

San Fernando Valley State College

A STUDY OF MOTIVATION AND COMPENSATION ADMINISTRATION

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ABSTRACT

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Formalized compensation programs have for the most part been implemented in industry to control costs and thus maximize return on investment. Maximum return implies a follow-through on the part of management beyond the installation and administration of the selected compensation program. It implies a requirement that the compensation function use optimum techniques in the administration of wages and salaries to insure that the monetary program truly motivates workers.

This study commences with a review of compensation and the Wage and Salary function. This is followed by an examination of management theory with emphasis on the behavioral approach. The succeeding chapter involves a look at methods whereby motivational findings might be employed in the practice of Wage and Salary Administration. The next chapter examines the results of an actual survey of firms in the Southern California area. In the final portion of the paper conclusions are drawn regarding the extent of application or non-application of motivational techniques based upon the sample of compen-

sation administration personnel examined in the study.

Chapter I

INTRODUCTION

This study involves a probe into the field of Wage and Salary Administration. It centers on a search into the behavioral knowledge and practices of a sample of compensation administrators in the Southern California area. The study naturally has certain limitations. The group surveyed involved a specific geographical area and a varied, though relatively limited, cross section of compensation managers in the Aerospace industry. Generalizations therefore are applicable only to these rather limited areas. The effort here is to ascertain whether these practitioners of this art are utilizing the techniques that theoretically should tend to maximize "return effort" for "dollars spent." Typically, the compensation field has emphasized control rather than the application of behavioral techniques to motivate or generate the maximum return from the dollar spent.

For foundation purposes we proceed initially with a brief review of man and his compensation.

In reviewing the history of man and his compensation, a number of current authors, including Zollitsch, Langsner, Lanham, and Brennan, examine first the theory of wages as viewed by the economists and then focus on man and his compensation from the days of serfdom to the collective bargaining era of the 20th century. A review of compensa-

tion must of necessity be closely tied to the history of labor. For the past half century, federal labor legislation has had a direct impact on compensation.

The classical economists referred to two major theories of wages: the subsistence theory and the wages-fund theory. The former is a long-range theory and the latter is short-range. Adam Smith and David Ricardo were proponents of the subsistence school. This theory stated that wage levels tended to be set at the minimum level required to feed, house, and clothe workers and their families.

The wages-fund theory, advanced by John Stuart Mill, stated that there was a fixed fund in the hands of the entrepreneurs which was the basis for wage payments. If the number of workers increased, the average rate decreased and also vice versa.

A number of other economic theories of wages followed these two classical ones. Francis A. Walker's residual claimant theory was one. This stated that labor was given what was left over after the factors of production, such as land, equipment and profit had been covered. Karl Marx's exploitation theory was another. The marginal productivity theory of John B. Clark¹ and the full employment theory of John M. Keynes² were still additional ones.

1. C. W. Brennan, Wage Administration (Homewood, Illinois: D. Irwin, Inc., 1963), p. 18.

2. E. Lanham, Administration of Wages and Salaries (New York: Harper's & Brothers, 1963), p. 20.

This latter theory of Keynes holds that the laws of supply and demand are not adequate in controlling the labor market. Keynesian theory calls for some sort of national wage policy to guide management and labor in determining wage policy.

Langsner and Zollitsch,³ the authors of Wage and Salary Administration, present a historical recap of the compensation field. They trace the economic status of the laboring man back to the day when slavery gave way to serfdom in the manorial system in early Europe. At this time, the laboring man was provided with just enough food and shelter, to subsist.

Then followed the "household period," where members of the household produced goods in the home. All activities followed rules established by the leader of the family, and all members' efforts were directed by this leader.

The "specialized trade" era followed where leading craftsmen of the specialized trades came to the forefront. Woodworking, carpentry, metalworking, stone-cutting, were some of the crafts that emerged. Next came the master craftsman, the journeyman, and the apprentice. This master craftsman organization eventually expanded into what is called the "cottage-trade" era. The master craftsman supplied the raw materials and tools to a number of workers who, in their own homes, processed the materials into finished products.

3. A. Langsner and H. Zollitsch, Wage and Salary Administration (Cincinnati, Ohio: Southwestern Publishing Co., 1961), pp. 21-40.

Following the "master-craftsman-cottage-trade" era came the Industrial Revolution. This era came with the invention of new machinery which led to the growth of the "factory system." The newly invented machinery and the greater production of goods stimulated the need for even greater production of these same items.

The final stage prior to the labor movement in the United States involved the "production system" which occurred in the nineteenth century wherein free trade, abundant natural resources, and a number of revolutionary inventions led to the creation of large industrial organizations run by "captains of industry."

In tracing labor organization growth in the United States, it is apparent that, even prior to development of the factory system, workers had banded together to protect themselves against low wages and long work hours. Between 1790 and 1799 trades such as printers, shoemakers, carpenters, and other craftsmen organized societies on the eastern seaboard of the United States and even staged strikes for higher wages and closed shops. Shoemakers, in Philadelphia in 1799, entered into collective bargaining. This was followed by the New York printers in 1809. In 1827 the Mechanics Union of Trade Associations was founded. Prior to 1837, the United National Trade Union was established. The Civil War in the 1860's had a great impact on manufacturing methods and hence the labor-industrial scene. In 1869 the Noble Order of Knights of

Labor was formed. This organization united miners and railroad men, and all the craftsmen and clerks, as well as the unorganized workers. By the year 1886 the Knights of Labor had three quarters of a million members and over 5,000 locals which constituted a large percentage of all the industrial workers of that period. Management was very adamant about these organizations and played a role in the ultimate dissolving of these groups. In 1886 officers of twenty-five unions met in Columbus, Ohio and organized all trades to form the American Federation of Labor (AFL). Samuel Gompers, a leader in the cigar-makers union, was voted president of this new organization.

The AFL during its early period was not oriented strongly toward the improvement in the compensation of its members. Its efforts however were directed primarily toward the improvement of unhealthy and hazardous working conditions and in the shortening of the twelve-hour work day.

The next organization of appreciable size was the Committee for Industrial Organizations (CIO). This was formed by a committee headed by John L. Lewis, president of the mining unions, in late 1935. This was a union of industrial (vertical) unions, i.e., unions in given industries such as rubber, automobile, and radio. After a somewhat stormy relationship during the 1930's and 1940's, these two unions, the AFL and CIO, merged into one union in December, 1955.

From the 1930's on, a series of federal laws had a great impact on the laboring man and his compensation. The initial legislation was the National Industrial Recovery Act of 1933. This act, later declared unconstitutional, was an attempt to equalize area compensation differentials.

In 1935 the National Labor Relations Act (Wagner Act) was passed, which guaranteed employees the right to self-organization: to form, join, or assist labor organizations to bargain collectively through representatives of their own choosing.

The Railroad Labor Act, originally passed in 1926, and amended in 1934, 1940, and 1952, provided for mediation and voluntary arbitration of wage disputes, and compulsory investigation by the National Railroad Adjustment Board before the calling of a strike.

In 1936 the Walsh-Healy Public Contracts Act set minimum wages and maximum hours for work done on public contracts exceeding 10,000 dollars or more.

The Fair Labor Standards Act of 1938 which was amended in 1939, 1941, 1949, 1955, etc., is probably the most important piece of legislation affecting the working man and his wages. The law provided for a 40-hour work week, overtime for time exceeding 8 hours per day and 40 hours per week. It also set a federal minimum wage and it prohibited the employment of children under 18 years of age.

Substantially, this was the picture up to and through the 1945 era in the field of compensation. In the early 1950's the specialized task of Wage and Salary Administration began to emerge as a distinct function in the field of Industrial Relations. Until this time, with a few exceptions, the administration of wages and salaries was handled primarily in industrial organizations as an informal function of, perhaps, the Director or Assistant Director of Industrial Relations. To be sure, there had been some development in this area. A limited number of firms had formalized compensation functions and some research had been done. Of note was the formulation of job evaluation plans in the mid 1930's. A leading example of this is the point evaluation system developed by Dr. Fischer at the Western Electric Corporation.

This plan developed by Dr. Fischer was, in the late 1930's and early 1940's, adopted at least in part by some two thousand firms in the National Metal Trades Association.

The concept of job evaluation was not new; its origin can be traced back to the principles of scientific management put forth by Frederick Taylor. The development of formalized techniques, however, did not have a beginning until this period in the mid 1930's.

In the late 1940's an innovative approach to compensation was developed: the incentive program originated by Joseph Scanlon. Scanlon was initially an official in the

United Steelworkers of America. He later joined the faculty of the Industrial Relations section of the Massachusetts Institute of Technology. The plan, or some form of it, has been applied in such companies as the Adamson Company of East Palestine, Ohio, the LaPointe Machine Tool Company, and the Stromberg-Carlson Company of Rochester, New York. Relatively speaking, the plan has not been widely accepted; however, it has been applied in some cases in industry and does indicate some cognizance of the behavioral impact in the area of compensation. The Scanlon plan involved the following distinct features:

1. The payment of a monthly bonus based upon the average level of production efficiency of the organization as a whole.
2. The organization of production committees securing the participation of the organization's members in the solution of production problems.
3. The introduction of the plan for participation of employees as well as management in decisions concerning both the details of the plan and its ultimate acceptance.

The bonus calculation is based upon Scanlon's requirement for determining some index of over-all efficiency; in most cases, this is the ratio of labor costs to sales dollars.

A more recent innovation in the field of compensation is the Kaiser Steel profit-sharing plan. This plan was installed in January, 1963 in the Kaiser Steel plant in Fontana, California. The descriptive company brochure states that the plan guarantees the employees:

1. Greater protection against loss of jobs or income because of technological change. (An employee's surplus pool was created where employees might be retained rather than laid off.)
2. A share in any cost reductions brought about through increased efficiency. Any savings in materials, supplies and labor costs were to be split 67.5% for the company and 32.5% for the employees. Monthly bonus to be paid from the employee's share.
3. Wage and benefit increases equal to, or better than, what might be granted by the rest of the steel industry. The company was to pay half the cost of any such increase effective during the first six months of the agreement. After that the employees' share of savings was to pay the cost, with the company picking up the deficit, if any.
4. Lump sum payments equal to a maximum of approximately 5,200 hours of incentive earnings were to

go to incentive workers who accepted a company offer to withdraw from incentive.

These incentive or profit-sharing plans are the most significant developed in the last twenty years. It is granted that there are numerous other examples of group incentive plans in industry. These however, to a great degree, have the scientific methods of Fredrick Taylor (time and motion studies) as their bases; and although recognizing, in a limited manner, the desire of the individual for added compensation, they do not generally embrace the behavioral concepts of commitment, participation, delegated decision-making, increased responsibility, and elimination of repetetive, boring tasks. They did not, at the time of their inception, reflect a significant trend toward behavioral application. A somewhat isolated example of an approach that did embrace behavioral techniques was the case of Nunn-Bush Shoe Manufacturing Company. This significant step in the evolution of man and his compensation was the development of the Nunn-Bush Fifty-two-Pay-Checks-a-Year-Plan. This plan was a product of the enlightened management philosophy of the company's president, Henry Lightfoot Nunn. This plan stands out as an exception in an era when the authoritarian approach to management was commonplace. In 1915, at the shoe manufacturing company he had helped to establish three years prior in Milwaukee, Mr. Nunn undertook a revolutionary step in establishing a joint worker-management committee.

This was called the Nunn-Bush Cooperative Society. It was an informal organization that took on functions of management such as discipline, discharge and the selection of new employees. The committee met with success and functioned for some twenty years.

In 1935 Mr. Nunn enlarged on his original idea. After the long period of good relations with the worker organization he offered a new compensation plan to his employees. The plan was designed primarily to stabilize the worker's income and tie his compensation to the amount of production achieved by the company. Mr. Nunn's preliminary research indicated that, for the 10 years prior to 1935, cost of labor centered around 20% of net sales. With the premise that labor costs would be pegged at this percentage of sales, the following plan was offered to and accepted by the Nunn-Bush Cooperative Association:

1. Annual earnings for each worker would be estimated for the coming year on a 48-week, 37 hours per week basis at the same rate as the previous year. This pay was to be distributed on a 52-week basis.
2. Actual annual pay would be determined by examining the factory's total production for each month and comparing 20% of the production figure against actual wages paid for that period. When the value of the production was up, the differ-

ence between the 20% figure and the actual wages paid was distributed to the worker as increased earnings.⁴

The plan was a huge step forward in motivating the worker through compensation. By means of the plan, the worker's effort and monetary return were tied to the production value of the factory output. The plan was an outstanding accomplishment for its time. It subsequently required revision due to the fact that it did not allow for a rise in the cost of materials and other factors of production that could erase management's profits in a runaway cost situation. Such a condition occurred, and in 1948 the plan was revised to a "per cent of added value." This added value represented the difference between the cost of the raw materials and sales. Theoretically, this figure was the "value added" by the efforts of labor. The management of Nunn-Bush was thus protected when cost of materials rose.

The first part of this chapter traced briefly the history of the laboring man and his compensation. The second part investigates what the Wage and Salary Administration function is and what it entails. Wage and Salary Administration, by title, is an attempt to control the cost of labor and place the cost of this commodity in its proper relationship with the other components of the

4. H. L. Nunn, The Whole Man Goes to Work (New York: Harper Bros., 1953), pp. 97-105.

finished product, such as materials, etc. The functions and responsibilities statement of typical manufacturing firms list job evaluation, preparation of job descriptions, administration of merit increase program, survey of comparable area rates, audit of job description applications, control of job applications, etc., as typical operations in the compensations function. Job evaluation encompasses the analysis of responsibilities involved in a specific set or tour of duties. This analysis or evaluation can encompass, on the one hand, an elaborate point grading system wherein scoring is given for factors such as Mental Development, Job Knowledge, Experience, Analysis Required, Decision Making Responsibilities, Hazards, Cost Responsibility;⁵ at the other extreme it can be a relatively simple ranking or slotting system, where jobs are merely ranked or slotted by an estimation process. Preparation of job descriptions is self-explanatory. Administration of merit increase programs involves the overseeing and coordination of the movement of individual salaries within the specified "control" or rate ranges. This includes counseling supervision to foster uniform, equitable handling of subordinate's salaries. Area surveys entail the establishment and maintenance of liaison with compensation functions of other area firms to the end of insuring that company rates are competitive. Control of job application usually

5. Plan for Grading Non-Supervisory Non-Professional Shop and Office Type Jobs, Western Electric Company, Kansas City Works.

involves the review of paperwork reclassifying workers within the firm to prevent movement into improper classifications. "Audits" involve investigation of current job description applications to see whether the duties actually being performed are those for which the job description and resulting rate of pay were established.

After reviewing compensation, identifying some of the typical responsibilities of the Wage and Salary function, the final portion of this chapter examines the rationale behind this paper. Essentially, this study is an examination of the maturity of the field of Wage and Salary Administration. As stated previously, the establishment of limits, parameters, or controls on wages and salaries is only one dimension of maximizing or optimizing the dollar return for wages and salaries. To set wage rates based on standardized procedures of "key job examples" and "prevailing area rate" surveys are two examples of shop-worn, routine procedures for controlling or establishing parameters for compensation costs. This is only part of the job. We point to the fact that the Wage and Salary Administrator should also consider whether his control techniques are, in fact, those techniques which, according to the behavioral scientists, are those most conducive to fostering maximum return to the organization by motivation or stimulation of the worker. We are not stating that it is the prime responsibility of the Wage and Salary Administration Department to motivate the worker. This is the

task of line supervision. However, the Wage and Salary Administrator is responsible to see that those segments of the compensation program affecting the worker are communicated to the recipient in the best manner to stimulate or motivate. In this study, it will be necessary to re-search the findings of the behavioral specialists and identify how these findings might be applied to Wage and Salary Administration. Then a test will follow of the specific knowledge and practice of behavioral theory by a typical sampling of responsible Wage and Salary Administrators.

SUMMARY OF CHAPTER

In this chapter we have reviewed, in general terms, the history of the laboring man and his compensation, and we have identified some of the operations and responsibilities typically found in the industrial compensation function. In the final portion we have documented the purpose of this research: to examine the compensation function to establish whether responsible Wage and Salary Administration personnel know, or practice unknowingly, the precepts of the behavioral specialists.

Chapter II
MANAGEMENT THEORY
AND THE INDUSTRIAL ORGANIZATION

I. The Industrial Work Environment

Bertrand Russell once summed up the industrial work situation by stating that "Mankind decided that it would submit to monotony and tedium in order to diminish the risk of starvation."¹

A significant percentage of the world's population is living in what is called "industrial society." This society dictates a set of social norms regarding such matters as dress, time, order, and authority, which must be conformed to, at least during the time that individuals are engaged in their industrial occupations. This aspect of our industrial order is easily recognized.²

These social norms can be identified as social pressures, uniformity of behavior, or shared frames of reference. A social norm is a rule which is binding on the behavior of individuals in a group.

The industrial work group formulates social pressures which act as catalysts on the behaviors

1. E. M. Hugh-Jones, (Ed.), Human Relations and Modern Management (Amsterdam: North-Holland Publishing Co., 1958), p. 43.

2. A. Inkeles, "Industrial Man: The Relation of Status to Experience, Perception and Value," American Journal of Sociology, LXVI, No. 1 (July, 1960), pp. 1-31.

and thoughts of the workers.

Within the framework of authority, most social norms are influenced by management's patterns of leadership. The leader or manager serves as a focus for the emotional feelings of the individual; he is an object for identification, for transference, for the feeling of submissiveness. Psychoanalytic theorists have stressed this feature of the relationship of the leader to his followers, and there is little doubt of the major role that it plays in accounting for the tremendous powers of leaders in group circumstances.³ Many leaders are successful because of their great personal power, which has been described as charismatic. Turning to "father figures" who will satisfy all wants is part of modern man's effort to gain security. This is a satisfaction of the need for security by identification with, and sharing the personal power of the leader.⁴

A big factor contributing to the individual's insecurity in the work group is the bigness of industry and the resulting loss of individuality. Because everything is getting bigger except the individual, he becomes smaller, more insignificant, and more dependent on larger social units.

3. B. M. Bass, Leadership, Psychology, and Organizational Behavior (New York: Harper and Brothers, 1960), pp. 224-226.

4. Ibid. pp. 224-226.

II. Scientific Management

This is a body of theory (predominant from 1910 to 1935) which viewed organizations as if they existed without people. An American engineer, Frederick W. Taylor, more than any other individual, advanced this philosophy of management. Taylor, the "father of scientific management," attempted to rely on a "third force" that would mediate between man and the organization, and he also stressed the impersonal rationality of management. The scientific management movement included studies on job methods and layout of work, the development of time and motion study, and the standardization of parts and processes.

The theories of Taylor and his followers had certain features in common. These theories were all machine-derived; that is, they tried to create an organizational form which was compatible with the technological requirements of machine production. They viewed the organization as a machine to turn out a collective product; by extension, the parts and human units of the organization were required to meet the same interdependent relationships.

There are great flaws in this approach to organization. The theories of scientific management are essentially non-psychological and attempt to specify the manners in which human activities are organized,

without taking into account the nature of human beings. These theories assume that for any function which is to be performed in an organization, there is one best method which can be prescribed and that it is the business of a management expert or a time-and-motion engineer to discover that method. It remains only to procure a worker, teach him the simplified motions of the best-of-all-possible methods, and then arrange for him to repeat those motions each hour of the day at the pace which time study sets as "normal."

This approach emphasizes the non-psychological aspect of scientific management. It is non-psychological in its disregard for the feelings and needs, the satisfactions and frustrations of men in the work situation. It is also almost a non-motivational system, in that only the motive to earn money is taken into account. One other implication of this approach to management is that work is drudgery, intrinsically unrewarding and offering no important social satisfactions except through the spending of one's wages.

Following the approach of Taylor, a trend developed in industry which enlarged upon scientific management and emphasized the social-psychological aspects of work and work organization. This second group of theories was appropriately called the human relations approach. Here people were regarded essentially as if they existed without organizations.

III. A Summary of Selected Behavioral Research Findings

The Western Electric (Hawthorne Studies)

The Hawthorne Studies at Western Electric were the earliest of the notable human relations research activities. This famous study of human relations in industry was conducted by Elton Mayo, F. J. Rothlisberger, and associates. This series of experiments with industrial work groups was undertaken during the late twenties and early thirties at the Western Electric Company's Hawthorne plant in Chicago. The people who initiated these studies were primarily interested in discovering the working conditions most conducive to increased productivity among employees doing assembly work. In other experiments in prior years a number of companies had attempted to increase output by rearranging rest periods which could combat "fatigue," a physiological condition which was presumably influenced by the physical conditions of work. In the Western Electric experiments, it was determined that worker fatigue was not the main problem, but rather the broader aspects of monotony in work, and of "incentives."⁵

In these experiments, Mayo and his team⁶ decided to introduce various wage incentive plans as

5. M. S. Olmsted, The Small Group (New York: Random House, 1959), p. 26.

6. Ibid. p. 26.

variables, in addition to the older variables of work, space, and lighting conditions. By combining and recombining incentive schemes and working conditions they hoped to discover the most efficient and productive work arrangements. The operation selected was that of assembling telephone relays. It consisted in "putting" together a coil, armature, contact springs, and insulators in a fixture and securing the parts in position by means of four machine screws; each assembly took about one minute when the work was going well.⁷ This was a repetitive operation and was performed by six women; the special observation room was known as the Relay Assembly Room.

Regardless of the presence or absence of the variables which were presumed to affect productivity, the output of the six girls continued to rise over the two-year period of the experiment. The explanation for this behavior was not difficult: The psychological conditions of work had improved. The Relay Assembly Room girls thought that working in the experimental room was more fun; supervision did not seem to them to be as constant or as onerous; they knew that the eyes of the company were upon them.⁸

7. E. Mayo, The Human Problems of An Industrial Civilization (New York: The Viking Press, 1933, 1960), p. 55.

8. Olmsted, op. cit., p. 27.

The existence of new social forces served to enhance the favorable reaction of the individual operators to the experimental situation and create new drives to increased output.⁹

The major experimental variable to be tested in the Bank Wiring Observation Room¹⁰ was a series of wage incentive schemes built around management's assumption that workmen are economically "rational." Once again, the results did not confirm the assumptions. It turned out that the workers' brand of rationality was different from management's; where management thought it logical for a man to work extra hard for extra pay bonuses, the workers under observation thought it logical not to jeopardize their jobs by demonstrating that they really could work much faster than the managements' payment plan assumed.¹¹

The observed outcome of the Bank Wiring Observation Room was the restriction of output. This study revealed the same phenomenon as the Relay Assembly Room: the importance of an informal social group with its special rules and obligations.

The work of Mayo and associates showed beyond doubt that in an apparently well-managed "efficient"

9. Ibid., p. 28.

10. Ibid., p. 28.

11. Ibid., p. 28.

plant, productivity was systematically restricted by workers, incentive pay did not have the intended motivational effects and supervisors were regarded with marked hostility. In addition, the attitudes and values of the workers, which were different from the assumption of scientific management, amounted to a system of norms and values which were enforced through a second or informal organization. This organization had been created to meet needs which the foreman organization either ignored or directly frustrated. Through this informal organization the workers were able to regulate the pace at which they would work, could work under the jurisdiction of leaders of their own choosing, and on occasion neutralize the vast apparatus of the formal organization. The great significance of the Hawthorne experiments was in their recognition of the human waste which was associated with a "scientifically managed" plant, and their implication that potential for improvement in efficiency rested in a better understanding of the human factors in organization.

The Other Behaviorists

After the Hawthorne Studies in the early 1930's, a serious dearth of behavioral research in industry existed. This is logical in view of the fact that through the 1930's much of industry was fighting for

its business survival. In the early 1940's the same concerns were intent on maximum production to insure their physical survival. In the second half of the 1940 decade the major efforts were directed at re-adjusting to peace-time products and peace-time production schedules. Commencing in the early 1950's behavioral studies in industry increased. A series of studies in this decade were conducted. While it would be difficult to single out one particular author as making a breakthrough, each of the studies contributed to a general viewpoint or school of thought which gave greater insight to the modus operandi of the human being in the industrial environment. The viewpoints of some of these behavioral researchers are sketched briefly hereinafter to set the stage, or give the reader a feel for a composite feeling of the behaviorists.

Chris Argyris

The first behavioralist work we examine is Chris Argyris' book, Personality and Organization. Argyris feels that the individual's needs and the formal organization's demands are basically incompatible. The outcome of these frustrations can be observed through a variety of defense mechanisms which can ultimately lead to the breakdown of the organization's goals and individual's own mental health.¹² Argyris

also feels that the basic principles of formal organization create a basic incongruency between the needs of a mature personality and the requirements of a formal organization, and that these principles hamper the growth toward a "total personality" and "self-actualization."¹³

While other authors such as McMurry believe that most persons are children and want to be led, Argyris maintains that that is the way it is, but that the organization forces them into this mold and they could be much different.

Argyris suggests three possibilities that would enhance work in the industrial organization, and thus lead to the "total human personality": (1) job enlargement, (2) employee-centered leadership, and (3) reality leadership.¹⁴ He says that a "democratic" leader permits much more self-actualization. Self-actualization is explained as an individual "realizing his full potential." Argyris sees good in all men (i.e. humans, when left free, will move toward the total personality). Authors such as McMurry sees all humans as lazy and in the need of being led.

12. C. Argyris, Personality and Organization (New York: Harper and Brothers, 1957), p. 86.

13. Ibid., pp. 58-66.

14. Ibid., pp. 177-193, pp. 205-208.

With democratic leadership, its effect on the group is (1) greater cohesiveness, (2) greater group productivity whether the leader is present or not, (3) increased job satisfaction and morale, (4) relatively broader time perspective, and (5) greater flexibility in behavior.¹⁵

Rensis Likert

This author states:

On the basis of a study I did in 1957, I believed that morale and productivity were positively related; that the higher the morale, the higher the productivity. Substantial research findings since then have shown that this relationship is much too simple.¹⁶

Likert and his associates found organizations with all the logical possibilities--high morale with low morale and low productivity.¹⁷

Douglas McGregor

Another system of thought attempts to deal with the tension between individual needs and organization demands. This thought was developed in McGregor's The Human Side of Enterprise. McGregor recognizes

15. C. Argyris, op. cit., p. 189.

16. R. Likert, "Developing Patterns of Management," Strengthening Management for the New Technology (American Management Association, 1955), p. 13.

17. R. Likert, New Patterns of Management (New York: McGraw-Hill, 1961).

the basic conflicts within the personality and asserts that from these conflicts, new and creative resolutions may emerge.

McGregor establishes four principles of organizational leadership: (1) authority is the central, indispensable means of managerial control, and that it is based on task or goal demands (objectives) which finally results in "target setting," a joint effort between superior and subordinate in an attempt to fix standards for work and productivity; (2), there is need for interdependence (collaboration) between the superior and subordinate; (3), subordinates are capable of exercising self-control (indication of maturity); and (4), a need exists for integration or the bringing together and working through of the differences between individual and organizational needs. McGregor says:

The central principle which derives from Theory Y is that of integration: the creation of conditions such that members of the organization can achieve their goals best by directing their efforts toward the success of the enterprise.¹⁸

The main segments of McGregor's theory consist of target-setting, self-control by the subordinate, interdependence, and integration. Aside from the problem of self-control which comes from satisfying

18. D. McGregor, Human Side of Enterprise (New York: McGraw Hill, 1960), p. 49.

work tasks there is a problem of just how much collaboration one can expect between superior and subordinate. In other words, can both the superior and subordinate perceive each other as human beings with needs and wants, and having realistic power? This is the same view that Likert puts forth in his principle of supportive relationships:

The leadership and other processes of the organization must be such as to insure a maximum probability that in all interactions and all relationships with the organization each member will, in the light of his background, values, and expectations, view the experience as supportive and one which builds and maintains his sense of personal worth and importance.¹⁹

Robert McMurry

McMurry concludes that modern organizational structure should be based on the concept of the "benevolent autocracy." He states that while democratic, participative management may be the ideal, we must be realistic about people and practical about work. The democratic-participative philosophy of management is incompatible with the bureaucratic traditions of most corporations. McMurry goes on to say that the bureaucratic personality does not want responsibility and independence; it prefers regimentation, routinization and structure. He also claims

19. R. Likert, op. cit., p. 107.

that it is simply not possible in business to delegate much autonomy below the top echelons of management. Finally, to a large number of employees, "participative" management is interpreted to mean that the employees have the right to veto management's decisions. Therefore, while employees have a few positive contributions to make, many are not at all reluctant to demand their "rights."²⁰

The answer apparently is a modification of the autocratic-bureaucratic approach. McMurry says that we must recognize the very disagreeable aspects of Theory X type management and minimize ill effects by eliminating the worst features, introducing certain "cushioning" practices, and adapting methods oriented to the needs of the employees, the result being a "benevolent autocracy."²¹

David Riesman

Today the individual must be adjusted to the group: he must above all else be sensitive to the feelings and attitudes of others, and he must get an idea of how others expect him to act, and then react to this.²² This is the insecure world which David

20. R. N. McMurry, "The Case for Benevolent Autocracy," Harvard Business Review, XXXVI, No. 1 (Jan-Feb, 1958), pp. 82-84.

21. Ibid., p. 85.

22. E. C. Bursk, "The New Perspective," Human Relations for Management (New York: Harper and Brothers, 1956)

Riesman has described in his book, The Lonely Crowd. He pictures man as being no longer "tradition directed" as if by the gyroscope of his own ideals, but today's man is "outerdirected" as if by radar. He must constantly keep his antenna tuned to the attitudes and reactions of others to him.²³

Kurt Lewin

Another pioneer associated with the work of human relations was Kurt Lewin. It was he who popularized the term "group dynamics" (study of small groups), and made significant contributions to both research and theory in this field. Group dynamics began in the United States toward the end of the 1930's. The basic assumptions held by most group dynamicists may be summarized as follows:

- (1) Groups are inevitable and always present.
- (2) Groups mobilize powerful forces which produce effects of utmost importance to individuals.
- (3) Groups may produce both bad and good consequences.
- (4) A correct understanding of group dynamics permits the possibility that desirable consequences from groups can be deliberately enhanced.²⁴

23. D. Riesman, The Lonely Crowd: A Study of the American Character (New York: Doubleday Anchor Books, 1950), pp. 275-298.

24. Cartwright and Zander (Eds.), Group Dynamics: Research and Theory, 2nd Ed. (Evanston, Illinois: Row, Peterson and Company, 1960), pp. 34-35.

The study of group dynamics has been guided by a great variety of theoretical orientations.²⁵ Overall, group dynamics involves a basic understanding of group life, the idea of democratic leadership, and group decision making, as well as the importance of participation in motivating people.

Keith Davis

According to this author, a characteristic of the informal organization is communication. The systems of communication that arise help fulfill the needs of the group's members by keeping them aware of what is occurring in the formal organization.

Workers identifying themselves with the informal organization gain a sense of security by this association.

The new employee joins a work group as an outsider, and he collides with this protective attitude of the group. Although his formal induction is achieved in one day, his social (informal) induction may take weeks or may never be achieved. He may remain an isolated outsider. He does not join the group in the true sense of the word; he has to be accepted into it.²⁶

Bernard Base

It has been found, in a study by Base, that the degree of efficiency in a work group is related to the

25. Ibid., pp. 40-41.

26. K. Davis, Human Relations in Business (New York: McGraw-Hill Co., Inc., 1957), p. 21.

extent of congeniality of the individual members and the attitudes of the members toward each other. Some of Bass' conclusions are given below:

1. In pleasant, convivial work groups, high efficiency will be a little more likely to occur when the groups are perceived to regulate the behavior of individuals while they are functioning as group members and place restrictions on their complete freedom of behavior: This is also true, but to a lesser extent, in groups where membership is accompanied by griping, complaining and unpleasant feelings. In both pleasant and unpleasant work groups, perceived lack of control of member behavior is indicative to the same extent of lack of efficiency.
2. Characteristics indicative of both formal and informal relations among group members appear to be observed slightly more often in efficient than inefficient groups regardless of the degree of pleasantness.
3. Behavior indicating ease of communication among members is very much

indicative of high efficiency in pleasant, convivial groups, but to a much smaller extent in unpleasant groups, while behavior indicating communication difficulty appears practically unrelated to group efficiency in both pleasant and unpleasant groups.

4. While the existence of intimacy among the members may be slightly related to the existence of high efficiency in unpleasant groups; in fact, aloofness may be slightly more conducive to efficiency in unpleasant groups.
5. The more the leader mixes with his group, stresses informal relations between himself and the members and is considerate of their welfare, the more likely is the group to be regarded as efficient -- more so in pleasant than in unpleasant groups.

Thus, the results of this study indicate that the greatest changes in efficiency in pleasant groups will

be effected if morale is raised by increasing cooperation, participation, commonness of purpose, etc., similarly, efficiency in pleasant groups will decline if factors tending to lower morale are introduced. Hence, the attitude of the group has an effect upon the production output of its members.²⁷

Morris Viteles

This author found that when a worker moved from the vicinity of a slower worker to that of a faster worker, his production increased.²⁸

Research has shown that "congenial work groups are conducive to teamwork and associated advantages are said to develop more readily when the number in the group is small, although strong cohesion may also occur in larger groups characterized by a substantial core of employees who have worked together for a long time."²⁹

Rosmussen and Zander

A study was made by these authors to determine the state of mind of the individual with respect to group identification. They found that:

27. B. M. Bass, "Feelings of Pleasantness and Work Group Efficiency," Personnel Psychology, Vol. 7, No. 1, (1954), p. 81.

28. M. S. Viteles, Motivation and Morale in Industry (New York: W. W. Norton and Co., Inc., 1953), p. 134.

29. Ibid., p. 139.

Groups develop standards which influence the behavior of their members. When these group standards represent valued practices, such as professional skills or beliefs, they may serve as personal levels of aspiration for the members. Thus, lack of conformity to the group norms should be perceived as non-achievement of one's ideal level of performance and provoke feelings of success. The stronger the attractiveness of the group, the more will the member wish to comply with the group's standards, and greater will be the desire to achieve his personal (but group included) level of aspiration. Thus, the more nonconformity and the more attractive the group, the stronger the feelings of failure.³⁰

John T. Longetta

This researcher found that as stress increases, individuals attempt to keep interpersonal tensions at a low level, substituting positive, group-oriented behaviors for negative, individually-oriented behaviors.

Under increased stress, members of a group show more behavior which tends to reduce interpersonal tension and friction and less behavior which might lead to increased disharmony.

Apparently, in the face of the external stress and anxiety, the group members regard the group as a source of security and thus attempt to maintain their

30. G. Rosmussen and A. Zander, "Group Membership and Self Evaluation," Human Relations, Vol. 7 (1954), pp. 239-251.

position in it and prevent rejection by becoming more cooperative and friendly.

It was found that productivity, efficiency, and morale were highest under mild stress and about the same under non-stress and high stress conditions. This would indicate that the problem solving performance of the group was best under mild stress and about equal under non-stress and high stress.

Activity, interest in job completion, motivation, and morale are all perceived to be highest under mild stress and about the same under the other two stress conditions.

The results suggest that stress may not always be detrimental to performance, that a certain amount of stress may actually facilitate good performance, although those experiencing the stress may not perceive the facilitation.³¹

From the previous discussion, we see that the atmosphere of the group has a definite effect on the production and output of the individual workers.

SUMMARY

In this chapter the industrial work environment has been reviewed, and the theories of management, from the scientific management of Fredrick Taylor to the present-

31. J. T. Longetta, "Group Behavior Under Stress," Human Relations, Vol. 8, No. 1, (1952), p. 56.

day behavioralists such as Likert, Argyris and others have been examined.

Chapter III
BEHAVIORAL FINDINGS AND THEIR APPLICATION
IN WAGE AND SALARY ADMINISTRATION

Having examined the behavioral authors' viewpoints, the next step is the application of these views to the practice of compensation administration.

In an overview we examine first the behavioral approach of creating an open, frank, or straightforward environment. In relating this to the practice of compensation administration, this might entail conscious effort on the part of Wage and Salary people to orient members of management and other employees on the workings of the company's compensation system. This would be in lieu of a secretive, closed approach where the Wage and Salary man guards his little empire and seeks to keep "outsiders" in the dark regarding compensation matters so they will not become a threat to him by becoming knowledgeable and hence capable of raising pertinent questions. An administrator employing the open, straightforward approach, in addition to trying to educate on the workings of the system, might also seek some media for transmitting the theory or philosophy of the compensation program.

He might try to demonstrate to the employees the basic compensation philosophy and then as a follow-up, present the actual results of the program as it is being implemented. This could take the form of a periodic,

statistical report distributed to supervision wherein actual salary and employee performance statistics are presented to show that the compensation program is in fact rewarding good performers. He could publish promotion statistics which demonstrate the rewarding features of the compensation program. Likewise, he could show unidentified individual salary retardations as examples of non-performance or non-reward. In general, the Wage and Salary man might apply this behavioral technique by adopting a more straightforward approach to the compensation function. By relating his "rate ranges" and "in-grade position" statistics to human beings--by putting himself in the shoes of the recipients of his compensation policies and asking the question, "What does it all mean to me as an individual?" -- these are some of the things that compensation people might consider in establishing a more "open" and perhaps more effective approach to the task.

Having examined the over-all features of this approach, we examine now some of the specific items brought forth by the behavioralists.

One of the behavioral authors, Chris Argyris, states that "job enlargement" is a method of stimulating or motivating employees. By job enlargement he means a broadening or expanding of an individual's assigned responsibilities and duties with the intent of eliminating monotony and tedium and with the hope of fostering interest, more participation and commitment from the employee. It is in

this area where responsible and cognizant compensation personnel can be most active in implementing behavioral findings. In most firms, the Wage and Salary function has some jurisdiction over the establishment of jobs, or "tours of duties." It is usually true that the line organization has a combination of duties in mind when they request a new job be set up; however, the Wage and Salary function normally would have at least the right to question or make recommendations regarding the combinations of duties.

Another point of the behavioral approach is a good understanding of the informal groups. If the Wage and Salary administrator, in his daily dealings, would maintain an awareness of the peculiarities of the informal group, his implementation of the compensation program might be more effective. If the Wage and Salary administrator would attempt to communicate and to make use of those informal communication channels, he might design and present his compensation program in a manner that would best utilize the informal group phenomena. Examples of this might be direct personal contact with individual employees or groups of employees to "tap" into the informal communications network. This would be in lieu of depending upon the formal channels such as communicating through the supervisors. Personal counseling sessions on compensation matters, group training, or question-and-answer surveys on employee reactions to the compensation program are some other specific techniques.

The enlightened compensation manager might also consider the findings of the behavioralists in the broad area of "democratic" leadership. While the principles of "commitment" and "participation" apply primarily to the work group, they can be related to the compensation function. The idea of "democratic" leadership emphasizes the creation of an open, frank, environment where the worker feels that he is being treated fairly. The compensation manager who is cognizant of these "democratic" principles and who makes an effort to publicize and "sell" the good features of the compensation program can be instrumental in achieving "commitment" on the part of the worker. With the feeling that the compensation program is the most conducive to achieving fair pay in relationship to other employees in the firm, the worker is more likely to "get on the bandwagon" and work for the good of the organization. The typical compensation program does not normally lend itself to "participation," as defined by the behavioralists. The worker cannot actively participate in the decisions regarding new hire salary determinations, nor coordination of merit increases between departments. However, through the use of such techniques as personal counseling, attitude surveys, "suggestion boxes," question and answer sessions, the worker can be given the feeling that he is "participating." This might be evident to him when the compensation manager is able to incorporate into the compensation program worthwhile contributions obtained from these

aforementioned media.

If the compensation manager is knowledgeable of the behavioral studies, he might also realize that the informal work group establishes and maintains its own norms or standards. With this awareness, the enlightened compensation manager might look beyond what he or the rest of management believe are the "values" or "desires" of the group. Rather, he might find out what, specifically, the group holds in esteem and thus orient his compensation program to fit these ideals and desires.

The behavioral research findings indicate that a group functions well under "mild stress" conditions. With this in mind, the compensation manager could take steps to see that the Wage and Salary program exerts a mild amount of stress on the employees. A specific example of this would be to use the merit increase program strictly for merit. With the elimination of the yearly "general" increase policy, the merit increase program in some firms has degenerated to a "take-turn" situation. Without the general increase program to keep the employees abreast of the rise in cost-of-living, the merit increase program has been used to give increases for non-meritorious performance. Line supervision has rationalized that the employees should get some sort of increase just to stay in the same relative position. So they proceed to give a small "merit" increase, instead of the "normal" one. Eventually both the non-performers and the excellent performers are re-

ceiving "merit" increases and the difference in the amount of the increases is not great enough to effect a significant differential in salary levels. As a result, the employees perceive no real reward for excellent performance and conclude that there is "no sweat;" they will still get raises regardless of level of performance. The effective merit increase program would put the employee under a "mild stress" condition where there might be a "general" or cost-of-living type of increase and then merit increases only for those who merit them. In this situation the employees would be under a "mild stress" to demonstrate meritorious performance. This mild stress situation should theoretically foster desirable company goal-oriented behavior.

We have examined some of the techniques that might be employed by the enlightened compensation administrator. In the succeeding chapter we shall examine the results of a survey undertaken as part of this paper. This survey was designed first to identify the extent of knowledge of behavioral theory possessed by compensation administrators and then to examine their compensation practices to see if good behavioral approach is being utilized, without possession of specific knowledge of behavioral theory.

SUMMARY

In this chapter we have reviewed some of the specific steps that a knowledgeable compensation manager might take

to see that his compensation program is geared to motivate. In general, a motivating program might be an open, frank approach instead of a guarded, secretive one, coupled with a planned program of employee education, improved communications systems, and a fairly administered program where the employee and his contemporaries can perceive concrete reward or non-reward for commensurate performance.

Chapter IV
RESEARCH, METHODS, FINDINGS

I. Two Year Research Activity

This paper is the culmination of a two year research project. This examination of the behavioral approach to the field of compensation was undertaken by the author in the middle of 1965.

This question of maximum return was most intriguing to the author. The seemingly stereotyped approach to Wage and Salary administration, where one looks only at the duties, not the individual in evaluating jobs; where one "surveys the area" to determine what others are paying so as to follow suit; where a new job structure is set up based on "bench jobs" within the industry--these are some of the practices that prompted the question of maximum return.

The study commenced with the research of the history of man and his compensation. It is evident from Chapter I of this paper that formalization of the field of compensation has largely occurred in the last fifty years. There have been some significant breakthroughs in the Wage and Salary Administration field in the last 30 years. There has been a trend toward behavioral application; however, number-wise, the applications are in the minority. The principles of "control" and "guard the door to the corporate treasury" have apparently been paramount. As stated

previously, there are such things as group incentive plans. These plans were first implemented around the turn of the century, before the development of the behavioral school. Some plans have been administered in the firm throughout the Industrial Engineering function rather than the Compensation Administration department. The typical approach used is based on the scientific time and motion methods of Fredrick Taylor.¹ For the purposes of this research paper, and for the reasons stated above, these group incentive plans are viewed as being not directly associated with the behavioral-Wage and Salary problem under examination in this study.

In industry, in recent years, there has been a trend in the increasing number of firms adopting profit sharing and stock purchase plans. Examples among these are the ATT stock purchase and the Sears Roebuck profit sharing plan. For the purposes of this project these stock purchase and profit sharing plans, although recognizing some general aspects, do not typically focus on the specific motivational techniques of the behaviorists. These specific techniques include personal commitment to organizational goals, participative decision-making, increased communication efforts and development of "growth" type

1. R. M. Barnes, Time and Motion Study (New York: John Wiley and Sons, Inc., 1958), pp. 37, 321, 329, 586-588, 602-611.

environments.

It is widely accepted that one of the major benefits from such approaches as the stock purchase and profit sharing plans is that they can serve as motivational tools. However, for the purposes of this study we are concerned with the day-to-day knowledge and application of the compensation managers in the survey group. While the importance of the stock purchase, profit sharing and other related plans should not be minimized, these areas might well constitute another approach or study of the over-all compensation-motivation problem.

The second step in this research project involved an in-depth review of the current data available in the area of behavioral science. This is evidenced by the data in Chapter II of this paper. The author was aided in identifying appropriate behavioral authors by members of the thesis committee. Having examined the field of compensation and investigated available findings in the behavioral area, the next, and perhaps most difficult portion of the project, was the development of an adequate questionnaire which would (1) test the behavioral knowledge of compensation administrators, and (2) establish whether their current compensation practices reflect good behavioral theory.

In developing this questionnaire, the author was most fortunate in receiving the counsel of four

competent psychologists, two of which were certified psychologists in the state of California; the other two held Doctoral degrees in the discipline. For a period of nearly a year the author presented to these qualified psychologists a series of efforts to establish a suitable questionnaire.

At the end of this period the group consensus resulted in the questionnaire which was administered and which is affixed to this paper as Appendix "A."

It was the opinion of the group that the document was an acceptable tool for the test.

After the questionnaire was developed, the author sought to establish a representative sample of compensation managers to test their knowledge and practice of behavioral theory. A key professional organization of compensation administrators was the Electronic Society of Wage and Salary Administrators. This group, located in Los Angeles, encompasses 30 compensation managers in the Southern California area. Although entitled "Electronic," this society includes a wide variety of manufacturing and service firms in the Southern California area. The educational levels of these managers ranged from the holding of masters degrees to high school diplomas. The average level of education was a bachelor's degree. Their work experience ranged from 5 to 20+ years in the compensation administration field. The average was over 10 years

in the field. The firms that these individuals represented ranged from highly technical research organizations such as Jet Propulsion Laboratories and Systems Development Corporation to production-oriented firms such as North American Aviation and Lockheed-California Company. The companies ranged in size from 1,000 to 20,000+. This Electronic Society of Wage and Salary Administrators, the foremost organization of compensation managers in the Southern California area, was regarded as a representative cross section of Wage and Salary Administrators in the area.

In an attempt to prevent reception difficulties with the test questionnaire, a pre-test trial of the instrument was administered to three responsible compensation managers in a leading aerospace firm in Southern California. No significant deficiencies were noted.

As the final step preparatory to administering the test to compensation managers, the test was presented to a women's bridge club to establish an average score for persons not having appropriate training in the behavioral field. The educational background of the participants in this test group ranged from high school to college graduates, none of whom had specific education or work experience in human relations. The test environment was such that there was no opportunity for the participants to compare

answers. The average score on the "knowledge" segment of the test for this group was 77%.

At this point the test was administered to the members of the previously mentioned Electronic Society of Wage and Salary Administrators in Los Angeles. The test environment was such that comparison of answers by the participants was not possible. The 22 participating firms are identified by the roster affixed to this paper as Appendix "B." Of the 30 firms in the society, four are considered inactive and 4 declined to participate.

II. Analysis of Test Results

The questionnaire for knowledge and practices was administered to the subject professional group. The participants were instructed to indicate on their papers any limiting or company policies that might restrict their scoring on the "practices" segment of the questionnaire. No significant comments were made by the participants, nor were any significant problems encountered in administering and correcting the tests.

The results of the compensation administrators on the "knowledge" test was an average score of 82%. This was a five point higher average than that of the control group, (the women's bridge club). The statistical test for determining whether there was a significant difference between the means was then applied to

GENERAL SUMMARY - TEST RESULTS

WOMEN'S BRIDGE CLUB

COMPENSATION MANAGERS

<u>Partici-</u> <u>pants</u>	<u>Test Score</u> <u>Knowledge (%)</u>	<u>Raw Scores</u>	<u>Test Score</u> <u>Knowledge (%)</u>	<u>Raw Scores</u>	<u>Practice</u>	<u>Score of</u> <u>60+</u>
1	78	39	80	40	28	
2	86	43	96	48	44	
3	70	35	94	47	34	
4	84	42	90	45	62	X
5	78	39	86	43	45	
6	82	41	88	44	27	
7	72	36	86	43	57	
8	<u>66</u>	<u>33</u>	86	43	43	
9			84	42	34	
10			84	42	83	X
11			84	42	45	
12			82	41	28	
13			82	41	56	
14			80	40	55	
15			74	37	44	
16			72	36	61	X
17			60	30	51	
18			76	38	29	
19			70	35	53	
20			86	43	51	
21			90	45	60	X
22			<u>74</u>	<u>37</u>	<u>30</u>	
<u>AVERAGES:</u>		<u>38.5</u>	<u>82%</u>	<u>41</u>		
<u>77%</u>						

NUMBER OF ADMINISTRATORS
REFLECTING GOOD BEHAVIORAL
PRACTICES. (4)

Question #	# Women Correct - Total Par- ticipating: 8	# Compensation Managers Correct. Total Participating: 22
1	5	17
2	4	16
3	8	20
4	5	19
5	3	17
6	2	4
7	1	8
8	5	21
9	0	11
10	8	22
11	6	21
12	7	21
13	7	22
14	8	18
15	7	20
16	1	6
17	8	22
18	1	8
19	7	22
20	7	17
21	8	13
22	5	17
23	3	19
24	4	21
25	1	5

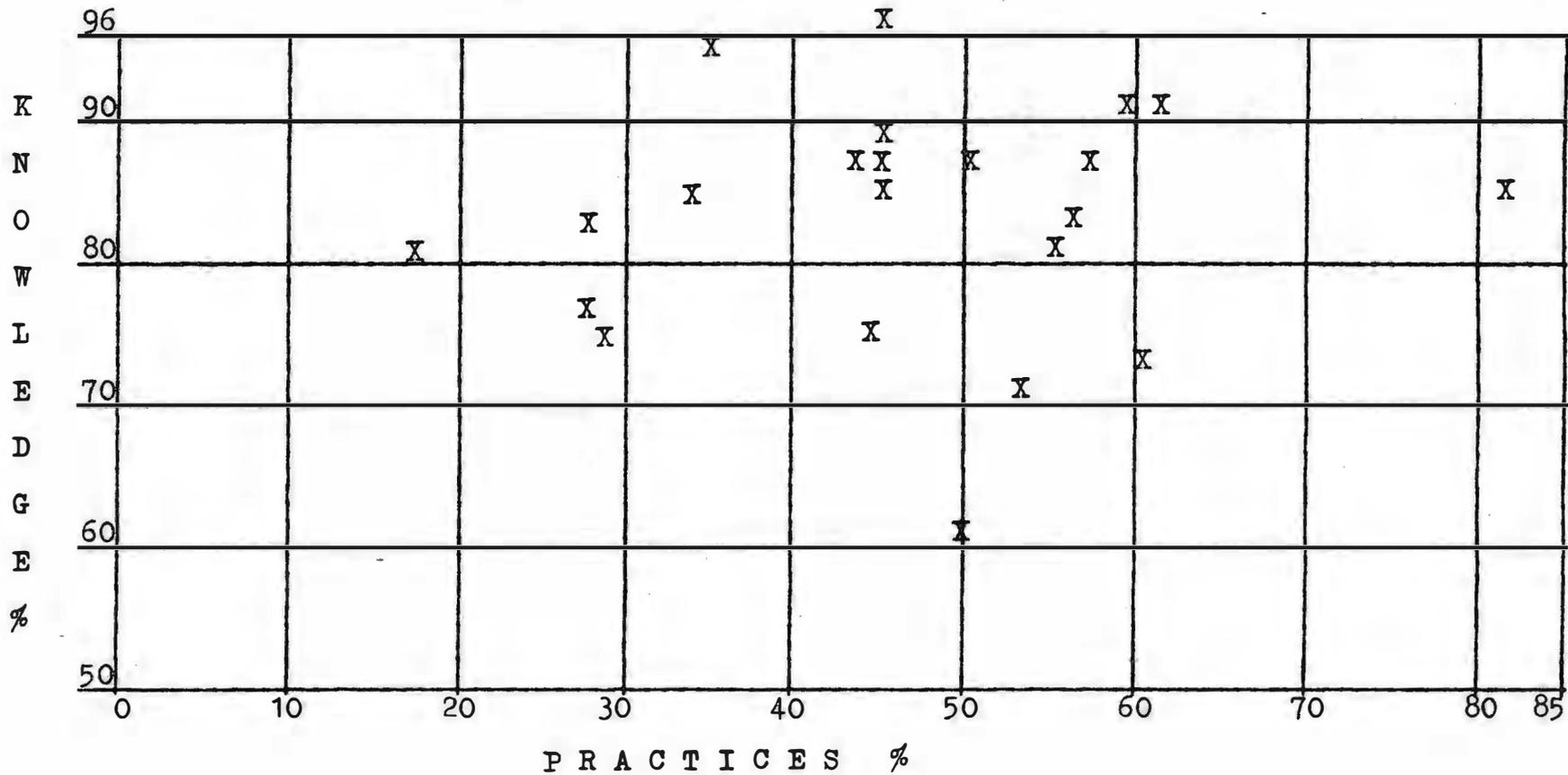
Question #	# Women Correct - Total Par- ticipating: 8	# Compensation Managers Correct. Total Participating: 22
26	8	21
27	7	18
28	8	17
29	7	20
30	8	22
31	7	22
32	8	19
33	8	22
34	8	21
35	7	15
36	7	21
37	8	22
38	8	22
39	8	22
40	8	22
41	6	18
42	6	19
43	6	19
44	8	19
45	5	19
46	7	22
47	8	19
48	7	16
49	8	20
50	8	20

ANALYSIS OF COMPENSATION MANAGERS RESPONSES TO PRACTICES QUESTIONS

Number Responding at Each Frequency Level

<u>Question</u>	<u>(A) Never</u>	<u>(B) 1-2 Times in last 5 years</u>	<u>(C) 5 Times in last 5 years</u>	<u>(D) 3-10 Times in last 5 years</u>	<u>(E) 10 or more Times in last 5 years</u>
1	9	7	-	-	7
2	7	1	1	4	9
3	7	1	1	3	10
4	1	6	-	4	11
5	16	3	1	2	-
6	13	5	2	2	1
7	7	4	2	1	8
8	9	5	1	3	4
9	18	3	-	1	1
10	17	2	1	2	1
11	15	1	1	2	3
12	22	-	-	-	1
13	18	2	1	1	1
14	6	6	6	2	2
15	17	3	1	-	1
16	7	3	5	3	4
17	4	5	1	7	5
18	12	3	2	2	3
19	2	3	3	1	13
20	11	2	2	1	6

CORRELATION - INDIVIDUAL MANAGERS' SCORES - KNOWLEDGE vs. PRACTICES



these averages with the following results.

The formula² for the "t" test is:

$$t = \frac{\bar{X}_1 - \bar{X}_2 - (M_1 - M_2)}{\sqrt{(N_1 - 1) S_1^2 + (N_2 - 1) S_2^2}} \sqrt{\frac{N_1 N_2 (N_1 + N_2 - 2)}{N_1 + N_2}}$$

Letting M = mean, S = standard deviation, n = number in the sample, 1 = Wage and Salary Administrators, and 2 = the control group, we substitute:

$$t = \frac{41 - 38.5 - 0}{\sqrt{(21)(16.82) + (7)(11)}} \sqrt{\frac{(22)(8)(28)}{30}}$$

$$t = \frac{2.5}{\sqrt{430.22}} \sqrt{\frac{4928}{30}}$$

$$t = \frac{2.5}{20.74174} (12.8166)$$

$$t = 1.5447889$$

This value of "t" (154 standard deviations) tells us that this much deviation would be expected to occur more than 10% of the time, but less than 20% of the time due to

2. P. G. Hoel, Elementary Statistics (New York: John Wiley and Sons, 1960) p. 116.

chance alone. Assuming that the universes of the two samples are the same, this test tells us that 90% of the time samples taken from these universes would be as close or closer to each other than the subject samples. Using a deviation occurrence criterion of 1 out of 1000 as a value in determining similarity of the two groups, it is apparent that this 1 out of 10 frequency points to the fact that these groups are similar.

The next test of the data concerned the compensation administrators' "practices" portion of the questionnaire. This involved a comparison of the number of Wage and Salary Administrators in the sample who scored 60 or better on the "practices" segment, with the number expected by chance, using the binomial distribution. The score of 60 on the practices portion represented a median answer of (c) for each of the twenty questions. Values of 1 for (a) through 5 for (e) were assigned to each question. On this section of the test 4 of the 22 administrators achieved a score of 60 or better.

Assuming a binomial distribution with $p = .50$, we sought to find the probability of obtaining 4 of 22 people with scores of 60 or better. We started by letting $n =$ the number in the sample, $p = .50$, $q = 1 - .50$, and u (the population mean) = $.50$ of 22 or 11.

$s =$ standard deviation of the
binomial distribution

$u = np = 22(.50) = 11$

$$s = \sqrt{npq}$$

$$s = \sqrt{22(.50)(.50)}$$

$$s = \sqrt{5,50} = 2.35$$

$$t = \frac{M - u}{s} = \frac{4 - 11}{2.35} = -2.98$$

The probability of getting 4 of 22 "passing" is .0028, or about 3 out of 1000. This indicates that the sample does not fit the distribution (4 instead of 11) on a frequent enough basis, therefore the compensation administrators' sample is not similar to a chance distribution. In the preceding formula, 4 is the number of passing participants in the sample taken for this project while 11 represents the number that should pass in a sample of 22.

The next step in the testing of the data was to see if there was relationship between the individual scores of the administrators on the "knowledge" or "theory" versus the "practices" sections of the test. This was determined using the Pearson product-moment correlation coefficient, as follows:

Letting X = the compensation administrators' score on the "knowledge" part of the test, and Y = the compensation administrators' score on the "practices" part of the test, we use the following formula:

$$r = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y)^2]}}$$

$$r = \frac{22(41805) - (902)(1020)}{\sqrt{(22)(37352) - (902)^2 (22)(51596) - (1020)^2}}$$

$$r = \frac{-330}{\sqrt{(8140)(94712)}} = \frac{-330}{\sqrt{770955680}}$$

$$r = \frac{-330}{27766} = .01$$

The range of relationships on this Pearson product moment test is from -1.00 (lowest negative correlation) to 1.00 (highest positive correlation). "0" indicates no correlation. The value of -.01 obtained from this research activity indicates next to no correlation.

Question #2 on the survey was a significant item in the estimation of the author and his behavioral consultants. The question read as follows:

2. Workers identify themselves with the informal organization but do not gain a sense of security by this association.

It was felt that this question was a "separator" of the knowledgeable and the unknowledgeable inasmuch as the majority behavioral opinion on this question clearly states that workers do gain security from this association. In this study 50% of the women's bridge club participants answered this item correctly, while the corresponding figure for the compensation administrators was 77%.

Question #7 was considered another indicator of whether the participant had read the historic Hawthorne Studies. The question was stated:

7. In early human relations studies it was found that employees worked extra hard for extra pay bonuses.

The bridge group had 13% responding correctly to the item, while the compensation administrators had 36% correct.

Another item on the test that was considered basic was question #11, which read as follows:

11. Generally there are basic conflicts between the personality and the formal organization.

On this question 75% of the women's bridge club answered correctly, while the corresponding figure for the compensation administrators group was 95%.

Question #16 was one that was considered to be an indicator of having read in the behavioral area. The question was stated as follows:

16. As stress increases, members of a group show more behavior which tends to reduce interpersonal tension and friction and less behavior which might lead to increased disharmony.

On this question the women's group had 13% correct, the administrators' group, 27%.

Another significant question was #23, which read:

23. Pay is generally found to be the most important determinant of a person's productivity.

The bridge group scored 38% correct on this question, while the compensation group scored 86% correct.

Question #25 was not a basic item but one which would have required more extensive reading in the behavioral area.

The question was:

25. Studies have proved conclusively that most workers would prefer to have their jobs expanded to include more varied and interesting tasks.

The women's bridge group scored 13% correct on the answer to this question. The compensation administrators scored 19% correctly.

SUMMARY

In this chapter the preliminary steps involved in this research were reviewed. These included the examination of man and his compensation, a review of behavioral findings and development and pre-tests of an appropriate questionnaire. The latter part of the chapter encompassed the statistical testing of the new data and an item review of significant questions from the survey form.

Chapter V

CONCLUSIONS AND RECOMMENDATIONS

In this portion of this paper we examine the test results from the preceding chapter, draw conclusions and make recommendations where warranted.

The initial observation involved the comparison of the average score of the compensation administrators to the average score of the women's bridge club. The "t" test of the means of these two groups resulted in the standard deviation of 1.54. This indicated that approximately 90% of the time the means of similar samples would be closer than these samples. Based upon this test, the conclusion could be that the sample of compensation administrators from the Southern California area and the sample of the women's bridge club are similar in respect to their knowledge in the behavioral area. This conclusion is not particularly earth-shaking in that the compensation administration field has not been generally regarded as a "people oriented" endeavor. Typically, the compensation administration function was focused on "x" amount of dollars for the performance of "x" duties. Recent studies in addition to this one have sought to propose that a relationship between the behavioral field and the field of compensation might be proper. One such study is the noteworthy effort of Opsahl and Dunnette¹ at the University of Minnesota. This study

¹ R. L. Opsahl and M. D. Dunnette, "The Role of Financial Compensation in Industrial Motivation," Psychological Bulletin, Vol. 66, No. 2 (1966), pp. 94-118.

reviewed the behavioral findings and related them to the field of compensation.

The second portion of the test questionnaire involved the "practices" of the compensation administrators. The criterion for passing this "practices" section was a score of 60 or better--this was the median score (20 questions, possible 1 to 5 points on each question). The number of compensation administrators passing this test was 4 out of 22. The binomial distribution formula applied in Chapter IV indicated that there was something more than chance at play in the sample because the probability of getting substantially different results from other samples from the same universe was very remote, approximately 3 chances out of 1000. The distribution of the sample did not fit the distribution that would be expected from chance. The conclusion here could be that the practices of the compensation administrators in the sample from the Southern California area do not reflect good behavioral theory.

The final test of the survey data in this study was the application of the Pearson product-moment correlation coefficient to ascertain whether there was any correlation between the individual scores of the compensation administrators on the "knowledge" versus the "practices" sections of the test. The coefficient figure obtained (-.01) on a scale where (0) represents absolutely no correlation, points to the fact that there was next to no correlation between the scores of the compensation administra-

tors sampled.

The analysis of the key questions on the test and the correct percentage scores of the two groups gives some additional insight to the two groups. Consistently, on these key knowledge questions the compensation group scored a somewhat higher percentage correct. While no positive conclusion can be drawn here, one might theorize that the managers everyday contact with the business world and their everyday responsibility of managing people could provide them with a better basis for guessing correctly on these human relations questions. The women's group, on the other hand, might be considered to be insulated or sheltered, relatively speaking.

The research data gathered in this study points to a separation of the behavioral and the compensation fields. It suggests that the typical approach to compensation, at least in the companies sampled, has been the scientific, mechanistic one and not one that primarily considers the needs, wants, and goals of the workers. It is a "blindness" type of approach where only the control of the dollars spent for certain specific duties performed is paramount. There is little evidence that consideration of the human being in establishing job assignments has been given. Conscious effort on the part of the compensation personnel surveyed to educate and inform the workers regarding the whys and wherefores of his pay are not evident. Efforts to keep compensation information a guarded secret are more

numerous in the sample.

In conclusion, it is apparent that before us lies an extremely fertile area for growth, maturation and sophistication for these compensation managers. Here is an opportunity for the compensation administrators to grasp hold and make a significant contribution to the over-all profitability of the firm while at the same time improving the mental and physical well-being of the individual workers, and concurrently greatly enhancing the over-all labor-management environment. But the answer is not in an immediate attempt on the part of compensation administration to utilize behavioral techniques. From the results of the survey conducted in this study project, it is apparent that the first step would involve the education of compensation managers in the behavioral field. After the education of the compensation personnel, the next step would involve concentrated efforts on the part of a combined group of behaviorists and compensation managers to carefully study the relationship of the two fields to the end of developing additional positive techniques for motivating workers.

SUMMARY

In this chapter conclusions were drawn regarding the survey of compensation managers in the Southern California area. In the final portion of the chapter recommendations were made for developing the relationship between the behavioral and compensation fields.

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APPENDIX A

Compensation Administrator's

Questionnaire

I. Behavioral Theory

True - False

Please answer all questions. Wrong answers will not be subtracted from correct ones. This portion of the questionnaire is directed at your knowledge of behavioral theory. If you believe that the answer could be either true or false, mark the one that, in your opinion, is the most correct.

1. Early human relations studies identified the importance of the informal group. T F
2. Workers identify themselves with the informal organization but do not gain a sense of security by this association. T F
3. Today man is no longer "tradition directed" but rather "outerdirected." This means that man is now more influenced by the attitudes and reactions of others to him, rather than by previously established ideals. T F
4. Scientific management was a body of management theory predominant prior to the "human relations" theory. T F
5. The theories of scientific management are essentially psychological. T F
6. In early human relations studies it was found that test variables such as lighting conditions, noise, etc., affected worker productivity. T F
7. In early human relations studies it was found that employees worked extra hard for extra pay bonuses. T F
8. Group dynamics involves a basic understanding of group life, the idea of democratic leadership and group decision making, as well as the importance of participation in motivating people. T F

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| 9. | Researchers have consistently found that as morale increases, productivity increases. | T | F |
| 10. | Some people would be motivated to produce if their job could be redesigned to contain more varied and responsible duties. | T | F |
| 11. | Generally, there are basic conflicts between the personality and formal organization. | T | F |
| 12. | A Characteristic of the informal organization is a system of communication that arises to help fulfill the needs of the group's members by keeping them aware of what is occurring in the formal organization. | T | F |
| 13. | Groups develop standards which influence the behavior of their members. | T | F |
| 14. | The degree of efficiency in a work group is related to the extent of congeniality of the group's individual members and the attitudes of the members toward each other. | T | F |
| 15. | When a worker moves from the vicinity of a slower worker to that of a faster worker, his production decreases. | T | F |
| 16. | As stress increases, members of a group show more behavior which tends to reduce interpersonal tension and friction and less behavior which might lead to increased disharmony. | T | F |
| 17. | Increased communication, straightforwardness on the part of management, and recognition of the worker as a responsible individual are techniques which should motivate. | T | F |
| 18. | "Commitment" and "participation" as used by the behavioralists means the involvement of the manager in his task of managing people. | T | F |
| 19. | Employee perception of his work situation affects his performance. | T | F |

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| 20. | Democratic leadership effects greater cohesiveness, productivity, and job satisfaction in the group. | T | F |
| 21. | Happy workers are productive workers. | T | F |
| 22. | General rather than close supervision is more often associated with high productivity. | T | F |
| 23. | Pay is generally found to be the most important determinant of a person's productivity. | T | F |
| 24. | Salary has been found to be more related to negative job attitudes than to positive job attitudes. | T | F |
| 25. | Studies have proved conclusively that most workers would prefer to have their jobs expanded to include more varied and interesting tasks. | T | F |
| 26. | Workers who are assigned more varied and responsible duties generally are better motivated. | T | F |
| 27. | Job enlargement generally lessens the conflict between individual and organization goals. | T | F |
| 28. | Highest job satisfaction is prevalent in semi-skilled groups. | T | F |
| 29. | The feelings, needs and values of the worker, together with organization requirements and economical impact should be considerations in establishing a new job. | T | F |
| 30. | Generally human beings seek secure, friendly and supportive relationships and ones that give them a sense of personal worth. | T | F |
| 31. | Modern media, education, and increased leisure time have decreased workers' expectations, goals and interests. | T | F |
| 32. | Modern mass production techniques have generally served to broaden the scope of individual worker's assignments. | T | F |

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| 33. | Creativity generally is psychologically rewarding. | T | F |
| 34. | "Egoistic" needs refer to recognition, status, and similar needs. | T | F |
| 35. | Greater economic productivity should normally result from putting together tasks that permit completion of the part, product or process. | T | F |
| 36. | Greater economic productivity should normally result from locating work stations so as to prevent involvement of the worker in his immediate work group. | T | F |
| 37. | Greater economic productivity should normally result from putting together tasks that permit the worker to perceive his relationship (the role he plays) to his organizational work unit and to the company as a whole. | T | F |
| 38. | "Achievement" and "pride" are important considerations in motivating workers. | T | F |
| 39. | "Credit for work accomplished" is important to workers. | T | F |
| 40. | Mass production techniques generally provide ample decision making responsibilities for workers. | T | F |
| 41. | Mass production techniques generally provide for more social interaction on the job. | T | F |
| 42. | Other things being equal, the difference between a satisfied and a dissatisfied worker may rest on whether he has a ten-operation or five-operation job. | T | F |
| 43. | In the factory, job interest increases in relationship to the number of different tasks performed. | T | F |
| 44. | Highest job satisfaction is generally found among the lowest skilled workers. | T | F |
| 45. | Decision making responsibility is a determinant in job satisfaction. | T | F |

46. The aspiration level of a worker is not a factor in employee job satisfaction. T F
47. Workers should be allowed to participate in planning whenever possible. T F
48. Highest job satisfaction is generally found among the highest skilled workers. T F
49. Broadening a worker's task too much can cause dissatisfaction. T F
50. "Prestige" is not an important factor in determination of job satisfaction. T F

II. Compensation Practices

Multiple Choice

Please mark the appropriate letter box according to the scale shown below:

- (a) Never.
 (b) Once or twice in last five years.
 (c) Three times in the last five years.
 (d) More than three but less than ten times in the last five years.
 (e) Ten or more times in the last five years.

1. How frequently have you conducted training courses for employees on job evaluation, history or Wage and Salary Administration, or any other similar compensation matter? (a) (b) (c) (d) (e)
2. How frequently have you discussed "job enlargement" (expansion of job duties to add responsibilities or duties with intent, of reducing boredom, etc.) with your subordinate job analysts or with line supervision? (a) (b) (c) (d) (e)
3. How frequently have you conducted or arranged for formal counseling sessions for employees regarding compensation matters? (a) (b) (c) (d) (e)

4. How frequently have you conducted or arranged for training classes for supervision in job evaluation, merit increases, philosophy or other compensation matters? (a) (b) (c) (d) (e)
5. How frequently have you conducted or arranged for training of job analysts in behavioral theory? (a) (b) (c) (d) (e)
6. How frequently have you conducted or arranged for surveys of employee opinions or recommendations for improvement in the compensation program? (a) (b) (c) (d) (e)
7. How frequently have you conducted or arranged for training sessions in the merit increase program or similar policies for employees? (a) (b) (c) (d) (e)
8. How frequently have you conducted or arranged for surveys of managers' opinions or recommendations for improvements in the compensation program? (a) (b) (c) (d) (e)
9. How frequently have you conducted or arranged for surveys of employee opinion on effectiveness of current compensation program? (a) (b) (c) (d) (e)
10. How frequently have you conducted or arranged for surveys of employee opinion of proposed changes to the compensation program, before implementation? (a) (b) (c) (d) (e)
11. How frequently have you conducted or arranged for surveys of employees to isolate specific examples of inequities resulting from your compensation program, i.e., faulty evaluations, poor administration by line supervision, etc.? (a) (b) (c) (d) (e)
12. How frequently have you conducted or arranged for surveys of employee opinion as to the most repetitive and boring job assignments? (a) (b) (c) (d) (e)

13. How frequently have you instructed your job analysts to design jobs from a "behavioral-scientific," as opposed to a straight "scientific" approach? (a)
(b)
(c)
(d)
(e)
14. How frequently have you considered recommending the implementation of some form of incentive compensation plan in addition to the present form of compensation in your firm? (a)
(b)
(c)
(d)
(e)
15. How frequently have you conducted or arranged for attitude surveys to get some insight to the prejudices, notions, convictions that may be impairing the employees' reception of the compensation program? (a)
(b)
(c)
(d)
(e)
16. How frequently have you recommended to line managers that jobs or assignments be expanded to include more responsibilities or varied tasks in order to reduce boredom? (a)
(b)
(c)
(d)
(e)
17. How frequently have you modified your compensation program, based upon feedback from employees or managers? (a)
(b)
(c)
(d)
(e)
18. How frequently has your compensation function prepared written communications (excluding copies of job descriptions) which were to be circulated directly to employee and not relayed verbally by supervision? (a)
(b)
(c)
(d)
(e)
19. How frequently have you personally encouraged employees, other than those in your own department to discuss their compensation viewpoints or problems with you? (a)
(b)
(c)
(d)
(e)
20. How frequently have you directed the preparation of, or prepared, job description which depart from the "traditional" W/S jobs (exclude jobs resulting from processes common to your particular firm and jobs resulting from technology advances,...i.e., numerical control, automatic drafting machines, etc.)? (a)
(b)
(c)
(d)
(e)

APPENDIX B

List of Participating Companies

Aerospace Corporation
Ampex Corporation
Atlantic Research Corporation
Beckman Instruments, Inc.
Bunker-Ramo Corporation
Burroughs Corporation
Collins Radio Company
Consolidated Electrodynamics
Electro-Optical Systems, Inc.
General Dynamics/Pomona
General Precision, Inc.
Hughes Aircraft Company
ITT-Gilfillan, Inc.
Jet Propulsion Laboratory
Lockheed-California Company
Litton, Data Systems Division
Litton, Guidance & Control Division
North American Aviation, Inc.
Northrop Norair
Northrop Ventura
Radio Corporation of America
Systems Development Corporation