# AN INVESTIGATION OF THE INSTALLATION AND INFLUENCE OF A STAFF PLANNING PROGRAM IN AN OPERATING HOTEL

Thesis for Degree of M. A.

MICHIGAN STATE UNIVERSITY

Kay Wold Herbranson

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# AN INVESTIGATION OF THE INSTALLATION AND INFLUENCE OF A STAFF PLANNING PROGRAM IN AN OPERATING HOTEL

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Kay W. Herbranson

## A THESIS

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#### PREFACE

The rising cost of payroll in the hotel industry has become a serious problem for the management of many hotel properties. This thesis is an investigation of a staff planning program devised to deal with the problem of the rising cost of payroll in an operating hotel.

Some hotelmen and even some of the larger hotel chains, such as the Sheraton Corporation of America, have concluded that a conscientious and continuing staff planning program is one of the determining factors for increasing profits.

Most hotelmen realize the importance of controlling payroll costs but are dubious of what type of program should be initiated to accomplish this end. This investigation presents the many factors that must be considered before a staff planning program can be established as an effective tool for controlling payroll costs and improving service.

Very little material has been published on this subject, within our industry, but the two main reference sources of this thesis come from a system known as "Payroll Control", developed by Harris, Kerr, Forster and Company, and the Sheraton Corporation of America's Staff Planning Manual.

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# The Role of Staff Planning

"Payroll and related costs for 600 hotels and motels totalled 422 million dollars in 1963 and represented 43.5% of total sales and income. This ratio was the highest recorded during the last twenty years."

Minimum wage, laws, increasing employee benefits and greater union demands are some of the factors that have been influencing the growth of payroll costs. The twenty-eighth annual review of Harris, Kerr, Forster, and Company states that the average hourly earning of hotel-motel employees was about three times as great in 1963 as in 1943. Total hotel-motel payroll, shown in Figure 1, has also increased during the past decade.

Automatic union increases for hourly employees, covered in the contract of the hotel being studied in this thesis, give an example of the growing expense of payroll. In Table 1, we see that during a one year period, union increases for hourly employees will be \$12,985 or 2.17% of the present payroll.

<sup>1</sup> Trends in the Hotel-Motel Business, Twenty-Eighth Annual Review, Prepared by Harris, Kerr, Forster and Company, (Chicago, 1964) p.9

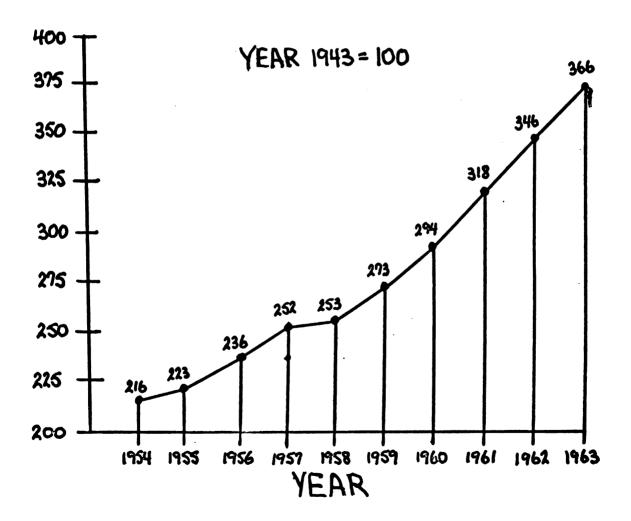


Figure 1 Total hotel-motel payroll.

Table 1 - Estimated Increases in Labor Costs

Local No.	Effective date	Existing annual labor costs	Estimated add'l. labor costs	% of increase
665	5/1/64-5/1/65	\$191,120.00	\$ 3,765.00	
152	5/1/64-5/1/65	65,382.00	1,810.00	
458	5/1/64-5/1/65	342,500.00	7,410.00	
Totals	5/1/64-5/1/65	\$599,452.00	\$12,985.00	2.17%

"As of the moment, organized labor presses for a 35 hour week without reduction of base pay."2

The double time penalty bill also causes concern: "As now written, this proposed legislation would authorize the Secretary of Labor to require - by order - that double time or more be paid for work time of more than prescribed maximum number of hours in a work period."<sup>3</sup>

Forecasts such as automatic union increases, as shown in Table 1, and future possibilities of a 35 hour week and double time for all overtime should be ample warnings for hotelmen to take a second look at their staffing practices and to evaluate their entire staffing program.

The Hidden Hazards in the New Pay Schedule Proposals, Leslie Martin, The Magazine of Wall Street, March 7, 1964, p. 609

<sup>3</sup>Ibid.

The ultimate goal of any profit making organization is that last line on the financial statement that reads "Net Profit". With this end in mind, it would be well for us to remember that dwindling profit may be closely related to a growing payroll.

Mr. Frank Hoffman, in an article written for the Harvard Business Review, states that profits should be improved day by day and not by sporadic or sudden cost-reduction moves. "The self-defeating cycle of lower profits - cutting costs - lower profits begins, and lasts until a new windfall occurs and the hardfisted cost cutter puts away his axe and allows the organization to grow "fat" in the luxury of good times all over again."

The standard reaction to dwindling profit is a "belt-tightening" program. Here, like a starvation diet, we suddenly become conscious of the "fat" in the organization and then suffer through the pangs of elimination. If an individual undertakes such a program for the elimination of his own excess fat, it is possible that the physiological harm that may occur would outweigh any advantages of the loss of the excess. Proper adjustment is more readily

Improve Your Profits Day by Day, Frank O. Hoffman, Harvard Business Review, July 1963, p. 59

accomplished through a controlled, conscientious and continuing program. This is also true of an organization. Few hotelmen have escaped the experience of a "belt-tightening" program and yet, in retrospect, only the exception would concede any long-term benefits from this difficult experience. The short-term results probably show great gains, but usually at the cost of service and quality. Then, notch by notch, the "belt" is loosened.

The purpose of this study is to present the possibilities of increasing profits and improving service through a continuous and conscientious staff planning program. This will be accomplished by an investigation of the installation and influence of a staff planning program in an operating hotel.

Hotel Facilities
The hotel in this case study is a newly built three hundred
room, transient hotel, located in the center of an urban
renewal project in a major midwestern city. Studio and
twin bed rooms occupy the major portion of the hotel space,
but there are 28 luxury two-room suites, and 4 luxury threeroom suites. Bathrooms are large, with wall-to-wall
mirrors, wall-to-wall fibre glass counters, bathroom
scales, glass tub enclosures and thermoelectric ice machines.
Each guest room is equipped with a combination radio and
television set, individually controlled air conditioning,
and an electronic mail and message light, controlled from

the mail and information desk.

This nineteen story, tower-like structure is serviced by three high-speed, guest operated passenger elevators, an escalator from the lobby to the plaza level, one freight and one service elevator. A complete dial telephone system operates throughout the hotel, including room-to-room dialing, direct dialing of restaurants, hotel departments and local calls.

This hotel also features a heated, outdoor swimming pool.

During the late fall, winter, and early spring, this
swimming pool plaza is transformed into a skating rink.

Outdoor food and beverage services are offered in this
area, with table service for 120. Space heating makes
it possible to serve in part of the area the year around.

Guest parking is complimentary and a 280 car parking ramp is directly connected to the hotel entrance drive. The street level portion of the garage is mainly devoted to rental space. A hotel operated specialty bar, seating 65, is located in this area.

Dining areas include a specialty room, a regular dining room, and a counter service area. The specialty room, on

the lobby level, accommodates 142 guests in the dining area and 58 in the cocktail area. During the summer months, a gazebo, leading from the dining area may be utilized to serve 25 or more guests. The main dining room, directly below the specialty room, seats 160 people. The counter service area, adjacent to the main dining room, on the plaza has a seating capacity of 30. Room service is also available to the guests.

The main bar, seating 95, is located on the top floor of the hotel. A sandwich lunch is also served in this area.

A private club, operated by the hotel, is located in the lobby area, These facilities include a complete kitchen, lounge, dining room, cocktail bar, checkroom and three private dining-conference rooms. The club has dining facilities for 150. The bar and cocktail lounge seats 35. The total membership of the club is 1,500.

The ballroom, located on the plaza level, has a seating capacity for 350 people for banquets, and 550 people for meetings. Directly adjoining the ballroom is Function Room A, seating 150 for banquets or 250 for a meeting set-up. In the same area, is Function Room B, seating 100 for dining with 195 capacity for meetings. The foyer, also available for service and conferences, can seat 100 banquet style or 175 for meetings. A 20 foot bar in the

foyer is used for private parties only in the ballroom and function rooms.

Four hospitality suites are located on the fourth floor.

The seating capacity is 30 for meals and 50 for meetings.

This hotel does not operate it's own laundry, but does have a complete valet service.

The description of the hotel in this investigation has it's importance in the fact that, in order to comprehend the methods of installation and the influence of a staff planning program, we must first have full knowledge of the physical limitations. The importance of this description lies in the use of the comparison theory, which is described below.

Direction of thought of thesis
The direction of the thought of this thesis is based around
the concept of a model hotel in comparison to the existing
hotel being studied. This line of thought is probably most
aptly explained by Mr. Ernest Henderson Sr., now Chairman
of the Board of the Sheraton Corporation of America,
when he addressed the managerial advisory council and
department heads of the Sheraton home office in Boston, Mass.

Mr. Henderson's comments were: "During World War II, I think that the maintaining of this country on a course leading to success in World War II has sometimes been

attributed in part to what has been referred to as a technique developed during that War. I refer to the creation
of a so-called model. This type of approach to solving
problems has been most effective, and it seems to be
peculiarly appropriate for creating efficient hotels.

"The concept of a model is to set up perhaps parallel to an existing hotel, an imaginary hotel if you wish. that has been created and designed under today's conditions. The model hotel must be exactly similar in potential, in general design, in location, to the existing hotel. We must then go to work and staff the model with ideal staffing guides. Much of the unknown is actually known. because you have an actual hotel with actual experience a real one besides the imaginary one. In the real one you know what the sales volume is. You know what volume the banquet department and the cocktail lounges can do. There are few unknowns because you already have complete records. And then you transfer into your imaginary hotel the existing volume of business. You have the same number of rooms. You save the same size kitchen. You have the same everything. Next you set up the theoretical staffing which you would set up from scratch if you were starting with a given volume of business. You will come to the conclusion that you need so many cooks, and you need so many bellmen, you need so many desk clerks, and you need so many of this. that and the other. You set

up your model under conditions of ideal performance."5

A pro forma is then established to accompany the model. A pro forma for this model would be a theoretical profit and loss statement which shows the ideal situations which would be created. Each hotel has all the facts needed to create this pro forma statement. By utilizing the knowledge of costs and salary scales in comparison to the ideal situation a hotel may find that the food department should produce a 15% profit when in reality, the hotel may be realizing a 2% food department profit. A comparison with each of the items in the model with the items of actual experience then becomes an effective tool by which to determine what must be changed in order to make the existing hotel profitable.

The direction of thought of this thesis is based on a comparison of the actual and theoretical, the use of this comparison and the influence it can have on an operating hotel. The thesis begins by explaining terminology and basic elements of staff planning. Then the actual hotel is analyzed and a statistical foundation is established. Chapter V begins the establishment of the theoretical while utilizing the knowledge of the actual. Throughout

<sup>&</sup>lt;sup>5</sup>Remarks of Mr. Ernest Henderson, President of Sheraton Corporation of America, to members of the Managerial Advisory Council and department heads of the Boston office at a meeting at 470 Atlantic Avenue, Boston, Mass., on Thursday. November 29. 1962.

this thesis, a step by step method of the installation of a staff planning program, which Mr. Henderson refers to as the model method, will be illustrated. As each step is accomplished, the influence of this program and the affected savings. will be shown.

This investigation does not follow the exact scientific approach but rather emphasizes the relationship of general managerial philosophy to each specific area of staff planning functions which must be accomplished in order to establish a conscientious and continuing staff planning program.

The main source of data used in this thesis comes from a day to day collection of information carefully compiled during a year of study when a staff planning program was installed in the hotel which is the subject of this investigation. Very little material has been published on this subject, within our industry, but the two main reference sources come from a system know as "Payroll Control", developed by Harris, Kerr, Forster, and Company, and the Sheraton Corporation of America's Staff Planning Manual. Many of the forms and additional analytical work come from these sources; however, new forms or a variation of suggested forms have been utilized in this study.

Other references come from a wide variety of sources and have been utilized to support individual theories which are interwoven in a staff planning program. These sources cover a wide range of subjects from work simplification to managerial philosophy. Emphasis should be placed on the fact that the main value of this thesis is found in the day to day study of a staff planning program in an operating hotel.

### CHAPTER II

#### TERMINOLOGY AND BASIC BLEMENTS OF STAFF PLANNING

Staff planning is the function whereby the number of personnel now employed and the resulting payroll costs are controlled through a system of forecasting workload volume. This is accomplished by employing personnel in order to avoid any lag in adjusting manpower. Staff planning must also provide the desired standard of service, analysis of performance, and corrective measures as indicated to eliminate any reoccurrence of malperformance. The staff planner must constantly search for new methods and technical improvements to increase efficiency and improve service.

When establishing the basic elements of staff planning, one must take into consideration three main job categories. The first is "fixed" job groups, which are positions that do not vary in the authorized number with the volume of business. Examples of this are the Executive Housekeeper or Assistant Manager. The second category is the "semi-variable" job groups. These are the positions such as inspectresses that vary with long term forecasted business volume. Positions that vary in accordance with fluctuations in business volume are called "variable" job groupings, Maids and waitresses are in this grouping.

To achieve the ends of staff planning, one must understand the formulation, installation, and revision of staffing guides which are the major tools used in payroll control. (Staffing guides are statistical tables which are used for converting work load units into a standard number of man hours required to accomplish the workload at various volumes of business.) Each hotel must develop it's own guides due to the variables that influence staffing. This is the first of the basic elements of staff planning. In order to establish accurate staffing guides, one must determine performance standards.

The determination and maintenance of valid performance standards is one of the most difficult elements in staff planning due to the fact that each working position must be carefully analyzed in relation to the condition of production and service.

"Productivity standards answer the question - 'How many hours of laborare necessary to service a known or fore-casted volume of business?' In these terms they represent what can be considered a fair day's work for an employee." 6

Trends in the Hotel-Motel Business, Twenty-Eighth Annual Review, Prepared by Harris, Kerr, Forster and Company, (Chicago, 1964) p. 9

There are several ways that performance standards may be established. One way is by dividing the number of rooms occupied, or number of food covers served, or any other unit measure, by the number of hours worked in each job classification. This, then establishes a productivity rate which must be computed for low, medium, medium-high, and high volume periods. These rates are then analyzed and an average arrived at to establish a "standard."

There are no automatically sound performance pars in any hotel operation and each hotel will differ in accordance with the operation.

Work sampling is another technique used by some businessmen to establish performance standards. Work sampling consists of observing a group of employees at random times during the day and noting what they are doing.

"Work sampling is possible because relatively small numbers of observations taken at random times will tend to follow the same patterns as if all employees had been observed continuously.

Statistics show that if enough observations of a situation are taken, the results will tend to be sufficiently close to the proportion of time the employees were actually at work on their various duties."7

<sup>7&</sup>quot;Setting work Standards", Administrative Management, September, 1963, p. 65

A work sampling study consists of six basic steps.

- 1. Define the problem.
- 2. Plan and organize the program.
- 3. Determine the accuracy desired.
- 4. Gather your observations.
- 5. Determine the ratios.
- 6. Analyze the results.

By following these steps an evaluation of activities performed in an area can be obtained, based on a series of instantaneous random observations.

"Perhaps a parallel can be drawn between the work sampling technique and the lapsed-time camera. A very spectacular use of the lapsed-time camera can be witnessed in the popular nature movies where buds burst into blossoms, or caterpillars turn into butterflies in the matter of seconds. These phenomena, of course, are produced by taking a few frames periodically until the "picture" is complete."

It is necessary to analyze and observe the flow of work under varying conditions. Work sampling accomplishes this to some degree but detailed studies such as the predetermined-motion-time studies are important guides in the establishment of performance standards.

"A predetermined-motion-time system is a procedure which analyzes a manual operation, or the manual portion of an

<sup>8</sup>Guide to Work Sampling, by Fred H. Lambray, John F. Reder Publisher, Inc., (New York) p. 1

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operation, in terms of the basic motions required to perform it and which assigns to each motion a previously established standard time value in such a manner that the times for the individual motions can be added to obtain a total time to perform the operation."9

An example of increased performance through the establishment of performance standards in another industry can be found in the following quotation concerning the Aurora Beacon News.

"Experience shows that in areas to which standards have not been previously applied, the first measurement of work reveals performance in the 50 to 70 percent area. If work procedures are improved by such means as revised scheduling of work, providing necessary tools, and eliminating delays, performance can be improved to 80 or 90 percent." 10

From this research the staff planner may conclude that a person working under the existing conditions will be able to accomplish a given amount of work in a given amount of time.

<sup>9</sup>Work-Factor Time Standards, Joseph H. Quick, McGraw-Hill Book Co. Inc. (New York, Toronto, London) 1962, p. 3

<sup>10</sup> Performance Standards, Editor and Publisher, June 8, 1963, p. 62

Forecasting workload volume is another element of staff planning. This subject will be presented in detail in Chapter V. "Forecasting theory is a collection of empirically derived rules for making systematic predictions (usually of future sales) based on analysis of historical data in terms of trends, seasonal patterns, and random variations." Without a refined forecasting system, our staffing guides are of no real value. Here we must understand the development and revision of workload forecast factors to avoid the lag in adjusting manpower.

The conversion of workload forecast into staffing requirements is correlated with performance standards. If the performance standard of maids is 17 rooms (this takes into consideration single, double and twin bedded rooms) during a 7½ hour period and our workload forecast is 170 rooms, then our staffing requirements for maids is 10 maids or 75 maid hours. Consideration must be given to peak periods when the staffing requirements are converted into hourly work schedules.

Staggered staffing now comes into consideration as we utilize such devices as the "bar graph" in order to deter-

Profitability Accounting for Planning and Control, Robert Beyer, C. P. A., The Ronald Press Co., (New York, 1963) p. 345



mine the maximum coverage during the peak periods.

Staggered staffing is the scheduling of employees in relation to volume in order to obtain a maximum staff at peak periods and eliminate excessive employees during the slow periods of business. An extreme example of this is if we staffed the 10 maids previously mentioned to work from 12:00 midnight to 7:30 A.M. Here we defeat our purpose of staffing due to the fact that the maids would be unable to do the rooms assigned to them. Due to it's importance, staggered staffing will be explained in Chapter VIII, which is dedicated to this subject.

Performance standards are used in creating the staffing guides. Workload volume is then forecasted and staffing requirements converted into hourly work schedules. The assignment of personnel in accordance with the work schedules is dictated by needs which are found in the study of staggered staffing. By utilizing these studies, the staff planner achieves the basis of payroll control which is!

"The method by which the forecast workload units are converted, by use of local staffing guides, to the number of man hours (by department and job group) required to accomplish the workload and provide the desired quality of service. Personnel are then employed in accordance with the man hour staffing requirements."

Sheraton Corporation of America, Hotel Management Activities Policy and Procedure, Staff Planning #1, Oct. 15, 1958, p.2

A daily personnel report is made by each department head of actual time worked. This report gives an opportunity for analysis of performance which will show variance from established staffing guides, so that management can follow up on authorized deviations. This analysis is done both daily and weekly. A staff planning report which summarizes the quality of forecasting and of staffing performance should be presented weekly to all department heads.

In order to realize an accurate forecast, the variations of food cover counts must be recognized. The first of three main classifications is the "regular" food cover count which is the number of persons served, individually, as indicated on the waiters checks, regardless of whether the guest ordered a single main item or a full course dinner. This includes all regular function service.

A "special"food cover count must be originated when we take an approximate number of persons attending a function, such as buffet, reception or cocktail party, where the actual count is not readily determinable. This "special" count does not include regular functions where charge is based on the number served.

The third count is classified as "group" food covers. When a group is booked on a prearranged basis to dine in a

regular restaurant outlet rather than the usual function room, and is served a pre-ordered or limited menu, the cover count is to be kept separate from the total covers served in that particular room, as an aid to greater accuracy in forecasting the usual covers in the room and so that proper consideration can be given to the group business in analyzing performance.

Another consideration that must be clarified in the establishment of a staff planning program is the intangible development of the staff planner. The backbone of an operational program is the managerial responsibility that makes the efficient execution of the program possible.

Management, simply put, is getting things done through people. This is the primary purpose of the staff planner.

Mr. Lawrence H. Appley, in his lectures on management, gives a further definition which was established by a group of business executives and teachers of business administration who met for an entire weekend for the purpose of arriving at a common definition. "Management is guiding human and physical resources into dynamic organization units which obtain their objectives to the satisfaction of those served and with a high degree of morale and sense of attainment on the part of those rendering service."13

<sup>13</sup>Basic Principles, Skills, and Tools of Management, Lectures on Management, as presented by Lawrence A. Appley in Unit #1 of the AMA Management Course (1957-58) p. 31

This is also the function of the staff planner. The technical procedures of staff planning can be followed faithfully, but then a certain point is reached where the true managerial talents of the staff planner must come into play. In keeping the overall philosophy of management in mind, the basic parts that make up the whole must be considered.

If the ends to a staff planning program are to be realized, the staff planner must understand the following basic fundamentals of management that will make his program operational.

The first fundamental is that of authority. Clearly defined lines of authority must be established between the staff planner and all department heads. Authority may be gained by position, by knowledge, and by the ability to obtain positive action as a result of respect because of sincerity, honesty, friendliness, understanding, and ability to create a favorable atmosphere for getting things done.

Chester I. Barnard, in his book, "The Functions of the Executive", states that authority involves two aspects. First, the decision as to whether an order has authority

<sup>14</sup> The Functions of the Executive, Chester I. Barnard, Harvard University Press, Cambridge, Mass. (1954)

person accepts communication only when he understands it, believes that it is not inconsistent with the purpose of the organization or with his personal interest, and is able to comple with it. The second aspect of authority is objective and depends upon the system of communication. Here he emphasizes that the channels of communication should be definitely known, as short as possible, definite for every member, authenticated and uninterrupted. A staff planning program would be useless if it could not be put into practice. Here the importance of authority and communication become apparent.

In order to accomplish the ends of staff planning, the responsibility of the primary functions must be clearly understood. These functions include: forecasting, staffing, timekeeping, personnel reports, production performance and the achieving of results. This is explained in the description of duties found in the Sheraton Staff Planning Manual.

- "a. Forecasting: Plan and conduct forecasting committee meetings; explain techniques to members; educate users in application; and analyze results.
- b. Staffing: Develop work schedules and manpower assignments for use by departments—to permit proper adherence to guides and to accomplish the desired results in achieving 'the best possible service with the least possible waste'.

- c. <u>Timekeeping</u>: Anticipate projected changes in work volume as to provide for desirable overtime (where economical) and yet avoid excess or unwarranted overtime costs, by close follow-up of departmental time reports. (May be delegated authority to deny or approve overtime requests.)
- d. <u>Personnel Reports</u>: Analyze daily personnel assignments for proper scheduling of "days off" and for proper allocation of payroll.
- e. Production Performance: Check volume of work
  "output" in relation to quality of service and
  to changes in conditions or facilities, so that
  standards may be properly adjusted for "variable"
  job groups. (Also check "fixed" and "semi-variable" job categories.)
- f. Achieving Results: Work with hotel manager and with department heads to remedy any lack of understanding or failure in compliance, and cooperate in all efforts to eliminate unfavorable results. "15

The achievement of these primary functions to the extent where the ultimate goals of staff planning are successful depends greatly on the ability of the staff planner in directing the department heads. Cooperation must be the key note if the goals are to be obtained. All of the management functions should be linked together by the understanding of morale.

Keith Davis, in his book, "Human Relations in Business" states: "Like the word health - morale used alone has neither favorable or unfavorable meaning. Health represents general conditions of human relations. Morale

<sup>15</sup> Sheraton Corporation of America, Hotel Management Activities, Policy and Procedure, Staff Planning #1, (Oct. 15, 1958) p. 14

is a collection of employee attitudes, feelings and sentiments instead of a single feeling. \*16

Morale is the cementing factor for the goals of staff planning. A statistical presentation can be the ideal when seen on paper, but in order to make it operate, the cooperation of those involved is a necessary ingredient. This is due to the fact that many times, work habits must be altered, and in doing so, the natural reaction of many employees is resistance. Reorganization and new work methods bring an insecurity that adversly affects morale. The establishment of new work habits must be accomplished while constantly considering the morale factor.

In the book, "Classics of Management" H. L. Gantt gives his thoughts on the habit of work, when he states that the habit of work is most important thing or quality in a worker and is more valuable than knowledge or skill. Gantt says that a worker must want to be busy and industrious. The busy worker usually has the best health and appearance and can do faster work at a better level of quality.

<sup>16&</sup>lt;sub>Human Relations in Business</sub>, Keith Davis, McGraw Hill Book Co., Inc., (New York Toronto, London, 1957)

<sup>17</sup> Classics of Management. H. L. Gantt

This satisfaction of achievement is a very definite part of morale. Many times when a habit of work patterns has not been established, a deterioration of morale occurs. Desire of accomplishment had to be created. This can be accomplished by establishing staffing guides and goals for the employees. These goals (many times limited by union contract) serve as an aid to, and an encouragement to the employees, based on the goals set by staffing guides. With this establishment of pace, due to division of work, a general feeling of accomplishment may become evident as measured through the increase in morale.

Morale is one element needed in developing a group of people into an effective team. Comprehending the human element is an all important part of developing an organizational team and a successful staff planning program.

"The demands that human factors in an organization place upon the administration are considerable. But, under the pressure of day-to-day activities with their inevitable crises, executives often handle in a piecemeal fashion or neglect entirely their responsibilities involving people. It is easier to work with inanimate things - facts, figures, or machines - than with human beings, and administrators tend to concentrate on these kinds of activities while letting the people take care of them-

selves - often to the detriment of total effectiveness."18

Staff planning must not be visualized merely as a statistical method of payroll control, but a combination of
the establishment of a program based on an analysis of the
operation and putting the program into operation by applying the knowledge of staff planning to the human influence
as well as the inanimate.

<sup>18</sup>Human Elements of Administration, Harry R. Knudson, Jr.,
Holt, Rinehart and Winston, (New York, Chicago, San
Francisco, Toronto, London, 1963) p.1

### CHAPTER III

#### ANALYZING THE PRESENT OPERATION

"The constructive cooperation of union and management offers a most comprehensive and successful way of solving the personnel and organizational problems of industry."19

Complete comprehension of the union contracts and philosophy gives the staff planner the direction needed in order to procede along the path of payroll savings. A staff planning program can be created, but in order to make it operational, we must understand the influences of the limitations dictated by the location of the operation.

The first step in analyzing the present operation is the understanding of the union, non-union labor markets and local work practices. The destructive consequences of failure to reconcile the different views of union and management are a result of conflicting philosophies and the inability of either group to recognize a working coexistence. In order to comprehend the influences these views have on a staff planning program, the underlying philosophies must be understood.

From the management point of view, staff planning is a tool for obtaining greater efficiency and higher profits.

<sup>19</sup> Psychology of Industrial Behavior, Henry Clay Smith, Assoc. Prof. of Psychology, Michigan State University, McGraw-Hill Book Co., Inc. (New York, Toronto, London) 1955, p. 257

This is accomplished by adapting the worker to management's values so that the worker will accept the logic of efficiency and allow management to apply it unilaterally. The union's fear is that in this way, the workers will identify themselves with the company rather than the union. The primary object of unions is to minimize individual advancement and emphasize group advancement.

Thus, the conflicts due to different philosophies. Management emphasizes individual competition for advancement, local rules and policies and benefits to be derived from their particular company. The union emphasizes group advancement, national rules and policies, and benefits to be derived from the government and community, as well as the local company.

Many times union and management see these conflicts as basic ones requiring a struggle to the end. The employees benefit most when union and management can be integrated to the point where they supplement rather than fight each other.

"What we in management do is of first importance in determining the nature of human relations in our plants. We are responsible for the enterprize. We have the initiative and superior resources. We also have the advantage of position, prestige. "20

Some managers have a negative attitude towards those who have assumed leadership in the employee group. Often the way that the employee leaders behave is a product of management behavior. Employees may listen to others because they no longer believe what management says, or because management has not told them what they want to know. It is important that management understands the problems and needs of the employees and conveys this understanding back to the employees. Sympathy should not be the result of understanding, but rather, whenever possible, immediate corrective action should be taken.

The general manager of the hotel is sometimes unaware of specific existing situations that are causing conflict between labor and management. This communication lag must be overcome. Mr. Thomas Deveau, Vice-President and Regional Manager for the Sheraton Corporation of America, states in a speech given at the Sheraton Houston Hotel, a general policy for an ideal department head - manager relationship.

<sup>&</sup>quot;We believe you should take the initative to meet with

<sup>20</sup> Human Relations in Small Industries, John Perry, Mc-Graw-Hill Book Co., Inc. (New York, Toronto, London) 1954, p.153

your manager and keep him informed about your work. To discuss your problems with him and to offer suggestions for improvement. I think you would be surprised and encouraged at the interest he would take in your plans and controls. "21

The staff planner, although not a policy maker for management, should take this type of initative in order to establish understanding and accomplish the goals of his program through a cooperative effort between management and union.

Although non-union employees are not represented by an organized group, this management-employee relationship also deserves consideration and analysis. The basic needs and desires of people exist in all types of employment. An overall philosophy must be established in order to develop an ideal management-employee relationship. It does not matter if the employee is union or non-union, he needs to know where his place is in the overall picture of operation.

An effective communications program is the key to the unity of purpose and understanding.

<sup>21</sup>Mr. Thomas Deveau, Vice-President and Regional Manager, Sheraton Corporation of America, in a speech given to chief engineers of the midwestern region, Sheraton Houston Hotel, Oct. 20, 1964

"Communication is important in a business organization because it is one of the chief means by which it's members work together. Communication helps hold the organization together by making it possible for members to influence one another and react to one another."22

Harold Koontz and Cyril O'Donnell, in their book "Principles of Management"<sup>23</sup> define communication as a transfer of information from one person to another, whether or not it elicits confidence or becomes an exchange or interchange. They stress, however, that the information transferred must be understandable to the receiver.

A contrast to the theory of Koontz and O'Donnell is that of Henry Clay Smith who states that, "Communication is the imparting or interchange of thought, opinions, or information by speech, writing, or signs."24

The hotel being studied incorporated the theory that communications and human relations are permanently linked.

<sup>22</sup> Management Principles and Practices, Dalton E. McFarland, The MacMillan Co., New York, 1958, p. 426

<sup>23</sup> Principles of Management, Harold Koontz & Cyril O'Donnell, Mc Graw-Hill Book Co., Inc. (New York Toronto, London) 1964. p. 505

<sup>24</sup> Psychology of Industrial Behavior, Henry Clay Smith, McGraw-Hill Book Co., Inc. (New York, Toronto, London) 1955, p. 245

An interchange of thoughts through different forms of communications is a basic tool used in evaluation and correction of staffing "targets" and operational goals.

The purpose of communication in the hotel being studied not only includes an attempt to effect change and influence actions but to also encourage a meaningful inter-action among the employees. In order to accomplish these ends, bulletin boards, announcements, meetings, memos, suggestion boxes, and monthly hotel newspapers are utilized. These tools of communication served upward, downward and lateral needs of communication.

"Communication is essential to the functioning of an organization. It is viewed widely as one of the most important processes of management."25

After a complete understanding of the basic philosophy of labor and management and attempting to establish a rapport between the two, the staff planner must then study the finer details that would influence his decisions when creating staffing policy.

A detailed study of the existing union contract provides

<sup>25</sup> New Patterns of Management, Rensis Likert, McGraw-Hill Book Co., Inc. (New York, Toronto, London) 1961, p 44

the direction needed in order to proceed along the correct Path to payroll savings in regards to union employees. Without complete comprehension of the union contract, the Staff planner may find himself backtracking on a program which, due to his lack of knowledge of union regulation, he thought would lead him directly to payroll savings or a higher quality of service. This situation is not only measured in time wasted but also in broken relationships which may be difficult to repair.

The following example of the importance of understanding the conditions under which a staff planning program will be operating is taken from a situation that occurred in the hotel being studied.

#### Situation:

The hotel averages three noon time banquet bars a week.

Each banquet bar lasts on the average of three hours.

The staff planner calls the head bartender to discuss how this situation is being handled. The head bartender explains that he has an agreement with a bartender to work these hours at the union hourly rate of \$2.11 per hour. From this information, the payroll for this extra bartender would be \$18.99 per week or \$987.48 per year.

Decision:
By refusing to accept the agreement, the head bartender
made with the union employee, the staff planner possibly

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saved the hotel hundreds of dollars. The reasoning behind this decision was based on the understanding of the collective bargaining agreement which was made between union and management. A breach in this contract would have been cause for a grievance which could result in the loss of time, money and good will.

Being aware of the stipulation of the union contract, the staff planner quickly ascertained that what the head bartender suggested was a contradiction to the union-management agreement. Under the agreement of the contract, to bring in an extra bartender, the hotel must pay \$17.87 per day no matter if the bartender works one or eight hours. The average number of hours a bartender was needed for the noon-time banquet bars was three per day. If this extra bartender worked on the suggested basis of \$2.11 per hour for one year and then decided to make a grievance against the hotel, the hotel would be obligated to make up the difference in pay. This would amount to \$2,787.72 per year, instead of \$987.48.— a costly \$1.800.24 error.

By the revision of bartender work schedules, it was possible to cover an average of two noon-time banquet bars per week while maintaining the present payroll. The third noon time bar was covered by giving overtime to one of the regular bartenders. Even if overtime was paid for all noon time banquet bars, this would amount to \$1,481.72

or a savings of \$1,306.50 over hiring an extra bartender.

This points out the importance of understanding the details of operation that influence the decisions of establishing a sound staff planning program.

Tabor Markets
"The efficiency of all resources in a business is the responsibility of the people who use them, the line organization. In the case of manpower, the personnel department has the specific objective of doing what it can to assist line executives in building and maintaining a work force which is as efficient as possible."26

The labor market affecting the hotel being studied, comes mainly from a non-hotel acclimated group. The midwestern city in which this hotel is located, draws from the surrounding farm country area. Colleges in this city also afford personnel for some types of positions. Due to recent growth of new hotels and motels, experienced personnel are at a minimum. Management positions were filled mainly by drawing from other areas in the country. Difficulty was experienced in obtaining experienced personnel in food preparation and the front office. Although applications for employment averaged twenty per day, most of these were not skilled and a high turnover of employees was experienced until a detailed orientation and training

<sup>26</sup> Management Principles and Practices, Dalton E. McFarland, MacMillan Co., (New York) 1958, p. 380

program was established.

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The familiarization with union-management philosophy and regulations and non-union labor fields necessary in establishing a sound staff planning program is as necessary as it is for a doctor to first examine his patient before he attempts a cure. It is from this knowledge that the starf planner gains direction for the installation of objectives in order to make his staff planning program operational.

Staff planning is a facilitating service given to line management so that they may accomplish the objectives of the organization. Policies and procedures are developed in order to accomplish the overall objectives. It is here that the communication between management and the staff planner must be clearly understood, for this is the corner stone in a successful staff planning program.

Objectives, Policies and Procedures
A hotel is like a tapestry. We must stand close to see
the detail in design but if we are to comprehend the
interwoven total meaning of purpose, we must also look
from a distance where we may absorb the scope of the
hotel. This overall scope is the objectives, policies,
and procedures which make up the direction and purpose
of the hotel.

"Objectives are goals, aims or purposes which executives, managers, and administrators wish members of their organizations to achieve over varying periods of time."27

The general objectives of the hotel being studied are:

- 1. To operate as effectively as possible in order to obtain the maximum earnings consistent with highest standards of business ethics.
- 2. To insure fair and equal treatment of the organization's personnel, whatever their occupation, position, or operating location.
- 3. To provide the desired quality of service at a suitable price with minimum waste. 28

The basic policy of the staff planning program that implements the objectives of the organization is that staff planning services are to be designed to render specialized technical advice and functional assistance to line management at all organizational levels. Line managers have the right to request, receive, or revise staff recommendations, but are held responsible for results.<sup>29</sup>

Procedures are a reflection of policy and are always subordinate to policy. Procedures are often the basis for observing any unstated policy that may exist and may sometimes deviate from policy for at least a short period of

<sup>28</sup> Sheraton Corporation of America, Hotel Management Activities Policy and Procedure, Staff Planning #1, October 15, 1958

<sup>29</sup>Ibid.

time. The way in which the ends of staff planning are accomplished are the procedures of staff planning. These procedures are found through out this thesis as the installation of a staff planning program is described.

"Policies provide a guide as to how the objectives of a business are to be achieved. Company policies, if followed, implement company objectives. Departmental policies implement departmental objectives." 30

Marshall E. Dimock, in his book, "A Philosophy of Administration Toward Creative Growth" comments that the philosophy of administration is a philosophy of life. He compares administration to biology, for he states that both are concerned with the growth and decline of an organism, with the mutual relations between living organisms and their enviornment. Although there are many different interpretations of philosophy, this is part of the tapestry made by management, which the staff planner must clearly visualize before building his program on this foundation. From a basic managerial policy established by the hotel, objectives, policy and procedures are created that are guides for staff planning.

Nielander, South Western Publishing Co., (Cinn., Chgo., Dallas, 1963) p. 344

A Philosophy of Administration Toward Creative Growth, Marshall E. Dimock, Harper, (New York, 1958) p.658

Architectural Influences
Although the blueprints for a new hotel may be carefully studied by the experts of the industry, there are always problems that arise after the hotel has been built. that effect the operation due to oversight, uniqueness of the operation, or unpredictable situations which were not anticipated while the hotel was on the drawing board. The staff planner's interest in the physical structure of the building is in the efficiency of operation in relation to the physical limitations. Many times it is discovered that alterations may be needed in order to achieve an efficient, smooth flow of service and/or a payroll savings. The beauty of decor may play an important part in selling, but the staff planner must visualize the hotel in it's physical and monetary usefulness.

The hotel being studied is a new building built just five months before the implementation of a staff planning program. A detailed study was necessary in order to establish a realistic picture of the areas of operations and the labor needs influenced by the tangible structure of the hotel. Following are some examples of physical limitations that affected staffing and service:

The front desk is located on the lobby level with the main entrance from the parking ramp side. Guests entering may easily see the desk and guest flow to the desk is excellent. The front desk has one entrance from the reservation office.

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Directly behind the front desk, but separated by a wall, is the one-position switch board. To the left of the front desk, but separated by a chest-high partition, is a two-position cashier's cage. Two windows are for the room clerk's use and one window for mail and information. Twelve room rack carriers and stock card box are located between the two clerk windows. Two room rack carriages, reservation racks and information racks are located between the clerk's window and the mail and information window.

Situation
There were several architectural flaws in the front office. A wall separates the front desk from the telephone operator. Communication between the telephone operator and the front desk mainly involves messages, telephone slips for new check-ins, charges on phone calls, and some information concerning check-outs. All written communications must be hand carried, therefore leaving one of the areas unattended.

#### Solution

The suggested solution for this problem was to install an opening in the wall, so that communications may be passed without leaving the work stations. The benefits obtained from this suggestion would be increasing the efficiency of service to the guests.

Situation

The second architectural flaw was the separating wall between the cashiers and room clerks. Maximum security was obtained in the installation of this wall; however, this also hampered the utilization of room clerks for relief cashiers.

Solution

A work sampling study was made and on the basis of this study, it was concluded that the desk clerk had sufficient time to also do the duties of relief cashier. The divider was removed, and one front office cashier was eliminated for a payroll savings of \$3,603 per year.

Another problem that was built into the front office by architectural design was the divided room rack. Two floors were separated from the main area of selling, which resulted in a decrease of efficiency. This inconvenience could only be corrected by a complete renovation of the registration area. The cost of this could not be justified at this time, and so the architectural error remains as part of the operation.

The elimination of these physical limitations resulted in increased efficiency of service with payroll savings through redesign.

The staff planner must also be aware that payroll must

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sometimes be increased in order to obtain the objective of the organization, while working within the limitations of the physical structure. In this case study, we find such an example in the study of the main freight elevator.

Situation

This hotel has only one small, approximately five feet wide and nine feet long, self-service freight elevator that goes from the sub-basement to the 19th floor.

The efficient utilization of the self-operated freight elevator posed a problem due to heavy use from all departments. This one elevator had to be utilized by room service, maids, inspectresses, security housemen, engineers, bellmen, and food supply for luncheon in the specialty bar on the 19th floor. All uniformed personnel used this elevator. As a self-operating unit, the service was greatly hindered due to misuse and the apparently, unanticipated work load. Normally a three-hundred room hotel would probably find it's needs met in one freight elevator, but when three-hundred rooms are stretched between nineteen floors and unanticipated use occurs, it was found to be inadequate as a self-operating unit. In a study of it's operation, it was found that during peak periods, it was common for a person to wait over five minutes before the elevator call was answered.

Solution

A complete program of employee indoctrination in the use of the elevator was undertaken, but the delays still occured. In order to provide the desired quality of service, an elevator operator was placed on the payroll to control the flow of traffic. The result was an increase in payroll but a reduction in time lost by individual employees, thus obtaining the efficiency of service desired by the hotel.

Before the staff planner can gain a complete understanding of the operation he must have full knowledge of position descriptions, defining authority. Only by knowing who is responsible for specific areas can the staff planner hope to communicate effectively as he attempts to move ahead with his staff planning program.

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#### CHAPTER IV

#### ESTABLISHING A STATISTICAL FOUNDATION

The completion of a sound foundation for a staff planning program lies in the establishment of statistical records.

The first step in accomplishing this end is the establishment of a job number control. The job number control is a list of numbers that have been assigned to jobs in each department. Each number represents a specific work schedule and area. The job number is the same as the employee's time card number. The installation of these numbers is a joint effort involving the staff planner, controller, and department heads. The ultimate responsibility of assigning correct job numbers lies with the department head. 32

The purpose of this job number control is to create routines which will result in the maintenance of a standardized history and grouping of all jobs in the hotel. It is necessary for the effective control of staffing that job titles, as used in each department, be descriptive of the work they represent. Further, and of even greater importance, it is essential that the employee who has been assigned a particular title actually performs the work for which the title he bears is representative. Unless these

Trends in the Hotel-Motel Business, Twenty-Eighth Annual Review, Prepared by Harris, Kerr, Forster and Company, (Chicago, 1964)

basic classifications and assignment principles are followed, the reliability of data processed by the payroll control office may be seriously impaired. It is for this reason, that forms and procedures have been devised which will enable each department head to better execute his responsibility in this particular respect.

Improvements in staffing or service will probably result in changes of the control list during the period of installation. After installation, the changes will be noted by the utilization of a "wage and/or position change" form. An example of this is shown in Figure 2.

## WAGE AND/OR POSITION CHANGE

Approved:		
Mgr	otel	Date
Aud		
Employee		
Present Position		New Position
Department		To Dept.
Clock No.	_	New Clock No.
Present Rate	_	New Rate
Effective Date of Ch	ange	Dept. Head
CHANGE: CLOCK CARD_	EARNING I	RECORDCONTRACT CARD
	ADDGR. P	LATE

Fig. 2 Wage and/or Position Change Form

The department head makes this form out in duplicate.

After obtaining the required approval, the completed forms will be forwarded to the paymaster, who is responsible for verifying the information on the form, and for making the necessary changes in the payroll records. This report then goes to the comptroller who approves the form and returns the original to the paymaster and the copy to the staff planner. All records are then adjusted in order to maintain proper control of the number system.

During the first few weeks after the installation of a job number system, the staff planner has an excellent opportunity for establishing the accuracy of reported hours by comparing the time cards to the actual payroll sheets while also verifying that the system is operating according to design. In this case study, many other infractions were highlighted through a comparison of payroll reports and time cards.

Many times we fail in our duties because of assumptions. How often the repetitious "I just assumed that . . . " points to the management failure of following through on proper training or basic lines of communication. This same situation occurred in the hotel being studied. An

example of this was the steward department. The head steward's method of reporting his employee's time worked was to pull the time cards at the end of each day and base his report on this information. No other record was kept except what he remembered happening during the day. When he had a day off, the reporting of the hours worked was delayed until he was back on the job. The use of the time card by the head steward, besides being a contradiction to payroll control, was completely inadequate and was costing the hotel hundreds of dollars in payroll hours not worked. The following explanation points out the complete lack of payroll control that typifies the operation before the emphasis was placed on staff planning.

the time clock is located at the employee entrance to the hotel. Excellent control over the going and coming of employees has been established. After the employee checks in, he goes to the locker rooms to change into his work clothes before reporting to work. The average time for this change would be approximately fifteen minutes. After working his shift, he spends fifteen minutes changing to his street clothes before checking out. The steward, when checking the time cards, did not take this, or the fact that each person has half an hour lunch break, into consideration. The result was that many workers were

being paid for dressing and eating. Such an error almost seems impossible. It is difficult to imagine how anyone could make such a mistake because you would "just assume that . . . ".

The assumption that department heads understand the proper payroll control systems is not a tool of payroll control. Proper methods must be clearly communicated to all concerned so that each department is uniform in their controls. The knowledge of the correct method of operation must be shared and the word "assume" removed from a staff planner's vocabulary. This example of a lack of knowledge emphasizes the fact that fundamentals must be established before an accurate statistical foundation can be achieved.

Another basic control that must be clearly established is the authorization for overtime. The repetitious presence of overtime is an indication of a trouble area. Overtime should always be investigated in order to determine it's significance in each particular instance. Some overtime is justified when staffing closely to normal requirements, but it must be watched closely to prevent abuses. The creation of an "overtime authorization" form is an essential tool in controlling excessive overtime. Idealistically, the form should be filled out in advance



and approved by the department head and management. However, due to unavoidable emergencies, this is not always possible. Final approval should still be obtained through the stated channels. This is accomplished when the overtime authorization form is sent to the staff planner with the department's Daily Payroll Report. Overtime hours shown on this report must be substantiated. The staff planner presents a weekly report to management showing the number of overtime hours and the overtime cost in each job classification.

An example of this Overtime Authorization is found in Figure 3.

Request for Overtime Authorization

	Dej	partment
Time Card No Na	me of Emplo	oyee
Job Title	_ Date Over	rtime Worked
State Reason in Detail	for Overti	lme
Began Overtime Work at	Finis	shed Overtime at
Total Overtime Hours W	orked	
Overtime Wage Rate	per hour	Total Overtime Wages
Signed: Department		Date:
Department	Head	
Signed: Manager		Date:

Fig. 3 Request for Overtime Authorization

All department heads must be furnished with an ample supply of these forms. The forms are checked by the staff planner any any apparent discrepancies should be discussed immediately with the department head involved.

Tight controls of overtime will generally realize an immediate payroll reduction in many departments. Continuing reductions will be influenced by a conscientious follow through and correction of any deviations in the established system.

Average Hourly Rate

By analyzing the payroll in relation to job classifications, we are able to ascertain the average hourly rate for each classification. The establishment of payroll rate factors will save the staff planner many hours when computing the estimated daily payroll. These factors are developed for each department and, where necessary, for the job groups within the departments. Fixed and semi-variable job categories may be grouped together but undivided attention should be given to the variable job groups. An excellent example of all three of these classifications can be found in the housekeeping department.

The fixed and semi-variable classifications of house-

keeping are the executive housekeeper, inspectresses, linen maids and housemen. In order to compute the payroll rate factor for this group, the staff planner obtains the weighted hourly rate for each employee and then divides the weighted hourly rate by the number of employees in the grouping.

No	. & Classification	\$ Per Hour	Group	Rate	Per Hour
1	Exec. Housekeeper	\$ 2.15	\$	2.15	
1	Asst. Housekeeper	1.59		1.59	
ı	Night Supervisor	1.37		1.37	
ļ	Inspectress	1.37		1.37	
3	Linen Room Attendants	1.32		3.96	
1	Housemen	1.46		10.22	
14	Total Fixed & Semi- Variable Employees		;	21.66	Weighted Average Hourly Rate of Department

$$\frac{21.66}{14}$$
 = 1.547 Payroll Rate Factor

This payroll rate factor is then used to figure the estimated daily payroll for housekeeping's fixed and semi-variable job classifications by simply multiplying the total hours reported on the daily personnel report by the payroll rate factor of 1.547.

This payroll rate factor is an approximation and not the true daily payroll for these job categories. The only way to obtain the actual daily payroll would be to figure each individual separately. Actual payroll is figured by the payroll department for each pay period but the staff planner must have a daily approximation of payroll in order to compare the daily estimated payroll with the par payroll for the General Manager's Daily Payroll Report that is further described in Chapter VII.

The variable classifications in this department are the day and night maids. In this case study, all maids were on the same pay scale of \$1.32. This, then, becomes a payroll rate factor of \$1.32.

The degree to which separate factors for the various job groups need be developed vary with different properties and should be established in relation to the experience of the property. Payroll rate factors must be kept under constant review to assure that they are current at all times. When rates are scheduled to change, the new payroll rate factors must be computed in advance so that the new rates are effective. The utilization of these factors will be fully explained in Chapter VI which deals with the daily personnel reports.

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Although the staff planner cannot control the fringe benefits given to the employees, it is important to understand that the actual payroll dollar is not the total cost per employee. Fringe benefits make up an all important part of payroll costs which must be constantly considered when analyzing the cost of labor.

"The simplest method of measurement is to identify the unit characteristics in the object to be measured, and then merely to count the recurrences."33

One of the tools of the staff planner is unit measurement. The two major units that affect variances in volume are the food covers and the rooms occupied. From these two units, we must establish an experience factor which will aid in the forecasting of future business and payroll.

Rooms Department
An analysis of the rooms department should be based
around the goal of accurately forecasting both guests and
room occupancy. The basis for this study is found in the
night clerk's report.

<sup>33</sup> Readings in Management, ed. by Max D. Richards, and William A. Nielander, "Fundamentals of Measurement" by Paul Kircher, South-Western Publishing Co., (Conn., Chgo., Dallas, 1963) p. 595

From the information that the night clerk's report reveals, we may formulate a statistical background in order to obtain a statistic for forecasting. Figure 4 shows a suggested statistical computation sheet for the rooms department.

This day by day statistical information is then transcribed into individual days of the week and the figures are accrued and the statistics are revised for each day. From this information, we establish important trends that become an informable tool of forecasting as well as an aid to past performance analysis.

Once a past history has been established, this analysis sheet should be kept daily and used in forecasting as well as investigation of past performance. (With these two forms, we are able to establish a statistical foundation for the rooms department.) From this information we are able to etablish the dollar sales of the rooms. The dollar sales has little to do with the variation of staff in the rooms department but the correlation to the rooms payroll percentage will naturally fluctuate with the dollar intake. This must be understood in order to recognize that the payroll percent to sales may be up although the actual payroll remains the same, due to the dictations of the staffing guides.

## ROOMS STATISTICS SHEET

# June 30 through July 6

Rooms Occupied Number of Guests Ratio	SUN. 63 82 1.3	MON. 128 164 1.3	TUES 153 191 1.25	66 76	THUR. 45 62 1.4	69 111	68	TOTAL OF WEEK 592 797	DAILY FOR WEEK 85 114 1.3
Total Transient Rooms	52	117	138	52	31	54	55	499	77
Total Transient Dollars	744	1636	1913	762	467	791	845	7163	1023
Transient Aver-	1440	1398	1386	1466	1506	1464	1536		1329
Transient Stay- over Rooms	36	55	74	16	19	36	21	257	37
		47.0	53.6	30.8	61.3	66.7	<b>3</b> 8.2		48.0
Total Reserva- tions	36	52	33	40	7	8	18	187	27
Cancellations & No Shows	12	12	9	14	3	4	3	57	8
_	33.3	23.1	27.3	35.0	42.9	50.0	16.7		30.0
Average Pickup	7	41	59	55	7	28	2	199	28

(A holiday week - July 4, 1963)

Fig. 4 Rooms statistics sheet.

An insight into how the payroll percent to sales may fluctuate while the actual payroll remains the same is found in the following example:

The dollar average per room is \$15.00 on one set day with 75 check-ins and 75 check-outs. The next day, the room average is \$14.00 per room with the same number of check-ins and check-outs. The rooms payroll percentage of sales would naturally be higher on the second day if, as it should be, the staffing for both days is the same. The following fluctuation of the rooms payroll percentage to sales would occur if the rooms dollar payroll was \$400 and the occupied rooms were 100 per day.

## First Day

\$15.00 Average Per Room

x 100 Room Occupancies

\$1,500 Rooms Sales

\$\frac{\$400}{\$1,500}\$ Rooms Payroll x 100% = 27% Rooms Payroll to Sales

## Second Day

\$14.00 Average Per Room

x 100 Room Occupancies

\$1,400 Rooms Sales

\$\frac{400}{\$1,400}\$ Rooms Payroll x 100% = 29% Rooms Payroll to Sales

These figures show that the fluctuations of payroll percentage to sales does not necessarily mean that there has been a lag in the adjusting of manpower. This points out that the staff planner must be unit orientated. Payroll percentages areas guide which indicate that certain areas should be investigated in regards to staffing by units. The same direction is taken for all the operating departments of the hotel.

## Food Department

The food department payroll is also based on unit output. The number of covers served correspond with the number of employees needed to supply, prepare, serve, clean and reset. The same holds true for beverage service, although variations in this department are not as great.

In order to establish a statistical foundation for the food department, we must obtain a breakdown of covers served per meal period per area. (Figure 5 shows the method utilized in this study to obtain a past history of covers served.) A special form was devised in order to maintain a day by day account of covers served in relation to the guest occupancy. Business fluctuates by the day of the week and complete statistics for a specific day of the week are kept together in one classification. The ultimate goal is to achieve a ratio which may be used as a tool for forecasting future business.

There are many factors that influence the variation from the norm which can be established by this statistical study and therefore, it is imperative that these figures are used only as a guide and not as a standard. The reasoning for this line of thought is that there are influences that must be considered with past statistics if an accurate forecast is to be achieve. An example of this is:

Our past history indicated that the main dining room usually will serve 70% of the hotel room guests. A convention of 200 people is staying at the hotel and organized breakfast is planned. Taking this influence into consideration, the normal ratio to guest occupancy must be adapted to meet the situation. Therefore, it is imperative to recognize the factors that influence the variances of our statistics if we are to achieve an accurate forecasting of man hours.

Minor Operating Departments
Statistics for minor operating departments are determined by unit count, which is the same manner as the rooms, food and beverage departments. The check room, for instance, would utilize the cover count for forecasting and yet maintain an individual record of garments received for checking. The man hours of work in this department are determined by the number of garments

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OUTLET	MEAL	COVERS	ROOMS	GUESTS	RATIO TO GUEST OCCUPANCY	AVERAGE CHECK
Counter Service	Brkfst. Lunch Dinner	3,403 3,297 1,915	6,589	8,751	38.7% 37.7% 21.9%	.80 .93 .98
Main Dining Room	Brkfst. Lunch Dinner	3,513 6,427 5,252			40.1% 73.6% 60.0%	1.19 1.74 3.36
Specialty Room	Lunch Dinner	5,502 6,613			63.8% 75.6%	2.08 3.98
Club	Lunch Dinner	525 632			6.0% 7.2%	1.84 3.53
Room Service	Brkfst. Lunch Dinner	2,510 1,531 1,686			28.5% 17.5% 19.3%	1.16 1.44 2.00

Fig. 5 Food Cover Analysis Sheet, September, 1963

which will be handled. The garage is staffed according to the number of cars that will be handled. And so, the same formula is used throughout all operating departments. The important fact that must be highlighted for all operating departments is that a statistical breakdown of units must be obtained in order to determine proper staffing.

Non-Operating Departments Non-operating departments offer a different measurement. Here we are dealing with fixed and semi-variable personnel and the work load does not have the variation found in the operating departments. Obtaining a statistical background in these departments entails a complete understanding of the work load for each individual job listing. We must determine the need and justification for each position by obtaining a knowledge of the amount of work to be done. An example of this is that in some smaller properties, a chief engineer, and one or two utility men would be the complete staff of heat, light, and power and the repair and maintenance departments. The statistical background that must be obtained in this situation is the number of public and guest rooms in the hotel, types of machinery, the condition of equipment, and the general condition of the physical property. Once this need is determined, we staff according to the need and these semivariable or fixed positions would vary only after a study

to determine changes in conditions that influence the particular department. The same holds true for other nonoperating departments. First, we study the needs and then staff accordingly to accomplish the needs of the hotel. Monthly re-evaluation of each department's output of work gives justification of the man hours used or indicates that adjustments should be made. The main difference in staffing operating and non-operating departments is in the time element of fluctuations. Operating departments are geared to adjust immediately to the fluctuations of business in order to avoid any lag in manpower. The non-operating departments are basically established on business averages or man hours needed to maintain set standards. The exception of this rule is mainly found in the administrative and general department where cashier man hours are influenced by daily business trends.

Food and Beverage Payroll Allocations
In order to obtain an estimated allocation of payroll
dollars to food and beverage, we must establish percentage averages based on a study of the hotel's past history. An example of this is a typical payroll from the main dining room. Both food and beverage are served in this area by one staff. Therefore, it is imperative that a knowledge of what proportion food and beverage is being served in order to allocate the payroll properly. This could be done daily by utilizing the dollar sales figures

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from restaurant audit. If, on a specific day, we sold \$1,000 of food and \$300 in beverages, the payroll percentage allocations would be calculated on the total sales of \$1,300. The division of the total sales into the food sales would then give us a percentage allocation for the food payroll.

This allocation of the total payroll to the food payroll is an estimate used in the hotel being studied. Due to the variance in sales, it would be difficult to divide the payrolls in accordance to the actual time spent in food and beverage. The percentage allocations proved to be a rapid method of calculating payroll allocations in restaurants serving both foods and beverages.

If the total payroll for the main dining room was \$400 for the same day, the actual food payroll would be calculated by multiplying \$400 times 76.9%.

\$400.00 Total Main Dining Room Payroll

x 76.9% Food Sales to Total Sales

\$307.60 Total Food Payroll for Day

The beverage payroll for the day would then be figured by subtracting the food payroll from the total payroll.

\$400.00 Total Food and Beverage Payroll
- 307.60 Food Payroll
\$ 92.40 Total Beverage Payroll for Day

This would give the staff planner a very accurate record of day to day payroll distributions. In some operations, where there is only one outlet involved, this may be practiced, but in this case study, allocations were made for the main dining room, the specialty room, the private club, banquets, room service, main bar, where lunch is served, and the stewards department. The time element involved in daily calculations of percentage allocations was prohibitive if the staff planner was to accomplish progress in the areas of responsibility. Average percentage allocations were established by a statistical analysis of past performance. These averages were subject to revision each month on the basis of the past month's performance and the next month's forecast. By establishing this statistical record, all the regular outlets maintained a close correlation of food to beverage. The banquet department usually needed slight variation in relation to the forecast of business.

In this case study, monthly percentage allocations of food and beverage payroll were used effectively as a daily guide. Due to a careful analysis of past history, intensive study of future business, and periodical re-evaluations, the degree of accuracy was within .5% of actual end of the month allocations.

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This degree of accuracy was arrived at by taking the actual food and beverage sales dollars for the end of each month and calculating payroll allocations for the restaurants serving both food and beverage on the basis of a ratio of food sales to the total sales dollars.

A statistical foundation for staff planning involves a continuing study and re-evaluation of past performance. The creation of new outlets for sales, payroll increases, seasonal fluctuations and changes in types of service are but a few of the factors that must be considered if past statistics are to be utilized effectively. In Chapter V, the utilization of the statistical foundation will be clearly established as forecasting of workload and payroll is discussed.

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## CHAPTER V

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## FORECASTING WORKLOAD AND PAYROLL

"The purpose of volume forecasting is to obtain accurate estimates of workloads to which work performance standards may be applied, and to furnish the operating department heads with information which will help them staff according to anticipated volume." 34

The basic information needed in order to make reasonably accurate forecasts is found in Chapter IV where the establishing of a statistical foundation was discussed. Forecasting is taking on increasing importance as management begins to realize that this is not just a guessing game, but rather a careful calculation of future business trends based on a statistical analysis of past performance and a calculation of future events and conditions. A sound statistical foundation is but a guide in forecasting and will be influenced by weather, local events, national events, general economic conditions and a multitude of other factors. Some of the factors may be foreseen and some may not.

"It is not possible to find historical patterns sufficiently repetitive or to discover relationships between the economic

<sup>34</sup> The Payroll Pre-Control System, Ralph L. Berg, Project Director, Management Advisory Services, Harris, Kerr, Forster and Company, (Chicago)

variables sufficiently reliable to enable us to forecast even the near economic future with consistent success."35

It is the unforseen situations that destroy the accuracy Sometimes these situations could have of forecasting. been forecasted if a more detailed study of coming events had been undertaken. An example of an unforseen influence was the tragic assination of President Kennedy. case study, a forecast of capacity rooms, food and beverage business was expected. Upon hearing of the assination. all events were cancelled and a forecasted capacity house became an empty house. The previous forecasts were quickly and drastically revised downward due to the profound influence this event had on an entire nation. This is an extreme example, but it clearly points out that the anticipation of future business must take into consideration national as well as local situations. The utilization of a statistical foundation serves only as a guide in the forecasting of future business volume.

"But the firm's sales forecast cannot be made without some estimate of what the industry is going to do. And the industry's sales forecast in turn depends in large measure

<sup>35</sup> Business Cycles, James Arthur Estey, Ph.D., Prof. of Economics, Purdue University, Third Edition, Prentice-Hall, Inc. (Englewood Cliffs, N. J.) p.321 (1941)

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on the predicted level of activity in the economy as a whole."36

Forecasting is a combination of a detailed science, common sense and good judgment. Robert H. Roy, in his book, "The Administrative Process" states that "Forecasting is an act, predicting quantitive terms for administrative purpose." 37 No matter what definition is given to define forecasting in the hotel industry, each definition indicates that the question, "What volume of business will we have tomorrow, next week, next month?" must be answered. The staffing of the entire hotel is guided by and dependent upon the forecasting information.

The role of the staff planner in the act of forecasting is that of coordinator, advisor, analyst, and contributor to workload forecasts. The staff planner does not provide direction in forecasting, but rather contributes analysis and recommendations for line management decision. It is his main concern to temper the workload forecast to the staffing guide.

In this investigation, a type of volume forecasting was

<sup>36</sup> Scientific Decision Making In Business, Abe Shuchman, Holt, Rinehard and Winston, Inc. (New York, 1963) p.540

The Administrative Process, Robert H. Roy, John Hopkins Press (Baltimore, 1958)

developed before a staff planning program was put into effect. Knowledge of staffing guides in relation to forecasting did not exist and therefore, the control of staffing was given to each department head.

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Four months after the installation of a staff planning program, the total hotel payroll had decreased from \$470, 500 for the four preceding months to \$459,000 for the four months after the installation of a staff planning program. During the second four months, sales increased \$13,000 over the preceding four months. Staffing according to the performance standards and to volume forecasting was the main reason why the hotel was able to recognize this \$11,500 payroll difference in a four month period of time. Due to different forecasting of workloads in relation to the forecasted volume, it was possible to serve more people with fewer employees.

It is important when discussing forecasting that both volume and workload be understood. Workload cannot be forecasted without first forecasting volume, and volume forecasting loses it's value unless it is used in the forecasting of workload. There must be both guides that direct and control and feedback in forecasting if accuracy is to be obtained. Control in forecasting is dictated by our statistical foundation and limitations established by

our staffing guides. The feedback is a study of past performance in forecasting volume and workload, and the adjustment of percentages in order to obtain greater accuracy.

A forecasting system provides for better and more intelligent planning and better business decisions. This, in turn, leads to more profit and less economic waste by maintaining an even level or increased level of production, less food and labor waste and more satisfied customers. If the forecast is accurate and the planning in relation to the forecast is followed through, then there is a direct and positive influence on the cost of labor, cost of goods sold, other expenses and increasing sales. In other words, accurate forecasting and proper planning will have a positive effect on all the factors that make up the operational, profits of the hotel. The non-operating departments are also influenced to some degree and so the hotel's complete profit picture has a direct correlation to forecasting.

"The man who undertakes a business venture is confronted with two different tasks as he attempts to portray the future. The first task is that of gathering pertinent data, and the second task is that of formulating a sound

decision as to his future course of action."38

Forecasting factors are developed from past experience and are used in correlation with the staffing guides to forecast workload units. This makes it possible to determine in advance the number of work hours required to provide the quality of service desired at the expected volume of business.

The primary variable in workload forecasting is the number of rooms to be occupied. A rooms occupancy forecast is created by taking the number of booked reservations and adding the expected increase in reservations and the number of people that will come in on the day being forecasted (without a reservation), and subtracting the estimated no shows. An analysis of past experience under similar conditions in Chapter IV, provides the basis for a reasonably accurate estimate of these portions of total room occupancy forecast.

The minor operating departments of the hotel being studied include the telephone department, valet, garage, skating rink or pool, and rents and other income departments.

These, along with the non-operating department of heat,

<sup>38</sup> Business Management, Lyman A. Keith, Carlo E. Gubellini, McGraw-Hill Book Company, Inc. (New York, Toronto, London, 1958) p. 23

light and power, repair and maintenance, sales, public relations, and administrative, and general, are all affected to some degree by the rooms forecast. Staffing of the minor operating departments have greater fluctuations in relation to rooms occupied due to the fact that many of the job categories in this classification are variable or semi-variable. The non-operating departments are composed mainly of fixed positions. The semi-variables of non-operating departments are influenced more by long term forecasting than daily fluctuations.

Food and beverage volume in regular outlets will vary with the rooms occupied in the hotel. A detailed analysis of previous food and beverage business, as shown in Figure 5, (page 60), is necessary in order to arrive at valid workload forecasting factors. These forecasting factors should be under constant screening and possibly revised when they differ greatly from the actual workload over an extended period of time. Revised factors must be watched carefully to determine their validity. It may be that the original factors were valid, but the period concerned was an abnormal one that is not representative.

Forecasting is a group responsibility and not that of a single individual. The chairman of the forecasting comm-

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ittee is the manager or a representative appointed by
the manager. This committee should be composed of the
front office manager, the food and beverage manager, the
food and beverage controller, the sales manager, catering
manager, managers of the food and beverage outlets, and
the staff planner. The auditor is included in the monthly
and yearly forecasts but does not usually participate in
the weekly and daily forecasts. Auditor participation is
the option of the manager.

The front office manager provides the figures and assembles the preliminary room volume forecast. It is from this prime variable that a basis is found for forecasting volume in the majority of the hotel's departments. The main exception is the banquet department. The volume of this department is dictated by business obtained and this, in turn, also becomes an influence on other food and beverage outlets. An example of this is if a convention, making up 50% of the total guests of the hotel, had a breakfast scheduled, then the number of people normally expected to have breakfast in the regular outlets would be reduced proportionally. This points out the interwoven influences that each department has on the other. For this reason, volume forecasting must be a group responsibility and not that of any single individual.

The weekly and the revised three day forecast are the two main tools for anticipating the near future business. The rooms volume forecast initiates the beginning of the forecast study. When preparing for the weekly forecast, a set time must be established when the front office manager must present his rooms forecast to the staff planner. In this case study, it is required that these statistics be given to the staff planner by 11:00 A.M., Wednesday. The catering manager makes up the banquet food cover forecast in the form of a complete function listing for the coming week, which is also required at this time. Copies of these two forecasts are then distributed to the other members of the forecasting committee so that they may have a chance to analyze and establish a rough forecast for their departments. The weekly forecast meetings of the hotel being studied are held on Thursday morning at 8:00 A.M., at which time the combined and informed judgment of the committee membership evaluates the estimates of each department. The weekly forecast is from Sunday through Saturday. So that two meetings are not held, a three day revised forecast is also made for Friday, Saturday, and Sunday after the weekly forecasting meeting. An example of a forecasting worksheet is found in Figure 6.

The forecasting meeting begins with a review of the past

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Fig. 6 Weekly forecast worksheet

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week's performance in relation to the weekly and revised forecasts. This gives an indication of the degree of accuracy as well as unexpected trends. From this analysis, the forecasting committee gains insight in relation to the influences that create fluctuation. Errors in judgment are discussed and continuing influences are identified for consideration of the next week's forecast. An example of this forecasting analysis is found in Figure 7.

"It may be assumed that any forecast of future conditions contains an error. This is inevitable. What is important, however, is the magnitude and direction of the error. In some cases it is possible to determine the probably margin of error. At other times, this is not possible." 39

The record of the degree of accuracy of the forecast statistics as compared to the actual results is kept by the staff planner. Every effort should be made to refine the forecasting procedure to assure a minimum of 95% accuracy. 40 During the second month of re-organization of the forecasting program of the hotel being studied, the sales increased \$27,442 in relation to an increase in payroll of \$184.

During the third month, the sales increased again, yet the payroll dollars decreased from the previous month. An imp
39 Forecasting for Profit, Wilson Wright, John Wiley & Sons Inc. (N.Y.) Chapman & Hall Ltd., (London) (1947) p.13

Trends in the Hotel-Motel Business, Twenty Eighth Annual Review, Prepared by Harris, Kerr, Forster & Co. (Chgo., 1964)

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TOTAL	100	110	110		
MAIN DINING ROOM:					
Breakfast	100	90	89	11	1
Tunch	300	265	246	19	
Dinner	260	250	253		3
TOTAL	660	605	588	17	
CPECIALTY ROCM:					
Lunch	180	160	143	17	1
Dinner	250	220	208	12	
TOTAL:	430	380	351	29	
COUNTER SERVICE:	1110	160		İ	
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	+ 330	330	353	-	Ľ
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TOTAL DIMING ROCHS:	1,540	1,445	1,404	41	
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Dreakfast					
Lunch Dinner	275	275	277	<del> </del>	7
Specials	<u> </u>	15	75	<b></b>	<del>-</del>
TOTAL.	275	350	352		2
TOTAL BANQUET COVERS:	275	350	352		2
TOTAL COVERS:	1,812	1,795	1,756	39	
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Fig. 7 Weekly Comparison of Forecast & Actual Sheet

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ortant factor influencing this decrease was the establishing of an accurate forecasting procedure and the utilization of the staffing guides to staff according to forecast. A 100% accurate forecast, or any forecast, means nothing unless it is adapted correctly in relation to staffing and the review of inadequate staffing is analyzed and corrected in order to obtain a higher degree of efficiency.

After a discussion of the past week's forecasted volume in relation to the actual volume. the forecasting committhen concentrates on the coming forecast. This tée is accomplished by a day to day analysis of the house in relation to the external and internal influences of that particular day. First, the front office manager states the anticipated number of rooms there will be occupied on that morning and the number of rooms occupied in the evening. The catering manager then states the functions for the day and explains any corresponding relationship of the functions to the guests in the hotel. Outside functions that have potential regular outlets in the food and beverage business are also discussed in order to adapt the forecasts to the influences of outside business. A quick review of the possible internal and external influences for the coming week



is then presented and with these factors in mind, the departmental forecast begins.

The basic forecasting aid for each department come from an analysis of the statistical foundations. Each department head involved in forecasting must have a knowledge of the number of work units involved in relation to the number of guest rooms occupied. An example of the establishing of such forecasting factors is found in Figure 5 where the forecasting factors for the food outlets have been analyzed.

The basis for the statistics of these factors are found in the financial statement. Simple division of the number of covers served or units of work in a particular outlet divided by the number of rooms occupied gives the ratio of covers served to guest occupancy for that department. Figure 5 shows a one month period. Accumulated monthly statistics should be established in order to obtain an overall factor for each room.

The historical ratios obtained from the food cover analysis sheet will usually establish a pattern when analyzed
over a four or five month period. These historical ratios
can then be utilized as a guide to the forecasting of

covers after the guest forecast has been completed.

In this case study, it was noted that there were seasonal variations and therefore, a comparison of monthly factors gave greater accuracy to the forecasting.

The staff planner should maintain a constant check on forecasting trends and keep the forecasting factors up to date. The continued use of invalid forecasting factors can destroy any advantages and savings that otherwise accrue to the hotel through the use of staff planning procedures.

A day by day analysis of future business is accomplished by reviewing the trend of business, special events, and conditions in the hotel and in the city, and an analysis of past forecasting. The ultimate objective is to bring the forecast closer to the actual.

After the committee agrees on the forecast, and it is approved by the manager, the staff planner immediately arranges for the preparation and distribution of copies of the forecast to all departments concerned.

The weekly and the three day forecast are given immediate

concern by the hotel staff and affect the immediate staffing of the operating departments. The three months forecast is the responsibility of the manager, who usually delegates this duty to the auditor. The staff planner should be familar with this system of forecasting so that he may compute and furnish payroll data based on workload estimates, provide any assistance requested, and develop methods for accomplishing this responsibility when requested to do so by management. Basically, the same considerations that have been discussed in the weekly and three day forecast are also considerations of the three month forecast. The basic difference is that an actual operating budget is created by the auditor. This gives detailed profit picture of the total operation. After agreement on the workload and revenue forecast, the auditor prepares the forecast of expenses. At this point, the staff planner forecasts all salary and wage expenses, basing his computations on the approved workload and revenue forecast, staffing guides, payroll rate factors, and any other known payroll facts affecting the month concerned.

The auditor then prepares the three month forecast and presents it to the manager for approval. Once the manager has approved the forecast, it is distributed to the departments concerned, in the form of a breakdown of the fore-

casted workload by the weeks of the month and detailed to the degree that is considered necessary for the operation. This provides the department heads with a basis for planning work and personnel for the weeks of the month.

In this investigation, it was found that the weekly and three day forecast mainly influenced the variable staff, due to the fact that the variable staff is more adaptable to short term change in schedules. Savings in the semi-variable and fixed staff were created through a meticulous study of the three months forecast. In other words, near future forecasts produce greater savings in the variable job categories while far future forecasts gave insight into the reduction of semi-variable and fixed staff.

"Forecasts may be said to represent the best 'guesstimate' of a situation that can be made at the time of
preparation. And, even though forecasts can never be
as accurate as a watch, they represent assumptions which
are prerequisite to good budgeting."41

Forecasting must be correlated with staffing guides in order to obtain peak efficiency. Chapter VI explains

Al Readings in Management, Max D. Richards & William A. Nielander, South-Western Publishing Co. (Cinn. 1963) p. 384

this correlation and the control used in order to assure that staffing guides are being followed.

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#### CHAPTER VI

#### ESTABLISHING STAFFING GUIDES

The basic tool in the installation of a staff planning system is the establishment of valid staffing guides for all elements of the hotel organization. In order to accomplish this end, the staff planner must have a full understanding of the entire operation. Knowledge of the organization, requirements of labor contracts, current personnel policies, survey material and reports, records, job designations, work schedules, equipment and it's capabilities, peak workload periods, room rates, type of service furnished and type of clientele are all a part of this overall understanding which must be gained before effective staffing guides can be created.

Gaining a complete understanding of the operation should be done in a scientific manner. The study and implementation of operations research would be a great value to the staff planner.

"The application of the scientific attitude and the associated techniques to the study of operations, whether business, governmental, or military, is what is meant by operations research." 42

The four basic concepts of fundamental importance to the

<sup>42</sup> Readings in Management, ed by Max A. Richards & William A. Nielander, South-Western Publishing Co., (Cinn., Chgo., Dallas, 1963) "Operations Research for Management" by Cyril C. Herrmann and John F. Magee, p. 262

practice of operational research are:

- a. the model
- b. the measure of effectiveness .
- c. the necessity for decision
- d. the role of experimentation

Although the theory of operational research was not consciously used in this investigation, the following are some correlations with the basic concepts of operations research:

a. The model - The model in the staff planning program is an accounting model. This is simple a hypothetical profit and loss statement, based on ideal performance. Allocations of payroll dollars to all departments are made in relation to the sales dollar. Staffing guides are utilized as a model for indicating the number of hours of labor necessary to service a known or forecasted volume of business.

"The model is a major goal of the operations reasearch analyst. In one sense, the construction of the model, or faithful representation of the operation, is the scientist's primary job. In doing it he develops a theory to explain the observed characteristics of the operation."43

b. The measure of effectiveness - The measure of effectiveness is related to the concept of the model or theory of operation. It is through this measurement that the attaining of the goals can be determined.

The staff planning program being studied utilizes the accounting method to measure effectiveness by comparing the costs of labor to the model costs and by using the staffing guides to

<sup>43</sup> Readings in Management, ed. by Max. A. Richards & William A. Nielander, South-Western Publishing Co., (Conn., Chgo., Dallas, 1963) "Operations Research for Management" by Cyril C. Herrmann & John F. Magee, p. 282

determine any hourly variances.

c. The necessity for decision -

"An essential element in all true operations research problems is the existence of alternative courses of action with a choice to be made among them; otherwise the study of an operation becomes academic or theoretical"44

The staff planner could take several courses of action when an unfavorable comparison with the model arises. There are many decisions the staff planner could make. Maybe he would increase training, re-evaluate job positions or eliminate a position. This would vary with the finding in relation to the measurement of effectiveness. The objective of operations research is to clarify the relation between the several courses of action, determine their outcomes, and indicate what measures up best in terms of company goals. Yet the ultimate responsibility of making the decision lies with the staff planner.

d. Role of experimentation -

"Operational research is the application of experimental science to the study of operations. The theory or model, is generally built up from observed data or experience, although in some cases the model development may depend heavily on external or a priori information. In either event, the theory describing the operation must always be verifiable experimentally." 45

There are two kinds of experiments that are important in this connection. The first is designed simply to get information and the second is a critical type designed to test the validity of conclusions.

Readings in Management, ed. by Max A. Richards & William A. Nielander, South-Western Publishing Co., (Conn., Chgo., Dallas, 1963) "Operations Research for Management" by Cyril C. Herrmann & John F. Magee,

<sup>45</sup> Ibid.

Gathering of information in the staff planning program is accomplished by the use of
daily personnel reports received from each
department. These reports are then used to
evaluate the effectiveness of that particular
day's staffing. These reports were also used
to verify the validity of any experimentation
in relation to the changes of staffing or production standards.

Operational research was not consciously practiced in the staff planning program being investigated. Although there are correlations between operational research and the installation of the staff planning program, the author feels that more emphasis sould have been placed on the establishment of a sound operational research program.

Staffing Guides
Staffing guides are an accumulation of production standards which indicate the number of hours of labor necessary to service a known or forecasted volume of business.
The main purpose of the staffing guide is to provide
management with a model to assist in planning and controlling labor requirements on a day to day basis.

Determining production standards involves a complete study of each job classification in relation to proper planning or work scheduling, work methods, equipment, layout, supervision and employee qualification. The ultimate goal of this investigation is to obtain the maximum efficiency of the job being studied. Sometimes a detailed work method study is needed in order to determine maximum efficiency and at all times, the understanding of the basic principles of work methods are utilized.

Ralph Barnes, in his book, "Work Methods Manual", states that "The first step in developing a better and easier work method is to get an accurate picture of the present method."46 The importance of this statement lies in it's fundamental teaching of beginning with a complete understanding of what is in existence. Parallel to the present method. a model method should be established in regard to the needs that must be filled. The staff planner will find that Rudyard Kipling's "Six honest men", which he names as Why, What, When, Where, How, and Who, are probably the most important "employees" in the hotel. The best facet of these "men" is that instead of pay and fringe benefits, all they ask is attention. The effectiveness of a work method study may be the result of complex and detailed process charts and flow diagrams study or or simple asking why: a specific thing is done. Better methods of operation are accomplished through eliminating all un-

<sup>46</sup> Work Methods Manual, Ralph M. Barnes, Prof. of Industrial Engineering and Director of Personnel, College of Engineering, University of Iowa, John Wiley and Sons, Inc., Chapman & Hall, Ltd., (London, New York, 1944) p. 9

necessary work, combining operations and elements, changing the sequence of operations and simplifying the necessary operations. This may be accomplished by simply moving a chair or table or it may be a complex change that requires the re-designing of an entire area and the installation of new machinery.

An example of utilizing the basic principle of work methods occurred in the hotel being studied.

All supplies coming into the hotel were received by a full time receiving clerk. In evaluating the situation, it was decided that the food and beverage department could delegate the receiving to the food store room clerk and that all other articles could be received by the timekeeper. Simply, by asking What, Why and Who, a savings of \$4,300 per year was recognized. This accomplished the goals of work simplification explained by H. S. Hall. "Work simplification, or methods improvement, is a general term describing systematic attempts to discover the most economical, or a more economical, way of performing work. It is the procedure by which a company identifies and eliminates uneconomical use of time, equipment, materials, space, or human effort." 47

<sup>47</sup> Putting Work Simplification to Work, Hall, H. S., Urbana Illinois, University of Illinois, Business management Service Bulletin No. 605

There are times when the staff planner must utilize a detailed work analysis including process charts and flow diagrams.

"The flow process chart is nothing more or less than a means of describing, detail by detail, the way a given bit of work is performed from it's inception to it's end." 48 In order further to explore this operation graphically, a flow diagram can be prepared, roughly to scale. This is simply a floor plan of the route over which the telephone slip travels.

A simple example of the use of process charts and flow diagrams is shown in the following situation:

Situation

Complaints were received from guests that there had been delays in their incoming telephone calls because the telephone operator did not have them listed on the telephone rack.

Investigation

A wall separates the front desk from the telephone oper-Telephone slips for new check-ins originate at the front desk and it is the responsibility of the clerk to deliver them to the telephone operator. A process

<sup>48</sup> Improving Individual Productivity, John D. Staley & Irving A. Delloff, American Management Association. Inc. (1963) p. 115, 1515 Broadway, Times Square, New York 36. N. Y.

chart, figure 8, of the present operation indicated that the guest's telephone slip went through three operations, eighteen minutes of delays, and had to be transported thirty feet before the cycle was complete. The delays experienced were based on the average obtained from ten observations at each delay area. The flow diagram, figure 9, points out where the operations, delays, and transportation took place.

## Solution

By studying the flow diagram, it was discovered that if an opening was cut into the wall directly behind the front desk clerk, telephone information slips could be handed through the opening to the telephone operator. This improvement would then change the process chart, figure 10, to three operations, eight minutes of delay, and three feet for transfer. The flow diagram, figure 11, shows the new floor plan of the route over which the telephone slip travels.

There were many more situations in the hotel where savings were recognized by a knowledge of work method study. Some like the example just stated, required little more than common sense, and others required a deeper knowledge of the principles of work methods study. The important thing for a staff planner to realize is that in one way or another, the study of work methods will play an imp-

TRAVEL IN FEET	time in Riinimes		
•••	,	Q	Room clerk checks in quest
	5	ф	folio awaiting typing
		ф	Talaphone slip is Eyped
	12	þ	awaiting believery
30		$\Diamond$	Transported to telephone operator
	3	Þ	trumssold basited what a printice of
		$\phi$	Placed in telephore rack
		$\triangle$	two estands temp litim barote
0 -	Operation	1	Summary: Feet travelled - 30
<u>D</u> -	Delay		Time and minutes - 20
ӯ-	Transport	tation	
<b>V</b> -	Storage		

Fig. 8 Process chart - present method.

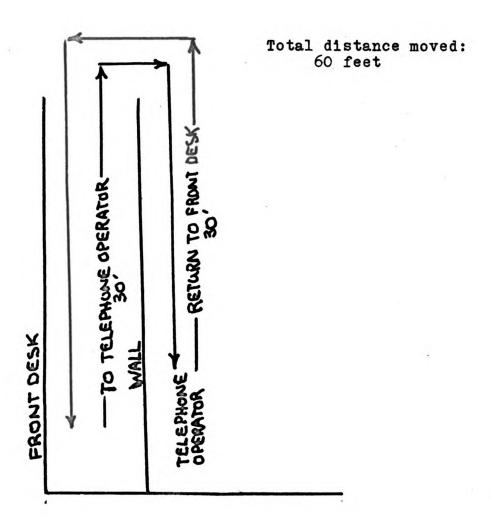


Fig. 9 Flow diagram, present method.

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Travel In feet	TIME IN		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	• • • • • • • • • • • • • • • • • • • •	P	Room clink chicks in quest
	5	þ	Polic auxiliary typing
		ф	Telephone slip is typed
6		$\Diamond$	Thoms ported to tallaphore operator
	3	þ	tructusalq bisted orlaps printiscus
		þ	Placed in telephone nack
		$\triangle$	two estands transplictures the te
0 -	Operation	on	Summary:
D -	Delay		Feet travelled - 6 Time and minutes - 8
₽-	Transpo	rtation	
<b>Ž</b> -	Storage		

Fig. 10 Process chart, proposed method.

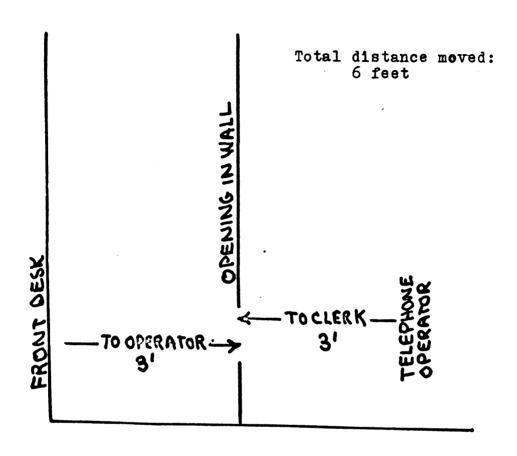


Fig. 11 Flow diagram, proposed method.

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ortant part of daily decisions, involving payroll savings or increased efficiency of service.

Another consideration that must be given attention in order to achieve maximum efficiency is that of human engineering. Human engineering deals with fitting the job to the man in areas where the job makes most employees extremely dissatisfied. Proper placement is not the entire answer but does play an important part in human engineering. In order to remedy the decreasing satisfaction and productivity associated with repetitive jobs the staff planner should consider fitting the man to the machine, fitting the machine to the man and fitting the job to the man.

"Psychologists are attempting to fit the machine to the man by using the principles of psychological mechanics. They select the best type of equipment display (warning, working, or informative) for the particular machine and design the best dials, counters, and scales for it. At the operating end of the machine, they select the best type of equipment controls (contact, selector, or adjustment) and make them realistic and distinguishable. The objective of their activities is to create machines that men can run with more satisfaction and efficiency." 49

<sup>49</sup> Psychology of Industrial Behavior, Henry Clay Smith, McGraw-Hill Book Co., Inc. (New York, Toronto, London, 1955) p.183

Fitting the entire job to the man includes varying the work pace, reducing surface-attention requirements, creating sub-goals, rotating jobs, and enlarging jobs. These many applications imply that the worker's job is only one unit in a human organization which itself may require change in order to produce more efficiently.

In the hotel being studied, the dishwashing area is one example where human engineering is needed. Attempts were made to choose workers for this area who were intellectually suited for repetitious work, and in this way, partially accomplish the requirement of fitting the man to the machine.

Another influence of productivity is the number of subordinates reporting directly to an executive. This is
called a span of control. The principle of the span
of control is that the larger the number reporting to
an executive, the more difficult it is to supervise and
coordinate them efficiently. The number of persons who
can be effectively supervised is a function of the ability
of the supervising executive and of the persons being
supervised.

"In addition to numbers, two other variables are involved in this principle. The first is the capacity of the higher executive to do his work; the second is the capacities of the executives supervised." 50

There are two main organizational structures involved in the span of control. These are the flat and the pyramid organizations. <sup>51</sup> In the hotel being studied, the pyramid type organization was utilized.

After a complete analysis of productivity standards for each job category, pars for these categories must then be established. These pars are given to respective department heads, not as a directive for staffing, but rather as a guide to their judgement experience. The final decision to staffing must remain with the individual immediately responsible for the results.

Once the pars have been agreed upon, departmental staffing guides may be formulated. The designation of job groups in each department are then reviewed to assure that they adhere to the job patterns desired by the hotel and to simplify the job group designations for use in establishing

<sup>50</sup> Management Principles and Practices, Dalton E. McFarland, MacMillian Co., (New York, 1958) p. 174

<sup>51</sup> Psychology of Industrial Behavior, Henry Clay Smith, Mc-Graw Hill Book Co., Inc. (New York, Toronto, London, 1955)

the staffing guides. Frequently, it will be found that the content of jobs bearing the same title will vary between hotels. This is caused by peculiarities within a particular job. In such cases, the title which is most descriptive of the duties should be assigned. At this point. it may be desirable to prepare abbreviated 10b descriptions for the positions. The publication "Job Descriptions for Hotels and Restaurants". U.S. Department of Labor, may be of assistance and save time. In determining under which department specific job categories fall, the basic rule is that the job is placed under that department from which supervision will be provided. For example, if the housekeeper is responsible for lobby housekeeping and is to supervise the lobby porter, the lobby porter job category is placed in the housekeeping department, but if the superintendent of service is to provide supervision and maintain records, then the lobby porter job category should be placed in the uniform service department. It is desirable that these job groups be clearly established; not only for the staffing guides, but for uniformity in payroll format. time card numbering. time sheets, badge numbers, locker numbers, etc., to assure an integrated system.

After the job categories have been established, staffing guides are then developed by departments. Figures 12 and 13

show the staffing guide created for the housekeeping department of the hotel being studied.

The first step in establishing a staffing guide is a listing by groups of the main job categories. Figure 12 shows this breakdown which is an explanation of the actual staffing guide. It is important that a minimum staff be established in order to determine the minimum number of personnel by job category that is necessary to have in order to maintain an operating establishment. The maximum range is determined at that point where additional workload units cannot be added or where the physical layout will not permit the use of a larger number of personnel of the most variable job category. The larger the hotel. the greater the variation between the minimum and maximum staff. In the housekeeping department there was little variation for the fixed and semi-variable staff. They were not greatly influenced by the fluctuation of volume.

The most variable job group in each department determines the breakdown of volume of workload units. In this case, it is the day maids. The staffing guides in this hotel were broken down by hours per day and hours per week. The basis of rooms occupied per day then becomes the measure

## HOUSEKEEPING

# Group 1 Staff 1 Executive Housekeeper 3 hours per day-48 per week 1 Assistant Housekeeper 75 hours per day-525 per week 25 hours per day 153 per week 25 hours per day 153 per week Group 2 Linen\_Room l Linen Maid (Day) 7½ hours per day-52½ per week l Linen Maid (Night) 7½ hours per day-52½ per week l Linen Maid (F&B Issues)7½ hours per day-37½ per week 22½ hours per day142½ per week Group 3 Day Maids Eased on 16 rooms per maid per 71 hour shift. Group 4 Right Maids 22½ hours per day157½ per week 3 Night Maids At volume lower than 50% less 1 maid. Group 5 Housemen 1 Linen Houseman (Day) 7½ hours per day-52½ per week 1 Linen Houseman (Night) 7½ hours per day-52½ per week 1 Lobby Forter (Day) 7½ hours per day-52½ per week 1 Lobby Forter (Night) 7½ hours per day-37½ per week 2 General Housemen 15 hours per day-105 per week 1 Outdoor Man 4½ hours per day-22½ per week 4½ hours per day-32½ per week Department Head Manager\_\_\_\_

HOUSEKEEPING EFFECTIVE DATE:

Fig. 12 - Job categories

Staff Planner

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## DAILY STAFFING GUIDE IN MOURS Housekseping Department

Rooms C		gocup.	Group 1	Group	Group	Group 4	Group 5	·TOTAL
65 - 8 81 - 9 97 - 1 113 - 1 129 - 1 145 - 1 161 - 1 177 - 1 193 - 2 209 - 2 241 - 2	54 50 50 50 50 50 50 50 50 50 50	20% 30% 40% 50% 60% 70% 80% 90%	23	223	237 452 452 452 452 452 452 452 160 160 160 160 160 160 160 160 160 160	15 223	498	13212 14012 1472 1552 1772 1772 1907 1907 2075 2075 2230 2452 250 260 2672

# MARKIN STAFFING GUIDE IN HOURS

	Occup. Moek	% Cocup.	Group	Group	Group 3	Group 4	Group 5	TOTAL
Up to 337- 449- 561- 673- 785- 897 -	336 448 560 672 734 896 1,008	20% 30% 40% 50%	153	1421	157½ 210 262½ 315 367½ 420 472½	104	3222	880½ 933 935½ 1,038 1,090½ 1,143 1,195½ 1,300½
1,121 1,233 1,345 1,457 1,569 1,681	- 1,120 - 1,232 - 1,344 - 1,456 - 1,568 - 1,680 - 1,792	60% 70% 80% 90%			630 6325 735 7875 840	1572		1,353 1,405½ 1,458 1,510½ 1,563 1,615½
1,905 2,017	- 1,904 - 2,123 - 2,128 - 2,128	100%		:	892술 945 99 <b>7</b> 章 1,050			1,668 1,720½ 1,773 1,825½

Fig. 13 Daily staffing guides in hours.

for this department. (In the restaurants, the measure is covers served per day.) For housekeeping workload purposes, rooms occupied are transients, plus permanents, plus complementaries, plus house use, plus commercial rooms, serviced, minus rooms not serviced, and sleep-outs.

Figure 13 is the actual staffing guide from which the staff planner can obtain the housekeeping standards by taking the rooms occupied for a specific day and then finding the corresponding total hours that should be needed in order to accomplish this work. For example, if there were 200 rooms occupied on one specific day, then the par for housekeeping for that day would be 215 maid hours.

The degree of accuracy of the staffing guides depends upon the minuteness of the breakdown in relation to volume once the actual staffing requirements have been established. This particular staffing guide was effective in directing staffing to within 2% of the actual monthly payroll.

Other staffing guides become more complicated, for it may become necessary to establish two or more workload units as the performance measure for the job groups of a single department. An example of this is the using of arrival and departures as the workload unit for bellmen and rooms occupied as the unit for all other jobs in the uniform service department. In order to standardize the workload units as much as possible, a breakdown of the variable job groups was first established.

WORKLOAD UNITS	ORGANIZATIONAL UNITS	PRIMARY VARIABLE JOB GROUPS
Rooms Occupied	Front Office Housekeeping	Front Office Clerks Day Maids
Arrivals and Departures	Uniform Service	Bellmen
Covers	Food Preparation Stewards Food & Beverage Service Banquet	Cooks Warewashers Waiters Waiters
Dollars of Bev. Sales	Beverage Preparation	Bartenders
Cars Checked	Parking Lot	Attendants

From this basic breakdown productivity standards were created by a study of past history and improvements made through work method studies. Past history will give the staff planner the units per man-hour by dividing the total number of units by the hours worked. This does not necessarily mean that the units per hour found through past history are the productivity standards for that job classification. A more detailed study is needed to deter-

mine the model productivity standards.

In a ticket agency, the productivity per agent man-hour spent in "processing" each customer can easily by figured, and so can a statement of unit cost. In a retail store, productivity per sales-person hour can readily be established and unit selling costs evolved. In the office, the productivity per clerical man-hour spent in posting accounts leads readily to a calculation of unit cost. In each of these situations, productivity can be increased by the conscientious application of some well-contrived and tested specific techniques.

The specific technique utilized in this investigation is the adaptation of production standards to form a schedule that is called a staffing guide.

After the initial installation of the staffing guide, the results should be closely followed and any changes indicated must be made by revision of the initial guide. More complete work method studies or a change in local operating conditions or policies may make it necessary to revise the existing staffing guide. The establishment of a new operation, such as adding a new bar, will require the creation of a new guide. The methods used in re-

vising staffing guides are the same as the ones used in creating the original guides.

When the staffing guide has been completed for a specific department, the signature of that department head, the manager, and the staff planner will then be obtained, verifying agreement to the guide. This is done in order to make sure that a complete understanding and agreement has been reached and that the utilization of these guides will be put into immediate effect.

Staffing guides prove their usefulness in the budgeting of payroll and as a comparison base in the measurement and evaluation of performance results. Chapter VII shows the usefulness of this guide in regard to the finding of trouble areas by a comparison of the actual and the par.

#### CHAPTER VII

## GENERAL MANAGER'S DAILY PAYROLL REPORT

The main theory behind a daily payroll report is "Management by Exception". This basically means that "certain standards, goals, and objectives are developed and used to measure any given activity. If the activity being measured operates according to standard, or attains it's goals or reaches it's objectives, no management is required. If, on the other hand, an activity fails to operate according to standard, or fails to attain it's goal, or reach it's objectives, management is required, hence, Management by Exception."52

The general manager's daily payroll report simply points out areas that do not achieve their payroll goals. This information serves as a directional sign to possible trouble areas. It does not indicate the underlining reasoning for a specific trouble area, but rather indicates that it exists and that some type of corrective action is necessary. Further investigation of staffing guides and forecasting usually indicates the corrective measures necessary.

<sup>52</sup> Management by Exception, a report given during the Management Trainee Conference of December 21, 1964, by James E. Butler, Director of Profit Programming, Sheraton Corporation of America, Boston, Mass.

Deviation from the standard goals of staffing can be seen on a daily basis where otherwise it may take weeks to locate a specific trouble area. This report's usefulness is found in the utilization of the par payrolls established in the staffing guides in comparison with the estimated payroll from each department's daily personnel report.

## Daily Personnel Report

Figure 14 shows an example of a daily personnel report for housekeeping. This report is filled out daily by each department head and provides the basic data on which the daily payroll computations and the analysis of performance are based. The analysis block at the upper left hand corner should be completed by each department head. This is not only time saving for the staff planner, but it makes the department head aware of what his staffing is in relation to the units or volume. self-analysis of performance by department heads is elementary in the staff planning system. All other data on this report is recorded by the respective department head in hours, with fractional hours reported to the nearest half or whole hour. It was requested that this report be in the hands of the staff planner no later than 11:00 A.M. following the date of the report. The reason for this is

	DAI	LY PE	RSONN	EL RE	PORT			Dept.	No.	<u></u>
Detai Group	l for Job		lume nits)	Equi	vale	nt	Dept	: Hous	ekeep	ING
_	al Forecast:		60				Day:	THU	LRSDAY	
		-	70		1.S				UL 30	
Final	Forecast:						or W	k. Ende	]:	
	l Vol. & Par loyees Neede		76	8	2.0				Da	te
"Tota Group	l" in Job (Below)			8	0.0		EXPI	ANATION	T:	
Diffe	rence (+ or	-)		- 7	0.5		<del></del>			
<b>7. b</b>	EQUIVALENT	NO.	ON DU	TY (8	HR.	BAS	SIS)			l Do 1
Job. Group No.	Group .	Reg.	O.T.	ual	tal	Ass	sign.	Adj. Total	Abs.W.	marks
1.	STAFF	23			23			23		
2	linen room	221/2			22/2	+	4	261/2		Figure Night Figures
3	DAY MAIDS	75	5		03			CS	7 1/2	uoitasav
4	NIGHT MAIDS	221/2			221/2	- 1	4	1842		to lingu Room
5	Househen	50		7	57	-	4	53		TDUQUED VINSHIN
6										
7										
8										
9										
10										
11										
12										
13										
14										
TOTAL		193	5	7	205			201		

Fig. 14 Daily personnel report.

Dept. Head\_\_\_

that the general manager's daily payroll report must be completed that same day if effective corrective action on the part of management is to be established.

The department head should also furnish the following information in the lower tabular section of this report:

- 1. Job Number Groups should be identical, with the number shown for those job groups of the department concerned in the staffing guides.
- 2. Number Of hours

...

- A. Regular-total hours worked by regular full time employees in the appropriate job groups at non-premium rates.
- B. Overtime-total hours worked by regular employees in the respective job group at the overtime rate.
- C. Casual-total hours worked by non-regular employees in the appropriate job groups.
- D. Total-sum of the hours, by job group, shown in regular, overtime and casual columns.
- E. Temporary Assignment-total hours by job classifications of personnel who were temporarily assigned to other departments (minus) or total hours temporarily assigned from other departments (plus) or those hours worked in a different job category in the same department than that to which they were regularly assigned (plus or minus). Explanation must be given in the "Remarks" column by each department head who reports hours of temporary assignment, to assure that the staff planner can charge the payroll hours to the proper department, can maintain correct records of hours worked by job groups, and can compute accurate payroll cost data.
- F. Adjusted Total-total hours worked by each job group, minus or plus the hours shown as temporary assignment.
- G. Absent with Pay-total hours of regular employees, by job group, who were authorized absent and who are to be paid for those hours, ie. sicktime, vacations, etc.

H. Remarks-explanations of temporary assignments, absences with pay, hours spent on special work assignments, separate identification of reimbursed payroll hours by job groups.

When the staff planner receives the Daily Personnel Report, he must check it for completeness and accuracy of all data. It then becomes his responsibility to contact those concerned to assure the accuracy of the hours reported. Particular care must be taken that temporary assignment hours that have been transferred "out" of one department are picked up by the department they are being transferred to and vice eversa. The overtime hours reported should also coincide with the overtime hours authorized to be paid. All reimbursed payrollmhours should be identified and the hour reported must cross balance. When a mistake in the reporting of hours is discovered, the department head should show this adjustment on the next report he submits.

Estimated Payroll
After the verification of the Daily Personnel Report, the
staff planner's next duty is to calculate the estimated
payroll for that specific department. This is accomplished
by the utilization of the payroll rate factor which was established in the statistical foundation discussed in Chapter
IV. In the case discussed, it was decided that the estimated
payroll rate factor for maids was \$1.32 and for all other job

categories, an average of \$1.547 was established. Figure 14 shows a typical Daily Personnel Report from the Housekeep-ing Department. Four steps must be taken in order to obtain the day's payroll for this department.

1. Subtract the total maid hours from the adjusted total.

201.0	Adjusted Total
-102.5	Total Maid Hours
98.5	Total All Other Hours

2. Multiply the established payroll rate factor per maid times the total maid hours.

102.5	Total Maid Hours
x 1.32	Maid Payroll Rate Factor
<u>x 1.32</u> \$135.30	Maid \$ Payroll for Day

3. Multiply the established payroll rate factor for all other housekeeping job categories times the total hours of the categories.

98.5	Total All Other Hours
x 1.547 \$ 153.38	All Other Payroll Rate Factors
<b>\$</b> 153.38	All Other \$ Payroll for Day

4. Add maid \$ payroll for the day and all other \$ payroll for the day in order to obtain the total \$ payroll for housekeeping.

<b>\$135.30</b>	Maid \$ Payroll Per Day
+ 153.38 \$288.68	All Other \$ Payroll for Day
\$288 <b>.68</b>	Total Housekeeping Payroll for Day

An average payroll ratio factor could be established for the entire department and is done so in the departments which do not have the great variable job categories. This is left up to the discretion of the staff planner and should be evaluated in relation to the desired degree of accuracy. After the daily payroll for each of the departments have been calculated, this information is transferred on to the General Manager's Daily Payroll Report and placed in the "Today" section under the estimated payroll column for each department. See Figure 15. The "To Date" section of the estimated payroll is figured by adding the day before's estimated to date payroll to today's estimated payroll.

From this information we receive three sub-totals for "Rooms", "Food", and "Beverage" estimated payrolls and one grand total for the hotel.

The rooms department estimated payroll is a simple addition of the front office, housekeeping, uniform service, and security estimated payrolls. Any payroll allocations are taken into consideration on the daily personnel reports.

In order to obtain the food and beverage estimated payrolls, the staff planner must allocate a percentage of the payroll's of the department involved in direct proportion to the participation of that department in the sale of food and beverage. For an example, food preparation estimated payroll would be charged 100% to food because it is involved only in preparing food for sale. The main dining room payroll,

# GENERAL MANAGER'S DAILY PAYROLL REPORT

DAY						DATE					
SAI TO	DATE		T	DDAY ?						PAR PAY: TO DATE	ROLL % TODAY
ROOMS											
				-			-				
FOOD	<del></del>			-							
BEV.								·			
TOTAL											
		TO 1	DATE			TODA	Υ.				
		EST.	PAR	COST		EST.	PAR	COST	# E	MPLOYEE	5
DEPART	MENTS:	P/R	I/R	EXCES	SS	P/R	P/R	EXCESS	OVE	R/UNDER	EXPLANATION
Front Hskp. Unif.	011.	<b> </b>			_			ļ			
HSKP.	Com	ļ	<b> </b>		_						
Securi	Ser.	<del> </del>			_			<b></b>	<del> </del>		
					-				}		
Food P	rep.	<del> </del> -						<u> </u>			
Stewar	r Ser.	}							<del> </del>		
Modn D	in. Rm.	<del> </del>									
Spec.	Room										
Room S					$\neg$				}		
Banque					~						<del></del>
Club		<del> </del>			_						
Spec.	Bar	<del>                                     </del>								1	
Bev. P	rep.	<b> </b>									
F.& B.											
Teleph											
Valet				-							
Garage											
Check					٦						
A.& G.											
Sales	& P.R.										
H.L. &	P.										
R. & M											
Pond/P	ool										
Patio											
TOTAL											

Fig. 15 General manager's daily payroll report.

however, is allocated in proportion to the food and beverage sales. If the main dining room sold \$800 worth of food and \$200 worth of drinks, then, according to the system used in the hotel being studied, allocations of this payroll would be 80% to food and 20% to beverage. analyzed department by department as suggested in Chapter IV concerning "Establishing a Statistical Foundation". These food and beverage percentage allocations are calculated on a monthly basis, but subjected to revision in case of unforseen changes. The proper allocations are then established daily by simple multiplying the percentage ratio times estimated payroll and thus obtaining the cost of payroll to food and the cost of payroll to beverage. An example of this is that the main dining room has been given the percentage allocations of 80% to food and 20% to beverage. From the daily personnel report, the staff planner has obtained an estimated payroll of \$170. The calculations would be:

\$170	Total Estimated Payroll of Main Dining Room
x 80%	Allocated % to Food Payroll
\$136.00	Total Food Payroll of Main Dining Room
\$170	Total Estimated Payroll of Main Dining Room
x 20%	Allocated % to Beverage Payroll
\$ 34.00	Total Beverage Payroll of Main Dining Room

Simple addition of the two totals proves that the percentages have been correctly allocated. These two figures are then placed in the appropriately titled columns and

pattern. Once the allocations have been completed, the addition of each column will give the total food and beverage payroll for the day. The "To Date" figure is an accrual of the Today figures until a new month begins.

These figures are then placed in the appropriate columns at the top of this report and will be used later to calculate the payroll percentage to sales.

The Today and To Date Sales figures found in the upper left hand corner of this report are given to the staff planner daily by the auditor. Once these figures have been recieved, the staff planner divides the sales into the payroll dollars in order to obtain a percentage of payroll to sales or payroll cost ratio. Payroll cost ratios are computed based on the standards applied to the average week of the year in order to establish a payroll cost goal. These percentage ratios should be analyzed in relation to work units produced and both should serve as guides to trouble areas.

Now that the estimated payroll has been established, the staff planner goes back to the Daily Personnel Report in order to obtain the actual unit volume of each depart-

ment. By comparing this unit volume with the staffing guides, he is able to establish the par for that department. For an example, the housekeeping department's par for 176 units is 200 total man hours. The actual man hours reported was 201 or one hour over par. By calculating the par payroll in the same manner as the estimated payroll, we would arrive at a figure of \$287 or \$2 under the estimated payroll. The cost excess column indicated the difference between the estimated and the par payroll. In this example, it was a cost excess of \$2. The pars for the rooms, food, beverage, and the total hotel are then placed in the upper right hand columns and the percentage to sales is calculated for today and to date. This then serves as the major comparison to the estimated payroll.

The idealistic situation is to have the estimate equal the par. Any noticable variations between the two serves as a warning that something is out of line. A detailed investigation of the payroll reports and pars should point out the trouble area.

Summary of Weekly Hours
Besides the general manager's Daily Payroll Report, two
other reports proved helpful in maintaining staff efficiency. The first is the summary of weekly hours worksheet

as shown in Figure 16. This report gives a breakdown in hours of job classifications by department. The example shown in Figure 16 is for the housekeeping department, but the master sheet takes in each department. From this report, we can quickly see which areas are overstaffed and therefore correct the situation or adjust to it.

Sales and Payroll Statistics
An example of the second report that proved useful in this
case study is shown in Figure 17, the Sales/Payroll Statistics report for room, food, beverage, and total hotel.

This report shows the sales and payroll figures for the month of April. In analyzing these two months it can quickly be assumed that the hotel was overstaffed for the month of March. Total hotel payroll was down \$210 while sales were up \$32,902. This is only an example of a sales/payroll statistics sheet for rooms, food, and beverage, and total hotel. It does not attempt to show the long range effects of staff planning. A study of the fluctuations between sales and payroll and the corresponding payroll savings will be discussed in Chapter IX when a comparison of the five months before the installation of a staff planning program and the five months after the installation of a staff planning program will be presented in detail.

# SUMMARY OF WEEKLY HOURS WORKSHEET

Week Ending APRIL 25

DEPT. & JOB GROUP	SUN.	MON.	TUES	WED.	THUR.	FRI.	SAT.	TOTAL	PAR	OVER/ UNDER
HOUSEKEEPING										
Staff	15	23	23	23	23	23	23	153	153	0
Linen Room	15	22 1/2	22 %	22 1/2	22 /2	2242	15	142%	142%	0
Day Maids	671/2	75	8272	40	821/2	821/2	60	540	5131/2	+261/2
Night Maids	15	221/2	221/2	22 Y2	22 42	15	15	135	157%	-221/2
Housem <b>en</b>	321/2	491/2	491/2	491/2	491/2	491/2	421/2	3221/2	3,224,	0
TOTAL HSKPG.	145	1921/2	200	2071/2	200	1921/2	1551/2	1,293	!,289	+4

(Worksheet continues, department by department, showing all job groups.)

Fig. 16 Summary of Weekly Hours Worksheet

:

# SALES/PAYROLL STATISTICS

	ROOM				ROOMS &				%		
		SAL		r. 21	FOOD PATMAR. 21			Mar.	21	April	21
			_			_					
Front Office Housekeeping	\$ 85	489	8	97,127	\$ 4,024	\$ 3,	322	4.7		3.4% 9.7%	
Uniform Serv.		Ħ.		ņ	8,930 2,737	2,	614	10.49		3.0%	
Security		Ħ		<u> </u>	406		420			.4%	
		•		•							
GRAND TOTAL RMS	.\$ 85	.489	\$	97.127	\$16.097	\$15.	782	18.89	6	16.2%	
_			•	,,,		,	•			•	
Food Prep.	\$ Q5	463	ġт	06.064	\$13,682	\$13.1	756	14. 39	4	13.0%	
Steward	* //	h	W -	••	6,052	6.	470	6.39	6	6.1%	•
F. & B. Gen'l.	_	Ņ		ii ii	3,119	2,	923	3.39	6	2.8%	
Counter Service		,656		7,270	1,028	1,		15.49		15.2%	
Main Dining Rm. Specialty Rm.		,050 ,479		23,450 30,050		4, 4 3, 4		19.5%		18.3%	
Room Service		,677		4,350	1,158	1,		31.5%		26.4%	
Banquet		,150		27,900		4,		20.69		16.1%	
Club Specialty Bar		,058 ,669		8,500 1.920	1,876 100			20.79		23.5% 4.9%	
phecrarel par		,003		1.320			2-		_	4.5/0	
CDAND MOMAT BOOT	nā ne	h67	ð٦	06 06h	878 660	870 <b>'</b>	765	h0 E0	,	37.5%	
GRAND TOTAL FOOD	<b>9</b> 90	,405	ĄΤ	.00,004	\$30,000	\$ 29 <b>,</b>	(0)	40.57	b	21.57	
GRAND TOTAL	•		_		•						
HOTEL BEV.	\$ 53	,423	8	62,048	\$15,121	\$14,9	977	28.39	6	24.1%	
GRAND TOTAL						•					
HOTEL	\$256	,997	\$2	89,899	\$95,625	\$95,	415	37.29	6	<b>32.9%</b>	

The month of March compared to the month of April.

SALES UP \$ 32,902
PAYROLL DOWN \$ 210

Fig17 Sales/Payroll Statistics

The major value of this report is that it created an awareness of payroll correlations to the department heads. It also brought out a competitive spirit among the department heads for each week it was analyzed at the staff meeting. One of it's main assets is in it's comparitive analysis of the previous month. It is based on a full week, Sunday through Saturday, so there would be less distortion in the comparison figures. A final end of the month report gives a comparison between the month just ended and the previous month. The initiation of "Target" percentage goals also proved effective and created a competitive spirit among the department heads. The greatest asset of this report is that it served as a tool for creating awareness among the department heads responsible for staffing.

The general manager's daily payroll report includes all the pertinent payroll information needed in order to obtain a quick insight into the overall operation. From this information, management is able to locate trouble spots before they can develop into serious problems. One of the most important responsibilities of the staff planner is to draw the manager's attention to these trouble areas and to maintain a constant follow through and take remedial action necessary in the department continually over the standards.

## CHAPTER VIII

#### PAYROLL SAVINGS THROUGH STAGGERED STAFFING

Everyday hotel operations are typically a series of peaks and valleys. A dining room is set up for breakfast before the doors are open. The breakfast service builds up to a peak and then diminishes almost completely until lunch. Lunch usually takes the same trend followed by dinner which is also in the same pattern. There are exceptions, but the average hotel dining room is geared to operate for three peak periods each day.

These daily cycles of operation should be measured in order to obtain a deeper knowledge of the different operations. James Estey in his book, "Business Cycles" points out the value of the time series measurement of business cycles.

"The statistical materials from which our knowledge of business cycles is derived take the form of "time series".

A time series is a number of quantitative measurements arranged in chronological sequence. "53 This type of measurement can be easily adapted to the measuring of units per hour or any other time period desired.

In the main dining room of the hotel being studied, by using the time series method of measurement, more covers

Business Cycles, James Arthur Estey, Ph.D., Prentice-Hall, Inc. (Englewood Cliffs, N. J. 1956- Third Edition) p.22

were served during  $4\frac{1}{2}$  hours of peak period time than were served in the other  $11\frac{1}{2}$  hours it was open for business. Yet the staffing in this dining room remained basically the same throughout the day. The reasoning behind this was that the waitresses were needed in order to service the peak periods. If business did not meet the expected forecast, then the room manager would send some of his staff home early, but no real thought had been given to staggering the times of arrival so that there would be an overlap into two peak periods. The shifts were the old basic seven to three and three to eleven. One hour of reorganization produced a yearly savings of \$4,346 and increased service by having more people working during peak periods.

Staggered staffing is the scheduling of employees in relation to volume in order to obtain a maximum staff at peak periods and eliminate excessive employees during the slow periods of business. This is accomplished by overlapping shifts through a staggering of the times of arrival on the job. A basic tool of staggered staffing is a bar graph, similar to the one in Figure 18. This bar graph should include the following information:

A day by day breakdown of average staffing for a week. Each day of the week is treated separately and staffing should not be grouped together or a statement made indicating that Monday and Tuesday are the same as Wednesday.

# 12 MIONIGHT Month of November, 1963 2 5 00 7 (0) 12N 1 Uniform Sperice 9.8 9.8 4.5 13.8 -0 6 60 DAY YAM 133.0 Sum.

(This continues for all the days of the week.)

\* CALLS PER HOUR

0.0 0.01

12.8 15.5 16.0

15.3 17.0 20.3 14.5

Y: Superintendent of Service
Bell Captains
Bellmen
Doormen
Service Elevator Operator

Fig. 18 Bar Chart-for uniform service

(\$)

- 2. The hours of operation should be listed across the top and graphically spaced.
- 3. A color code should be established for each job category. All the categories of the department should be listed so that the possibility of combining different areas may be discussed.
- 4. An hour by hour breakdown of the volume of business by workload units is to be established.

Figure B shows a bar graph for the uniform service department of the hotel being studied. Although this was not a department where improper staffing drew attention to itself, by making a detailed study of this area, it was possible to save \$2,372 per year. Bellmen service was also improved through the utilization of maximum staff at peak periods by staggered staffing.

A study of a department with the end in mind of utilizing staggered staffing is initiated by first obtaining the weekly schedules of all the employees of the department. Figure 19 is an example of a weekly schedule sheet that is made for each department. The time card number is placed in the first column on the left hand side. Along with the job title, it was found helpful in recalling specific shifts, to also include the name of the person. The weekly wage and hours column is a quick reference in regards to the total hours and rate category of each person. Any great variances in wages can be scrutinized for their

WEEKLY	SCHEDULE

Department	Da <b>te</b>

NO.	JOB TITLE	WEEKLY WAGE/HOURS	SUN.	MON.	TUES.	WED.	THUR.	FRI.	SAT.
				·					
		,							

Fig. 19 Weekly schedule

value in relation to the whole. The remaining columns headed Sunday through Saturday are to be marked with the person's shift and days off. The actual hours worked, 7:00 A.M. - 3:00 P.M., indicate the shift and a "0" indicates a day off.

Other information needed before this study can be effective is the volume of business this specific department
takes care of during the different hours of the day.
This is very important if the peak periods are to be established and thus, stagger the staffing accordingly.

Once this basic information is obtained, the staff planner arranges a meeting with the department head and possibly his immediate superior. This meeting should be uninterempted due to the fact that one thought follows into another as elimination, adding, or changing takes place. It is almost like a game of chess, as a man is moved from one another area to another in order to obtain the best advantage.

The meeting opens with a review of performance standards in order to obtain a common ground of comparison. Special problems of the department and union regulations are then discussed so that there will be no overlapping or backtracking once the actual staff adjustments are dis-

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cussed. After these preliminaries, the discussion is then directed to the weekly schedule, which is transposed to a day by day bar graph. Open discussion on each position and it's corresponding part of the whole is really the purpose of the meeting. From this discussion comes suggestions for possible changes in relation to the volume of business. It is also very possible that by staggering the staffing, a position may be covered more adequately and yet a man can be eliminated.

The advantages of staggered staffing and the utilization of the bar graph is that the overall picture of a department's staffing and it's corresponding peak volumes can clearly be seen at a glance. It is then possible to adjust the staff in relation to the variances of that volume by the overlapping of positions in order to obtain the desired standard of service with the minimum number of employees. This study of the operation as a whole can then be broken down into individual analysis in order to establish the value of each part to the whole. This, then, becomes a work method study as we analyze what is done, why is it done, is every part necessary, who does the work, could someone else do it, where, when, and how is it done. The ultimate goal is to increase service and decrease payroll.

The disadvantages of staggered staffing lie in the human element. "The demands that the human factors in an organization place upon the administrator are considerable. But, under the pressure of day-to-day activities with their inevitable crises, executives often handle in a piecemeal fashion or neglect entirely their responsibilities involving people. It is easier to work with inanimate things -facts. figures. or machines -- than with human beings: and administrators tend to concentrate on these kinds of activities while letting the people take care of themselves -often to the detriment of total effectiveness."54 Although an ideal bar chart for staggered staffing can be created. it may not be operational in specific areas due to the demand on individuals to work inconvenient and sometimes rotating shifts. This depends upon the situation and the employees, but a high turnover of employees was noted in the areas where regular working hours were changed to irregular working hours. The understanding of employee relations must temper the logical approach of efficiency.

Probably the most amazing thing about the bar graph method of staggered staffing is that it is as old as common sense, yet relatively unexploited. In the eight hotels with which the writer has been associated, only one had established the system of the bar graph method of staggered staffing.

<sup>54</sup> Human Elements of Administration, Harry R. Knudson, Jr. Holt, Rinehart and Winston (N.Y., Chgo., San Francisco, Toronto, London, 1963) p.1

Yet after this type of analysis was initiated, each hotel that participated recognized considerable payroll savings.

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There were many small savings recognized in the hotel being studied by the utilization of staggered staffing and work method studies, but probably the most impressive savings from a single department was in Beverage Preparation. In this department, the following savings were recognized:

Main Bar 1 Bartender \$ 5,705 per year 3,172 per year Specialty Room 1 Bartender 5,705 per year Lounge

Kitchen Service 1 Barboy 3,172 per year Bar

These savings are a direct result of a study of the beverage preparation department in terms of bar graph and staggered staffing. It is very possible that these positions may have been eliminated sometime in the future after observation and the consolidation of duties, but the strength of the bar graph and staggered staffing is that it gives immediate awareness and immediate results.

TOTAL PAYROLL SAVINGS \$17.754 per year

The staff planner in the hotel being studied found this to be an effective tool in decreasing the cost of payroll and improving service.

#### CHAPTER IX

#### SUMMARY

Three major executive functions are planning, organizing, and controlling. Of these three functions, the staff planner's greatest contribution to management is control.

"Control is the process by which an executive gets the performance of his subordinates to correspond as closely as possible to chosen plans, orders, objectives or policies. Control thus involves the process of evaluating results, comparing them to established standards, and taking steps to correct discrepancies which appear. Control, in addition to being a process, may also be defined as a condition or a state of existing affairs whereby the discrepancy between intended and actual results is very slight or does not exist at all."55

This quotation is an excellent summary of the basic duties of a staff planner. The many different tools that are utilized to accomplish these ends are universal, but this thesis has stressed the guide posts to follow for the establishing of a payroll pre-control system. The main direction behind the establishement of a staff planning program is based on

<sup>55</sup>Management, Principles and Practices, McFarland, Dalton E., M. B. A. Ph.D., Assoc. Dir. of the Labor and Indus. Relations Center and Assoc. Prof. of Bus. Ad., Michigan State U., The MacMillan Co., New York, Chicago, Toronto, 1958, p.299

the "Model" and "Management by Exception" theories.

Standards were established for the hotel and the deviations from this standard became a warning to management that a specific area should be evaluated. This then saves the management the time and money involved in a complete examination of a general trouble area by pointing out more exactly where the breakdown is occuring.

Control should not be mistaken for only systems and procedures. "The skill in the process of executive control probably lies more in the guidance and supervision of the working team than in expert knowledge of systems and procedures."56 This is where the overall knowledge and understanding of management plays an important part in accomplishing the ends of staff planning. It is the ultimate objective of the staff planner to accomplish the ends of his program through the department heads and not in spite of them. Without the support of all concerned, a staff planning program can turn into a dictator's whip instead of a guide and an aid. When installing a staff planning program, the staff planner must educate those he is working with in order to eliminate the connotation of a "head chopper" or "efficiency expert". The accomplishment of this task is up to the individual, but it is based around the under-

Management, It's Nature and Significance, Brech, E.F.L., London, Sir Isaac Ditman and Sons, Ltd., 1952, p.18

standing of the different departments and the people who operate them.

Although planning is a major responsibility of the general manager, the staff planner also has an important contribution to this phase of management. Forecasting future business volume, workload, and payroll is but one area the staff planner takes an active participation in management planning. Another important factor in planning is the collection and analysis of data. Planning depends for it's effectiveness on the quality and quantity of data available to the planner. The staff planner needs to line up reliable sources of information in a timely manner. He must organize it, evaluate it, and arrange for it's use. Filing systems and records must be provided to keep information available for use.

Planning takes an important role in the search for new methods and technical improvements to reduce payroll cost and improve service. In the installation of this program it was necessary to develop new methods to reduce payroll cost and improve service tailored to the requirements of the operation. Some recommendations initiated that are still in the planning stage include:

- 1. Programmed teaching should be developed for each job category as an instrument to increase attitudes, knowledge, and skills. The reasoning behind the creation of such a training program is to reach more employees due to the fact that each individual sets his own learning speed according to his capabilities. This would produce improved service and possibly decrease labor turnover.
- 2. A dollar payroll budget, revised monthly, is to be created and presented to the department head prior to the first of each month. The department head is to be made responsible for meeting this goal;
- J. Under consideration is a recommendation that the hotel eliminate the front desk typist by changing the registration procedure. This would involve the changing of the folio forms so that the desk clerk, by the use of sensitized paper, could print the information needed.

As seen in the above recommendations, the installation of new methods and technical improvements for a specific hotel involves both creative thinking and the knowledge of what presently exists in other operations. The adapting of existing methods and technical improvements to the location should be given consideration in establishing a staff planning program, but depth and understanding of the local operation should be the core around which all else entwines.

"It is easier to adopt someone else's gadget than to study carefully and in full detail one's own situation. We become so concerned with charts, methods, work measurement,

and controls that we cannot lift our eyes to see the work place, it's real nature, it's inherent forces for productivity, it's responsibility, and it's opportunity."57

In this thesis, we have discussed the importance of analyzing the present operation so that we understand the methods of operation and the tangible and intangible limitations. After an understanding of the present situation, the past was analyzed in order to establish a statistical foundation. New systems and guides such as the job number control, daily payroll reporting, overtime control, staffing guides, report and work sheets, payroll analysis, and personnel comparison reports were established. An understanding of volume forecasting and correlating labor workload has the staff planner looking into the When the future becomes the past, the staff planner must follow through by analyzing the operations and determine the reasons for overstaffing or poor service. Thus, the staff planner is in a never ending process of planning, comparing and correcting.

The ultimate goal of this planning, comparing and correcting is to provide the desired quality of service at the lowest cost to payroll. If the staff planning program is properly installed in an operating hotel, the payroll savings accomplished, while maintaining the desired savings accomplished, while maintaining the desired Staff Role in Management, Robert C. Sampson, Harper Brothers, (New York, 1955) p.6

sired standard of service will be one measurement of the success of the program. A monthly report of payroll savings, such as found in Figure 20, should be initiated as a record of action taken during the previous month. This is a standard form used by the Sheraton Corporation of America. The key to this figure is as follows:

- 1. Under "Item", indicate what job categories are involved and the nature of the change necessary to effect the saving: e.g. (Rescheduling) Revised Policy, New Layout, New Equipment, Capital Investment (amount). In the case of an increase, indicate the reason for the increase: e.g. Labor Union Negotiations, Policy Additions to Staff, Etc.
- 2. Indicate whether saving will be continued ("Year Round") and Annual Amount, or otherwise ("Spot) amount for a limited period.
- 3. Indicate date of accomplishment, or if not yet accomplished ("Potential") estimated date.

The accomplishments and recommendations come from an actual report of the hotel being studied.

Payroll savings, through the establishment of a staff planning program in a hotel that has never had an organized staff planning program can almost be taken for granted. The profits of the 1940's and 1950's can no longer be taken for granted, yet staffing practices have changed very little in the past twenty years. A conscientious and continuing staff planning program can recognize payroll savings in an almost unlimited number of areas.

# MONTHLY REPORT OF PAYROLD SAVINGS

MONTH OF December, 1963

(1)		(2) AMOUNT	(3)
ITE (MATURE OF ACT	TION)	YEAR ROUND or SPOT	DATE
	1 Address town		
Doorman	A. ACCOMPTISHED Rescheduling	1,201	12/15
Service Elev. Opr.		1,171	12/15
Pots Runner	Ravised Policy	2,477	12/15
	(comb. dish rnr)		/ -3
Club Warewasher	Revised Policy	2,633	12/15
Foreman	•	•	
Club Marewasher	Rescheduling	1,500	12/15
Club Warewasher	Revised Folicy	2,723	12/15
	(elim. 6th day)		/
Main Kitchen	Rescheduling	1,000	12/15
Warewashers	Dogobodulika	1 027	10/15
Counter Service  Bus Boy	Rescheduling	1,237	12/15
Main Dining Room	Revised Policy	2,145	12/15
Eus Boy	(clim. one boy)	,2.13	1-1-2
Waitresses	Rescheduling	1,201	12/15
Specialty Room	Rescheduling	1,450	12/22
Waiters	9	•	
Club Waiters	Rescheduling	1,750	12/22
Club Bus Boys	Revised Policy	2,548	12 <b>/</b> 22 12 <b>/</b> 22
Ear Doys	Revised Policy	1,572	12/22
Front Office	New Layout	3,603	12/22
Cashier	Deed De Bion	h 700	10/00
Receiving Clark TOTAL ACCOMPIN	Revised Folicy	4,300 32,564	12/22
LUIRL RUULFIA	Loned	72,504	
	D. RECOMMENDED		
Food & Bev.	Revised Policy	2,787	Potential
Cashier	(comb. with	-,	
	cashier-mgr.)		
P. R. Secretary	Revised Policy	<u>3,360</u>	Fotential
	(elim. of job)		
TOTAL RECOMMEN	CECC	6,147	
	a translasa		
None	C. THOREASES		
110116		Signed	Date
		016.10 u	200

Fig. 20 Monthly report of payroll savings.

The payroll savings recognized in the hotel being investigated were notable. As a measure of the effectiveness of a staff planning program in this hotel, the following comparisons of sales dollars, of payroll dollars, and the percentage of payroll to sales for the rooms department. food department, beverage department, and total hotel payroll, of the first five months after the installation of a staff planning program and the five months preceding the staff planning program has been established. parison is based on the high to low sales dollars, i.e., the month with the highest sales dollars for the department being analyzed in the five month period of the staff planning program as compared with the month with the highest sales dollars for the department being analyzed in the five month period preceding the staff planning program and this follows through until the months with the lowest sales dollars are compared. This type of comparison was utilized due to the fact that comparisons for the same month last year were not available.

Rooms Department
Figure 21 shows rooms sales payroll dollars and the percentage of payroll to sales. Figure 22 shows the difference in the sales and payroll dollars from the five months preceding the staff planning program.

## ROOMS:

MONTHS	SALES	PAYROLL	PAYROLL % OF SALES
Oct. Apr.	99 <b>.6</b> <u>96<b>.7</b></u>	16.0 15.7	16.0% 16.2%
	- 2.9	- •3	+ .2%
Sept. May	96.1 96.0	16.2 15.6	16.8% 16.3%
	1	6	5%
Aug. Mar.	89 <b>.2</b> 85 <b>.2</b>	16.5 16.0	18.66 18.8 <b>%</b>
	- 4.0	- •5	+ .2%
Nov. Feb.	76 <b>.7</b> 82 <b>.0</b>	13.7 15.0	17.9% 18.2%
	+ 5.3	+ 1.3	+ •3%
Dec. Jan.	59 <b>.7</b> 78 <b>.</b> 0	12.7 14.1	21.4% 18.0%
	+18.3	+ 1.4	- 3.4%

Fig. 21-A comparison to the nearest \$100, based on the high to low dollar room sales and related payrolls, and percentage of payroll to sales, of the first five months after the installation of a staff planning program in the room department, with the five months proceeding the installation of a staff planning program.

AUG PERIOD B OCT SEPT DEC Kov APR PERIOD A MAY MAR FEB JAN

Fig. 22 Bar chart of sales and payroll for rooms, comparing period A with period B.

10000

The rooms department did not show as great a reduction in payroll as the other main departments. One of the reasons for this lack of reduction is that an additional assistant manager was placed on the payroll at the beginning of the staff planning program.

In order to obtain an estimated reduction of payroll, this investigation used the average payroll percentages for the two periods being compared. From this point on, the five month period preceding the installation of a staff planning program will be referred to as Period A. The five month period after the installation of a staff planning program will be referred to as Period B.

Total room sales for period A was \$421,300. Total room \$ payroll for the same period was \$75,100, or 17.8% of total room sales for Period A.

Total room sales for Period B was \$437,900. Total room \$ payroll for the same period was \$76,400, or 17.4% average payroll percentage to sales for Period B.

Average room sales figures, based on the combined sales of Period A and Period B, projected for a twelve month period, would be \$1,031,040. If Period B continued with the same average payroll percentage to sales, the difference

\$4,124 per year. This, then, could be counted as a savings due to the installation of a staff planning program.

Food Department Figure 2 shows the food sales dollars, payroll dollars. and the percentage of payroll to sales in the comparative months for Period A and Period B. Period A had more food sales in every month compared than Period B. This normally would not be a good comparison, for it is good to know what happens when sales rise in the periods being compared. Figure 24 shows an interesting development in regards to the correlation of decreasing sales dollars and payroll dollars. Note that in February, April and January, the payroll dollars decreased far beyond the decrease of the sales dollars. Under standard conditions, the payroll dollars would decrease proportionately with the decreasing of the sales dollars but would never decrease more than the sales dollars unless the staff had been greatly cut. Figure 24 indicates reductions in staff from the Period A.

Total food sales for Period A were \$547,300. Total food payroll for the same period was \$229,500 or 41.9% of total food sales for Period A.

Total food sales for Period B were \$525,400. Total food

FOOD:

MONTHS	SALES	PAYROLL	PAYROLL % OF SALES
Oct. May.	125.1 116.4	49.4 <u>43.1</u>	39.5% 37.0%
	- 8.7	- 6.3	- 2.5%
Sept. Feb.	113.8 106.7	48.5 39.3	42.6% 36.8%
	- 7.1	- 9.2	<b>-</b> 5.8%
Aug. Apr.	106 <b>.4</b> 105.0	47.5 41.4	44.6% 39.5%
	- 1.4	- 6.1	- 5.1%
Nov. Jan.	103.6 102.3	41.4 38.3	40.0% 37.5%
	- 1.3	- 3.1	- 2.5%
Dec. Mar.	98 <b>.4</b> 95 <b>.0</b>	42 <b>.7</b> 39 <b>.</b> 8	43.4% 42.0%
	- 3.4	- 2.9	- 1.4%

Fig. 23 A comparison to the nearest \$100, based on the high to low dollar food sales and related payrolls, and percentage of payroll to sales, of the first five months after the installation of a staff planning program in the food department, with the five months preceding the installation of a staff planning program.

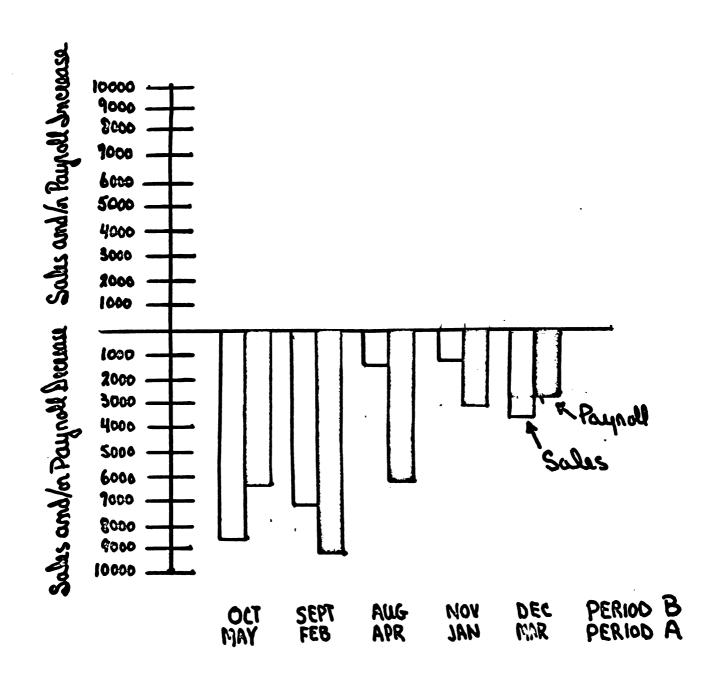


Fig. 24 Bar chart of sales and payroll for food, comparing period A with period B.

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payroll for this same period was \$201,900 or 38.3% of total food sales for Period B.

Average food sales dollars, based on the combined sales of Period A and Period B, projected for a twelve month period, would be \$1,287,240. If Period B continued with the same average payroll percentage to sales, the difference between the payrolls and Period A and Period B would be \$46,239 per year.

Beverage Department
Figure 25 shows the beverage sales dollars, payroll dollars,
and percentage of payroll to sales in the comparitive
months for Period A and Period B. This comparison shows
both an increase and decrease in monthly sales. Figure 26
shows that in the month of 'April, January and March, there
was an increase in sales and a decrease in beverage payroll.
This is an ideal measure for the staff planner for when
sales increase and payroll decreases, there is definitely
payroll savings.

Total beverage sales for Period A was \$297,000. Total beverage payroll for the same period was \$86,100 or 28.9% of total average sales for Period A.

Total beverage sales for Period B was \$303,500. The total

# BEVERAGE:

MONTHS	SALES	PAYROLL _	PAYROLL % OF SALES
Oct. Feb.	66.9 <u>63.8</u>	20.1 16.3	30 <b>.0%</b> 25.6%
	- 3.1	- 3.8	- 4:4%
Sept. May	62.5 62.4	18.4 15.8	29.5% 25.4%
	1	- 2.6	- 4.1%
Aug. Apr.	57•9 61•9	15.6 15.3	26 <b>.9%</b> <u>24<b>.7%</b></u>
•	+ 4.0	3	- 2.2%
Nov. Jan.	56.3 61.7	16.6 16.3	29.5% 76.4%
	+ 5.4	3	- 3.1%
Dec. Mar.	53 <b>.4</b> 53 <b>.7</b>	15.4 15.2	28 <b>.8%</b> 28 <b>.2%</b>
	+ •3	2	6%

Fig. 25 A comparison to the nearest \$100, based on the high to low dollar beverage sales and related payrolls and percentage of payroll to sales, of the first five months after the installation of a staff planning program in the beverage department, with the five months preceding the installation of a staff planning program.

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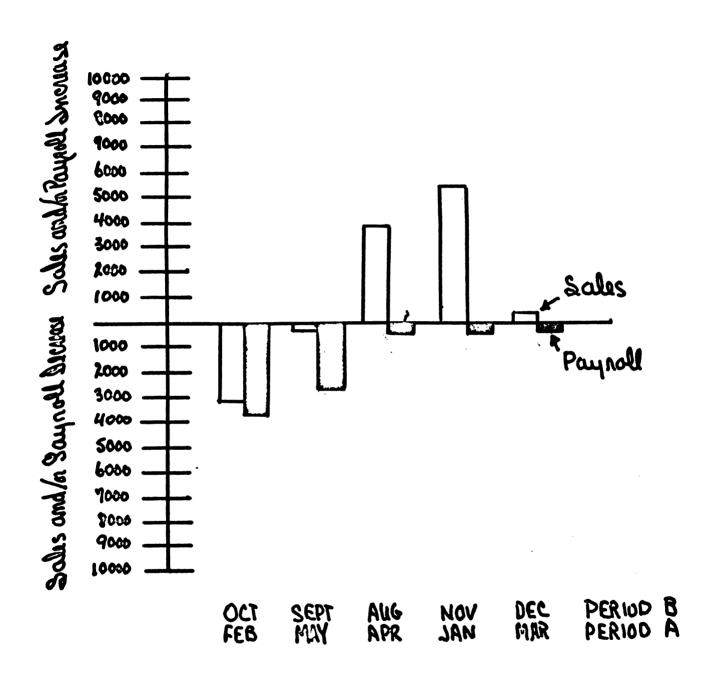


Fig. 26 Bar chart of sales and payroll for beverage, comparing period A with period B.

beverage payroll for the same period was \$75,900 or 26.0% of total beverage sales for Period A.

Average beverage sales dollars, based on the combined sales of Period A and Period B, projected for a twelve month period, would be \$708,000. If Period B continued with the same average payroll percentage to sales, the difference between the payrolls of Period A and Period B would be \$21, 240 per year. This is the saving realized during a period when a staff planning program was in operation.

Total Hotel Payroll
Figure 27 shows the total hotel sales dollars, payroll
dollars and percentage of payroll to sales for Period A
and Period B.

Figure 28 shows: a. a decrease in sales and a decrease in payroll

- b. an increase in sales and an increase in payroll
- c. an increase in sales and a decrease in payroll

It is important to note here that despite the fluctuations between sales and payroll, the percentage of payroll to sales, found in figure 27, always was under the comparative months of Period A.

Total hotel sales dollars for Period A was \$1,359,200. The total hotel payroll for the same period was \$506,700

# TOTAL HOTEL:

MONTHS	SALES	PAYROLL	PAYROLL % OF SALES
Oct. May	309.5 301.0	108 <b>.0</b> _99.2	34.9% 32.9%
	- 8.5	- 8.8	- 2.0%
Sept.	293.5 296.4	104.9 <u>97.3</u>	35.8% 32.8%
	+ 2.9	- 7.6	- 3.0%
Aug. Feb.	271:4 279.1	102 <b>.4</b> 94.0	37 • 5% 33 • 7%
	+ 7.7	- 8.4	- 3.8%
Nov. Jan.	255.1 266.0	94 <b>.7</b> <u>95<b>.</b>8</u>	37.1% <u>36.0%</u>
	+ 10.9	+ 1.1	- 1.1%
Dec. Mar.	230.2 260.0	96.7 <u>97.3</u>	42.0% 37.4%
	+ 29.8	+ .6	- 4.6%

Fig. 27 A comparison to the nearest \$100, based on the high to low dollar total hotel sales and related payrolls and percentage of payroll to sales, to the first five months after the installation of a staff planning program in the total hotel, with the five months preceding the installation of a staff planning program.

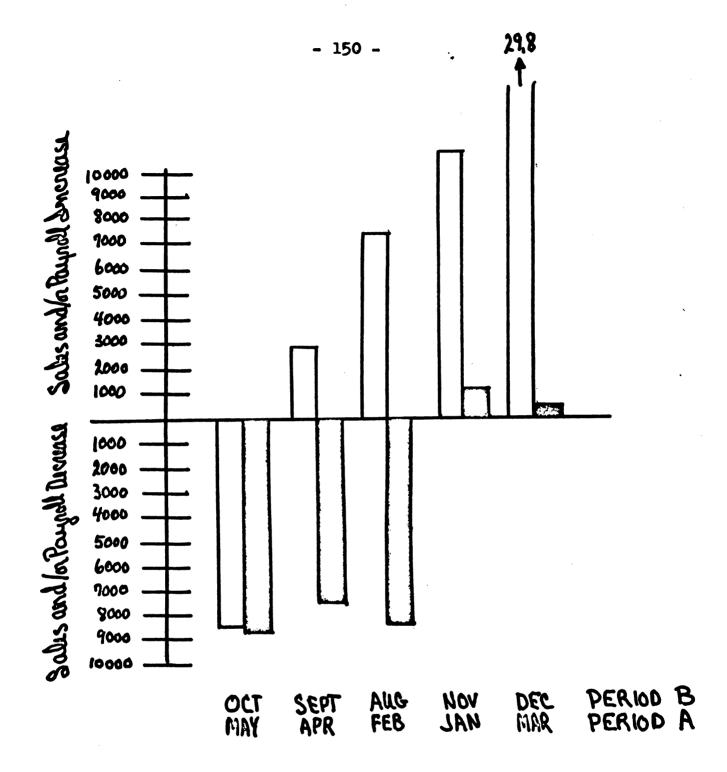


Fig. 28 Bar chart of sales and payroll for total hotel, comparing period A with period B.

or 37.2% of the total hotel sales for Period A.

Total hotel sales dollars for Period B was \$1,402,500. The total hotel payroll for the same period was \$483,600 or 34.5% of the total hotel sales for Period B.

Average total hotel sales dollars, based on the combined sales of Period A and Period B, projected for a twelve month period, would be \$3,314,640. If Period B continued with the same average payroll percentage dollars to sales, the difference between the payrolls of Period A and Period B would be \$89,495 per year.

Projected savings due to the installation of the staff planning program in the hotel being investigated amounted to \$89,495 per year. The areas and their contributions to this savings are:

a. Rooms Department	8 4,124
b. Food Department	46,239
c. Beverage Department	21,240
d. All other Departments	17.892
TOTAL ESTIMATED PROJECTED PAYROLL SAVINGS PER YEAR	\$89,495

The total estimated projected payroll savings of \$89,495 per year for the hotel being investigated indicates a degree of success in the installation of a staff planning program. However, there were also many things this program could have included or used more effectively. "Since the first management principles were introduced, most planning and control methods have been predicated on using historical data. Early shop practitioners sought the most efficient utilization of time by employing timestudy and task-setting methods based on stopwatch measurement of past processes that were physical and finite in character. Few useful techniques have been offered facilitating forward planning of management activities for which empirical information was not available."58

It is the author's opinion that greater emphasis should be placed on operational research and work method studies. The use of the management planning control method, called Program Evaluation and Review Technique, or PERT, could be an effective tool of the staff planner.

"PERT, as a dynamic program tool, uses linear programming

<sup>58</sup> Readings in Management, Max D. Richards, Wm. A. Nielander, South-Western Publishing Company, (Cinn., 1963) p. 311

and statistical probability concepts to plan and control series and parallel tasks which appear only remotely interrelated. Many tasks involve extensive research and development which itself is difficult to schedule, least of all to find a "one best way" of doing it. PERT's objective is to determine the optimum way by which to maximize the attainment, in time, of some pre-determined objective that is preceded by a number of constraints—hence its linear programming feature. A measure of the degree of risk is predicted in probabilistic terms to foretell the reasonableness of accomplishment on scheduled time—hence its statistical probability feature. "59

Other methods of reporting staffing variations from performance standards should be investigated in order to eliminate excessive routine paper work that keeps the staff planner at his desk instead of out analyzing and correcting the problems of the organization.

One method that is now being evaluated at the Sheraton-Jefferson Hotel, St. Louis, Missouri, is Daily Personnel

<sup>59</sup> Readings in Management, Max D. Richards, William A. Nielander, South-Western Publishing Company (Cinn., 1963) p. 312

Reporting by Exception. The idea behind this method is that only the variable job classification will be reported daily. Payroll dollar and hour figures are predetermined for the semi-variable and fixed base staff for each day of the week. Only the increases and decreases in the predetermined figures will be reported. This type of reporting by exception decreases the routine work of the staff planner while highlighting changes in staffing. The principle of management by exception can then be quickly applied.

"The great volume of data which is available in most companies must be carefully condensed and summarized, if reports to busy managers are to be truly informative. The manager should not have to read through pages of data in order to determine if and where there is a need for action. In order to direct attention quickly to those areas where there is such a need, the principle of exception reporting should be followed in the design of management reports."60

The purpose of this study was to present the possibilities

<sup>60</sup> Profitability Accounting for Planning and Control, Robert Beyer, C.P.A. The Ronald Press Company (New York, 1963) p.285

of increasing profit and improving service through a continuous and conscientious staff planning program. The statistics presented in this report indicate conclusively a correlating profit increase due to the decreasing of payroll expenses for the hotel being studied. During this same period of time, the standards of service were maintained or improved. On the basis of this study, it is highly recommended that the management of this industry give serious consideration to the installation of a conscientious and continuing staff planning program.

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