisation compensation figures.⁴⁰ By providing information on community practice regarding policies and practices affecting wages and salaries, the fringe survey

⁴⁰For example, the annual bonus, which directly affects the actual compensation levels of employees. One author, however, lists 108 fringe-benefit variables which can affect compensation levels and the wage and salary structure. See David W. Belcher, "Employee and Executive Compensation", Employment Relations Research, ed. H.G. Heneman et al (New York: Harper and Brothers, 1960), pp. 75-76.

further aids in adequate comparison between survey organisation benefit packages and those of the survey community.

In general, the compensation survey may be said to be a control mechanism in wages and salary administration. Data on community wage levels, structures, progression, payment methods and fringe-benefits together with internal data, are the essentials with which control methods operate.

As suggested, prevailing wage and salary patterns have an important impact on the wage and salary structure and the overall level of wage payments within most organisations. Even those organisations who do not make wage and salary surveys are affected by these environmental pressures, and it thus becomes necessary to respond to signals from either the internal or the external environment that all is not well with existing wage and salary structures. It thus becomes vitally important for the larger, more competitive organisation to gauge the upward movement of both wages and salaries, and living costs. It is in this important area of control that the compensation survey may be regarded as an essential mechanism.

Finally, it is in the light of the above facts that it may be stated that, due to the important role of the compensation survey in the administration of wages and salaries, it is imperative that constant effort be made to improve survey procedures. More specifically, as the compensation survey must continue to carry a heavy load as a wage and salary technique, it is essential to develop and improve methods of obtaining compensation information which is both as objective and as accurate as possible.

PART III

THE MIDPOINT SYSTEM

CHAPTER IV

RATIONALE

The policy of organisations competing in the labour market is to pay competitive compensation. To determine whether the compensation being paid is competitive, it is necessary to conduct and/or participate in surveys of leading companies in both the industry of the organisation concerned, as well as other industries in the communities in which such organisation's subsidiaries may compete for qualified employees.

In order to adjust wage and salary structures on a competitive basis, it becomes imperative for the organisation to develop a valid and reliable data gathering system, as well as a data analysing system. It is necessary for such a system to be as reliable as possible in that the decision to adjust such structures will be based on the analysis of such collated data. This decision to adjust structures will affect the complete organisation as a whole, as well as each individual within such organisation. Further, it will affect the organisation's competitiveness within the labour market.

The basic aim of such a survey system, therefore, is to establish competitive rates of pay for all positions falling within an organisation's wage and salary structure. The process utilised in establishing such rates differs widely from organisation to organisation, thus posing problems as regards

subjective evaluation of data, and thus varying adjustments to structures, which results in the present inflationary market in the effect of surveys chasing surveys.

The Proposed Midpoint System endeavours to establish a comprehensive guide to conducting competitive compensation surveys such that disadvantages which pose as potential invalidators of present systems may be minimised. Such disadvantages may be listed as follows:

1. Usually only up to fifteen percent of the positions contained in the hierarchy are selected for the purposes of comparison. The choice of such positions becomes arbitrary, and as such, subjectivity as regards such choice is precipitated. The importance of such a choice is evidenced by the fact that the data obtained from comparisons of these positions provides the basis for a decision on the adjustment of existing wage and salary structures.

2. Under existing systems, a number of positions are selected from the position hierarchy and these are utilised to establish position-to-position comparisons with similar positions of participating organisations. These position comparisons are made at all levels, taking into account specific job content, employees supervised, levels of responsibility, and other related aspects. These comparisons are made in order to establish an average competitive rate of pay for each position, and collectively provide the basis for appropriate wage and salary structure and level adjustment. However, certain position monetary salary data requires adjustment in order to take into account intra-organisational variations in scope and magnitude of the abovementioned factors. These adjustments are of necessity very subjective, and this certainly has an effect on data obtained.

3. At present, most organisations compare actual salaries which do not, because of human potentials, reflect the true value a company places on its levels

of responsibility. The surveying of actual salaries once again has the effect of surveys chasing surveys. The basic problem in this regard is that certain individuals within the structure are compensated according to what management feels they are worth, rather than according to their efficiency and effectiveness in relation to the job description and job evaluation techniques. Thus, once again survey data would tend to reflect subjective rather than objective worth.

4. Another problem is the statistics to be used in collecting and analysing survey data. Simple averages paid by organisations for a certain position do not take total numbers of employees into account; on the other hand averages weighted on the basis of number of employees may be distorted by the inclusion of large organisations whose practices may be atypical or impossible to emulate.

In attempting to minimise the effects of such disadvantages the Midpoint System relies on the use of three important concepts:

1. The midpoint concept.¹
2. The key position concept.²
3. The job evaluation concept.

With respect to base salary range midpoints, where the participating organisation has established salary group ranges, ie. a minimum salary and a maximum salary for each range of positions within the structure, the midpoint salary of the range is usually considered as that salary which is representative of the competitive rate of pay for positions within that salary group. In such cases these midpoints are utilised to establish a

¹"Employee Relations Manual" (Mobil Oil Southern Africa (Pty.) Ltd., 1969), serial B.8.1.7.

²This concept has already been discussed in Chapter III.

community average competitive rate for a particular position.

The utilisation of this concept serves to eradicate the problems of subjective rather than objective worth of positions, as well as the problems of weighted averages and total number of employees, as suggested in 3. and 4. above.

However, as certain participating companies do not have an established salary range for a position, a specific technique has been introduced in order to establish hypothetical midpoints for positions, such that the abovementioned problems are minimised as far as is possible.³

In order to reduce the problem of arbitrary selection of positions for comparison purposes in the survey system, the Midpoint System attempts to make optimum usage of the key position concept. A survey position is a position within the employer organisation which has been selected for comparison with similar positions in the survey community to establish competitive compensation data. Collectively, the competitive data for several survey positions provides basic information required to establish an appropriate base salary structure and to check the adequacy of position evaluations.⁴

It thus becomes necessary for these positions to satisfy certain criteria in order to be selected as "key" positions:

1. They should represent a cross section of all positions in the salary structure being studied, i.e., they should represent various occupational families, functions and organisation levels.
2. The nature of the duties should be reasonably easy to define and readily found in other companies in the survey community.
3. They should be relatively free from supply and demand extremes affecting compensation and should

³Supra, p. 81

⁴Supra, p. 72

not be controversial in terms of appropriate pay levels.

The adequate identification and selection of "key" positions will thus provide a sample of positions which justifiably represents the structure as a whole; the sample should thus be regarded as a skeleton structure and hierarchy.

Job analysis and evaluation are vitally important in the selection of such positions, as these systems provide the basic job description data which allows a hierarchical structuring of relative as well as monetary worth.

A further area in which the job evaluation technique is utilised in the Midpoint System is in the weighting of similar positions which are not comparable in terms of criteria mentioned in section 2 of the listed disadvantages.⁵ Under such circumstances, employment of a common system of job evaluation would permit development and comparison of job-level values. This is accomplished either by installing identical job evaluation systems in co-operating establishments, or by providing wage survey field men with such a system and instructing them to use it in comparing jobs. In this way subjective weighting of data is minimised.

In summary, the Midpoint System attempts to provide the organisation with a guide to conducting competitive compensation surveys which is reliable enough to satisfy the following basic necessities:

1. Minimisation of time needed to conduct a wage and salary survey.
2. An adequate basis for comparison of positions which are as representative a sample of the hierarchical structure as possible.
3. Minimisation of subjectivity by minimisation of the necessity for position data evaluation and weighting.
4. Limitation of the effect of "subjective worth" on the data gathering and analysis system by optimum utilisation of the midpoint concept.

⁵Supra, p. 66

CHAPTER V

THE MIDPOINT SYSTEM GUIDE

PURPOSE

It is the organisation's policy to pay competitive compensation. To determine whether the compensation being paid is competitive, it is necessary to conduct and/or participate in surveys of leading organisations in the communities of the industries in which the organisation competes for qualified employees.

The information obtained from these surveys is used by the organisation to:

1. develop monetary limits for base salary groups,
2. audit the external competitiveness of the position evaluation programme.

PROCEDURE

I. Frequency of Surveys.

Gradually changes occur in a labour market area and within particular industries. Normally, therefore, a comprehensive compensation survey should be conducted at regular intervals of a minimum of three years and a maximum of five years.¹

However, the need to adjust base salary ranges should be reviewed on an annual basis. The decision to make interim adjustments to base salary ranges in the years between comprehensive surveys may be based on

¹"Management Report: Survey of the Necessity for Conducting a Comprehensive Compensation Survey on a National Basis" (Mobil Oil Southern Africa (Pty.) Ltd., August, 1976), p. 6. (Employee Relations Department Files).

"spot check" analysis of the following: (1) general economic conditions, (2) past compensation trends, (3) surveys conducted by other organisations, (4) the movement of competitive salary structures, and (5) a review of competitive compensation for several representative positions with the organisations included in previous comprehensive surveys. If these indications are inadequate, any adjustments in the base salary should be based on comprehensive surveys conducted more often than every three years.

II. Who Should Conduct a Compensation Survey?

It is suggested that the Personnel Department staff of the organisation concerned be assigned primary responsibility for conducting competitive compensation surveys. It is further suggested that such staff call on other management employees to assist them for reasons indicated below:

1. Line management of the organisation should participate in the personal interviews with participating organisations because their knowledge of the duties and responsibilities associated with certain survey positions is usually greater than that of the Personnel staff. This is particularly true of management and supervisory positions under the line manager's supervision. The judgment of line management is often helpful in evaluating the similarities and differences in management positions. Further, it allows the line management to participate in the survey process and helps to reassure them about the validity of the results.

2. Compensation staff specialists of the organisation may be asked to participate in conducting surveys because their experience, particularly with respect to management positions, is usually broader than that of the Personnel staff.

III. Selection of Survey Positions.

A survey position is a position within the organisation which has been selected for comparison with similar positions in the community to establish

competitive compensation data. Collectively, the competitive data for several survey positions provides basic information required to establish or adjust appropriate base salary structures, and to check the adequacy of position evaluations.

Survey positions (regarded as "key" positions) should be selected on the basis of the following criteria:

1. They are representative of a cross section of all positions in the salary structure being studied, i.e., they should represent various occupational families, functions, and organisation levels.
2. The nature of the duties should be reasonably easy to define and readily found in other companies in the survey community.
3. They should be relatively free from supply and demand extremes affecting compensation, and should not be controversial in terms of appropriate pay levels.

To ensure that an appropriate amount of competitive data will be obtained, it is usually desirable to select at least four positions from each salary group included in the survey.² Depending upon the number of salary groups in the survey, however, the total number of positions may become so large that participating companies may be reluctant to devote the necessary time to the survey. It is suggested, therefore, that the total number be limited to about fifty, regardless of the number of salary groups to be included.

There should be continuity in positions included in the survey with those included in previous surveys, provided the positions still meet the criteria discussed above.

IV. Survey Community and Companies.

The survey should normally cover an area or community which contains a reasonable sampling of

²Ibid., p.7.

employers who compete with the organisation conducting the survey,³ for employees. The community may be a town, a city, or a larger area. For example, it may be that there is one large geographic area for management, professional, technical and sales personnel, such as a country or a region within a country.

As a guide, it is recommended that each of the companies selected to be surveyed should:

1. Be regarded as reputable employers in the community being surveyed, and compete with the survey organisation for qualified employees.

2. Provide a "benefit plan package" and working conditions reasonably comparable to those provided by the survey organisation. As a general rule, the same companies should be surveyed for both compensation and benefit purposes.

3. As a group, be representative of the leading industries in the community.

It is suggested that the number of organisations to be included in the survey be about ten to twelve. However, where it appears that competitive data will be limited, the reliability of the survey results may be increased by increasing the number of organisations to as many as eighteen. To the extent that it is possible, the same organisations should be included from one survey to the next to ensure consistency in the data obtained. If a company should be excluded, an attempt should be made to choose a replacement from within the same industry.

V. Preliminary Contact With Participating Organisations.

After the participating organisations have been identified, they should be contacted to explain the purpose of the survey, and to request their participation. It should be explained that a survey team of the survey

³Hereafter referred to as the "survey organisation."

organisation is planning to conduct personal interviews for the purpose of exchanging the information, that a summary report of the survey data will be furnished to each participating organisation, and that all data will be kept confidential.

After securing the agreement of the individual organisations to participate, it is desirable to send each participating organisation a Survey Booklet containing information about the survey organisation, abbreviated position descriptions, and organisation charts. The data supplied should be in the form of Exhibits A and B, Appendix I.

Exhibit A. -- This exhibit should contain survey organisation information to provide the participating companies with data that will be helpful to them in making job comparisons, and that will serve as a model for the type of information they are asked to supply. Included in their questionnaire should be all questions with regard to fringe-benefit packages which the survey organisation wishes to analyse.

Exhibit B.-- should contain a concise, yet complete summary of the survey organisation survey positions, and the related data which specifically applies to those positions. Particular care should be taken to ensure that the scope and magnitude data is pertinent to each position.⁴ With respect to this exhibit, the section "salary information" should not be completed in advance of the personal interview to avoid prejudicing the participating organisations in their selection of comparable positions. Each participating organisation should be informed that salary data will be furnished during the personal interview after the position comparisons have been made.

Additional blank copies of the Survey Booklet

⁴Thus the need for accurate and reliable job analysis systems, and meaningful job descriptions.

should also be furnished such that representatives of each participating company may record their own compensation data and related information in advance of the personal interview.

VI. Personal Interview.

The purpose of personal interviews is to review tentative position comparisons made by the participating organisations, review the adequacy of the data reported, and gather other general information of interest. The visits are also helpful in establishing personal contacts which may prove valuable in future surveys and inquiries. It is recommended that the persons conducting the interviews have with them complete position descriptions of the survey positions, and appropriate organisation charts to supplement the Survey Booklet information.

Recommendations based on the survey results are only as valid as the comparisons of the survey positions. The personal interview, therefore, is an important aspect of the survey. It is suggested that these interviews be undertaken with care, and that the specific criteria used to judge the level of responsibility of participating organisation positions be thoroughly explored, as discussed in Section VIII.⁵

VII. Information Required.

General Information.--The following general information should be obtained from each participating organisation and recorded on a form similar to Exhibit A, Appendix I.

1. Operational information, such as: (1) type of business activity, (2) number of employees, (3) size of organisation in terms of sales volumes, (4) manufacturing capacity, (5) profits, (6) number and location of major plants or facilities, etc. (Operational information should apply to an organisation's operations inside the survey community, that is, the information should relate to the positions in the survey. If an

⁵Supra, p.77

organisation has operations outside the survey area, information related to the organisation's total operations should be recorded separately).

2. Compensation information applicable to the positions being surveyed such as: (1) base salary ranges, (2) recent history of changes in base salary structures, (3) general increases, (4) salary administration policies, (5) incentive bonus plans, (6) allowances, (7) subsidies, etc.

The nature and extent of compensation practices will reveal the participating organisations' philosophy toward their employees, and the degree to which they are comparable with those of the survey organisation. The first time a participating organisation is surveyed, a comprehensive review of this general information is recommended. In subsequent surveys, it should be necessary only to review changes in these items.

Compensation Data.-- For each participating organisation, the following data should be obtained and recorded for each survey position: (1) base salary range midpoint, (2) actual salaries of each incumbent, or the average salary of all incumbents if individual incumbent salaries cannot be provided, (3) additional month(2) payments (bonus), (4) incentive bonus payments, (5) allowances, (6) premium payments, (7) subsidies, etc.

With respect to base salary range midpoints, where the participating organisation has established salary group ranges, i.e., a minimum salary and a maximum salary, the midpoint salary of the range is usually considered as that salary which is representative of the competitive rate of pay for positions in that salary group. In some cases, participating organisations might not use the midpoint of the range for this purpose, but might use another salary point within the range. In this event, the latter point should be identified.⁶

⁶In this guide, all such salary points will be referred to as the "midpoint" for simplicity of presentation.

When a participating organisation does not have an established salary range for a position, the survey team should obtain, in addition to actual salary data, the number of years such incumbent has been in the position (including prior comparable level positions, if any). As in the case of actual salaries, when individual years in position cannot be provided, the average years in position of all incumbents should be obtained. Section X explains the use of this data in calculating a hypothetical midpoint for the position.⁷

A form similar to Exhibit B, Appendix I, is recommended for use in recording base salary data and related position information. The use of other compensation information is discussed in Section X.

VIII. Establishing Criteria for Evaluating Comparability of the Survey Organisation Positions and the Participating Organisation Positions.

As stated earlier, the purpose of the survey is to determine whether the compensation paid by the survey organisation is competitive in the community in which it competes for employees. The method used to determine competitiveness begins with a comparison of each survey organisation position with comparable positions of the participating organisations. Based on this comparison, an assessment is made of the degree of comparability in terms of whether each participating organisation's position is equal to, heavier than, or lighter than the survey organisation's position. The accuracy of this assessment depends upon the reliability of the comparisons made during the personal interview, and is essential, therefore, that the information sought for each position comparison be planned in advance by making use of job analysis, job descriptions and job evaluation techniques. The following criteria should be considered when making position-to-position comparisons:

⁷Supra, p. 81

Reporting Relationship.-- The relative location of the survey organisation position, and the participating organisation position in their respective, organisational structures is reviewed. The level of the positions to which they report, the number of positions which report to the next higher level position, etc., all have a bearing on which of the two positions is more difficult or responsible.

Functional Responsibilities.-- The number of business activities for which each position is responsible is examined and evaluated. If, for example, two supervisory positions are being compared and one of them has additional responsibility for the development of work procedures, that position will be judged to be heavier.

Scope and Magnitude.-- Each position whether line or staff, should be described in terms of quantitative data that may be used in determining relative differences. For example, sales supervisory positions may be compared on the basis of sales volumes, realisations, number of employees supervised, number and type of customers, and other similar factors. Although it is more difficult to quantify the scope and magnitude of staff positions, it is possible to do so in many cases. A public relations position, for instance, can be described in terms of (1) the type and complexities of problems encountered and solved, (2) the level of the organisation client or organisation served, (3) the publics to which the work product is directed, (4) size of operating budget, etc.

Other.-- Other factors of significance should be considered, such as (1) limits of authority, (2) degree of functional guidance given and received, etc.

Because the specific criteria under these general headings vary from position to position, the survey team should develop, prior to the personal interview, a description of the specific criteria for each position which should be used as the basis of comparison.

Once the specific characteristics or criteria for each position have been developed, the survey team is

prepared to discuss these criteria with the participating organisations, and to record the comparative data required to assess the comparability of the participating organisation's positions with the survey organisation's positions.

IX. Summarising Position Comparisons.

When all the interviews have been completed, a Summary Worksheet should be prepared for each survey organisation position in the survey (Exhibit D, Appendix I). On each worksheet, record (1) the names of the participating organisations, (2) the titles of their survey positions, (3) the criteria used in identifying differences in responsibilities, (4) the applicable quantified scope and magnitude data, and (5) any other factors which might be helpful in assessing the degree of comparability between participating organisation position and the survey organisation position.

The data recorded on Exhibit B, Appendix I, for each position should be reviewed and posted to the Summary Worksheet. For each criterion of comparison, a notation of =, +, or - should be entered to indicate whether the participating organisation position is equal to, heavier than or lighter than the survey organisation position with respect to the criterion. No attempt should be made at this stage to assign a salary group differential to each of the criterion separately. When all criteria have been considered, a judgment should be reached as to the overall degree of comparability, and a salary group differential estimated, for example, plus one-half of a salary group overall.⁸

As a final check, the previous salary survey should be reviewed. If the degree of comparability of any participating organisation has changed, the new assessment should be re-examined to determine whether the change is justified.

⁸For a detailed example of this criteria weighting method, see Exhibit D, Appendix I.

When the initial judgments have been reviewed, each participating organisation position judged to be more than three salary groups heavier or lighter than the survey organisation position should be deleted from the Summary Worksheet. Those positions judged to be two-and-a-half or three groups heavier or lighter should also be deleted unless there are fewer than three remaining position comparisons, or unless the position being surveyed is the only position in its salary group for which comparisons have been made.⁹

It is important that effective use of the job evaluation system of the survey organisation be made whenever there is difficulty in assessing the comparability of positions, as this system places degrees of scope and magnitude of similar positions on a standardised basis. In this way, subjective estimates of comparability will be reduced to a minimum.

X. Establishing Competitive Total Compensation.

Total compensation in its broadest meaning includes any payment, whether in cash or in kind, that has a financial value to the employee. Base salaries, extra salary payments, incentive bonuses, allowances, subsidies, perquisites, benefits, etc., are all elements of compensation. However, for the purpose of establishing competitive base salary structures, survey organisations should ordinarily include in the total compensation paid by participating organisations only base salary midpoints, extra salary payments, such as a thirteenth month payment, and incentive bonuses. The competitiveness of the survey organisation with respect to any other element of compensation should be assessed, and decisions made by the survey organisation management, separately from considerations of base salary structures, regarding whether and by what means such competitiveness should be achieved.

⁹For detailed examination of the method which may be used to establish monetary weightings based on the salary group weightings thus established, see Section XII, p.84

If management deems it appropriate in the light of local conditions, such other element paid by a participating organisation might be included in its total compensation.

When the process of assessing comparability of survey positions, as described in Section IX,¹⁰ has been completed, the next step is to establish the total compensation for each competitive position.

Base Salary Midpoints. -- If the participating organisation has an established salary group range for its positions, the midpoint¹¹ of that range should be used.

If the participating company does not have an established range for a position, a hypothetical midpoint should be calculated. TABLE 1 shown below has been developed for use by the survey organisation in making the calculation.

TABLE 1
HYPOTHETICAL MIDPOINT CALCULATION

If years in position are	Multiply actual salary by the factor
less than 1	1,1364
1	1,1033
2	1,0712
3	1,0400
4	1,0098
4½	1,0000
5	,9948
6	,9851
7	,9754
8	,9657
9	,9562
10	,9467
11	,9373
12	,9281
13	,9189
14	,9098
15	,8320

¹⁰Supra, pp. 79-80.

¹¹As defined in Section VII, p. 79

Factors have been calculated on the basis of $4\frac{1}{2}$ years as the minimum average period required for full effectiveness to be achieved according to job description specifications, i.e., the period requirement before the midpoint of a salary range is reached. Applying a factor of 1,0000 to $4\frac{1}{2}$ years, corresponding factors have been calculated for each year, on the basis of a 50% spread in the salary range.

The resulting salary value is the hypothetical midpoint for the position under consideration. Where there is only one incumbent in the position, the actual salary and years in position (including prior comparable level positions) should be used. Where there are two or more incumbents, the average salary and average years in position of all incumbents should be used.

It is important to note that should the participating organisation grant one or more extra monthly base salary payments, the hypothetical base salary midpoint should be increased by one-twelfth for each such extra monthly payment.

Incentive Bonus Payments. -- An incentive bonus is an award granted for individual performance. Its value is stated as a cash amount regardless of the form in which it is paid, or the time at which it is paid. If a participating organisation regularly awards incentive bonuses, the cash value of awards made for performance during the latest full year (calendar) should be included in that company's total compensation. In some cases, awards are made in the year following the performance year, while in others awards are made during the performance year.

When the participating organisation has established salary group ranges, the bonus amount to be included should be that amount which the participating organisation would normally award to an employee whose salary is at the midpoint of the group range, and whose performance rating is comparable to the survey organisation's performance appraisal rating which indicates a meeting of all requirements as stipulated by the job description

for that particular position.

Where the participating organisation does not have a salary group range for the position, such organisation should be asked to provide an estimate of a "normal" bonus for an employee who meets all requirements of the Position. If a "normal" bonus estimate is not provided, the average of the actual bonus paid to the incumbents of the position should be used. To determine this average, the sum of the bonuses paid should be divided by the number of incumbents, including those who did not receive an award.

If bonus payments vary significantly from year to year, the average of the bonuses paid in the most recent five calendar years (including any year in which a bonus was not paid) should be used.¹² For example, if a bonus was paid in three of the years, the sum of the three awards should be divided by five to obtain the average award. This procedure is applicable both when the participating company has established salary group ranges, and when it does not.

XI. The Use of Monthly or Annual Compensation Values.

Organisations usually prefer to express compensation data in either monthly or annual terms. Whichever is the preference, it is essential that each element of compensation paid by participating organisations be converted, if necessary, to the same basis.

For example, if the survey organisation uses the monthly basis, the base salary data of all participating organisations must be converted to monthly amounts. Similarly, if a participating organisation pays extra salaries such as a thirteenth month payment, its base salary midpoint data should be analysed to ascertain whether the extra payment is included or not. If it

¹²This figure has been calculated as that which represents the most reliable number of years on which an average bonus may be calculated for an incumbent rated as meeting all requirements of a position as stipulated in the job description. "Old Mutual: Western Cape Survey" (Cape Town: Old Mutual, August, 1976).

is not, the monthly base salary midpoint should be increased by one-twelfth.

Finally, if incentive bonuses are paid by a participating organisation, the total award granted for the performance year should be divided by twelve to obtain the equivalent monthly value. This amount should be added to the monthly base salary midpoint to obtain the total compensation midpoint.

XII. Adjusting the Data.

If a given position in a participating organisation is judged to be heavier or lighter than the survey organisation position, the participating organisation's total compensation, for that position, must be adjusted. The reason for this is that the competitive rate for a job which has a degree of responsibility equal to that of the survey organisation must be determined. If, for example, the participating organisation position is heavier, its total compensation must be reduced to a value that would be reasonable for that position if it were equal to the survey organisation. Conversely, if the position is lighter, its total compensation must be increased.

The adjustments to be made vary in technique, depending on whether the participating organisation's total compensation consists of base salary alone, or includes incentive bonuses as well.

If the total compensation of the participating organisation consists solely of base salary (including one or more extra payments, if any), the adjustment is made to the midpoint of that organisation's base salary range. The technique used to make this adjustment is based on the fact that the participating organisation position is valued in terms of plus or minus one-half, one, one-and-one-half, etc., survey organisation salary groups. Thus, assume that Position "A" of the participating organisation is minus one-half to Position "A" of the survey organisation. If, for example, the survey organisation position is

evaluated in Salary Group fourteen, the participating organisation position would be "evaluated" in Salary Group thirteen-and-a-half. To adjust the participating organisation midpoint, it must be increased by one-half of the group-to-group progression rate (i.e., the percentage difference between two adjacent salary group ranges) that exists between the survey organisation's midpoints of Salary Group thirteen and Salary Group fourteen. This process, in effect, establishes a hypothetical base salary midpoint that would be appropriate in the participating organisation's salary structure for a position whose level of responsibility is equal to that of the survey organisation.

The simplified formulae, revealed in TABLE 2 below, should be used to calculate the required adjustments.

TABLE 2

BASE SALARY MIDPOINT ADJUSTMENT CALCULATION

If the participating organisation position is lighter by

Then multiply the participating organisation midpoint by the factor as calculated below ^a

$\frac{1}{2}$ group Factor = 1 plus one-half of the percentage difference between groups.

Example:

$$\begin{aligned} \text{Factor} &= 1 + (\frac{1}{2} \times 0,1076) \\ &= 1 + 0,0538 \\ &= 1,0538 \end{aligned}$$

1 group Factor = 1 plus the full percentage difference between groups

Example:

$$\begin{aligned} \text{Factor} &= 1 + 0,1076 \\ &= 1,1076 \end{aligned}$$

1½ groupsFactor = the factor for 1 group multiplied by the factor for ½ group.

Example:

$$\begin{aligned} \text{Factor} &= 1,1076 \times 1,0538 \\ &= 1,1672 \end{aligned}$$

2 groupsFactor = the factor for 1 group multiplied by itself.

Example:

$$\begin{aligned} \text{Factor} &= 1,1076 \times 1,1076 \\ &= 1,2268 \end{aligned}$$

2½ groupsFactor = the factor for 2 groups multiplied by the factor for ½ group.

Example:

$$\begin{aligned} \text{Factor} &= 1,2268 \times 1,0538 \\ &= 1,2928. \end{aligned}$$

^aWhile the group-to-group progression rate may vary from one salary structure to another, in the example illustrated it is assumed to be 10,76% or 0,1076.

NOTE:

When the participating organisation position is heavier than the survey organisation position, the same factors shown above are used, but because the participating organisation midpoints must be reduced, they are divided by the appropriate factors.

If the total compensation of the participating organisation consists of both base salary and incentive bonus, the base salary midpoint should first be adjusted as described above. The adjusted value for the incentive bonus should be the amount that the participating organisation would normally pay to an employee whose salary is at the participating organisation's adjusted base salary midpoint, and whose performance level is comparable to the survey organisation's performance rating which indicates a meeting of all

requirements of the particular position as stipulated in the job description. This amount should then be added to the adjusted base salary midpoint to obtain the adjusted total compensation for the participating organisation position.

XIII. Tabulating the Adjusted Total Compensation Midpoints by Salary Group.

Once the required calculations discussed in Section XII have been made, the adjusted and unadjusted midpoints for each position should be tabulated on a worksheet similar to that shown in Exhibit E or Exhibit F, Appendix I.

Exhibit E. -- This exhibit illustrates a format which may be used when the total compensation paid by all participating organisations consists solely of base salary and the survey organisation records data in monthly terms.

Exhibit F. -- This exhibit illustrates a format which may be used when the total compensation of one or more of the participating organisations includes both base salary and incentive bonus. Data is expressed in annual terms.

The adjusted total compensation midpoint for each participating company for each survey position should be tabulated, by salary group, as illustrated in Exhibit G, Appendix I. This serves to identify any midpoints which are not consistent with the majority of midpoints for the same position. When such identifications are made, the survey information for the affected position should be reviewed and a decision reached concerning the validity of the job comparison that was made with the participating organisation. Ordinarily, such inconsistent midpoints should be deleted from the tabulation. For example, the midpoint of Position "E" of Organisation "C" shown on Exhibit G, Appendix I, was inconsistent and was thus deleted.

XIV. Deleting the Data of Certain Survey Positions.

Once the tabulation has been refined as described in Section XIII above, the Competitive Average Total Compensation Midpoint for each position should be calculated by adding all remaining midpoints and dividing the sum by the number of midpoints. When this average midpoint for a position is nearer the average midpoint for positions in higher or lower salary groups than the one in which the position is evaluated, the data for that position should be deleted. For example, if Position "C" (Exhibit G, Appendix I), is evaluated in Salary Group ten, and the survey data indicates that an evaluation in Salary Group eleven would be more appropriate, Position "C" should be deleted. However, before this is done, it is suggested that the comparisons made between Position "C" and the corresponding participating company positions be reviewed to check the validity of the assessment of job differences.

In addition if there are fewer than three matches for any given position, consideration should be given to deleting the data for that position.

XV. Determining the Competitive Average Total Compensation Midpoint for Each Salary Group.

After the necessary adjustments have been made, including adjustments of the midpoint data and deletion of positions, the Competitive Average Total Compensation Midpoint for each salary group may be calculated as follows:

1. First, for each salary group, calculate each organisation's average Adjusted Total Compensation Midpoint for all of its positions listed in the specific salary group. For example, as shown on Exhibit G, Appendix I, this average for Company "A" for Salary Group ten, is R12 408.

2. Second, for each salary group, calculate the average of the company averages found in the first step. This is the Competitive Average Total Compensation Midpoint for the salary group. As shown on Exhibit G Appendix I, this average for Salary Group ten is R11 993.

The resulting averages are used in determining the Competitive Total Compensation Trend Line, as described below.

XVI. Determining the Competitive Total Compensation Trend Line.

The Competitive Total Compensation Trend Line (which is, in actual fact, the Line of Best Fit) may be drawn by inspection from a plot of the survey data as follows:

1. First, plot the Competitive Average Total Compensation Midpoints on semi-log graph paper as shown in Exhibit H, Appendix I.

Semi-log graph paper facilitates the graphic representation of data since a wide range of values can be drawn within a small space. Also, the trend line will appear as a straight line rather than a curve because the horizontal scale is spread arithmetically, while the vertical axis is spread logarithmically.

If semi-log graph paper is not available, linear graph paper may be used. In this case, the salary group number is represented on the horizontal axis, and the logarithm of the Competitive Average Total Compensation Midpoint is represented on the vertical axis. Exhibit I, Appendix I illustrates the plotting of survey data on linear graph paper.

2. Draw the Competitive Total Compensation Trend Line by superimposing a straight edge, such as a transparent ruler, upon the plotted midpoints.

As shown on Exhibit H, the distribution of the midpoints indicates that a single straight line may be drawn from Salary Group one through Salary Group fifteen because: (1) the midpoints cluster close to the line all along its length and (2) the sum of the distances from the line to the midpoints above the line will be approximately equal to the sum of the distances from the line to the midpoints below the line.

On the other hand, the single straight line drawn through the entire series of salary group midpoints may not adequately represent the competitive trend line.

Visual examination may show, for example, that a straight line for Salary Groups one through ten appears to be reasonable, but that a different line should be drawn for Salary Groups eleven through fifteen. Exhibit J, Appendix I, illustrates this point. Such a break in the competitive trend of salaries may occur at any place in the structure. Normally, one or two lines are adequate for Salary Groups one through fifteen, while two to four lines might be adequate for Salary Groups sixteen and above, depending upon the highest salary group included in the survey. Generally, each separate trend line should cover a minimum of five salary groups.¹³

3. Compare the Competitive Total Compensation Trend Line values with the Competitive Average Total Compensation Midpoints. The trend line values should be reasonably close to the corresponding midpoint values. If the average of the individual percentage deviations (also referred to as average variance) of each trend line value from its corresponding midpoint falls outside the range of -0,5% to +0,5%, the line should be re-drawn until the average deviation falls within this range.¹⁴

The suggested procedure in calculating individual percentage deviations is as follows:

- a) Divide the trend line value by the corresponding midpoint value.
- b) Subtract 1,000 from the answer.
- c) Move the decimal point two places to the right in order to obtain the percentage deviation¹⁵ (variance).

The suggested procedure in calculating the average of the individual deviations is as follows:

¹³This depends on the total number of salary groups concerned. See French, The Personnel Management Process, 246-248.

¹⁴See William L. Hays, Basic Statistics (Belmont, California: Brooks/Cole Publishing Company, 1967) pp. 96-104.

¹⁵For examples of individual percentage deviation calculation See Examples A and B, Appendix II.

- a) Total the plus deviations.
- b) Total the minus deviations.
- c) Subtract the smaller total from the larger.
- d) Divide the remainder by the number of salary groups in the structure for which there are Competitive Average Midpoints. The resulting answer is the average deviation.¹⁶

XVII. Establishing the Survey Organisation Base Salary Structures.

The base salary structure of the survey organisation may be determined from the Competitive Total Compensation Trend Line as outlined below:

1. Determine the ratio of the trend line value for the highest salary group to that for the lowest salary group on the same straight line.

This ratio is found by dividing the value for the highest salary group by the value for the lowest salary group as determined from the trend line. For example, from Exhibit H, Appendix I, the value for Group fifteen is R1 610 and for Group one the value is R424; therefore,

$$\text{Ratio } \frac{1610}{424} = 3,7972$$

2. Determine the group-to-group progression rate.

For the above example, refer to Page two of Exhibit K, Appendix I.¹⁷ Find the column containing the nearest ratio equal to 3,7972, which is 3,8. Follow down the column headed 3,8 to the value opposite the number of salary groups in the structure (in our example the number is fifteen) as indicated in the first column. The approximate group-to-group progression rate (r) for this example is shown to be 1,001. Since the ratio of the midpoint of the highest salary group

¹⁶For example of average deviation calculation see Example C, Appendix II.

¹⁷The tables in Exhibit K have been drawn up to facilitate group-to-group progression rate calculations. These tables express progression rates calculated for selected ratio values and salary groups. For mathematical calculation of group-to-group progression rates, see Example D, Appendix II.

in the structure divided by the midpoint of the lowest salary group in the structure is not an even-tenth, the group-to-group progression rate may be calculated more closely by interpolation as shown below:

- a) Identify the two even-tenth ratios that the actual ratio lies between (3,7972 lies between 3,7 and 3,8).
- b) Calculate the difference between the "r" values as shown in Exhibit K, Page 2, Appendix I, for the ratio 3,7 and 3,8:

$$r \text{ for } 3,8 = 1,1001$$

$$r \text{ for } 3,7 = \underline{1,0980}$$

$$\text{difference} = 0,0021$$

- c) Calculate the difference between the actual ratio and the lower even-tenth ratio:

$$\text{actual ratio} = 3,7972$$

$$\text{lower even-tenth ratio} = \underline{3,7}$$

$$\text{difference} = 0,0972$$

- d) Move the decimal point in the difference from Step (c) (0,0972) one place to the right (0,972)
- e) Multiply the difference in the "r" values from Step (b) (0,0021) by the result from Step (d) (0,972):

$$0,0021 \times 0,972 = 0,0020$$

- f) Add the result from Step (e) to the "r" value for the lower even-tenth ratio:

$$\begin{array}{r} 1,0980 \\ + \underline{0,0020} \\ 1,1000 \end{array}$$

This is the group-to-group progression rate (r) for the actual ratio of 3,7972.

3. Calculate the tentative salary group midpoints. Multiply the value on the Competitive Total Compensation Trend Line for the lowest salary group (in this example, R424 for Group one) by the progression rate (r = 1,1000). This results in the calculated value for Group two. Then multiply the calculated value of Group two by (r) to obtain the calculated value of Group Three. This process is repeated for each subsequent

Salary group. The results of these calculations are tentative midpoints for the salary groups. (Each resulting tentative midpoint should be rounded to the nearest whole number).

4. Calculate salary group minimums.

a) Divide the tentative midpoint by a factor which is equal to the sum of one plus one-half of the desired "spread." (The "spread" is the percentage by which the maximum of the range exceeds the minimum)¹⁸. The result of this calculation is the tentative minimum.

For example, if the spread is 50% and the tentative midpoint is R909, the tentative minimum is R727 (R909 divided by 1,25).

b) Adjust the tentative minimum to the nearest whole number that is divisible by a factor which is equal to two times the reciprocal of the spread.

For example, if the spread is 50% and the tentative minimum is R727, the factor is four (two times the reciprocal of 50% = two times two) and the nearest whole number that is divisible by four is R728.

This is the salary group minimum.

5. Calculate the salary group midpoint. Multiply the minimum by a factor which is equal to one plus one-half the desired spread. For example, if the spread is 50%, the factor is 1,25.

6. Calculate the salary group maximum. Multiply the minimum by a factor which is equal to one plus the full amount of the spread. For example, if the spread is 50%, the factor is 1,5.

Application of the above calculations in the example cited results in the salary group ranges shown in Exhibit L, Appendix I.

¹⁸ Experience has shown that a 50% spread in the salary range is proper for most salary groups. Spreads of less than 50% do not provide adequate room for administration of salaries on a merit basis over a period of time. Spreads of more than 50% particularly, where salary administration policy is not well defined, result in compensation levels at salary group extremes which are either non-competitive or excessive. See Richard C. Smyth, Financial Incentives for Management, p. 68.

Once the range midpoints have been calculated, a tabulation should be prepared showing, by salary group, the calculated range midpoint, the corresponding competitive Total Compensation Midpoint and the percentage deviation (plus or minus) of the calculated range midpoint from the Competitive Average Total Compensation Midpoint. (See Exhibit M, Appendix I).

XVIII. Comparison of Recommended Structure to Present Structure.

After the recommended salary structure has been developed according to data analysed from survey results, a comparison of the recommended midpoints and present midpoints should be made as shown in Exhibit N, Appendix I.

As a guide, a recommendation to adjust a salary structure should be made only if the average change in midpoints will exceed plus or minus 5%.

XIX. Preparation of Summary Report to Management.

The survey findings and the recommended salary structure should be submitted to management in a report which incorporates the following format and content:

Proposal.-- This is a summary statement that includes:

1. Recommendation that the proposed structures be adopted.
2. The effective date for implementation.
3. The average percentage by which the proposed structure differs from the existing one (Exhibit N, Appendix I).
4. Reference to an exhibit in the Summary Report which contains the proposed structure. (Exhibit L, Appendix I).

Background.-- In this section, the pertinent events that have taken place since the last formal survey should be outlined.

1. Date of last survey and the salary groups included.
2. The chronology and details of any interim adjustments that were made in the survey

organisation including the compounded percentage increase in ranges since the last survey.

3. The chronology and details of range changes made by participating organisations since the last survey.
4. The chronology and details of general increases granted by the participating organisations and the survey organisation.
5. A statement of general economic conditions and trends, including any pertinent indicators, such as consumer price index.

Scope of Survey.-- This section should include:

1. Definition of geographic area covered by the survey.
2. List and description of participating organisations including an explanation of any variations from the previous survey.
3. Date of competitive data.
4. List, by salary group, of the survey organisations included in the survey.

Survey Techniques and Findings. -- This section should include:

1. A statement of the staff and line employees who were involved in the preparation of the job descriptions used in the survey, in the personal visits to the participating organisations, in the analysis and review of data, in the review of the validity of job matches and adjustments, and in the preparation of the Summary Report.
2. An explanation of the techniques used in adjustment of competitive data, calculation of competitive salary group averages, construction of the competitive trend line, and calculation of the survey organisation base salary structures.

3. Reference to supporting exhibits.

XX. Summary Report of Survey Data for Participating Organisations.

A summary of the survey data should be prepared and forwarded to the participating organisations. The data for each participating organisation should be identified by Code only, i.e., by Company "A", Company "B", etc. This will ensure that the information exchanged is treated confidentially.

It is suggested that the survey data be summarised for each survey position in a manner similar to that shown in Exhibits E or F, Appendix I, with the exception that competitive averages for the survey positions should not be included. Since these averages include data for the participating organisation positions and exclude data for the survey organisation, they are meaningless to the participating organisation.

XXI. Indicated Re-Evaluation of Positions Based on Survey Results.

The survey results may indicate a need to review the survey organisation position evaluations. This will usually arise when it has been necessary to delete a position as discussed in Section XIV. In Exhibit G, Appendix I, the data for Position "C", which had been evaluated by the survey organisation in Salary Group ten, was deleted because the internal evaluation of Salary Group ten is not consistent with the community's evaluation of comparable jobs. The survey organisation may wish to consider re-evaluating the position. However, if the position is a "key" position any decision by the survey organisation to re-evaluate should take into account the effect upon other positions whose evaluations have been based upon comparison with that reference position. Such consideration might indicate that the best course of action is to retain the present evaluation.

PART IV

ASSESSING THE SYSTEM

SURVEY ORGANISATION :
MOBIL OIL SOUTHERN AFRICA (PTY.) LTD.

CHAPTER VI

THE MIDPOINT SYSTEM COMPENSATION SURVEY : AUGUST 1978

SUMMARY REPORT

INTRODUCTION

A comprehensive survey was conducted by members of the Personnel Staff of Mobil Oil Southern Africa (Pty.) Ltd., utilising the Midpoint System as a guide. Such survey was conducted during the months of August/September, 1978, and data was analysed shortly thereafter.

This survey consisted of two main sections, namely:

1. Benefit survey, based on the General Information Questionnaire as discussed in Section V. of Chapter V.
2. Wage and Salary Survey.

Data and information obtained from the General Information Questionnaire was summarised in order to make comparison with existing Mobil Oil Fringe-Benefit programmes. However, as the existing package is regarded as being highly competitive, most emphasis has been placed on the analysis of wage and salary data, and recommendations stemming from such analysis.

The basic Fringe-Benefit which has a direct effect on compensation, namely, the annual bonus,¹ has been

¹Although a myriad of fringe-benefits affect the actual compensation levels of employees, the only benefits which are deemed to affect the actual wage and salary structure, and which are therefore taken into account by the Midpoint System, are the annual bonus, the incentive bonus and car benefits. See Exhibit B, Appendix I. However, as the annual bonus award has become common practice in most organisations, it has been included in all structural analyses.

taken into account, alongside wage and salary data, such that wage and salary structures have been analysed on a basis of basic salary plus monthly portion of annual bonus. In other words, present salary structure and recommended salary structure are presented in a form which includes ranges consisting of basic salary plus bonuses of one month's salary.

SCOPE OF SURVEY

I. Geographical Area.

The Republic of South Africa.

II. Date of Competitive Data.

August/September 1978.

III. Participating Organisations.

A.E. & C.I. Limited.-- Manufacturers and marketers explosives, industrial chemicals, plastics, vinyl products and fertilisers with major factories in Transvaal, Orange Free State and Cape Province.

Sales Value : R456 million

Number of Employees: 11614

Afrox Limited.-- Primarily engaged in the manufacture and distribution of industrial and medical gases, electric and gas welding equipment, electrodes and welding consumables.

Sales Value : R142 million

Number of Employees: 3100

Anglo American Corporation of South Africa Ltd.-- The Corporation is the head of an international group of mining, industrial and investment companies.

Administers and develops the companies of the group, and makes investments in them and companies which it does not administer.

Capital employed : R967 million
 Profits after tax : R94,9 million

BP Southern Africa (Pty.) Ltd.-- Marketing Company. Has marketing offices, bulk plants and warehouses throughout the Republic of South Africa, South West Africa, Lesotho, Botswana, Swaziland, and Transkei. Has 50% interest in Sapref Refinery in Durban of 200 000 barrels of oil per day capacity.

Sales Value : R420 million
 Number of Employees : 2280

Caltex Oil (SA) (Pty.) Ltd.-- Marketing Company and Refinery. Has marketing offices, bulk plants and warehouses throughout the Republic of South Africa, South West Africa, Mocambique, Rhodesia, Malawi, Lesotho, Botswana, Swaziland and Transkei. Has one Refinery in Cape Town of 58 000 barrels of oil per day capacity.

Sales Value : +R400 million
 Number of Employees : 2454

Dunlop South Africa Ltd.-- Manufacturers of rubber and rubber-like products and products allied to them either by technology or marketing conditions in which competitive efficiency requires a capital-intensive manufacturing approach. Principal products are tyres, tubes, conveyor belts, hose, vinyl flooring, carpets, sports goods and foam products.

Sales Value : R83 million
 Number of Employees : 4708

Ford Motor Company of South Africa (Pty.) Ltd.-- Automotive manufacturing assembly, comprising car and light truck assembly plant, heavy truck assembly plant, engine manufacturing plant, and parts depot. Total operation based in Port Elizabeth.

Sales Value : R191 million
 Number of Employees : 4676

International Business Machines South Africa (Pty.) Ltd.-- Market and service wide range of office machines and computers, primarily in main centres of the Republic of South Africa.

Sales Value : between R50 million and R100 million
 Number of Employees : 1473

Massey Ferguson (South Africa) Limited.-- Manufacturer, importer and distributor of agricultural, industrial, and construction machinery through a network of franchised dealers covering the Republic of South Africa, South West Africa, Botswana, Lesotho, and Swaziland.

Sales Value : R59 million
 Number of Employees : 2119

Metal Box South Africa Ltd.-- Manufacturers of packaging containers, closures and components in metals, plastics, and board, and are builders of machinery and equipment for the packaging and related industries.

Sales Value : R142 million
 Number of Employees : 7174

Shell Oil South Africa (Pty.) Ltd.-- Marketing Company. Has marketing offices, bulk plants and warehouses throughout the Republic of South Africa, South West Africa, Lesotho, Botswana, Swaziland, and Transkei. Has 50% interest in Sapref Refinery in Durban of 200 000 barrels of oil per day capacity.

Sales Value : R440 million
 Number of Employees : 2187

The South African Breweries Limited.-- Largest manufacturer and marketer of beer, wine and spirits in the Republic of South Africa. Holding and Operating Company. Principal operating activities are in brewing (Beer Division), wine and spirits (Stellenbosch Wine Trust Ltd.),

department stores (OK Bazaars), furniture (Afcol and Amrel), shoe manufacture (Shoe Corporation), food (Food Corporation), hotels (Southern Sun and Transito Hotels), banking (UDC Holdings), real estate (Retco), and soft drinks (Schweppes).

Sales Value (Group) : R1195 million
 Number of Employees : 52 000

South African Petroleum Refineries (Pty.) Ltd.-- Refining company situated in Durban, in which the marketing companies BP Southern Africa (Pty.) Ltd., and Shell Oil South Africa (Pty.) Ltd. have equal interests.

Refining Capacity : 200 000 barrels per day
 Number of Employees : 1205

Stewarts and Lloyds of South Africa Ltd.-- This company operates in the Republic of South Africa, Rhodesia, Malawi, and South West Africa. The Group comprises four divisions: a division engaged in manufacture and marketing of Tubing, a Foundry Division, a Trading Division, and a Manufactured Products Division.

Sales Value : R208 million
 Number of Employees : 9600

Total South Africa (Pty.) Ltd.-- Marketing Company. Has marketing offices, bulk plants, and warehouses throughout the Republic of South Africa, South West Africa, Mocambique, Lesotho, Botswana, Swaziland, and Transkei. Has a 30% interest in the National Petroleum Refinery which is operated by South African Coal, Oil and Gas Corporation Ltd., and has a capacity of 70 000 barrels of oil per day.

Sales Value : R200 million
 Number of employees : 1244

Unilever South Africa (Pty.) Ltd.-- Manufacturers, distributors and markets of wide range of soaps, detergents (Lever Brothers (Pty.) Ltd., and Hudson and Knight (Pty.) Ltd.), edible fats and sundry foods

(van den Bergh and Jurgens (Pty.) Ltd.), tea and coffee (Pitco Ltd., and Glenton and Mitchell (Pty.) Ltd.), toilet preparations (Elida Gibbs (Pty.) Ltd.), ice cream (T. Wall and Sons (Pty.) Ltd.), chemicals (Silicote and Chemical Industries (Pty.) Ltd.), flooring (Nairn Industries (Pty.) Ltd.), warehousing and distribution (S.A. Warehousing Services (Pty.) Ltd.), and market research (Consumer Research Services (Pty.) Ltd.).

Sales Value (Group) : R241,5 million
 Number of Employees : 6798

Mobil Oil Southern Africa (Pty.) Ltd.-- Marketing Company and Refinery. Has marketing offices, bulk plants and warehouses throughout the Republic of South Africa, South West Africa, Mocambique, Rhodesia, Malawi, Lesotho, Botswana, Swaziland, and Transkei. Has one Refinery in Durban of 100 000 barrels of oil per day capacity.

Sales Value : R450 million
 Number of Employees : 3354

IV. Survey Positions.

Group 1	General Labourer
Group 2	Fork Lift Truck Operator Artisan's Helper
Group 3	Chauffeur Junior Clerk (Male or Female) Reproducing Machine Operator
Group 4	Key Punch Operator Copy Typist
Group 5	Clerk (Male or Female) Telephonist Laboratory Technician
Group 6	Warehouseman/Storeman Assigned Stenographer
Group 7	Senior Clerk (Male or Female) Computer Operator I Chairman's Secretary
Group 8	Programmer II Senior Laboratory Technician
Group 9	Assistant, Purchasing Assistant, Ledgers Programmer I

Group 10	Salesman, General Trade Employee Relations Assistant, Region Payroll Supervisor, Refinery
Group 11	Engineering Assistant, Cape Town Programmer/Analyst I Warehouse Superintendent, Refinery
Group 12	Section Head, Ledgers Employee Relations Assistant - Compensation and Benefit Chief Draughtsman
Group 13	District Manager, General Trade Maintenance Zone Supervisor, Refinery
Group 14	Transport Co-ordinator, Region Financial Analyst, Cape Town Legal Advisor, Cape Town
Group 15	Employee Relations Manager, Region Chief Chemist, Cape Town Instrument/Electrical Superinten- dent, Refinery Island View "A" Superintendent, Refinery
Group 16	Assistant Controller, General Accounting, Cape Town Data Processing Manager, Cape Town Chief Maintenance Superintendent, Refinery
Group 17	Real Estate Manager, Cape Town Transport Manager, Cape Town Chief Project Engineer, Refinery
Group 18	Treasurer, Cape Town Secretary and Legal Counsel, Cape Town Controller, Cape Town Employee Relations Manager, Cape Town
Group 19	Resale Sales Manager, Northern Region Systems and Computer Manager, Cape Town Technical Manager, Refinery
Group 20	Resale Sales Manager, Cape Town Assistant Accounting and Finance Manager, Cape Town
Group 21	Regional Manager, Northern Region Operations Manager, Cape Town Relations Manager, Cape Town
Group 22	Accounting and Finance Manager, Cape Town
Group 23	Manufacturing Manager, Refinery
Group 24	Marketing Manager, Cape Town.

BACKGROUND

Mobil Oil has a twenty-four group salary and wage structure, which, at present, consists of three different group-to-group progression rates. It is deemed necessary by Management for such structure to be as competitive as possible with regard to the labour market.

The existing salary structure of Mobil Oil is illustrated in TABLE 3 below:

TABLE 3
MOBIL OIL : PRESENT SALARY STRUCTURE

SALARY GROUP	MINIMUM	MIDPOINT	MAXIMUM
1	144	180	216
2	170	212	255
3	208	260	312
4	254	317	381
5	312	390	468
6	382	477	573
7	415	519	623
8	450	563	675
9	489	611	734
10	531	664	797
11	576	720	864
12	626	782	939
13	680	850	1020
14	738	923	1107
15	802	1003	1203
16	872	1090	1308
17	980	1225	1470
18	1101	1376	1652
19	1238	1547	1857
20	1390	1737	2085
21	1562	1953	2343
22	1756	2195	2634
23	1974	2468	2961
24	2218	2772	3327

NOTE:

Group-to-group Progression rates:

Groups 1 - 6	=	1,2256
Groups 6 - 16	=	1,0861
Groups 16 - 24	=	1,12396

In order for this objective to be achieved, close attention is paid to influences such as the Consumer Price Index, competitive adjustments made by competing organisations to their own structures, national salary surveys conducted by organisations such as Peromnes and Urwick - UAL, plus analysis of labour market trends on an annual basis

However, it is company policy to conduct a comprehensive wage and salary survey at four-yearly intervals, and it is on the basis of analysis of data obtained from such surveys that major competitive adjustments are made to the wage and salary structure.

The last comprehensive survey conducted by Mobil Oil was undertaken in May, 1974, and included all salary groups. Since this last comprehensive survey, the following across-the-board general salary adjustments have been made:

1. March 1975 : 10% in respect of Salary Groups one to twenty only.
2. June 1976 : 10% in respect of Salary Groups one to twenty only.
3. August 1977 : 6% in respect of Salary Groups one to twenty only.

These increases have compounded salaries by 28,3%.

Adjustments to the actual wage and salary structure since the previous comprehensive survey have been as follows:

1. August 1974 : \pm 4,7% (overall, excluding Groups one to six). This change took place as a result of the 1974 survey.
2. March 1975 : 8,0% (Groups one to twenty-four).
3. June 1976 : 10,0% (Groups one to twenty-four).
4. August 1977 : 6,2% (Groups one to twenty-four).

As a result of these adjustments the compounded increase in ranges since the previous survey is 32,1%.

In order to provide a comparable basis as regards salary and structural adjustments, details of range changes, and general increases in salaries granted are provided in TABLE 4.

TABLE 4

COMPOUNDED STRUCTURAL ALTERATIONS AND GENERAL SALARY INCREASES OF PARTICIPATING ORGANISATIONS : MAY 1974 TO AUGUST 1978^a

COMPANY (1)	COMPOUNDED RANGE ALTERATIONS PERCENTAGE (2)	COMPOUNDED GENERAL SALARY INCREASES PERCENTAGE (3)
BP	36,3	36,3
CALTEX	33,0	34,7
SHELL	36,3	36,3
TOTAL	28,6	not applicable ^b
SAPREF	36,3	36,3
A.E. & C.I.	37,9	not applicable
AFROX	27,2	not applicable
ANGLO-AMERICAN	not applicable ^c	not applicable
DUNLOP	46,8	not applicable
FORD	38,8	28,6
IBM	43,6	not applicable
MASSEY FERGUSON	53,1	50,8
METAL BOX	37,8	37,8
S.A. BREWERIES	27,2	not applicable
STEWARTS AND LLOYDS	37,8	not applicable
UNILEVER	45,3	45,9
MOBIL	32,1	28,3

^aStatistics for most organisations were unavailable for changes later than August, 1978.

^bIn all cases where the words "not applicable" appear under heading of column (3), such organisations do not grant general salary increases, but instead build an economic factor into their merit programmes, and apply increases annually on fixed review dates.

^cThis organisation does not have established ranges.

On the basis of such statistics, a decision was made to conduct a comprehensive compensation survey, with Mobil Oil representing the survey organisation. The Midpoint System was utilised as a comprehensive guide for the undertaking of such survey, with the reliability and validity of such results to be tested against statistics already obtained from continuous survey organisations such as Urwick-UAL and Peromnes Salary Surveys (Pty.) Ltd.

As Mobil Oil has regional offices throughout the Republic of South Africa, but administers salaries and

wages according to a single wage and salary structure, the comprehensive survey is undertaken on a national basis, and includes organisations from diverse industries competing in a similar labour market. However, such surveys usually always include a core of "oil-community" organisations, as these organisations tend to have similar market interests and thus similar wage and salary structures and administration policies.

SURVEY TECHNIQUES

The sixty positions surveyed were selected on the basis of job comparisons made in previous surveys, and on positions generally used in surveys of participants. Such positions satisfied basic criteria of "key" positions as discussed in Section II, Chapter V. Job descriptions were prepared for each of the survey positions in conjunction with the Departmental and/or Functional Manager concerned.

A booklet¹ containing such job descriptions and relevant organisation charts was sent to each of the participating organisations. This was followed by visits to each participant by the Personnel Manager and his assistant, with the assistance of the Line Managers when necessary, at which time each position compared was discussed and, where necessary, weighted. The validity of the weightings was afterwards discussed with and agreed upon by the Functional Managers concerned.

The percentage weighting was calculated on the basis of present group-to-group progression rates. Where weighting was considered necessary, multiples of one-half of a salary group were used, depending on the difference

¹Although all positions were surveyed according to the Midpoint System, actual information for top management positions was collected and analysed on a separate and confidential basis. This was achieved by collecting information in two separate booklets - one for top management positions, and one for all positions other than top management. Top management positions are represented by Salary Groups 20 to 24 in the Mobil Oil salary structure.

in the magnitude and scope with the relevant survey position. The present group-to-group progression rates of Mobil Oil are as follows:

TABLE 5

MOBIL OIL : EXISTING GROUP-TO-GROUP PROGRESSION RATES

Salary Group	Group-to-Group Progression Rate
1 to 6	1,2256
6 to 16	1,0861
16 to 24	1,12396

The above progression rates were utilised as the weighting factors whenever such weighting of positions was necessary. Use of the Peromnes Job Evaluation System² provided a basis for decisions as regards weighting in terms of multiples of one-half salary groups.

Analysis and weighting of salary data was based solely on the midpoint concept, that is, where participating organisations had established ranges, the midpoint of salary groups concerned were utilised for data analysis, and where organisations did not have established ranges, data provided was utilised to calculate hypothetical midpoints. When survey positions of participating organisations required weighting, the midpoints of the relevant salary groups were thus altered by the necessary weighting factor.

RECOMMENDATIONS AND RESULTS

I. Summary of Results.

A booklet of results was sent to each participating organisation containing (1) a summary of the General Information Questionnaire, in the form of TABLE 13, and discussed in due course,³ (2) a summary of salary data

²Copyrights of such system reserved. However, Mobil Oil utilises such system as its day-to-day job evaluation system; thus survey position evaluations have been based on methods provided by this system.

³Under heading of "Fringe-Benefit Analysis", p. 123.

for each survey position in the form of Exhibit O, Appendix I.

It is not the policy of Mobil Oil to submit data analysis results in complete form to the participating organisations. Rather, raw data is sent in booklet form such that these organisations may apply their own methods of analysis. An explanation is supplied with these booklets illustrating method of analysis in the compilation of the data supplied for each position.

A comprehensive analysis according to the Midpoint System Guide was undertaken, and recommendations have been submitted, based on these results, to the management of Mobil Oil.

Base Salary Analysis.-- As mentioned previously, the elements of compensation taken into consideration for base salary analysis, consist of base salary plus annual bonus. However, it must be stressed that where organisations had established ranges, the midpoints for these positions were used, and where organisations did not have established ranges, hypothetical midpoints were calculated and these hypothetical midpoints were then used in further calculations.⁴

Overall evaluation weightings were calculated for each participating organisation position on Summary Worksheets (see Appendix III),⁵ according to criteria such as reporting relationships, functional responsibility, and scope and magnitude of responsibilities. These overall weightings in terms of multiples of one-half of the Mobil salary group concerned were then converted to monetary values on the Summary of Adjusted (Unadjusted) Salary Data Worksheets (Appendix IV)⁵, according to the necessary job weighting factors based on Mobil group-to-group progression rates.

⁴The explanation of the use of the midpoint concept is discussed in Chapter V, Section VII, p. 75. For hypothetical calculation see Chapter V, Section X, p. 80.

⁵Due to length of analysis involved, Appendixes III and IV are under separate cover.

The competitive adjusted averages of all sixty positions were then calculated on these same worksheets. The data from these Salary Data Worksheets was then tabulated on Adjusted Total Compensation Midpoint worksheets (TABLE 6), such that data for those positions regarded as being "out-of-line", as discussed in Chapter V, Section XIV could be deleted or re-evaluated. The tabulation of such Adjusted Total Compensation Midpoint Data allows for easy comparison of position midpoints and averages, for purposes of deletion and Competitive Average Total Compensation Midpoint calculations. These averages (community averages) for each salary group were plotted on semi-log graph paper, and the "line of best fit" established.

The sequence of calculations and results obtained from the stage of tabulation of Adjusted Total Compensation Midpoint Data, is presented in the following tabulations and illustrations.

The "line of best fit", or Community Salary Trend Line established in Figure 5 provides the following group-to-group progression rates and cut-off values (adjusted), in TABLE 10.

TABLE 6 - - continued
 TABULATION OF ADJUSTED TOTAL COMPENSATION MIDPOINT DATA

Salary Group	Position Title	Adjusted Total Compensation Midpoint													Competitive Av. Total Compensation Midpoint (Salary Group Av.)			
		BP	Calltex	Shell	Sapref	Total	AE & CI	Afrax	Anglo	Dunlon	Ford	ISM	Massey Ferguson	Metl Box		S.A. Breweries & Lloyds	Uni-lever	
11	Engineering Assistant	668	679	815	-	781	-	862	711	-	771	-	899	-	752	835	711	
	Programmer/Analyst I	873	753	815	-	781	883	-	726	843	1 059	-	996	-	-	834	747	
	Warehouse Supervisor	-	820	-	555	-	750	-	-	515	-	872	-	-	639	582	847	
	AVERAGE	771	717	815	-	781	883	862	711	726	807	1 059	899	996	752	835	729	9 876 (823)
12	Section-Head - Ledgers	-	820	708	-	695	747	-	760	703	939	820	683	-	-	791	767	
	Eng. Rel. Asst. Comp. & Benefits	972	820	977	-	883	883	-	776	1 202	-	783	837	-	-	747	887	
	Chief Draughtsman	-	820	-	850	-	966	886	-	904	871	-	902	854	726	796	858	
	AVERAGE	972	820	977	850	-	925	886	-	904	819	1 202	783	870	854	726	772	10 596 (883)
13	District Manager General Trade	807	803	900	-	924	-	852	-	1 084	849	1 042	-	-	-	834	901	
	Maint. Zone Supervisor, Ref.	-	786	-	900	-	888	961	-	932	747	862	892	-	834	771	857	
	-	807	803	900	900	924	888	907	-	1 008	798	952	892	-	834	803	-	
	AVERAGE	807	803	900	900	924	888	907	-	1 008	798	952	892	-	834	803	-	10 536 (878)
14	Transport Co-ordinator Region	807	913	977	-	755	964	-	-	-	1 009	1 015	-	993	970	-	911	
	Financial Analyst	-	906	-	-	957	-	-	-	876	-	-	985	-	-	837	969	
	Legal Advisor	972	-	977	-	957	-	-	-	-	-	-	-	-	1 004	747	922	
	AVERAGE	890	910	977	-	856	964	-	876	-	1 009	1 015	985	985	987	792	-	11 364 (947)
15	Employee Rel. Mgr. Region	1 082	991	-	-	-	1 109	-	1 198	1 071	-	1 854	-	1 007	970	1 064	1 124	
	Chief-Chemist	-	991	-	-	1 047	-	-	1 138	985	-	1 138	028	-	834	1 100	1 017	
	Instrument/Elec. Superintendent	-	1 077	-	1 079	-	1 143	-	-	1 264	-	-	-	-	-	1 197	1 152	
	Island View "A" Superintendent	-	1 104	-	937	-	-	1 146	-	-	-	-	-	-	-	988	1 044	
AVERAGE	1 082	1 057	-	1 008	-	1 126	1 146	1 198	1 168	-	1 854	-	898	1 007	970	1 083	13 596 (1 133)	
16	Asst. Controller, Gen. Acc.	1 107	1 199	977	-	1 039	1 194	-	1 117	1 264	1 111	1 494	-	1 206	1 186	1 157	1 171	
	Data Processing Manager	1 226	1 077	1 439	-	1 004	-	-	-	1 214	1 140	1 576	-	-	1 157	1 067	1 207	
	Chief Maint. Superintendent	-	991	-	992	-	1 134	1 257	-	1 163	1 162	-	-	-	1 053	1 300	1 131	
	AVERAGE	1 167	1 089	1 208	982	1 022	1 164	1 257	1 117	1 214	1 140	1 535	-	1 170	1 132	1 175	-	14 064 (1 172)
17	Real Estate Manager CTO	1 441	1 067	1 439	-	924	-	-	-	-	-	1 402	-	-	-	-	1 255	
	Transport-Manager-CTO	1 403	-	1 617	-	1 168	-	-	-	-	-	-	-	-	-	1 197	1 276	
	Chief Project Engineer, Ref.	-	1 292	-	1 104	-	1 311	1 361	1 606	-	1 250	-	-	-	1 090	1 197	1 276	
	AVERAGE	1 441	1 180	1 439	1 104	924	1 311	1 361	1 606	-	1 250	1 402	-	-	1 090	1 197	-	15 300 (1 275)
18	Treasurer	1 619	1 292	-	-	1 168	1 522	-	1 507	1 556	1 427	2 029	-	-	-	1 345	1 496	
	Secretary & Legal Counsel	1 530	1 129	1 569	-	-	-	-	1 485	-	-	2 263	-	-	1 466	1 325	1 535	
	Controller	1 477	1 632	1 439	-	1 269	1 354	1 539	1 462	1 628	1 597	-	-	-	-	1 513	1 491	
	Engr.-Bldr.-Manager-CTO	1 081	1 764	1 764	-	1 744	1 737	1 452	1 452	1 452	2 402	-	-	-	1 461	1 761	1 761	
AVERAGE	1 542	1 351	1 504	-	1 219	1 438	1 539	1 485	1 592	1 512	2 146	-	-	1 466	1 325	1 457	-	18 072 (1 506)

TABLE 6 - - continued

TABULATION OF ADJUSTED TOTAL COMPENSATION MIDPOINT DATA

Salary Group	Position Title	Adjusted Total Compensation Midpoint															Competitive Av. Total Compensation Midpoint (Position Average)	Competitive Av. Total Compensation Midpoint (Salary Group Av.)
		BP	Caltex	Shell	Sapref	Total	AE & CI	Afrox	Anglo	Dunlop	Ford	IBM	Massey Ferguson	Metal Box	S.A. Breweries	Stewarts & Lloyds		
19	Resale Sales Mgr., North	1 720	1 733	1 617	-	1 103	1 564	-	-	-	1 467	-	-	-	1 460	-	1 510	1 532
	Systems & Computer Mgr.	1 763	1 452	1 847	-	1 739	1 616	1 597	-	1 943	1 306	2 013	1 843	2 050	-	1 538	1 703	1 724
	Technical Mgr., Refinery	-	1 834	-	-	-	1 642	-	-	-	-	-	-	-	-	-	-	1 738
	AVERAGE	1 763	1 643	1 847	-	1 739	1 629	1 597	-	1 943	1 306	2 013	1 843	2 050	-	1 538	1 703	
20	Resale Sales Mgr., CTO	1 763	1 881	1 569	-	1 426	-	-	-	1 943	1 795	-	-	-	1 736	1 813	1 856	1 754
	Assist. A & F Manager	-	-	-	-	-	-	-	1 729	-	-	2 450	1 759	1 945	2 248	1 813	-	1 991
		-	-	-	-	-	-	-	1 729	-	-	2 450	1 759	1 945	2 248	1 813	-	
	AVERAGE	-	-	-	-	-	-	-	1 729	-	-	2 450	1 759	1 945	2 248	1 813	-	
21	Regional Mgr. North	-	1 991	-	-	-	2 025	2 074	-	2 278	-	-	-	-	1 994	2082	2 103	2 078
	Operations Manager, CTO	2 073	2 199	2 076	-	1 426	-	-	-	-	2 143	-	-	-	-	-	2 221	2 023
	Relations Mgr., CTO	2 474	2 114	1 961	-	1 985	2 010	3 426	2 619	2 319	1 745	3 206	1 785	-	2 000	1 960	2 483	2 221
	AVERAGE	2 073	2 095	2 076	-	1 426	2 025	2 074	-	2 278	2 143	-	-	-	1 994	2 082	2 162	
22	Accounting & Finance Mgr.	2 703	2 335	2 756	-	2 431	-	2 416	2 239	2 278	2 341	3 393	2 277	2 374	2 224	1 744	2 438	2 477
23	Manufacturing Manager	-	2 472	-	2 591	-	2 676	3 276	-	2 719	2 580	-	2 243	-	-	-	2 723	2 572
24	Marketing Manager	2 703	2 762	3 063	-	2 454	3 007	-	-	-	-	4 176	3 385	-	3 115	2 476	-	3 016

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FIGURE 5
Community Salary Trend Line

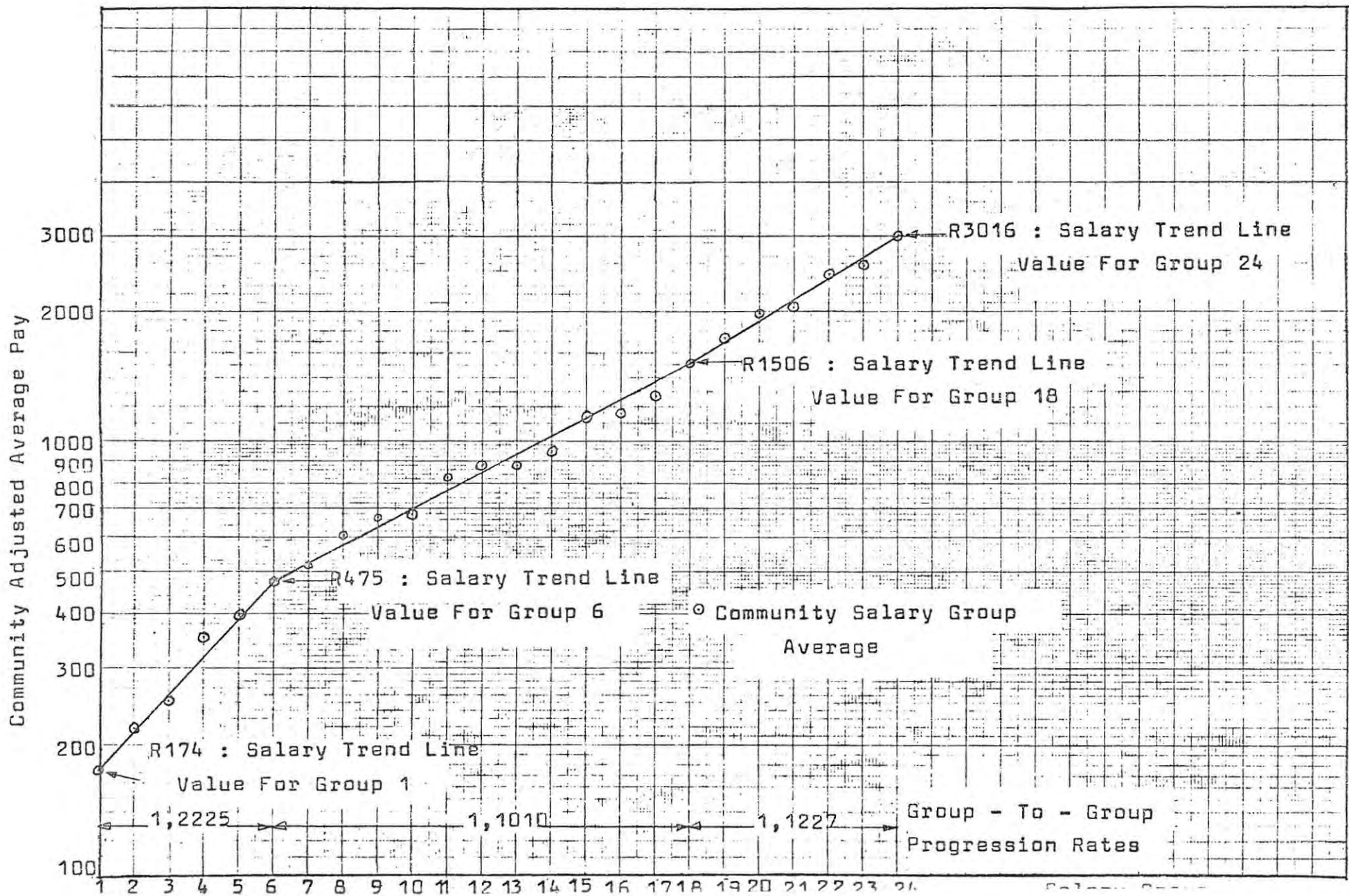


TABLE 7
RECOMMENDED SALARY STRUCTURE

SALARY GROUP	MINIMUM (RAND)	MIDPOINT (RAND)	MAXIMUM (RAND)
1	140	175	210
2	172	215	258
3	208	260	312
4	256	320	384
5	312	390	468
6	380	475	570
7	420	525	630
8	460	575	690
9	508	635	762
10	560	700	840
11	616	770	924
12	676	845	1014
13	744	930	1116
14	820	1025	1230
15	904	1130	1356
16	996	1245	1494
17	1096	1370	1644
18	1204	1505	1806
19	1354	1690	2028
20	1520	1900	2280
21	1704	2130	2556
22	1916	2395	2874
23	2152	2690	3228
24	2412	3015	3618

NOTE:

Group-to-group progression rates = Groups 1 to 6 : 1,2225)
 Groups 6 to 18 : 1,101)
 Groups 18 to 24 : 1,1227)

*(Before Midpoint adjustments to nearest R5).

Salary range spread = 50%

All ranges for Groups 1 to 19 include Christmas Bonus of one month's salary.

TABLE 8
COMPARISON OF RECOMMENDED SALARY STRUCTURE TO
PRESENT SALARY STRUCTURE

SALARY GROUP	RECOMMENDED STRUCTURE (MIDPOINTS RAND) ^a	PRESENT STRUCTURE (MIDPOINTS RAND) ^b	PERCENTAGE RECOMMENDED VARIES FROM PRESENT
1	175	180	-2,7
2	215	212	+1,3
3	260	260	0,0
4	320	317	+0,8
5	390	390	0,0
6	475	477	-0,3
7	525	519	+1,2
8	575	563	+2,1
9	635	611	+3,9
10	700	664	+5,4
11	770	720	+6,9
12	845	782	+8,0
13	930	850	+9,4
14	1025	923	+11,1
15	1130	1003	+12,6
16	1245	1090	+14,2
17	1370	1225	+11,8
18	1505	1376	+9,4
19	1690	1547	+9,2
20	1900	1737	+9,4
21	2130	1953	+9,1
22	2395	2195	+9,1
23	2690	2468	+9,0
24	3015	2772	+8,8

Average Variance = +6,2

NOTE:

Average Variance Groups 1 to 6 : -0,15%
 Average Variance Groups 6 to 18 : +7,4%
 Average Variance Groups 18 to 24 : +9,1%

^aGroup-to-group progression rates =

Groups 1 to 6 : 1,2225)
 Groups 6 to 18 : 1,101) *
 Groups 18 to 24 : 1,1227)

*(Before Midpoint adjustments to nearest R5).

^bGroup-to-group progression rates =

Groups 1 to 6 : 1,2256
 Groups 6 to 16 : 1,0861
 Groups 16 to 24 : 1,12396

TABLE 9

COMPARISON OF RECOMMENDED SALARY STRUCTURE TO
COMPETITIVE AVERAGE TOTAL COMPENSATION MIDPOINTS

SALARY GROUP	RECOMMENDED SALARY STRUCTURE ^a (MIDPOINT RAND)	COMPETITIVE AVERAGE TOTAL COMPENSATION MIDPOINT (RAND)	PERCENTAGE RECOMMEN- DED MIDPOINT VARIES FROM COMPETITIVE AVERAGE TOTAL COM- PENSATION MIDPOINT
1	175	174	+0,6
2	215	219	+1,8
3	260	251	+3,6
4	320	353	-9,3
5	390	396	-1,5
6	475	475	0,0
7	525	517	+1,5
8	575	602	-4,5
9	635	664	-4,4
10	700	679	+3,1
11	770	823	+6,4
12	845	883	-4,3
13	930	878	+5,9
14	1025	947	+8,2
15	1130	1133	+0,3
16	1245	1172	+6,2
17	1505	1506	-0,1
19	1690	1740	-2,9
20	1900	1991	-4,6
21	2130	2039	+4,5
22	2395	2477	-3,3
23	2690	2572	+4,5
24	3015	3016	0,0

Average Variance = +0,12

^aGroup-to-group progression rates =

Groups 1 to 6 : 1,2225)

Groups 6 to 18 : 1,101) *

Groups 18 to 24 : 1,1227)

*(Before Midpoint adjustment to nearest R5).

TABLE 10

MOBIL OIL : RECOMMENDED GROUP-TO-GROUP PROGRESSION RATES

SALARY GROUP	VALUES (ADJUSTED)	GROUP-TO-GROUP PROGRESSION RATES
1	175)	
6	475)	1,2225
6	475)	
18	1505)	1,101
18	1505)	
24	3015)	1,1227

The above progression rates provide the basis for a recommendation as regards a wage and salary structural adjustment. The recommended structure based on such rates allows comparison with the existing structure and progress rates. The Average Variance based on comparison of the Recommended Salary Structure and the Competitive Average Total Compensation Midpoints (TABLE 9) is +0,12% which falls within the suggested variance range of -0,5% to +0,5% as provided by the Midpoint System Guide.

The Average Variance between the Recommended Salary Structure and the Present Salary Structure (TABLE 8) is +6,2%. This figure thus indicates the degree to which Mobil Oil midpoints, on the average, are less competitive than the Community Labour Market midpoint. In other words, on the average, Mobil Oil provides rates of basic compensation which are 6,2% lower than those rates regarded as being competitive by the general Labour Market Community. A summary of the final analysis of the survey data as analysed according to the Midpoint System is revealed in TABLE 11. Such table allows concise comparison of data analysis on a salary group-to-group basis.

TABLE 11

COMPARISON OF PRESENT MIDPOINTS
PROPOSED MIDPOINTS, OIL COMMUNITY
AVERAGES AND TOTAL COMMUNITY AVERAGES
ANNUAL BASE SALARY - FOREIGN CURRENCY

Salary Group	Present Midpoints 1.6.76 ^a	Oil Community Averages 1.5.77	Present Midpoints Compared to Oil Community Averages	Total Community Averages	Present Midpoints Compared to Total Community Averages	Proposed Midpoints ^b	Proposed Midpoints Compared to Oil Community Averages	Proposed Midpoints Compared to Total Community Averages	Proposed Midpoints Compared to Present Midpoints
1	2 158	2 187	- 1,3%	2 088	+ 3,4%	2 100	- 4,0%	+ 0,6%	- 2,7%
2	2 548	2 835	-10,1%	2 628	- 3,0%	2 580	- 9,0%	- 1,8%	+ 1,3%
3	3 120	3 318	- 6,0%	3 012	+ 3,6%	3 120	- 6,0%	+ 3,6%	0,0%
4	3 809	4 224	- 9,8%	4 236	-10,1%	3 840	- 9,1%	- 9,3%	+ 0,8%
5	4 680	4 803	- 2,6%	4 752	- 1,5%	4 680	- 2,6%	- 1,5%	0,0%
6	5 720	5 769	- 0,8%	5 700	+ 0,4%	5 700	- 1,2%	0,0%	- 0,3%
AVERAGE DEVIATION SALARY GROUPS 1 THROUGH 6							- 5,3%	- 1,4%	- 0,15% ^c

^a Group-to-group progression rate 22,6%

^b Group-to-group progression rate 22,3%

^c Note may be made of the fact that a negative adjustment of the salary structure is suggested by the final data analysis for salary groups one to six. The reason for such a result is the fact that, due to pressure from the Mobil Oil International Head Office to increase the salaries of Black employees, an unrealistic upward adjustment was made to this lower section of the structure in August 1977. According to the present analysis of data, a negative adjustment would be required to align the structure on a competitive community average basis. The 1977 adjustment affected the lower section of the structure due to the fact that there is no differentiation between White and Black rates, i.e., Whites and Blacks are remunerated according to a uniform structure.

TABLE 11 - - continued

COMPARISON OF PRESENT MIDPOINTS
PROPOSED MIDPOINTS, OIL COMMUNITY
AVERAGES AND TOTAL COMMUNITY AVERAGES
ANNUAL BASE SALARY - FOREIGN CURRENCY

Salary Group	Present Midpoints ^a 1.6.76	Oil Community Averages 1.5.77	Present Midpoints Compared to Oil Community Averages	Total Community Averages	Present Midpoints Compared to Total Community Averages	Proposed ^b Midpoints	Proposed Midpoints Compared to Oil Community Averages	Proposed Midpoints Compared to Total Community Averages	Proposed Midpoints Compared to Present Midpoints
6	5 720	5 769	- 0,8%	5 700	+ 0,4%	5 700	- 1,2%	0,0%	- 0,3%
7	6 227	6 186	+ 0,7%	6 204	+ 0,4%	6 300	+ 1,8%	+ 1,5%	+ 1,2%
8	6 760	6 384	+ 5,9%	7 224	- 6,4%	6 900	+ 8,1%	- 4,5%	+ 2,1%
9	7 332	8 163	-10,2%	7 968	- 8,0%	7 620	- 6,7%	- 4,4%	+ 3,9%
10	7 969	7 941	+ 0,4%	8 148	- 2,2%	8 400	+ 5,8%	+ 3,1%	+ 5,4%
11	8 645	9 252	- 6,6%	9 876	-12,5%	9 240	- 0,1%	- 6,4%	+ 6,9%
12	9 386	10 857	-13,5%	10 596	-11,4%	10 140	- 6,6%	- 4,3%	+ 8,0%
13	10 205	10 402	- 1,9%	10 536	- 3,1%	11 160	+ 7,3%	+ 5,9%	+ 9,4%
14	11 076	10 899	+ 1,6%	11 364	- 2,5%	12 300	+12,9%	+ 8,2%	+11,1%
15	12 038	12 588	- 4,4%	13 596	-11,5%	13 560	+ 7,7%	- 0,3%	+12,6%
16	13 078	13 123	- 0,3%	14 064	- 7,0%	14 940	+13,8%	+ 6,2%	+14,2%
17	14 703	14 611	+ 0,6%	15 300	- 3,9%	16 440	+12,5%	+ 7,5%	+11,8%
18	16 510	16 848	- 2,0%	18 072	- 8,6%	18 060	+ 7,2%	- 0,1%	+ 9,4%
AVERAGE DEVIATION SALARY GROUPS 6 THROUGH 18							+ 4,8%	+ 1,0%	+ 7,4%

^a Group-to-group progression rate 8,6% (Groups 6 through 16)

^b Group-to-group progression rate 10,1% (Groups 6 through 18)

TABLE 11 - - continued

COMPARISON OF PRESENT MIDPOINTS
PROPOSED MIDPOINTS, OIL COMMUNITY
AVERAGES AND TOTAL COMMUNITY AVERAGES
ANNUAL BASE SALARY - FOREIGN CURRENCY

Salary Group	Present Midpoints 1.6.76 ^a	Oil Community Averages 1.5.77	Present Midpoints Compared to Oil Community Averages	Total Community Averages	Present Midpoints Compared to Total Community Averages	Proposed Midpoints ^b	Proposed Midpoints Compared to Oil Community Averages	Proposed Midpoints Compared to Total Community Averages	Proposed Midpoints Compared to Present Midpoints
18	16 510	16 848	- 2,0%	18 072	- 8,6%	18 060	+ 7,2%	- 0,1%	+ 9,4%
19	18 564	20 976	-11,5%	20 880	-11,1%	20 280	- 3,3%	- 2,9%	+ 9,2%
20	20 844	-	-	23 892	-12,8%	22 800	-	- 4,6%	+ 9,4%
21	23 436	23 010	+ 1,9%	24 468	- 4,2%	25 560	+11,1%	+ 4,5%	+ 9,1%
22	26 340	30 675	-14,1%	29 728	-11,4%	28 740	- 6,3%	- 3,3%	+ 9,1%
23	29 616	30 378	- 2,5%	30 864	- 4,0%	32 280	+ 6,3%	+ 4,6%	+ 9,0%
24	33 264	32 946	+ 1,0%	36 192	- 8,1%	36 180	+ 9,8%	0,0%	+ 8,8%
AVERAGE DEVIATION SALARY GROUPS 18 THROUGH 24							+ 4,1%	+ 0,3%	+ 9,1%

^a Group-to-group progression rate 12,4% (Groups 16 through 24)

^b Group-to-group progression rate 12,3% (Groups 18 through 24)

Thus, in order for Mobil Oil to remain as competitive as possible with regard to the labour market, it is necessary to recommend an adjustment to the existing wage and salary structure based on the above analysis of survey data.

Fringe-Benefit Analysis.-- Information obtained from the General Information Questionnaires has been summarised in the form of a schedule to facilitate easy comparison and quick reference. In this schedule alphabetical codes have been used to denote different organisations. Such codes are utilised in order to maintain confidentiality. The summary of the data obtained is presented below:

A. General.

1. Type of Operation.

Fifteen of the sixteen organisations which participated operate in the Manufacturing and/or Marketing fields. One company is engaged in Mining and Finance.

2. Size of Company.

In terms of 1977, one organisation quoted a Sales Value in excess of R1000 million. Four organisations quoted in excess of R400 million, two organisations quoted in excess of R200 million, and six organisations quoted between R50 - R150 million. Three organisations failed to disclose sales figures.

3. Number of Employees.

All participating organisations have a total of over 1000 employees, and all but one have under 12 000 employees. The following table has been drawn up, based on the quoted figures.

TABLE 12

SUMMARY OF NUMBER OF EMPLOYEES
PER PARTICIPATING ORGANISATION

NUMBER OF EMPLOYEES			NUMBER OF ORGANISATIONS
1000	- 2000	3
2000	- 4000	6
4000	- 8000	4
over	8000	3
Arithmetic Average ^a =			7029
Median			= 2738

^aThe arithmetic average has been influenced by one company which quoted a figure of 50 000 employees.

B. Salary Practices.

Fifteen of the sixteen participating organisations have established salary ranges. Nine organisations last updated their ranges in the second half of 1977 by \pm 9% on average. These organisations anticipate a further adjustment in the second half of 1978, depending on economic conditions. Six organisations last updated their salary ranges in the first half of 1978 by \pm 9% on average.

C. Remaining Salary Practices and Major Benefit Plans.

The remaining section of the questionnaire has been drawn up in schedule form, and is illustrated in TABLE 13.

TABLE 13

SALARY PRACTICE AND MAJOR BENEFITS PLANS

	A	B	C	D	E	F
1. Does your Company have established Salary Ranges?	Yes	Yes	Yes	Yes	Yes	Yes
2. Do you have a policy covering size and frequency of merit increases? Are increases based on an appraisal rating or any form of time or age progression.	Yes Increases are based on: (a) Performance rating; (b) Position in salary range; (c) Time since last increase.	Yes Merit increases are based on performance.	Yes Merit increases are based on performance.	Yes Merit increases are based on performance.	Yes Merit increases are based on performance.	Yes Merit increases are given annually, based on performance.
3. Do you grant annual increases on a fixed review date or do you spread them throughout the year?	Increases are spread throughout the year.	Annual increases on a fixed review date.	Annual increases on a fixed review date.	Annual increases on a fixed review date.	Annual increases on a fixed review date.	Annual increases on a fixed review date.
4. Are merit increases combined with any other type of increase e.g. economic or cost-of-living increases?	Only merit increases are granted. "Economic" increases are indirectly taken care of by annual revision of salary ranges.	Combined merit and economic.	COL increases are taken into account but not as a separate entity.	One all-embracing increase is given.	No	Combined merit and COL increases.
5. Indicate any other types of increases based on economic indicators, cost-of-living, etc.	N/A	N/A	N/A	N/A	N/A	N/A
6. a. Do you operate a bonus plan?	No	Yes	Yes	Yes	Yes	Yes
b. Indicate the type of bonus plan.		Christmas.	Christmas bonus; Profit bonus payable in June if target earnings per share are exceeded.	Leave.	Twice a year (June and December).	Christmas.
c. Is the bonus payable to all employees or does it differ by category of employees?		All employees.	All staff except senior executives.	All employees.	All employees.	All employees.
d. Indicate the formula for bonus.		One month's salary.	50% of one month's salary. Profit bonus based on merit.	50% of one month's salary.	Half a month's salary on each occasion.	One month's salary.
e. Is the bonus pensionable?		Yes	No	No	No	Yes

TABLE 13 - - continued

SALARY PRACTICE AND MAJOR BENEFITS PLANS

	G	H	I	J	K	L
1. Does your Company have established Salary Ranges?	Yes	No	Yes	Yes	Yes	Yes
2. Do you have a policy covering size and frequency of merit increases? Are increases based on an appraisal rating or any form of time or age progression.	Yes Frequency and size of merit increases based on performance.	Yes Merit increases based on performance.	Yes Merit increases are based on performance.	Yes Appraisal of merit.	Yes Frequency and size of merit increases are based on performance and his position in the range. Increases vary between 5-15% after 12-18 months.	Yes Merit increases are based on performance.
3. Do you grant annual increases on a fixed review date or do you spread them throughout the year?	Frequency of increases is determined according to appraisal rating and is tied to employee's anniversary date.	Annual increases on fixed review dates.	Annual increases on fixed review dates.	Annual increases on a fixed review date.	Increases are spread throughout the year.	Annual increases on fixed review dates.
4. Are merit increases combined with any other type of increase e.g. economic or cost-of-living increases?	No	Combined merit and COL increases.	No	No	No	No
5. Indicate any other types of increases based on economic indicators, cost-of-living, etc.	N/A	N/A	Economic Adjustments based on market and economic conditions. May be given on a fixed percentage basis.	Economic Adjustments based on market and economic conditions. May be given on a fixed percentage basis.	General increases are granted from time to time based on market rates and C.O.L.	General increases are granted from time to time based on market rates and C.O.L.
6. a. Do you operate a bonus plan?	Yes	Yes	Yes	Yes	Yes	Yes
b. Indicate the type of bonus plan.	Christmas.	Christmas.	Christmas.	Christmas.	Year-end bonus.	Christmas.
c. Is the bonus payable to all employees or does it differ by category of employees?	All employees.	All employees.	All employees.	All employees.	All employees.	All employees.
d. Indicate the formula for bonus.	One month's salary.	10% of annual salary.	One month's salary.	One month's salary.	Service % Annual Salary Less than 1 yr. 4% 1 to less than 5 yrs. 6% 5 to less than 10 yrs. 7% 10 or more years 8%	One month's salary.
e. Is the bonus pensionable?	No	Yes	Yes	Yes	No	Yes

TABLE 13 - - continued

SALARY PRACTICE AND MAJOR BENEFITS PLANS

	M	N	O	P	Mobil
1. Does your Company have established Salary Ranges?	Yes	Yes	Yes	Yes	Yes
2. Do you have a policy covering size and frequency of merit increases? Are increases based on an appraisal rating or any form of time or age progression.	Yes Frequency and size of merit increases are based on performance and his position in the range. Below midpoint: 3-11% After 12-18mths. Above midpoint: 4-9% after 15-24 months.	Yes Merit increases are based on performance.	Yes Merit increases are based on performance.	Yes Merit increases are based on performance.	Yes Frequency and size of merit increases are based on employee's performance. Below midpoint: 5-12% after 12-24months. Above midpoint: 5-8% after 15-24 months.
3. Do you grant annual increases on a fixed review date or do you spread them throughout the year?	Increases are spread throughout the year.	Annual increases on fixed review date.	Annual increases on fixed review date.	Annual increases on fixed review date.	No. All salaries reviewed Sept./Oct. each year, but increases spread throughout the year.
4. Are merit increases combined with any other type of increase e.g. economic or cost-of-living increases?	No	Yes, with COL and/or market pressure.	No	Yes, when COL increases are considered necessary.	No
5. Indicate any other types of increases based on economic indicators, cost-of-living, etc.	General Adjustments to all staff are normally awarded as a result of market movement of salaries in excess of 5%.	C.O.L. increases are given when necessary.	"Across the Board" adjustments are awarded from time to time. The adjustment is based on economic indicators.	N/A	General adjustments to all staff are awarded as a result of market movement of salaries.
6. a. Do you operate a bonus plan?	Yes	Yes	Yes	Yes	Yes
b. Indicate the type of bonus plan.	Christmas.	Christmas.	Christmas.	Profit sharing bonus.	Christmas.
c. Is the bonus payable to all employees or does it differ by category of employees?	All employees.	All employees.	All employees.	All employees.	All employees, except Top Management.
d. Indicate the formula for bonus.	One month's salary.	One month's salary.	One month's salary.	Minimum of one month's salary provided a dividend is paid to shareholders.	One month's salary.
e. Is the bonus pensionable?	Yes	Yes	Yes	No	Yes

TABLE 13 - - continued

SALARY PRACTICE AND MAJOR BENEFITS PLANS

	A	B	C	D	E	F
7. a. Does your Company guarantee housing deposits?	Yes To all employees with one year's service. Co. guarantees up to 17½%. Repayments may not exceed 30% of monthly salary. Interest charged = Building Society rates plus 1% for amount guaranteed.	Yes To all employees with min of 3 yrs. service. Co. guarantees up to 20% of value of house. Repayments may not exceed 25% of monthly salary. Int. charged = Building Society rates less 2% subsidy for balance outstanding.	Yes After 3 years service. Co. guarantees up to 20% and repayments may not exceed 25% of monthly salary. Interest charged = Building Society rates.	No	No	Yes Co. guarantees up to 20% of value of house. Repayments may not exceed 30% of monthly salary. Int. charged = Building Society rates.
b. Does your Company provide employees with housing loans?	No	No	Loans for Senior Executives up to one yrs. salary or 85% of value of house (the lower). Int. charged = 5% below going rate. Loans to Non-White employees up to a max. of R4 000, repayable at 5% over 20 years.	No	Draft proposal being considered for low interest loans to assist the employee with the deposit on a house.	Interest free loans to all staff repayable over 3 years for bond and transfer costs. Co. also assist by lending the employee interest free, the diff. between bond repayments and 25% of monthly salary. Blacks are provided with int. free loans to obtain house in homelands or for improvement to rented homes in Urban areas.
8. Do you assist empl. to purchase, lease, etc. a car for purposes other than job requirements?	Yes Co. guarantees through bank up to R3410 and at normal overdraft rates repayable over 3 yrs. Employee must take out insurance.	No	Yes An assisted car purchase scheme entitles certain categories of empl. (Middle and Jnr. Mngmt.) to purchase vehicles up to R4500 repayable over 5 yrs.	Yes For selected Middle Mngt. positions, Co. leases car and pays allowance towards running costs.	Yes Employees from certain category upwards receive cars. Employee pays R30 per month lease.	Yes Company cars to employees from first level below Assist. Manager upwards.

TABLE 13 - - continued

SALARY PRACTICE AND MAJOR BENEFITS PLANS

	G	H	I	J	K	L
7. a. Does your Company guarantee housing deposits?	Yes Co. guarantees through Building Society at normal interest rates.	No	Yes To all employees after 2 years service. Co. guarantees up to 25% of value of house. Repayments not to exceed 25% of monthly salary.	Yes To all married male staff after 2 yrs. service. Co. guarantees up to 25% of valuation. Repayments not to exceed 25% of monthly salary, except where interest free loans are provided.	No	Yes Co. provides collateral guarantee for employees after 2-5 years service a max. of 15% of valuation and after 5 years service a max. of 25% of valuation
b. Does your Company provide employees with housing loans?	No	To all staff. 90% of valuation to max. of R35 000 depending on salary at an interest rate of 5%.	Interest free loans to all staff to cover the difference between mthly. repayments and 20% or 25% of monthly salary. Loans decrease as salaries increase and employee starts repaying when 20% or 25% of salary equals bond repayments. Int.free loans to Non-Whites up to R600, repayable over 5 yrs. for deposit on house or to make improvements.	Interest free loans to staff to cover the diff. between monthly repayments and 20% or 25% of monthly salary. Loans decrease as salaries increase and employee starts repaying when 20% or 25% of salary equals bond repayments. Int. free loans to Non-Whites up to R600, repayable over 5 years for deposit on house or to make improvements.	Interest free loan up to R300 to employees who own or rent or wish to own or rent a municipal or government house to purchase or for improvements. Repayments at R5.00 per week.	No
8. Do you assist empl. to purchase, lease, etc. a car for purposes other than job requirements?	No	Yes To Top, Middle and Junior Mngt. Employee receives allowance to pay for running costs.	Yes To Senior employees. Co. grants a non-pensionable allowance equal to repayments on car over 42 months. Employee arranges loan with Bank. Allowance taxable. Employee pays for running costs.	Yes To Senior employees. Co. grants non-pensionable allowance equal to repayments on car over 42 months. Employee arranges loan. Allowance taxable. Employee pays for running costs. Max. value = R4 500.	Yes Directors and Snr. Mngmt. qualify for 2 Co. cars. Other employees above a certain group may lease 1 Co. car. The lease charges include all extras except petrol and oil.	Yes Company cars to Snr. Mngment. Assisted car scheme to Middle Mngmt. Empl. pays R15 per month plus petrol costs.

TABLE 13 - - continued

SALARY PRACTICE AND MAJOR BENEFITS PLANS

	M	N	O	P	MOBIL
7. a. Does your Company guarantee housing deposits?	Yes Co. provides guarantee to employees after 1-5 yrs. service up to 20% of valuation. Repayments not to exceed 25% of salary. Building Society rates applicable.	Yes Co. provides guarantee to employees after 5 yrs. service up to a max. of 25% of valuation. Repayments not to exceed 25% of monthly salary. Building Society rates applicable.	Yes Co. provides guarantee after 2 yrs. service of up to 25% of valuation. Repayments not to exceed 25% of monthly salary, except where interest free loans are provided.	Yes Co. provides collateral security to meet Building Society deposit requirements.	Yes Co. provides guarantee to employees with at least 3 yrs. service, of up to 25% of valuation. Monthly repayments limited to 30% of monthly salary. Int. at normal Building Society rates.
b. Does your Company provide employees with housing loans?	Yes Interest free loan to certain category of staff to cover the difference between monthly repayments and 25% of salary. Monthly loan not to exceed 16% of monthly salary. Loans to Non-White staff up to maximum of R600 at 5% interest, repayable over 5 years.	No	Yes Interest free loans to employees to cover the difference between mthly. repayments and 25% of mthly. salary. Loans decrease as salaries increase and employee starts repaying when 25% of salary equals bond repayments.	No	Yes Loans to Non-Whites of up to R600 at 5% interest, and repayable over 5 yrs. Purpose of loan to assist employees with buying or improving an existing house or building a new one.
8. Do you assist empl. to purchase, lease, etc. a car for purposes other than job requirements?	Yes Co. cars are provided to Departmental Managers.	Yes Co. cars only to Senior Management.	Yes To senior employees. Co. grants non-pensionable allowance equal to repayments on car over 36 mths. Employee pays extra tax and running costs of car.	No	Yes To senior employees. Co. grants non-pensionable allowance equal to repayments on car over 54 mths. Employee arranges loan. Employee pays extra tax and running costs of car. Max. value = R5 285.

II. Summary of Recommendations.

In order to ensure that Mobil Oil Southern Africa (Pty.) Ltd., and Mobil Refining Company Southern Africa (Pty.) Ltd., continue to pay compensation which is regarded as being competitive in the Community Labour Market, it is recommended that:

1. The Recommended Salary Structure for Salary Groups one to twenty-four (TABLE 7)⁸ be adopted. The required adjustments to individual Salary Group Midpoints is revealed in the Comparison of Recommended Salary Structure to Present Salary Structure (TABLE 8).⁹

2. Positions deleted on the Tabulation of Adjusted Total Compensation Midpoint Data Worksheets (TABLE 6) be re-evaluated according to the Peromnes Job Evaluation System.

⁸Supra, p. 116

⁹Supra, p. 117

CHAPTER VII

EVALUATION OF THE MIDPOINT SYSTEM

THE PEROMNES SALARY SURVEY

Although number and methods of salary survey undertakings vary from organisation to organisation, certain organisations operate nationally accepted systems on an annual basis, and offer their services to any organisation which may be interested.

Organisations such as Peromnes Salary Surveys (Pty.) Ltd., and Urwick-UAL have developed salary survey systems on the basis of national and international research. Such systems are utilised to analyse data received from participating organisations on an annual basis. Although these systems as such are unavailable to client organisations, upon completion of raw data analysis, such analysis and interpretation thereof is handed to clients for consideration.

A large number of organisations rely solely on these analyses for annual adjustments to wage and salary structures, and such survey organisations are regarded as being highly reliable in analysis of data on a national basis.

Although Mobil Oil participate in the annual Peromnes compensation survey, the comprehensive four-yearly compensation survey is regarded as an absolutely necessary undertaking such that particular organisations of importance to the Oil Company Community may be surveyed. Adjustments to the Mobil Oil wage and salary structure are then based entirely on the results of such comprehensive survey.

However, the Peromnes statistics may be regarded

as an important basis for comparison with statistics obtained by Mobil Oil. In short then, the Peromnes survey provides the most reliable basis for testing reliability and validity of the Midpoint System utilised by Mobil Oil for the following reasons:

1. Peromnes provides an internationally and nationally accepted compensation survey system.

2. The analysis and interpretation of data is comprehensive and reliable in terms of industry and positions surveyed by Mobil Oil. Survey results are provided regionally as well as nationally.

3. The Peromnes annual survey provides raw, as well as analysed data, such that this data may be analysed in terms of other survey systems for comparison purposes.

4. Mobil Oil utilised the Peromnes Job Evaluation System for all internal position evaluations. In other words, the Mobil Oil organisational hierarchy of jobs is based on Peromnes Job Evaluation factors. This provides an extremely reliable basis for survey position comparisons and weightings.

Utilising its own methods, the Peromnes Organisation has established its own wage and salary structure. Basically, the Peromnes structure, consisting of eighteen salary range groups, forms a hierarchy depending on the number of points allotted to positions evaluated by the system. Most highly evaluated positions fall into salary group one, while lowest evaluated positions fall into salary group eighteen.

In order to provide a basis of comparison between the final Community Trend Lines obtained from the Mobil Oil survey and the Peromnes survey, the Peromnes salary group structure had to be standardised according to the Mobil Oil salary group structure. In other words, the Peromnes eighteen group structure had to be readjusted according to the Mobil twenty-four group structure, ensuring that each re-adjusted group was comparable with its Mobil partner.

This adjustment was completed in consultation with

the Peromnes management concerned. The comparisons were partly based on salary midpoints at a given time, and on positions within each salary group, which were analysed in order to establish the level of comparison.

Peromnes has an established hypothetical organisational structure of positions, with a hierarchy of positions based on the Peromnes method of job evaluation. Accordingly, a hypothetical wage and salary structure has been established based on the point-score evaluations as applicable to relevant job descriptions of such positions. Utilising these job descriptions and the Peromnes method of job evaluation, position comparability was established with Mobil Oil key positions such that comparable point-score evaluations could be established for similar positions. In this way, standardisation of Peromnes salary groupings in terms of the Mobil Oil wage and salary structure was achieved.

The final structure of Mobil salary groups and their comparable Peromnes equivalent is revealed in TABLE 14.

TABLE 14

ADJUSTED PEROMNES SALARY GROUP STRUCTURE

MOBIL OIL SALARY GROUP	PEROMNES SALARY GROUP
1	18
2	17
3	16
4	15
5	14
6	13
7	12
8	11
9	11/10
10	10
11	9
12	9/8
13	8
14	8/7
15	7/6
16	6
17	6/5
18	5/4
19	4/3
20	3/2
21	2/1
22	1
23	1+
24	1++

The above table was utilised to adjust the Community Average Midpoints as supplied by the Peromnes 1977/78 Survey.¹ The adjustment of these midpoints is illustrated in TABLE 15.

¹Peromnes Compensation Survey April 1977 to April 1978 report to Mobil Oil, April, 1978. (unpublished material only available to organisations participating in Peromnes Surveys).

TABLE 15
ADJUSTMENT OF PEROMNES COMMUNITY AVERAGE MIDPOINTS

PEROMNES SALARY GROUP	PEROMNES COMMUNITY AVERAGE MIDPOINT (RAND)	MOBIL OIL SALARY GROUP	ADJUSTED PEROMNES COMMUNITY AVERAGE MIDPOINT (RAND) ^a
1	2610	24	-
2	2364	23	-
3	1926	22	2610
4	1650	21	2488
5	1450	20	2145
6	1230	19	1788
7	1011	18	1550
8	885	17	1340
9	775	16	1230
10	695	15	1120
11	610	14	948
12	495	13	885
13	440	12	830
14	370	11	775
15	340	10	695
16	250	9	653
17	208	8	610
18 ^b	174	7	495
		6	440
		5	370
		4	340
		3	250
		2	208
		1	174

^aThese midpoints were calculated on the same basis of calculation utilised in the Mid-point System Survey, i.e., base salary plus annual bonus, based on the midpoint concept.
^bThe Peromnes Structure is based on eighteen salary groups; the standardisation to the Mobil Oil twenty-four group structure only allows adequate comparison of twenty-two groups. Therefore, no Adjusted Peromnes Community Average Midpoints could be established for Mobil Groups twenty-three and twenty-four.

TABLE 16
 AVERAGE VARIANCE OF MIDPOINT SYSTEM TREND LINE VALUES FROM PEROMNES
 SYSTEM TREND LINE VALUES

SALARY GROUP (MOBIL AND STAN- DARDISED PEROMNES) (1)	MIDPOINT SYSTEM TREND LINE VALUES (RAND) ^a (2)	PEROMNES SYSTEM TREND LINE VALUES (RAND) ^b (3)	PEROMNES VARIANCE: MIDPOINT SYSTEM FROM PEROMNES SYSTEM (4)
1	174	174	0,0
2	213	208	2,4
3	260	250	4,0
4	318	298	6,7
5	389	357	9,0
6	475	427	11,2
7	523	510	2,5
8	576	610	-5,6
9	634	666	-4,8
10	698	727	-4,0
11	769	793	3,0
12	946	865	-2,2
13	932	945	-1,4
14	1026	1031	-0,5
15	1129	1125	0,4
16	1244	1228	1,3
17	1369	1340	2,2
18	1507	1531	-1,6
19	1692	1750	3,3
20	1900	1999	-5,0
21	2133	2284	-6,6
22	2395	2610	-8,2
Average Variance =			+0,28

^aGroup-to-group progression rates = Groups 1 to 6 : 1,2225
 Groups 6 to 18 : 1,101
 Groups 18 to 24 : 1,1227
^bGroup-to-group progression rates = Groups 1 to 8 : 1,1953
 Groups 8 to 18 : 1,0914
 Groups 18 to 22 : 1,1426

of groups, is on average, 1,1% lower than rates for the same range of groups as provided by the Peromnes System.

3. For those positions ranked in the upper section of the position hierarchy (Mobil Oil Salary Groups eighteen to twenty-four, and Peromnes Salary Groups four to one), as represented by Salary Groups eighteen to twenty-two in column (1) of TABLE 15, the Midpoint System progression rate is 1,99% lower than that provided by the Peromnes System. Rates provided by the Midpoint System for this range of groups is, on average 3,6% lower than those provided for the same range by the Peromnes System.

The overall comparison of the Mobil Oil Community Trend Line and the Peromnes Community Trend Line may be best illustrated graphically, as revealed in FIGURE 6. In conjunction with the above sectional analysis, the graph clearly reveals that the Midpoint System data analysis assumes that the national labour community pay higher rates with greater progression rates (i.e. greater pay increases more often) at the lower levels of the salary structure (i.e. the lowest jobs in the position hierarchy), as compared with the Peromnes structure (i.e. top management levels) the Peromnes analysis assumes higher rates with higher progression rates than the Midpoint analysis, while there is no significant difference between rates and progression rates for supervisory to upper management positions..

CONCLUDING REMARKS

In order to evaluate the Midpoint System, assessments have to be made not only of the statistical results obtained through practical utilisation, but also of the success of the system in effectively achieving its goal by utilising basic concepts, that is, in achieving objective data analysis by obtaining job comparability.

Thus concluding remarks may be made in terms of:

1. Results of the comprehensive survey.
2. The effectiveness of the system in terms of the utilisation of (a) the midpoint concept, (b) the key position concept, and (c) the job evaluation concept.

In terms of results obtained from the comprehensive survey undertaken, it may be stated that the Midpoint System analysis compared favourably with the Peromnes System analysis in that, overall, there is no significant degree of variance between the final salary structures of the two systems. Thus, in terms of the Peromnes analysis of the national community rates, the Midpoint System provides a method which may adequately survey a particular labour market community or industry, such that a competitive adjustment may be made to an organisation's wage and salary structure.

However, this evaluative statement is made bearing in mind that the Peromnes System has been chosen as that system which is most likely to reflect the goals to be achieved by one organisation in particular, namely, Mobil Oil. Although the Midpoint System is intended as a guide for use by any organisation within any labour market or industry, to evaluate such system in terms of every such market or industry would prove to be a monumental task. On a national basis, however, the Peromnes System undoubtedly provides an adequate yardstick for comparison, against which the Midpoint System has been favourably assessed.

A further disadvantage in terms of comparability is the fact that it is difficult to assume the reliability and validity of any one system in terms of another inasmuch that each system has its own weaknesses in terms of obtaining objective information. In short then, there is no system which may be regarded as a perfect method of obtaining job comparability, and against which other systems may be effectively evaluated.

As stated then, the Midpoint System results may be

regarded as comparable in terms of the Peromnes System results; however, it is extremely difficult to provide an objective evaluation on the basis of these analyses alone, without an adequate comparison of techniques utilised by both systems. Although this is impossible, as the Peromnes organisation does not publish its compensation survey analysis techniques, evaluation of the Midpoint System techniques may be made in terms of success of objective information gathering and analysis.

1. We have emphasised throughout the discussion of the compensation survey the importance of a reliable job evaluation system as a most useful means of obtaining objective information and the Midpoint System relies heavily on such a system for effective operation.

Although there has been practically no research on the reliability of salary surveys, one study has provided some useful insight into the question of reliability by finding that generalised, ambiguous job descriptions led participating organisations to report widely diverse salary ranges for these jobs in contract to the "spread" of salaries reported for jobs more clearly and specifically described.² As the job description forms a vital source of information for the job evaluation process, and establishment of position comparability, meticulous care was taken in drawing up reliable descriptions for the survey key positions. This proved fruitful in that out of a possible nine-hundred-and-sixty position comparisons completed according to the Midpoint System, the data of only two such comparisons was deleted due to inconsistency with other comparisons (see TABLE 6). Furthermore, such inconsistent data only occurred in Salary Groups twenty-two and twenty-three of the Mobil Oil salary structure,

²John B. Harker, Personnel Journal, XXXI, 131-134.

that is, at the executive level. As already discussed, positions at these levels are extremely difficult to describe and analyse in terms of the usual job content and job factors, and this may well be the cause for the two inconsistencies discovered in the data collected.

2. When position comparability could not be obtained on the basis of the job descriptions above, the Peromnes method of job evaluation was utilised to determine a possibility of comparability. Once again, although it is difficult to evaluate the success of such a method in terms of absolute objectivity, a degree of evaluation may be revealed by the necessity to delete inconsistent data. The evaluation of individual position data (as completed on worksheets in Appendixes III and IV) according to such a technique results in Salary Group averages which proved to be consistent to the degree that it was not necessary to delete any data. Apart from this limited indication as to the successful use of the job evaluation concept, the overall effectiveness of the Midpoint System in achieving adequate results, in terms of the Peromnes yardstick, may be regarded as an indication of the successful application of this concept in that job evaluation formed the base of position comparability techniques.

3. Evaluation of the key position concept and the midpoint concept cannot be made in terms of reliability or validity. Rather, as discussed these concepts are valid in terms of their logic. More specifically, the utilisation of the midpoint concept proved to be essential to the streamlining of information gathering. The reasoning behind such a fact is that for those organisations which had established salary group ranges, and which regarded the midpoint as being that rate which is representative of the competitive rate of pay for positions in that particular salary group, salary data was immediately available for all positions without the necessity of applying adjustment factors.

As a method of underlining the essentiality of the midpoint concept, a study was undertaken in conjunction with the gathering of survey information, such that a comparison between results obtained by utilising the midpoint concept, and results obtained by utilising actual earnings as such. To achieve this, actual pay rates for each position were gathered (earnings) as well as the midpoints concerned. These actual rates were not adjusted according to the hypothetical midpoint calculations,³ and community averages and a trend line were established on this basis. The resultant adjusted trend line curve revealed a structure which proved to be, on the average, 4,8% higher than that obtained by the Midpoint System. The cause of such a discrepancy is the fact that actual earnings vary greatly from employee to employee, depending on merit and service. Use of the midpoint effectively nullified the greatly varying position averages reflected by these actual rates.

In terms of the concepts discussed then, we may state the Midpoint System proved to be adequate in the attainment of the organisational goals stipulated in the purpose of such a system. Actual statistical results compare favourably with those of the Peromnes organisation, and thus provided a basis for adjustment to base salary groups. Further, the external competitiveness of the job evaluation programme may be gauged by the percentage of positions requiring re-evaluation.⁴

However, research completed in order to establish and test the system discussed in this text has revealed that a great deal of further research into the application and modification of survey techniques is required. More specifically, due to the fact that

³As discussed in Chapter III, Section X.

⁴20% of Mobil Oil key positions according to the Midpoint survey. See TABLE 6 for deletion of such positions.

no adequate gauges exists against which the many techniques may be tested, especially in the South African context, much work remains to be done with regard to reliability and validity of the various techniques and concepts.

Although, as already discussed, there has been considerable research on reliability of the job evaluation and descriptions, there has been practically no research on the reliability of salary surveys as such, or on these techniques in terms of their usefulness to the salary survey.

Further, the validity of such systems may be judged by the extent to which they contribute to the attainment of the goals of the organisation through the survey system as such, and this contribution is very difficult to measure since a large number of variables would need to be held constant in order to measure the effect of any one variable, such as job evaluation.

However, if we assume that these concepts are valid in terms of logical examination of underlying assumptions, several revealing questions need to be asked and researched: In terms of the compensation survey's basic necessities, is the job description an accurate reflection of the actual job being performed? Are the specifications those really required by the job? Are the factors used in job evaluation related to value produced? What wage levels are necessary to retain employees and keep defensive behaviour at a minimum? In short, research on the probable contribution of particular devices or systems to the success of the overall compensation survey system should provide useful insight into validity and reliability of such systems, although these surveys do provide a kind of validity in themselves in that they provide an index of what wage levels are necessary to recruit and retain needed talent, and what wage levels would be higher than necessary would lead to unnecessary costs.

Finally, much work may be done in the field of establishing a completely objective information gathering system, which would effectively eliminate the disadvantages of present systems. Such research may examine the concept of comparing individual key positions. However, as the existing compensation survey methods, techniques and devices provide the organisation with a tool to aid in establishing wage and salary levels, as well as having other equally important uses in wage and salary administration, and until better tools are forged, constant effort must be made to improve these survey procedures, as the compensation survey must continue to carry a heavy load as a wage and salary technique.

APPENDIX II
EXAMPLES

EXHIBIT A

GENERAL INFORMATION QUESTIONNAIRE

Two copies of this questionnaire are provided (one in each booklet). The blank copy should be completed prior to the survey interview and handed to our representatives. The completed one, i.e. Mobil's information, should be retained. Should more space be required to provide complete answers, please use the reverse side of the applicable page.

A. GENERAL

1. Participating organisation(s)
2. Organisation Representative(s)
3. Type of Operations (e.g. Marketing, Manufacturing, Services, etc.)
4. Size of Company (Approximate 1977 Sales Value, Manufacturing Capacity, etc.)
5. Number of Employees
6. Organisation Charts

It would assist discussions and final analysis if a set of organisation charts could be made available, indicating those positions related to the survey positions.

B. SALARY PRACTICES

1. Salary Ranges
 - (a) Do you have established ranges?
If so, please attach a copy.
 - (b) What is the date and amount of last increase to salary ranges?
 - (c) When do you anticipate the next change in your salary ranges?
2. Salary Administration
 - (a) Merit increases
 - (i) Do you have a policy covering size and

EXHIBIT A - - continued

frequency of merit increases? Are increases based on an appraisal rating or any form of time or age progression?

- (ii) Do you grant annual increases on a fixed review date or do you spread them throughout the year?
- (iii) Are merit increases combined with any other type of increase, e.g. economic or cost-of-living increases?
- (iv) Indicate the changes to your salary ranges and the increases your Company has granted over the past 3 years.

<u>% Range</u> <u>Changes</u>	<u>Economic Increases</u> <u>and Date</u>	<u>Merit(as %</u> <u>of Salary</u> <u>Bill)</u>
----------------------------------	--	---

1974

1975

1976

1977

- (v) Do you anticipate an economic adjustment to salaries in 1978?

(b) Promotional Increases

Do you have a policy covering promotional increases? If so, indicate the size (percentage) of the promotional increase and whether this varies by category of employees.

(c) Other increases

Indicate and describe briefly any other types of increases based on economic indicators, cost-of-living, etc.

3. Bonus

- (a) Do you operate a bonus plan?
- (b) Indicate the type of bonus plan (e.g. Leave, Christmas, etc.)
- (c) Is the bonus payable to all employees or does it differ by category of employees?
- (d) Indicate the formula for bonus (e.g. one month's salary).
- (e) Is the bonus pensionable?

EXHIBIT A - - continuedC. MAJOR FRINGE BENEFIT PLANS (excluding Pension and Medical Aid Plans)1. Housing Assistance

Do you provide any form of assistance to employees with regard to housing? (e.g. company house or flat, subsidised rent, guaranteed deposit, low-interest bond, etc.)

2. Vehicles

It is accepted that vehicles are provided where essential for the job. If, over and above this, you have any plan for assisted purchase, car lease, etc., please give details.

EXHIBIT C^a
SALARY INFORMATION

SALARY INFORMATION (per month):

PARTICIPATING ORGANISATION	NO.OF YR'S SERVICE IN PRESENT POSITION	ACTUAL SALARY	BONUS	INCENTIVE BONUS	CAR BENEFIT	OTHER COMPEN-SATION

TITLE OF COMPARABLE POSITION:

^aIt must be noted that Exhibit C should, in practice, form the reverse side of Exhibit B.

EXHIBIT D
SUMMARY WORKSHEET

SURVEY POSITION TITLE:

SURVEY POSITION NO.:

SALARY GROUP:

Company and Position Title	Reporting Relationship	+	Functional Responsibilities	+	Scope and Magnitude of Responsibility						+	Other Non-Quantifiable Factors infl. posit. Evaluation	+	Overall Evaluation of Compared Position to Mobil	Unadjusted Monthly Compensation				Comments	
					No. of Retail Outlets	% Total Market Share	% Market Annual (Gasoline)	Total Annual Realization	Geog. Areas of Resp.	No. of Emplov. Superv.					-	-	-	-		Base Salary

* Details of Additional Compensation:

EXHIBIT E
SUMMARY OF ADJUSTED (UNADJUSTED) SALARY DATA
WORKSHEET^a

Participating Organisation	Title of Position Compared	Evaluation Compared to Survey Organisation's Position	Job Weighting Factor	Adjusted (Unadjusted) Base Salary Midpoint
Organisation "A"	Engineer I	-1/2	1,0538	1 040 (987)
Organisation "B"	Engineer A	Equal	-	936 (936)
Organisation "C"	Engineer II	+1 1/2	1,1672	1 019 (1 189)
Organisation "D"	Engineer I	Equal	-	988 (988)
Organisation "E"	Jr. Engineer	Equal	-	1 060 (1 060)
Competitive Adjusted Average ^b				1 009
Survey Organisation	Engineer I	Survey Position		953

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^aThis worksheet format is designed for use where only base salary data is involved.

^bEach organisation "Adjusted Average Actual Salary" given weight of one.

NOTE:

Survey organisation group-to-group progression rate of 1,1076 was used as the basis for adjusting data.

EXHIBIT F
SUMMARY OF ADJUSTED (UNADJUSTED)
SALARY DATA WORKSHEET^a

SURVEY POSITION TITLE: General Manager, Marketing
SURVEY POSITION NUMBER: 10

SALARY GROUP 20

Organisation	Title of Position	Evaluation Compared to Survey Organisation Position	Base Midpoint	Average Base Salary	Number of Incumbents	Average Years in Grade	Hypothetical Midpoint Adjustment Factor	Base Midpoint or Hypothetical Midpoint ^c	Job Weighting Factor	Adjusted Base Salary Midpoint	Adjusted Bonus and/or Other elements of Compensation ^d	Adjusted Total Compensation Midpoint
Company "A"	Marketing Director	-1	-	35 000	1	6	0,9851	34 497	1,1067	38 189	1 500	39 689
Company "B"	Vice Presid., Mkt.	+1/2	39 750	-	1	2	-	39 750	1,0538	37 721	-	37 721
Company "C"	Oil Sales Manager	Equal	-	36 500	3	3	-	36 500	-	36 500	2 000	38 500
Company "D"	Product Sales Mgr.	-1/2	38 000	-	1	6	-	38 000	1,0538	40 044	-	40 044
Company "E"	Marketing Director	+1 1/2	-	39 000	1	1	1,1033	43 029	1,1672	36 865	2 000	38 865
Competitive Survey Organisation	Adjusted Average ^b General Manager, Marketing		38 500	32 500	1	1	-	38 500		37 864		38 964

^aThis worksheet format is designed for use when the total compensation of one or more participating organisations includes base salary and other elements of compensation or when participating organisations do not have existing salary structures and hypothetical midpoints must be calculated.

^bEach organisation's "Adjusted Base Salary Midpoint" and "Adjusted Total Compensation Midpoint" given weight of one.

^cAverage salary and years in grade are used to calculate a hypothetical midpoint where a participating organisation does not have an established salary structure.

^dThe adjusted bonus and/or other elements of compensation should be the amount that the participating organisation would normally pay to an employee whose salary is at the organisation's adjusted base salary midpoint and whose performance level is comparable to the survey organisation's "MR" performance appraisal rating.

NOTE:

Survey organisation group-to-group progression rate of 1,1076 was used as the basis for adjusting data.

EXHIBIT G
TABULATION OF ADJUSTED TOTAL COMPENSATION MIDPOINT DATA

Salary Group	Position Title	Adjusted Total Compensation Midpoint					Competitive Ave. Total Compensation Midpoint (position Average)	Competitive ^C Total Compens. Midpoint (Salary Group Average)
		Company "A"	Company "B"	Company "C"	Company "D"	Company "E"		
10	Position "A"	12 480	11 232	12 228	11 856	12 720	12 103	
	Position "B"	12 336	11 832	11 616	11 484	12 144	11 882	
	^a Position "C"	14 928	14 323	14 760	14 592		14 652	
	AVERAGE:	12 408	11 532	11 922	11 670	12 432		11 993 (999)
11	Position "D"	13 121	13 117	13 785	13 137	13 305	13 293	
	Position "E"	13 313		^b 14 800	13 137	14 097	13 516	
	Position "F"	12 953	13 117	13 785		13 593	13 362	
	AVERAGE:	13 129	13 117	13 785	13 137	13 665		13 367 (1 114)
12	Position "G"	15 096	14 184	14 496	13 872		14 412	
	Position "H"	14 830	13 800			14 952	14 544	
	Position "I"	15 240		14 232	14 448	14 472	14 598	
	Position "J"	14 798	13 776	14 472		14 856	14 476	
	AVERAGE:	15 004	13 920	14 400	14 160	14 760		14 449 (1 204)
13	Etc.							

^a Position "C" was deleted because it's data was inconsistent.

^b Inconsistent data deleted.

^c The Competitive Average Total Compensation Midpoint (Salary Group Average) is the sum of the individual organisation salary group average divided by the number of these averages. In the case of Salary Group 10: (12 408 + 11 532 + 11922 + 11670 + 12 432 + 5 = 11 993).

EXHIBIT H

Competitive Average Total Compensation Trend Line

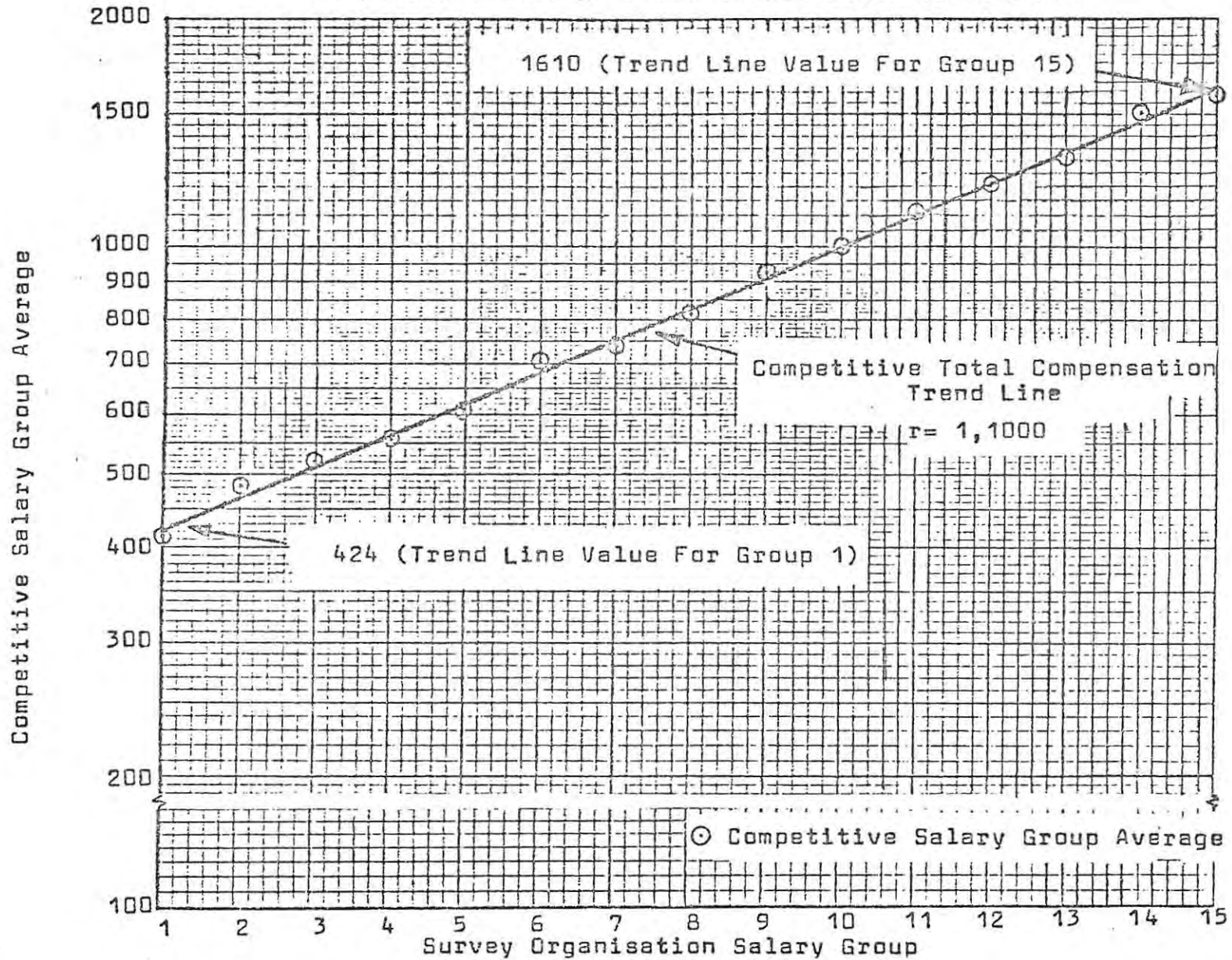


EXHIBIT I

Competitive Total Compensation Trend Line

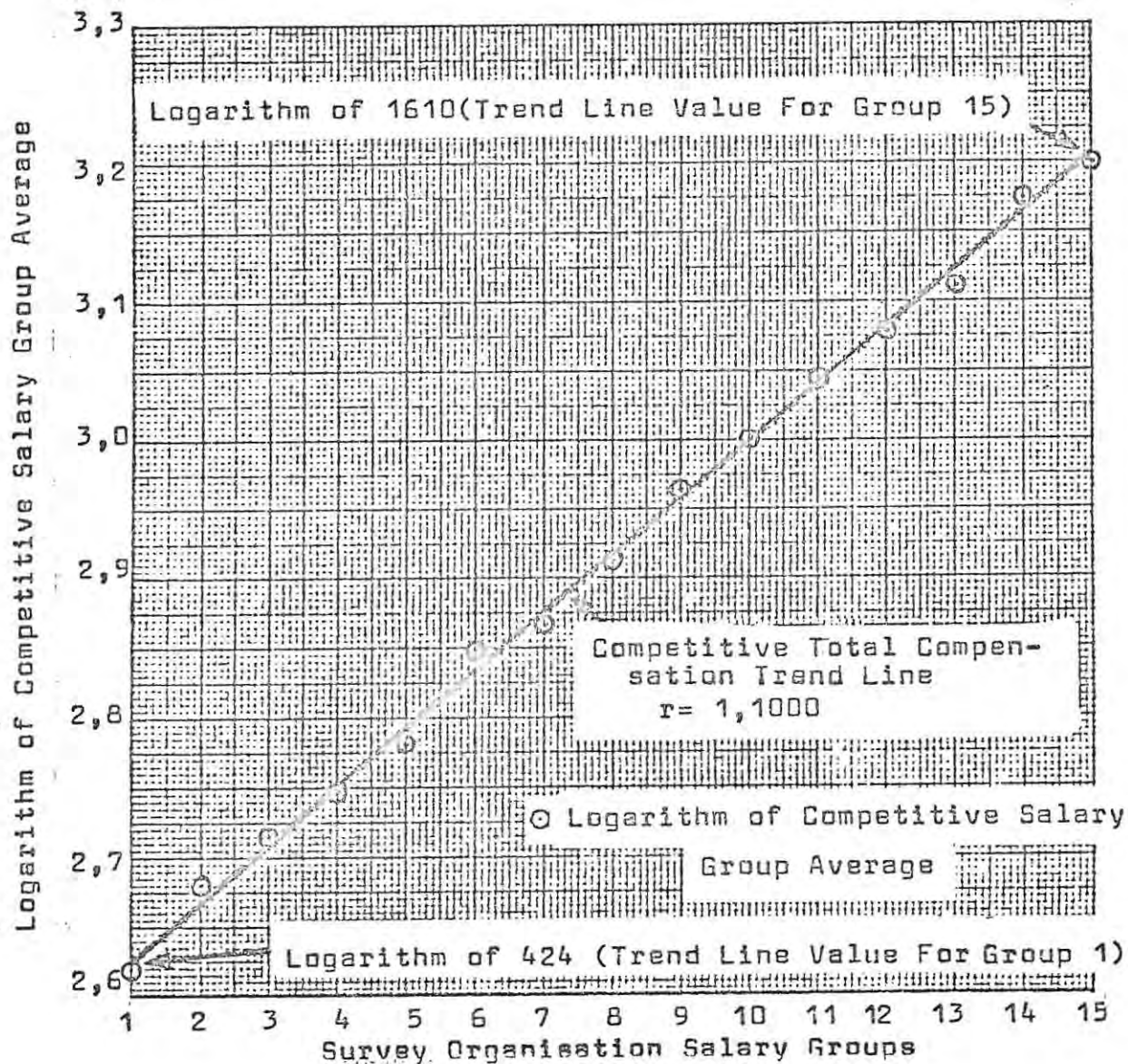


EXHIBIT J
Competitive Total Compensation Trend Line

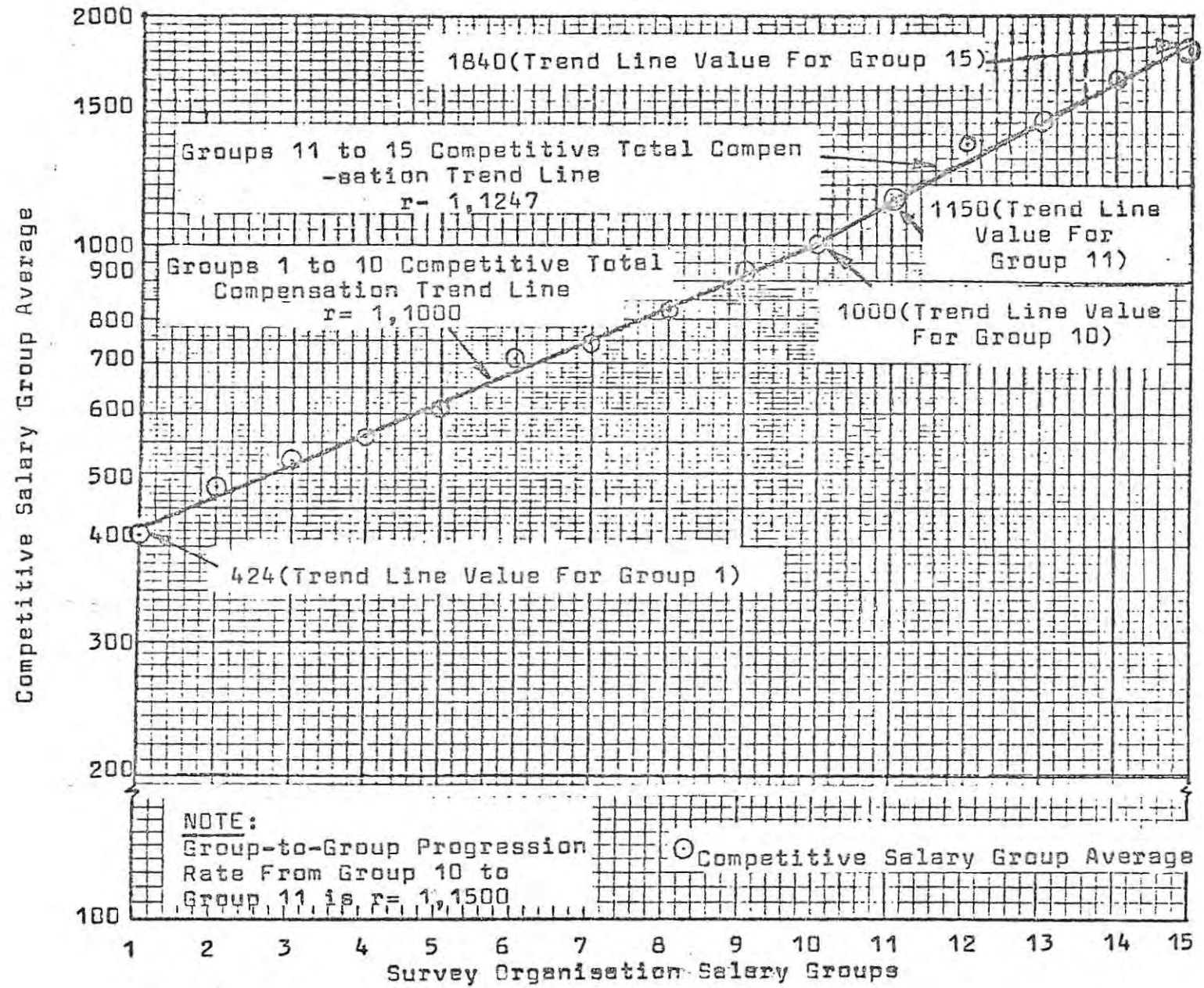


EXHIBIT K

Table of Group-to-Group Progression Rates for Selected Ratio Values

Number of Salary Groups in Structure	Ratio of Highest Salary Group Midpoint to Lowest Salary Group Midpoint								
	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
2	1.1000	1.2000	--	--	--	--	--	--	--
3	--	1.0955	1.1402	1.1832	1.2248	1.2649	--	--	--
4	--	1.0627	1.0914	1.1187	1.1447	1.1695	1.1935	1.2164	1.2386
5	--	--	1.0678	1.0878	1.1067	1.1247	1.1418	1.1583	1.1741
6	--	--	--	1.0696	1.0845	1.0986	1.1120	1.1247	1.1370
7	--	--	--	--	1.0699	1.0815	1.0925	1.1029	1.1129
8	--	--	--	--	--	1.0695	1.0788	1.0876	1.0960
9	--	--	--	--	--	--	1.0686	1.0762	1.0835
10	--	--	--	--	--	--	--	1.0675	1.0739
11	--	--	--	--	--	--	--	--	1.0663

Number of Salary Groups in Structure	Ratio of Highest Salary Group Midpoint to Lowest Salary Group Midpoint									
	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9
5	1.1892	1.2038	1.2179	1.2315	1.2445	--	--	--	--	--
6	1.1487	1.1599	1.1708	1.1813	1.1914	1.2011	1.2106	1.2198	1.2287	1.2373
7	1.1225	1.1316	1.1404	1.1489	1.1571	1.1650	1.1726	1.1800	1.1872	1.1942
8	1.1041	1.1118	1.1192	1.1284	1.1335	1.1399	1.1463	1.1524	1.1585	1.1643
9	1.0905	1.0972	1.1036	1.1097	1.1157	1.1213	1.1269	1.1322	1.1374	1.1423
10	1.0801	1.0859	1.0916	1.0970	1.1022	1.1072	1.1120	1.1167	1.1212	1.1255
11	1.0718	1.0770	1.0820	1.0869	1.0915	1.0960	1.1003	1.1044	1.1085	1.1124
12	1.0650	1.0698	1.0743	1.0787	1.0828	1.0869	1.0907	1.0945	1.0981	1.1016
13	--	--	1.0679	1.0719	1.0757	1.0794	1.0829	1.0863	1.0896	1.0928
14	--	--	--	1.0662	1.0697	1.0730	1.0763	1.0794	1.0824	1.0854
15	--	--	--	--	--	1.0676	1.0706	1.0731	1.0763	1.0790
16	--	--	--	--	--	--	1.0658	1.0685	1.0711	1.0735
17	--	--	--	--	--	--	--	--	1.0665	1.0688

EXHIBIT K- -continued
 Table of Group-to-Group Progression Rates for
 Selected ratio Values

Number of Salary Groups in Structure	Ratio of Highest Salary Group Midpoint to Lowest Salary Group Midpoint									
	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9
7	1.2009	1.2075	1.2139	1.2202	1.2263	1.2322	--	--	--	--
8	1.1699	1.1754	1.1808	1.1860	1.1911	1.1960	1.2008	1.2055	1.2101	1.2146
9	1.1472	1.1519	1.1565	1.1609	1.1653	1.1695	1.1736	1.1777	1.1816	1.1854
10	1.1298	1.1340	1.1380	1.1418	1.1456	1.1493	1.1529	1.1565	1.1599	1.1632
11	1.1161	1.1198	1.1234	1.1268	1.1302	1.1335	1.1367	1.1398	1.1428	1.1458
12	1.1050	1.1083	1.1115	1.1147	1.1177	1.1206	1.1235	1.1263	1.1291	1.1317
13	1.0959	1.0989	1.1018	1.1046	1.1074	1.1101	1.1127	1.1152	1.1177	1.1201
14	1.0882	1.0909	1.0936	1.0962	1.0987	1.1012	1.1035	1.1059	1.1082	1.1104
15	1.0816	1.0842	1.0866	1.0890	1.0914	1.0936	1.0958	1.0980	1.1001	1.1021
16	1.0760	1.0784	1.0806	1.0829	1.0850	1.0871	1.0892	1.0912	1.0931	1.0950
17	1.0711	1.0733	1.0754	1.0775	1.0795	1.0814	1.0834	1.0852	1.0870	1.0888
18	1.0668	1.0688	1.0708	1.0728	1.0746	1.0765	1.0783	1.0800	1.0817	1.0834
19	--	--	1.0668	1.0686	1.0704	1.0721	1.0738	1.0754	1.0770	1.0786
20	--	--	--	--	1.0665	1.0682	1.0698	1.0713	1.0728	1.0743

Number of Salary Groups in Structure	Ratio of Highest Salary Group Midpoint to Lowest Salary Group Midpoint									
	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9
8	1.2190	1.2233	1.2276	--	--	--	--	--	--	--
9	1.1892	1.1929	1.1965	1.2000	1.2034	1.2068	1.2102	1.2134	1.2166	1.2254
10	1.1665	1.1697	1.1729	1.1759	1.1789	1.1819	1.1848	1.1876	1.1904	1.1931
11	1.1487	1.1515	1.1541	1.1571	1.1597	1.1623	1.1649	1.1674	1.1698	1.1722
12	1.1343	1.1369	1.1394	1.1418	1.1442	1.1465	1.1488	1.1511	1.1533	1.1554
13	1.1225	1.1248	1.1271	1.1293	1.1314	1.1335	1.1356	1.1377	1.1397	1.1416
14	1.1125	1.1147	1.1167	1.1187	1.1207	1.1227	1.1246	1.1264	1.1282	1.1300
15	1.1041	1.1060	1.1079	1.1098	1.1116	1.1134	1.1152	1.1169	1.1186	1.1202
16	1.0968	1.0986	1.1004	1.1021	1.1038	1.1055	1.1071	1.1087	1.1103	1.1118
17	1.0905	1.0922	1.0938	1.0955	1.0970	1.0986	1.1001	1.1016	1.1030	1.1044
18	1.0850	1.0866	1.0881	1.0896	1.0911	1.0925	1.0939	1.0953	1.0967	1.0980
19	1.0801	1.0815	1.0830	1.0844	1.0857	1.0872	1.0885	1.0895	1.0911	1.0923
20	1.0757	1.0771	1.0785	1.0798	1.0811	1.0824	1.0836	1.0849	1.0861	1.0873

EXHIBIT K- --continued
 Table of Group-to-Group Progression Rates for
 Selected Ratio Values

Number of Salary Groups in Structure	Ratio of Highest Salary Group Midpoint to Lowest Salary Group Midpoint									
	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9
9	1.2228	1.2259	--	--	--	--	--	--	--	--
10	1.1958	1.1984	1.2011	1.2036	1.2061	1.2085	1.2110	1.2134	1.2157	1.2180
11	1.1746	1.1769	1.1792	1.1815	1.1837	1.1859	1.1880	1.1901	1.1922	1.1942
12	1.1576	1.1596	1.1617	1.1637	1.1657	1.1676	1.1696	1.1714	1.1733	1.1751
13	1.1435	1.1454	1.1473	1.1491	1.1509	1.1527	1.1544	1.1561	1.1578	1.1594
14	1.1318	1.1335	1.1352	1.1369	1.1385	1.1401	1.1417	1.1432	1.1448	1.1463
15	1.1218	1.1234	1.1250	1.1265	1.1280	1.1295	1.1309	1.1324	1.1338	1.1352
16	1.1133	1.1147	1.1162	1.1176	1.1190	1.1204	1.1217	1.1230	1.1243	1.1255
17	1.1058	1.1072	1.1085	1.1099	1.1112	1.1124	1.1137	1.1149	1.1161	1.1173
18	1.0993	1.1006	1.1018	1.1031	1.1043	1.1055	1.1066	1.1078	1.1089	1.1101
19	1.0935	1.0947	1.0959	1.0971	1.0982	1.0993	1.1005	1.1015	1.1026	1.1037
20	1.0884	1.0895	1.0906	1.0918	1.0928	1.0939	1.0949	1.0959	1.0969	1.0979

Number of Salary Groups in Structure	Ratio of Highest Salary Group Midpoint to Lowest Salary Group Midpoint									
	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9
10	1.2203	1.2225	--	--	--	--	--	--	--	--
11	1.1962	1.1982	1.2002	1.2021	1.2040	1.2058	1.2077	1.2095	1.2113	1.2131
12	1.1769	1.1787	1.1804	1.1821	1.1838	1.1855	1.1871	1.1888	1.1904	1.1919
13	1.1611	1.1626	1.1642	1.1658	1.1673	1.1688	1.1703	1.1718	1.1732	1.1746
14	1.1478	1.1492	1.1507	1.1521	1.1535	1.1549	1.1562	1.1576	1.1589	1.1602
15	1.1365	1.1379	1.1392	1.1403	1.1418	1.1431	1.1443	1.1455	1.1468	1.1479
16	1.1269	1.1281	1.1294	1.1306	1.1317	1.1329	1.1341	1.1352	1.1363	1.1374
17	1.1185	1.1196	1.1208	1.1219	1.1230	1.1241	1.1252	1.1262	1.1273	1.1283
18	1.1112	1.1123	1.1133	1.1143	1.1154	1.1164	1.1174	1.1184	1.1194	1.1203
19	1.1047	1.1057	1.1067	1.1077	1.1086	1.1096	1.1105	1.1115	1.1124	1.1133
20	1.0989	1.0998	1.1008	1.1017	1.1026	1.1035	1.1044	1.1053	1.1062	1.1070

EXHIBIT L
RECOMMENDED SALARY STRUCTURE

Salary Group	Minimum	Midpoint	Maximum
1	340	425	510
2	372	465	558
3	412	515	618
4	452	565	678
5	496	620	744
6	548	685	822
7	600	750	900
8	660	825	990
9	728	910	1 092
10	800	1 000	1 200
11	880	1 100	1 320
12	968	1 210	1 452
13	1 064	1 330	1 596
14	1 172	1 465	1 758
15	1 288	1 610	1 932

NOTE:

Group-to-group progression rate = 1,1000 (before adjustments).

Salary range spread = 50%.

EXHIBIT M
 COMPARISON OF RECOMMENDED SALARY STRUCTURE TO
 COMPETITIVE AVERAGE TOTAL COMPENSATION MIDPOINTS

Salary Group	Recommended Salary Structure ^a (Midpoint)	Competitive Average Total Compensation Midpoint	Percentage Recommended Midpoint Varies From Competitive Average Total Compensation Midpoint
1	425	414	+2,7
2	465	480	-3,1
3	515	520	-1,0
4	565	558	+1,3
5	620	606	+2,3
6	685	704	-2,7
7	750	740	+1,4
8	825	820	+0,6
9	910	924	-1,5
10	1 000	999	-
11	1 100	1 114	-1,3
12	1 210	1 204	+0,5
13	1 330	1 304	+2,0
14	1 465	1 500	-2,3
15	1 610	1 592	+1,1
Average Variance =			0,0

^aGroup-to-group progression rate = 1,1000 (before adjustments).

NOTE:

Group-to-group progression rate for Group 15 (recommended) to Group 16 (present) = 1,1280.

EXHIBIT N
COMPARISON OF RECOMMENDED SALARY STRUCTURE TO
PRESENT SALARY STRUCTURE

Salary Group	Recommended Structure (Midpoints) ^a	Present Structure (Midpoints) ^b	Percentage Recommended Varies From present
1	425	380	+11,8
2	465	421	+10,5
3	515	466	+10,5
4	565	516	+9,5
5	620	572	+8,4
6	685	633	+8,2
7	750	702	+6,8
8	825	777	+6,2
9	910	861	+5,7
10	1 000	953	+4,9
11	1 100	1 056	+4,2
12	1 210	1 169	+3,5
13	1 330	1 295	+2,7
14	1 465	1 435	+2,1
15	1 610	1 589	+1,3
Average Variance			=+6,4

^aGroup-to-group progression rate = 1,1000 (before adjustments).

^bGroup-to-group progression rate = 1,1076.

NOTE:

Group-to-group progression rate for Groups 16 and above = 1,1399.

Group-to-group progression rate for Group 15 (recommended) to Group 16 (present) = 1,1280.

EXHIBIT O
SALARY DATA WORKSHEET: AS INCORPORATED IN
REPORT TO PARTICIPATING ORGANISATIONS

POSITION TITLE Marketing Director - Head Office				POSITION DESCRIPTION NO. 1		
Company Code	Number of Employees	Base Salary Plus bonus	Comparability	Comments		
				Plus Car Benefits	Plus Entertainment Allowance	Plus Other Benefits
A	1	3033	Equal	275	67	67
B	-	-	-	-	-	-
C	-	-	-	-	-	-
D	1	1823	15% Light	175	75	-
E	1	2480	15% Light	175	-	-
F	-	-	-	-	-	-
G	-	-	-	-	-	-
H	1	3250	15% Heavy	275	200	-
I	1	3760	Equal	225	-	-
J	2	2771	15% Light	275	200	-
K	-	-	-	-	-	-
L	1	2763	Equal	275	80	-
M	-	-	-	-	-	-
N	1	3038	Equal	275	125	-
O	1	2347	30% Light	275	125	-
P	-	-	-	-	-	-
Mobil	1	2772	Survey Position	275	-	-

Number of Companies: 9
Community Average : 2807 (Arithmetic Mean)
Weighted Average : 2804
Median : 2771

APPENDIX II
EXAMPLES

EXAMPLE A
PERCENTAGE DEVIATION
CALCULATION (INDIVIDUAL)

If the Trend Line Value (752) is larger than the Average Base Salary Midpoint (740).

$$\begin{array}{r} \frac{752}{740} = +1,016 \\ \quad \quad \quad -1,000 \\ \hline \quad \quad \quad +0,016 = +1,6\% \end{array}$$

EXAMPLE B
PERCENTAGE DEVIATION
CALCULATION (INDIVIDUAL)

If the Trend Line Value (900) is smaller than the Average Base Salary Midpoint (924).

$$\begin{array}{r} \frac{900}{924} = +0,974 \\ \quad \quad \quad -1,000 \\ \hline \quad \quad \quad -0,026 = -2,6\% \end{array}$$

EXAMPLE C
AVERAGE DEVIATION
PERCENTAGE CALCULATION

Salary Group	Percentage Deviation of Trend Line Value from Average Base Salary Midpoint
11	-2,7
12	+2,2
13 No Competitive Average Base Salary Midpoint	
14	+1,3
15	-2,5
Total of minus deviations	= -5,2
Total of plus deviations	= +3,5
Remainder	= -1,7
Average Deviation (Variance)	= (-1,7 ÷ 4)
	= -0,4%

EXAMPLE D
MATHEMATICAL CALCULATION OF
GROUP-TO-GROUP PROGRESSION RATE

$$\begin{aligned}
 r &= \text{Group-to-Group Progression Rate} \\
 &= N-1 \frac{M_1}{M_2} \\
 &= N-1 R_m
 \end{aligned}$$

In this equation:

N = number of salary groups in structure.
 M_1 = midpoint of highest salary group in structure.
 M_2 = midpoint of lowest salary group in structure.
 R_m = M_1 divided by M_2 .

Example:

$$\begin{aligned}
 N &= 15 \\
 M_1 &= 805 \\
 M_2 &= 212 \\
 R_m &= 3,7972
 \end{aligned}$$

Substituting:

$$\begin{aligned}
 r &= 15-1 \frac{805}{212} \\
 &= 14 \cdot 3,7972
 \end{aligned}$$

$$\log 3,7972 = 0,57946$$

divide log 3,7972 by 14

$$\frac{0,57946}{14} = 0,04139$$

Then:

$$\text{antilog } 0,04139 = 1,1000$$

Thus Group-to-Group Progression Rate for this Example = 1,1000

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